

# ArcGIS 9.2 basics for Petroleum users

Workshop to cover subjects not covered in ESRI introductory courses but used in Petroleum Exploration



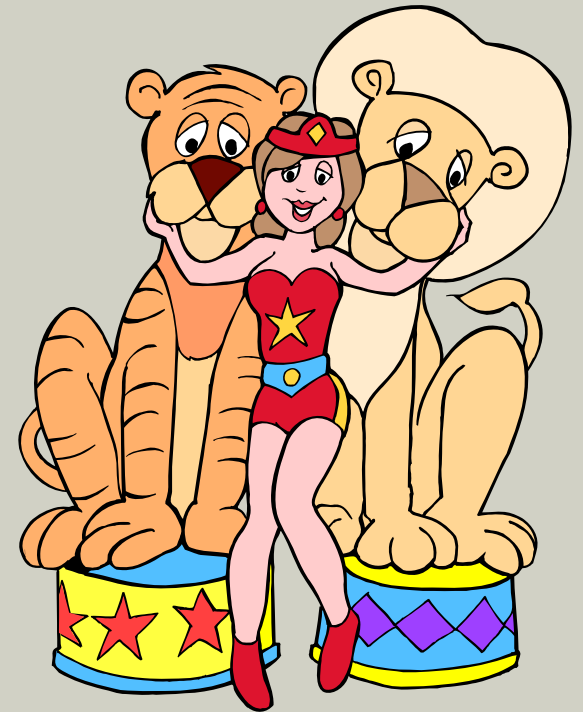
**bhpbilliton**

# Who are we?

- Robert Graham – GIS Manager at BHP Billiton Petroleum

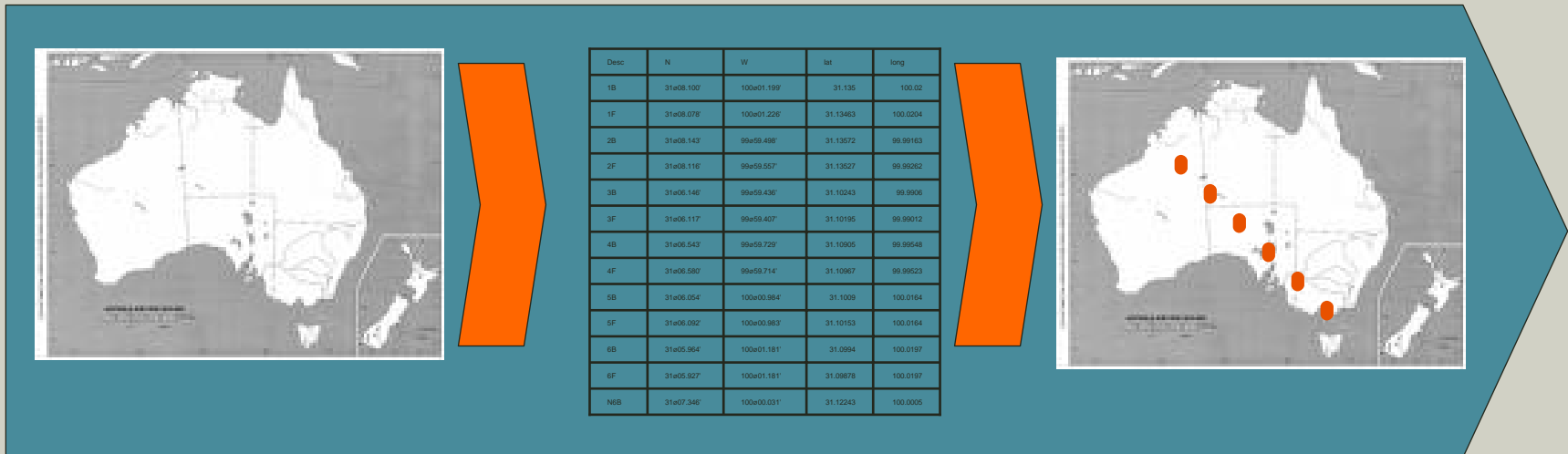


- Jenny Harrison – Instructor at TeachMeGIS.com



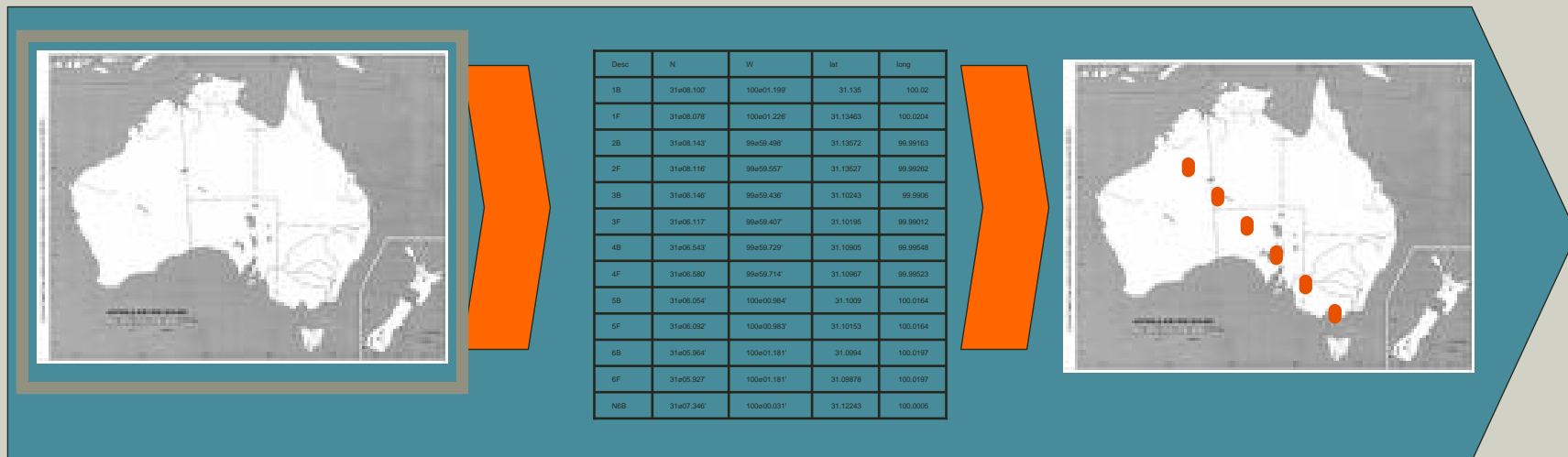
# What will be covered?

- GeoReferencing of images – Scanned or downloaded images that could be used as layers on a map
- Adding XY data – building layers in a map based on text files with coordinate pairs
- Layouts – How to print/export map



# Demonstration

## How to geofence a map image:



# Georeferencing

- Fit to display
- Update georeferencing or rectify

# Adding XY\Lat Long coordinate pairs to a map

- Reformatting data into readable table
  - 1<sup>st</sup> record must be column names without spaces or special characters
  - Expecting separate column for atleast X, Y and ID
- Defining projection system
  - What coordinate system are the values?
- Converting feature type (i.e. points -> lines)
  - Use Xtools or ET Geowizards to display series of points as lines
  - Must have line segment ID if multiple lines described in input

# Reformatting data into tabular records

- Use Text editor or excel to reformat
- Separate coordinate pairs into numeric type values
- Name column headers (no spaces)

# Reformatting demo



Desc	N	W	lat	long
1B	31a08.100'	100a01.199'	31.135	100.02
1F	31a08.078'	100a01.226'	31.13463	100.0204
2B	31a08.143'	99a59.498'	31.13572	99.99163
2F	31a08.116'	99a59.557'	31.13527	99.99262
3B	31a06.146'	99a59.436'	31.10243	99.9906
3F	31a06.117'	99a59.407'	31.10196	99.99012
4B	31a06.543'	99a59.729'	31.10905	99.99548
4F	31a06.580'	99a59.714'	31.10967	99.99523
5B	31a06.054'	100a00.984'	31.1009	100.0164
5F	31a06.092'	100a00.983'	31.10153	100.0164
6B	31a05.964'	100a01.181'	31.0994	100.0197
6F	31a05.927'	100a01.181'	31.09878	100.0197
N6B	31a07.346'	100a00.031'	31.12243	100.0005





# Summary of reformatting text into tables

- Use text or table editor to put coordinates into expected format. We used excel.
- Separate coordinates into numeric columns
- Name columns with no space or special characters
- Removed non-tabular records

# Display text as locations

- Steps
  1. Add table to ArcMap
  2. Right Click layer
  3. Add xy ...
  4. Choose coordinate fields
  5. Define projection system
  6. OK

# Demonstration



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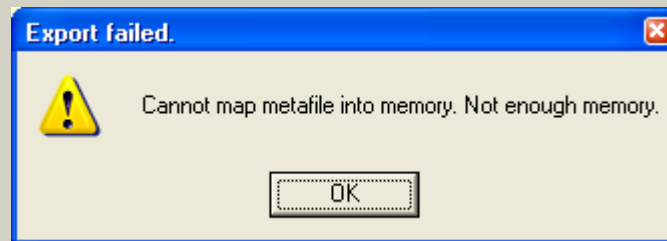


# Summary of demonstration

- Add table to ArcMap
- Right Click layer
- Add xy ...
- Choose coordinate fields
- Define projection system
- OK

# Printing/Plotting/Exporting to PowerPoint NOT Cartography

- Build a layout with scale, title, graticules & projection information
- Page settings same as printer
- Reference scale
- Common problems
- Work-arounds
- Get it in a PPT slide at full resolution.



# Demonstration output

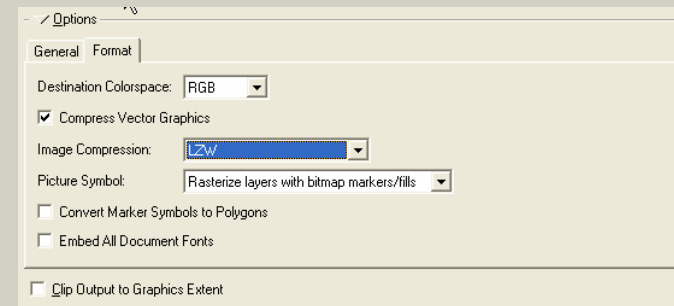
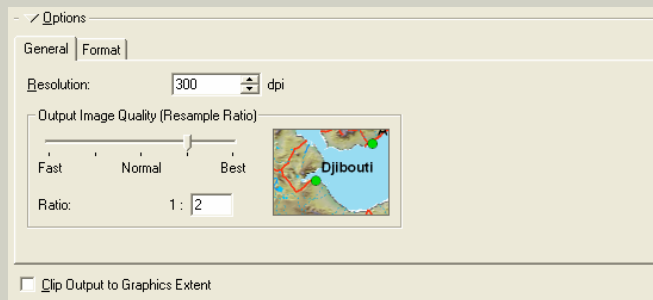


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- Get it in a PPT slide at full resolution.
- Reduce labels, or reduce resolution if metafile error occurs



# Insert image to PowerPoint (PPT)

- Open PPT
- Insert -> Picture -> From File...
- Resize to page



# Questions

Robert Graham

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- Jennifer Harrison

- Jennifer.Harrison@teachmegis.com