

Appendix 1. The CAER Fischer-Tropsch Database

Fischer-Tropsch Database System Documentation
Center for Applied Energy Research

Summary:

Much effort has expended in developing a program to acquire, store and generate tabular and graphical output. The initial effort utilized a program obtained from DOE (PETC at the time) and has progressed to the one reported here.

History:

The Fischer-Tropsch project started with one reactor and one person. This person was responsible for: reactor operations, sample analysis, and data workup (calculations of gas conversions, selectivity's etc.) and data analysis. Data workup was done by hand with a calculator. This was a manageable solution at the time, but not now. Currently the project has eleven reactors with four more due to come online shortly. Analysis is now done on four different gas analyzers, a gas chromatograph and a high temperature gas chromatograph. In a typical week gas, oil and wax samples are run daily, Monday through Friday, for each reactor. Additionally, many more calculations are now being done, such as: alpha values, product stream combining and so on. Thus, not only has the number of reactor increased, but also the quantity of data generated by each has grown exponentially.

Over time more reactors came online and more people were brought in. Additionally more product streams were being analyzed for each reactor; this greatly increased the quantity of data, which needed to be worked up. Each researcher was forced to come up with a method of storage and workup. Typically the solution was a spreadsheet program such as Microsoft Excel®. Although, the numerous benefits of

using a spreadsheet are obvious, the problem of scalability is, at least initially, less readily seen.

Data workup through the use of spreadsheets fails to scale well. There are problems in data administration, consistency, and distribution. Administration is very difficult with numerous researchers, each keeping their data on their own computer. A file may be deleted, or even simply lost due to poor indexing. Consistency is difficult, as user changes in a spreadsheet are uncontrolled and when they occur they are seldom documented. Moreover, unless very careful, the user will end up with several versions of the spreadsheet on their computer. With this happening with multiple users the problems are compounded. Distribution is difficult, if one wants a particular sample one has to answer a number of questions. Whose sample is it? Where is that person? Have they worked up the sample? Can they find it quickly? Thus the overhead of using spreadsheets to work-up the data grows out of proportion with the increasing number of researchers, number of reactors, the number of calculations desired for each sample, and finally the amount raw data.

While these problems can be solved or reduced in several ways, the simplest and most reliable is by using database. With a database, data storage is centralized and is simple to backup. Documentation is also centralized and thus reduced to documenting one database and several reports as opposed to hundreds of spreadsheets with many small changes. Data analysis is standardized within reports, thus assuring consistency while simultaneously allowing access to raw data and any ad hoc analysis that may need to be done. As for changes, since each viewing or printing generates the report anew, all calculations are redone. Thus simply viewing the report will include any changes such as

Overview

The Fischer-Tropsch database is currently running under Microsoft Access® version 8.0. The file name is fts10.mdb, and is currently over 81 meg in size. It includes data for 230 runs and over 3000 samples. The largest table 'Oil_Peaks' has about 560,000 records. In general, the database was modeled for a CSTR, with one gas input stream, and four output streams: gas, oil, wax, re wax, and water. Run and sample objects are included in the model to represent each experiment in the CSTR and each sample from the reactor.

The tables in the database are, as closely as possible, mapped to these streams and objects (figure 1). Tables are linked by run name, and sample designation. The run parameters along with catalyst data are stored in the run table. Conditions at the time a sample is taken are stored in the sample table. Gas data are complicated in that the data are derived from two different gas analyzers. An AGC which can be calibrated, and will identify peaks up to carbon number 4, and a HP5790 which will identify peaks from carbon number one through carbon number nine or ten. Peaks are not discriminated very well and typically only two peaks per carbon number are seen: one is the alkene and the second is the alkane. Considering these factors, the data for carbon number one through four are used from the AGC and carbon numbers five and up are taken from the HP5790. The HP5790 is calibrated by using the calibrated values for total mole percent of C4's from the AGC and the total area of C4's from the HP5790 to calculate a response factor for the HP5790. So the Gas table includes a column for every expected gas of interest in the AGC and HP5790, AGC values are mole percents, and HP5790 values are area counts. Another complication is that a new HP refinery gas analyzer that can identify all the compounds is now in operation. This data is stored in the 'Gas Peaks' table (not

shown in figure one). When data are imported from the AGC, it will fill a portion of a record from the Gas table. Imports from the HP5790 fill the rest of the record. If data from the HP refinery gas analyzer are imported all the peaks are inserted into the 'Gas Peaks' table. This information is used to calculate values for HP5790 area counts and AGC mole percents as if these two instruments had been used; these data are then inserted into the gas table. The oil and wax samples are combined and analyzed together; this data is then inserted into the oil table. The rewax analysis is inserted into the wax table. All other tables are all direct mappings.

All stored data, with the exception of alpha values, within the database are raw data. Thus any values desired that depend on calculations are executed on the fly. Examples include, time on stream, conversion and so on. Alpha values, which are calculated using a SAS program, are input after they have been determined. Calculations are done by a combination of SQL Queries, Seagate Crystal Reports 8.0®, and Active Server Pages® using Visual Interdev® 6.0. Automated data entry and data entry by users are through Visual Basic 6.0 programs using Distributed COM over the local area network.

Currently the database is being upsizing to Microsoft SQL Server®. With tables having more than a half million records, Access® is being pushed to its limits. While there are many anticipated changes, the two major ones are that all catalyst information will be pulled out of the run table into its own table and the gas table will be changed so that each peak will be on record in the table as opposed to now where each record contains a field for each expected gas. These changes will simplify and speed up data

access. Furthermore, data entry and report generation will act through stored procedures, and Distributed COM, using a multi-tier client server system.

Database Table Fields With Units

Run Table Columns

RUNID	unique name of the run
Started	date and time of the start of synthesis
Initial Gas Feed	slph
Initial H2	mol percent in gas feed
Initial CO	mol percent in gas feed
Initial N2	mol percent in gas feed
Initial Pressure	psig
Initial Temperature	degrees C
Startup Oil	strtup oil/wax name
Startup Oil Weight	grams
CatID	not used
Catalyst	unique name of catalyst
Weight Catalyst	grams
Percent Al	mol percent in catalyst
Percent Si	mol percent in catalyst
Percent Co	mol percent in catalyst
Percent Fe	mol percent in catalyst
Percent Cu	mol percent in catalyst
Percent K	mol percent in catalyst
Pretreatment Temperature	degrees C
Pretreatment Pressure	psig
Pretreatment Gas	one of [H2, CO, Syngas]
Pretreatment Time	hours
High Temperature Trap	degrees C
Mid Temperature Trap	degrees C
Low Temperature Trap	degrees C
Run Notes	
Catalyst Notes	

Sample Table Columns

RunID	link to run table
SampleID	unique (for this run) sample ID
Date	date and time of sample
Sample Period	not used
Pressure	psig
Temperature	degrees C
Gas Feed	slph
Gas Prod	slph
Percent H2	mol percent of feed
Percent CO	mol percent of feed

Percent N2	mol percent of feed
Weight Oil	grams
Weight Wax	grams
Weight Water	grams
Weight Rewax	grams
Notes	

Gas Table Columns

RunID	link to sample table
SampleID	link to sample table
Area AGC C4	not used
H2	AGC mol percent
C3	AGC mol percent
C3=	AGC mol percent
i-C4	AGC mol percent
n-C4	AGC mol percent
1-C4=	AGC mol percent
i-C4=	AGC mol percent
t-C4=	AGC mol percent
c-C4=	AGC mol percent
i-C5	AGC mol percent
n-C5	AGC mol percent
CO2	AGC mol percent
C2=	AGC mol percent
C2	AGC mol percent
Ar2	AGC mol percent
CH4	AGC mol percent
CO	HP5790 area count
5790 C4=	HP5790 area count
5790 C4	HP5790 area count
5790 C5=	HP5790 area count
5790 C5	HP5790 area count
5790 C6=	HP5790 area count
5790 C6	HP5790 area count
5790 C7	HP5790 area count
5790 C8	HP5790 area count
5790 C9	HP5790 area count

Gas Peak Table Columns

GasPeakID	
RunID	run name
Sample	sample number
Compound	Compound name

Norm Mole-%
Norm Weight-%
Mole-%
Peak Area
RT (seconds)

Water Table Columns

RunID	link to sample table
SampleID	link to sample table
Water	mol percent
Methanol	mol percent
Aldehyde	mol percent
Ethanol	mol percent
Propanone	mol percent
i-Propanol	mol percent
Propanal	mol percent
Propanol	mol percent
Buytanol	mol percent - (note misspelling)

Wax Table Columns

RunID	link to sample table
SampleID	link to sample table
Retention_Time	minutes and 100's seconds
Weight_Percent	weight percent
Carbon_Number	carbon number of compound

Oil Table Columns

RunID	link to sample table
SampleID	link to sample table
Retention_Time	minutes and 100's seconds
Weight_Percent	weight percent
Carbon_Number	carbon number of compound
Compound	compound class on of [n-alkane, 1-alkene, cis-2-alkene, trans-2-alkene]

AlphaFit Table Columns

RunID	link to sample table
SampleID	link to sample table
Alpha1	value of alpha 1 (0,1]
Alpha2	value of alpha 2 [0,1]
x	contribution of alpha 1 (0.1]
FitRange	range of carbon numbers used in the fit
Notes	

Antoine Constants Table Columns

Carbon_Number	carbon number
A	parameter A
B	parameter B
C	parameter C

This table is used for calculations of estimated vapor pressures using Antoinnes equation for normal alkanes from C1 to C100. This is for user information and is not used in any of the calculations done by the database.

Tropsch (Access) Database Documentation

File: FTS10.MDB

Tuesday, April 18, 2000

Properties

Date Created:	11/20/1998 9:21:10 AM	Last Updated:	11/22/1999 3:08:12 PM
OrderByOn:	False	RecordCount:	620
Updatable:	True		

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: RunID Source Table: AlphaFit		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SampleID Source Table: AlphaFit		
Alpha1	Single	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Alpha1 Source Table: AlphaFit		
Alpha2	Single	4

	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: Alpha2 Source Table: AlphaFit		
x	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: x Source Table: AlphaFit	Single	4
FitRange	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 3915 Data Updatable: False DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: FitRange Source Table: AlphaFit	Text	50
Notes	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 5160 Data Updatable: False DisplayControl: Text Box Ordinal Position: 7 Required: False Source Field: Notes Source Table: AlphaFit	Text	255

Relationships

SampleAlphaFit

Sample		AlphaFit
RunID	1 1	RunID
SampleID	1 1	SampleID
Attributes:		Unique, Enforced
RelationshipType:		One-To-One

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	94
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	620
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleAlphaFit	2
Clustered:	False
DistinctCount:	620
Foreign:	True
Ignore Nulls:	False
Name:	SampleAlphaFit
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
SampleID	1
Clustered:	False
DistinctCount:	73

C:\FTS Database\Backup\FTS10.mdb
Table: AlphaFit

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Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created: 12/15/1998 2:17:12 PM Last Updated: 11/22/1999 3:08:12 PM
 RecordCount: 100 Updatable: True

Columns

Name	Type	Size
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	0	
Required:	False	
Source Field:	Carbon_Number	
Source Table:	Antoine Constants	
A	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Source Field:	A	
Source Table:	Antoine Constants	
B	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	
Source Field:	B	
Source Table:	Antoine Constants	
C	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	3	
Required:	False	
Source Field:	C	
Source Table:	Antoine Constants	

Table Indexes

Name	Number of Fields
Carbon_Number	1
Clustered:	False

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Table: Antoine Constants

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DistinctCount:	100
Foreign:	False
Ignore Nulls:	False
Name:	Carbon_Number
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending

Properties

Date Created:	11/16/1998 2:23:46 PM	Filter:	((Gas.RunID="rem023"))
Last Updated:	12/7/1999 10:38:55 AM	OrderByOn:	False
RecordCount:	2905	Updatable:	True

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: RunID Source Table: Gas		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SampleID Source Table: Gas		
Area AGC C4	Double	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Area AGC C4 Source Table: Gas		
H2	Single	4

	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: H2 Source Table: Gas		
C3	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: C3 Source Table: Gas	Single	4
C3=	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: C3= Source Table: Gas	Single	4
i-C4	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 7 Required: False	Single	4

	Source Field: Source Table:	i-C4 Gas		
n-C4	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 8 False n-C4 Gas	Single	4
1-C4=	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 9 False 1-C4= Gas	Single	4
i-C4=	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 10 False i-C4= Gas	Single	4
t-C4=	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable:	False Fixed Size General False Default Default False	Single	4

	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	t-C4=		
	Source Table:	Gas		
c-C4=			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	12		
	Required:	False		
	Source Field:	c-C4=		
	Source Table:	Gas		
i-C5			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	13		
	Required:	False		
	Source Field:	i-C5		
	Source Table:	Gas		
n-C5			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	14		
	Required:	False		
	Source Field:	n-C5		
	Source Table:	Gas		
CO2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		

	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	15		
	Required:	False		
	Source Field:	CO2		
	Source Table:	Gas		
C2=			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	16		
	Required:	False		
	Source Field:	C2=		
	Source Table:	Gas		
C2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	17		
	Required:	False		
	Source Field:	C2		
	Source Table:	Gas		
Ar2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	18		
	Required:	False		
	Source Field:	Ar2		
	Source Table:	Gas		

CH4	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 19 Required: False Source Field: CH4 Source Table: Gas	Single	4
CO	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 20 Required: False Source Field: CO Source Table: Gas	Single	4
5790 C4=	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 21 Required: False Source Field: 5790 C4= Source Table: Gas	Double	8
5790 C4	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 22	Double	8

	Required:	False		
	Source Field:	5790 C4		
	Source Table:	Gas		
5790 C5=			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	23		
	Required:	False		
	Source Field:	5790 C5=		
	Source Table:	Gas		
5790 C5			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	24		
	Required:	False		
	Source Field:	5790 C5		
	Source Table:	Gas		
5790 C6=			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	25		
	Required:	False		
	Source Field:	5790 C6=		
	Source Table:	Gas		
5790 C6			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		

	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	26		
	Required:	False		
	Source Field:	5790 C6		
	Source Table:	Gas		
5790 C7			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	27		
	Required:	False		
	Source Field:	5790 C7		
	Source Table:	Gas		
5790 C8			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	28		
	Required:	False		
	Source Field:	5790 C8		
	Source Table:	Gas		
5790 C9			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	29		
	Required:	False		
	Source Field:	5790 C9		
	Source Table:	Gas		

Relationships

SampleGas

	Sample			Gas
	RunID	1	1	RunID
	SampleID	1	1	SampleID
Attributes:		Unique, Enforced		
RelationshipType:		One-To-One		

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False
Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending

Properties

Date Created:	3/8/1999 10:04:47 AM	Filter:	((Gas_Peaks.RunID="rem023"))
Last Updated:	12/7/1999 10:38:35 AM	OrderByOn:	False
RecordCount:	27734	Updatable:	True

Columns

Name	Type	Size
GasPeakID	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Auto-Increment	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Source Field:	GasPeakID	
Source Table:	Gas_Peaks	
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	2	
Required:	False	
Source Field:	RunID	
Source Table:	Gas_Peaks	
Sample	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	3	
Required:	False	
Source Field:	Sample	
Source Table:	Gas_Peaks	
Compound	Text	15
AllowZeroLength:	False	

Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	Variable Length General False Default 2595 False Text Box 4 False Compound Gas_Peaks		
Norm Mole-%		Double	8
AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 5 False Norm Mole-% Gas_Peaks		
Norm Weight-%		Double	8
AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 6 False Norm Weight-% Gas_Peaks		
Mole-%		Double	8
AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnOrder: ColumnWidth: Data Updatable: DecimalPlaces: DisplayControl: Ordinal Position: Required: Source Field: Source Table:	False Fixed Size General False Default Default False Auto Text Box 7 False Mole-% Gas_Peaks		

Peak Area		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	Peak Area		
Source Table:	Gas_Peaks		
RT (seconds)		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	RT (seconds)		
Source Table:	Gas_Peaks		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	24
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
GasPeakID	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	GasPeakID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1

	Clustered:	False
	DistinctCount:	27734
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	85
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleCompound		3
	Clustered:	False
	DistinctCount:	27734
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleCompound
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
		Ascending
		Ascending
Sample		1
	Clustered:	False
	DistinctCount:	129
	Foreign:	False
	Ignore Nulls:	False
	Name:	Sample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending

Properties

Date Created:	11/14/1998 9:28:35 AM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	1/4/2000 10:33:15 AM	OrderByOn:	False
RecordCount:	564369	Updatable:	True

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: Oil_Peaks		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: Oil_Peaks		
Retention_Time	Single	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: Retention_Time Source Table: Oil_Peaks		
Weight_Percent	Double	8

AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Weight_Percent		
Source Table:	Oil_Peaks		
Carbon_Number		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	Carbon_Number		
Source Table:	Oil_Peaks		
Compound		Text	15
AllowZeroLength:	True		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	Compound		
Source Table:	Oil_Peaks		

Relationships

SampleOil_Peaks

	Sample		Oil_Peaks
	RunID	1	RunID
	SampleID	1	SampleID
Attributes:	Enforced		
RelationshipType:	One-To-Many		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID

Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	11/16/1998 2:25:20 PM	Filter:	((Run.RUNID Like "yqz*"))
Last Updated:	3/21/2000 10:22:38 AM	OrderByOn:	False
RecordCount:	234	Updatable:	True

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: RUNID Source Table: Run		
Started	Date/Time	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 4605 Data Updatable: False Ordinal Position: 2 Required: False Source Field: Started Source Table: Run		
Initial Gas Feed	Single	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Initial Gas Feed Source Table: Run		
Initial H2	Single	4
AllowZeroLength: False		

	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	Initial H2		
	Source Table:	Run		
Initial CO			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	Initial CO		
	Source Table:	Run		
Initial N2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	6		
	Required:	False		
	Source Field:	Initial N2		
	Source Table:	Run		
Initial Pressure			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		
	Source Field:	Initial Pressure		

Source Table:	Run		
Initial Temperature		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	8		
Required:	False		
Source Field:	Initial Temperature		
Source Table:	Run		
Startup Oil		Text	10
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	Startup Oil		
Source Table:	Run		
Startup Oil Weight		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	10		
Required:	False		
Source Field:	Startup Oil Weight		
Source Table:	Run		
CatID		Long Integer	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		

	Ordinal Position:	11		
	Required:	False		
	Source Field:	CatID		
	Source Table:	Run		
Catalyst			Text	6
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	12		
	Required:	False		
	Source Field:	Catalyst		
	Source Table:	Run		
Weight Catalyst			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	13		
	Required:	False		
	Source Field:	Weight Catalyst		
	Source Table:	Run		
Percent Al			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	14		
	Required:	False		
	Source Field:	Percent Al		
	Source Table:	Run		
Percent Si			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		

Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	15		
Required:	False		
Source Field:	Percent Si		
Source Table:	Run		
Percent Co		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	16		
Required:	False		
Source Field:	Percent Co		
Source Table:	Run		
Percent Fe		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	17		
Required:	False		
Source Field:	Percent Fe		
Source Table:	Run		
Percent Cu		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	18		
Required:	False		
Source Field:	Percent Cu		
Source Table:	Run		
Percent K		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		

Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	19		
Required:	False		
Source Field:	Percent K		
Source Table:	Run		
Pretreatment Temperature		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	20		
Required:	False		
Source Field:	Pretreatment Temperature		
Source Table:	Run		
Pretreatment Pressure		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	21		
Required:	False		
Source Field:	Pretreatment Pressure		
Source Table:	Run		
Pretreatment Gas		Text	10
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DisplayControl:	Text Box		
Ordinal Position:	22		
Required:	False		
Source Field:	Pretreatment Gas		
Source Table:	Run		

Pretreatment Time		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	23		
Required:	False		
Source Field:	Pretreatment Time		
Source Table:	Run		
High Temperature Trap		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	24		
Required:	False		
Source Field:	High Temperature Trap		
Source Table:	Run		
Mid Temperature Trap		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	25		
Required:	False		
Source Field:	Mid Temperature Trap		
Source Table:	Run		
Low Temperature Trap		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	26		

Required: False
 Source Field: Low Temperature Trap
 Source Table: Run

Run Notes Memo -
 AllowZeroLength: True
 Attributes: Variable Length
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: Default
 Data Updatable: False
 Ordinal Position: 27
 Required: False
 Source Field: Run Notes
 Source Table: Run

Catalyst Notes Memo -
 AllowZeroLength: True
 Attributes: Variable Length
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: Default
 Data Updatable: False
 Ordinal Position: 28
 Required: False
 Source Field: Catalyst Notes
 Source Table: Run

Relationships

RunSample

Run	1	Sample
RUNID	1	RunID
Attributes:		Enforced
RelationshipType:		One-To-Many

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False

CatID	Fields:	Ascending
		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending

Properties

Date Created:	11/16/1998 2:26:04 PM	Last Updated:	4/10/2000 10:43:31 AM
OrderByOn:	False	Orientation:	0
RecordCount:	3136	Updatable:	True

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: RunID Source Table: Sample UnicodeCompression: True		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SampleID Source Table: Sample UnicodeCompression: True		
Date	Date/Time	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2670 Data Updatable: False Ordinal Position: 3 Required: False Source Field: Date Source Table: Sample		
Sample Period	Single	4

	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	Sample Period		
	Source Table:	Sample		
Pressure			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	Pressure		
	Source Table:	Sample		
Temperature			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	6		
	Required:	False		
	Source Field:	Temperature		
	Source Table:	Sample		
Gas Feed			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		

Field Name	Source Field	Source Table	Attributes	Width	Decimal Places	Display Control	Ordinal Position	Required
Gas Prod	Gas Feed	Sample	Single	4				
AllowZeroLength:	False							
Attributes:	Fixed Size							
Collating Order:	General							
ColumnHidden:	False							
ColumnOrder:	Default							
ColumnWidth:	1440							
Data Updatable:	False							
DecimalPlaces:	Auto							
DisplayControl:	Text Box							
Ordinal Position:	8							
Required:	False							
Source Field:	Gas Prod							
Source Table:	Sample							
Percent H2			Single	4				
AllowZeroLength:	False							
Attributes:	Fixed Size							
Collating Order:	General							
ColumnHidden:	False							
ColumnOrder:	Default							
ColumnWidth:	1440							
Data Updatable:	False							
DecimalPlaces:	Auto							
DisplayControl:	Text Box							
Ordinal Position:	9							
Required:	False							
Source Field:	Percent H2							
Source Table:	Sample							
Percent CO			Single	4				
AllowZeroLength:	False							
Attributes:	Fixed Size							
Collating Order:	General							
ColumnHidden:	False							
ColumnOrder:	Default							
ColumnWidth:	1440							
Data Updatable:	False							
DecimalPlaces:	Auto							
DisplayControl:	Text Box							
Ordinal Position:	10							
Required:	False							
Source Field:	Percent CO							
Source Table:	Sample							
Percent N2			Single	4				
AllowZeroLength:	False							
Attributes:	Fixed Size							
Collating Order:	General							
ColumnHidden:	False							
ColumnOrder:	Default							
ColumnWidth:	1440							
Data Updatable:	False							

DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	11		
Required:	False		
Source Field:	Percent N2		
Source Table:	Sample		
Weight Oil		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	12		
Required:	False		
Source Field:	Weight Oil		
Source Table:	Sample		
Weight Wax		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	13		
Required:	False		
Source Field:	Weight Wax		
Source Table:	Sample		
Weight Water		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	14		
Required:	False		
Source Field:	Weight Water		
Source Table:	Sample		
Weight Rewax		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		

ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 1440
 Data Updatable: False
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 15
 Required: False
 Source Field: Weight Rewax
 Source Table: Sample

Notes

Memo

AllowZeroLength: True
 Attributes: Variable Length
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 1410
 Data Updatable: False
 Ordinal Position: 20
 Required: False
 Source Field: Notes
 Source Table: Sample
 UnicodeCompression: True

Relationships

RunSample

	Run			Sample
	RUNID	1		RunID
Attributes:				Enforced
RelationshipType:				One-To-Many

SampleAlphaFit

	Sample			AlphaFit
	RunID	1	1	RunID
	SampleID	1	1	SampleID
Attributes:				Unique, Enforced
RelationshipType:				One-To-One

SampleGas

	Sample			Gas
	RunID	1	1	RunID
	SampleID	1	1	SampleID
Attributes:	Unique, Enforced			
RelationshipType:	One-To-One			

SampleOil_Peaks

	Sample			Oil_Peaks
	RunID	1		RunID
	SampleID	1		SampleID
Attributes:	Enforced			
RelationshipType:	One-To-Many			

SampleWater

	Sample			Water
	RunID	1	1	RunID
	SampleID	1	1	SampleID
Attributes:	Unique, Enforced			
RelationshipType:	One-To-One			

SampleWax_Peaks

	Sample			Wax_Peaks
	RunID	1		RunID
	SampleID	1		SampleID
Attributes:	Enforced			
RelationshipType:	One-To-Many			

Table Indexes

Name	Number of Fields
Date	1
Clustered:	False
DistinctCount:	2036
Foreign:	False
Ignore Nulls:	False

	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending

Properties

Date Created:	11/16/1998 2:38:57 PM	Last Updated:	1/28/1999 3:25:41 PM
OrderByOn:	False	RecordCount:	466
Updatable:	True		

Columns

Name		Type	Size
RunID		Text	6
	AllowZeroLength:	False	
	Attributes:	Variable Length	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	Default	
	Data Updatable:	False	
	DisplayControl:	Text Box	
	Ordinal Position:	1	
	Required:	False	
	Source Field:	RunID	
	Source Table:	Water	
SampleID		Text	3
	AllowZeroLength:	False	
	Attributes:	Variable Length	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	Default	
	Data Updatable:	False	
	DisplayControl:	Text Box	
	Ordinal Position:	2	
	Required:	False	
	Source Field:	SampleID	
	Source Table:	Water	
Water		Single	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	Default	
	Data Updatable:	False	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	3	
	Required:	False	
	Source Field:	Water	
	Source Table:	Water	
Methanol		Single	4

	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	Methanol		
	Source Table:	Water		
Aldehyde			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	Aldehyde		
	Source Table:	Water		
Ethanol			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	6		
	Required:	False		
	Source Field:	Ethanol		
	Source Table:	Water		
Propanone			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		

Field Name	Source Field	Source Table	Field Type	Field Length
i-Propanol		Propanone	Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	8		
	Required:	False		
	Source Field:	i-Propanol		
	Source Table:	Water		
Propanal		Water	Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	Propanal		
	Source Table:	Water		
Propanol		Water	Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	Propanol		
	Source Table:	Water		
Buytanol		Water	Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		

DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 11
 Required: False
 Source Field: Buytanol
 Source Table: Water

Relationships

SampleWater

	Sample			Water
	RunID	1	1	RunID
	SampleID	1	1	SampleID

Attributes: Unique, Enforced
 RelationshipType: One-To-One

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	465
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleWater	2
Clustered:	False
DistinctCount:	465
Foreign:	True
Ignore Nulls:	False
Name:	SampleWater
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
	Ascending

Properties

Date Created:	11/16/1998 2:29:31 PM	Last Updated:	1/28/1999 3:25:41 PM
OrderByOn:	False	RecordCount:	31439
Updatable:	True		

Columns

Name	Type	Size
RunID	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: RunID Source Table: Wax		
SampleID	Text	50
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: SampleID Source Table: Wax		
Carbon Number	Integer	2
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Carbon Number Source Table: Wax		
Normalized Weight Percent	Double	8

AllowZeroLength: False
 Attributes: Variable Length
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: Default
 Data Updatable: False
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 4
 Required: False
 Source Field: Normalized Weight Percent
 Source Table: Wax

Retention_Time	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Auto-Increment	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
Ordinal Position:	5	
Required:	False	
Source Field:	Retention_Time	
Source Table:	Wax	

Table Indexes

Name	Number of Fields
RunSampleCN	3
Clustered:	False
DistinctCount:	28789
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleCN
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending
	Ascending

Properties

Date Created:	11/14/1998 9:28:44 AM	Filter:	((Wax_Peaks.RunID="chp001"))
Last Updated:	2/19/1999 2:45:15 PM	OrderByOn:	False
RecordCount:	116715	Updatable:	True

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: Wax_Peaks		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: Wax_Peaks		
Retention_Time	Single	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1935 Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 2 Required: False Source Field: Retention_Time Source Table: Wax_Peaks		
Weight_Percent	Double	8

AllowZeroLength: False
 Attributes: Fixed Size
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 2745
 Data Updatable: False
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 3
 Required: False
 Source Field: Weight_Percent
 Source Table: Wax_Peaks

Carbon_Number Integer 2
 AllowZeroLength: False
 Attributes: Fixed Size
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 2265
 Data Updatable: False
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 4
 Required: False
 Source Field: Carbon_Number
 Source Table: Wax_Peaks

Relationships

SampleWax_Peaks

	Sample		Wax_Peaks
	RunID	1	RunID
	SampleID	1	SampleID
Attributes:			
RelationshipType:	Enforced One-To-Many		

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	121
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False

Fields:	Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	109428
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending
	Ascending
SampleID	1
Clustered:	False
DistinctCount:	57
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleWax_Peaks	2
Clustered:	False
DistinctCount:	558
Foreign:	True
Ignore Nulls:	False
Name:	SampleWax_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	11/18/1998 10:06:46 AM	Last Updated:	11/20/1998 9:43:42 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT DISTINCT AlphaFit.RunID, AlphaFit.SampleID, AlphaFit.Alpha1, AlphaFit.Alpha2, AlphaFit.x,
AlphaFit.FitRange, AlphaFit.Notes
FROM AlphaFit;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: AlphaFit		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: AlphaFit		
Alpha1	Single	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default		

	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	Alpha1		
	Source Table:	AlphaFit		
Alpha2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Alpha2		
	Source Table:	AlphaFit		
x			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	x		
	Source Table:	AlphaFit		
FitRange			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	3915		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	FitRange		
	Source Table:	AlphaFit		
Notes			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		

ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 5160
 Data Updatable: False
 DisplayControl: Text Box
 Ordinal Position: 6
 Required: False
 Source Field: Notes
 Source Table: AlphaFit

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	94
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	620
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending
SampleAlphaFit	2
Clustered:	False
DistinctCount:	620
Foreign:	True
Ignore Nulls:	False
Name:	SampleAlphaFit
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	73
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False

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Query: Alpha Data

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Unique: False
Fields: Ascending

Properties

Date Created:	1/24/2000 2:27:07 PM	Last Updated:	1/24/2000 2:27:23 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT AlphaFit.RunID, AlphaFit.SampleID, AlphaFit.Alpha1, AlphaFit.Alpha2, AlphaFit.x,
AlphaFit.FitRange, AlphaFit.Notes
FROM AlphaFit;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length, Updatable Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: True DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: AlphaFit		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: AlphaFit		
Alpha1	Single	4
AllowZeroLength: False Attributes: Fixed Size, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default		

	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	Alpha1		
	Source Table:	AlphaFit		
Alpha2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Alpha2		
	Source Table:	AlphaFit		
x			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	x		
	Source Table:	AlphaFit		
FitRange			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	3915		
	Data Updatable:	True		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	FitRange		
	Source Table:	AlphaFit		
Notes			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length, Updatable		
	Collating Order:	General		

ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 5160
 Data Updatable: True
 DisplayControl: Text Box
 Ordinal Position: 6
 Required: False
 Source Field: Notes
 Source Table: AlphaFit

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	94
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	620
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending
SampleAlphaFit	2
Clustered:	False
DistinctCount:	620
Foreign:	True
Ignore Nulls:	False
Name:	SampleAlphaFit
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	73
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False

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Query: Alpha_Export_Data

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Unique: False
Fields: Ascending

Properties

Date Created:	11/11/1999 3:07:27 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	11/11/1999 3:07:27 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number, Oil_Peaks.Retention_Time,
Oil_Peaks.Compound, *
FROM Oil_Peaks
WHERE (((Oil_Peaks.RunID)="LGX359") AND ((Oil_Peaks.SampleID)="009") AND
((Oil_Peaks.Compound)="1-olefin"));
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Carbon_Number		
Source Table:	Oil_Peaks		
Retention_Time		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2730		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Retention_Time		
Source Table:	Oil_Peaks		
Compound		Text	15
AllowZeroLength:	True		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	Compound		
Source Table:	Oil_Peaks		
Weight_Percent		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2670		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Weight_Percent		
Source Table:	Oil_Peaks		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Fields:	Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Fields:	Ascending
Fields:	Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False

Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	11/11/1999 3:13:57 PM	Last Updated:	11/11/1999 3:13:57 PM
MaxRecords:	0	ODBCTimeout:	60
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT B_1_olefin.Carbon_Number, B_1_olefin.Retention_Time AS RT_Olefin,
B_Paraffin.Retention_Time AS RT_Paraffin, [RT_Paraffin]-[RT_Olefin] AS Delta
FROM B_1_olefin INNER JOIN B_Paraffin ON B_1_olefin.Carbon_Number =
```

Columns

Name	Type	Size
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	Carbon_Number	
Source Table:	Oil_Peaks	
RT_Olefin	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	2730	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	Retention_Time	
Source Table:	Oil_Peaks	
RT_Paraffin	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1950	

	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	Retention_Time		
	Source Table:	Oil_Peaks		
Delta			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Retention_Time		
	Source Table:	Oil_Peaks		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3
Clustered:	False

DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending

Properties

Date Created:	11/11/1999 3:07:49 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	11/11/1999 3:08:10 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number, Oil_Peaks.Retention_Time,
Oil_Peaks.Compound, *
FROM Oil_Peaks
WHERE (((Oil_Peaks.RunID)="LGX359") AND ((Oil_Peaks.SampleID)="009") AND
((Oil_Peaks.Compound)="paraffin"));
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Carbon_Number		
Source Table:	Oil_Peaks		
Retention_Time		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2730		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Retention_Time		
Source Table:	Oil_Peaks		
Compound		Text	15
AllowZeroLength:	True		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	Compound		
Source Table:	Oil_Peaks		
Weight_Percent		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2670		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Weight_Percent		
Source Table:	Oil_Peaks		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Fields:	Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Fields:	Ascending
Fields:	Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False

Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	3/24/2000 9:06:20 AM	Last Updated:	3/24/2000 9:08:14 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
PARAMETERS [@RunID] Text ( 255 );
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, [Sample Calcs].TOS, [Sample Calcs].[H2
Conv] AS H2, [Sample Calcs].[CO Conv] AS CO, [Sample Calcs].[H2CO Conv] AS Syngas, [Sample
Calcs].SV, [Sample Calcs].Efficiency, [Sample Calcs].Contraction, Sample.Pressure,
Sample.Temperature
FROM [Sample Calcs] INNER JOIN Sample ON ([Sample Calcs].RunID = Sample.RunID) AND ([Sample
Calcs].SampleID = Sample.SampleID)
WHERE ((([Sample Calcs].RunID)=[@RunID]))
```

Query Parameters

Name	Type
[@RunID]	Text

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: Sample UnicodeCompression: True		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1470 Data Updatable: False DisplayControl: Text Box Ordinal Position: 1		

	Required:	False		
	Source Field:	SampleID		
	Source Table:	Sample		
	UnicodeCompression:	True		
TOS	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2400		
	Data Updatable:	False		
	Ordinal Position:	2		
	Required:	False		
H2	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2070		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
CO	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2070		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Syngas	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1980		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
SV	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2610		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		
Efficiency			Double	8

AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2295		
Data Updatable:	False		
Ordinal Position:	7		
Required:	False		
Contraction		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3075		
Data Updatable:	False		
Ordinal Position:	8		
Required:	False		
Source Table:	Sample		
Pressure		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	9		
Required:	False		
Source Field:	Pressure		
Source Table:	Sample		
Temperature		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	10		
Required:	False		
Source Field:	Temperature		
Source Table:	Sample		

Table Indexes

Name	Number of Fields
Date	1
Clustered:	False

	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending

Properties

Date Created:	11/18/1999 1:25:56 PM	Last Updated:	11/18/1999 1:25:56 PM
MaxRecords:	0	ODBCTimeout:	60
OrderBy:	Factor	OrderByOn:	True
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Fix_C5Alkanes.RunID, Fix_C5Alkanes.SampleID, "C5" AS Expr1,
Sum(Fix_C5Alkanes.[Mole-%]) AS [SumOfMole-%], Fix_C5Alkanes.Factor, Sum([Mole-%])/[Factor]
AS Area
FROM Fix_C5Alkanes
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	
Expr1	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	

SumOfMole-%	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Factor	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2625		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Area	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2925		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		

Table Indexes

Name	Number of Fields
RunSample	2
	Clustered: False
	DistinctCount: 2905
	Foreign: False
	Ignore Nulls: False
	Name: RunSample
	Primary: True
	Required: True
	Unique: True
	Fields: Ascending
	Ascending
SampleGas	2
	Clustered: False
	DistinctCount: 2905
	Foreign: True
	Ignore Nulls: False
	Name: SampleGas
	Primary: False
	Required: False
	Unique: True
	Fields: Ascending
	Ascending

Properties

Date Created:	11/18/1999 1:10:49 PM	Last Updated:	11/18/1999 1:10:49 PM
MaxRecords:	0	ODBCTimeout:	60
OrderBy:	Factor	OrderByOn:	True
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Gas.RunID, Gas.SampleID, Gas_Peaks.Compound, Gas_Peaks.[Mole-%], [5790 Response
Factor].Factor
FROM (Gas_Peaks INNER JOIN Gas ON Gas_Peaks.RunID = Gas.RunID) INNER JOIN [5790 Response
Factor] ON (Gas.RunID = [5790 Response Factor].RunID) AND (Gas.SampleID = [5790 Response
Factor].SampleID)
WHERE (((Gas_Peaks.Compound) In ("iso-pentane","n-pentane")) AND
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	
Compound	Text	15
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	

	ColumnOrder:	Default		
	ColumnWidth:	2595		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	Compound		
	Source Table:	Gas_Peaks		
Mole-%			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Mole-%		
	Source Table:	Gas_Peaks		
Factor			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2625		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
	Source Table:	Gas		

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False

Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
Compound	1
Clustered:	False
DistinctCount:	24
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
GasPeakID	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	GasPeakID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	85
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleCompound	3
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleCompound
Primary:	False

	Required:	False
	Unique:	False
	Fields:	Ascending
Sample		1
	Clustered:	False
	DistinctCount:	129
	Foreign:	False
	Ignore Nulls:	False
	Name:	Sample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		2
	Clustered:	False
	DistinctCount:	2905
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
SampleGas		2
	Clustered:	False
	DistinctCount:	2905
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleGas
	Primary:	False
	Required:	False
	Unique:	True
	Fields:	Ascending
		Ascending

Properties

Date Created:	11/18/1999 1:27:15 PM	Last Updated:	11/18/1999 1:28:27 PM
MaxRecords:	0	ODBCTimeout:	60
OrderBy:	Fix_C5Alkenes.Compound	OrderByOn:	True
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Fix_C5Alkenes.RunID, Fix_C5Alkenes.SampleID, "C5=" AS Expr1,
Sum(Fix_C5Alkenes.[Mole-%]) AS [SumOfMole-%], Fix_C5Alkenes.Factor, Sum([Mole-%])/[Factor]
AS Area
FROM Fix_C5Alkenes
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	
Expr1	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	

SumOfMole-%	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Factor	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2625		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Area	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2925		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		

Table Indexes

Name	Number of Fields
RunSample	2
	Clustered: False
	DistinctCount: 2905
	Foreign: False
	Ignore Nulls: False
	Name: RunSample
	Primary: True
	Required: True
	Unique: True
	Fields: Ascending
	Ascending
SampleGas	2
	Clustered: False
	DistinctCount: 2905
	Foreign: True
	Ignore Nulls: False
	Name: SampleGas
	Primary: False
	Required: False
	Unique: True
	Fields: Ascending
	Ascending

Properties

Date Created:	11/18/1999 1:11:15 PM	Last Updated:	11/18/1999 1:14:28 PM
MaxRecords:	0	ODBCTimeout:	60
OrderBy:	Fix_C5Alkenes.Compound	OrderByOn:	True
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Gas.RunID, Gas.SampleID, Gas_Peaks.Compound, Gas_Peaks.[Mole-%], [5790 Response
Factor].Factor
FROM (Gas_Peaks INNER JOIN Gas ON Gas_Peaks.RunID = Gas.RunID) INNER JOIN [5790 Response
Factor] ON (Gas.RunID = [5790 Response Factor].RunID) AND (Gas.SampleID = [5790 Response
Factor].SampleID)
WHERE (((Gas_Peaks.Compound) In
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	
Compound	Text	15
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	

	ColumnOrder:	Default		
	ColumnWidth:	2595		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	Compound		
	Source Table:	Gas_Peaks		
Mole-%			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Mole-%		
	Source Table:	Gas_Peaks		
Factor			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2625		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
	Source Table:	Gas		

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False

Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
Compound	1
Clustered:	False
DistinctCount:	24
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
GasPeakID	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	GasPeakID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	85
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleCompound	3
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleCompound
Primary:	False

	Required:	False
	Unique:	False
	Fields:	Ascending
Sample		1
	Clustered:	False
	DistinctCount:	129
	Foreign:	False
	Ignore Nulls:	False
	Name:	Sample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		2
	Clustered:	False
	DistinctCount:	2905
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
SampleGas		2
	Clustered:	False
	DistinctCount:	2905
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleGas
	Primary:	False
	Required:	False
	Unique:	True
	Fields:	Ascending
		Ascending

Properties

Date Created:	11/17/1998 4:08:04 PM	Last Updated:	11/20/1998 8:21:39 AM
MaxRecords:	0	ODBCTimeout:	60
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	128
Updatable:	True		

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 4 AS [Carbon Number], ([5790 C4=]+[5790
C4])*[Factor] AS [Gas Percent], 0 AS Water, 0 AS Oil, 0 AS Wax
FROM Gas RIGHT JOIN [5790 Response Factor] ON (Gas.RunID = [5790 Response Factor].RunID)
AND (Gas.SampleID = [5790 Response Factor].SampleID)
WHERE Gas.RunID = pRunID ;
```

```
UNION
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 5 AS [Carbon Number], ([5790 C5=]+[5790
C5])*[Factor],0 ,0, 0
FROM Gas RIGHT JOIN [5790 Response Factor] ON (Gas.RunID = [5790 Response Factor].RunID)
AND (Gas.SampleID = [5790 Response Factor].SampleID)
WHERE Gas.RunID = pRunID;
```

```
UNION
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 6 AS [Carbon Number], ([5790 C6=] + [5790
C6])*[Factor],0 ,0, 0
FROM Gas RIGHT JOIN [5790 Response Factor] ON (Gas.RunID = [5790 Response Factor].RunID)
AND (Gas.SampleID = [5790 Response Factor].SampleID)
WHERE Gas.RunID = pRunID;
```

```
UNION
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 7 AS [Carbon Number], [5790 C7]*[Factor],0 ,0,
0
FROM Gas RIGHT JOIN [5790 Response Factor] ON (Gas.RunID = [5790 Response Factor].RunID)
AND (Gas.SampleID = [5790 Response Factor].SampleID)
WHERE Gas.RunID = pRunID;
```

```
UNION
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 8 AS [Carbon Number], [5790 C8]*[Factor],0 ,0,
0
FROM Gas RIGHT JOIN [5790 Response Factor] ON (Gas.RunID = [5790 Response Factor].RunID)
AND (Gas.SampleID = [5790 Response Factor].SampleID)
WHERE Gas.RunID = pRunID;
```

```
UNION SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 9 AS [Carbon Number], [5790
C9]*[Factor],0 ,0, 0
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength:	False	

	Attributes:	Variable Length	
	Collating Order:	General	
	Data Updatable:	False	
	Ordinal Position:	0	
	Required:	False	
SampleID			Text 255
	AllowZeroLength:	False	
	Attributes:	Variable Length	
	Collating Order:	General	
	Data Updatable:	False	
	Ordinal Position:	1	
	Required:	False	
Carbon Number			Long Integer 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnWidth:	1710	
	Data Updatable:	False	
	Ordinal Position:	2	
	Required:	False	
Gas Percent			Double 8
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnWidth:	2490	
	Data Updatable:	False	
	Ordinal Position:	3	
	Required:	False	
Water			Long Integer 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	Data Updatable:	False	
	Ordinal Position:	4	
	Required:	False	
Oil			Long Integer 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	Data Updatable:	False	
	Ordinal Position:	5	
	Required:	False	
Wax			Long Integer 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	Data Updatable:	False	
	Ordinal Position:	6	

Required: False

Properties

Date Created:	11/17/1998 4:08:04 PM	Last Updated:	11/20/1998 8:22:13 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	128	Updatable:	True

SQL

```

PARAMETERS pRunID Text ( 255 );
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 1 AS [Carbon Number], Gas.CH4 AS Gas, 0 AS
Water, 0 AS Oil, 0 AS Wax
FROM Gas
WHERE Gas.RunID = pRunID;
UNION
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 2, [C2=] + [C2], 0, 0, 0
FROM Gas
WHERE Gas.RunID = pRunID;
UNION SELECT DISTINCTROW Gas.RunID, Gas.SampleID, 3, [C3=] + [C3], 0, 0, 0
FROM Gas
WHERE Gas.RunID = pRunID;
UNION Select DISTINCTROW Gas.RunID, Gas.SampleID, 0, [CO] + [CO2] + [H2] + [Ar2], 0, 0, 0
FROM Gas
WHERE Gas.RunID = pRunID;
  
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Carbon Number	Long Integer	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False		

	Ordinal Position:	2		
	Required:	False		
Gas	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2535		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Water	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Oil	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
Wax	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		

Properties

Date Created:	11/14/1998 10:24:14 AM	Filter:	((Gas.RunID="rem023"))
Last Updated:	11/14/1998 10:24:14 AM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, Gas.H2, Gas.CO, Gas.CO2, Gas.CH4, Gas.[C2=],
Gas.C2, Gas.[C3=], Gas.C3, [5790 C4=]*[f] AS [C4=], [5790 C4]*[f] AS C4, [5790 C5=]*[f] AS
[C5=], [5790 C5]*[f] AS C5, [5790 C6=]*[f] AS [C6=], [5790 C6]*[f] AS C6, [5790 C7]*[f] AS C7,
[5790 C8]*[f] AS C8, [5790 C9]*[f] AS C9,
((n-C4)+[i-C4]+[1-C4=]+[i-C4=]+[t-C4=]+[c-C4=])/([5790 C4=]+[5790 C4]) AS f,
[C2=]/([C2]+[C2=]) AS C2Rat, [C3=]/([C3]+[C3=]) AS C3Rat, [5790 C4=]/([5790 C4=]+[5790
C4]) AS C4Rat, [5790 C5=]/([5790 C5=]+[5790 C5]) AS C5Rat, [5790 C6=]/([5790 C6=]+[5790
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	
H2	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	

	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	2		
	Required:	False		
	Source Field:	H2		
	Source Table:	Gas		
CO			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	CO		
	Source Table:	Gas		
CO2			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	4		
	Required:	False		
	Source Field:	CO2		
	Source Table:	Gas		
CH4			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	5		
	Required:	False		
	Source Field:	CH4		
	Source Table:	Gas		

C2=	AllowZeroLength: False Attributes: Fixed Size, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: C2= Source Table: Gas	Single	4
C2	AllowZeroLength: False Attributes: Fixed Size, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 7 Required: False Source Field: C2 Source Table: Gas	Single	4
C3=	AllowZeroLength: False Attributes: Fixed Size, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 8 Required: False Source Field: C3= Source Table: Gas	Single	4
C3	AllowZeroLength: False Attributes: Fixed Size, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 9	Single	4

	Required:	False		
	Source Field:	C3		
	Source Table:	Gas		
C4=	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2250		
	Data Updatable:	False		
	Ordinal Position:	10		
	Required:	False		
	Source Table:	Gas		
C4	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	11		
	Required:	False		
	Source Table:	Gas		
C5=	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1905		
	Data Updatable:	False		
	Ordinal Position:	12		
	Required:	False		
	Source Table:	Gas		
C5	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	13		
	Required:	False		
	Source Table:	Gas		
C6=	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	14		
	Required:	False		
	Source Table:	Gas		
C6	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		

	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1995		
	Data Updatable:	False		
	Ordinal Position:	15		
	Required:	False		
	Source Table:	Gas		
C7			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	16		
	Required:	False		
	Source Table:	Gas		
C8			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	17		
	Required:	False		
	Source Table:	Gas		
C9			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2310		
	Data Updatable:	False		
	Ordinal Position:	18		
	Required:	False		
	Source Table:	Gas		
f			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2670		
	Data Updatable:	False		
	Ordinal Position:	19		
	Required:	False		
	Source Table:	Gas		
C2Rat			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1965		
	Data Updatable:	False		
	Ordinal Position:	20		

	Required:	False		
	Source Table:	Gas		
C3Rat			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2025		
	Data Updatable:	False		
	Ordinal Position:	21		
	Required:	False		
	Source Table:	Gas		
C4Rat			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1965		
	Data Updatable:	False		
	Ordinal Position:	22		
	Required:	False		
	Source Table:	Gas		
C5Rat			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2235		
	Data Updatable:	False		
	Ordinal Position:	23		
	Required:	False		
	Source Table:	Gas		
C6Rat			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1875		
	Data Updatable:	False		
	Ordinal Position:	24		
	Required:	False		
	Source Table:	Gas		

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False

Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False
Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
	Ascending

Properties

Date Created:	11/14/1998 10:25:35 AM	Last Updated:	12/2/1998 3:02:48 PM
MaxRecords:	0	ODBCTimeout:	5
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT DISTINCTROW Gas.RunID, Gas.SampleID, Run.Started, Sample.Date, Gas.H2, Gas.CO,
Gas.CO2, Gas.CH4, Gas.[C2=], Gas.C2, Gas.[C3=], Gas.C3,
[Gas]![1-C4=]+[Gas]![i-C4=]+[Gas]![t-C4=]+[Gas]![c-C4=] AS [C4=], [Gas]![i-C4]+[Gas]![n-C4] AS
C4, [5790 C5=]*[f] AS [C5=], [5790 C5]*[f] AS C5, [5790 C6=]*[f] AS [C6=], [5790 C6]*[f] AS
C6, [5790 C7]*[f] AS C7, [5790 C8]*[f] AS C8, [5790 C9]*[f] AS C9,
([n-C4]+[i-C4]+[1-C4=]+[i-C4=]+[t-C4=]+[c-C4=])/([5790 C4=]+[5790 C4]) AS f,
[C2=]/([C2]+[C2=]) AS [C2 Ratio], [C3=]/([C3]+[C3=]) AS [C3 Ratio],
([Gas]![1-C4=]+[Gas]![i-C4=]+[Gas]![t-C4=]+[Gas]![c-C4=])/([Gas]![i-C4]+[Gas]![n-C4]+[Gas]![1-C4
=]+[Gas]![i-C4=]+[Gas]![t-C4=]+[Gas]![c-C4=]) AS [C4 Ratio], [5790 C5=]/([5790 C5=]+[5790
C5]) AS [C5 Ratio], [5790 C6=]/([5790 C6=]+[5790 C6]) AS [C6 Ratio],
DateDiff("n",[Started],[Date])/60 AS TOS
FROM Gas, Run, Sample
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Gas	

Started	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1740 Data Updatable: False Ordinal Position: 2 Required: False Source Field: Started Source Table: Run	Date/Time	8
Date	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2670 Data Updatable: False Ordinal Position: 3 Required: False Source Field: Date Source Table: Sample	Date/Time	8
H2	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 4 Required: False Source Field: H2 Source Table: Gas	Single	4
CO	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 5 Required: False Source Field: CO Source Table: Gas	Single	4

CO2	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 6 Required: False Source Field: CO2 Source Table: Gas	Single	4
CH4	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 7 Required: False Source Field: CH4 Source Table: Gas	Single	4
C2=	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 8 Required: False Source Field: C2= Source Table: Gas	Single	4
C2	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 9	Single	4

	Required:	False		
	Source Field:	C2		
	Source Table:	Gas		
C3=	AllowZeroLength:	False	Single	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	C3=		
	Source Table:	Gas		
C3	AllowZeroLength:	False	Single	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	C3		
	Source Table:	Gas		
C4=	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2235		
	Data Updatable:	False		
	Ordinal Position:	12		
	Required:	False		
	Source Table:	Gas		
C4	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2610		
	Data Updatable:	False		
	Ordinal Position:	13		
	Required:	False		
	Source Table:	Gas		

C5=	AllowZeroLength: Attributes: Collating Order: ColumnHidden: ColumnWidth: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 2310 False 14 False Gas	Double	8
C5	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 15 False Gas	Double	8
C6=	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 16 False Gas	Double	8
C6	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 17 False Gas	Double	8
C7	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 18 False Gas	Double	8
C8	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	False Fixed Size General False 19 False Gas	Double	8

C9	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 20 Required: False Source Table: Gas	Double	8
f	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 21 Required: False Source Table: Gas	Double	8
C2 Ratio	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 22 Required: False Source Table: Gas	Double	8
C3 Ratio	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 23 Required: False Source Table: Gas	Double	8
C4 Ratio	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 24 Required: False Source Table: Gas	Double	8
C5 Ratio	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 25 Required: False Source Table: Gas	Double	8
C6 Ratio	AllowZeroLength: False	Double	8

Attributes: Collating Order: Data Updatable: Ordinal Position: Required: Source Table:	Fixed Size General False 26 False Gas		
TOS	AllowZeroLength: Attributes: Collating Order: Data Updatable: Ordinal Position: Required:	False Fixed Size General False 27 False	Double 8

Table Indexes

Name	Number of Fields
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False
Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending Ascending
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66

	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Date		1
	Clustered:	False
	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID

Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	1
Clustered:	False
DistinctCount:	227
Foreign:	True
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleID	2
Clustered:	False
DistinctCount:	3136
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleID
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	2905
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleGas	2
Clustered:	False
DistinctCount:	2905
Foreign:	True
Ignore Nulls:	False
Name:	SampleGas
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending

Properties

Date Created:	11/16/1999 12:52:37 PM	Filter:	((Run.RUNID Like "yqz*"))
Last Updated:	11/16/1999 12:54:42 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT Run.RUNID, Run.[Run Notes]
FROM Run
WHERE (((Run.RUNID)=[pRunID]));
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length, Updatable Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: True DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
Run Notes	Memo	N/A
AllowZeroLength: True Attributes: Variable Length, Updatable Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: True Ordinal Position: 1 Required: False Source Field: Run Notes Source Table: Run		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	11/17/1998 4:18:33 PM	Last Updated:	11/18/1998 8:47:37 AM
MaxRecords:	0	ODBCTimeout:	60
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	128
Updatable:	True		

SQL

```
Select * FROM [Gas AGC Mol Percents];
UNION Select * FROM [Gas 5790 Mol Percents]
ORDER BY RunID, SampleID, [Carbon Number];
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	0	
Required:	False	
SampleID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Carbon Number	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2145	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	
Gas	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	

	ColumnWidth:	2580		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Water	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Oil	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
Wax	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		

Properties

Date Created:	11/17/1998 4:11:17 PM	Last Updated:	11/18/1998 8:47:16 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	128	Updatable:	True

SQL

```
SELECT * FROM [Mols Wax];
UNION
SELECT * FROM [Mols Oil];
UNION
SELECT * FROM [Mols Water];
UNION SELECT * FROM [Mols Gas];
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Carbon_Number	Long Integer	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 2 Required: False		
Mols Gas	Double	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General		

	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Mols Water			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Mols Oil			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
Mols Wax			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		

Properties

Date Created:	12/15/1998 2:28:27 PM	Last Updated:	12/15/1998 2:31:40 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Antoine Constants].Carbon_Number, [Antoine Constants].A, [Antoine Constants].B,
[Antoine Constants].C
FROM [Antoine Constants];
```

Columns

Name	Type	Size
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Data Updatable:	True	
Ordinal Position:	0	
Required:	False	
Source Field:	Carbon_Number	
Source Table:	Antoine Constants	
A	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Data Updatable:	True	
Ordinal Position:	1	
Required:	False	
Source Field:	A	
Source Table:	Antoine Constants	
B	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Data Updatable:	True	
Ordinal Position:	2	
Required:	False	
Source Field:	B	
Source Table:	Antoine Constants	
C	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Data Updatable:	True	

Ordinal Position: 3
Required: False
Source Field: C
Source Table: Antoine Constants

Table Indexes

Name	Number of Fields
Carbon_Number	1
Clustered:	False
DistinctCount:	100
Foreign:	False
Ignore Nulls:	False
Name:	Carbon_Number
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending

Properties

Date Created:	12/15/1998 2:27:41 PM	Last Updated:	12/15/1998 2:31:22 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
PARAMETERS Temperature IEEESingle;
SELECT [Antoine Constants].Carbon_Number, ([Antoine Constants]![A]-([Antoine
Constants]![B]/([Temperature]+[Antoine Constants]![C]))) AS [Log P (mm Hg)], 10^([Antoine
Constants]![A]-([Antoine Constants]![B]/([Temperature]+[Antoine Constants]![C]))) AS [mm Hg],
[Temperature] AS [Temperature (deg C)]
FROM [Antoine Constants];
```

Query Parameters

Name	Type
Temperature	Single

Columns

Name	Type	Size
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Data Updatable:	True	
Ordinal Position:	0	
Required:	False	
Source Field:	Carbon_Number	
Source Table:	Antoine Constants	
Log P (mm Hg)	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	3270	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Source Table:	Antoine Constants	
mm Hg	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	3000	

Data Updatable:	False		
Ordinal Position:	2		
Required:	False		
Source Table:	Antoine Constants		
Temperature (deg C)		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3315		
Data Updatable:	False		
Ordinal Position:	3		
Required:	False		

Table Indexes

Name	Number of Fields
Carbon_Number	1
Clustered:	False
DistinctCount:	100
Foreign:	False
Ignore Nulls:	False
Name:	Carbon_Number
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending

Properties

Date Created:	2/24/2000 9:15:47 AM	Last Updated:	2/24/2000 9:58:49 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT Product_Distribution.RunID, Product_Distribution.SampleID, Product_Distribution.TOS,
Product_Distribution.[Carbon Number], [Total Mols]/[SumOfTotal Mols] AS [Mol Fraction]
FROM Product_Distribution INNER JOIN Product_Distribution_Sums ON
(Product_Distribution.SampleID = Product_Distribution_Sums.SampleID) AND
(Product_Distribution.RunID = Product_Distribution_Sums.RunID)
WHERE (((Product_Distribution.RunID)=[pRunID]) AND ((Product_Distribution.[Carbon
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	0	
Required:	False	
SampleID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Product_Distribution.TOS	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	3015	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	

Carbon Number		Long Integer	4
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2550		
Data Updatable:	False		
Ordinal Position:	3		
Required:	False		
Mol Fraction		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2460		
Data Updatable:	False		
Ordinal Position:	4		
Required:	False		

Properties

Date Created:	11/18/1998 8:55:05 AM	Last Updated:	12/16/1998 2:55:35 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Product_Distribution.RunID, Product_Distribution.SampleID, Product_Distribution.TOS,
Product_Distribution.[Carbon Number], [Total Mols]/[SumOfTotal Mols] AS [Mol Fraction], Log([mol
Fraction]) AS [Log Mol Fraction], AlphaFit.Alpha1, AlphaFit.Alpha2, AlphaFit.x, AlphaFit.FitRange AS
Range, AlphaFit.Notes
FROM (Product_Distribution INNER JOIN Product_Distribution_Sums ON
(Product_Distribution.SampleID = Product_Distribution_Sums.SampleID) AND
(Product_Distribution.RunID = Product_Distribution_Sums.RunID)) LEFT JOIN AlphaFit ON
(Product_Distribution.SampleID = AlphaFit.SampleID) AND (Product_Distribution.RunID =
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Product_Distribution.TOS	Long Integer	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnWidth: 3015 Data Updatable: False Ordinal Position: 2 Required: False		

Carbon Number	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2550	
Data Updatable:	False	
Ordinal Position:	3	
Required:	False	
Mol Fraction	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2460	
Data Updatable:	False	
Ordinal Position:	4	
Required:	False	
Log Mol Fraction	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2685	
Data Updatable:	False	
Ordinal Position:	5	
Required:	False	
Alpha1	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	6	
Required:	False	
Source Field:	Alpha1	
Source Table:	AlphaFit	
Alpha2	Single	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	7	

	Required:	False		
	Source Field:	Alpha2		
	Source Table:	AlphaFit		
x			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	8		
	Required:	False		
	Source Field:	x		
	Source Table:	AlphaFit		
Range			Text	50
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	3915		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	FitRange		
	Source Table:	AlphaFit		
Notes			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	5160		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	Notes		
	Source Table:	AlphaFit		

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	94
Foreign:	False
Ignore Nulls:	False

Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	620
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
SampleAlphaFit	2
Clustered:	False
DistinctCount:	620
Foreign:	True
Ignore Nulls:	False
Name:	SampleAlphaFit
Primary:	False
Required:	False
Unique:	True
Fields:	Ascending
SampleID	1
Clustered:	False
DistinctCount:	73
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	12/22/1999 3:33:57 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	12/22/1999 3:33:57 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
Orientation:	0	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID
FROM Oil_Peaks
GROUP BY Oil_Peaks.RunID, Oil_Peaks.SampleID
HAVING (((Oil_Peaks.RunID) Like "LGX???"))
ORDER BY Oil_Peaks.RunID;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RunID Source Table: Oil_Peaks		
SampleID	Text	3
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: Oil_Peaks		

Table Indexes

Name	Number of Fields
Compound	1

	Clustered:	False
	DistinctCount:	6
	Foreign:	False
	Ignore Nulls:	False
	Name:	Compound
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	156
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		2
	Clustered:	False
	DistinctCount:	1304
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
		Ascending
RunSampleRT		3
	Clustered:	False
	DistinctCount:	557383
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleRT
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending
		Ascending
SampleID		1
	Clustered:	False
	DistinctCount:	128
	Foreign:	False
	Ignore Nulls:	False
	Name:	SampleID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
SampleOil_Peaks		2

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Query: Oil Run Sample

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Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	11/17/1998 4:16:48 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	12/3/1998 11:20:33 AM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT DISTINCT Oil_Peaks.SampleID
FROM Oil_Peaks
WHERE (((Oil_Peaks.RunID)=[pRunID]));
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending
	Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False

Fields:	Ascending
	Ascending

Properties

Date Created:	11/22/1999 3:12:13 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	11/22/1999 3:12:13 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Weight_Percent, Oil_Peaks.Carbon_Number,
Oil_Peaks.Compound, *
FROM Oil_Peaks
WHERE (((Oil_Peaks.Compound)="1-olefin"));
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Weight_Percent	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	

Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Weight_Percent		
Source Table:	Oil_Peaks		
Carbon_Number		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Carbon_Number		
Source Table:	Oil_Peaks		
Compound		Text	15
AllowZeroLength:	True		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	Compound		
Source Table:	Oil_Peaks		
Retention_Time		Single	4
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Retention_Time		
Source Table:	Oil_Peaks		

Table Indexes

Name	Number of Fields
------	------------------

Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending

Properties

Date Created:	12/16/1998 3:32:17 PM	Last Updated:	12/16/1998 4:31:47 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	True	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```

SELECT [Oil Normalized Weight Fraction].RunID, [Oil Normalized Weight Fraction].SampleID,
TOS.TOS, [Oil Normalized Weight Fraction].Carbon_Number, [Weight Fraction]*100 AS [Weight
Percent], Log([Weight Fraction]*100) AS LogWeightPercent, IIf(IsNull([paraffin]),0,[paraffin]) AS
SumOfParaffin, IIf(IsNull([cis_2_olefin]),0,[cis_2_olefin]) AS SumOfCis_2_Olefin,
IIf(IsNull([trans_2_olefin]),0,[trans_2_olefin]) AS SumOfTrans_2_Olefin,
IIf(IsNull([1_olefin]),0,[1_olefin]) AS SumOf_1_Olefin
FROM (((([Oil Normalized Weight Fraction] INNER JOIN TOS ON ([Oil Normalized Weight
Fraction].SampleID = TOS.SampleID) AND ([Oil Normalized Weight Fraction].RunID = TOS.RUNID))
LEFT JOIN Sum_1_Olefin ON ([Oil Normalized Weight Fraction].Carbon_Number =
Sum_1_Olefin.Carbon_Number) AND ([Oil Normalized Weight Fraction].SampleID =
Sum_1_Olefin.SampleID) AND ([Oil Normalized Weight Fraction].RunID = Sum_1_Olefin.RunID))
LEFT JOIN Sum_cis_2_olefin ON ([Oil Normalized Weight Fraction].Carbon_Number =
Sum_cis_2_olefin.Carbon_Number) AND ([Oil Normalized Weight Fraction].SampleID =
Sum_cis_2_olefin.SampleID) AND ([Oil Normalized Weight Fraction].RunID =
Sum_cis_2_olefin.RunID)) LEFT JOIN Sum_Paraffin ON ([Oil Normalized Weight
Fraction].Carbon_Number = Sum_Paraffin.Carbon_Number) AND ([Oil Normalized Weight
Fraction].SampleID = Sum_Paraffin.SampleID) AND ([Oil Normalized Weight Fraction].RunID =
Sum_Paraffin.RunID)) LEFT JOIN Sum_trans_2_olefin ON ([Oil Normalized Weight
Fraction].Carbon_Number = Sum_trans_2_olefin.Carbon_Number) AND ([Oil Normalized Weight
Fraction].SampleID = Sum_trans_2_olefin.SampleID) AND ([Oil Normalized Weight Fraction].RunID =
Sum_trans_2_olefin.RunID)
WHERE ((([Weight Fraction]*100)>0))
  
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	

SampleID	AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 1 Required: False Source Field: SampleID Source Table: Oil_Peaks	Text	3
TOS	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 2 Required: False	Long Integer	4
Carbon_Number	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: Default Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Carbon_Number Source Table: Oil_Peaks	Integer	2
Weight Percent	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 4 Required: False	Double	8
LogWeightPercent	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 5 Required: False	Double	8
SumOfParaffin	AllowZeroLength: False Attributes: Fixed Size	Double	8

Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	6		
Required:	False		
SumOfCis_2_Olefin		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	7		
Required:	False		
SumOfTrans_2_Olefin		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	8		
Required:	False		
SumOf_1_Olefin		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	9		
Required:	False		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False

DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending
RunSampleRT	3
Clustered:	False
DistinctCount:	557383
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	128
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleOil_Peaks	2
Clustered:	False
DistinctCount:	1304
Foreign:	True
Ignore Nulls:	False
Name:	SampleOil_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending

Properties

Date Created:	2/15/2000 8:54:38 AM	Last Updated:	2/15/2000 9:26:35 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Product_Distribution.RunID, Product_Distribution.SampleID, Product_Distribution.TOS,
Product_Distribution.[Carbon Number], [Total Mols]*([Carbon Number]*14+2) AS Weight
FROM Product_Distribution
WHERE (((Product_Distribution.[Carbon Number])>0));
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	0	
Required:	False	
SampleID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
TOS	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	3015	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	
Carbon Number	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	

	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2550		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Weight			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		

Properties

Date Created:	11/3/1999 3:56:51 PM	Last Updated:	11/3/1999 4:03:54 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Product_Distribution.RunID, Product_Distribution.SampleID, Product_Distribution.[Carbon
Number], [Total Mols]/[SumOfTotal Mols] AS [Mol Fraction]
FROM Product_Distribution INNER JOIN Product_Distribution_Sums ON
(Product_Distribution.SampleID = Product_Distribution_Sums.SampleID) AND
(Product_Distribution.RunID = Product_Distribution_Sums.RunID)
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	0	
Required:	False	
SampleID	Text	255
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Carbon Number	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2550	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	
Mol Fraction	Double	8
AllowZeroLength:	False	

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Attributes:	Fixed Size
Collating Order:	General
ColumnHidden:	False
ColumnWidth:	2460
Data Updatable:	False
Ordinal Position:	3
Required:	False

Properties

Date Created:	11/16/1999 2:22:36 PM	FailOnError:	False
Last Updated:	11/16/1999 2:26:51 PM	MaxRecords:	0
ODBCTimeout:	60	RecordLocks:	Edited Record
RecordsAffected:	0	ReturnsRecords:	True
Type:	48	Updatable:	True
UseTransaction:	True		

SQL

```
PARAMETERS pRunID Text ( 255 ), pNote Text;  
UPDATE Run SET Run.[Run Notes] = [pNote]  
WHERE (((Run.RUNID)=[pRunID]));
```

Query Parameters

Name	Type
pRunID	Text
pNote	Memo

Properties

Date Created:	12/11/1998 10:05:50 AM	Last Updated:	12/11/1998 10:49:35 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Recent Runs Extended Summary].RUNID, Format([TOS],"0") AS [TOS (hrs)], [Recent Runs
Extended Summary].Pressure, [Recent Runs Extended Summary].Temperature,
Format([WHSV],"0.00") AS SV, Format([H2_CO Ratio],"0.0") AS H2_CO, Format([Syngas
Conversion],"0.0") AS Syn_Conv, [Recent Runs Extended Summary].Catalyst, "Co" AS Active_Metal,
[Recent Runs Extended Summary].[Catalyst Notes]
FROM [Recent Runs Extended Summary]
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
TOS (hrs)	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Pressure	Integer	2
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 2		

	Required:	False		
	Source Field:	Pressure		
	Source Table:	Sample		
Temperature			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Temperature		
	Source Table:	Sample		
SV			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
H2_CO			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
	Source Table:	Sample		
Syn_Conv			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		
Catalyst			Text	6
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		
	Source Field:	Catalyst		

Source Table:	Run		
Active_Metal		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	8		
Required:	False		
Catalyst Notes		Memo	N/A
AllowZeroLength:	True		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	7440		
Data Updatable:	False		
Ordinal Position:	9		
Required:	False		
Source Field:	Catalyst Notes		
Source Table:	Run		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True

	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Date		1
	Clustered:	False
	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2

	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Catalyst		1
	Clustered:	False
	DistinctCount:	120
	Foreign:	False
	Ignore Nulls:	False
	Name:	Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87

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Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	11/14/1998 3:02:15 PM	Last Updated:	11/17/1998 2:12:35 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Run.RUNID, Last(Format([Started],"Short Date")) AS [Started On],
Max(Format([Date],"Short Date")) AS [Last Sample]
FROM Run LEFT JOIN Sample ON Run.RUNID = Sample.RunID
WHERE (((DateDiff("d",[Date],Now()))<=10) AND ((Run.[Percent Co])>0))
GROUP BY Run.RUNID
ORDER BY Last(Format([Started],"Short Date")) DESC;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
Started On	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnWidth: 2865 Data Updatable: False Ordinal Position: 1 Required: False		
Last Sample	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnWidth: 4170 Data Updatable: False Ordinal Position: 2 Required: False		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False

Fields: Ascending

Properties

Date Created:	12/11/1998 10:06:42 AM	Last Updated:	12/11/1998 10:50:51 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Recent Runs Extended Summary].RUNID, Format([TOS],"0") AS [TOS (hrs)], [Recent Runs
Extended Summary].Pressure, [Recent Runs Extended Summary].Temperature,
Format([WHSV],"0.00") AS SV, Format([H2_CO Ratio],"0.0") AS H2_CO, Format([Syngas
Conversion],"0.0") AS Syn_Conv, [Recent Runs Extended Summary].Catalyst, "Fe" AS Active_Metal,
[Recent Runs Extended Summary].[Catalyst Notes]
FROM [Recent Runs Extended Summary]
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
TOS (hrs)	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Pressure	Integer	2
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 1440 Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 2		

	Required:	False		
	Source Field:	Pressure		
	Source Table:	Sample		
Temperature			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Temperature		
	Source Table:	Sample		
SV			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
H2_CO			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
	Source Table:	Sample		
Syn_Conv			Text	255
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		
Catalyst			Text	6
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	Default		
	Data Updatable:	False		
	DisplayControl:	Text Box		
	Ordinal Position:	7		
	Required:	False		
	Source Field:	Catalyst		

Source Table:	Run		
Active_Metal		Text	255
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	8		
Required:	False		
Catalyst Notes		Memo	N/A
AllowZeroLength:	True		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	False		
Ordinal Position:	9		
Required:	False		
Source Field:	Catalyst Notes		
Source Table:	Run		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True

	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Date		1
	Clustered:	False
	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2

	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Catalyst		1
	Clustered:	False
	DistinctCount:	120
	Foreign:	False
	Ignore Nulls:	False
	Name:	Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87

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Query: Recent Fe Summary

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Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	11/14/1998 3:09:38 PM	Last Updated:	11/17/1998 2:12:17 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Run.RUNID, Last(Format([Started],"Short Date")) AS [Started On],
Max(Format([Date],"Short Date")) AS [Last Sample]
FROM Run LEFT JOIN Sample ON Run.RUNID = Sample.RunID
WHERE (((DateDiff("d",[Date],Now()))<=10) AND ((Run.[Percent Fe])>0))
GROUP BY Run.RUNID
ORDER BY Max(Format([Date],"Short Date")) DESC;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
Started On	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Last Sample	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnWidth: 4170 Data Updatable: False Ordinal Position: 2 Required: False		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	12/11/1998 9:56:02 AM	Last Updated:	12/11/1998 9:56:02 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Run.RUNID, Max(Sample.Date) AS MaxOfDate
FROM Run INNER JOIN Sample ON Run.RUNID = Sample.RunID
WHERE (((DateDiff("d",[Date],Now()))<10))
GROUP BY Run.RUNID;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RUNID	
Source Table:	Run	
MaxOfDate	Date/Time	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	3270	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False

	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending

Properties

Date Created:	12/11/1998 10:03:45 AM	Last Updated:	12/11/1998 10:03:45 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Recent Runs Summary].RUNID, [Recent Runs Summary].TOS, [Recent Runs
Summary].Pressure, [Recent Runs Summary].Temperature, [Recent Runs Summary].WHSV, [Recent
Runs Summary].[H2_CO Ratio], [Recent Runs Summary].[Syngas Conversion], Run.Catalyst,
Run.[Percent Co], Run.[Percent Fe], Run.[Catalyst Notes]
FROM [Recent Runs Summary] INNER JOIN Run ON [Recent Runs Summary].RUNID = Run.RUNID;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RUNID	
Source Table:	Run	
TOS	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2400	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Pressure	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1440	
Data Updatable:	False	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	

	Ordinal Position:	2		
	Required:	False		
	Source Field:	Pressure		
	Source Table:	Sample		
Temperature			Integer	2
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	False		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	3		
	Required:	False		
	Source Field:	Temperature		
	Source Table:	Sample		
WHSV			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2610		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
H2_CO Ratio			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2490		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
	Source Table:	Sample		
Syngas Conversion			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1980		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		
Catalyst			Text	6
	AllowZeroLength:	False		
	Attributes:	Variable Length		
	Collating Order:	General		
	ColumnHidden:	False		

Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Date	1
Clustered:	False
DistinctCount:	2036

	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Catalyst		1
	Clustered:	False
	DistinctCount:	120
	Foreign:	False
	Ignore Nulls:	False
	Name:	Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False

Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	12/11/1998 10:01:35 AM	Last Updated:	12/11/1998 10:01:35 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Recent Runs].RUNID, [Sample Calcs 2].TOS, Sample.Pressure, Sample.Temperature,
[Sample Calcs 2].SV AS WHSV, [Sample Calcs 2].[H2_CO Ratio], [Sample Calcs 2].[Syngas Conv
Value] AS [Syngas Conversion]
FROM ([Recent Runs] INNER JOIN Sample ON ([Recent Runs].MaxOfDate = Sample.Date) AND
([Recent Runs].RUNID = Sample.RunID)) INNER JOIN [Sample Calcs 2] ON (Sample.SampleID =
[Sample Calcs 2].SampleID) AND (Sample.RunID = [Sample Calcs 2].RunID)
ORDER BY [Recent Runs].RUNID;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RUNID	
Source Table:	Run	
TOS	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnWidth:	2400	
Data Updatable:	False	
Ordinal Position:	1	
Required:	False	
Pressure	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1440	
Data Updatable:	False	

DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Pressure		
Source Table:	Sample		
Temperature		Integer	2
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	1440		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Temperature		
Source Table:	Sample		
WHSV		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2610		
Data Updatable:	False		
Ordinal Position:	4		
Required:	False		
H2_CO Ratio		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2490		
Data Updatable:	False		
Ordinal Position:	5		
Required:	False		
Source Table:	Sample		
Syngas Conversion		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	1980		
Data Updatable:	False		
Ordinal Position:	6		
Required:	False		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Date	1
Clustered:	False

	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending

Properties

Date Created:	12/11/1998 12:11:48 PM	Last Updated:	12/15/1998 1:44:36 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT Run.RUNID, First(IIf([Percent Co]>0,"Co","Fe")) AS [Active Metal], Max(Format([TOS],"0"))
AS MaxOfTOS, First(Run.Catalyst) AS FirstOfCatalyst, First(Run.[Catalyst Notes]) AS [FirstOfCatalyst
Notes], First(Run.[Run Notes]) AS [FirstOfRun Notes]
FROM Run INNER JOIN [Sample Calcs 2] ON Run.RUNID = [Sample Calcs 2].RunID
GROUP BY Run.RUNID
ORDER BY First(Run.Started) DESC;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnOrder: 1 ColumnWidth: Default Data Updatable: False DisplayControl: Text Box Ordinal Position: 0 Required: False Source Field: RUNID Source Table: Run		
Active Metal	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
MaxOfTOS	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General ColumnHidden: False ColumnWidth: 1560 Data Updatable: False Ordinal Position: 2 Required: False		
FirstOfCatalyst	Text	255

AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2700		
Data Updatable:	False		
Ordinal Position:	3		
Required:	False		
FirstOfCatalyst Notes		Memo	N/A
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3195		
Data Updatable:	False		
Ordinal Position:	4		
Required:	False		
FirstOfRun Notes		Memo	N/A
AllowZeroLength:	False		
Attributes:	Variable Length		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	4065		
Data Updatable:	False		
Ordinal Position:	5		
Required:	False		

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False

	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending

Properties

Date Created:	11/14/1998 10:24:14 AM	Last Updated:	11/14/1998 10:24:14 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT DISTINCTROW Sample.RunID, Sample.SampleID, DateDiff("n",[Started],[Date])/60 AS TOS,
  [Gas Prod]/22.414*[CO] AS MolsCO_Out, [Gas Feed]/22.424*[Sample].[Percent CO] AS
  MolsCO_In, [Gas Feed]/22.414*[Percent H2] AS MolsH2_In, [Gas Prod]/22.414*[H2] AS
  MolsH2_Out, (([MolsH2_In]-[MolsH2_Out])/([MolsH2_In])*100 AS [H2 Conv],
  (([MolsCO_In]-[MolsCO_Out])/([MolsCO_In])*100 AS [CO Conv], ([MolsCO_In]*[CO
  Conv]+[MolsH2_In]*[H2 Conv])/([MolsH2_In]+[MolsCO_In]) AS [H2CO Conv],
  [MolsH2_In]/[MolsCO_In] AS [H2_CO Ratio], [Gas Feed]/([Weight Catalyst]*([Percent
  Fe]+[Run].[Percent Co])/100) AS SV, [Gas Prod]*[CO2]/22.414 AS MolsCO2_Out,
  ((([MolsCO_In]-[MolsCO_Out]-[MolsCO2_Out])/([MolsCO_In]-[MolsCO_Out]))*100 AS Efficiency,
  [Run].[Percent Co]+[Run].[Percent Fe] AS Active_Metal_Percent, (([Gas Feed]-[Gas Prod])/[Gas
  Feed])*100 AS Contraction
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Sample	
UnicodeCompression:	True	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1470	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Sample	
UnicodeCompression:	True	

TOS	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnWidth: 2400		
	Data Updatable: False		
	Ordinal Position: 2		
	Required: False		
MolsCO_Out	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnWidth: 1935		
	Data Updatable: False		
	Ordinal Position: 3		
	Required: False		
MolsCO_In	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnWidth: 1740		
	Data Updatable: False		
	Ordinal Position: 4		
	Required: False		
	Source Table: Sample		
MolsH2_In	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnWidth: 2055		
	Data Updatable: False		
	Ordinal Position: 5		
	Required: False		
	Source Table: Sample		
MolsH2_Out	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		
	ColumnHidden: False		
	ColumnWidth: 1680		
	Data Updatable: False		
	Ordinal Position: 6		
	Required: False		
H2 Conv	AllowZeroLength: False	Double	8
	Attributes: Fixed Size		
	Collating Order: General		

	ColumnHidden:	False		
	ColumnWidth:	2070		
	Data Updatable:	False		
	Ordinal Position:	7		
	Required:	False		
CO Conv			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2070		
	Data Updatable:	False		
	Ordinal Position:	8		
	Required:	False		
H2CO Conv			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1980		
	Data Updatable:	False		
	Ordinal Position:	9		
	Required:	False		
H2_CO Ratio			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2490		
	Data Updatable:	False		
	Ordinal Position:	10		
	Required:	False		
	Source Table:	Sample		
SV			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2610		
	Data Updatable:	False		
	Ordinal Position:	11		
	Required:	False		
MolsCO2_Out			Double	8
	AllowZeroLength:	False		
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	1950		
	Data Updatable:	False		
	Ordinal Position:	12		
	Required:	False		

Efficiency		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2295		
Data Updatable:	False		
Ordinal Position:	13		
Required:	False		
Active_Metal_Percent		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
Data Updatable:	False		
Ordinal Position:	14		
Required:	False		
Source Table:	Run		
Contraction		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3075		
Data Updatable:	False		
Ordinal Position:	15		
Required:	False		
Source Table:	Sample		

Table Indexes

Name	Number of Fields
Date	1
Clustered:	False
DistinctCount:	2036
Foreign:	False
Ignore Nulls:	False
Name:	Date
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	227
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	1

	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending
Catalyst		1
	Clustered:	False
	DistinctCount:	120
	Foreign:	False
	Ignore Nulls:	False
	Name:	Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203

	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Date		1
	Clustered:	False
	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID

C:\FTS Database\Backup\FTS10.mdb
Query: Sample Calcs

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Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
	Ascending

Properties

Date Created:	11/14/1998 10:24:14 AM	Last Updated:	11/14/1998 10:24:14 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT DISTINCTROW [Sample Calcs].RunID, [Sample Calcs].SampleID, [Sample Calcs].TOS,
[Sample Calcs].TOS AS [Syngas Conv], [Sample Calcs].[H2CO Conv] AS [Syngas Conv Value],
[Sample Calcs].TOS AS [H2 Conv], [Sample Calcs].[H2 Conv] AS [H2 Conv Value], [Sample
Calcs].TOS AS [CO Conv], [Sample Calcs].[CO Conv] AS [CO Conv Value], [Sample Calcs].TOS AS
Efficiency, [Sample Calcs].Efficiency AS [Efficiency Value], [Sample Calcs].SV, [Sample Calcs].[H2_CO
Ratio], [Sample Calcs].Active_Metal_Percent, [Sample Calcs].Contraction
FROM [Sample Calcs];
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Sample	
UnicodeCompression:	True	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	1470	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Sample	
UnicodeCompression:	True	
TOS	Double	8
AllowZeroLength:	False	
Attributes:	Fixed Size	

Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2400		
Data Updatable:	False		
Ordinal Position:	2		
Required:	False		
Syngas Conv		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2400		
Data Updatable:	False		
Ordinal Position:	3		
Required:	False		
Syngas Conv Value		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	1980		
Data Updatable:	False		
Ordinal Position:	4		
Required:	False		
H2 Conv		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2400		
Data Updatable:	False		
Ordinal Position:	5		
Required:	False		
H2 Conv Value		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2070		
Data Updatable:	False		
Ordinal Position:	6		
Required:	False		
CO Conv		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2400		
Data Updatable:	False		
Ordinal Position:	7		
Required:	False		

CO Conv Value		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2070		
Data Updatable:	False		
Ordinal Position:	8		
Required:	False		
Efficiency		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2400		
Data Updatable:	False		
Ordinal Position:	9		
Required:	False		
Efficiency Value		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2295		
Data Updatable:	False		
Ordinal Position:	10		
Required:	False		
SV		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2610		
Data Updatable:	False		
Ordinal Position:	11		
Required:	False		
H2_CO Ratio		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	2490		
Data Updatable:	False		
Ordinal Position:	12		
Required:	False		
Source Table:	Sample		
Active_Metal_Percent		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
Data Updatable:	False		

Ordinal Position:	13		
Required:	False		
Source Table:	Run		
Contraction		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3075		
Data Updatable:	False		
Ordinal Position:	14		
Required:	False		
Source Table:	Sample		

Table Indexes

Name	Number of Fields
Date	1
Clustered:	False
DistinctCount:	2036
Foreign:	False
Ignore Nulls:	False
Name:	Date
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	227
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	1
Clustered:	False
DistinctCount:	227
Foreign:	True
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleID	2
Clustered:	False
DistinctCount:	3136
Foreign:	False
Ignore Nulls:	False

	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Catalyst		1
	Clustered:	False
	DistinctCount:	120
	Foreign:	False
	Ignore Nulls:	False
	Name:	Catalyst
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
CatID		1
	Clustered:	False
	DistinctCount:	66
	Foreign:	False
	Ignore Nulls:	False
	Name:	CatID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
PrimaryKey		1
	Clustered:	False
	DistinctCount:	234
	Foreign:	False
	Ignore Nulls:	False
	Name:	PrimaryKey
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
Started		1
	Clustered:	False
	DistinctCount:	203
	Foreign:	False
	Ignore Nulls:	False
	Name:	Started
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
Weight Catalyst		1
	Clustered:	False
	DistinctCount:	87
	Foreign:	False
	Ignore Nulls:	False
	Name:	Weight Catalyst
	Primary:	False

Date	Required:	False
	Unique:	False
	Fields:	Ascending
		1
	Clustered:	False
	DistinctCount:	2036
	Foreign:	False
	Ignore Nulls:	False
	Name:	Date
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunID		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSample		1
	Clustered:	False
	DistinctCount:	227
	Foreign:	True
	Ignore Nulls:	False
	Name:	RunSample
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
RunSampleID		2
	Clustered:	False
	DistinctCount:	3136
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleID
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending

Properties

Date Created:	3/17/2000 3:41:55 PM	Last Updated:	3/22/2000 10:51:20 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	128
Updatable:	True		

SQL

```
PARAMETERS pRunID Text ( 255 );  
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'H2' AS Gas, [Sample Calcs].[H2 Conv] AS  
[Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

UNION

```
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'CO' AS Gas, [Sample Calcs].[CO Conv] AS  
[Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

UNION

```
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'Efficiency' AS Gas, [Sample  
Calcs].[Efficiency] AS [Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

UNION

```
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'Contraction' AS Gas, [Sample  
Calcs].[Contraction] AS [Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

UNION

```
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'Syngas' AS Gas, [Sample Calcs].[H2CO  
Conv] AS [Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

UNION

```
SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'H2:CO' AS Gas, [Sample Calcs].[H2_CO  
Ratio] AS [Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

```
UNION SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'SV' AS Gas, [Sample Calcs].[SV] AS  
[Value]  
FROM [Sample Calcs]  
WHERE ((([Sample Calcs].RunID)=[pRunID]));
```

```
UNION SELECT [Sample Calcs].RunID, [Sample Calcs].SampleID, 'TOS' AS Gas, [Sample Calcs].[TOS]
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Gas	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 2 Required: False		
Value	Double	8
AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 3 Required: False		

Properties

Date Created:	3/22/2000 10:53:41 AM	Last Updated:	3/22/2000 10:54:53 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	16	Updatable:	True

SQL

```
TRANSFORM First([Sample Calcs 3].Value) AS FirstOfValue  
SELECT [Sample Calcs 3].Gas  
FROM [Sample Calcs 3]  
GROUP BY [Sample Calcs 3].Gas  
PIVOT [Sample Calcs 3].SampleID;
```

Query Parameters

Name	Type
pRunID	Text

Properties

Date Created:	3/17/2000 4:07:16 PM	Last Updated:	3/17/2000 4:07:16 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Sample Calcs 3].RunID, [Sample Calcs 3].SampleID, [Sample Calcs 3].TOS, [Sample Calcs 3].Gas, [Sample Calcs 3].Val
FROM [Sample Calcs 3];
```

Query Parameters

Name	Type
pRunID	Text
[Sample Calcs 3].TOS	Text
[Sample Calcs 3].Val	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
TOS	From	0
AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 2 Required: False		
Gas	Text	255
AllowZeroLength: False Attributes: Variable Length		

	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Val	AllowZeroLength:	False	From	0
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		

Properties

Date Created:	11/23/1999 1:10:08 PM	Last Updated:	11/23/1999 1:10:08 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	Orientation:	0
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT Sample.RunID, Sample.SampleID, Sample.Date, Sample.Pressure, Sample.Temperature,
Sample.[Gas Feed], Sample.[Gas Prod], Sample.[Percent H2], Sample.[Percent CO],
Sample.[Percent N2], Sample.[Weight Oil], Sample.[Weight Wax], Sample.[Weight Water],
Sample.[Weight Rewax], Sample.Notes, *
FROM Sample
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Sample	
UnicodeCompression:	True	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	

	Source Table:	Sample	
	UnicodeCompression:	True	
Date		Date/Time	8
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	2670	
	Data Updatable:	True	
	Ordinal Position:	2	
	Required:	False	
	Source Field:	Date	
	Source Table:	Sample	
Pressure		Integer	2
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	3	
	Required:	False	
	Source Field:	Pressure	
	Source Table:	Sample	
Temperature		Integer	2
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	4	
	Required:	False	
	Source Field:	Temperature	
	Source Table:	Sample	
Gas Feed		Single	4
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	

	Ordinal Position:	5	
	Required:	False	
	Source Field:	Gas Feed	
	Source Table:	Sample	
Gas Prod			Single 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	6	
	Required:	False	
	Source Field:	Gas Prod	
	Source Table:	Sample	
Percent H2			Single 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	7	
	Required:	False	
	Source Field:	Percent H2	
	Source Table:	Sample	
Percent CO			Single 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	
	ColumnWidth:	1440	
	Data Updatable:	True	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	8	
	Required:	False	
	Source Field:	Percent CO	
	Source Table:	Sample	
Percent N2			Single 4
	AllowZeroLength:	False	
	Attributes:	Fixed Size, Updatable	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnOrder:	Default	

	ColumnWidth:	1440		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	9		
	Required:	False		
	Source Field:	Percent N2		
	Source Table:	Sample		
Weight Oil			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	10		
	Required:	False		
	Source Field:	Weight Oil		
	Source Table:	Sample		
Weight Wax			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	11		
	Required:	False		
	Source Field:	Weight Wax		
	Source Table:	Sample		
Weight Water			Single	4
	AllowZeroLength:	False		
	Attributes:	Fixed Size, Updatable		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnOrder:	Default		
	ColumnWidth:	1440		
	Data Updatable:	True		
	DecimalPlaces:	Auto		
	DisplayControl:	Text Box		
	Ordinal Position:	12		
	Required:	False		
	Source Field:	Weight Water		
	Source Table:	Sample		
Weight Rewax			Single	4
	AllowZeroLength:	False		

Attributes: Fixed Size, Updatable
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 1440
 Data Updatable: True
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 13
 Required: False
 Source Field: Weight Rewax
 Source Table: Sample

Notes Memo N/A

AllowZeroLength: True
 Attributes: Variable Length, Updatable
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 1410
 Data Updatable: True
 Ordinal Position: 14
 Required: False
 Source Field: Notes
 Source Table: Sample
 UnicodeCompression: True

Sample Period Single 4

AllowZeroLength: False
 Attributes: Fixed Size, Updatable
 Collating Order: General
 ColumnHidden: False
 ColumnOrder: Default
 ColumnWidth: 1440
 Data Updatable: True
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 15
 Required: False
 Source Field: Sample Period
 Source Table: Sample

Table Indexes

Name	Number of Fields
Date	1
Clustered:	False
DistinctCount:	2036
Foreign:	False
Ignore Nulls:	False
Name:	Date
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

RunID	1
Clustered:	False
DistinctCount:	227
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	1
Clustered:	False
DistinctCount:	227
Foreign:	True
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleID	2
Clustered:	False
DistinctCount:	3136
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleID
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending

Properties

Date Created:	3/8/1999 10:11:23 AM	FailOnError:	False
Filter:	((Gas_Peaks.RunID="rem023"))	Last Updated:	3/8/1999 12:16:03 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	Edited Record
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True	UseTransaction:	True

SQL

```
PARAMETERS pRun Text ( 255 ), pSample Short;
SELECT Gas_Peaks.RunID, Gas_Peaks.Sample, Gas_Peaks.Compound, Gas_Peaks.[Norm Mole-%],
Gas_Peaks.[Norm Weight-%], Gas_Peaks.[Mole-%], Gas_Peaks.[Peak Area], Gas_Peaks.[RT
(seconds)]
FROM Gas_Peaks
```

Query Parameters

Name	Type
pRun	Text
pSample	Integer

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Gas_Peaks	
Sample	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DecimalPlaces:	Auto	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	

Source Field:	Sample		
Source Table:	Gas_Peaks		
Compound		Text	15
AllowZeroLength:	False		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	2595		
Data Updatable:	True		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Compound		
Source Table:	Gas_Peaks		
Norm Mole-%		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	3		
Required:	False		
Source Field:	Norm Mole-%		
Source Table:	Gas_Peaks		
Norm Weight-%		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	4		
Required:	False		
Source Field:	Norm Weight-%		
Source Table:	Gas_Peaks		
Mole-%		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		

DisplayControl:	Text Box		
Ordinal Position:	5		
Required:	False		
Source Field:	Mole-%		
Source Table:	Gas_Peaks		
Peak Area		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	6		
Required:	False		
Source Field:	Peak Area		
Source Table:	Gas_Peaks		
RT (seconds)		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
ColumnHidden:	False		
ColumnOrder:	Default		
ColumnWidth:	Default		
Data Updatable:	True		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	7		
Required:	False		
Source Field:	RT (seconds)		
Source Table:	Gas_Peaks		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	24
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
GasPeakID	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False

Name:	GasPeakID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	85
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleCompound	3
Clustered:	False
DistinctCount:	27734
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleCompound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
	Ascending
	Ascending
Sample	1
Clustered:	False
DistinctCount:	129
Foreign:	False
Ignore Nulls:	False
Name:	Sample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Properties

Date Created:	12/16/1998 3:14:13 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	11/22/1999 3:28:03 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number,
Sum(Oil_Peaks.Weight_Percent) AS 1_olefin
FROM Oil_Peaks
WHERE (((Oil_Peaks.Compound)="1-olefin"))
GROUP BY Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

	ColumnWidth:	Default	
	Data Updatable:	False	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	2	
	Required:	False	
	Source Field:	Carbon_Number	
	Source Table:	Oil_Peaks	
1_olefin		Double	8
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnWidth:	3240	
	Data Updatable:	False	
	Ordinal Position:	3	
	Required:	False	

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3

	Clustered:	False
	DistinctCount:	557383
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleRT
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending
		Ascending
SampleID		1
	Clustered:	False
	DistinctCount:	128
	Foreign:	False
	Ignore Nulls:	False
	Name:	SampleID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
SampleOil_Peaks		2
	Clustered:	False
	DistinctCount:	1304
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleOil_Peaks
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
		Ascending

Properties

Date Created:	12/16/1998 3:15:29 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	12/16/1998 3:17:23 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number,
Sum(Oil_Peaks.Weight_Percent) AS cis_2_olefin
FROM Oil_Peaks
WHERE (((Oil_Peaks.Compound)="cis-2-olefin"))
GROUP BY Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

ColumnWidth: Default
 Data Updatable: False
 DecimalPlaces: Auto
 DisplayControl: Text Box
 Ordinal Position: 2
 Required: False
 Source Field: Carbon_Number
 Source Table: Oil_Peaks

cis_2_olefin Double 8
 AllowZeroLength: False
 Attributes: Fixed Size
 Collating Order: General
 ColumnHidden: False
 ColumnWidth: 3240
 Data Updatable: False
 Ordinal Position: 3
 Required: False

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3

	Clustered:	False
	DistinctCount:	557383
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleRT
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending Ascending Ascending
SampleID		1
	Clustered:	False
	DistinctCount:	128
	Foreign:	False
	Ignore Nulls:	False
	Name:	SampleID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
SampleOil_Peaks		2
	Clustered:	False
	DistinctCount:	1304
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleOil_Peaks
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending Ascending

Properties

Date Created:	12/16/1998 3:14:28 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	12/16/1998 3:15:11 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number,
Sum(Oil_Peaks.Weight_Percent) AS paraffin
FROM Oil_Peaks
WHERE (((Oil_Peaks.Compound)="paraffin"))
GROUP BY Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

	ColumnWidth:	Default	
	Data Updatable:	False	
	DecimalPlaces:	Auto	
	DisplayControl:	Text Box	
	Ordinal Position:	2	
	Required:	False	
	Source Field:	Carbon_Number	
	Source Table:	Oil_Peaks	
paraffin		Double	8
	AllowZeroLength:	False	
	Attributes:	Fixed Size	
	Collating Order:	General	
	ColumnHidden:	False	
	ColumnWidth:	3240	
	Data Updatable:	False	
	Ordinal Position:	3	
	Required:	False	

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3

	Clustered:	False
	DistinctCount:	557383
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleRT
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending
		Ascending
		Ascending
SampleID		1
	Clustered:	False
	DistinctCount:	128
	Foreign:	False
	Ignore Nulls:	False
	Name:	SampleID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
SampleOil_Peaks		2
	Clustered:	False
	DistinctCount:	1304
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleOil_Peaks
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
		Ascending

Properties

Date Created:	12/16/1998 3:16:18 PM	Filter:	((Oil_Peaks.RunID="bao029"))
Last Updated:	12/16/1998 3:17:10 PM	MaxRecords:	0
ODBCTimeout:	60	OrderByOn:	False
RecordLocks:	No Locks	RecordsAffected:	0
RecordsetType:	Dynaset	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number,
Sum(Oil_Peaks.Weight_Percent) AS trans_2_olefin
FROM Oil_Peaks
WHERE (((Oil_Peaks.Compound)="trans-2-olefin"))
GROUP BY Oil_Peaks.RunID, Oil_Peaks.SampleID, Oil_Peaks.Carbon_Number;
```

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Oil_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Oil_Peaks	
Carbon_Number	Integer	2
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	

ColumnWidth:	Default		
Data Updatable:	False		
DecimalPlaces:	Auto		
DisplayControl:	Text Box		
Ordinal Position:	2		
Required:	False		
Source Field:	Carbon_Number		
Source Table:	Oil_Peaks		
trans_2_olefin		Double	8
AllowZeroLength:	False		
Attributes:	Fixed Size		
Collating Order:	General		
ColumnHidden:	False		
ColumnWidth:	3240		
Data Updatable:	False		
Ordinal Position:	3		
Required:	False		

Table Indexes

Name	Number of Fields
Compound	1
Clustered:	False
DistinctCount:	6
Foreign:	False
Ignore Nulls:	False
Name:	Compound
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	156
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	2
Clustered:	False
DistinctCount:	1304
Foreign:	False
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3

	Clustered:	False
	DistinctCount:	557383
	Foreign:	False
	Ignore Nulls:	False
	Name:	RunSampleRT
	Primary:	True
	Required:	True
	Unique:	True
	Fields:	Ascending Ascending Ascending
SampleID		1
	Clustered:	False
	DistinctCount:	128
	Foreign:	False
	Ignore Nulls:	False
	Name:	SampleID
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending
SampleOil_Peaks		2
	Clustered:	False
	DistinctCount:	1304
	Foreign:	True
	Ignore Nulls:	False
	Name:	SampleOil_Peaks
	Primary:	False
	Required:	False
	Unique:	False
	Fields:	Ascending Ascending

Properties

Date Created:	11/17/1998 4:10:40 PM	Last Updated:	11/18/1998 1:17:12 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	0	Updatable:	True

SQL

```
SELECT DISTINCTROW Run.RUNID, Sample.SampleID, DateDiff("h",[Started],[Date]) AS TOS
FROM Run LEFT JOIN Sample ON Run.RUNID = Sample.RunID;
```

Columns

Name	Type	Size
RUNID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RUNID	
Source Table:	Run	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	True	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Sample	
UnicodeCompression:	True	
TOS	Long Integer	4
AllowZeroLength:	False	
Attributes:	Fixed Size	
Collating Order:	General	
Data Updatable:	False	
Ordinal Position:	2	
Required:	False	

Table Indexes

Name	Number of Fields
Catalyst	1
Clustered:	False
DistinctCount:	120
Foreign:	False
Ignore Nulls:	False
Name:	Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
CatID	1
Clustered:	False
DistinctCount:	66
Foreign:	False
Ignore Nulls:	False
Name:	CatID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
PrimaryKey	1
Clustered:	False
DistinctCount:	234
Foreign:	False
Ignore Nulls:	False
Name:	PrimaryKey
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending
Started	1
Clustered:	False
DistinctCount:	203
Foreign:	False
Ignore Nulls:	False
Name:	Started
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
Weight Catalyst	1
Clustered:	False
DistinctCount:	87
Foreign:	False
Ignore Nulls:	False
Name:	Weight Catalyst
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending

Date	1
Clustered:	False
DistinctCount:	2036
Foreign:	False
Ignore Nulls:	False
Name:	Date
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunID	1
Clustered:	False
DistinctCount:	227
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSample	1
Clustered:	False
DistinctCount:	227
Foreign:	True
Ignore Nulls:	False
Name:	RunSample
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleID	2
Clustered:	False
DistinctCount:	3136
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleID
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending

Properties

Date Created:	11/17/1998 4:18:05 PM	Last Updated:	11/20/1998 8:19:16 AM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	ReturnsRecords:	True
Type:	128	Updatable:	True

SQL

```
PARAMETERS pRunID Text ( 255 );
SELECT RunID, SampleID, 1 AS [Carbon Number], 0 AS Gas, Methanol AS [Water], 0 AS [Oil], 0 AS
[Wax]
FROM [Water]
WHERE Methanol > 0 AND Water.RunID = pRunID ;
UNION
SELECT RUNID, SampleID, 2, 0, Ethanol + Aldehyde, 0, 0 FROM [Water]
WHERE Ethanol + Aldehyde > 0 AND Water.RunID = pRunID ;
UNION
SELECT RUNID, SampleID, 3, 0, Propanol + Propanal + Propanone + [i-Propanol] , 0, 0 FROM
[Water]
WHERE Propanol + Propanal + Propanone + [i-Propanol] > 0 AND Water.RunID = pRunID ;
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 0 Required: False		
SampleID	Text	255
AllowZeroLength: False Attributes: Variable Length Collating Order: General Data Updatable: False Ordinal Position: 1 Required: False		
Carbon Number	Long Integer	4
AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnWidth: 2190 Data Updatable: False		

	Ordinal Position:	2		
	Required:	False		
Gas	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2595		
	Data Updatable:	False		
	Ordinal Position:	3		
	Required:	False		
Water	AllowZeroLength:	False	Double	8
	Attributes:	Fixed Size		
	Collating Order:	General		
	ColumnHidden:	False		
	ColumnWidth:	2400		
	Data Updatable:	False		
	Ordinal Position:	4		
	Required:	False		
Oil	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	5		
	Required:	False		
Wax	AllowZeroLength:	False	Long Integer	4
	Attributes:	Fixed Size		
	Collating Order:	General		
	Data Updatable:	False		
	Ordinal Position:	6		
	Required:	False		

Properties

Date Created:	12/16/1998 4:37:30 PM	Last Updated:	12/16/1998 4:37:30 PM
MaxRecords:	0	ODBCTimeout:	60
OrderByOn:	False	RecordLocks:	No Locks
RecordsAffected:	0	RecordsetType:	Dynaset
ReturnsRecords:	True	Type:	0
Updatable:	True		

SQL

```
SELECT [Wax Normalized Weight Fraction].RunID, [Wax Normalized Weight Fraction].SampleID,
TOS.TOS, [Wax Normalized Weight Fraction].Carbon_Number, [Weight_Fraction]*100 AS [Weight
Percent], Log([Weight_Fraction]*100) AS LogOfWeightPercent
FROM [Wax Normalized Weight Fraction] INNER JOIN TOS ON ([Wax Normalized Weight
Fraction].SampleID = TOS.SampleID) AND ([Wax Normalized Weight Fraction].RunID = TOS.RUNID)
```

Query Parameters

Name	Type
pRunID	Text

Columns

Name	Type	Size
RunID	Text	6
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	1	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	0	
Required:	False	
Source Field:	RunID	
Source Table:	Wax_Peaks	
SampleID	Text	3
AllowZeroLength:	False	
Attributes:	Variable Length	
Collating Order:	General	
ColumnHidden:	False	
ColumnOrder:	Default	
ColumnWidth:	Default	
Data Updatable:	False	
DisplayControl:	Text Box	
Ordinal Position:	1	
Required:	False	
Source Field:	SampleID	
Source Table:	Wax_Peaks	

TOS	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 2 Required: False	Long Integer	4
Carbon_Number	AllowZeroLength: False Attributes: Fixed Size Collating Order: General ColumnHidden: False ColumnOrder: Default ColumnWidth: 2265 Data Updatable: False DecimalPlaces: Auto DisplayControl: Text Box Ordinal Position: 3 Required: False Source Field: Carbon_Number Source Table: Wax_Peaks	Integer	2
Weight Percent	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 4 Required: False	Double	8
LogOfWeightPercent	AllowZeroLength: False Attributes: Fixed Size Collating Order: General Data Updatable: False Ordinal Position: 5 Required: False	Double	8

Table Indexes

Name	Number of Fields
RunID	1
Clustered:	False
DistinctCount:	121
Foreign:	False
Ignore Nulls:	False
Name:	RunID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
RunSampleRT	3
Clustered:	False

DistinctCount:	109428
Foreign:	False
Ignore Nulls:	False
Name:	RunSampleRT
Primary:	True
Required:	True
Unique:	True
Fields:	Ascending Ascending Ascending
SampleID	1
Clustered:	False
DistinctCount:	57
Foreign:	False
Ignore Nulls:	False
Name:	SampleID
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending
SampleWax_Peaks	2
Clustered:	False
DistinctCount:	558
Foreign:	True
Ignore Nulls:	False
Name:	SampleWax_Peaks
Primary:	False
Required:	False
Unique:	False
Fields:	Ascending Ascending

Fischer-Tropsch Report Documentation

Crystal Report Files

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Sample Conditions
Version: 8.0

2.0 Record Sort Fields

A - {Sample.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Run.RUNID} = UpperCase ({?pRunID})

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Page Header Section

Visible

Printed at:

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@ReportDate}

Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@ReportTime}

Time, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Time
Base: 12 Hour, AM/PM Type: AM/PM After, Hour Type: Numeric No Leading
Zero, Minute Type: Numeric, Second Type: Numeric, AM String: 'AM', PM
String: 'PM', Hour Minute Separator: ':', Minute Second Separator: ':'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Last updated at:

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

ModificationDate

Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

ModificationTime

Time, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Time
Base: 12 Hour, AM/PM Type: AM/PM After, Hour Type: Numeric No Leading
Zero, Minute Type: Numeric, Second Type: Numeric, AM String: 'AM', PM
String: 'PM', Hour Minute Separator: ':', Minute Second Separator: ':'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

5.2 Page Footer Section

Visible, New Page After, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Hidden, New Page Before

5.4 Report Footer Section

Hidden, New Page After

5.5 Group Header Section

Visible

Subsection.1
Visible, Keep Together

Subsection.2
Visible, Keep Together

{@FormatRun}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

The reactor was loaded with
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Weight Catalyst}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

g of
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@FormatCat}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

catalyst. The initial conditions for the reactor were

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Pressure}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

psig,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Temperature}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

deg. C, with the traps at

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.High Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Mid Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Low Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

deg. C. The feed gas was initially set to

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Gas Feed}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

slph

String, Visible, Left Alignment, Top Alignment,

Keep Together, Expand

with a percentage composition of

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial H2}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

H2,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial CO}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

CO and

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial N2}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

inert gas for a H2:CO ratio of

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@H2CORat}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

and

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@WHSV}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

WHSV.
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Startup Oil Weight}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

g of the startup oil
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Startup Oil}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

was used. Synthesis was started on
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Started}
Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

.
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

The catalyst was pretreated with
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Gas}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

at
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Temperature}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

degrees C for
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Time}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

hours. The catalyst composition was

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@CatComposition}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Notes:

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Run

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Run Notes}

Memo, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Catalyst

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Catalyst Notes}

Memo, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Date

String, Visible, Right Alignment, Top Alignment,
Keep Together

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

P (psig)

String, Visible, Right Alignment, Top Alignment,
Keep Together

T (deg. C)

String, Visible, Right Alignment, Top Alignment,
Keep Together

Feed (slph)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Prod (slph)
String, Visible, Right Alignment, Top Alignment,
Keep Together

H2 %
String, Visible, Right Alignment, Top Alignment,
Keep Together

CO %
String, Visible, Right Alignment, Top Alignment,
Keep Together

Oil (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Wax (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Water (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Rewax (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

ReportTitle
String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

PrintDate
Date, Visible, Default Alignment, Top Alignment,

Keep Together, Using System Default Formatting, Windows
Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

5.6 Group Footer Section

Visible, New Page After

Subsection.1

Visible, New Page After, Keep Together, Suppress Blank
Sections

Subsection.2

Visible, New Page After, Keep Together, Suppress Blank
Sections

Subsection.3

Visible, New Page After, Keep Together, Suppress Blank
Sections

Subsection.4

Visible, New Page After, Keep Together, Suppress Blank
Sections

Subsection.5

Visible, New Page After, Keep Together, Suppress Blank
Sections

Subsection.6

Visible, Keep Together, Suppress Blank Sections

Conversion Data.rpt

Subreport, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: Conversion Data.rpt
Version: 8.0

2.0 Record Sort Fields

A - {Sample_Calcs__2.TOS}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Sample_Calcs__2.RunID} = {?Pm-Run.RUNID}

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

Subsection.1

Visible, Keep Together

Subsection.2

Visible, Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,

Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

ReportTitle

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

5.2 Report Footer Section

Visible, New Page After

Subsection.1

Visible, Keep Together

Subsection.2

Visible, Keep Together

PageNumber

Numeric, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Group Header Section

Visible

GroupName ({Sample_Calcs__2.RunID})

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

RunID
String, Visible, Left Alignment, Top Alignment,
Keep Together

SampleID
String, Visible, Left Alignment, Top Alignment,
Keep Together

TOS
String, Visible, Right Alignment, Top Alignment,
Keep Together

Syngas
String, Visible, Right Alignment, Top Alignment,
Keep Together

H2
String, Visible, Right Alignment, Top Alignment,
Keep Together

CO
String, Visible, Right Alignment, Top Alignment,
Keep Together

Efficiency
String, Visible, Right Alignment, Top Alignment,
Keep Together

SV
String, Visible, Right Alignment, Top Alignment,
Keep Together

H2:CO
String, Visible, Right Alignment, Top Alignment,
Keep Together

Contraction
String, Visible, Right Alignment, Top Alignment,
Keep Together

5.4 Group Footer Section

Visible

5.5 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

```
Background Color      :      if
Remainder(RecordNumber,2) = 0 then
  White
else
  Color (230,230 ,250)
  {Sample_Calcs__2.RunID}
  String, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
Word Wrap

  {Sample_Calcs__2.SampleID}
  String, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
Word Wrap

  {Sample_Calcs__2.TOS}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {Sample_Calcs__2.Syngas Conv Value}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {Sample_Calcs__2.H2 Conv Value}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'
```

Alignment, {Sample_Calcs__2.CO Conv Value}
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, {Sample_Calcs__2.Efficiency Value}
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, {Sample_Calcs__2.SV}
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, {Sample_Calcs__2.H2_CO Ratio}
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, {Sample_Calcs__2.Contraction}
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Subreport ends

_Web Methane and HC.rpt
Subreport, Visible, Default Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: _Web Methane and HC.rpt
Version: 8.0

2.0 Record Sort Fields

A - {Gas.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Run.RUNID}={?Pm-Run.RUNID}

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@Run_Name}
Formula: left({Run.RUNID},3) + '-' +
right({Run.RUNID},3)

Name: {@Methane Rate}
Formula: if {@gMetal} > 0 then
 {Sample.Gas Prod} / 22.414 / {@gMetal} *
{Gas.CH4} / 100
else
 0

Name: {@Methane Selectivity}
Formula: if {@FT_Rate} > 0 then
 {@Methane Rate} / {@FT_Rate} * 100
else
 0

Name: {@Hydrocarbon Rate}
Formula: {@FT_Rate} * 14.329

Name: {@@CO2_Selectivity}
Formula: if ({@CO_IN} - {@CO_Out}) > 0 then
 {@CO2_Out} / ({@CO_IN} - {@CO_Out}) * 100
else
 0

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

Hydrocarbon Rates

String, Visible, Left Alignment, Top Alignment,
Keep Together

Hydrocarbon Rate

String, Visible, Right Alignment, Top Alignment,
Keep Together

CH4 Selectivity

String, Visible, Right Alignment, Top Alignment,

Keep Together

CH4 Rate

String, Visible, Right Alignment, Top Alignment,
Keep Together

{@Run_Name}

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,

Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

CO2 Selectivity

String, Visible, Right Alignment, Top Alignment,
Keep Together

5.2 Report Footer Section

Visible, New Page After

Methane Rate mols / h / g Metal

String, Visible, Left Alignment, Top Alignment,
Keep Together

Methane Selectivity: mol percent

String, Visible, Left Alignment, Top Alignment,
Keep Together

Hydrocarbon Rate g / hr / g Metal

String, Visible, Left Alignment, Top Alignment,
Keep Together

CO2 Selectivity: mol percent
String, Visible, Left Alignment, Top Alignment,
Keep Together

5.3 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

Background Color : if
Remainder(RecordNumber,2) = 0 then
White
else
Color (230,230 ,250)
{Gas.SampleID}
String, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,
Word Wrap

{@Methane Rate}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 6 Decimal Places, Rounding:
0.0000001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Methane Selectivity}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Hydrocarbon Rate}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@@CO2_Selectivity}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,

Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Subreport ends

_Web Rates.rpt

Subreport, Visible, Default Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: _Web Rates.rpt
Version: 8.0

2.0 Record Sort Fields

A - {Gas.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Run.RUNID}={?Pm-Run.RUNID??01}

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@Run_Name}
Formula: left({Run.RUNID},3) + '-' +
right({Run.RUNID},3)

Name: {@ConvRateCO}
Formula: if {@gMetal} > 0 then
 {@CO_IN} * {@ConvCO} / {@gMetal}
else
 0

Name: {@ConvRateH2}
Formula: if {@gMetal} > 0 then
 {@H2_IN} * {@ConvH2} / {@gMetal}
else
 0

Name: {@ConvRateH2CO}
Formula: {@ConvRateCO} + {@ConvRateH2}

Name: {@RateCO2Form}
Formula: if {@gMetal} > 0 then
 {Sample.Gas Prod} * {Gas.CO2} / 22.414 / 100 /
{@gMetal}
else

```

0

Name: {@H2COUsageRat}
Formula: if {@ConvRateCO} > 0 then
    {@ConvRateH2} / {@ConvRateCO}
else
    0

Name: {@FT_Rate}
Formula: {@ConvRateCO} - {@RateCO2Form}

Name: {@TOS}
Formula: ({Sample.Date} - {Run.Started}) * 24

Name: {@ConvRateWater}
Formula: if ({@gMetal} > 0) and ({Sample.Sample
Period} > 0 ) then
    {@Mol_Frac_H2O_Gas} * {Sample.Gas Prod} / 22.414 +
{Sample.Weight Water} / {Sample.Sample Period} / 18 / {@gMetal}
else
    0

```

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

Subsection.1

Hidden, Keep Together

Subsection.2

Visible, Keep Together

Rates mols/ h / g Metal

String, Visible, Left Alignment, Top Alignment,
Keep Together

Rate H2O *

String, Visible, Right Alignment, Top Alignment,
Keep Together

TOS

String, Visible, Right Alignment, Top Alignment,
Keep Together

{@Run_Name}

String, Visible, Default Alignment, Top
Alignment,
Word Wrap
Keep Together, Using System Default Formatting,

FT Rate
String, Visible, Right Alignment, Top Alignment,
Keep Together

H2/CO Usage
String, Visible, Right Alignment, Top Alignment,
Keep Together

Rate CO2
String, Visible, Right Alignment, Top Alignment,
Keep Together

Rate H2 + CO
String, Visible, Right Alignment, Top Alignment,
Keep Together

Rate H2
String, Visible, Right Alignment, Top Alignment,
Keep Together

Rate CO
String, Visible, Right Alignment, Top Alignment,
Keep Together

PrintDate
Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

Sample
String, Visible, Left Alignment, Top Alignment,
Keep Together

* Assumes water is 100 % of water phase.
String, Visible, Left Alignment, Top Alignment,
Keep Together

5.2 Report Footer Section
Hidden, New Page After

5.3 Details Section
Visible

Subsection.1
Visible, Keep Together

Format Formulas

```
Background Color      :      if
Remainder(RecordNumber,2) = 0 then
  White
else
  Color (230,230 ,250)
  {Gas.SampleID}
  String, Visible, Default Alignment, Top
Alignment,
  Keep Together, Using System Default Formatting,
Word Wrap
```

```
{@ConvRateCO}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together,
  Leading Minus, 4 Decimal Places, Rounding:
0.0001,
  Thousands Symbol: ',', Decimal Symbol: '.'
```

```
{@ConvRateH2}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together,
  Leading Minus, 4 Decimal Places, Rounding:
0.0001,
  Thousands Symbol: ',', Decimal Symbol: '.'
```

```
{@ConvRateH2CO}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together,
  Leading Minus, 4 Decimal Places, Rounding:
0.0001,
  Thousands Symbol: ',', Decimal Symbol: '.'
```

```
{@RateCO2Form}
  Numeric, Visible, Default Alignment, Top
Alignment,
  Keep Together,
  Leading Minus, 4 Decimal Places, Rounding:
0.0001,
```

Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, { @H2COUsageRat }
Numeric, Visible, Default Alignment, Top
Keep Together,
0.0001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, { @FT_Rate }
Numeric, Visible, Default Alignment, Top
Keep Together,
0.0001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, { @TOS }
Numeric, Visible, Default Alignment, Top
Keep Together, Using System Default Formatting,
0.0001, Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Alignment, { @ConvRateWater }
Numeric, Visible, Default Alignment, Top
Keep Together,
0.0001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

Subreport ends

_Web Gas Mols.rpt
Subreport, Visible, Default Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: _Web Gas Mols.rpt
Version: 8.0

2.0 Record Sort Fields

A - {Gas Mol Percents.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Gas Mol Percents.RunID}={?Pm-Gas Mol Percents.RunID}

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@RunName}

Formula: left({Gas Mol Percents.RunID},3) + '-' +
right({Gas Mol Percents.RunID},3)

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

{@RunName}

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

(mols per hour)

String, Visible, Left Alignment, Top Alignment,
Keep Together

C9

String, Visible, Right Alignment, Top Alignment,
Keep Together

C8

String, Visible, Right Alignment, Top Alignment,
Keep Together

C7

String, Visible, Right Alignment, Top Alignment,
Keep Together

C6

String, Visible, Right Alignment, Top Alignment,
Keep Together

C6=

String, Visible, Right Alignment, Top Alignment,
Keep Together

C5

String, Visible, Right Alignment, Top Alignment,
Keep Together

C5=

String, Visible, Right Alignment, Top Alignment,
Keep Together

C4

String, Visible, Right Alignment, Top Alignment,
Keep Together

C4=

String, Visible, Right Alignment, Top Alignment,
Keep Together

C3

String, Visible, Right Alignment, Top Alignment,
Keep Together

C3=

String, Visible, Right Alignment, Top Alignment,
Keep Together

C2

String, Visible, Right Alignment, Top Alignment,
Keep Together

C2=

String, Visible, Right Alignment, Top Alignment,
Keep Together

CH4

String, Visible, Right Alignment, Top Alignment,
Keep Together

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

Gas Composition Report

String, Visible, Horizontal Centre Alignment,
Top Alignment,
Keep Together

5.2 Report Footer Section

Hidden, New Page After

5.3 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

Background Color : if
Remainder(RecordNumber,2) = 0 then
White
else
Color (230,230 ,250)
{Gas Mol Percents.C5}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding:
0.001,
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C6=}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding:
0.001,
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C6}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C7}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C8}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C9}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C5=}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C4}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C4=}

Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C3}
Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C3=}
Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C2}
Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.C2=}
Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.CH4}
Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas Mol Percents.SampleID}
Alignment, String, Visible, Default Alignment, Top

Word Wrap

Keep Together, Using System Default Formatting,

Subreport ends

_Web Gas Olefin Ratios.rpt
Subreport, Visible, Default Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: _Web Gas Olefin Ratios.rpt
Version: 8.0

2.0 Record Sort Fields

A - {GasOlefin.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{GasOlefin.RunID}={?Pm-GasOlefin.RunID}

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@RunName}
Formula: left({GasOlefin.RunID},3) + '-' +
right({GasOlefin.RunID},3)

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

C2 Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

C3 Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

C4 Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

C5 Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

C6 Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,

Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

{@RunName}

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

Sample

String, Visible, Right Alignment, Top Alignment,
Keep Together

TOS (hrs)

String, Visible, Right Alignment, Top Alignment,
Keep Together

Gas Olefin Ratio Report

String, Visible, Horizontal Centre Alignment,

Top Alignment,

Keep Together

5.2 Report Footer Section

Hidden, New Page After

5.3 Details Section

Visible

Subsection.1

```

Visible, Keep Together

Format Formulas

Background Color      :      if
Remainder(RecordNumber,2) = 0 then
  White
else
  Color (230,230 ,250)
    {GasOlefin.C2 Ratio}
    Numeric, Visible, Default Alignment, Top
Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

    {GasOlefin.C3 Ratio}
    Numeric, Visible, Default Alignment, Top
Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

    {GasOlefin.C4 Ratio}
    Numeric, Visible, Default Alignment, Top
Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

    {GasOlefin.C5 Ratio}
    Numeric, Visible, Default Alignment, Top
Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

    {GasOlefin.C6 Ratio}
    Numeric, Visible, Default Alignment, Top
Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

    {GasOlefin.SampleID}
    String, Visible, Right Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
Word Wrap

    {GasOlefin.TOS}

```


Alignment, Numeric, Visible, Default Alignment, Top
Keep Together,
0.0001, Leading Minus, 4 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

Subreport ends

_Web Water.rpt
Subreport, Visible, Default Alignment, Top Alignment,
Keep Together, Expand

Subreport begins

1.0 File Information

Report File: _Web Water.rpt
Version: 8.0

2.0 Record Sort Fields

A - {Sample Calcs.TOS}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Sample Calcs.RunID} = {?Pm-Sample Calcs.RunID} and
{Water.Water} > 0

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@Run Name}
Formula: left({Water.RunID},3) + '-' +
right({Water.RunID},3)

Name: {@Water}
Formula: {Water.Water} / {@THC}

Name: {@Methanol}
Formula: {Water.Methanol} / {@THC}

Name: {@Aldehyde}
Formula: {Water.Aldehyde} / {@THC}

Name: {@Ethanol}
Formula: {Water.Ethanol} / {@THC}

Name: {@Propanone}
Formula: {Water.Propanone} / {@THC}

Name: {@i-Propanol}
Formula: {Water.i-Propanol} / {@THC}

Name: {@Propanal}
Formula: {Water.Propanal} / {@THC}

Name: {@Propanol}
Formula: {Water.Propanol} / {@THC}

Name: {@Butanol}
Formula: {Water.Buytanol} / {@THC}

5.0 Sectional Information

5.1 Report Header Section

Visible, New Page Before

Water Phase Components / Total Hydrocarbons
String, Visible, Horizontal Centre Alignment,

Top Alignment,

Keep Together

{@Run Name}

String, Visible, Default Alignment, Top

Alignment,

Keep Together, Using System Default Formatting,

Word Wrap

Butanol

String, Visible, Left Alignment, Top Alignment,
Keep Together

Propanol

String, Visible, Left Alignment, Top Alignment,
Keep Together

Propanal

String, Visible, Left Alignment, Top Alignment,
Keep Together

i-Propanol

String, Visible, Left Alignment, Top Alignment,
Keep Together

Propanone

String, Visible, Left Alignment, Top Alignment,
Keep Together

Ethanol

String, Visible, Left Alignment, Top Alignment,
Keep Together

Aldehyde

String, Visible, Left Alignment, Top Alignment,
Keep Together

Methanol

String, Visible, Left Alignment, Top Alignment,
Keep Together

Water

String, Visible, Left Alignment, Top Alignment,
Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,

Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

TOS

String, Visible, Left Alignment, Top Alignment,
Keep Together

Water Phase Composition Report

String, Visible, Horizontal Centre Alignment,
Top Alignment,
Keep Together

5.2 Report Footer Section
Hidden, New Page After

5.3 Details Section
Visible

Subsection.1

Visible, Keep Together, Suppress Blank Sections

Format Formulas

Background Color : if
Remainder(RecordNumber,2) = 0 then
White
else
Color (230,230 ,250)
{Sample Calcs.TOS}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Water}

Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 5 Decimal Places, Rounding:
0.00001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Methanol}

Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 5 Decimal Places, Rounding:
0.00001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Aldehyde}

Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 5 Decimal Places, Rounding:
0.00001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Ethanol}

Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
Leading Minus, 5 Decimal Places, Rounding:
0.00001,

Thousands Symbol: ',', Decimal Symbol: '.'

{@Propanone}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.00001, Leading Minus, 5 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{@i-Propanol}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.00001, Leading Minus, 5 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{@Propanal}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.00001, Leading Minus, 5 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{@Propanol}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.00001, Leading Minus, 5 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{@Butanol}
Numeric, Visible, Default Alignment, Top
Alignment,
Keep Together,
0.00001, Leading Minus, 5 Decimal Places, Rounding:
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample Calcs.SampleID}
String, Visible, Default Alignment, Top
Alignment,
Keep Together, Using System Default Formatting,
Word Wrap

Subreport ends

5.7 Details Section

```
Visible

Subsection.1
  Visible, Keep Together

  Format Formulas

  Background Color: if Remainder(RecordNumber,2) = 0 then
    White
  else
    Color (230,230 ,250)
    {Sample.SampleID}
      String, Visible, Default Alignment, Top Alignment,
      Keep Together, Using System Default Formatting, Word Wrap

    {Sample.Date}
      Date, Visible, Default Alignment, Top Alignment,
      Keep Together, Using System Default Formatting, Windows
      Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
      Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
      Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
      Separator: ' '

    {Sample.Pressure}
      Numeric, Visible, Default Alignment, Top Alignment,
      Keep Together, Using System Default Formatting,
      Leading Minus, 0 Decimal Places, Rounding: 1,
      Thousands Symbol: ',', Decimal Symbol: '.'

    {Sample.Temperature}
      Numeric, Visible, Default Alignment, Top Alignment,
      Keep Together, Using System Default Formatting,
      Leading Minus, 0 Decimal Places, Rounding: 1,
      Thousands Symbol: ',', Decimal Symbol: '.'

    {Sample.Gas Feed}
      Numeric, Visible, Left Alignment, Top Alignment,
      Keep Together, Using System Default Formatting,
      Leading Minus, 2 Decimal Places, Rounding: 0.01,
      Thousands Symbol: ',', Decimal Symbol: '.'

    {Sample.Gas Prod}
      Numeric, Visible, Left Alignment, Top Alignment,
      Keep Together, Using System Default Formatting,
      Leading Minus, 2 Decimal Places, Rounding: 0.01,
      Thousands Symbol: ',', Decimal Symbol: '.'

    {Sample.Percent H2}
      Numeric, Visible, Default Alignment, Top Alignment,
      Keep Together, Using System Default Formatting,
```

Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Percent CO}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Oil}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Wax}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Water}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Rewax}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Conversion Data
Version: 8.0

2.0 Record Sort Fields

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Conversion_Data.RunID} = {?[@RunID]}

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Page Header Section

Hidden, Keep Together

5.2 Page Footer Section

Visible, New Page After, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Visible, New Page Before

ReportTitle

String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows
Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

5.4 Report Footer Section

Hidden, New Page After

5.5 Group Header Section

Visible

Subsection.1

Visible, New Page After, Keep Together

Subsection.2

Visible, New Page After, Keep Together

Subsection.3

Visible, Keep Together

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

TOS

String, Visible, Right Alignment, Top Alignment,
Keep Together

H2

String, Visible, Right Alignment, Top Alignment,
Keep Together

CO

String, Visible, Right Alignment, Top Alignment,
Keep Together

Syngas

String, Visible, Right Alignment, Top Alignment,
Keep Together

SV

String, Visible, Right Alignment, Top Alignment,
Keep Together

Efficiency

String, Visible, Right Alignment, Top Alignment,
Keep Together

Contraction

String, Visible, Right Alignment, Top Alignment,
Keep Together

Pressure
String, Visible, Right Alignment, Top Alignment,
Keep Together

Temperature
String, Visible, Right Alignment, Top Alignment,
Keep Together

5.6 Group Footer Section
Hidden

5.7 Details Section
Visible

Subsection.1
Visible, Keep Together

Format Formulas

Background Color: if Remainder(RecordNumber,2) = 0 then
White
else
Color (220,220 ,250)

{Conversion_Data.SampleID}
String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

{Conversion_Data.TOS}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.H2}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.CO}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.Syngas}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.SV}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.Efficiency}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.Contraction}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.Pressure}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Conversion_Data.Temperature}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File:
Version: 7.0

2.0 Record Sort Fields

A - {Gas.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

{Sample.RunID} = {?pRunID}

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@MBP}
Formula: if {Gas.SampleID} = "001" then
 {Sample Calcs 2.TOS}
else
 {Sample Calcs 2.TOS} - Previous ({Sample Calcs 2.TOS})

Name: {@O_Balance}
Formula: if {@O_In_mols} > 0 then
 100 - (({@O_In_mols} - {@O_Out_mols}) / {@CO_In_mols}) * 100

Name: {@C_Balance}
Formula: if {@C_In_mols} > 0 then
 100 - ((({@C_In_mols} -{@C_Out_mols}) / {@C_In_mols}) *
100)

Name: {@H_Balance}
Formula: if {@H_In_mols} > 0 then
 100 - ((({@H_In_mols} -{@H_Out_mols}) / {@H_In_mols})
* 100)

Name: {@CH_Balance}
Formula: numbervar HC_IN;
numbervar HC_OUT;

if {Gas.SampleID} = "001" then
 HC_IN := {@H_In_mols}
else
 HC_IN := HC_IN + {@H_In_mols};

if {Gas.SampleID} = "001" then
 HC_OUT :={@H_Out_mols}
else
 HC_OUT := HC_OUT + {@H_Out_mols};

```
if HC_IN > 0 then
    100 - ( ((HC_IN - HC_OUT) / HC_IN) * 100 )
```

```
Name: {@CC_Balance}
Formula: numbervar CC_IN;
numbervar CC_OUT;
```

```
if {Gas.SampleID} = "001" then
    CC_IN := {@C_In_mols}
else
    CC_IN := CC_IN + {@C_In_mols};
```

```
if {Gas.SampleID} = "001" then
    CC_OUT :={@C_Out_mols}
else
    CC_OUT := CC_OUT + {@C_Out_mols};
```

```
if CC_IN > 0 then
    100 - ( ((CC_IN - CC_OUT) / CC_IN) * 100 )
```

```
Name: {@C_O_Balance}
Formula: numbervar OC_IN;
numbervar OC_OUT;
```

```
if {Gas.SampleID} = "001" then
    OC_IN := {@O_In_mols}
else
    OC_IN := OC_IN + {@O_In_mols};
```

```
if {Gas.SampleID} = "001" then
    OC_OUT :={@O_Out_mols}
else
    OC_OUT := OC_OUT + {@O_Out_mols};
```

```
if OC_IN > 0 then
    100 - ( ((OC_IN - OC_OUT) / OC_IN) * 100 )
```

5.0 Sectional Information

5.1 Page Header Section Visible

5.2 Page Footer Section Visible, New Page After, Print At Bottom of Page

```
PageNumber
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
```

Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section
Visible, New Page Before

5.4 Report Footer Section
Hidden, New Page After

5.5 Group Header Section
Visible

Elemental Balance Report
String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

PrintDate
Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows
Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

GroupName ({Sample.RunID})
String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

TOS

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(hrs)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

MBP

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(hrs)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Sample

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Oxygen

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Carbon

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Hydrogen

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

MBP Percents

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Hydrogen

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Carbon

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Oxygen

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Cumulative Percents

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

5.6 Group Footer Section

Visible, New Page After

Assumes that:

String, Visible, Left Alignment, Top Alignment,
Keep Together

Water phase is 100% water,

String, Visible, Left Alignment, Top Alignment,
Keep Together

Oil and Wax phases are all alkanes $-(CH_2)-$ for determining carbon content,

String, Visible, Left Alignment, Top Alignment,
Keep Together

Hydrogen content is $2.2 * \text{the carbon content}$

String, Visible, Left Alignment, Top Alignment,
Keep Together

5.7 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

Background Color: if $\text{Remainder}(\text{RecordNumber}, 2) = 0$ then

White

else

Color (230,230 ,250)

{Sample Calcs 2.TOS}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@MBP}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas.SampleID}

String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

{@O_Balance}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@C_Balance}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@H_Balance}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@CH_Balance}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@CC_Balance}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@C_O_Balance}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File:
Version: 7.0

2.0 Record Sort Fields

A - {Gas.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@MBP}
Formula: if {Gas.SampleID} = "001" then
 {Sample Calcs 2.TOS}
else
 {Sample Calcs 2.TOS} - Previous ({Sample Calcs 2.TOS})

Name: {@Period Accumulation}
Formula: {@Mass Balance Hourly} * {@MBP}

Name: {@Period Closure}
Formula: if ({@Gas_in_g} * {@MBP}) <= 0 then
 -1
else
 100 - (({@Period Accumulation} / ({@Gas_in_g} * {@MBP})) * 100

Name: {@Cumulative Accumulation}
Formula: numberVar acc;

if {Gas.SampleID} = "001" then
 acc := {@Period Accumulation}
else
 acc := acc + {@Period Accumulation};
acc

Name: {@Cumulative Closure}
Formula: if {@Cumulative Gas_In_g} > 0 then
 100 - {@Cumulative Accumulation} / {@Cumulative Gas_In_g} *

100;

Name: {@MW_Gas_Prod}
Formula: {@AGC Contribution} + {@5790 Contribution}

Name: {@5790 Contribution}

Formula: ({Gas.5790 C4=} * 57 + {Gas.5790 C4} * 58 + {Gas.5790 C5=} * 71 + {Gas.5790 C5} * 72 + {Gas.5790 C6=} * 85 + {Gas.5790 C6} * 86 + {Gas.5790 C7} * 100 + {Gas.5790 C8} * 114 + {Gas.5790 C9} * 128) * {@Mols_Per_Area} / 100

Name: {@AGC Contribution}
Formula: ({Gas.H2} * 2.0 + {Gas.C3} * 44.0 + {Gas.C3=} * 43 + {Gas.CO2} * 44 + {Gas.Ar2} * 28 + {Gas.CH4} * 16 + {Gas.CO} * 28) / 100

5.0 Sectional Information

5.1 Page Header Section

Visible

5.2 Page Footer Section

Visible, New Page After, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment, Keep Together, Using System Default Formatting, Leading Minus, 0 Decimal Places, Rounding: 1, Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Visible, New Page Before

5.4 Report Footer Section

Hidden, New Page After

5.5 Group Header Section

Visible

Mass Balance Report

String, Visible, Horizontal Centre Alignment, Top Alignment, Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment, Keep Together, Using System Default Formatting, Windows Default Type: Use Windows Short Date, Date Order: Month Day Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading Day Type: None, First Separator: '/', Second Separator: '/', Leading Day Separator: ''

GroupName ({Sample.RunID})

String, Visible, Default Alignment, Top Alignment, Keep Together, Using System Default Formatting, Word Wrap

TOS

String, Visible, Horizontal Centre Alignment, Top Alignment,

Keep Together

(hrs)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

MBP

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(hrs)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Period

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Accumulation

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(g)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Period

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(%)

String, Visible, Horizontal Centre Alignment, Top Alignment,

Keep Together

Cumulative

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Accumulation

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(g)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Cumulative

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Closure

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(%)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Avg. MW

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Gas

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Product

String, Visible, Horizontal Centre Alignment, Top Alignment,

Keep Together

5790

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Contribution

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(g)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

AGC

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Contribution

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

(g)

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

Sample

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

5.6 Group Footer Section

Hidden, New Page After

5.7 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

```
Background Color: if Remainder(RecordNumber,2) = 0 then
  White
else
  Color (230,230 ,250)
  {Sample Calcs 2.TOS}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@MBP}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@Period Accumulation}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@Period Closure}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@Cumulative Accumulation}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@Cumulative Closure}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@MW_Gas_Prod}
  Numeric, Visible, Default Alignment, Top Alignment,
  Keep Together, Using System Default Formatting,
  Leading Minus, 2 Decimal Places, Rounding: 0.01,
  Thousands Symbol: ',', Decimal Symbol: '.'

  {@5790 Contribution}
  Numeric, Visible, Default Alignment, Top Alignment,
```


Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@AGC Contribution}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Gas.SampleID}
String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Oil Phase Distribution
Version: 8.0

2.0 Record Sort Fields

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@Paraffin Ratio}
Formula: if {@Total} > 0 then
 {Oil_Phase_Sums.SumOfParaffin} / {@Total}

Name: {@Olefin Ratio}
Formula: if {@olefins} > 0 then
 {Oil_Phase_Sums.SumOf_1_Olefin} / {@olefins}

5.0 Sectional Information

5.1 Page Header Section

Hidden, Keep Together

5.2 Page Footer Section

Visible, New Page After, Keep Together, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

Alkane ratio: n-alkane / (n-alkane + total alkenes)

String, Visible, Left Alignment, Top Alignment,
Keep Together

Alkene Ratio: 1-alkene / total alkene

String, Visible, Left Alignment, Top Alignment,
Keep Together

Total Alkene: 1-alkene + cis-2-alkene + trans-2-alkene
String, Visible, Left Alignment, Top Alignment,
Keep Together

5.3 Report Header Section

Visible, New Page Before

ReportTitle

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows

Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

5.4 Report Footer Section

Hidden, New Page After

5.5 Group Header Section

Visible

Subsection.1

Visible, Keep Together, Underlay

Subsection.2

Visible, Keep Together

Carbon Number

String, Visible, Right Alignment, Top Alignment,
Keep Together

Weight Percent

String, Visible, Right Alignment, Top Alignment,
Keep Together

Alkane Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

Alkene Ratio

String, Visible, Right Alignment, Top Alignment,
Keep Together

{Oil_Phase_Sums.RunID}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word
Wrap

.
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Oil_Phase_Sums.SampleID}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word
Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Oil_Phase_Sums.TOS}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

hrs. on stream
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

5.6 Group Footer Section
Hidden

5.7 Details Section
Visible

Subsection.1
Visible, Keep Together

{Oil_Phase_Sums.Carbon_Number}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Oil_Phase_Sums.Weight_Percent}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 6 Decimal Places, Rounding: 0.0000001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Paraffin Ratio}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Suppress If Zero,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@Olefin Ratio}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Suppress If Zero,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Product Distribution
Version: 8.0

2.0 Record Sort Fields

A - {Normalized_Product_Distributions.Carbon Number}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

4.2 Group Selection Formula

4.3 Other Formulas

Name: {@G1}
Formula: {#TG1} / {#Total}

Name: {@G2}
Formula: {#TG2} / {#Total}

Name: {@G3}
Formula: {#TG3} / {#Total}

Name: {@G4}
Formula: {#TG4} / {#Total}

Name: {@G5}
Formula: {#TG5} / {#Total}

Name: {@G6}
Formula: {#TG6} / {#Total}

Name: {@G7}
Formula: {#TG7} / {#Total}

5.0 Sectional Information

5.1 Page Header Section

Hidden, Keep Together

5.2 Page Footer Section

Visible, New Page After, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Visible, New Page Before

Product Distribution Report

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

{Normalized_Product_Distributions.RunID}

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

Mol Percent by Carbon Number per Hours on Stream

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together

5.4 Report Footer Section

Visible, New Page Before, New Page After

5.5 Group Header Section

Visible

{Normalized_Product_Distributions.RunID}

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

-

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

{Normalized_Product_Distributions.SampleID}

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

{Normalized_Product_Distributions.TOS}

Numeric, Visible, Horizontal Centre Alignment, Top
Alignment,

Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

hours on stream.

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

5.6 Group Footer Section

Hidden

{@G1}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{#Total}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G2}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G3}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G4}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G5}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G6}

Numeric, Visible, Default Alignment, Top Alignment,

Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

{@G7}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

5.7 Details Section

Hidden

Subsection.1

Hidden, Keep Together

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Sample Conditions
Version: 7.0

2.0 Record Sort Fields

A - {Sample.SampleID}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Page Header Section

Visible

Printed at:

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@ReportDate}

Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@ReportTime}

Time, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Time
Base: 12 Hour, AM/PM Type: AM/PM After, Hour Type: Numeric No Leading
Zero, Minute Type: Numeric, Second Type: Numeric, AM String: 'AM', PM
String: 'PM', Hour Minute Separator: ':', Minute Second Separator: ':'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Last updated at:
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

ModificationDate
Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

ModificationTime
Time, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Time
Base: 12 Hour, AM/PM Type: AM/PM After, Hour Type: Numeric No Leading
Zero, Minute Type: Numeric, Second Type: Numeric, AM String: 'AM', PM
String: 'PM', Hour Minute Separator: ':', Minute Second Separator: ':'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

5.2 Page Footer Section

Hidden, New Page After, Keep Together, Print At Bottom of Page

5.3 Report Header Section

Hidden, New Page Before

5.4 Report Footer Section

Hidden, New Page After

5.5 Group Header Section

Visible

Sample

String, Visible, Left Alignment, Top Alignment,
Keep Together

Date

String, Visible, Right Alignment, Top Alignment,
Keep Together

SP (hrs)
String, Visible, Right Alignment, Top Alignment,
Keep Together

P (psig)
String, Visible, Right Alignment, Top Alignment,
Keep Together

T (deg. C)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Feed (slph)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Prod (slph)
String, Visible, Right Alignment, Top Alignment,
Keep Together

H2 %
String, Visible, Right Alignment, Top Alignment,
Keep Together

CO %
String, Visible, Right Alignment, Top Alignment,
Keep Together

Oil (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Wax (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

Water (g)
String, Visible, Right Alignment, Top Alignment,
Keep Together

```

Rewax (g)
    String, Visible, Right Alignment, Top Alignment,
    Keep Together

ReportTitle
    String, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting, Word Wrap

PrintDate
    Date, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting, Windows
Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

{@FormatRun}
    String, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand, Using System Default Formatting, Word
Wrap

    String, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand

    String, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand

    The reactor was loaded with
    String, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand

{Run.Weight Catalyst}
    Numeric, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

g of
    String, Visible, Left Alignment, Top Alignment,
    Keep Together, Expand

{@FormatCat}

```

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word
Wrap

catalyst. The initial conditions for the reactor was

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Pressure}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

psig,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Temperature}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

deg. C, with the traps at

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.High Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Mid Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Low Temperature Trap}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,

Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

deg. C. The feed gas was initially set to
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial Gas Feed}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

slph

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

with a percentage composition of
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial H2}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

H2,

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial CO}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

CO and

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Initial N2}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

inert gas for a H2:CO ratio of

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@H2CORat}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

and

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@WHSV}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

WHSV.

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Startup Oil Weight}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

g of the startup oil

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Startup Oil}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

was used. Synthesis was started on

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Started}
Date, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Windows Default Type: Use Windows Short Date, Date Order: Month Day
Year, Year Type: Long, Month Type: Numeric Month, Day Type: Numeric Day,
Leading Day Type: None, First Separator: '/', Second Separator: '/',
Leading Day Separator: ''

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

The catalyst was pretreated with
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Gas}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

at
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Temperature}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

degrees C for
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Pretreatment Time}
Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

hours. The catalyst composition was

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{@CatComposition}
String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Notes:

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Run

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Run Notes}

Memo, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

Catalyst

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Run.Catalyst Notes}

Memo, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

5.6 Group Footer Section

Visible, New Page After

5.7 Details Section

Visible

Subsection.1

Visible, Keep Together

{Sample.SampleID}

String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

{Sample.Date}

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows
Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

{Sample.Sample Period}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 1 Decimal Places, Rounding: 0.1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Pressure}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Temperature}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Gas Feed}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Gas Prod}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Percent H2}

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 2 Decimal Places, Rounding: 0.01,
Thousands Symbol: ',', Decimal Symbol: '.'

```
{Sample.Percent CO}
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Oil}
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Wax}
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Water}
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'

{Sample.Weight Rewax}
    Numeric, Visible, Default Alignment, Top Alignment,
    Keep Together, Using System Default Formatting,
    Leading Minus, 2 Decimal Places, Rounding: 0.01,
    Thousands Symbol: ',', Decimal Symbol: '.'
```

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Wax Distribution Report
Version: 8.0

2.0 Record Sort Fields

A - {Wax_Phase_Sums.SampleID}
A - {Wax_Phase_Sums.Carbon_Number}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Page Header Section

Visible, Keep Together

ReportTitle

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows

Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

5.2 Page Footer Section

Visible, New Page After, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Hidden, New Page Before

5.4 Report Footer Section

Visible, New Page After

5.5 Group Header Section

Visible

Subsection.1

Visible, Keep Together, Underlay

Subsection.2

Visible, Keep Together

Carbon Number

String, Visible, Right Alignment, Top Alignment,
Keep Together

Weight Percent

String, Visible, Right Alignment, Top Alignment,
Keep Together

{Wax_Phase_Sums.RunID}

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

.

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Wax_Phase_Sums.SampleID}

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

{Wax_Phase_Sums.TOS}

Numeric, Visible, Left Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

hrs. on stream

String, Visible, Left Alignment, Top Alignment,
Keep Together, Expand

5.6 Group Footer Section

Visible, New Page After

5.7 Details Section
Visible

Subsection.1
Visible

{Wax_Phase_Sums.Carbon_Number}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

{Wax_Phase_Sums.Weight_Percent}
Numeric, Visible, Default Alignment, Top Alignment,
Keep Together,
Leading Minus, 4 Decimal Places, Rounding: 0.0001,
Thousands Symbol: ',', Decimal Symbol: '.'

Crystal Report Professional v8.0 (32-bit) - Report Definition

1.0 File Information

Report File: Run, Catalyst Report
Version: 7.0

2.0 Record Sort Fields

A - {Run.Catalyst}

3.0 Group Sort Fields

4.0 Formulas

4.1 Record Selection Formula

ToNumber ({?pYear}) = Year ({Run.Started})
and left({Run.Catalyst},3) <> 'UNK'

4.2 Group Selection Formula

4.3 Other Formulas

5.0 Sectional Information

5.1 Page Header Section

Visible, Keep Together

Catalyst

String, Visible, Left Alignment, Top Alignment,
Keep Together

Run

String, Visible, Left Alignment, Top Alignment,
Keep Together

Catalyst Notes

String, Visible, Left Alignment, Top Alignment,
Keep Together

PrintDate

Date, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Windows

Default Type: Use Windows Short Date, Date Order: Month Day Year, Year
Type: Long, Month Type: Numeric Month, Day Type: Numeric Day, Leading
Day Type: None, First Separator: '/', Second Separator: '/', Leading Day
Separator: ''

Catalyst Ran During
String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

{?pYear}
String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand, Using System Default Formatting, Word

Wrap

String, Visible, Horizontal Centre Alignment, Top Alignment,
Keep Together, Expand

5.2 Page Footer Section

Visible, New Page After, Keep Together, Print At Bottom of Page

PageNumber

Numeric, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting,
Leading Minus, 0 Decimal Places, Rounding: 1,
Thousands Symbol: ',', Decimal Symbol: '.'

5.3 Report Header Section

Hidden, New Page Before

5.4 Report Footer Section

Hidden, New Page After

5.5 Details Section

Visible

Subsection.1

Visible, Keep Together

Format Formulas

Background Color: if Remainder(RecordNumber,2) = 0 then

White

else

Color (230,230 ,250)

{Run.Catalyst}

String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

{Run.RUNID}

String, Visible, Default Alignment, Top Alignment,
Keep Together, Using System Default Formatting, Word Wrap

{Run.Catalyst Notes}

Memo, Visible, Default Alignment, Top Alignment,

Wrap

Keep Together, Expand, Using System Default Formatting, Word