Australian Hydrological Geospatial Fabric (Geofabric)

Data Dictionary

Groundwater Cartography

Version 2.0 – November 2011

Australian Government
Bureau of Meteorology

Water Information
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Geofabric Groundwater Cartography V2.0

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SpecificYieldRange	Range Domain
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AHGF_InterimAquiferFramework

Description	Classification of similar aquifer characteristics.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value

Domain Members

Name	Value
Surficial Sediment Aquifer (porous media - unconsolidated)	1
Upper Tertiary/Quaternary Aquifer (porous media - unconsolidated)	2
Upper Tertiary/Quaternary Aquitard (porous media - unconsolidated)	3
Upper Tertiary Aquifer (porous media - unconsolidated)	4
Upper Tertiary Aquitard (porous media - unconsolidated)	5
Upper Mid-Tertiary Aquifer (porous media - unconsolidated)	6
Upper Mid-Tertiary Aquitard (porous media - unconsolidated)	7
Lower Mid-Tertiary Aquifer (porous media - unconsolidated)	8
Lower Mid-Tertiary Aquitard (porous media - unconsolidated)	9
Lower Tertiary Aquifer (porous media - unconsolidated)	10
Tertiary Basalt Aquifer (fractured rock)	11
Tertiary Sediments (fractured rock)	12
Mesozoic Sediment Aquifer (porous media - consolidated)	13
Mesozoic Fractured Rock Aquifer	14
Jurassic (GAB intake beds) (porous media - consolidated)	15
Mesozoic (GAB) (porous media - consolidated)	16
Fractured and Karstic Rocks, Local Aquifers	17
Fractured and Karstic Rocks, Regional Scale Aquifers	18
Palaeozoic and Pre-Cambrian Fractured Rock Aquifers (low permeability)	19
Palaeozoic and Pre-Cambrian Fractured Rock Aquifers (consolidated and partly porous)	20
Late Permian/Triassic intrusives and volcanics fractured rock aquifers	21
Late Permian/Triassic sediments (porous media - consolidated)	22
Palaeozoic and Pre-Cambrian Fractured Rock Aquifers (low fracture density and very low permeability)	23
Undifferentiated non-outcropping sediments including palaeo-channels, glacial sediments and coal measures (porous media - unconsolidated)	24

Water Body	25
Cainozoic Aquifer (porous media - consolidated)	29
Unassigned due to lack of codes	30
Unknown	- 99

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AHGFAquiferBoundaryType

Description	Boundaries of underlying, outcropping and subcropping aquifers.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
AquiferBoundary	66

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AHGFAquiferContourType

Description	Subtypes of aquifer surface contours.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
AquiferContourTop	68
AquiferContourBottom	69
BedrockContourTop	73

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AHGFAquiferOutcropType

Description	Outcrop areas of aquifers.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
AquiferOutcrop	67

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AHGFContourDepthRange

Description	Range of valid aquifer contour depth values.
Domain Type	Range Domain
Field Type	Double
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
MinValue	-5,000
MaxValue	9,999

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AHGFGroundwaterSourceDescription

Description	Detailed source descriptions for groundwater data.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value

Domain Members

Name	Value
Bain, J.H.C., Haipola, D., 1997, North Queensland Geology 1:1,000,000, Australian Geological Survey Organisation & Geological Survey of Queensland.	1
Blake, D.H., 1987, Mt Isa Inlier and Environs 1:500,000, Bureau of Mineral Resources.	2
Brown, C.M. and Stephenson, A.E., 1991, Geology of the Murray Basin, south-eastern Australia, 1:1,000,000 scale map, Bureau of Mineral Resources.	3
Bultitude R.J., Garrod P.D., and Roberts C.W., 1997, Hodgkinson Province Geology 2nd Ed. 1:500,000, Geological Survey of Queensland.	4
Bureau of Rural Science	5
Burra 1:250,000 sheet area compiled from PIRSA 1:250,000 scale digital data, 2006.	6
Compiled from PIRSA 1:250,000 scale digital coverage of South Australia, 2005, with Mesoproterozoic and Palaeoproterozoic rock associations updated from more recent unpublished PIRSA information.	7
Compiled from PIRSA 1:250,000 scale digital coverage of South Australia, 2005.	8
Cronfield, L.C., 1992, Maryborough Geology 1:250,000, Geological Survey of Queensland.	9
Department of Environment and Heritage, South Australia	10
Department of Environment and Resource Management, Queensland	11
Department of Natural Resources, Environment and the Arts, Northern Territory	12
Department of Natural Resoures, New South Wales	13
Department of Primary Industry, Parks, Water and Environment, Tasmania	14
Department of Sustainability and Environment, Victoria	15
Department of Water, Western Australia	16
Exon, N.F., 1976, Geology of the Northern Part of the Surat Basin 1:1,000,000, Bureau of Mineral Resources.	17
Not Used (Geodata coastline 1:250,000 version 2, Geoscience Australia.)	18
Geological Survey of New South Wales 1:100,000 scale maps, 2000-2004. Simplified, edge matched and modified for representation at 1:1 million scale.	19
Geological Survey of New South Wales, Cobar Geoscience Database, 1:100,000 scale	20

mapping, 2000. Simplified, edge matched and modified for representation at 1:1 million scale.	
Geological Survey of New South Wales, Statewide geodatabase, 1:250,000 scale or better, 2003. Simplified, edge matched and modified for representation at 1:1 million scale.	21
Geological Survey of New South Wales, Statewide geodatabase, 1:250,000 scale or better, 2005 updated data (unpublished). Simplified, edge matched and modified for representation at 1:1 million scale.	22
Geological Survey of New South Wales, Statewide geodatabase, 1:250,000 scale or better, 2007. Data relocated or amended based on recent satellite and radiometric imagery.	23
Geological Survey of New South Wales, Statewide geodatabase, 1:250,000 scale or better, 2007. Simplified, edge matched and modified for representation at 1:1 million scale.	24
Geological Survey of New South Wales, Statewide geodatabase, 2003. Outcrop extents considerably modified by new radiometric and Landsat interpretation.	25
Geological Survey of Queensland, 1:100,000 scale geological maps, 2001. Simplified, edge matched and modified for representation at 1:1 million scale.	26
Geological Survey of Queensland, 1:100,000 scale geological maps, July 2004. Simplified, edge matched and modified for representation at 1:1 million scale.	27
Geological Survey of Queensland, Australian Geological Survey Organisation 1:250,000 scale geological maps, 2nd Edition, 1995-1996. Simplified, edge matched and modified for representation at 1:1 million scale.	28
Geological Survey of Queensland, Bundaberg 1:250,000 compilation in progress, 2003-2004.	29
Geological Survey of Victoria state geological map, 1:1,000,000 scale, 1999. Modified and edge matched to New South Wales and South Australia; granitoid names added from more detailed GSV maps.	30
Geoscience Australia	31
Geoscience Victoria 1:100,000 scale geological maps. Simplified, edge matched and modified for representation at 1:1 million scale.	32
Geoscience Victoria 1:50,000 scale geological maps. Simplified, edge matched and modified for representation at 1:1 million scale.	33
Glikson et al. 1996 Geology of the Western Musgrave Block, central Australia with particular reference to the mafic-ultramafic Giles Complex. Australian Geological Survey Bulletin 239 Plate 1.	34
Grimes, K.G., Fraser Island Special Geology 1:250,000, Geological Survey of Queensland.	35
Maitland 1:250,000 sheet area compiled from PIRSA 1:250,000 scale digital data, 2006.	36
Malone E.J., Olgers F., Mollan R.G., Jensen A.R., 1967, Bowen Basin Geology	37

1:1,000,000, Bureau of Mineral Resources.	
Mond, A., Senior, B.R., Matueev, G., Swoboda, R., 1977, Geology of North Western Eromanga Basin 1:1,000,000, Bureau of Mineral Resources.	38
Murray-Darling Basin Authority	39
Office of Water, New South Wales	40
Pain, A.G.L., Cameron R.L. and Sweet I.P., 1980, Burdekin River Region 1:500,000, Geological Survey of Queensland & Bureau of Mineral Resources.	41
Palaeozoic from Geological Survey of New South Wales 1:100,000 scale maps, 2000-2004. Simplified and modified for representation at 1:1 million scale. Cainozoic simplified from GSNSW State-wide geodatabase, 1:250,000 scale, 2003.	42
Palaeozoic-Proterozoic: Laing,W.P., Preiss,W.V. and Stevens,B.P.J., 1996. Outcrop geology of the Curnamona Province and surrounding Neoproterozoic and Palaeozoic belts, 1:500,000 scale map. Cainozoic from GSNSW State-wide geodatabase, 1:250,000 scale.	43
Primarily from Geology of Tasmania, 1:500,000 scale map, Tasmanian Geological Survey, 1999. Granite nomenclature and minor boundaries updated from Tasmanian Granites and Associated Mineralisation, 1:500,000 scale map, Mineral Resources Tasmania, 2005.	44
Published 1:100,000 scale geological maps (Geological Survey of WA, 2008).	45
Published 1:250,000 and 1:100,000 scale geological maps (Geological Survey of WA, and Geoscience Australia), supplemented in parts by more recent GA Solid Geology interpretation of the Patterson area (2008).	46
Published 1:250,000 and 1:100,000 scale geological maps (Geological Survey of WA, and Geoscience Australia), supplemented in parts by more recent stratigraphic classification in GSWA Record 2006/15.	47
Published 1:250,000 scale geological maps (Geological Survey of WA, and Geoscience Australia), supplemented in parts by GSWA Bulletin 134 (1988).	48
Published 1:250,000 scale geological maps (Geological Survey of WA, and Geoscience Australia), supplemented in parts by more recent stratigraphic classification in GSWA 1:500,000 scale Solid Geology dataset (2008).	49
Raymond, O.L., 1993, Wagga Wagga - Kyeamba Region, 1:100,000 scale geological map, Australian Geological Survey Organisation.	50
Senior, B.R., Johnston, I.D., 1974, Geology of the Central Eromanga Basin 1:1,000,000, Bureau of Mineral Resources.	51
Senior, B.R., Swoboda, R., Mond, A., 1977, Geology of Northern Eromanga Basin 1:1,000,000, Bureau of Mineral Resources.	52
Simplified from 1:100,000 scale maps published by Geosicence Australia and Northern Territory Geological Survey	53
Simplified from 1:250,000 (and some 1:500,000) scale maps published by Geoscience Australia (previously BMR) and Northern Territory Geological Survey. Some unit descriptions, ages and associations updated from recent mapping by NTGS (2003-6)	54

Sinclair Knight Merz	55
Smout, J., Grimes, K.G., Poutch, H.F., Swoboda, R.A., Russell, E.A., 1980, Carpentaria and Karumba Basins 1:1,000,000, Geological Survey of Queensland & Bureau of Mineral Resources.	56
Southern Rural Water	57
Sweet, I.P., 2006, 1:100,000 scale geological maps. Simplified, edge matched and modified for representation at 1:1 million scale, Geoscience Australia.	58
Unknown	59
Willmot, F.W. and Chertok, I., 1972, Cape York Peninsula & Torres Strait 1:500,000, Bureau of Mineral Resources.	60
Withnal I.W., Blake P.R., Crouch S.B.S. and Rapkins P.I., 1995, Anakie Inlier 1:100,000 special, Geological Survey of Queensland.	61
Withnal, I., 2004, Port Clinton Geology 1:100,000, Geological Survey of Queensland.	62

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AHGFSurficialHydrogeologicUnitType

Description	Surficial units of similar hydrogeologic properties.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value

Domain Members

Name	**Value**
SurficialHydrogeologicUnit	70

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AHGFWaterTableAquiferType

Description	Water table units of similar hydrogeologic properties.
Domain Type	Coded Value
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
WaterTableAquifer	71

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HydraulicConductivityRange

Description	Range of valid Hydraulic Conductivity values.
Domain Type	Range Domain
Field Type	Double
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
MinValue	1.0000000000000001e-005
MaxValue	1,000

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SalinityClass

Description	Broad classification of salinity (Non-saline/Saline).
Domain Type	Coded Value
Field Type	String
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
Non-Saline (<3,000mg/L)	Non-Saline (<3,000mg/L)
Saline (>3,000mg/L)	Saline (>3,000mg/L)
Unknown	Unknown
No Data	No Data

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SalinityRange

Description	Range of valid salinity values.
Domain Type	Range Domain
Field Type	Integer
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
MinValue	0
MaxValue	200,000

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SalinityValue

Description	Broad classification of salinity (Non-saline/Saline).
Domain Type	Coded Value
Field Type	String
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
Unknown	0
< 250	1
< 500	2
250 - 500	3
< 1,000	4
500 – 1,000	5
< 1,500	6
500 – 1,500	7
1,000 – 1,500	8
< 3,000	9
1,000 – 3,000	10
> 3,000	11
1,000 – 3,500	12
1,500 – 3,000	13
3,000 – 5,000	14
> 5,000	15
3,000 – 6,000	16
3,000 – 7,000	17
3,500 – 7,000	18
> 7,000	19
3,500 – 13,000	20
6,000 – 12,000	21
> 12,000	22
7,000 – 13,000	23
> 13,000	24

7,000 – 14,000	25
> 14,000	26
13,000 – 35,000	27
14,000 – 35,000	28
> 35,000	29
> 100,000	30
No Data	31

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SpecificYieldRange

Description	Range of valid Specific Yield values.
Domain Type	Range Domain
Field Type	Double
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
MinValue	0.0001
MaxValue	0.20000000000000001

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YieldClass

Description	Broad classification of yield (<5L/s or >=5L/s).
Domain Type	Coded Value
Field Type	String
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
<5L/s	<5L/s
>5L/s	>5L/s
Unknown	Unknown
No Data	No Data

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YieldRange

Description	Range of valid aquifer yield values.
Domain Type	Range Domain
Field Type	Double
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
MinValue	0
MaxValue	500

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YieldValue

Description	Source yield values.
Domain Type	Coded Value
Field Type	String
Merge Policy	Default Value
Split Policy	Default Value
Domain Members	
Name	**Value**
No Data	0
<0.5	1
<1	2
<1.5	3
<5	4
0.5 to 5	5
5 to 10	6
5 to 50	7
10 to 50	8
>1.5	9
>2.5	10
>5	11
>50	12

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ObjectClasses

ObjectClass Name	Type	Geometry	Subtype
GW_Cartography			SR
AHGFAquiferBoundary	Simple FeatureClass	Polygon	-
AHGFAquiferContour	Simple FeatureClass	Polyline	AquiferContourBottom AquiferContourTop BedrockContourBottom
AHGFAquiferOutcrop	Simple FeatureClass	Polygon	-
AHGFSurficialHydrogeologicUnit	Simple FeatureClass	Polygon	-
AHGFWaterTableAquifer	Simple FeatureClass	Polygon	-
IGWAquiferSalinity	Simple FeatureClass	Polygon	-
IGWAquiferYield	Simple FeatureClass	Polygon	-
IGWWaterTableHydraulicConductivity	Simple FeatureClass	Polygon	-
IGWWaterTableSalinity	Simple FeatureClass	Polygon	-
IGWWaterTableYield	Simple FeatureClass	Polygon	-

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AHGFAquiferBoundary

Alias AHGFAquiferBoundary
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
DLithology	DominantLithology	DLithology	String	100	No
LitholDesc	LithologyDescription	LitholDesc	String	254	Yes
GeoUnits	GeologicalUnits	GeoUnits	String	50	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
AHGFFType	66	AHGFAquiferBoundaryType
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape
GDB_25_HydroID	Yes	No	HydroID

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AHGFAquiferContour

Alias AHGFAquiferContour
Dataset Type FeatureClass
FeatureType Simple

Geometry : Polyline
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
AqifrBndID	AquiferBoundaryID	AqifrBndID	Integer	4	No
ContValue	ContourValue	ContValue	Double	8	No
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
AHGFFType	68	AHGFAquiferContourType
IAF_ID		AHGF_InterimAquiferFramework
ContValue		AHGFContourDepthRange
SrcDesc		AHGFGroundwaterSourceDescription
AquiferContourBottom (AHGFFType=69)		
AHGFFType	69	AHGFAquiferContourType
ContValue		AHGFContourDepthRange
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription
AquiferContourTop (AHGFFType=68) [Default]		
AHGFFType	68	AHGFAquiferContourType
ContValue		AHGFContourDepthRange
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription
BedrockContourBottom (AHGFFType=73)		
AHGFFType	73	AHGFAquiferContourType
ContValue		AHGFContourDepthRange
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape
GDB_32_AqifrBndI	Yes	No	AqifrBndID

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AHGFAquiferOutcrop

Alias AHGFAquiferOutcrop
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points:0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
AqifrBndID	AquiferBoundaryID	AqifrBndID	Integer	4	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
AHGFFType	67	AHGFAquiferOutcropType
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape
GDB_24_AqifrBndI	Yes	No	AqifrBndID

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AHGFSurficialHydrogeologicUnit

Alias AHGFSurficialHydrogeologicUnit
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
DLithology	DominantLithology	Dlithology	String	100	No
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
LitholDesc	LithologyDescription	LitholDesc	String	254	Yes
GeoUnits	GeologicalUnits	GeoUnits	String	50	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
Fsource	FeatureSource	Fsource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
AHGFFType	70	AHGFSurficialHydrogeologicUnitType
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape

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AHGFWaterTableAquifer

Alias AHGFWaterTableAquifer
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
AHGFFType	AHGFFeatureType	AHGFFType	Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
GWProvince	GroundwaterProvince	GWProvince	String	70	Yes
GWFlowSysP	GWFlowSystemPrimary	GWFlowSysP	String	80	Yes
GWFlowSysS	GWFlowSystemSecondary	GWFlowSysS	String	80	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
AHGFFType	71	AHGFWaterTableAquiferType
IAF_ID		AHGF_InterimAquiferFramework
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape

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IGWAquiferSalinity

Alias IGWAquiferSalinity
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
AqifrBndID	AquiferBoundaryID	AqifrBndID	Integer	4	No
SalinValue	SalinityValue	SalinValue	String	5	Yes
SalinClass	SalinityClass	SalinClass	String	25	Yes
SalinMin	SalinityMinimum	SalinMin	Integer	4	Yes
SalinMax	SalinityMaximum	SalinMax	Integer	4	Yes
SalinMed	SalinityMedian	SalinMed	Integer	4	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
IAF_ID		AHGF_InterimAquiferFramework
SalinValue		SalinityValue
SalinClass		SalinityClass
SalinMin		SalinityRange
SalinMax		SalinityRange
SalinMed		SalinityRange
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape
GDB_28_AqifrBndI	Yes	No	AqifrBndID

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IGWAquiferYield

Alias IGWAquiferYield
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
NameSynonm	NameSynonyms	NameSynonm	String	254	Yes
AqifrBndID	AquiferBoundaryID	AqifrBndID	Integer	4	No
YieldValue	YieldValue	YieldValue	String	5	Yes
YieldClass	YieldClass	YieldClass	String	10	Yes
YieldMin	YieldMinimum	YieldMin	Double	8	Yes
YieldMax	YieldMaximum	YieldMax	Double	8	Yes
YieldMed	YieldMedian	YieldMed	Double	8	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
IAF_ID		AHGF_InterimAquiferFramework
YieldValue		YieldValue
YieldClass		YieldClass
YieldMin		YieldRange
YieldMax		YieldRange
YieldMed		YieldRange
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape
GDB_27_AqifrBndI	Yes	No	AqifrBndID

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IGWWaterTableHydraulicConductivity

Alias	IGWWaterTableHydraulicConductivity	**Geometry:** Polygon **Average Number of Points:** 0 **Has M:** No **Has Z:** No **Grid Size:** 1,000
Dataset Type	FeatureClass	
FeatureType	Simple	

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
IAF_ID	IAF_ID	IAF_ID	Integer	4	Yes
HydKValue	HydraulicConductivityValue	HydKValue	Double	8	Yes
SpecYield	SpecificBoreYield	SpecYield	Double	8	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
IAF_ID		AHGF_InterimAquiferFramework
HydKValue		HydraulicConductivityRange
SpecYield		SpecificYieldRange
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape

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IGWWaterTableSalinity

Alias IGWWaterTableSalinity
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
SalinValue	SalinityValue	SalinValue	String	5	Yes
SalinClass	SalinityClass	SalinClass	String	25	Yes
SalinMin	SalinityMinimum	SalinMin	Integer	4	Yes
SalinMax	SalinityMaximum	SalinMax	Integer	4	Yes
SalinMed	SalinityMedian	SalinMed	Integer	4	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
SalinValue		SalinityValue
SalinClass		SalinityClass
SalinMin		SalinityRange
SalinMax		SalinityRange
SalinMed		SalinityRange
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape

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IGWWaterTableYield

Alias IGWWaterTableYield
Dataset Type FeatureClass
FeatureType Simple

Geometry: Polygon
Average Number of Points: 0
Has M: No
Has Z: No
Grid Size: 1,000

Field Name	Alias Name	Model Name	Type	Length	Null
OBJECTID	OBJECTID	OBJECTID	OID	4	No
Shape	Shape	Shape	Geometry	0	Yes
HydroID			Integer	4	No
YieldValue	YieldValue	YieldValue	String	5	Yes
YieldClass	YieldClass	YieldClass	String	10	Yes
YieldMin	YieldMinimum	YieldMin	Double	8	Yes
YieldMax	YieldMaximum	YieldMax	Double	8	Yes
YieldMed	YieldMedian	YieldMed	Double	8	Yes
ReliabCode	ReliabilityCode	ReliabCode	String	160	Yes
GWNote	GroundwaterNote	GWNote	String	254	Yes
Scale			String	20	Yes
SrcDesc	SourceDescription	SrcDesc	Integer	4	Yes
SrcFCName	SourceFeatureClassName	SrcFCName	String	25	No
SrcFType	SourceFeatureType	SrcFType	String	32	No
SrcType	SourceType	SrcType	Integer	4	Yes
SourceID			Integer	4	Yes
FeatRel	FeatureReliability	FeatRel	Date	8	Yes
FSource	FeatureSource	FSource	String	25	No
AttrRel	AttributeReliability	AttrRel	Date	8	Yes
AttrSource	AttributeSource	AttrSource	String	25	No
PlanAcc	PlanimetricAccuracy	PlanAcc	Small Integer	2	Yes
Symbol			Small Integer	2	Yes
TextNote			String	50	Yes
AlbersArea			Double	8	Yes
Shape_Length	Shape_Length	Shape_Length	Double	8	Yes
Shape_Area	Shape_Area	Shape_Area	Double	8	Yes

Subtype Name	Default Value	Domain
ObjectClass		
YieldValue		YieldValue
YieldClass		YieldClass
YieldMin		YieldRange
YieldMax		YieldRange
YieldMed		YieldRange
SrcDesc		AHGFGroundwaterSourceDescription

Index Name	Ascending	Unique	Fields
FDO_OBJECTID	Yes	Yes	OBJECTID
FDO_Shape	No	No	Shape

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Relationships

Name	Origin	Destination	Attributed	Composite	Rules
AquiferHasContour	AHGFAquiferBoundary	AHGFAquiferContour	No	No	No
AquiferHasOutcrop	AHGFAquiferBoundary	AHGFAquiferOutcrop	No	No	No
AquiferHasSalinity	AHGFAquiferBoundary	IGWAquiferSalinity	No	No	No
AquiferHasYield	AHGFAquiferBoundary	IGWAquiferYield	No	No	No

AquiferHasContour

Composite	No	
Cardinality	One To Many	
Notification	None	
Attributed	No	
	Origin	**Destination**
ObjectClass	AHGFAquiferBoundary	AHGFAquiferContour
Key	HydroID (*Origin Primary Key*)	AqifrBndID (*Origin Foreign Key*)
Labels	defines surface for	has surface defined by

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AquiferHasOutcrop

Composite	No	
Cardinality	One To Many	
Notification	None	
Attributed	No	
	Origin	**Destination**
ObjectClass	AHGFAquiferBoundary	AHGFAquiferOutcrop
Key	HydroID (*Origin Primary Key*)	AqifrBndID (*Origin Foreign Key*)
Labels	defines outcrop area for	has outcropping defined by

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AquiferHasSalinity

Composite	No	
Cardinality	One To Many	
Notification	None	
Attributed	No	
	Origin	**Destination**
ObjectClass	AHGFAquiferBoundary	IGWAquiferSalinity
Key	HydroID (*Origin Primary Key*)	AqifrBndID (*Origin Foreign Key*)
Labels	defines salinity area for	has property of

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AquiferHasYield

Composite	No	
Cardinality	One To Many	
Notification	None	
Attributed	No	
	Origin	**Destination**
ObjectClass	AHGFAquiferBoundary	IGWAquiferYield
Key	HydroID (*Origin Primary Key*)	AqifrBndID (*Origin Foreign Key*)
Labels	defines bore yield area for	has property of

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Spatial references

Dimension	Minimum	Precision
GW_Cartography		
X	-400	1,000,000,000
Y	-400	
M	0	100,000
Z	0	100,000
Coordinate System Description GEOGCS["GCS_GDA_1994", DATUM["D_GDA_1994", SPHEROID["GRS_1980",6378137.0,298.257222101]], PRIMEM["Greenwich",0.0], UNIT["Degree",0.0174532925199433], AUTHORITY["EPSG",4283]]		

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Through the *Water Act 2007*, the Australian Government has given the Bureau of Meteorology responsibility for compiling and delivering comprehensive water information across Australia.

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Australian Government
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