BC Oil & Gas COMMISSION

2013 HYDROCARBON RESERVES DATA

USER'S GUIDE

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Historically, the BC Oil and Gas Commission (Commission) published reserve extract files in fixed width text file format.

For the 2013 reserves extract, the Commission is moving to comma separated value format files (.csv). In addition to the change from fixed width text format to .csv, the 2013 reserve extract will no longer include several code table related files. Values from the omitted code table files are now included directly in each primary reserve file. For example, the Gas Reserve file previously contained a column for Area Code and the Area Name associated with that Area Code was contained in a separate code table file. For the 2013 reserve year both the Area Code and the Area Name are included in the Gas Reserve file.

Copies of this User Guide can be accessed through the Commission website via the Industry Zone Tab/Activity Levels/Annual Reserves Data.

This information is provided for the convenience of the public.
The Commission does not assume liability for any errors or omissions.

If you have any questions regarding the data files, please do not hesitate to contact Information Systems at the Commission:

OGC.Systems@bcogc.ca

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1. Files

The BC Oil and Gas Commission supplies the following non confidential data:

Readme File	README_R.txt
Gas Reserve File	GAS_RESV.csv
Oil Reserves File	OIL_RESV.csv
Production File	PROD.csv
Gas Analysis*	S_G_ANAL.csv

*The gas analysis data is based on the weighted averages of all the wells included in a pool.

2. File Formats

2.1. Gas Reserves File

Column	Title	Description	Units/Comments
A	AREA_CODE	Area Code	Number (4 character field left padded with zeros (e.g. 40 = 0040))
B	AREA_DESC	Area Description	Text (area name)
C	FORMTN_CODE	Formation Code	Number (4 character field left padded with zeros (e.g. 175 = 0175))
D	FORMTN_DESC	Formation Description	Text (formation geologic name)
E	POOL_SEQ	Pool Sequence	Text (A, B, C, etc.)
F	PROJECT_CODE	Project Code	Number (2 character field left padded with zeros (e.g. 2 = 02))
G	PROJECT_DESC	Project Description	Text (project name, operator)
H	PROJECT_TYPE	Project Type	Text (Good Engineering Practice; Concurrent Production, etc.)
I	DRLG_OR_REVISED_ FLAG	Drilling or Revised	Text (Drilling; Revised) Reason for reserve change

J	PLANT_ASSIGNED	Plant Assigned	Number (8 character field left padded with zeros (e.g. 437 = 00000437))
K	PLANT_ASSIGNED_ NAME	Plant Assigned Name	Text (i.e. Westcoast Clarkelake B-084-G/094-J-10)
L	AREA_EST_GAS	Area Established Gas (hectare)	Ha (pool mapped or assigned area)
M	COMPRESS_FACTOR	Compressibility Factor	Decimal
N	CRITCL_PRESS	Critical Pressure	kPa
O	CRITCL_TEMP	Critical Temperature	Kelvin
P	NET_PAY_EST_GAS	Net Pay used for Established Reserves	Metres
Q	POOL_CONNCTD_ FLAG	Pool Connected	Y / N (pool connected to gathering system)
R	PORSTY_GAS_AVG	Average Gas Porosity	Decimal
S	GAS_PRODUCT_ TYPE	Gas Product Type	Gas Cap / Non-Associated Gas
T	RECVRY_FACTOR_ GAS	Gas Recovery Factor	Decimal (calculated or assumed value used)
U	WATER_SATRTN_ GAS_AVG	Water Saturation	Decimal
V	SHRINKG_FACTOR	Shrinkage Factor	Decimal (processing losses)
W	RESRVR_INIT_PRESS	Reservoir Initial Pressure	kPaa
X	OFFCL_CALC_ METHD_FLAG	Official Calculation Method	D=decline; V=volumetric; M=material balance; X=depleted
Y	GAS_OIL_CONTCT_ DEPTH	Gas/Oil Contact Depth	mSS
Z	WATER_CONTCT_ DEPTH	Water/Contact Depth	mSS
AA	AVG_FORMTN_ TEMP	Average Formation Temperature (Kelvin)	K
AB	DATUM_DEPTH	Datum Depth	mSS
AC	OFFICIAL_GAS_IN_	Official Gas In Place	10^3m^3

	PLACE		
AD	INIT_EST_GAS_RAW	Initial Established Raw Gas	10^3m^3
AE	INIT_EST_GAS_MKT	Initial Established Marketable Gas	10^3m^3
AF	REM_GAS_RAW	Remaining Recoverable Raw Gas	10^3m^3
AG	REM_GAS_MKT	Remaining Recoverable Marketable Gas	10^3m^3
AH	DISCOVERY_WA	WA Number of Discovery Well	Number (5 character field left padded with zeros (e.g. 23 = 00023))
AI	DISCOVERY_WA_ Name	Discovery Well Name	Text
AJ	DISCOVERY_DATE	Discovery Date	Date (yyyy)

2.2. Oil Reserves File

Column	Title	Description	Units/Comments
A	AREA_CODE	Area Code	Number (4 character field left padded with zeros (e.g. 40 = 0040))
B	AREA_DESC	Area Description	Text (area name)
C	FORMTN_CODE	Formation Code	Number (4 character field left padded with zeros (e.g. 175 = 0175))
D	FORMTN_DESC	Formation Description	Text (formation geologic name)
E	POOL_SEQ	Pool Sequence	Text (A, B, C, etc.)
F	PROJECT_CODE	Project Code	Number (2 character field left padded with zeros (e.g. 2 = 02))
G	PROJECT_DESC	Project Description	Text (project name, operator)
H	PROJECT_TYPE	Project Type	Text (Good Engineering Practice; Concurrent Production, etc.)
I	DRLG_OR_REVISED_FLAG	Drilling or Revised	Text (Drilling; Revised) Reason for reserve change
J	PLANT_ASSIGNED	Plant Assigned	Number (8 character field left padded with zeros (e.g. 437 = 00000437))

K	PLANT_ASSIGNED_NAME	Plant Assigned Name	Text (i.e. Westcoast Fort St John SE 15-25-082-18W6)
L	AREA_EST_OIL	Area Established Oil (Hectare)	Ha (pool mapped or assigned area)
M	FORMTN_VOL_FACTOR	Formation Volume Factor	m^3/m^3
N	INIT_SOLN_GAS_OIL_RATIO	Initial Solution Gas/Oil Ratio	m^3/m^3
O	NET_PAY_EST_OIL	Net Pay Established Oil	Metres
P	POOL_CONNCTD_FLAG	Pool Connected Flag	Y / N (pool connected to gathering system)
Q	OIL_SATRTN_PRESS	Oil Saturation Pressure	kPa
R	PORSTY_OIL_AVG	Oil Average Porosity	Decimal
S	RECVRY_FACTOR_OIL	Oil Recovery Factor	Decimal (calculated or assumed value used)
T	RESVR_DRIVE_CODE	Reservoir Drive Mechanism	Text (depletion, waterflood, gas cap expansion)
U	WATER_SATRTN_OIL_AVG	Water Saturation	Decimal
V	OIL_DENSTY	Oil Density	kg/m^3
W	RESRVR_INIT_PRESS	Reservoir Initial Pressure	kPaa
X	OFFCL_CALC_METHD_FLAG	Official Calculation Methodology	D=decline; V=volumetric; M=material balance; X=depleted
Y	GAS_OIL_CONTCT_DEPTH	Gas/Oil Contact Depth	mSS
Z	WATER_CONTCT_DEPTH	Water Contact Depth	mSS
AA	AVG_FORMTN_TEMP	Average Formation Temperature (Kelvin)	K
AB	DATAUM_DEPTH	Datum Depth	mSS
AC	OIL_VISCSTY	Oil Viscosity	mPa-s
AD	GAS_CONSERV_FLAG	Gas Conservation Flag	Y/N
AE	GAS_FLAG	Gas Flag	Y / N
AF	OFFICIAL_OIL_IN_PLACE	Original Oil in Place	m^3
AG	INIT_EST_OIL	Initial Oil in Place	m^3

AH	REMAINING_OIL	Remaining Recoverable Oil	m^3
AI	SOLN_GAS_IN_PLACE	Solution Gas In Place	10^3m^3
AJ	SOLN_GAS_RAW	Recoverable Solution Gas (Raw)	10^3m^3
AK	SOLN_GAS_MKT	Recoverable Solution Gas (Marketable)	10^3m^3
AL	RECVRY_FACTOR_SOLN_GAS	Solution Gas Recovery Factor	Decimal
AM	REM_CONDENSATE	Remaining Recoverable Condensate	m^3
AN	DISCOVERY_WA	Discovery Well WA #	Number (5 character field left padded with zeros (e.g. 23 = 00023))
AO	DISCOVERY_WA_NAME	Discovery Well Name	Text
AP	DISCOVERY_DATE	Discovery Date	Date (yyyy)

2.3. Production

Column	Title	Description	Units/Comments
A	AREA_CODE	Area Code	Number (4 character field left padded with zeros (e.g. 40 = 0040))
B	AREA_DESC	Area Description	Text (area name)
C	FORMTN_CODE	Formation Code	Number (4 character field left padded with zeros (e.g. 175 = 0175))
D	FORMTN_DESC	Formation Description	Text (formation geologic name)
E	POOL_SEQ	Pool Sequence	Text (A, B, C, etc.)
F	PROJECT_CODE	Project Code	Number (2 character field left padded with zeros (e.g. 2 = 02))
G	PROJECT_DESC	Project Description	Text (project name, operator)

H	PROJECT_TYPE	Project Type	Text (Good Engineering Practice; Concurrent Production, etc.)
I	POOL_IP_PERIOD	Pool Initial Production Date	Date (yyyymm)
J	POOL_LAST_PROD_PERIOD	Pool Last Production Date	Date (yyyymm)
K	ANN_OIL_PROD	2013 Annual Oil Production	m^3
L	CUM_OIL_PROD	Cumulative Oil Production (to 31/12/2013)	m^3
M	ANN_RAW_GAS_PROD	Annual Raw Gas Production	10^3m^3
N	CUM_RAW_GAS_PROD	Cumulative Raw Gas Production (to 31/12/2013)	10^3m^3
O	CUM_MKT_GAS_PROD	Cumulative Marketable Gas Production (to 31/12/2013)	10^3m^3
P	ANN_GAS_INJ	Annual Gas Injection	10^3m^3
Q	CUM_GAS_INJ	Cumulative Gas Injection	10^3m^3
R	ANN_CON_PROD	Annual Condensate Production (to 31/12/2013)	m^3
S	CUM_CON_PROD	Cumulative Condensate Production (to 31/12/2013)	m^3

2.4. Gas Analysis

Column	Title	Description	Units/Comments
A	AREA_CODE	Area Code	Number (4 character field left padded with zeros (e.g. 40 = 0040))
B	AREA_DESC	Area Description	Text (area name)
C	FORMTN_CODE	Formation Code	Number (4 character field left padded with zeros (e.g. 175 = 0175))
D	FORMTN_DESC	Formation Description	Text (formation geologic name)
E	POOL_SEQ	Pool Sequence	Text (A, B, C, etc.)

F	PROJECT_CODE	Project Code	Number (2 character field left padded with zeros (e.g. 2 = 02))
G	PROJECT_DESC	Project Description	Text (project name, operator)
H	PROJECT_TYPE	Project Type	Text (Good Engineering Practice; Concurrent Production, etc.)
I	SAMPLE_POINT_CODE	Describes Sample Source	Text (i.e. Meter Run)
J	H2_FRACTN	Hydrogen Mole Fraction in Gas Sample	Decimal
K	HELIUM_FRACTN	Helium Mole Fraction in Gas Sample	Decimal
L	CO2_FRACTN	Carbon Dioxide Mole Fraction in Gas Sample	Decimal
M	H2S_FRACTN	Hydrogen Sulphide Mole Fraction in Gas Sample	Decimal
N	N2_FRACTN	Nitrogen Mole Fraction in Gas Sample	Decimal
O	C1_FRACTN	Methane Mole Fraction in Gas Sample	Decimal
P	C2_FRACTN	Ethane Mole Fraction in Gas Sample	Decimal
Q	C3_FRACTN	Propane Mole Fraction in Gas Sample	Decimal
R	IC4_FRACTN	Iso-Butane Mole Fraction in Gas Sample	Decimal
S	NC4_FRACTN	Normal-Butane Mole Fraction in Gas Sample	Decimal
T	IC5_FRACTN	Iso-Pentane Mole Fraction in Gas Sample	Decimal
U	NC5_FRACTN	Normal-Pentane Mole Fraction in Gas Sample	Decimal
V	C6_FRACTN	Hexane Mole Fraction in Gas Sample	Decimal
W	C7_FRACTN	Heptane Mole Fraction	Decimal

		in Gas Sample	
X	C8_FRACTN	Octane Mole Fraction in Gas Sample	Decimal
Y	C9_FRACTN	Nonane Mole Fraction in Gas Sample	Decimal
Z	C10_FRACTN	Decane Mole Fraction in Gas Sample	Decimal
AA	GHV_CALC	Gross Heating Value (Calculated)	MJ/m^3
AB	RELTV_DENSTY_CALC	Relative Density	Ratio
AC	PCP_PPC	Pseudo Critical Pressure	kPa
AD	PRESS_RECVD	Pressure Received	kPa
AE	PCP_PTC	Pseudo Critical Temperature - Kelvin	K
AF	TEMP_RECVD	Temperature Received (Degrees Celcius)	^oC