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ASX/Media Release

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# NAPOLEONVILLE FARMOUT COMPLETED

The Board is pleased to advise that it has completed a partial farmout of parts of its interests at the Napoleonville Salt Dome to a private US onshore oil and gas company.

The terms of the farmout are summarized below:

- Reprocessing and re-interpretation of the seismic (at no cost to GGE).
- Partner will have 6 months from receipt of seismic data and tapes to propose a deep well targeting the highly prospective Marg Vag/Cib Haz structures and will then have a further 3 months to propose a second Marg Vag/Cib Haz well with both wells drilled by 31 March 2013.
- The partner is earning 57% to 63% with all other partners farming out while Grand Gulf will retain between 17-19% working interest in the Project and will be required to pay between 11.5-13% towards costs associated with dry hole drilling costs of these prospects.
- The Desiree Prospect and the currently producing Dugas & Leblanc Field have been excluded from this farmout. The D&L#3 well is presently producing over 265 barrels of oil and 1 million cubic feet of gas per day. The Company has a 40% WI in this well.

This farmout will provide Grand Gulf with a dedicated partner who has the significant and specific geological and geophysical expertise warranted for a project of this size and complexity. The Board is very pleased with the completion of this farmout and looks forward to working with its new partner.

The Desiree Prospect has advanced significantly with all leases having been secured. The prospect has been excluded from the farmout and is targeting an accumulation of oil in a well defined updip block from an interval that produced 2.3 million barrels equivalent. The prospect is likely to contain between 600,000 to 800,000 bbls of oil and represents a low risk drilling operation. The Company anticipates to spud the well in April 2012.

A summary of the Napoleonville Salt dome is located below in Appendix A.

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For more information visit <u>www.grandgulfenergy.com</u> and sign up for email news.

**About Grand Gulf Energy:** Grand Gulf is an ASX listed US based oil and gas exploration and production company with management in Houston and assets in Louisiana and Arkansas.

**COMPETENT PERSONS STATEMENT**: The information in this report has been reviewed and signed off by Mr K.C. Whittemore (Registered Geologist, Texas USA), with over 36 years respective relevant experience within oil and gas sector.

This report contains forward looking statements that are subject to risk factors associated with resources businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

# Appendix A

### Napoleonville Salt Dome Summary

The Napoleonville Salt Dome Project ("Napoleonville") is located in Assumption, Iberville and Ascension Parishes, Louisiana within the Mid-Lower Miocene productive fairway of south Louisiana. The Miocene is one of the regions' most prolific producing zones along the South Louisiana Gulf Coast region. 3D seismic reveals a large salt withdrawal basin surrounding the dome with potential sourcing from a very large fetch area of 120 square miles. Studies have shown (Halbouty, 1967; Johnson and Bredeson, 1971) that the size of the uplifted area and the fetch area directly corresponds to the relative amount of production found. Napoleonville discovered in the 1940's has produced 188 billion cubic feet ("BCF") of gas and 20.2 million barrels ("MMBO") of oil and was one of the few remaining opportunities to shoot a proprietary 3D Seismic survey. In 2007 Grand Gulf Energy with its partners shot 50.4 sq miles of 3D seismic proprietary data over the area and has since developed a full inventory of prospects and leads for future development. Actual production is most likely much higher given the age of discovery and lack of consistent reporting prior to the mid 1960's.

The Napoleonville Project is located within the Lower Miocene Planulina – Upper Frio Marg vag trend of south Louisiana. The field is uniquely positioned along a paleo shelf edge and overlaps the ancestral Laura ridge and the edge of the Lake Verret Planulina embayment. A large salt withdrawal basin exists to the north and flanks the dome. Production along trend is primarily from the unexpanded L Miocene Planulina and Marg Vag. The nature of salt dome affords it with additional production from the middle and upper Miocene formations primarily against salt. An extensive prospect and lead inventory was generated using the proprietary 3D seismic integrated with subsurface well data and production histories. Previous to the Napoleonville 3D seismic shoot the area was developed by subsurface well data and sparse 2D seismic. While numerous prospects target the original producing horizons, others target the L Miocene L.Cris R--Marg vag/Miogyp with significant reserve potential. A detailed description of the play types associated with the dome is set out below.



Napoleonville Salt Dome



Napoleonville is a shallow piercement salt dome traversed by numerous growth faults both parallel and radial to the dome. Of significance and central to the production and remaining potential are the shape of the salt

history growth and early growth faults. The salt stock is extremely irregular in shape both vertically and laterally to form the following:

- Irregular salt outline and salt face re-entrants
- Salt wings and overhangs
- Platform and salt shoulders
- A north bounding salt withdrawal basin
- Vertically interbedded thick mineralized sands with clean reservoir sands
- Large block tilting and erosion
- Angular and onlap unconformities

In combination these characteristics act to form numerous traps as old as Miogyp-Marg Vag and well into the Upper Miocene. There are over 20 individual producing horizons within the Napoleonville Field.

Planulina Sands are shelf margin sands deposited with progradation of the Marg Vag shelf edge. These sands are coincident with a low stand sequence which provided for an influx of sands across the area and promulgation into a collapsed mini basin to the southwest flank of the dome forming the Lake Verret Planulina Embayment. The Lower Planullina Cris R sands have a low sand/shale ratio and tend to onlap onto the dome. The majority of sands are found on the north flank and account for the majority of the 188 billion cubic feet gas and 20 million barrels of oil, plus, produced from the field.

The Cris R I, II, III and V sands are the main producers. Concentration of activity and production has been restricted to the north and northeast flanks parts of the dome with few penetrations elsewhere relatively unexplored. In addition numerous stray sands within the sequence which contribute to the serendipity factor in drilling recognized targets around the dome. The Cris R is a low risk objective with several other potential deeper pools, Marg Vag – Miogyp prospects.

The Cris R I is primarily an oil target and the thinnest of the sands averaging 8-10 feet in thickness. Total historical production in the Cris R I has been 2 MMBOE. Several attic PUD's and development prospects have been generated targeting this sand. The Cris R II is thicker averaging 40-50 feet on the north flank. While the reservoir has a gas cap and/or a gas reservoir in some areas. Cumulative historical production is much greater than the Cris R I, at 6.8 million barrels oil.

The Cris R III thru VII are similar to the Cris R II with thick sands and high per well cumulative production. Total historical production from this interval is 118 BCFE. Well control suggest sands are concentrated on the north and northeast flanks coincident withsignificant production. On the north flank Prospect target the Cris R VI in untested fault blocks and updip to thick sand On the southwest and southeast flanks of the dome there are only a few Cris R penetrations in an area thought to be devoid of sand. The 3D seismic data is being utilized to identify plays in these areas.

Marg A sands immediately above the Cris R.are the last sands to be deposited prior to the major Middle Miocene progradation. Sands within the interval thicken locally and produce proximal to the dome . in vicinity of salt re-entrants and overhangs.

Middle Miocene sands are near shore to fluvial in deposition and are characterized by thick, blocky sand sequenced with a high sand/shale ratio. Due to this ratio, production from these sands in most of South Louisiana tend to be restricted to salt domes. The most prolific of these at Napoleonville are the Big hum "M" sands.. Grand Gulf generated and participated in the M Sand 14-149 discovery drilled in 2010. The Dugas Leblanc #3 is currently producing 270 barrels of oil and 1.0 million cubic feet of natural gas per day. Within the Middle Miocene significant mineralization of sands has been noted against salt in certain areas. The mineralized sands are imbedded with clean porous sands and the mineralization has the capacity to provide lateral and vertical seal for hydrocarbon entrapment. Chacahoula dome is analogous with this type of post 3-D play.



Major domal uplift of salt occurred during the Middle Miocene interval between the Big hum and the base of the Operc . As a result, the south flank of the dome experience significant tilt and erosion followed by . onlap of sediment. The Big hum upper sands truncate against salt where they produce as previously noted. The lower sands truncate or onlap off the flank creating significant potential over a large area sparsely drilled.



### **Typical Seismic Cross Section**

With few well penetrations the deeper L Cris R, Marg vag.and geopressured Cib hazz- Miogyp sands are relatively unexplored around the dome. Since acquisition of the 3D seismic survey, no deep wells have been drilled for the deeper objectives. The deeper sands are interpreted as upper slope marine sands. The presence of sand at Napoleonville is supported by the regional depositional model and flank penetrations with up to 100' of L. Cris R-Marg vag sand. On trend sands within the interval have produced 130 BCFE in association with salt domes to support the prospectiveness of the deeper targets at Napoleonville. Several deeper prospects have been identified to date.