# **ESTIMATES**

of

# RESERVES AND FUTURE REVENUE TO THE CITY OF NEWPORT BEACH INTEREST

and

# UNRISKED GROSS (100 PERCENT) PROSPECTIVE RESOURCES

in

# **CERTAIN OIL AND GAS PROPERTIES**

located in

# WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

as of

**DECEMBER 31, 2011** 

BASED ON CONSTANT PRICE AND COST PARAMETERS specified by CITY OF NEWPORT BEACH



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September 27, 2012

Mr. Robert Stein Public Works Department 3300 Newport Boulevard Newport Beach, California 92658

Dear Mr. Stein:

In accordance with your request, we have estimated the proved developed producing and probable reserves and future revenue, as of December 31, 2011, to the City of Newport Beach (CNB) interest in certain oil and gas properties located in West Newport Field, Orange County, California, as listed in the accompanying tabulations. Also as requested, we have estimated the unrisked gross (100 percent) prospective resources, as of December 31, 2011, for prospects located in West Newport Field. We completed our evaluation on June 25, 2012. This report has been prepared using price and cost parameters specified by CNB, as discussed in subsequent paragraphs of this letter.

The estimates in this report have been prepared in accordance with the definitions and guidelines set forth in the 2007 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE). As presented in the 2007 PRMS, petroleum accumulations can be classified, in decreasing order of likelihood of commerciality, as reserves, contingent resources, or prospective resources. Different classifications of petroleum accumulations have varying degrees of technical and commercial risk that are difficult to quantify; thus reserves, contingent resources, and prospective resources should not be aggregated without extensive consideration of these factors. Definitions are presented immediately following this letter. Following the definitions is a list of abbreviations used in this report, an overview of recommendations, and a report overview.

### RESERVES \_

Reserves are those quantities of petroleum anticipated to be commercially recoverable from known accumulations by application of development projects from a given date forward under defined conditions. Reserves must be discovered, recoverable, commercial, and remaining as of the evaluation date based on the planned development projects to be applied. Proved reserves are those quantities of oil and gas which, by analysis of engineering and geoscience data, can be estimated with reasonable certainty to be commercially recoverable; probable and possible reserves are those additional reserves which are sequentially less certain to be recovered than proved reserves.

As presented in the accompanying summary projections, Tables I and II, we estimate the net reserves and future net revenue to the CNB interest in these properties, as of December 31, 2011, to be:

	Net Re	serves	Future Net Revenue (M\$)			
Category	Oil (MBBL)	Gas <sup>(1)</sup> (MMCF)	Total	Present Worth at 10%		
Proved Developed Producing	295.1	0.0	9,330.8	6,536.0		
Probable	209.1	0.0	15,560.5	6,853.8		

<sup>(1)</sup> All gas is either consumed onsite or is transported offsite as excess for no monetary consideration. Excess gas was previously marketed to Hoag Memorial Hospital Presbyterian, with annual gas sales of approximately \$44,000. Current excess gas volumes are approximately 35 thousand cubic feet per day.



The oil reserves shown include crude oil and condensate. Oil volumes are expressed in thousands of barrels (MBBL); a barrel is equivalent to 42 United States gallons. Gas volumes are expressed in millions of cubic feet (MMCF) at standard temperature and pressure bases.

The estimates of reserves shown in this report are for proved developed producing and probable reserves. Our study indicates that there are no proved developed non-producing, proved undeveloped, or possible reserves for these properties at this time. Reserves categorization conveys the relative degree of certainty; reserves subcategorization is based on development and production status. The estimates of reserves and future revenue included herein have not been adjusted for risk.

Gross revenue for the reserves shown in this report is CNB's share of the gross (100 percent) revenue from the properties prior to any deductions. Future net revenue is after deductions for CNB's share of capital costs, abandonment costs, and operating expenses but before consideration of any income taxes. The future net revenue has been discounted at an annual rate of 10 percent to determine its present worth, which is shown to indicate the effect of time on the value of money. Future net revenue presented in this report, whether discounted or undiscounted, should not be construed as being the fair market value of the properties.

As requested, the oil price used in this report is based on the 12-month unweighted arithmetic average of the firstday-of-the-month Brent Crude price for each month in the period January through December 2011. The average price of \$111.02 per barrel is adjusted for quality, transportation fees, and a local price differential. The adjusted oil price of \$99.35 per barrel is held constant throughout the lives of the properties.

Operating costs used in this report are based on current budgets and operating expense records of CNB, the operator of the properties, and include only direct lease- and field-level costs. Budgetary estimates for the 2011 through 2012 fiscal year, while higher than previous years' actuals, were used to reflect the most recent outlook on operating expenses in the field at the as-of date. Our operating expense model includes a fixed, field-level cost of \$40,764 per month and a per-well cost of \$3,136 per month. These costs do not include the per-well overhead expenses allowed under joint operating agreements, nor do they include the headquarters general and administrative overhead expenses of CNB. As requested, operating costs are held constant throughout the lives of the properties.

Capital costs used in this report were estimated by Netherland, Sewell & Associates, Inc. (NSAI) and are based on our experience with similar operations in the region. Authorizations for expenditure or actual cost data from recent activity have not been provided by CNB. Capital costs are included as required for workovers, new development wells, and production equipment. Abandonment costs used in this report were similarly estimated by NSAI for abandoning the wells and production facilities, net of any salvage value. As requested, capital costs and abandonment costs are held constant to the date of expenditure.

### PROSPECTIVE RESOURCES \_\_\_\_\_

Prospective resources are those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. The unrisked prospective resources included in this report should not be construed as reserves or contingent resources; they represent exploration opportunities and quantify the development potential in the event a petroleum discovery is made. This report does not include economic analysis for these prospects. Based on analogous field developments, it appears that, assuming a discovery is made, the unrisked best estimate prospective resources in this report have a reasonable chance of being commercial.

We estimate the unrisked gross (100 percent) prospective oil resources for the Deeper Than Newport reservoir in West Newport Field, as of December 31, 2011, to be:



Unrisked Gross (100 Percent)						
Prospective Oil Resources (MBBL)						
Low	Low Best High					
Estimate Estimate Estimate						
39 153 478						

The oil volumes shown include crude oil only. No gas market currently exists for these properties; therefore, prospective gas resources have not been estimated for this report.

The prospective resources shown in this report have been estimated using probabilistic methods and are dependent on a petroleum discovery being made. If a discovery is made and development is undertaken, the probability that the recoverable volumes will equal or exceed the unrisked estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate.

Unrisked prospective resources are estimated ranges of recoverable oil volumes assuming their discovery and development and are based on estimated ranges of undiscovered in-place volumes. As requested, no geologic risk assessment was conducted for these prospects. Geologic risking of prospective resources addresses the probability of success for the discovery of significant quantities of potentially moveable petroleum; such risk analysis is conducted independent of estimations of petroleum volumes and without regard to the chance of development. Principal geologic risk elements of the petroleum system include (1) trap and seal characteristics; (2) reservoir presence and quality; (3) source rock capacity, quality, and maturity; and (4) timing, migration, and preservation of petroleum in relation to trap and seal formation. Risk assessment is a highly subjective process dependent upon the experience and judgment of the evaluators.

It should be understood that the prospective resources discussed and shown herein are those undiscovered, highly speculative resources estimated beyond reserves or contingent resources where geological and geophysical data suggest the potential for discovery of petroleum but where the level of proof is insufficient for classification as reserves or contingent resources. The unrisked prospective resources shown in this report are the range of volumes that could reasonably be expected to be recovered in the event of the discovery and development of these prospects.

### GENERAL INFORMATION \_\_\_\_\_

As shown in the Table of Contents, this report includes reserves and economics data for each reserves category; these data include a summary projection of reserves and revenue along with one-line summaries of reserves, economics, and basic data by lease. The General Information section of this report includes a discussion of the properties along with pertinent exhibits. Included in the Appendix for a low price, high price, and escalation case sensitivity is a description of the economic parameters used along with reserves and economic data for each category. These cases are included to demonstrate the sensitivity of the field's reserves and future net revenue to a lower oil price, a higher oil price, and a NYMEX price. The escalation case also includes operating and capital cost escalation, including utility cost reduction associated with a micro turbine installation.

This report does not include any value that could be attributed to interests in undeveloped acreage beyond those tracts for which undeveloped reserves have been estimated. Although we have performed a field inspection, we have not investigated possible environmental liability related to the properties; therefore, our estimates do not include any costs due to such possible liability.

The reserves and prospective resources shown in this report are estimates only and should not be construed as exact quantities. Estimates may increase or decrease as a result of market conditions, future operations, changes in regulations, or actual reservoir performance. In addition to the primary economic assumptions discussed herein, our estimates of reserves are based on certain assumptions including, but not limited to, that the properties will be developed consistent with current development plans, that the properties will be operated in



a prudent manner, that no governmental regulations or controls will be put in place that would impact the ability of the interest owner to recover the reserves, and that our projections of future production will prove consistent with actual performance. If these volumes are recovered, the revenues therefrom and the costs related thereto could be more or less than the estimated amounts. Because of governmental policies and uncertainties of supply and demand, the sales rates, prices received, and costs incurred may vary from assumptions made while preparing this report.

For the purposes of this report, we used technical and economic data including, but not limited to, well logs, geologic maps, production data, historical price and cost information, and property ownership interests. The reserves and prospective resources in this report have been estimated using a combination of deterministic and probabilistic methods; these estimates have been prepared in accordance with generally accepted petroleum engineering and evaluation principles set forth in the Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE (SPE Standards). We used standard engineering and geoscience methods, or a combination of methods, including performance analysis, volumetric analysis, analogy, and reservoir modeling, that we considered to be appropriate and necessary to classify, categorize, and estimate volumes in accordance with the 2007 PRMS definitions and guidelines. The prospective resources and a portion of the reserves shown in this report are for undeveloped locations; such volumes are based on estimates of reservoir volumes and recovery efficiencies along with analogy to properties with similar geologic and reservoir characteristics. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, our conclusions necessarily represent only informed professional judgment.

The data used in our estimates were obtained from CNB, public data sources, and the nonconfidential files of NSAI and were accepted as accurate. Supporting geoscience, performance, and work data are on file in our office. The titles to the properties have not been examined by NSAI, nor has the actual degree or type of interest owned been independently confirmed. The technical persons responsible for preparing the estimates presented herein meet the requirements regarding qualifications, independence, objectivity, and confidentiality set forth in the SPE Standards. We are independent petroleum engineers, geologists, geophysicists, and petrophysicists; we do not own an interest in these properties nor are we employed on a contingent basis.

Sincerely,

NETHERLAND, SEWELL & ASSOCIATES, INC.

Texas Registered Engineering Firm F-2699

/s/ C.H. (Scott) Rees III

By:

C.H. (Scott) Rees III, P.E. Chairman and Chief Executive Officer

/s/ Michael F. Krehel, Jr.

By:

Michael F. Krehel, Jr., P.E. 97142 Vice President

Date Signed: September 27, 2012

/s/ Shane M. Howell

By: Shane M. Howell, P.G. 11276 Vice President

Date Signed: September 27, 2012

MFK:ARP

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This document contains information excerpted from definitions and guidelines prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) and reviewed and jointly sponsored by the World Petroleum Council (WPC), the American Association of Petroleum Geologists (AAPG), and the Society of Petroleum Evaluation Engineers (SPEE).

#### Preamble

Petroleum resources are the estimated quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resource assessments estimate total quantities in known and yet-to-be-discovered accumulations; resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating development projects, and presenting results within a comprehensive classification framework.

These definitions and guidelines are designed to provide a common reference for the international petroleum industry, including national reporting and regulatory disclosure agencies, and to support petroleum project and portfolio management requirements. They are intended to improve clarity in global communications regarding petroleum resources. It is expected that this document will be supplemented with industry education programs and application guides addressing their implementation in a wide spectrum of technical and/or commercial settings.

It is understood that these definitions and guidelines allow flexibility for users and agencies to tailor application for their particular needs; however, any modifications to the guidance contained herein should be clearly identified. The definitions and guidelines contained in this document must not be construed as modifying the interpretation or application of any existing regulatory reporting requirements.

### **1.0 Basic Principles and Definitions**

The estimation of petroleum resource quantities involves the interpretation of volumes and values that have an inherent degree of uncertainty. These quantities are associated with development projects at various stages of design and implementation. Use of a consistent classification system enhances comparisons between projects, groups of projects, and total company portfolios according to forecast production profiles and recoveries. Such a system must consider both technical and commercial factors that impact the project's economic feasibility, its productive life, and its related cash flows.

#### **1.1 Petroleum Resources Classification Framework**

Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid phase. Petroleum may also contain non-hydrocarbons, common examples of which are carbon dioxide, nitrogen, hydrogen sulfide and sulfur. In rare cases, non-hydrocarbon content could be greater than 50%.

The term "resources" as used herein is intended to encompass all quantities of petroleum naturally occurring on or within the Earth's crust, discovered and undiscovered (recoverable and unrecoverable), plus those quantities already produced. Further, it includes all types of petroleum whether currently considered "conventional" or "unconventional."

Figure 1-1 is a graphical representation of the SPE/WPC/ AAPG/SPEE resources classification system. The system defines the major recoverable resources classes: Production, Reserves, Contingent Resources, and Prospective Resources, as well as Unrecoverable petroleum.

The "Range of Uncertainty" reflects a range of estimated quantities potentially recoverable from an accumulation by a project, while the vertical axis represents the "Chance of



Figure 1-1: Resources Classification Framework.



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Commerciality", that is, the chance that the project that will be developed and reach commercial producing status. The following definitions apply to the major subdivisions within the resources classification:

**TOTAL PETROLEUM INITIALLY-IN-PLACE** is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

**DISCOVERED PETROLEUM INITIALLY-IN-PLACE** is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production.

**PRODUCTION** is the cumulative quantity of petroleum that has been recovered at a given date. While all recoverable resources are estimated and production is measured in terms of the sales product specifications, raw production (sales plus non-sales) quantities are also measured and required to support engineering analyses based on reservoir voidage (see Production Measurement, section 3.2).

Multiple development projects may be applied to each known accumulation, and each project will recover an estimated portion of the initially-in-place quantities. The projects shall be subdivided into Commercial and Sub-Commercial, with the estimated recoverable quantities being classified as Reserves and Contingent Resources respectively, as defined below.

**RESERVES** are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must further satisfy four criteria: they must be discovered, recoverable, commercial, and remaining (as of the evaluation date) based on the development project(s) applied. Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status.

**CONTINGENT RESOURCES** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be subclassified based on project maturity and/or characterized by their economic status.

**UNDISCOVERED PETROLEUM INITIALLY-IN-PLACE** is that quantity of petroleum estimated, as of a given date, to be contained within accumulations yet to be discovered.

**PROSPECTIVE RESOURCES** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective Resources have both an associated chance of discovery and a chance of development. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

**UNRECOVERABLE** is that portion of Discovered or Undiscovered Petroleum Initially-in-Place quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

Estimated Ultimate Recovery (EUR) is not a resources category, but a term that may be applied to any accumulation or group of accumulations (discovered or undiscovered) to define those quantities of petroleum estimated, as of a given date, to be potentially recoverable under defined technical and commercial conditions plus those quantities already produced (total of recoverable resources).



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#### **1.2 Project-Based Resources Evaluations**

The resources evaluation process consists of identifying a recovery project, or projects, associated with a petroleum accumulation(s), estimating the quantities of Petroleum Initially-in-Place, estimating that portion of those in-place quantities that can be recovered by each project, and classifying the project(s) based on its maturity status or chance of commerciality.

This concept of a project-based classification system is further clarified by examining the primary data sources contributing to an evaluation of net recoverable resources (see Figure 1-2) that may be described as follows:



Figure 1-2: Resources Evaluation Data Sources.

- The Reservoir (accumulation): Key attributes include the types and quantities of Petroleum Initially-in-Place and the fluid and rock properties that affect petroleum recovery.
- The Project: Each project applied to a specific reservoir development generates a unique production and cash flow
  schedule. The time integration of these schedules taken to the project's technical, economic, or contractual limit defines
  the estimated recoverable resources and associated future net cash flow projections for each project. The ratio of EUR to
  Total Initially-in-Place quantities defines the ultimate recovery efficiency for the development project(s). A project may be
  defined at various levels and stages of maturity; it may include one or many wells and associated production and
  processing facilities. One project may develop many reservoirs, or many projects may be applied to one reservoir.
- The Property (lease or license area): Each property may have unique associated contractual rights and obligations including the fiscal terms. Such information allows definition of each participant's share of produced quantities (entitlement) and share of investments, expenses, and revenues for each recovery project and the reservoir to which it is applied. One property may encompass many reservoirs, or one reservoir may span several different properties. A property may contain both discovered and undiscovered accumulations.

In context of this data relationship, "project" is the primary element considered in this resources classification, and net recoverable resources are the incremental quantities derived from each project. Project represents the link between the petroleum accumulation and the decision-making process. A project may, for example, constitute the development of a single reservoir or field, or an incremental development for a producing field, or the integrated development of several fields and associated facilities with a common ownership. In general, an individual project will represent the level at which a decision is made whether or not to proceed (i.e., spend more money) and there should be an associated range of estimated recoverable quantities for that project.

An accumulation or potential accumulation of petroleum may be subject to several separate and distinct projects that are at different stages of exploration or development. Thus, an accumulation may have recoverable quantities in several resource classes simultaneously.

In order to assign recoverable resources of any class, a development plan needs to be defined consisting of one or more projects. Even for Prospective Resources, the estimates of recoverable quantities must be stated in terms of the sales products derived from a development program assuming successful discovery and commercial development. Given the major uncertainties involved at this early stage, the development program will not be of the detail expected in later stages of maturity. In most cases, recovery efficiency may be largely based on analogous projects. In-place quantities for which a feasible project cannot be defined using current, or reasonably forecast improvements in, technology are classified as Unrecoverable.

Not all technically feasible development plans will be commercial. The commercial viability of a development project is dependent on a forecast of the conditions that will exist during the time period encompassed by the project's activities (see



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Commercial Evaluations, section 3.1). "Conditions" include technological, economic, legal, environmental, social, and governmental factors. While economic factors can be summarized as forecast costs and product prices, the underlying influences include, but are not limited to, market conditions, transportation and processing infrastructure, fiscal terms, and taxes.

The resource quantities being estimated are those volumes producible from a project as measured according to delivery specifications at the point of sale or custody transfer (see Reference Point, section 3.2.1). The cumulative production from the evaluation date forward to cessation of production is the remaining recoverable quantity. The sum of the associated annual net cash flows yields the estimated future net revenue. When the cash flows are discounted according to a defined discount rate and time period, the summation of the discounted cash flows is termed net present value (NPV) of the project (see Evaluation and Reporting Guidelines, section 3.0).

The supporting data, analytical processes, and assumptions used in an evaluation should be documented in sufficient detail to allow an independent evaluator or auditor to clearly understand the basis for estimation and categorization of recoverable quantities and their classification.

### 2.0 Classification and Categorization Guidelines

#### 2.1 Resources Classification

The basic classification requires establishment of criteria for a petroleum discovery and thereafter the distinction between commercial and sub-commercial projects in known accumulations (and hence between Reserves and Contingent Resources).

#### 2.1.1 Determination of Discovery Status

A discovery is one petroleum accumulation, or several petroleum accumulations collectively, for which one or several exploratory wells have established through testing, sampling, and/or logging the existence of a significant quantity of potentially moveable hydrocarbons.

In this context, "significant" implies that there is evidence of a sufficient quantity of petroleum to justify estimating the in-place volume demonstrated by the well(s) and for evaluating the potential for economic recovery. Estimated recoverable quantities within such a discovered (known) accumulation(s) shall initially be classified as Contingent Resources pending definition of projects with sufficient chance of commercial development to reclassify all, or a portion, as Reserves. Where in-place hydrocarbons are identified but are not considered currently recoverable, such quantities may be classified as Discovered Unrecoverable, if considered appropriate for resource management purposes; a portion of these quantities may become recoverable resources in the future as commercial circumstances change or technological developments occur.

#### 2.1.2 Determination of Commerciality

Discovered recoverable volumes (Contingent Resources) may be considered commercially producible, and thus Reserves, if the entity claiming commerciality has demonstrated firm intention to proceed with development and such intention is based upon all of the following criteria:

- Evidence to support a reasonable timetable for development.
- A reasonable assessment of the future economics of such development projects meeting defined investment and operating criteria.
- A reasonable expectation that there will be a market for all or at least the expected sales quantities of production required to justify development.
- Evidence that the necessary production and transportation facilities are available or can be made available.
- Evidence that legal, contractual, environmental and other social and economic concerns will allow for the actual implementation of the recovery project being evaluated.

To be included in the Reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame. A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While 5 years is recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.



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To be included in the Reserves class, there must be a high confidence in the commercial producibility of the reservoir as supported by actual production or formation tests. In certain cases, Reserves may be assigned on the basis of well logs and/or core analysis that indicate that the subject reservoir is hydrocarbon-bearing and is analogous to reservoirs in the same area that are producing or have demonstrated the ability to produce on formation tests.

#### 2.2 Resources Categorization

The horizontal axis in the Resources Classification (Figure 1.1) defines the range of uncertainty in estimates of the quantities of recoverable, or potentially recoverable, petroleum associated with a project. These estimates include both technical and commercial uncertainty components as follows:

- The total petroleum remaining within the accumulation (in-place resources).
- That portion of the in-place petroleum that can be recovered by applying a defined development project or projects.
- Variations in the commercial conditions that may impact the quantities recovered and sold (e.g., market availability, contractual changes).

Where commercial uncertainties are such that there is significant risk that the complete project (as initially defined) will not proceed, it is advised to create a separate project classified as Contingent Resources with an appropriate chance of commerciality.

#### 2.2.1 Range of Uncertainty

The range of uncertainty of the recoverable and/or potentially recoverable volumes may be represented by either deterministic scenarios or by a probability distribution (see Deterministic and Probabilistic Methods, section 4.2).

When the range of uncertainty is represented by a probability distribution, a low, best, and high estimate shall be provided such that:

- There should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.
- There should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
- There should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.

When using the deterministic scenario method, typically there should also be low, best, and high estimates, where such estimates are based on qualitative assessments of relative uncertainty using consistent interpretation guidelines. Under the deterministic incremental (risk-based) approach, quantities at each level of uncertainty are estimated discretely and separately (see Category Definitions and Guidelines, section 2.2.2).

These same approaches to describing uncertainty may be applied to Reserves, Contingent Resources, and Prospective Resources. While there may be significant risk that sub-commercial and undiscovered accumulations will not achieve commercial production, it is useful to consider the range of potentially recoverable quantities independently of such a risk or consideration of the resource class to which the quantities will be assigned.

#### 2.2.2 Category Definitions and Guidelines

Evaluators may assess recoverable quantities and categorize results by uncertainty using the deterministic incremental (riskbased) approach, the deterministic scenario (cumulative) approach, or probabilistic methods (see "2001 Supplemental Guidelines," Chapter 2.5). In many cases, a combination of approaches is used.

Use of consistent terminology (Figure 1.1) promotes clarity in communication of evaluation results. For Reserves, the general cumulative terms low/best/high estimates are denoted as 1P/2P/3P, respectively. The associated incremental quantities are termed Proved, Probable and Possible. Reserves are a subset of, and must be viewed within context of, the complete resources classification system. While the categorization criteria are proposed specifically for Reserves, in most cases, they can be equally applied to Contingent and Prospective Resources conditional upon their satisfying the criteria for discovery and/or development.



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For Contingent Resources, the general cumulative terms low/best/high estimates are denoted as 1C/2C/3C respectively. For Prospective Resources, the general cumulative terms low/best/high estimates still apply. No specific terms are defined for incremental quantities within Contingent and Prospective Resources.

Without new technical information, there should be no change in the distribution of technically recoverable volumes and their categorization boundaries when conditions are satisfied sufficiently to reclassify a project from Contingent Resources to Reserves. All evaluations require application of a consistent set of forecast conditions, including assumed future costs and prices, for both classification of projects and categorization of estimated quantities recovered by each project (see Commercial Evaluations, section 3.1).

Based on additional data and updated interpretations that indicate increased certainty, portions of Possible and Probable Reserves may be re-categorized as Probable and Proved Reserves.

Uncertainty in resource estimates is best communicated by reporting a range of potential results. However, if it is required to report a single representative result, the "best estimate" is considered the most realistic assessment of recoverable quantities. It is generally considered to represent the sum of Proved and Probable estimates (2P) when using the deterministic scenario or the probabilistic assessment methods. It should be noted that under the deterministic incremental (risk-based) approach, discrete estimates are made for each category, and they should not be aggregated without due consideration of their associated risk (see "2001 Supplemental Guidelines," Chapter 2.5).

Class/Sub-Class	Definition	Guidelines
Reserves	Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.	Reserves must satisfy four criteria: they must be discovered, recoverable, commercial, and remaining based on the development project(s) applied. Reserves are further subdivided in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their development and production status. To be included in the Reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame. A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While 5 years is recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented.
On Production	The development project is currently producing and selling petroleum to market.	The key criterion is that the project is receiving income from sales, rather than the approved development project necessarily being complete. This is the point at which the project "chance of commerciality" can be said to be 100%. The project "decision gate" is the decision to initiate commercial production from the project.

#### Table 1: Recoverable Resources Classes and Sub-Classes



Excerpted from the Petroleum Resources Management System Approved by the Society of Petroleum Engineers (SPE) Board of Directors, March 2007

Class/Sub-Class	Definition	Guidelines
Approved for Development	All necessary approvals have been obtained, capital funds have been committed, and implementation of the development project is under way.	At this point, it must be certain that the development project is going ahead. The project must not be subject to any contingencies such as outstanding regulatory approvals or sales contracts. Forecast capital expenditures should be included in the reporting entity's current or following year's approved budget.
		The project "decision gate" is the decision to start investing capital in the construction of production facilities and/or drilling development wells.
Justified for Development	Implementation of the development project is justified on the basis of reasonable forecast commercial conditions at the time of reporting, and there are reasonable expectations that all necessary approvals/contracts will be obtained.	In order to move to this level of project maturity, and hence have reserves associated with it, the development project must be commercially viable at the time of reporting, based on the reporting entity's assumptions of future prices, costs, etc. ("forecast case") and the specific circumstances of the project. Evidence of a firm intention to proceed with development within a reasonable time frame will be sufficient to demonstrate commerciality. There should be a development plan in sufficient detail to support the assessment of commerciality and a reasonable expectation that any regulatory approvals or sales contracts required prior to project implementation will be forthcoming. Other than such approvals/contracts, there should be no known contingencies that could preclude the development from proceeding within a reasonable timeframe (see Reserves class).
		The project "decision gate" is the decision by the reporting entity and its partners, if any, that the project has reached a level of technical and commercial maturity sufficient to justify proceeding with development at that point in time.
Contingent Resources	Those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable due to one or more contingencies.	Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.
Development Pending	A discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future.	The project is seen to have reasonable potential for eventual commercial development, to the extent that further data acquisition (e.g. drilling, seismic data) and/or evaluations are currently ongoing with a view to confirming that the project is commercially viable and providing the basis for selection of an appropriate development plan. The critical contingencies have been identified and are reasonably expected to be resolved within a reasonable time frame. Note that disappointing appraisal/evaluation results could lead to a re-classification of the project to "On Hold" or "Not Viable" is the decision to undertake further data
		acquisition and/or studies designed to move the project to a level of technical and commercial maturity at which a decision can be made to proceed with development and production.
Development Unclarified or on Hold	A discovered accumulation where project activities are on hold and/or where justification as a commercial development may be subject to significant delay.	The project is seen to have potential for eventual commercial development, but further appraisal/evaluation activities are on hold pending the removal of significant contingencies external to the project, or substantial further appraisal/evaluation activities are required to clarify the potential for eventual commercial development. Development may be subject to a significant time delay. Note that a change in circumstances, such that there is no longer a reasonable expectation that a critical contingency can be removed in the foreseeable future, for example, could lead to a reclassification of the project to "Not Viable" status.
		evaluation designed to clarify the potential for eventual commercial development or to temporarily suspend or delay further activities pending resolution of external contingencies.



Excerpted from the Petroleum Resources Management System Approved by the Society of Petroleum Engineers (SPE) Board of Directors, March 2007

Class/Sub-Class	Definition	Guidelines
Development Not Viable	A discovered accumulation for which there are no current plans to develop or to acquire additional data at the time due to limited production potential.	The project is not seen to have potential for eventual commercial development at the time of reporting, but the theoretically recoverable quantities are recorded so that the potential opportunity will be recognized in the event of a major change in technology or commercial conditions. The project "decision gate" is the decision not to undertake any further data acquisition or studies on the project for the foreseeable future.
Prospective Resources	Those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.	Potential accumulations are evaluated according to their chance of discovery and, assuming a discovery, the estimated quantities that would be recoverable under defined development projects. It is recognized that the development programs will be of significantly less detail and depend more heavily on analog developments in the earlier phases of exploration.
Prospect	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.	Project activities are focused on assessing the chance of discovery and, assuming discovery, the range of potential recoverable quantities under a commercial development program.
Lead	A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be classified as a prospect.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to confirm whether or not the lead can be matured into a prospect. Such evaluation includes the assessment of the chance of discovery and, assuming discovery, the range of potential recovery under feasible development scenarios.
Play	A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to define specific leads or prospects for more detailed analysis of their chance of discovery and, assuming discovery, the range of potential recovery under hypothetical development scenarios.

### **Table 2: Reserves Status Definitions and Guidelines**

Status	Definition	Guidelines
Developed Reserves	Developed Reserves are expected quantities to be recovered from existing wells and facilities.	Reserves are considered developed only after the necessary equipment has been installed, or when the costs to do so are relatively minor compared to the cost of a well. Where required facilities become unavailable, it may be necessary to reclassify Developed Reserves as Undeveloped. Developed Reserves may be further sub-classified as Producing or Non-Producing.
Developed Producing Reserves	Developed Producing Reserves are expected to be recovered from completion intervals that are open and producing at the time of the estimate.	Improved recovery reserves are considered producing only after the improved recovery project is in operation.
Developed Non- Producing Reserves	Developed Non-Producing Reserves include shut-in and behind-pipe Reserves.	Shut-in Reserves are expected to be recovered from (1) completion intervals which are open at the time of the estimate but which have not yet started producing, (2) wells which were shut-in for market conditions or pipeline connections, or (3) wells not capable of production for mechanical reasons. Behind-pipe Reserves are expected to be recovered from zones in existing wells which will require additional completion work or future re- completion prior to start of production. In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.



Excerpted from the Petroleum Resources Management System Approved by the Society of Petroleum Engineers (SPE) Board of Directors, March 2007

Status	Definition	Guidelines
Undeveloped Reserves	Undeveloped Reserves are quantities expected to be recovered through future investments:	(1) from new wells on undrilled acreage in known accumulations, (2) from deepening existing wells to a different (but known) reservoir, (3) from infill wells that will increase recovery, or (4) where a relatively large expenditure (e.g. when compared to the cost of drilling a new well) is required to (a) recomplete an existing well or (b) install production or transportation facilities for primary or improved recovery projects.

### Table 3: Reserves Category Definitions and Guidelines

Category	Definition	Guidelines
Proved Reserves	Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations.	If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. The area of the reservoir considered as Proved includes (1) the area delineated by drilling and defined by fluid contacts, if any, and (2) adjacent undrilled portions of the reservoir that can reasonably be judged as continuous with it and commercially productive on the basis of available geoscience and engineering data. In the absence of data on fluid contacts, Proved quantities in a reservoir are limited by the lowest known hydrocarbon (LKH) as seen in a well penetration unless otherwise indicated by definitive geoscience, engineering, or performance data. Such definitive information may include pressure gradient analysis and seismic indicators. Seismic data alone may not be sufficient to define fluid contacts for Proved reserves (see
		<ul> <li>"2001 Supplemental Guidelines," Chapter 8).</li> <li>Reserves in undeveloped locations may be classified as Proved provided that:</li> <li>The locations are in undrilled areas of the reservoir that can be judged with reasonable certainty to be commercially productive.</li> <li>Interpretations of available geoscience and engineering data indicate with reasonable certainty that the objective formation is laterally continuous with drilled Proved locations.</li> <li>For Proved Reserves, the recovery efficiency applied to these reservoirs should be defined based on a range of possibilities supported by analogs and sound engineering judgment considering the characteristics of the Proved area and the applied development program.</li> </ul>
Probable Reserves	Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves.	It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate. Probable Reserves may be assigned to areas of a reservoir adjacent to Proved where data control or interpretations of available data are less certain. The interpreted reservoir continuity may not meet the reasonable certainty criteria. Probable estimates also include incremental recoveries associated with project recovery efficiencies beyond that assumed for Proved.



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Category	Definition	Guidelines
Possible Reserves	Possible Reserves are those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recoverable than Probable Reserves.	The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves may be assigned to areas of a reservoir adjacent to Probable where data control and interpretations of available data are progressively less certain. Frequently, this may be in areas where geoscience and engineering data are unable to clearly define the area and vertical reservoir limits of commercial production from the reservoir by a defined project.
Probable and Possible Reserves	(See above for separate criteria for Probable Reserves and Possible Reserves.)	The 2P and 3P estimates may be based on reasonable alternative technical and commercial interpretations within the reservoir and/or subject project that are clearly documented, including comparisons to results in successful similar projects.
		In conventional accumulations, Probable and/or Possible Reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from Proved areas by minor faulting or other geological discontinuities and have not been penetrated by a wellbore but are interpreted to be in communication with the known (Proved) reservoir. Probable or Possible Reserves may be assigned to areas that are structurally higher than the Proved area. Possible (and in some cases, Probable) Reserves may be assigned to areas that are structurally lower than the adjacent Proved or 2P area.
		Caution should be exercised in assigning Reserves to adjacent reservoirs isolated by major, potentially sealing, faults until this reservoir is penetrated and evaluated as commercially productive. Justification for assigning Reserves in such cases should be clearly documented. Reserves should not be assigned to areas that are clearly separated from a known accumulation by non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results); such areas may contain Prospective Resources.
		In conventional accumulations, where drilling has defined a highest known oil (HKO) elevation and there exists the potential for an associated gas cap, Proved oil Reserves should only be assigned in the structurally higher portions of the reservoir if there is reasonable certainty that such portions are initially above bubble point pressure based on documented engineering analyses. Reservoir portions that do not meet this certainty may be assigned as Probable and Possible oil and/or gas based on reservoir fluid properties and pressure gradient interpretations.

The 2007 Petroleum Resources Management System can be viewed in its entirety at <u>http://www.spe.org/spe-app/spe/industry/reserves/prms.htm</u>.



### ABBREVIATIONS

4	porosity
$\varphi$	acro foot
	American Potroloum Instituto
	Air Quality Management District
AQIVID	Air Quality Management District
Armstrong	Armstrong Petroleum Corporation
Bo	oil formation volume factor
BBL	barrels
BTU	British thermal units
BCF	billions of cubic feet
CNB	City of Newport Beach
COPE	California Oil Producers Electric Cooperative
DOG	State of California Department of Conservation,
	Division of Oil, Gas & Geothermal
DTN	Deeper Than Newport
EUR	estimated ultimate recovery
ft	feet
GRV	gross rock volume
Hoag	Hoag Memorial Hospital Presbyterian
kW	kilowatts
MBBL	thousands of barrels
MCF	thousands of cubic feet
MD	measured depth
MMBBL	millions of barrels
MMCF	millions of cubic feet
NSAI	Netherland, Sewell & Associates, Inc.
NTG	net-to-gross ratio
OOIP	original oil-in-place
P1	1 percent confidence level
P10	10 percent confidence level
P50	50 percent confidence level
P90	90 percent confidence level
PRMS	Petroleum Resources Management System
psi	pounds per square inch
pumper	contract oil field operator
RB/STB	reservoir barrels per stock tank barrel
Regatta	Regatta Solutions Inc
RF	recovery factor
S	oil saturation
0 <sub>0</sub>	water saturation
	Sand Above Newport
SAN	Salid Above Newpoli
SUE	Southern California Edison
	Society of Petroleum Engineers
SPE Standards	and Gas Reserves Information promulgated by the SPE
TVDSS	true vertical depth subsea



### OVERVIEW OF RECOMMENDATIONS CITY OF NEWPORT BEACH WEST NEWPORT FIELD AS OF DECEMBER 31, 2011

### RECOMMENDED

- 1. Continue to operate the oilfield assets with contract operator services provided by Sampson Oil. Based on our onsite observations and investigation of operating costs and well servicing records, West Newport Field appears to be operated in accordance with prudent industry standards and with reasonable operating costs.
- 2. Contact Regatta Solutions, the regional distributor for Capstone MicroTurbines, to pursue acquisition of two C65 CARB certified micro turbine generators for the oilfield. Some urgency exists for pursuing this recommendation. If the units are installed in 2012, no Air Quality Management District (AQMD) permit will be required because of the CARB certification. The installation process will be streamlined, and no fee will be required if the AQMD permit can be avoided. Also, numerous federal and state tax credits exist that offer additional financial incentives beyond the long-term benefits derived from electricity expense savings.
- 3. Perform uphole recompletion operations on the currently inactive Newport 5 well. This operation will entail plugging back the current idle completion and perforating and completing the D5 zone. Our economic projection has this operation slated for 2014, and our estimate of capital cost is approximately \$230,000. We estimate the probable reserves associated with this activity to be 85.2 thousand barrels (MBBL) of oil.
- 4. Conduct remedial operations for returning the Newport 15 well to production. The existing production liner has failed, which allows formation sand to enter the wellbore and prevents the well from being produced by rod pump. The well produced 20 barrels of oil per day prior to the liner failure. Our economic projection has this operation slated for 2014, and our estimate of capital cost is approximately \$300,000. We estimate the probable reserves associated with this activity to be 17.6 MBBL of oil.
- 5. Perform uphole recompletion operations on the Newport 9 well to access the D5 zone. This well is currently active in the Newport zone, although it is a marginal contributor and only pumps 4 to 5 hours per day. The contract operator indicated that the most recent well test of 8 barrels of oil per day looked too high, thus the well needed to be retested for rate verification. Recompletion to the D5 interval will require abandonment of the current completion. Our economic projection schedules the work for 2016, and our estimate of capital cost for the operation is approximately \$172,000. We estimate the incremental probable reserves associated with this activity to be 68.3 MBBL of oil.
- 6. Recomplete the Newport 1 well to the uphole C zone. This well is currently an active producer commingled in the D5 and Sand Above Newport (SAN) intervals. Although the C zone has not produced in the field, it appears to have productive potential at the Newport 1 location. The well will have to be abandoned in its present completion prior to conducting recompletion operations. Our economic projection has this operation slated for 2021, for an estimated capital cost of approximately \$145,000. We estimate the incremental probable reserves associated with this activity to be 13.0 MBBL of oil.
- 7. Test individual wells monthly to better monitor well performance and diagnose potential downhole issues. All well production is commingled in the battery for fluid processing, storage, and sales. The process train



does have the capability to isolate individual wells for testing purposes. The pumper acknowledged that although monthly testing is desirable, the current frequency is annually.

8. Continue to inject produced water into the Newport 3 well as a saltwater disposal operation. This well was originally set up as a waterflood injection well based on recommendations in a report by Mr. Merrill Wright in 2004.

### SPECULATIVE

1. Drill an exploration well to the Deeper Than Newport (DTN) zone in the eastern portion of the field. Although this DTN interval has been productive in the west, all penetrations in the main part of the field (southeast) appear wet on open-hole logs. This target location is upstructure to the existing DTN reservoir penetrations in the main part of the field. Our estimate of capital costs for this drilling project is approximately \$1.2 million. Dry hole costs are estimated at approximately \$800,000, with completion costs of approximately \$400,000. The unrisked best case estimate for these prospective resources is 153,000 barrels of oil.

### NOT RECOMMENDED

- It is not recommended to shoot a 3-D seismic survey to cover the field area for better understanding of the subsurface geology. Shooting a survey in a transitional zone (between land and ocean) has significant logistical complications that will make acquiring a good quality data set very difficult. For the cost of acquiring such a survey (likely greater than \$10 million), many new exploratory wells could be drilled, which could also help improve the understanding of the subsurface potential by adding well control, possibly to a greater extent than seismic data.
- 2. Uphole recompletion of the Newport 7 well is not recommended. Although the Newport 7 well has D5 zone potential uphole in the wellbore, this location is downdip of the other recommended locations in the Newport 5 and 9 wells. Although the Newport 7 well is not a strong producer, it should remain in the present interval producing through its economic limit.
- 3. Further development of the waterflood project proposed by Mr. Wright is not recommended. No secondary recovery benefit has been observed by offset producing wells as a result of the water injection in the Newport 3 well. The lack of observed production benefit coupled by the insufficient volume of usable injection water render the waterflood project ineffective in improving overall recovery. Mr. Wright later recommended that the project be cancelled since full implementation could not be achieved.



#### REPORT OVERVIEW - CITY OF NEWPORT BEACH WEST NEWPORT FIELD AS OF DECEMBER 31, 2011

#### SUMMARY OF ECONOMIC PARAMETERS

	Base	Operating Cost		Life of Field		
Case Sensitivity	Oil Price <sup>(1)</sup> (\$/Barrel)	Fixed Cost (\$/Month)	Variable Cost (\$/Well/Month)	Proved (Years)	Probable (Years)	Capital Investment <sup>(2)</sup> (M\$)
Base	111.02	40,764	3,136	20.8	24.2	1,102.0
Low	91.02	40,764	3,136	15.7	20.7	1,102.0
High	131.02	40,764	3,136	24.8	26.1	1,102.0
Escalation <sup>(3)</sup>	105.17	40,764	3,136	18.4	22.5	1,452.0

#### SUMMARY OF RESERVES AND FUTURE NET REVENUE

	Oil Reserves		Gas Reserves		Future Net Revenue (M\$)	
	Gross	Net	Gross	Net <sup>(4)</sup>		Present Worth
Case Sensitivity/Category	(MBBL)	(MBBL)	(MMCF)	(MMCF)	Total	at 10%
Base						
Proved Developed Producing	317.3	295.1	173.3	0.0	9,330.8	6,536.0
Probable	224.9	209.1	85.9	0.0	15,560.5	6,853.8
Low						
Proved Developed Producing	260.0	241.8	142.2	0.0	3,919.1	3,447.8
Probable	239.4	222.7	96.5	0.0	11,255.6	5,217.3
High						
Proved Developed Producing	355.5	330.6	194.0	0.0	15,614.3	9,701.3
Probable	205.3	190.9	74.3	0.0	19,564.2	8,446.9
Escalation						
Proved Developed Producing	292.1	271.7	159.7	0.0	4,483.1	4,217.3
Probable	231.4	215.2	90.5	0.0	14,865.1	6,233.1

# SUMMARY OF UNRISKED GROSS (100 PERCENT) PROSPECTIVE OIL RESOURCES DEEPER THAN NEWPORT RESERVOIR

	Oil
Category	(MBBL)
Low Estimate Best Estimate	39 153
High Estimate	478

<sup>(1)</sup> Prices shown are before adjustments for quality, transportation fees, and a local price differential.

- <sup>(2)</sup> Amounts shown are total capital investments required to achieve reserves volumes shown in the probable category. There is no capital investment required for the proved category.
- <sup>(3)</sup> Prices and operating costs shown for the Escalation Case Sensitivity are for the period ending December 31, 2012. Thereafter, prices are escalated 3 percent on January 1 of each year through December 31, 2026, and held constant thereafter. Operating costs are escalated 3 percent on January 1 of each year through December 31, 2026, and held constant thereafter.
- <sup>(4)</sup> All gas is either consumed onsite or is transported offsite as excess for no monetary consideration.



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#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		NET RESERVES				AVE	ERAGE PRICE	S	GROSS REVENUE				
ENDING	OIL	NGL	GAS	OIL	NGL	GAS		OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF		\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$	
12-31-2012	24,045	0	13,212	22,361	0		0	99.350	0.000	0.000	2,221.5	0.0	0.0	2,221.5	
12-31-2013	22,970	0	12,613	21,363	0		0	99.350	0.000	0.000	2,122.2	0.0	0.0	2,122.2	
12-31-2014	21,942	0	12,041	20,405	0		0	99.350	0.000	0.000	2,027.5	0.0	0.0	2,027.5	
12-31-2015	20,964	0	11,494	19,498	0		0	99.350	0.000	0.000	1,936.9	0.0	0.0	1,936.9	
12-31-2016	20,029	0	10,974	18,629	0		0	99.350	0.000	0.000	1,850.8	0.0	0.0	1,850.8	
12-31-2017	19,138	0	10,480	17,800	0		0	99.350	0.000	0.000	1,768.4	0.0	0.0	1,768.4	
12-31-2018	18,288	0	10,004	17,004	0		0	99.350	0.000	0.000	1,689.6	0.0	0.0	1,689.6	
12-31-2019	17,476	0	9,555	16,252	0		0	99.350	0.000	0.000	1,614.6	0.0	0.0	1,614.6	
12-31-2020	16,698	0	9,122	15,531	0		0	99.350	0.000	0.000	1,543.0	0.0	0.0	1,543.0	
12-31-2021	15,959	0	8,710	14,841	0		0	99.350	0.000	0.000	1,474.4	0.0	0.0	1,474.4	
12-31-2022	14,921	0	8,133	13,877	0		0	99.350	0.000	0.000	1,378.5	0.0	0.0	1,378.5	
12-31-2023	14,192	0	7,730	13,200	0		0	99.350	0.000	0.000	1,311.3	0.0	0.0	1,311.3	
12-31-2024	13,566	0	7,381	12,615	0		0	99.350	0.000	0.000	1,253.2	0.0	0.0	1,253.2	
12-31-2025	12,963	0	7,050	12,056	0		0	99.350	0.000	0.000	1,197.9	0.0	0.0	1,197.9	
12-31-2026	12,392	0	6,734	11,522	0		0	99.350	0.000	0.000	1,144.8	0.0	0.0	1,144.8	
SUBTOTAL	265,543	0	145,233	246,954	0		0	99.350	0.000	0.000	24,534.6	0.0	0.0	24,534.6	
REMAINING	51,795	0	28,093	48,169	0		0	99.350	0.000	0.000	4,785.8	0.0	0.0	4,785.8	
TOTAL	317,338	0	173,326	295,123	0		0	99.350	0.000	0.000	29,320.4	0.0	0.0	29,320.4	
CUM PROD	5,677,670		2,037,693												
ULTIMATE	5,995,008		2,211,019												

				NET DEDU	JCTIONS/EXPEND	ITURES		FUTU	RE NET REVEN	IUE		
PERIOD	NUMBER	ROF	TAX	KES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	NTED	DISC AT 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	12	12.00	0.0	0.0	0.0	0.0	940.4	1,281.1	1,281.1	1,222.6	8.000	7,010.1
12-31-2013	12	12.00	0.0	0.0	0.0	0.0	940.4	1,181.8	2,462.9	2,247.8	12.000	6,108.5
12-31-2014	12	12.00	0.0	0.0	0.0	0.0	940.4	1,087.1	3,550.0	3,104.9	15.000	5,550.7
12-31-2015	12	12.00	0.0	0.0	0.0	0.0	940.4	996.5	4,546.5	3,819.5	20.000	4,805.6
12-31-2016	12	12.00	0.0	0.0	0.0	0.0	940.4	910.4	5,456.9	4,412.8	25.000	4,234.9
12-31-2017	12	12.00	0.0	0.0	0.0	0.0	940.4	828.0	6,284.9	4,903.2	30.000	3,790.4
12-31-2018	12	12.00	0.0	0.0	0.0	0.0	940.4	749.2	7,034.1	5,306.7	35.000	3,436.7
12-31-2019	12	12.00	0.0	0.0	0.0	0.0	940.4	674.2	7,708.3	5,636.9	40.000	3,150.6
12-31-2020	12	12.00	0.0	0.0	0.0	0.0	940.4	602.6	8,310.9	5,905.1	45.000	2,915.0
12-31-2021	12	12.00	0.0	0.0	0.0	0.0	940.4	534.0	8,844.9	6,121.3	50.000	2,717.7
12-31-2022	12	12.00	0.0	0.0	0.0	0.0	909.1	469.4	9,314.3	6,294.1		
12-31-2023	11	11.00	0.0	0.0	0.0	0.0	902.8	408.5	9,722.8	6,430.9		
12-31-2024	11	11.00	0.0	0.0	0.0	0.0	902.8	350.4	10,073.2	6,537.4		
12-31-2025	11	11.00	0.0	0.0	0.0	0.0	902.8	295.1	10,368.3	6,619.0		
12-31-2026	11	11.00	0.0	0.0	0.0	0.0	902.8	242.0	10,610.3	6,679.8		
SUBTOTAL			0.0	0.0	0.0	0.0	13,924.3	10,610.3	10,610.3	6,679.8		
REMAINING			0.0	0.0	0.0	1,775.0	4,290.3	-1,279.5	9,330.8	6,536.0		
TOTAL OF 20.8 YE	RS		0.0	0.0	0.0	1,775.0	18,214.6	9,330.8	9,330.8	6,536.0		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

BASED ON CONSTANT PRICE AND COST PARAMETERS



#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		NET RESERVES				ERAGE PRICE	S	GROSS REVENUE				
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$	
12-31-2012	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0	
12-31-2013	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0	
12-31-2014	12,529	0	5,052	11,651	0	0	99.350	0.000	0.000	1,157.6	0.0	0.0	1,157.6	
12-31-2015	11,275	0	4,547	10,487	0	0	99.350	0.000	0.000	1,041.8	0.0	0.0	1,041.8	
12-31-2016	13,897	0	5,589	12,924	0	0	99.350	0.000	0.000	1,284.1	0.0	0.0	1,284.1	
12-31-2017	17,677	0	7,096	16,440	0	0	99.350	0.000	0.000	1,633.1	0.0	0.0	1,633.1	
12-31-2018	15,836	0	6,358	14,728	0	0	99.350	0.000	0.000	1,463.2	0.0	0.0	1,463.2	
12-31-2019	14,182	0	5,694	13,190	0	0	99.350	0.000	0.000	1,310.5	0.0	0.0	1,310.5	
12-31-2020	12,699	0	5,098	11,809	0	0	99.350	0.000	0.000	1,173.2	0.0	0.0	1,173.2	
12-31-2021	12,935	0	4,710	12,028	0	0	99.350	0.000	0.000	1,195.0	0.0	0.0	1,195.0	
12-31-2022	13,653	0	4,528	12,697	0	0	99.350	0.000	0.000	1,261.5	0.0	0.0	1,261.5	
12-31-2023	11,932	0	3,906	11,096	0	0	99.350	0.000	0.000	1,102.3	0.0	0.0	1,102.3	
12-31-2024	10,421	0	3,361	9,694	0	0	99.350	0.000	0.000	962.9	0.0	0.0	962.9	
12-31-2025	9,100	0	2,884	8,463	0	0	99.350	0.000	0.000	840.7	0.0	0.0	840.7	
12-31-2026	7,938	0	2,469	7,383	0	0	99.350	0.000	0.000	733.5	0.0	0.0	733.5	
SUBTOTAL	164,074	0	61,292	152,590	0	0	99.350	0.000	0.000	15,159.4	0.0	0.0	15,159.4	
REMAINING	60,797	0	24,575	56,539	0	0	99.350	0.000	0.000	5,617.6	0.0	0.0	5,617.6	
TOTAL	224,871	0	85,867	209,129	0	0	99.350	0.000	0.000	20,777.0	0.0	0.0	20,777.0	
CUM PROD	0		0											
ULTIMATE	224,871		85,867											

				NET DEDU	ICTIONS/EXPEND	DITURES		FUTU	IRE NET REVEN	IUE		
PERIOD	NUMBEF	ROF	TAX	KES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	INTED	DISC AT 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.000	7,946.8
12-31-2013	0	0.00	0.0	0.0	530.0	0.0	0.0	-530.0	-530.0	-443.3	12.000	5,954.6
12-31-2014	2	2.00	0.0	0.0	0.0	0.0	75.2	1,082.4	552.4	410.6	15.000	4,882.9
12-31-2015	2	2.00	0.0	0.0	0.0	0.0	75.2	966.6	1,519.0	1,103.9	20.000	3,614.5
12-31-2016	2	2.00	0.0	0.0	172.0	0.0	72.1	1,040.0	2,559.0	1,775.0	25.000	2,760.8
12-31-2017	2	2.00	0.0	0.0	0.0	0.0	75.2	1,557.9	4,116.9	2,698.6	30.000	2,163.6
12-31-2018	2	2.00	0.0	0.0	0.0	0.0	75.2	1,388.0	5,504.9	3,446.5	35.000	1,730.9
12-31-2019	2	2.00	0.0	0.0	0.0	0.0	75.2	1,235.3	6,740.2	4,051.6	40.000	1,408.7
12-31-2020	2	2.00	0.0	0.0	0.0	0.0	75.2	1,098.0	7,838.2	4,540.6	45.000	1,163.8
12-31-2021	2	2.00	0.0	0.0	145.0	0.0	72.1	977.9	8,816.1	4,934.5	50.000	973.3
12-31-2022	2	2.00	0.0	0.0	0.0	0.0	75.2	1,186.3	10,002.4	5,371.2		
12-31-2023	2	2.00	0.0	0.0	0.0	0.0	75.2	1,027.1	11,029.5	5,715.0		
12-31-2024	2	2.00	0.0	0.0	0.0	0.0	75.2	887.7	11,917.2	5,985.1		
12-31-2025	2	2.00	0.0	0.0	0.0	0.0	75.2	765.5	12,682.7	6,196.8		
12-31-2026	2	2.00	0.0	0.0	0.0	0.0	75.2	658.3	13,341.0	6,362.3		
SUBTOTAL			0.0	0.0	847.0	0.0	971.4	13,341.0	13,341.0	6,362.3		
REMAINING			0.0	0.0	0.0	0.0	3,398.1	2,219.5	15,560.5	6,853.8		
TOTAL OF 24.2 Y	RS		0.0	0.0	847.0	0.0	4,369.5	15,560.5	15,560.5	6,853.8		

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BASED ON CONSTANT PRICE AND COST PARAMETERS

RESERVES AND ECONOMICS



#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		NET RESERVES				AVE	ERAGE PRICE	S	GROSS REVENUE				
ENDING	OIL	NGL	GAS	OIL	NGL	GAS		OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF		\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$	
12-31-2012	24,045	0	13,212	22,361	0		0	99.350	0.000	0.000	2,221.5	0.0	0.0	2,221.5	
12-31-2013	22,970	0	12,613	21,363	0		0	99.350	0.000	0.000	2,122.2	0.0	0.0	2,122.2	
12-31-2014	21,942	0	12,041	20,405	0		0	99.350	0.000	0.000	2,027.5	0.0	0.0	2,027.5	
12-31-2015	20,964	0	11,494	19,498	0		0	99.350	0.000	0.000	1,936.9	0.0	0.0	1,936.9	
12-31-2016	20,029	0	10,974	18,629	0		0	99.350	0.000	0.000	1,850.8	0.0	0.0	1,850.8	
12-31-2017	19,138	0	10,480	17,800	0		0	99.350	0.000	0.000	1,768.4	0.0	0.0	1,768.4	
12-31-2018	18,288	0	10,004	17,004	0		0	99.350	0.000	0.000	1,689.6	0.0	0.0	1,689.6	
12-31-2019	17,476	0	9,555	16,252	0		0	99.350	0.000	0.000	1,614.6	0.0	0.0	1,614.6	
12-31-2020	16,698	0	9,122	15,531	0		0	99.350	0.000	0.000	1,543.0	0.0	0.0	1,543.0	
12-31-2021	15,959	0	8,710	14,841	0		0	99.350	0.000	0.000	1,474.4	0.0	0.0	1,474.4	
12-31-2022	14,921	0	8,133	13,877	0		0	99.350	0.000	0.000	1,378.5	0.0	0.0	1,378.5	
12-31-2023	14,192	0	7,730	13,200	0		0	99.350	0.000	0.000	1,311.3	0.0	0.0	1,311.3	
12-31-2024	13,566	0	7,381	12,615	0		0	99.350	0.000	0.000	1,253.2	0.0	0.0	1,253.2	
12-31-2025	12,963	0	7,050	12,056	0		0	99.350	0.000	0.000	1,197.9	0.0	0.0	1,197.9	
12-31-2026	12,392	0	6,734	11,522	0		0	99.350	0.000	0.000	1,144.8	0.0	0.0	1,144.8	
SUBTOTAL	265,543	0	145,233	246,954	0		0	99.350	0.000	0.000	24,534.6	0.0	0.0	24,534.6	
REMAINING	51,795	0	28,093	48,169	0		0	99.350	0.000	0.000	4,785.8	0.0	0.0	4,785.8	
TOTAL	317,338	0	173,326	295,123	0		0	99.350	0.000	0.000	29,320.4	0.0	0.0	29,320.4	
CUM PROD	5,677,670		2,037,693												
ULTIMATE	5,995,008		2,211,019												

			NET DEDUCTIONS/EXPENDITURES					FUTU	IRE NET REVEN	IUE		
PERIOD	NUMBE	R OF	TAX	KES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	INTED	DISC AT 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COM	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	12	12.00	0.0	0.0	0.0	0.0	940.4	1,281.1	1,281.1	1,222.6	8.000	7,010.1
12-31-2013	12	12.00	0.0	0.0	0.0	0.0	940.4	1,181.8	2,462.9	2,247.8	12.000	6,108.5
12-31-2014	12	12.00	0.0	0.0	0.0	0.0	940.4	1,087.1	3,550.0	3,104.9	15.000	5,550.7
12-31-2015	12	12.00	0.0	0.0	0.0	0.0	940.4	996.5	4,546.5	3,819.5	20.000	4,805.6
12-31-2016	12	12.00	0.0	0.0	0.0	0.0	940.4	910.4	5,456.9	4,412.8	25.000	4,234.9
12-31-2017	12	12.00	0.0	0.0	0.0	0.0	940.4	828.0	6,284.9	4,903.2	30.000	3,790.4
12-31-2018	12	12.00	0.0	0.0	0.0	0.0	940.4	749.2	7,034.1	5,306.7	35.000	3,436.7
12-31-2019	12	12.00	0.0	0.0	0.0	0.0	940.4	674.2	7,708.3	5,636.9	40.000	3,150.6
12-31-2020	12	12.00	0.0	0.0	0.0	0.0	940.4	602.6	8,310.9	5,905.1	45.000	2,915.0
12-31-2021	12	12.00	0.0	0.0	0.0	0.0	940.4	534.0	8,844.9	6,121.3	50.000	2,717.7
12-31-2022	12	12.00	0.0	0.0	0.0	0.0	909.1	469.4	9,314.3	6,294.1		
12-31-2023	11	11.00	0.0	0.0	0.0	0.0	902.8	408.5	9,722.8	6,430.9		
12-31-2024	11	11.00	0.0	0.0	0.0	0.0	902.8	350.4	10,073.2	6,537.4		
12-31-2025	11	11.00	0.0	0.0	0.0	0.0	902.8	295.1	10,368.3	6,619.0		
12-31-2026	11	11.00	0.0	0.0	0.0	0.0	902.8	242.0	10,610.3	6,679.8		
SUBTOTAL			0.0	0.0	0.0	0.0	13,924.3	10,610.3	10,610.3	6,679.8		
REMAINING			0.0	0.0	0.0	1,775.0	4,290.3	-1,279.5	9,330.8	6,536.0		
TOTAL OF 20.8 YF	RS		0.0	0.0	0.0	1,775.0	18,214.6	9,330.8	9,330.8	6,536.0		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

BASED ON CONSTANT PRICE AND COST PARAMETERS



#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

#### PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GR	OSS RESERV	/ES	NE	ET RESERVES	6	GRO	DSS REVENU	JE	TOTAL	NET CAP	ABDNMNT	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TAXES	COST	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFOR	NIA								
NEWF	PORT, W FIELD, ORANGE CO	DUNTY														
000180	NWPRT 1 RD2	24,641	0	24,887	22,916	0	0	2,276.6	0.0	0.0	0.0	0.0	0.0	742.8	1,533.8	830.9
000190	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000200	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000400	NWPRT 2 RD2	28,728	0	13,444	26,717	0	0	2,654.3	0.0	0.0	0.0	0.0	0.0	742.8	1,911.5	996.4
000410	NWPRT 3 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000430	NWPRT 3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000440	NWPRT 4	29,627	0	11,939	27,552	0	0	2,737.3	0.0	0.0	0.0	0.0	0.0	742.8	1,994.5	1,086.0
000460	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000450	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000470	NWPRT 6 RD1	40,014	0	22,848	37,213	0	0	3,697.1	0.0	0.0	0.0	0.0	0.0	742.8	2,954.3	1,623.1
000480	NWPRT 7 RD1	5,127	0	2,856	4,768	0	0	473.6	0.0	0.0	0.0	0.0	0.0	382.3	91.3	68.5
000490	NWPRT 7 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000500	NWPRT 8 RD1	42,562	0	13,194	39,583	0	0	3,932.5	0.0	0.0	0.0	0.0	0.0	742.8	3,189.7	1,651.2
000510	NWPRT 9 STB	21,331	0	8,596	19,838	0	0	1,971.2	0.0	0.0	0.0	0.0	0.0	742.8	1,228.4	667.5
000210	NWPRT 10 RD1	24,573	0	14,204	22,853	0	0	2,270.4	0.0	0.0	0.0	0.0	0.0	742.8	1,527.6	796.0
000220	NWPRT 11 RD1	20,913	0	22,168	19,449	0	0	1,932.3	0.0	0.0	0.0	0.0	0.0	742.8	1,189.5	668.3
000240	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000250	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000230	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000280	NWPRT 12 RD5	16,732	0	8,767	15,560	0	0	1,545.9	0.0	0.0	0.0	0.0	0.0	742.8	803.1	456.7
000290	NWPRT 13 RD2	43,198	0	20,994	40,174	0	0	3,991.3	0.0	0.0	0.0	0.0	0.0	742.8	3,248.5	1,708.7
000300	NWPRT 14 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000310	NWPRT 14 RD3	19,892	0	9,429	18,500	0	0	1,837.9	0.0	0.0	0.0	0.0	0.0	742.8	1,095.1	580.6
000320	NWPRT 14 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000350	NWPRT 16 RD3	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000170	FIXED EXPENSE PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	9,661.5	-9,661.5	-4,351.3
000570	ABANDONMENT PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	1,775.0	0.0	-1,775.0	-246.6
	FIELD TOTAL	317,338	0	173,326	295,123	0	0	29,320.4	0.0	0.0	0.0	0.0	1,775.0	18,214.6	9,330.8	6,536.0
т	OTAL CALIFORNIA	317,338	0	173,326	295,123	0	0	29,320.4	0.0	0.0	0.0	0.0	1,775.0	18,214.6	9,330.8	6,536.0
т	OTAL ALL LEASES	317,338	0	173,326	295,123	0	0	29,320.4	0.0	0.0	0.0	0.0	1,775.0	18,214.6	9,330.8	6,536.0

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

BASED ON CONSTANT PRICE AND COST PARAMETERS



#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACT	IVE	GROSS ULTIMATE		WORKING REVENUE			OIL/COND		ND NGL		GL GAS			GROSS OPERATING		
LEASE			COMF	LTNS	OIL/COND	GAS	INTE	REST	INTEF	REST	\$/B	BL	\$/B	BL	\$/M	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFUR	INIA											
NEWF	PORT, W FIELD, ORANGE C	OUNTY																	
000180	NWPRT 1 RD2	D5, SAN	1	0	225,532	97,773	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000190	NWPRT 1 SI	NWPT	0	0	54,741	19,585	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000200	NWPRT 1 SI	SAN	0	0	182,072	51,631	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	D0, D5	0	0	127,582	26,741	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	D0, D5	0	0	66,716	12,518	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	D5	0	0	32,000	9,707	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000400	NWPRT 2 RD2	2747-3477 MD	1	0	261,889	64,813	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000410	NWPRT 3 RD1 SI	D0, D5	0	0	88,251	25,285	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	D0	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000430	NWPRT 3 SI	NWPT	0	0	59,296	24,528	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000440	NWPRT 4	D0, D5	1	0	324,860	96,610	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000460	NWPRT 5 SI	NWPT	0	0	129,743	68,490	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000450	NWPRT 5 SI	SAN, D5	0	0	27,030	19,523	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000470	NWPRT 6 RD1	NWPT	1	0	794,671	300,747	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000480	NWPRT 7 RD1	DPR THN NWPT	1	0	189,695	69,470	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	10.2
000490	NWPRT 7 SI	DPR THN NWPT	0	0	13,781	6,130	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000500	NWPRT 8 RD1	SAN, NWPT	1	0	597,956	222,613	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000510	NWPRT 9 STB	NWPT	1	0	388,108	138,486	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000210	NWPRT 10 RD1	3755-3964 MD	1	0	429,276	224,033	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000220	NWPRT 11 RD1	D0, D5	1	0	304,746	93,821	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000240	NWPRT 11 SI	D0, D5	0	0	14,949	6,790	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000250	NWPRT 11 SI	D0, D5 FRC PCK	0	0	76,580	11,159	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000230	NWPRT 11 SI	SAN, NWPT	0	0	81,002	36,122	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	D0	0	0	23,985	7,796	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	D0, D5	0	0	65,332	17,968	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000280	NWPRT 12 RD5	D0, D5	1	0	278,127	92,324	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000290	NWPRT 13 RD2	DPR THN NWPT	1	0	533,718	207,906	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000300	NWPRT 14 RD2 SI	D0, D5	0	0	86,803	30,173	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000310	NWPRT 14 RD3	D0, NWPT, SAN	1	0	101,104	45,463	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000320	NWPRT 14 RD3 SI	NWPT, SAN	0	0	42,737	36,309	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	DPR THN NWPT	0	0	299,182	113,979	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	DPR THN NWPT	0	0	21,527	2,917	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000350	NWPRT 16 RD3	DPR THN NWPT	0	0	41,638	23,650	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	DPR THN NWPT	0	0	30,379	5,959	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000170	FIXED EXPENSE PDP		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	19.7
000570	ABANDONMENT PDP		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	20.8
	FIELD TOTAL		12	0	5,995,008	2,211,019													
т	OTAL CALIFORNIA		12	0	5,995,008	2,211,019													
т	OTAL ALL LEASES		12	0	5,995,008	2,211,019													



#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GROSS RESERVES			NET RESERVES				ERAGE PRICE	ES	GROSS REVENUE				
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$	
12-31-2012	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0	
12-31-2013	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0	
12-31-2014	12,529	0	5,052	11,651	0	0	99.350	0.000	0.000	1,157.6	0.0	0.0	1,157.6	
12-31-2015	11,275	0	4,547	10,487	0	0	99.350	0.000	0.000	1,041.8	0.0	0.0	1,041.8	
12-31-2016	13,897	0	5,589	12,924	0	0	99.350	0.000	0.000	1,284.1	0.0	0.0	1,284.1	
12-31-2017	17,677	0	7,096	16,440	0	0	99.350	0.000	0.000	1,633.1	0.0	0.0	1,633.1	
12-31-2018	15,836	0	6,358	14,728	0	0	99.350	0.000	0.000	1,463.2	0.0	0.0	1,463.2	
12-31-2019	14,182	0	5,694	13,190	0	0	99.350	0.000	0.000	1,310.5	0.0	0.0	1,310.5	
12-31-2020	12,699	0	5,098	11,809	0	0	99.350	0.000	0.000	1,173.2	0.0	0.0	1,173.2	
12-31-2021	12,935	0	4,710	12,028	0	0	99.350	0.000	0.000	1,195.0	0.0	0.0	1,195.0	
12-31-2022	13,653	0	4,528	12,697	0	0	99.350	0.000	0.000	1,261.5	0.0	0.0	1,261.5	
12-31-2023	11,932	0	3,906	11,096	0	0	99.350	0.000	0.000	1,102.3	0.0	0.0	1,102.3	
12-31-2024	10,421	0	3,361	9,694	0	0	99.350	0.000	0.000	962.9	0.0	0.0	962.9	
12-31-2025	9,100	0	2,884	8,463	0	0	99.350	0.000	0.000	840.7	0.0	0.0	840.7	
12-31-2026	7,938	0	2,469	7,383	0	0	99.350	0.000	0.000	733.5	0.0	0.0	733.5	
SUBTOTAL	164,074	0	61,292	152,590	0	0	99.350	0.000	0.000	15,159.4	0.0	0.0	15,159.4	
REMAINING	60,797	0	24,575	56,539	0	0	99.350	0.000	0.000	5,617.6	0.0	0.0	5,617.6	
TOTAL	224,871	0	85,867	209,129	0	0	99.350	0.000	0.000	20,777.0	0.0	0.0	20,777.0	
CUM PROD	0		0											
ULTIMATE	224,871		85,867											

			NET DEDUCTIONS/EXPENDITURES				FUTU	IRE NET REVEN	NUE			
PERIOD	NUMBE	ROF	TAX	KES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	INTED	DISC AT 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COM	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.000	7,946.8
12-31-2013	0	0.00	0.0	0.0	530.0	0.0	0.0	-530.0	-530.0	-443.3	12.000	5,954.6
12-31-2014	2	2.00	0.0	0.0	0.0	0.0	75.2	1,082.4	552.4	410.6	15.000	4,882.9
12-31-2015	2	2.00	0.0	0.0	0.0	0.0	75.2	966.6	1,519.0	1,103.9	20.000	3,614.5
12-31-2016	2	2.00	0.0	0.0	172.0	0.0	72.1	1,040.0	2,559.0	1,775.0	25.000	2,760.8
12-31-2017	2	2.00	0.0	0.0	0.0	0.0	75.2	1,557.9	4,116.9	2,698.6	30.000	2,163.6
12-31-2018	2	2.00	0.0	0.0	0.0	0.0	75.2	1,388.0	5,504.9	3,446.5	35.000	1,730.9
12-31-2019	2	2.00	0.0	0.0	0.0	0.0	75.2	1,235.3	6,740.2	4,051.6	40.000	1,408.7
12-31-2020	2	2.00	0.0	0.0	0.0	0.0	75.2	1,098.0	7,838.2	4,540.6	45.000	1,163.8
12-31-2021	2	2.00	0.0	0.0	145.0	0.0	72.1	977.9	8,816.1	4,934.5	50.000	973.3
12-31-2022	2	2.00	0.0	0.0	0.0	0.0	75.2	1,186.3	10,002.4	5,371.2		
12-31-2023	2	2.00	0.0	0.0	0.0	0.0	75.2	1,027.1	11,029.5	5,715.0		
12-31-2024	2	2.00	0.0	0.0	0.0	0.0	75.2	887.7	11,917.2	5,985.1		
12-31-2025	2	2.00	0.0	0.0	0.0	0.0	75.2	765.5	12,682.7	6,196.8		
12-31-2026	2	2.00	0.0	0.0	0.0	0.0	75.2	658.3	13,341.0	6,362.3		
SUBTOTAL			0.0	0.0	847.0	0.0	971.4	13,341.0	13,341.0	6,362.3		
REMAINING			0.0	0.0	0.0	0.0	3,398.1	2,219.5	15,560.5	6,853.8		
TOTAL OF 24.2 YF	RS		0.0	0.0	847.0	0.0	4,369.5	15,560.5	15,560.5	6,853.8		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

BASED ON CONSTANT PRICE AND COST PARAMETERS



#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

PROBABLE RESERVES

CITY OF NEWPORT BEACH INTEREST

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GR	OSS RESERVI	ES	N	ET RESERVE	S	GRO	DSS REVENU	JE	TOTAL	NET CAP	ABDNMNT	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TAXES	COST	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFORM	NIA								
NEWF	ORT, W FIELD, ORANGE CO	UNTY														
000680	NWPRT 1 RD2 IPB	-10,023	0	-10,123	-9,321	0	0	-926.0	0.0	0.0	0.0	0.0	0.0	-385.6	-540.4	-148.7
000520	NWPRT 1 RD2 BP	24,000	0	8,400	22,320	0	0	2,217.5	0.0	0.0	0.0	145.0	0.0	296.7	1,775.8	532.0
000710	NWPRT 2 RD2 EXT	3,191	0	1,493	2,967	0	0	294.8	0.0	0.0	0.0	0.0	0.0	131.7	163.1	21.3
000720	NWPRT 4 EXT	2,776	0	1,119	2,581	0	0	256.5	0.0	0.0	0.0	0.0	0.0	131.7	124.8	16.3
000530	NWPRT 5 BP1	91,581	0	36,632	85,170	0	0	8,461.6	0.0	0.0	0.0	230.0	0.0	799.3	7,432.3	3,576.2
000730	NWPRT 6 RD1 EXT	3,373	0	1,926	3,137	0	0	311.7	0.0	0.0	0.0	0.0	0.0	131.7	180.0	23.5
000540	NWPRT 7 RD1 BP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	4,572	0	1,417	4,252	0	0	422.4	0.0	0.0	0.0	0.0	0.0	131.7	290.7	37.8
000690	NWPRT 9 STB IPB	-14,755	0	-5,946	-13,723	0	0	-1,363.4	0.0	0.0	0.0	0.0	0.0	-573.6	-789.8	-307.6
000560	NWPRT 9 STB BP	88,163	0	35,265	81,992	0	0	8,145.9	0.0	0.0	0.0	172.0	0.0	702.2	7,271.7	2,812.2
000750	NWPRT 10 RD1 EXT	2,821	0	1,631	2,624	0	0	260.7	0.0	0.0	0.0	0.0	0.0	131.7	129.0	16.8
000760	NWPRT 11 RD1 EXT	1,959	0	2,077	1,822	0	0	181.0	0.0	0.0	0.0	0.0	0.0	131.7	49.3	6.5
000770	NWPRT 12 RD5 EXT	1,680	0	880	1,562	0	0	155.2	0.0	0.0	0.0	0.0	0.0	131.7	23.5	3.1
000780	NWPRT 13 RD2 EXT	4,336	0	2,107	4,033	0	0	400.6	0.0	0.0	0.0	0.0	0.0	131.7	268.9	35.0
000790	NWPRT 14 RD3 EXT	2,284	0	1,083	2,124	0	0	211.0	0.0	0.0	0.0	0.0	0.0	131.7	79.3	10.4
000700	NWPRT 15 RD1 RTP	18,913	0	7,906	17,589	0	0	1,747.5	0.0	0.0	0.0	300.0	0.0	633.1	814.4	370.6
000630	FIXED EXPENSE PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	1,712.1	-1,712.1	-221.6
00800	ABANDONMENT PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0
	FIELD TOTAL	224,871	0	85,867	209,129	0	0	20,777.0	0.0	0.0	0.0	847.0	0.0	4,369.5	15,560.5	6,853.8
тс	OTAL CALIFORNIA	224,871	0	85,867	209,129	0	0	20,777.0	0.0	0.0	0.0	847.0	0.0	4,369.5	15,560.5	6,853.8
то	OTAL ALL LEASES	224,871	0	85,867	209,129	0	0	20,777.0	0.0	0.0	0.0	847.0	0.0	4,369.5	15,560.5	6,853.8



#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

### PROBABLE RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACTI	/E _	GROSS UL	TIMATE	WOR	KING	REVE	NUE	OIL/C	OND	NG	L	GA	S	GROSS OP	ERATING	
LEASE			COMPL	TNS	OIL/COND	GAS	INTE	REST	INTEF	REST	\$/B	BL	\$/BI	BL	\$/M0	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOR	NIA											
NEW	PORT, W FIELD, ORANGE C	OUNTY																	
000680	NWPRT 1 RD2 IPB	D5, SAN	0	0	-10,023	-10,123	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000520	NWPRT 1 RD2 BP	C SAND	1	0	24,000	8,400	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	17.5
000710	NWPRT 2 RD2 EXT	2747-3477 MD	1	0	3,191	1,493	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000720	NWPRT 4 EXT	D0, D5	1	0	2,776	1,119	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000530	NWPRT 5 BP1	D5	1	0	91,581	36,632	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000730	NWPRT 6 RD1 EXT	NWPT	1	0	3,373	1,926	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000540	NWPRT 7 RD1 BP	D5	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	SAN, NWPT	1	0	4,572	1,417	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000690	NWPRT 9 STB IPB	NWPT	0	0	-14,755	-5,946	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000560	NWPRT 9 STB BP	D5	1	0	88,163	35,265	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000750	NWPRT 10 RD1 EXT	3755-3964 MD	1	0	2,821	1,631	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000760	NWPRT 11 RD1 EXT	D0, D5	1	0	1,959	2,077	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000770	NWPRT 12 RD5 EXT	D0, D5	1	0	1,680	880	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000780	NWPRT 13 RD2 EXT	DPR THN NWPT	1	0	4,336	2,107	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000790	NWPRT 14 RD3 EXT	D0, NWPT, SAN	1	0	2,284	1,083	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	23.2
000700	NWPRT 15 RD1 RTP	DPR THN NWPT	1	0	18,913	7,906	100.000	100.000	93.000	93.000	99.350	99.350	0.000	0.000	0.000	0.000	3.1	3.1	18.8
000630	FIXED EXPENSE PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	23.2
00800	ABANDONMENT PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	24.2
	FIELD TOTAL		13	0	224,871	85,867													
т	OTAL CALIFORNIA		13	0	224,871	85,867													
Т	OTAL ALL LEASES		13	0	224,871	85,867													

GENERAL INFORMATION



### DISCUSSION WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

### OVERVIEW

The West Newport Field properties are located along the Pacific Coast Highway in an unincorporated portion of Orange County, California, just outside the City of Newport Beach (CNB), as shown on the location map on Page 18. The wells are located on a surface land lease operated by Armstrong Petroleum Corporation (Armstrong), while the bottomhole locations of all wells are located off the coast in the tide and submerged lands area (tidelands). CNB owns and operates a 100 percent working interest in these properties. CNB has been operating the wells since it took over operatorship from Armstrong in 1981. CNB's oil field operations are presently managed by the Department of Public Works.

We have estimated proved developed producing and probable reserves as well as unrisked prospective resources for West Newport Field. Gas revenue is not included in this report since currently all produced associated gas is either consumed onsite by the production operation or is transported offsite as excess for no monetary consideration.

### GEOLOGY

West Newport Field was discovered in 1953 by the Newport 1 well, which encountered pay in multiple zones of the Puente Formation. A type log for the Newport 2 well showing the various zones of the Puente Formation encountered in West Newport Field can be found on Page 19. This formation was deposited as a succession of marine turbidite fans and channels during the Late Miocene. The Puente Formation can exceed a gross thickness of 3,000 feet in some areas, although the base of the formation is not believed to have been penetrated in this field.

The Puente Formation unconformably overlies the Middle Miocene Topanga Formation and is unconformably overlain by the Pliocene Repetto Formation. The Puente Formation is composed of sandstone, conglomerate, and shale. Within West Newport Field, the shallow interval of the Puente Formation tends to be dominated by shale, while the deeper interval is dominated by thick beds of sandstones and/or conglomerates. The deeper interval is the main producing interval and tends to have thick beds that correlate poorly from well to well. This poor correlation most likely occurs for two reasons. The first reason is the complex nature of the marine turbidite deposits where deposition of younger turbidite flows often erode into older deposits. This erosion is localized and not widespread, which can lead to individual wells displaying different log patterns. The second reason is that limited well log data exist because of the technology available at the time the wells were drilled. The primary log curves that are available for wells in West Newport Field are spontaneous potential, conductivity, and resistivity. The well logs range from fair to poor in quality; therefore, well log correlation is challenging and is not of high confidence.

We performed correlation of three intervals throughout West Newport Field; these intervals are the D5, Sand Above Newport (SAN), and Newport. Using these correlations, we created depth structure maps for the D5, SAN, and Newport zones, which can be found on Pages 20, 21, and 22, respectively. An anticlinal structure is believed to exist near the main (or southeast) portion of the field. At least three faults are present. More faults may exist; however, their orientation is unknown given the sparse well control. The anticlinal structure is most likely the predominant trapping mechanism. However, it is evident by the various oil-water contacts that stratigraphic traps are present within the structure. The porosity of the productive intervals is not known because of the lack of available density logs. It is assumed that the porosity should be fairly high, 28 to 32 percent, because of the young age of the sediments and lack of burial. Given the available log data, we are also not able to determine accurately the water saturation. By employing Archie's law, using the assumed porosity and assumed water



resistivity of approximately 2 ohms, as seen in many of the wet sands, the resulting range for water saturations in the pay sands varies from 30 to 55 percent.

Most of the wellbores in West Newport Field have been sidetracked multiple times. These sidetracks have also been referred to as redrills. The given well names and the well names used on the directional surveys were not always consistent, and quite a bit of effort was spent associating the wellbores with the correct directional surveys. At times, assumptions had to be made based on logging dates on well headers, total depths of the well logs, and annotations from the well log copies in order to associate the wellbores and directional surveys. For these reasons, uncertainty still exists concerning the names of some of the wellbores and the association of the directional surveys.

### RESERVOIR REVIEW\_

For this review, we acquired historical monthly oil, gas, and water production and injection data from public sources. Data from July 1977 to present was found on the State of California Department of Conservation, Division of Oil, Gas & Geothermal (DOG) website. Pre-1977 production data was acquired from Petrodata/IG Service, which was referred to us as a source of data by the Oil and Gas District 1 office of the DOG. A graph of gross historical oil, gas, and water production and gross historical water injection from the West Newport Field wells is shown on Page 23. Cumulative production as of December 31, 2011, was 5.7 million barrels (MMBBL) of oil, 2.0 billion cubic feet (BCF) of gas, and 15.2 MMBBL of water, with a cumulative water injection of 3.6 MMBBL. Initial peak oil production was achieved in November 1955 with production of approximately 1,050 barrels per day.

For our analysis, we were also provided with well files from CNB for each of the producing wells in the field. Since the field was first put on production in December 1953 there have been numerous recompletions and redrills. Many of the wells are completed in more than one reservoir with production commingled downhole. Based on the information available, each well's production history was split into different completions. This was done in an attempt to accurately allocate the production data among the different reservoirs. A table showing the cumulative production from each of the completions as it has been assigned can be found on Page 24.

There were no bottomhole pressure data available for our analysis. As such, the reservoir drive mechanism is uncertain, although we can infer from the increase in water cut over the field's life that there is some component of natural aquifer support. Current injection pressure on the water injection well, the Newport 3 RD1, is approximately 550 psi. Wellhead pressures on the producing wells are approximately 40 psi; these wells are being lifted with rod pumping units. The average API of the oil currently produced from the field is approximately 18.5 degrees.

The oil and gas forecasts included in our reserves estimates are based on decline curve analysis because of the maturity of the wells in the field. This analysis assumes the field will continue to be operated as it currently is, and that the historical production trends will remain consistent into the future.

### FIELD SITE REVIEW

An onsite review of West Newport Field was conducted on November 8, 2011. Our personnel were accompanied on the tour by CNB employees, Mr. Ed Burt and Ms. Iris Lee. Mr. Burt conducted the tour of the well sites and production processing facilities. The purpose of the tour was to observe the operation of the field, to determine the means by which wells are produced, and to observe the overall condition of the wells and production facilities. We later had the opportunity to tour the facilities again with Mr. Rennick Sampson of Sampson Oil Company. Mr. Sampson is the contract oil field operator (pumper) who has operated the field on behalf of CNB, the operator of record, since CNB took over in 1981 from Armstrong.



The field contains 17 slant-drilled wells, with subsequent redrills, drilled primarily from 1953 to 1958. Presently, 15 wells are completed for production service, and 1 well is operating in injection service as a waterflood injector. One additional well, the Newport 17, was drilled and abandoned in October 1958. Two wells that were completed for production service are currently inactive resulting from downhole mechanical issues. At the time of the field tour, daily production was approximately 85 barrels of oil per day, 45 thousand cubic feet (MCF) of gas per day, and approximately 1,250 barrels of water per day.

All wells require artificial lift and are produced via rod pumping operation. The majority of the wells utilize Lufkin 114 pumping units; however, there is one Lufkin 320 pumping unit onsite. There are also two large air balanced pumping units servicing the Newport 13 and 15 wells, located on the north well site of the field.

All well operations are maintained by the pumper or his assistant. The pumper reportedly tests individual wells on an annual basis. The total daily and monthly production is then allocated to the individual wells based on well test performance. The production facilities are simple but well suited for the intended purpose. The process and mechanical components could benefit from fresh paint in order to provide additional protection from corrosion.

The well fluids initially undergo a simple 2-phase separation of liquids from natural gas. Subsequently, oil is separated and spills over into downstream tanks where it is conditioned and then stored onsite in two 1,000-barrel capacity oil storage tanks. The storage tanks provide ample retention time for the additional segregation of water from the oil. Application of heat and chemicals provide enhanced oil-water separation to ensure that quality specifications are met for oil sales. The current facility design and capacity is efficient and could adequately operate even if oil production doubled from its current rate. The tanks appear to be in adequate mechanical condition; however, aging tanks often develop corrosion problems on the bottoms. Mr. Sampson is in the process of replacing tanks for better compliance with current regulations and to avoid leakage.

The producing wells are chemically treated downhole with corrosion inhibitor as well as biocide to combat sulfatereducing bacteria. Chemical batch treatments are done once per week. The processing facility also uses a demulsifier chemical to remove bound water from the oil to condition it for sales. Demulsifier is introduced at a rate of 2 quarts per day, in addition to heat, in order to aid in oil-water separation for maintaining the 1.0 to 1.5 percent basic sediment and water limit for pipeline quality oil sales. A reverse breaker (flocculent) chemical is also introduced at the Wemco water flotation cell for removing additional oil skim from the produced water. The treated and skimmed water passes through in-line filters prior to being injected downhole in the Newport 3 RD1 waterflood injection well.

Oil is sold to Plains Marketing, L.P. and is delivered via truck-loading equipment onsite. Sales volumes are determined by tank gauging, and run tickets are generated at the point of sale. The truck-loading operation is efficient for the current level of oil production and sales. Even if production increased, the pumper indicated that the facility could efficiently operate with increased truck-loading traffic without issue.

CNB operates the oil field pumping units and production facilities with electricity from the local electric utility, Southern California Edison (SCE). Electricity is used to run the pumping unit motors, saltwater injection pump motor, Wemco, and lights. The CNB wells also produce associated natural gas with the oil production. The total gas volume is not significant; current gas production is estimated at 45 MCF per day. The natural gas has an energy content of approximately 1,160 BTU. Gas analysis reports indicate no hydrogen sulfide is present, so no additional treating or sweetening is required beyond initial separation. Approximately 10 MCF of natural gas per day is consumed onsite to fuel the oil heater. A coil heater is used to heat the oil emulsion to enhance oil-water separation for producing pipeline quality oil for sales. The remaining volume of approximately 35 MCF of gas per day is transported offsite for third-party consumption.

### Well Pumping Options

At this stage of the development, reservoir pressures have decreased to the extent that none of the wells are able to flow without assistance. There are various alternatives available for providing artificial lift for the wells,



including gas lift, progressive cavity pumping, electric submersible pumping, subsurface hydraulic pumping, and beam/sucker rod pumping operations. Based on the fluid characteristics, volume of daily fluid production (both oil and water), and well depths, the existing rod pumping systems are the most applicable system for use. Rod pumping is the most efficient lift operation and is generally characterized by low operating costs and low maintenance requirements relative to the other methods. Page 25 shows a summary of various artificial lift options and their advantages and disadvantages. Our review of production and well file records reveals that the CNB wells have sustained very little mechanical downtime. The pumping units have rod rotators installed to minimize failures by promoting uniform rod wear. The units have safety shut-down devices installed in the event of a rod part. This would prevent the unit from running off-balanced without a rod load, causing a serious pumping unit malfunction. Rod pumping provides high lift efficiency (approximately 50 to 60 percent), positive displacement of fluid for providing strong drawdown across the completion, and the ability to pump heavy oil (API of less than 20 degrees). Additionally, pumping units are economical to repair and provide flexibility to adjust pumping output by adjusting the stroke length, adjusting the pumping unit speed in strokes per minute, or resizing the downhole pump. Rod pumping operates best with fluid output of less than 1,000 barrels of fluid per day per well. CNB's oil field operation is well suited for rod pumping and, as a result, no changes are recommended to the production lift systems that are currently employed.

All wells have been optimized for efficient lift operation. The pumping units are sized accurately for the fluid volumes produced. The wells are also outfitted with pump-off controllers to shut the unit down as the downhole fluid levels fall below the sucker rod pump. This is designed to minimize excess mechanical wear from continuing to pump the well without fluid entry. The wells are also outfitted with time clocks for restarting the pumping units based on projected fluid inflow into the wellbore. Our review of the well files determined that the frequency of well pulling operations was quite low given the age of the wells, which further indicates that the rod pumping operation is being well maintained. Mr. Sampson confirmed that there were some incidents of past casing leaks or collapses that have impacted casing integrity. This could be an issue which would jeopardize future sustained production or the recommended recompletion activities. Some of the wells have had liners installed in the past to repair leaks. Liners can be found inside the production casing for 4 of the 13 active producers. In these wells, the production tubing and rod pump are set above the liner top. Consequently, these wells are not as productive as they could be if the tubing was set lower in the casing. With tubing and pumps set higher in the wellbore, the wells are not able to be pumped down as effectively. The remaining 9 producing wells have maintained casing and production liner integrity, so the tubing is set deep in the well, promoting efficient pumping. Two wells are shut in with casing or liner leaks, which have limited the ability to sustain production. Both of these wells are recommended for future remedial activity.

### Waterflood Operations

A study was conducted in April 2004 by Mr. Merrill Wright, which evaluated waterflood potential for West Newport Field. The conclusions in Mr. Wright's evaluation are based on offset analogy performance from several similar oil operations along the California coast. The study recommended that at least 18,000 barrels of water per day be injected into the existing producing intervals in order to enhance production across the field. This level of injection would require 6 injection wells injecting an average of 3,000 barrels of water per day. In addition, 14 additional production wells were recommended to fully exploit the field. The recommendations from the study were never fully implemented. The surface production facilities were modified to increase the produced water handling capacity of the system to 5,000 barrels per day. A Wemco induced gas flotation cell was installed for enhanced oil skimming of the produced water. These units are very efficient for this service and are often used in offshore operations for treating produced water prior to overboard disposal. The water treating system also includes a sock filter separator for final water filtration prior to injection downhole. This system is very effective for maintaining injected water quality, which should minimize the need for frequent remedial operations in the injection well.

While the surface facilities are adequate to support a waterflood operation, the specified amount of injection water was never achieved. In December 2001 CNB began water injection into the Newport 3 RD1 well. This well is completed in the D0 zone, which is shallower than the D5 zone. The current produced water volume of the field is



approximately 1,200 to 1,300 barrels per day. All of the produced water from West Newport Field is reinjected into the Newport 3 RD1 well. The operator attempted to supplement the daily water injection volume by importing produced water from the nearby West Newport Oil Company operation. This produced water was found to be full of iron sulfide scale and was not suitable for introducing into the system. The particulate would have plugged the sock filters or plugged the formation sandface of the injection well in a short amount of time. Consequently, this alternative source of potential injection water was deemed unacceptable for waterflood operations. Since there is insufficient water for injection at this site, a full-scale waterflood will not be achievable.

We located a memo from Mr. Wright to Mr. Steve Myrter, the CNB Utilities Manager, dated March 26, 2008. In the memo, Mr. Wright opines that after more than 6 years of limited water injection, the waterflood project should be cancelled. The basis for this opinion relates to four specific problems: low daily water injection, no water source wells to supplement existing produced water supplies for injection, an insufficient number of injection wells, and non-conformance of injection and production intervals.

Our studies indicate that since there is only one injection well in operation, and given the complex stratigraphy within the producing intervals, the current injection water is limited to a relatively small reservoir compartment which can only impact a few producing wells. Analyzing the oil production decline trend prior to and after water injection, it appears that water injection has had neither a measurable beneficial effect nor a detrimental effect on oil production. Some West Newport Field producing wells did seem to show increasing water cuts after water injection began, although it is not clear that the water cut increases are the direct result of water injection into the Newport 3 RD1 well. Given the structural and stratigraphic complexity of the field, the high viscosity of the oil, the lack of additional water volumes to inject, and the large number of producing zones, we conclude that this field is not an ideal waterflood candidate.

A significant capital program would be required in order to implement all of the initial study's recommendations. This would require the drilling of 19 additional wells, which may not be feasible given the surface location limitations at the wellsite. A smaller scale waterflood pilot would be a better strategy in order to test the results on a limited area of the reservoir. At this point, the results of the limited water injection to date do not justify further implementation.

While the water injection program has provided little benefit from a secondary oil recovery standpoint, the need for produced water disposal is being adequately met by the current operation. Current water injection can be viewed as a low-cost water disposal method, and since this does not seem to be having any detrimental impact on oil production, it is recommended to continue water injection as a saltwater disposal operation. Previously, produced water was transported to West Newport Oil Company for disposal on their lease. Initially, water disposal cost was \$0.10 per barrel beginning in May 1994. The disposal fee was later increased to \$0.20 per barrel in January 2002. Saltwater disposal at this rate would result in water disposal costs of approximately \$8,000 per month, provided that the unit charge remained at the \$0.20 per barrel rate.

### GAS DISPOSAL

Current natural gas production totals approximately 45 MCF per day from 13 active producing wells. Beginning in 1985, natural gas produced by the CNB wells in excess of that required for lease use was sold to Hoag Memorial Hospital Presbyterian (Hoag). The gas sales agreement was subsequently amended in 2000 and 2003. In 2003 CNB was receiving approximately \$44,000 per year in gas sales proceeds. At that time, a rate increase proposal was issued raising the gas price from \$0.21 per therm to \$0.33 per therm. The proposed rate increase was projected to increase sales revenues of CNB by \$25,000 per year. However, we were advised that Hoag has since renegotiated the terms of the agreement by which they now receive the gas for no compensation. This seems to have occurred at some point after January 2009; however, we could not locate supporting documentation referencing this change to the agreement. At that time, CNB had only one viable outlet for handling its excess gas production. Flaring of natural gas is essentially prohibited. We were told that CNB was faced with shutting in the field or spending the time and resources required to pursue other gas sales options.



Hoag understood that CNB was in a difficult position with little recourse. Consequently, CNB elected to continue transporting the gas to Hoag to avoid additional capital expense, while receiving no compensation for the gas.

There are relatively few options for dealing with the associated gas production. CNB could re-inject it downhole as a form of pressure maintenance for the reservoir, use it for gas lift for artificially lifting the oil wells, continue to deliver it to Hoag without compensation, pursue other sales options, or burn it onsite as fuel for electricity generation. Re-injection would require obtaining a compressor in order to boost the injection pressure sufficiently to overcome the downhole reservoir pressure. This would essentially be a gas disposal operation similar to the waterflood operation as discussed above. The benefit would likely be realized by very few wells. In addition, an additional well would be required as a gas injector. This would involve either recompleting an inactive well or drilling a new well for this purpose. The limited potential reservoir benefit would not justify the capital cost for acquiring a compressor and preparing a gas injection well, with the additional lease operating costs for the service and maintenance of the compressor.

Gas lift injection could also be considered as an alternative use for the associated gas instead of rod pumping the wells. However, gas lift would also require a costly compressor installation similar to the gas injection option. While gas lift is a popular method of artificial lift for many offshore oil production operations, in this case it is not a realistic application. The crude oil gravity of 18.5 degrees API is too low, which would be difficult for efficient lift. Gas lift has a much lower operating efficiency than rod pumping, and the associated gas volumes available are insufficient for a viable, full-field gas lift operation.

We encountered two studies in CNB's files that were conducted to evaluate onsite electrical power generation, one from SCE in 1996 and a 2008 feasibility study published by the California Oil Producers Electric Cooperative (COPE). Both studies addressed general capital cost estimates and benefits for installation of micro turbines for generating electricity onsite with the associated gas production. In the 2008 study, a capital cost of \$600,000 to \$680,000 was assumed for generator installation. The study estimated an approximate 5½-year project payout strictly from the capital cost being offset by revenue generated by the sale of excess power to SCE. It was estimated that the associated gas volume could generate 150 to 180 kilowatts (kW) per day. At the time of the study, CNB's oil field operation consumed an average of 92 kW per day. As a result, the proposed power generated would be twice the requirement for oil field operations and the excess could be sold to the electric utility. During the 5-year period from 2006 through 2011, average electricity cost to CNB was nearly \$75,000 per year. Accounting for the cost savings from no longer purchasing electric power, the project payout is less than 4 years.

We contacted Regatta Solutions, Inc. (Regatta), the regional distributor for Capstone micro turbines in southern California, in order to validate the basic assumptions from the COPE study. We determined that at current conditions, an installation of two 65-kW micro turbine generators would satisfactorily consume the associated gas volumes from West Newport Field. The estimated current capital cost for materials and installation would be approximately \$350,000. An installation of this nature may also gualify for several incentives and tax credits on the state and federal levels; however, these opportunities would require further review prior to quantifying the savings. Further, since waste heat would be utilized to benefit the production process (by heating the crude oil to enhance oil/water separation and de-emulsification), a one-time credit of approximately \$78,000 may be realized from the local electrical utility. If the installation is completed in 2012, there would be no air permit necessary and no Air Quality Management District (AQMD) monitoring requirement. Estimated operating costs for the installation would be approximately \$10,000 per year per unit, for a complete service package including routine preventive maintenance. We estimate that the excess power generated onsite could be sold to SCE for approximately \$0.05 per kW per hour, for an annual revenue of approximately \$17,000. We also assume that a Departing Load Fee of approximately \$1,250 per month would be charged by SCE as a result of discontinuing the purchase of power as a result of customer generation. With the described cost and revenue parameters considered, a reasonable estimate of payout of the micro turbine installation would be approximately 6 years. However, Regatta suggests that payout is approximately from 2 to 3 years when considering all applicable utility and tax credits. In our experience, micro turbine technology is an efficient and typically cost-effective means for onsite power generation. These units are highly efficient, create low levels of emissions, operate with a wide range of fuel compositions (350 to 2,500 BTU), require no lubricants or coolants, and are low maintenance. Many



traditional oil- and gas-producing basins such as the Permian, Piceance, and San Juan Basins utilize micro turbines in their operations. In recent years, many of the developing shale plays such as the Eagle Ford, Marcellus, Haynesville, and Bakken Shale operations are also featuring micro turbine power generation. In addition to power generation, waste heat recovery provides additional operational benefits for oil and gas processing facilities. In CNB's operation, exhaust heat should provide the required heating to enhance oil-water separation and eliminate the need for the existing gas-fueled heater coil. We recommend that onsite power generation be pursued as a means to take advantage of the associated gas that is currently being transported offsite for no compensation, while reducing the operating expense of purchasing power from the local utility.

### RECOMMENDATIONS FOR FUTURE PRODUCTION AND OPERATIONS MANAGEMENT

### Workover Potential

### D5 Zone Potential in the Newport 5, 7, and 9 Wells

The D5 zone has produced throughout West Newport Field. Log analysis of the Newport 5, 7, and 9 wells indicates unperforated pay in the D5 zone in these wells, which is uphole to the current completions. Structure mapping indicates that these wells are in a separate fault block from the main part of the field, and that the D5 oil should still be in place in the reservoir. Of the three wells, the Newport 7 well is the most downdip and likely not ideally situated in the D5 zone to make a good completion. The Newport 5 well is updip to the Newport 7, but downdip to the Newport 9. Both the Newport 5 and 9 wells are adequately positioned to produce oil from the D5 zone. Monte Carlo simulation was done using the estimated ranges of gross rock volume (GRV), net-to-gross ratio (NTG), porosity ( $\Phi$ ), water saturation (S<sub>w</sub>), oil saturation (S<sub>o</sub>), and oil formation volume factor (B<sub>o</sub>) to estimate oil in place. A range was also assumed for the oil recovery factor (RF). These ranges are shown in the following table:

Parameter	Units	P90	P10
GRV	Ac-Ft	1,473	1,768
NTG	Fraction	0.50	0.90
Φ	Fraction	0.28	0.32
Sw	Fraction	0.55	0.30
So	Fraction	0.45	0.70
B	RB/STB	1.20	1.10
RF	Fraction	0.05	0.25

All of the distributions used for the input parameters are normal distributions. The original oil-in-place (OOIP) and estimated ultimate recovery (EUR) volumes for the D5 reservoir based on these inputs are shown in the following table:

OOIP 1,303	838	1,277	1,798

Probable reserves estimated for the Newport 5 and 9 wells are one half of the P50 volume of 186 thousand barrels (MBBL) of oil, or 93 MBBL of oil each, prior to consideration of field- and well-level economics. The Newport 9 well is currently forecasted to produce to the end of the field's economic life. Thus, the current completion will need to either be shut-in or commingled with the uphole D5 zone in order to execute this workover. For the purposes of this report, we have assumed that the existing completion is shut-in when the



uphole recomplete is executed. The Newport 5 well is currently shut-in, so there is no loss of future net revenue associated with shutting in an existing completion to move uphole.

There is a producibility risk of making an economic completion in these wells because of the age and quality of the open-hole logs. Also, because of the age of the wellbores, there is mechanical risk of being able to successfully execute the workovers.

The capital required for executing the workovers on the Newport 5 and Newport 9 wells are estimated to be \$230,000 and \$172,000, respectively.

### C Zone Potential in the Newport 1 Well

The C zone has not been produced in West Newport Field. Based on log analysis of the Newport 1 well, there is uphole potential in the C zone in this well. Using similar methodology to the D5 zone, we have estimated a range of various volumetric input parameters, as shown below:

Parameter	Units	P90	P10	P1
Area	Ac-Ft	1		5
Net Pay	Feet	50	125	
Φ	Fraction	0.28	0.32	
Sw	Fraction	0.55	0.30	
So	Fraction	0.45	0.70	
Bo	RB/STB	1.25	1.05	
RF	Fraction	0.05	0.25	

For the area parameter, a lognormal distribution has been assumed using input values at P90 and P1. The potential reservoir area is bounded to the south, where the C zone appears to be wet based on log analysis. The area may extend to the north beyond well control to an estimated maximum area of 5 acres. This maximum value represents the P1 value of the lognormal probability distribution rather than the P10 value. For the other input distributions, we have assumed a normal distribution with the range defined by P90 and P10. All other parameters are normally distributed in our Monte Carlo analysis. Using the ranges above yields OOIP and EUR volumes as follows:

	Mean (MBBL)	P90 (MBBL)	P50 (MBBL)	P10 (MBBL)
OOIP	201	74	170	364
EUR	31	7	24	63

Probable reserves are estimated for the Newport 1 well at 24 MBBL of oil. An investment of \$145,000 is estimated to be required to recomplete this well. In our reserves analysis, we have assumed the Newport 1 existing completion must be shut in to produce the volumes out of the uphole C zone, although additional upside potential could exist to commingle the existing completion with the C zone recomplete.

The primary risks associated with this work are producibility of the zone, given it has not proven productive elsewhere in the field, and the mechanical condition of the well due to its age.

### Return to Production Newport 15 Well

The Newport 15 well is currently shut-in because of downhole mechanical issues resulting from excessive sand production. We have estimated that an investment of \$300,000 will be required to repair the well and bring it back online to its historical production trend. The primary risks associated with this work are mechanical, as numerous



interventions have been tried recently to bring this well back online, with none having been successful in sustaining production to date. Our investigation of well file data and discussions with the pumper suggest that the 5½-inch production liner has failed, allowing formation sand to enter the wellbore, which ultimately results in pump failure. Well servicing reports suggest that a collapse or hole has developed in the perforated liner at approximately 6,140 feet. The required workover would include cleaning out the wellbore to total depth and attempting to wash over the liner. If successful, it is recommended to pull the liner and replace it with a new liner across the existing completion interval. If pulling is unsuccessful, it is recommended to cut the liner and attempt to at least complete the upper interval of the existing completion. Probable reserves are estimated for this well based on the extrapolation of its historical production trends.

### Exploratory Drilling Potential

### Deeper Than Newport Zone in the Main Fault Block

The Deeper Than Newport (DTN) interval has only been produced in the western portion of West Newport Field. The penetrations in the main (southeastern) part of the field have all been wet based on log analysis. It appears that there is potential to target this interval higher on structure, which could yield a discovery of hydrocarbons.

The DTN zone is sand-rich. The hydrocarbon source and charge in this area is believed to be low risk. The anticline structure is present in the D5, SAN, and Newport zones and is assumed to be present updip of the wet penetrations. However, there is a risk that the structure does not extend down to this level. Also, additional faulting may exist in the DTN zone that is not present at shallower depths, which could raise the seal risk given the sand-rich nature of this zone. The chance of finding hydrocarbons updip of the wet penetrations is favorable; however, there remain factors that give this prospect risk. A better understanding of the subsurface geology could be achieved with acquisition of seismic data over the West Newport Field area. However, this may not be feasible given the high costs, logistical challenges of shooting in a populated area through a land and sea transition, and very shallow reservoirs.

We have used Monte Carlo analysis to estimate the potential range of volumes should a discovery be made in the DTN zone. Input parameters are shown below:

Parameter	Units	P90	P10	P1
	· -·	_		50
Area	Acre-Ft	5		50
Net Pay	Feet	50	125	
Φ	Fraction	0.28	0.32	
Sw	Fraction	0.55	0.30	
So	Fraction	0.45	0.70	
Bo	RB/STB	1.25	1.05	
RF	Fraction	0.05	0.25	

All parameters are assumed to be normally distributed with the exception of the area, which is lognormally distributed using the P90 and P1 values as inputs. The range of OOIP and recoverable volumes is presented below:

	Mean	P90	P50	P10
	(MBBL)	(MBBL)	(MBBL)	(MBBL)
OOIP	1,427	395	1,090	2,846
EUR	222	39	153	478



The estimated cost to drill and complete a new well into this zone is \$1.2 million. Based on analogy to similarly sized prospective resources, if a discovery is made, it is likely to be economic in the current price and cost environment.

### Summary of Upside Potential

A summary of the incremental net reserves and incremental present value of each of the upside opportunities is presented below:

		Capital		Proba C	able Incren )il Reserve (MBBL)	nental es	Prob F	able Increm Present Valu (M\$)	ental e
Well	Opportunity Type	Cost (M\$)	Workover Date	Low Price	Base Price	High Price	Low Price	Base Price	High Price
Newport 1 RD2	Uphole Recomplete	145.0	July 2021	17.0	13.0	10.4	323.5	383.3	448.5
Newport 5 BP1	Uphole Recomplete	230.0	January 2014	80.5	85.2	86.3	2,729.6	3,576.2	4,401.4
Newport 9 STB	Uphole Recomplete	172.0	July 2016	65.7	68.3	68.2	1,947.1	2,504.6	3,039.0
Newport 15 RD1	Return to Production	300.0	January 2014	16.7	17.6	18.2	194.4	370.6	548.9

The four workovers have been scheduled in our economic model as shown above. As discussed in previous paragraphs, the Newport 1 and Newport 9 wells are currently producing. Adding perforations in the uphole zones could require early abandonment of the existing producing zones. For this reason, these workovers are assumed to be completed further out in time compared to the workovers on the Newport 5 and Newport 15 wells, which are currently shut-in. Each of these opportunities has risk commensurate with its classification as probable reserves and different levels of expenditure required, as discussed in the previous paragraphs. The cost, benefit, and risk tolerance levels must all be considered when prioritizing the well work.

### **Future Operations Management**

Within the scope of this project, we were also requested to opine on alternative future management options for the CNB oil operations. To determine the best means for future operation, an understanding of CNB's ultimate strategy must be considered. West Newport Field is presently managed by CNB's Municipal Operations Department, with onsite maintenance and supervision provided by a contract operator. Our review of the West Newport Field operating cost records suggests that this is a low cost operation relative to our knowledge of other similar fields in the region. Based on our onsite review of the operations, we consider the equipment to be adequately maintained and suitable for the intended purpose. The well production is consistent, with few mechanical breakdowns observed with the rod pumping equipment, and operational downtime is minimal. If CNB intends to simply operate the existing wells without significant capital investment for drilling or recompletion activities to enhance the value or cash flow, then the present mode of management is satisfactory and should be continued until the field economic limit is achieved.

If CNB intends to maximize the potential value of the assets, then capital investment will be required. It should be reiterated that the potential upside opportunities identified in this report also carry operational and reservoir risk. Since all of the wells are over 50 years old, mechanical risk is always a concern when performing downhole recompletion or remedial activities. However, if CNB can tolerate the risk and has the access to required capital, the upside opportunities should be considered. This work program can also be accomplished within the current operations management scenario since the pumper, by our observation, seems to display the knowledge and experience required to conduct the activities. All downhole operations would likely be conducted by contract service personnel under the supervision of the pumper. However, if CNB does not have access to the required



capital for the identified work program, a working interest or joint venture partner could be considered. There are many ways to structure a potential partnership depending on how much working interest must be surrendered in order to attract the necessary capital.

Finally, if CNB does not have an appetite for the necessary future capital investment to exploit the identified opportunities, nor the desire to continue the status quo operation to produce the remaining proved reserves over a 20-year period, it may be an opportune time to divest the assets. There are generally numerous companies looking to acquire oil-producing properties, especially in light of the current low natural gas price environment, that may be interested in purchasing the assets outright. This option would be a means to generate a significant cash payment to CNB for its general use or for the Tidelands Fund. One attractive aspect of the sale of assets option would be that CNB would avoid the future cost of well and facility abandonment. It is reasonable to expect that an asset sale would generate an offer price that would cover the value of proved developed producing reserves and some risked portion of probable reserves. Some consideration may be realized for the prospective resources.









![](_page_43_Figure_0.jpeg)

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

NETHERLAND, SEWELL & ASSOCIATES, INC.

![](_page_44_Figure_1.jpeg)

![](_page_45_Figure_0.jpeg)

![](_page_46_Figure_0.jpeg)

![](_page_46_Figure_1.jpeg)

![](_page_47_Picture_0.jpeg)

#### SUMMARY OF GROSS HISTORICAL PRODUCTION WEST NEWPORT FIELD AS OF DECEMBER 31, 2011

API Number	Completion Name	Reservoir	First Production Date	Last Production Date	Oil Cum (BBL)	Gas Cum (MCF)
04250051820000		Nounart	12/1052	05/1060	54 741	10 595
04259051620000		Newport SAN	12/1953	10/1070	192.072	19,000
04259051820000		SAN DE CAN	06/1960	10/1970	182,072	31,031
04259051820100		DO, SAN	12/1970	06/2011	199,930	71,915
04259051830100	NEWPORT 2 RD1 SI	D0, D5	03/1954	09/1960	127,582	26,741
04259051830100	NEWPORT 2 RD1 SI	D5	10/1960	04/1963	32,000	9,707
04259051830100	NEWPORT 2 RD1 SI	D0, D5	05/1963	09/1970	66,716	12,518
04259051830200	NEWPORT 2 RD2	2747-3477 MD	10/1970	06/2011	232,115	50,879
04259051840000	NEWPORT 3 SI	Newport	08/1954	07/1966	59,296	24,528
04259051840100	NEWPORT 3 RD1 SI	D0, D5	09/1970	11/2000	88,251	25,285
04259051840100	NEWPORT 3 RD1 WINJ	D0			0	0
04259051850000	NEWPORT 4	D0, D5	09/1954	06/2011	294,025	84,184
04259051860000	NEWPORT 5 SI	Newport	10/1954	12/1976	129,743	68,490
04259051860000	NEWPORT 5 SI	SAN, D5	07/1977	02/2007	27,030	19,523
04259051870100	NEWPORT 6 RD1	Newport	01/1955	06/2011	752,913	276,903
04259051880000	NEWPORT 7 SI	DTN	06/1955	09/1956	13,781	6,130
04259051880100	NEWPORT 7 RD1	DTN	10/1956	06/2011	184,257	66,441
04259051890100	NEWPORT 8 RD1	SAN, Newport	03/1955	06/2011	553,808	208,927
04259051900200	NEWPORT 9 STB	Newport	05/1955	06/2011	365,964	129,562
04259051910100	NEWPORT 10 RD1	3755-3964 MD	09/1955	06/2011	403,829	209,324
04259051920000	NEWPORT 11 SI	SAN, Newport	11/1955	05/1962	81,002	36,122
04259051920000	NEWPORT 11 SI	D0, D5	06/1962	04/1963	14,949	6,790
04259051920000	NEWPORT 11 SI	D0, D5 Frack Pack	05/1963	12/1970	76,580	11,159
04259051920100	NEWPORT 11 RD1	D0. D5	01/1971	06/2011	282,980	70,749
04259051930100	NEWPORT 12 RD1 SI	D0	01/1956	03/1957	23,985	7,796
04259051930200	NEWPORT 12 RD2 SI	D0, D5	04/1957	05/1961	65,332	17,968
04259051930500	NEWPORT 12 RD5	D0. D5	06/1961	06/2011	260,743	83.215
04259051940200	NEWPORT 13 RD2	DTN	07/1956	06/2011	488,835	186,093
04259051950200	NEWPORT 14 RD2 SI	D0. D5	08/1957	05/1962	86.803	30,173
04259051950300	NEWPORT 14 RD3 SI	Newport, SAN	07/1962	10/1971	42,737	36.309
04259051950300	NEWPORT 14 RD3	D0. Newport, SAN	11/1971	06/2011	80.504	35.699
04259051960100	NEWPORT 15 RD1 SI	DTN	12/1957	04/2011	299 182	113 979
04259051970200	NEWPORT 16 RD2 SI	DTN	04/1958	04/1961	21,527	2,917
04259051970300	NEWPORT 16 RD3 SI	DTN	05/1961	09/1963	30,379	5,959
04259051970300	NEWPORT 16 RD3	DTN	07/1978	06/2011	41 505	23 483
0.20000.0100000			01/1010	00/2011	,000	20,100

Note: Production current through June 2011. Wells still producing at the as of date.

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![](_page_48_Picture_0.jpeg)

### SUMMARY OF ARTIFICIAL LIFT TECHNOLOGY

	Pump Type	Electric Submersible	Beam/Sucker Rod	Progressive Cavity	Subsurface Hydraulic	Gas Lift
(0	High Volume	Х		Х	Х	Х
nres	High Volume Capacity	Х			Х	Х
Feat	Low Maintenance	Х	Х	Х		
ive	Economical to Repair/Service		Х	Х	Х	Х
Posit	Low Capital Investment		Х	Х		
	Pump Heavy Oil		Х	Х		
	Limited Lift Capabilities			< 5,000 ft		
	High Initial Capital Cost	Х			XX	XX
sối	High Power Consumption	Х		Х		
omin	Limited Ability to Pump Sand	Х	Х		Х	Х
ortco	Operating Complexity/Difficulty				Х	Х
Ŝ	If Prime Mover Fails, all Wells Stop				Х	Х
	Maintenance Intensive				Х	Х
	Requires Source for Gas for Injection					Х

Adapted from www.coscoesp.com/esp/basic artificial lift tech paper/Basic Artificial Lift.pdf

APPENDIX

![](_page_50_Picture_0.jpeg)

### ECONOMIC PARAMETERS LOW PRICE CASE SENSITIVITY WEST NEWPORT FIELD, ORANGE COUNTY, CALIFORNIA AS OF DECEMBER 31, 2011

As requested, a Low Price Case Sensitivity has been prepared to demonstrate the sensitivity of reserves and future net revenue to oil price. The oil price is based on the 12-month unweighted arithmetic average of the first-day-of-the-month Brent Crude price for each month in the period January through December 2011. The average price of \$111.02 per barrel is reduced by \$20.00 per barrel and then adjusted for quality, transportation fees, and a local price differential. The adjusted oil price of \$79.35 per barrel is held constant throughout the lives of the properties.

As requested, operating costs are held constant throughout the lives of the properties and capital costs and abandonment costs are held constant to the date of expenditure.

![](_page_51_Picture_0.jpeg)

#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	NET RESERVES			AVE	RAGE PRICE	S		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	0	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/	/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	24,045	0	13,212	22,361	0	(	)	79.350	0.000	0.000	1,774.3	0.0	0.0	1,774.3
12-31-2013	22,970	0	12,613	21,363	0	(	)	79.350	0.000	0.000	1,694.9	0.0	0.0	1,694.9
12-31-2014	21,942	0	12,041	20,405	0	(	)	79.350	0.000	0.000	1,619.4	0.0	0.0	1,619.4
12-31-2015	20,964	0	11,494	19,498	0	(	)	79.350	0.000	0.000	1,547.1	0.0	0.0	1,547.1
12-31-2016	19,860	0	10,880	18,473	0	(	)	79.350	0.000	0.000	1,465.7	0.0	0.0	1,465.7
12-31-2017	18,646	0	10,206	17,342	0	(	)	79.350	0.000	0.000	1,375.8	0.0	0.0	1,375.8
12-31-2018	17,815	0	9,741	16,565	0	(	)	79.350	0.000	0.000	1,314.6	0.0	0.0	1,314.6
12-31-2019	17,022	0	9,302	15,830	0	(	)	79.350	0.000	0.000	1,256.2	0.0	0.0	1,256.2
12-31-2020	16,263	0	8,879	15,126	0	(	)	79.350	0.000	0.000	1,200.4	0.0	0.0	1,200.4
12-31-2021	15,541	0	8,477	14,452	0	(	)	79.350	0.000	0.000	1,147.0	0.0	0.0	1,147.0
12-31-2022	14,853	0	8,095	13,813	0	(	)	79.350	0.000	0.000	1,096.0	0.0	0.0	1,096.0
12-31-2023	14,192	0	7,730	13,200	0	(	)	79.350	0.000	0.000	1,047.3	0.0	0.0	1,047.3
12-31-2024	13,566	0	7,381	12,615	0	(	)	79.350	0.000	0.000	1,000.9	0.0	0.0	1,000.9
12-31-2025	12,963	0	7,050	12,056	0	(	)	79.350	0.000	0.000	956.7	0.0	0.0	956.7
12-31-2026	9,345	0	5,087	8,689	0	(	)	79.350	0.000	0.000	689.6	0.0	0.0	689.6
SUBTOTAL	259,987	0	142,188	241,788	0	(	)	79.350	0.000	0.000	19,185.9	0.0	0.0	19,185.9
REMAINING	0	0	0	0	0	(	)	0.000	0.000	0.000	0.0	0.0	0.0	0.0
TOTAL	259,987	0	142,188	241,788	0	(	)	79.350	0.000	0.000	19,185.9	0.0	0.0	19,185.9
CUM PROD	5,677,670		2,037,693											
ULTIMATE	5,937,657		2,179,881											

				NET DEDUCTIONS	EXPENDITURES	5		FUTURE NET	REVENUE			
PERIOD	NUMBER	ROF	TA	XES	CAPITAL	OPERATING	UNDISCOL	JNTED	DISCOUNTED A	T 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	EXPENSE	PERIOD	CUM	PERIOD	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	12	12.00	0.0	0.0	0.0	940.4	833.9	833.9	795.7	795.7	8.000	3,587.1
12-31-2013	12	12.00	0.0	0.0	0.0	940.4	754.5	1,588.4	654.5	1,450.2	12.000	3,305.8
12-31-2014	12	12.00	0.0	0.0	0.0	940.4	679.0	2,267.4	535.3	1,985.5	15.000	3,100.4
12-31-2015	12	12.00	0.0	0.0	0.0	940.4	606.7	2,874.1	434.8	2,420.3	20.000	2,786.3
12-31-2016	12	12.00	0.0	0.0	0.0	927.9	537.8	3,411.9	350.5	2,770.8	25.000	2,519.5
12-31-2017	11	11.00	0.0	0.0	0.0	902.8	473.0	3,884.9	280.4	3,051.2	30.000	2,295.3
12-31-2018	11	11.00	0.0	0.0	0.0	902.8	411.8	4,296.7	221.9	3,273.1	35.000	2,108.2
12-31-2019	11	11.00	0.0	0.0	0.0	902.8	353.4	4,650.1	173.1	3,446.2	40.000	1,949.9
12-31-2020	11	11.00	0.0	0.0	0.0	902.8	297.6	4,947.7	132.2	3,578.4	45.000	1,816.8
12-31-2021	11	11.00	0.0	0.0	0.0	902.8	244.2	5,191.9	98.9	3,677.3	50.000	1,702.0
12-31-2022	11	11.00	0.0	0.0	0.0	902.8	193.2	5,385.1	71.1	3,748.4		
12-31-2023	11	11.00	0.0	0.0	0.0	902.8	144.5	5,529.6	48.5	3,796.9		
12-31-2024	11	11.00	0.0	0.0	0.0	902.8	98.1	5,627.7	29.8	3,826.7		
12-31-2025	11	11.00	0.0	0.0	0.0	902.8	53.9	5,681.6	14.9	3,841.6		
12-31-2026	11	11.00	0.0	0.0	0.0	677.1	12.5	5,694.1	3.4	3,845.0		
SUBTOTAL			0.0	0.0	0.0	13,491.8	5,694.1	5,694.1	3,845.0	3,845.0		
REMAINING			0.0	0.0	1,775.0	0.0	-1,775.0	3,919.1	-397.2	3,447.8		
TOTAL OF 15.7 YI	RS		0.0	0.0	1,775.0	13,491.8	3,919.1	3,919.1	3,447.8	3,447.8		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

![](_page_52_Picture_0.jpeg)

#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

#### PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GR	OSS RESERV	'ES	N	ET RESERVE	S		GROSS RE	EVENUE		TOTAL	NET CAP	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	TAXES	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFORM	NIA								
NEW	PORT, W FIELD, ORANGE CO	DUNTY														
000180	NWPRT 1 RD2	20,339	0	20,542	18,915	0	0	1,500.9	0.0	0.0	1,500.9	0.0	0.0	554.6	946.3	570.5
000190	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000200	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000400	NWPRT 2 RD2	23,362	0	10,933	21,726	0	0	1,724.1	0.0	0.0	1,724.1	0.0	0.0	554.6	1,169.5	687.2
000410	NWPRT 3 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000430	NWPRT 3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000440	NWPRT 4	24,688	0	9,949	22,960	0	0	1,822.0	0.0	0.0	1,822.0	0.0	0.0	554.6	1,267.4	765.0
000460	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000450	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000470	NWPRT 6 RD1	33,805	0	19,303	31,439	0	0	2,494.6	0.0	0.0	2,494.6	0.0	0.0	554.6	1,940.0	1,175.1
000480	NWPRT 7 RD1	2,618	0	1,458	2,435	0	0	193.2	0.0	0.0	193.2	0.0	0.0	175.5	17.7	15.3
000490	NWPRT 7 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000500	NWPRT 8 RD1	34,786	0	10,783	32,351	0	0	2,567.1	0.0	0.0	2,567.1	0.0	0.0	554.6	2,012.5	1,175.2
000510	NWPRT 9 STB	17,521	0	7,061	16,295	0	0	1,292.9	0.0	0.0	1,292.9	0.0	0.0	554.6	738.3	447.2
000210	NWPRT 10 RD1	19,881	0	11,491	18,489	0	0	1,467.1	0.0	0.0	1,467.1	0.0	0.0	554.6	912.5	537.2
000220	NWPRT 11 RD1	17,427	0	18,473	16,207	0	0	1,286.1	0.0	0.0	1,286.1	0.0	0.0	554.6	731.5	452.3
000240	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000250	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000230	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000280	NWPRT 12 RD5	13,811	0	7,237	12,844	0	0	1,019.1	0.0	0.0	1,019.1	0.0	0.0	554.6	464.5	291.7
000290	NWPRT 13 RD2	35,656	0	17,329	33,160	0	0	2,631.2	0.0	0.0	2,631.2	0.0	0.0	554.6	2,076.6	1,224.5
000300	NWPRT 14 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000310	NWPRT 14 RD3	16.093	0	7.629	14.967	0	0	1.187.6	0.0	0.0	1.187.6	0.0	0.0	554.6	633.0	378.0
000320	NWPRT 14 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000350	NWPRT 16 RD3	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	0	ů 0	ů 0	ů 0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000170		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	7 215 7	-7 215 7	-3 874 2
000570		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	1 775 0	0.0	-1 775 0	-397.2
000370		250 087	0	1/2 188	2/1 788	0	0	10 185 0	0.0	0.0	10 185 0	0.0	1,775.0	13 /01 8	3 010 1	3 117 8
-		253,307	0	142,100	241,700	0	0	10,105.9	0.0	0.0	10 195 0	0.0	1,775.0	12 404 9	2 010 4	2 4 47 0
-		209,987	0	142,108	241,700	0	0	19,100.9	0.0	0.0	19,103.9	0.0	1,775.0	10,491.8	3,919.1	3,447.8
1	UTAL ALL LEASES	259,987	0	142,188	241,788	0	0	19,185.9	0.0	0.0	19,185.9	0.0	1,775.0	13,491.8	3,919.1	3,447.8

![](_page_53_Picture_0.jpeg)

## BASIC DATA

CITY OF NEWPORT BEACH INTEREST

AG OF DECEMBER 31, 2011
PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			AC	TIVE	GROSS UL	TIMATE	WOR	KING	REVE	NUE	OIL/C	OND	NO	SL.	GA	S	GROSS OF	ERATING	
LEASE			COM	PLTNS	OIL/COND	GAS	INTE	REST	INTER	REST	\$/B	BL	\$/B	BL	\$/M	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOF	RNIA											
NEWF	PORT, W FIELD, ORANGE C	OUNTY																	
000180	NWPRT 1 RD2	D5, SAN	1	0	221,230	93,428	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000190	NWPRT 1 SI	NWPT	0	0	54,741	19,585	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000200	NWPRT 1 SI	SAN	0	0	182,072	51,631	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	D0, D5	0	0	127,582	26,741	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	D0, D5	0	0	66,716	12,518	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	D5	0	0	32,000	9,707	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000400	NWPRT 2 RD2	2747-3477 MD	1	0	256,523	62,302	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000410	NWPRT 3 RD1 SI	D0, D5	0	0	88,251	25,285	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	D0	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000430	NWPRT 3 SI	NWPT	0	0	59,296	24,528	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000440	NWPRT 4	D0, D5	1	0	319,921	94,620	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000460	NWPRT 5 SI	NWPT	0	0	129,743	68,490	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000450	NWPRT 5 SI	SAN, D5	0	0	27,030	19,523	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000470	NWPRT 6 RD1	NWPT	1	0	788.462	297.202	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000480	NWPRT 7 RD1	DPR THN NWPT	1	0	187,186	68.072	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	4.7
000490	NWPRT 7 SI	DPR THN NWPT	0	0	13,781	6.130	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000500	NWPRT 8 RD1	SAN, NWPT	1	0	590,180	220,202	100.000	100.000	93.000	93,000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000510	NWPRT 9 STB	NWPT	1	0	384,298	136.951	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000210	NWPRT 10 RD1	3755-3964 MD	1	0	424,584	221.320	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000220	NWPRT 11 RD1	D0. D5	1	0	301,260	90,126	100.000	100.000	93.000	93,000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000240	NWPRT 11 SI	D0. D5	0	0	14,949	6,790	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000250	NWPRT 11 SI	D0 D5 FRC PCK	0	0	76,580	11 159	100 000	100 000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000230	NWPRT 11 SI	SAN, NWPT	0	0	81.002	36,122	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	D0	0	0	23,985	7 796	100 000	100 000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	D0 D5	0	0	65,332	17,968	100.000	100.000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000280	NWPRT 12 RD5	D0, D5	1	0	275.206	90,794	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000290	NWPRT 13 RD2	DPR THN NWPT	1	0	526 176	204 241	100 000	100 000	93 000	93 000	79 350	79 350	0.000	0.000	0.000	0.000	31	3.1	14 7
000300	NWPRT 14 RD2 SI	D0 D5	0	0	86 803	30 173	100.000	100.000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000310	NWPRT 14 RD3	DO NWPT SAN	1	0	97 305	43 663	100.000	100.000	93.000	93.000	79.350	79 350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000320	NWPRT 14 RD3 SI	NWPT SAN	0	0	42 737	36,309	100.000	100.000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	DPR THN NWPT	0	0	299 182	113 979	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	DPR THN NWPT	0	0	21 527	2 917	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000350	NWPRT 16 RD3	DPR THN NWPT	0	0	41 638	23,650	100.000	100.000	93 000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	DPR THN NWPT	0	0	30 379	5 959	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000170			0	0	00,070	0,000	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	1/1 7
000570			0	0	0	0	100.000	100.000	03.000	03.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.0	-0.0	15.7
000070			10	0	E 007 CE7	0 170 991	100.000	100.000	55.000	55.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	10.7
_			12	0	5,937,057	2,1/9,881													
T	UTAL CALIFORNIA		12	0	5,937,657	2,179,881													
T	OTAL ALL LEASES		12	0	5,937,657	2,179,881													

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#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	VET RESERVES			AVE	RAGE PRICE	S		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL		NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BB	L	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	0	0	0	0	0	C	0 0	.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2013	0	0	0	0	0	C	0 0	.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2014	12,529	0	5,052	11,651	0	C	79	.350	0.000	0.000	924.5	0.0	0.0	924.5
12-31-2015	11,275	0	4,547	10,487	0	C	79	.350	0.000	0.000	832.1	0.0	0.0	832.1
12-31-2016	13,897	0	5,589	12,924	0	C	79	.350	0.000	0.000	1,025.5	0.0	0.0	1,025.5
12-31-2017	17,677	0	7,096	16,440	0	C	79	.350	0.000	0.000	1,304.4	0.0	0.0	1,304.4
12-31-2018	15,836	0	6,358	14,728	0	C	79	.350	0.000	0.000	1,168.7	0.0	0.0	1,168.7
12-31-2019	14,182	0	5,694	13,190	0	C	79	.350	0.000	0.000	1,046.7	0.0	0.0	1,046.7
12-31-2020	12,699	0	5,098	11,809	0	C	79	.350	0.000	0.000	937.0	0.0	0.0	937.0
12-31-2021	12,935	0	4,710	12,028	0	C	79	.350	0.000	0.000	954.3	0.0	0.0	954.3
12-31-2022	13,653	0	4,528	12,697	0	C	79	.350	0.000	0.000	1,007.5	0.0	0.0	1,007.5
12-31-2023	11,932	0	3,906	11,096	0	C	79	.350	0.000	0.000	880.5	0.0	0.0	880.5
12-31-2024	10,421	0	3,361	9,694	0	C	79	.350	0.000	0.000	769.1	0.0	0.0	769.1
12-31-2025	9,100	0	2,884	8,463	0	C	79	.350	0.000	0.000	671.5	0.0	0.0	671.5
12-31-2026	10,984	0	4,123	10,214	0	C	79	.350	0.000	0.000	810.6	0.0	0.0	810.6
SUBTOTAL	167,120	0	62,946	155,421	0	C	79	.350	0.000	0.000	12,332.4	0.0	0.0	12,332.4
REMAINING	72,325	0	33,525	67,261	0	C	79	.350	0.000	0.000	5,337.4	0.0	0.0	5,337.4
TOTAL	239,445	0	96,471	222,682	0	C	79	.350	0.000	0.000	17,669.8	0.0	0.0	17,669.8
CUM PROD	0		0											
ULTIMATE	239,445		96,471											

				NET DEDUCTIONS	EXPENDITURES			FUTURE NET	REVENUE			
PERIOD	NUMBER	ROF	TAX	KES	CAPITAL	OPERATING	UNDISCOL	JNTED	DISCOUNTED A	T 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	EXPENSE	PERIOD	CUM	PERIOD	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.000	6,020.8
12-31-2013	0	0.00	0.0	0.0	530.0	0.0	-530.0	-530.0	-443.3	-443.3	12.000	4,544.8
12-31-2014	2	2.00	0.0	0.0	0.0	75.2	849.3	319.3	670.1	226.8	15.000	3,733.0
12-31-2015	2	2.00	0.0	0.0	0.0	75.2	756.9	1,076.2	542.8	769.6	20.000	2,757.4
12-31-2016	2	2.00	0.0	0.0	172.0	72.1	781.4	1,857.6	504.0	1,273.6	25.000	2,093.4
12-31-2017	2	2.00	0.0	0.0	0.0	75.2	1,229.2	3,086.8	728.6	2,002.2	30.000	1,627.1
12-31-2018	2	2.00	0.0	0.0	0.0	75.2	1,093.5	4,180.3	589.2	2,591.4	35.000	1,291.2
12-31-2019	2	2.00	0.0	0.0	0.0	75.2	971.5	5,151.8	475.8	3,067.2	40.000	1,042.0
12-31-2020	2	2.00	0.0	0.0	0.0	75.2	861.8	6,013.6	383.8	3,451.0	45.000	852.5
12-31-2021	2	2.00	0.0	0.0	145.0	72.1	737.2	6,750.8	297.0	3,748.0	50.000	706.7
12-31-2022	2	2.00	0.0	0.0	0.0	75.2	932.3	7,683.1	343.2	4,091.2		
12-31-2023	2	2.00	0.0	0.0	0.0	75.2	805.3	8,488.4	269.5	4,360.7		
12-31-2024	2	2.00	0.0	0.0	0.0	75.2	693.9	9,182.3	211.2	4,571.9		
12-31-2025	2	2.00	0.0	0.0	0.0	75.2	596.3	9,778.6	164.9	4,736.8		
12-31-2026	11	11.00	0.0	0.0	0.0	300.9	509.7	10,288.3	128.3	4,865.1		
SUBTOTAL			0.0	0.0	847.0	1,197.1	10,288.3	10,288.3	4,865.1	4,865.1		
REMAINING			0.0	0.0	0.0	4,370.1	967.3	11,255.6	352.2	5,217.3		
TOTAL OF 20.7 YF	RS		0.0	0.0	847.0	5,567.2	11,255.6	11,255.6	5,217.3	5,217.3		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

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#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GRO	OSS RESERVI	ES	N	ET RESERVES	S		GROSS RE	EVENUE		TOTAL	NET CAP	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	TAXES	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFORM	IIA								
NEWF	ORT, W FIELD, ORANGE CO	UNTY														
000680	NWPRT 1 RD2 IPB	-5,721	0	-5,778	-5,320	0	0	-422.3	0.0	0.0	-422.3	0.0	0.0	-197.4	-224.9	-72.7
000520	NWPRT 1 RD2 BP	24,000	0	8,400	22,320	0	0	1,771.0	0.0	0.0	1,771.0	0.0	145.0	296.7	1,329.3	396.2
000710	NWPRT 2 RD2 EXT	5,285	0	2,473	4,915	0	0	390.0	0.0	0.0	390.0	0.0	0.0	185.0	205.0	40.7
000720	NWPRT 4 EXT	4,866	0	1,961	4,525	0	0	359.0	0.0	0.0	359.0	0.0	0.0	185.0	174.0	34.8
000530	NWPRT 5 BP1	86,570	0	34,628	80,510	0	0	6,388.4	0.0	0.0	6,388.4	0.0	230.0	664.4	5,494.0	2,729.6
000730	NWPRT 6 RD1 EXT	6,120	0	3,495	5,692	0	0	451.7	0.0	0.0	451.7	0.0	0.0	185.0	266.7	53.2
000540	NWPRT 7 RD1 BP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	7,659	0	2,374	7,122	0	0	565.2	0.0	0.0	565.2	0.0	0.0	185.0	380.2	75.3
000690	NWPRT 9 STB IPB	-10,945	0	-4,411	-10,179	0	0	-807.7	0.0	0.0	-807.7	0.0	0.0	-385.4	-422.3	-187.5
000560	NWPRT 9 STB BP	81,585	0	32,634	75,874	0	0	6,020.7	0.0	0.0	6,020.7	0.0	172.0	567.3	5,281.4	2,134.6
000750	NWPRT 10 RD1 EXT	4,621	0	2,671	4,297	0	0	341.0	0.0	0.0	341.0	0.0	0.0	185.0	156.0	31.0
000760	NWPRT 11 RD1 EXT	3,435	0	3,641	3,194	0	0	253.5	0.0	0.0	253.5	0.0	0.0	185.0	68.5	13.9
000770	NWPRT 12 RD5 EXT	2,878	0	1,508	2,676	0	0	212.4	0.0	0.0	212.4	0.0	0.0	185.0	27.4	5.7
000780	NWPRT 13 RD2 EXT	7,430	0	3,611	6,910	0	0	548.3	0.0	0.0	548.3	0.0	0.0	185.0	363.3	72.0
000790	NWPRT 14 RD3 EXT	3,741	0	1,773	3,479	0	0	276.0	0.0	0.0	276.0	0.0	0.0	185.0	91.0	18.2
000700	NWPRT 15 RD1 RTP	17,921	0	7,491	16,667	0	0	1,322.6	0.0	0.0	1,322.6	0.0	300.0	551.5	471.1	194.4
000630	FIXED EXPENSE PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	2,405.1	-2,405.1	-470.7
008000	ABANDONMENT PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.6
	FIELD TOTAL	239,445	0	96,471	222,682	0	0	17,669.8	0.0	0.0	17,669.8	0.0	847.0	5,567.2	11,255.6	5,217.3
то	OTAL CALIFORNIA	239,445	0	96,471	222,682	0	0	17,669.8	0.0	0.0	17,669.8	0.0	847.0	5,567.2	11,255.6	5,217.3
т	OTAL ALL LEASES	239,445	0	96,471	222,682	0	0	17,669.8	0.0	0.0	17,669.8	0.0	847.0	5,567.2	11,255.6	5,217.3

![](_page_56_Picture_0.jpeg)

#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

### PROBABLE RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACT	IVE	GROSS UL		WOR	KING	REVE	NUE	OIL/C	OND	NG	SL.	GA	S	GROSS OF	'ERATING	
LEASE			COMP	LTNS	OIL/COND	GAS	INTE	REST	INTEF	REST	\$/B	BL	\$/B	BL	\$/M	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOR	NIA											
NEWF	PORT, W FIELD, ORANGE CO	OUNTY																	
000680	NWPRT 1 RD2 IPB	D5, SAN	0	0	-5,721	-5,778	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000520	NWPRT 1 RD2 BP	C SAND	1	0	24,000	8,400	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	17.5
000710	NWPRT 2 RD2 EXT	2747-3477 MD	1	0	5,285	2,473	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000720	NWPRT 4 EXT	D0, D5	1	0	4,866	1,961	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000530	NWPRT 5 BP1	D5	1	0	86,570	34,628	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000730	NWPRT 6 RD1 EXT	NWPT	1	0	6,120	3,495	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000540	NWPRT 7 RD1 BP	D5	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	SAN, NWPT	1	0	7,659	2,374	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000690	NWPRT 9 STB IPB	NWPT	0	0	-10,945	-4,411	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000560	NWPRT 9 STB BP	D5	1	0	81,585	32,634	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000750	NWPRT 10 RD1 EXT	3755-3964 MD	1	0	4,621	2,671	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000760	NWPRT 11 RD1 EXT	D0, D5	1	0	3,435	3,641	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000770	NWPRT 12 RD5 EXT	D0, D5	1	0	2,878	1,508	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000780	NWPRT 13 RD2 EXT	DPR THN NWPT	1	0	7,430	3,611	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000790	NWPRT 14 RD3 EXT	D0, NWPT, SAN	1	0	3,741	1,773	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	19.7
000700	NWPRT 15 RD1 RTP	DPR THN NWPT	1	0	17,921	7,491	100.000	100.000	93.000	93.000	79.350	79.350	0.000	0.000	0.000	0.000	3.1	3.1	16.7
000630	FIXED EXPENSE PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	19.7
008000	ABANDONMENT PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	20.7
	FIELD TOTAL		13	0	239,445	96,471													
т	OTAL CALIFORNIA		13	0	239,445	96,471													
Т	OTAL ALL LEASES		13	0	239,445	96,471													

![](_page_57_Picture_0.jpeg)

### ECONOMIC PARAMETERS HIGH PRICE CASE SENSITIVITY WEST NEWPORT FIELD, ORANGE COUNTY, CALIFORNIA AS OF DECEMBER 31, 2011

As requested, a High Price Case Sensitivity has been prepared to demonstrate the sensitivity of reserves and future net revenue to oil price. The oil price is based on the 12-month unweighted arithmetic average of the first-day-of-the-month Brent Crude price for each month in the period January through December 2011. The average price of \$111.02 per barrel is increased by \$20.00 per barrel and then adjusted for quality, transportation fees, and a local price differential. The adjusted oil price of \$119.35 per barrel is held constant throughout the lives of the properties.

As requested, operating costs are held constant throughout the lives of the properties and capital costs and abandonment costs are held constant to the date of expenditure.

![](_page_58_Picture_0.jpeg)

#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	NET RESERVES			AVE	ERAGE PRICE	S		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS		OIL	NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF		\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	24,045	0	13,212	22,361	0		0	119.350	0.000	0.000	2,668.8	0.0	0.0	2,668.8
12-31-2013	22,970	0	12,613	21,363	0		0	119.350	0.000	0.000	2,549.4	0.0	0.0	2,549.4
12-31-2014	21,942	0	12,041	20,405	0		0	119.350	0.000	0.000	2,435.7	0.0	0.0	2,435.7
12-31-2015	20,964	0	11,494	19,498	0		0	119.350	0.000	0.000	2,327.0	0.0	0.0	2,327.0
12-31-2016	20,029	0	10,974	18,629	0		0	119.350	0.000	0.000	2,223.3	0.0	0.0	2,223.3
12-31-2017	19,138	0	10,480	17,800	0		0	119.350	0.000	0.000	2,124.3	0.0	0.0	2,124.3
12-31-2018	18,288	0	10,004	17,004	0		0	119.350	0.000	0.000	2,030.0	0.0	0.0	2,030.0
12-31-2019	17,476	0	9,555	16,252	0		0	119.350	0.000	0.000	1,939.7	0.0	0.0	1,939.7
12-31-2020	16,698	0	9,122	15,531	0		0	119.350	0.000	0.000	1,853.5	0.0	0.0	1,853.5
12-31-2021	15,959	0	8,710	14,841	0		0	119.350	0.000	0.000	1,771.6	0.0	0.0	1,771.6
12-31-2022	15,254	0	8,319	14,186	0		0	119.350	0.000	0.000	1,693.0	0.0	0.0	1,693.0
12-31-2023	14,577	0	7,945	13,558	0		0	119.350	0.000	0.000	1,618.2	0.0	0.0	1,618.2
12-31-2024	13,936	0	7,587	12,959	0		0	119.350	0.000	0.000	1,546.6	0.0	0.0	1,546.6
12-31-2025	13,318	0	7,248	12,386	0		0	119.350	0.000	0.000	1,478.4	0.0	0.0	1,478.4
12-31-2026	12,621	0	6,860	11,736	0		0	119.350	0.000	0.000	1,400.7	0.0	0.0	1,400.7
SUBTOTAL	267,215	0	146,164	248,509	0		0	119.350	0.000	0.000	29,660.2	0.0	0.0	29,660.2
REMAINING	88,288	0	47,817	82,110	0		0	119.350	0.000	0.000	9,800.0	0.0	0.0	9,800.0
TOTAL	355,503	0	193,981	330,619	0		0	119.350	0.000	0.000	39,460.2	0.0	0.0	39,460.2
CUM PROD	5,677,670		2,037,693											
ULTIMATE	6,033,173		2,231,674											

				NET DEDUCTIONS	EXPENDITURES			FUTURE NET	REVENUE			
PERIOD	NUMBER	ROF	TAX	KES	CAPITAL	OPERATING	UNDISCOL	JNTED	DISCOUNTED A	T 10.000%	PRESENT WO	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	EXPENSE	PERIOD	CUM	PERIOD	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	12	12.00	0.0	0.0	0.0	940.4	1,728.4	1,728.4	1,649.0	1,649.0	8.000	10,568.6
12-31-2013	12	12.00	0.0	0.0	0.0	940.4	1,609.0	3,337.4	1,395.7	3,044.7	12.000	8,951.9
12-31-2014	12	12.00	0.0	0.0	0.0	940.4	1,495.3	4,832.7	1,179.2	4,223.9	15.000	8,012.8
12-31-2015	12	12.00	0.0	0.0	0.0	940.4	1,386.6	6,219.3	994.0	5,217.9	20.000	6,817.5
12-31-2016	12	12.00	0.0	0.0	0.0	940.4	1,282.9	7,502.2	836.0	6,053.9	25.000	5,940.8
12-31-2017	12	12.00	0.0	0.0	0.0	940.4	1,183.9	8,686.1	701.3	6,755.2	30.000	5,277.5
12-31-2018	12	12.00	0.0	0.0	0.0	940.4	1,089.6	9,775.7	586.9	7,342.1	35.000	4,761.0
12-31-2019	12	12.00	0.0	0.0	0.0	940.4	999.3	10,775.0	489.2	7,831.3	40.000	4,348.3
12-31-2020	12	12.00	0.0	0.0	0.0	940.4	913.1	11,688.1	406.5	8,237.8	45.000	4,012.4
12-31-2021	12	12.00	0.0	0.0	0.0	940.4	831.2	12,519.3	336.4	8,574.2	50.000	3,731.7
12-31-2022	12	12.00	0.0	0.0	0.0	940.4	752.6	13,271.9	276.7	8,850.9		
12-31-2023	12	12.00	0.0	0.0	0.0	940.4	677.8	13,949.7	226.7	9,077.6		
12-31-2024	12	12.00	0.0	0.0	0.0	940.4	606.2	14,555.9	184.2	9,261.8		
12-31-2025	12	12.00	0.0	0.0	0.0	940.4	538.0	15,093.9	148.7	9,410.5		
12-31-2026	12	12.00	0.0	0.0	0.0	927.9	472.8	15,566.7	118.9	9,529.4		
SUBTOTAL			0.0	0.0	0.0	14,093.5	15,566.7	15,566.7	9,529.4	9,529.4		
REMAINING			0.0	0.0	1,775.0	7,977.4	47.6	15,614.3	171.9	9,701.3		
TOTAL OF 24.8 YF	RS		0.0	0.0	1,775.0	22,070.9	15,614.3	15,614.3	9,701.3	9,701.3		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

![](_page_59_Picture_0.jpeg)

#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GR	OSS RESERV	'ES	N	ET RESERVES	s		GROSS R	EVENUE		TOTAL	NET CAP	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	TAXES	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
	-															
							CALIFURI	NIA								
000190	NWBBT 1 BD2	27 490	0	27 764	25 565	0	0	2 051 2	0.0	0.0	2 051 2	0.0	0.0	906 4	2 154 0	1 096 2
000100		27,469	0	27,704	25,505	0	0	3,051.3	0.0	0.0	3,001.3	0.0	0.0	0.0	2,154.9	1,060.2
000190		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000200		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000370		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000380		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000360		22 410	0	15 169	20 142	0	0	2 507 4	0.0	0.0	2 507 4	0.0	0.0	0.0	2 701 0	1 206 7
000400		32,410	0	15,100	30,142	0	0	3,597.4	0.0	0.0	3,597.4	0.0	0.0	090.4	2,701.0	1,290.7
000410		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000420		0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000430	NVVPRT 3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000440		32,010	0	13,220	30,521	0	0	3,042.0	0.0	0.0	3,042.0	0.0	0.0	090.4	2,740.4	1,397.5
000460	NVVPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000450	NVVPRI 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000470	NWPRI 6 RD1	43,885	0	25,058	40,813	0	0	4,871.2	0.0	0.0	4,871.2	0.0	0.0	896.4	3,974.8	2,052.3
000480	NWPRI 7 RD1	6,799	0	3,787	6,323	0	0	754.7	0.0	0.0	754.7	0.0	0.0	551.5	203.2	136.8
000490	NWPRT 7 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000500	NWPRT 8 RD1	47,834	0	14,828	44,486	0	0	5,309.6	0.0	0.0	5,309.6	0.0	0.0	896.4	4,413.2	2,106.0
000510	NWPRT 9 STB	23,884	0	9,625	22,212	0	0	2,651.1	0.0	0.0	2,651.1	0.0	0.0	896.4	1,754.7	885.9
000210	NWPRT 10 RD1	27,831	0	16,087	25,883	0	0	3,089.1	0.0	0.0	3,089.1	0.0	0.0	896.4	2,192.7	1,050.1
000220	NWPRT 11 RD1	23,166	0	24,556	21,544	0	0	2,571.4	0.0	0.0	2,571.4	0.0	0.0	896.4	1,675.0	882.4
000240	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000250	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000230	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000280	NWPRT 12 RD5	18,666	0	9,781	17,359	0	0	2,071.8	0.0	0.0	2,071.8	0.0	0.0	896.4	1,175.4	623.9
000290	NWPRT 13 RD2	48,191	0	23,421	44,818	0	0	5,349.1	0.0	0.0	5,349.1	0.0	0.0	896.4	4,452.7	2,171.0
000300	NWPRT 14 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000310	NWPRT 14 RD3	22,530	0	10,680	20,953	0	0	2,500.7	0.0	0.0	2,500.7	0.0	0.0	896.4	1,604.3	782.7
000320	NWPRT 14 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000350	NWPRT 16 RD3	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000170	FIXED EXPENSE PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	11.659.0	-11.659.0	-4.603.1
000570	ABANDONMENT PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	1.775.0	0.0	-1.775.0	-167.1
	FIELD TOTAL	355,503	0	193,981	330.619	0	0	39.460.2	0.0	0.0	39.460.2	0.0	1.775.0	22.070.9	15.614.3	9.701.3
т		355 503	0	193 981	330 619	0	0	39 460 2	0.0	0.0	39 460 2	0.0	1 775 0	22 070 9	15 614 3	9 701 3
т, т,		355 503	0	103,001	330 610	0	0	30 160 2	0.0	0.0	30 160 2	0.0	1 775 0	22,070.9	15 614 2	0 701 2
	OTAL ALL LLAGES	555,505	0	193,901	550,019	U	U	55, <del>4</del> 00.2	0.0	0.0	J3,400.Z	0.0	1,773.0	22,010.9	13,014.3	9,701.3

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

![](_page_60_Picture_0.jpeg)

#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACT	IVE	GROSS ULT	IMATE	WOR	KING	REVE	NUE	OIL/C	OND	NG	<u></u>	GA	\S	GROSS OF	<b>'ERATING</b>	
LEASE			COMF	LTNS	OIL/COND	GAS	INTE	REST	INTER	REST	\$/E	BL	\$/B	BL	\$/M	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOR	RNIA											
NEWF	PORT, W FIELD, ORANGE C	OUNTY																	
000180	NWPRT 1 RD2	D5, SAN	1	0	228,380	100,650	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000190	NWPRT 1 SI	NWPT	0	0	54,741	19,585	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000200	NWPRT 1 SI	SAN	0	0	182,072	51,631	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	D0, D5	0	0	127,582	26,741	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	D0, D5	0	0	66,716	12,518	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	D5	0	0	32,000	9,707	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000400	NWPRT 2 RD2	2747-3477 MD	1	0	265,571	66,537	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000410	NWPRT 3 RD1 SI	D0, D5	0	0	88,251	25,285	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	D0	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000430	NWPRT 3 SI	NWPT	0	0	59,296	24,528	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000440	NWPRT 4	D0, D5	1	0	328,051	97,897	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000460	NWPRT 5 SI	NWPT	0	0	129,743	68,490	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000450	NWPRT 5 SI	SAN, D5	0	0	27,030	19,523	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000470	NWPRT 6 RD1	NWPT	1	0	798,542	302,957	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000480	NWPRT 7 RD1	DPR THN NWPT	1	0	191,367	70,401	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	14.7
000490	NWPRT 7 SI	DPR THN NWPT	0	0	13,781	6,130	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000500	NWPRT 8 RD1	SAN, NWPT	1	0	603,228	224,247	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000510	NWPRT 9 STB	NWPT	1	0	390,661	139,515	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000210	NWPRT 10 RD1	3755-3964 MD	1	0	432,534	225,916	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000220	NWPRT 11 RD1	D0, D5	1	0	306,999	96,209	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000240	NWPRT 11 SI	D0, D5	0	0	14,949	6,790	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000250	NWPRT 11 SI	D0, D5 FRC PCK	0	0	76,580	11,159	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000230	NWPRT 11 SI	SAN, NWPT	0	0	81,002	36,122	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	D0	0	0	23,985	7,796	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	D0, D5	0	0	65,332	17,968	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000280	NWPRT 12 RD5	D0, D5	1	0	280,061	93,338	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000290	NWPRT 13 RD2	DPR THN NWPT	1	0	538,711	210,333	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000300	NWPRT 14 RD2 SI	D0, D5	0	0	86,803	30,173	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000310	NWPRT 14 RD3	D0. NWPT. SAN	1	0	103,742	46,714	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000320	NWPRT 14 RD3 SI	NWPT, SAN	0	0	42,737	36,309	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	DPR THN NWPT	0	0	299,182	113,979	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	DPR THN NWPT	0	0	21,527	2.917	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000350	NWPRT 16 RD3	DPR THN NWPT	0	0	41.638	23.650	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	DPR THN NWPT	0	0	30,379	5,959	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000170	FIXED EXPENSE PDP		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	23.8
000570	ABANDONMENT PDP		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	24.8
	FIELD TOTAL		12	0	6,033,173	2,231,674													
Т	OTAL CALIFORNIA		12	0	6,033,173	2,231,674													
т	OTAL ALL LEASES		12	0	6.033.173	2.231.674													

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#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	NET RESERVES		AV	ERAGE PRICE	ES		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2013	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2014	12,529	0	5,052	11,651	0	0	119.350	0.000	0.000	1,390.6	0.0	0.0	1,390.6
12-31-2015	11,275	0	4,547	10,487	0	0	119.350	0.000	0.000	1,251.6	0.0	0.0	1,251.6
12-31-2016	13,897	0	5,589	12,924	0	0	119.350	0.000	0.000	1,542.5	0.0	0.0	1,542.5
12-31-2017	17,677	0	7,096	16,440	0	0	119.350	0.000	0.000	1,962.0	0.0	0.0	1,962.0
12-31-2018	15,836	0	6,358	14,728	0	0	119.350	0.000	0.000	1,757.7	0.0	0.0	1,757.7
12-31-2019	14,182	0	5,694	13,190	0	0	119.350	0.000	0.000	1,574.2	0.0	0.0	1,574.2
12-31-2020	12,699	0	5,098	11,809	0	0	119.350	0.000	0.000	1,409.5	0.0	0.0	1,409.5
12-31-2021	12,935	0	4,710	12,028	0	0	119.350	0.000	0.000	1,435.5	0.0	0.0	1,435.5
12-31-2022	13,653	0	4,528	12,697	0	0	119.350	0.000	0.000	1,515.4	0.0	0.0	1,515.4
12-31-2023	11,932	0	3,906	11,096	0	0	119.350	0.000	0.000	1,324.3	0.0	0.0	1,324.3
12-31-2024	10,421	0	3,361	9,694	0	0	119.350	0.000	0.000	1,156.8	0.0	0.0	1,156.8
12-31-2025	9,100	0	2,884	8,463	0	0	119.350	0.000	0.000	1,009.8	0.0	0.0	1,009.8
12-31-2026	7,938	0	2,469	7,383	0	0	119.350	0.000	0.000	881.2	0.0	0.0	881.2
SUBTOTAL	164,074	0	61,292	152,590	0	0	119.350	0.000	0.000	18,211.1	0.0	0.0	18,211.1
REMAINING	41,231	0	12,986	38,343	0	0	119.350	0.000	0.000	4,576.7	0.0	0.0	4,576.7
TOTAL	205,305	0	74,278	190,933	0	0	119.350	0.000	0.000	22,787.8	0.0	0.0	22,787.8
CUM PROD	0		0										
ULTIMATE	205,305		74,278										

				NET DEDUCTIONS	/EXPENDITURES			FUTURE NET	REVENUE			
PERIOD	NUMBER	ROF	TAX	KES	CAPITAL	OPERATING	UNDISCOL	JNTED	DISCOUNTED A	T 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	EXPENSE	PERIOD	CUM	PERIOD	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.000	9,799.0
12-31-2013	0	0.00	0.0	0.0	530.0	0.0	-530.0	-530.0	-443.3	-443.3	12.000	7,341.7
12-31-2014	2	2.00	0.0	0.0	0.0	75.2	1,315.4	785.4	1,037.8	594.5	15.000	6,030.2
12-31-2015	2	2.00	0.0	0.0	0.0	75.2	1,176.4	1,961.8	843.7	1,438.2	20.000	4,481.3
12-31-2016	2	2.00	0.0	0.0	172.0	72.1	1,298.4	3,260.2	838.4	2,276.6	25.000	3,438.4
12-31-2017	2	2.00	0.0	0.0	0.0	75.2	1,886.8	5,147.0	1,118.4	3,395.0	30.000	2,706.7
12-31-2018	2	2.00	0.0	0.0	0.0	75.2	1,682.5	6,829.5	906.6	4,301.6	35.000	2,175.7
12-31-2019	2	2.00	0.0	0.0	0.0	75.2	1,499.0	8,328.5	734.3	5,035.9	40.000	1,780.2
12-31-2020	2	2.00	0.0	0.0	0.0	75.2	1,334.3	9,662.8	594.2	5,630.1	45.000	1,477.7
12-31-2021	2	2.00	0.0	0.0	145.0	72.1	1,218.4	10,881.2	491.0	6,121.1	50.000	1,241.8
12-31-2022	2	2.00	0.0	0.0	0.0	75.2	1,440.2	12,321.4	530.1	6,651.2		
12-31-2023	2	2.00	0.0	0.0	0.0	75.2	1,249.1	13,570.5	417.9	7,069.1		
12-31-2024	2	2.00	0.0	0.0	0.0	75.2	1,081.6	14,652.1	329.1	7,398.2		
12-31-2025	2	2.00	0.0	0.0	0.0	75.2	934.6	15,586.7	258.4	7,656.6		
12-31-2026	2	2.00	0.0	0.0	0.0	75.2	806.0	16,392.7	202.6	7,859.2		
SUBTOTAL			0.0	0.0	847.0	971.4	16,392.7	16,392.7	7,859.2	7,859.2		
REMAINING			0.0	0.0	0.0	1,405.2	3,171.5	19,564.2	587.7	8,446.9		
TOTAL OF 26.1 YF	RS		0.0	0.0	847.0	2,376.6	19,564.2	19,564.2	8,446.9	8,446.9		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

HIGH PRICE CASE SENSITIVITY

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#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

PROBABLE RESERVES

CITY OF NEWPORT BEACH INTEREST

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GRO	OSS RESERV	ES	N	ET RESERVE	S		GROSS RE	EVENUE		TOTAL	NET CAP	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL	TAXES	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFORM	NA								
NEWF	ORT, W FIELD, ORANGE CO	DUNTY														
000680	NWPRT 1 RD2 IPB	-12,871	0	-13,000	-11,970	0	0	-1,428.7	0.0	0.0	-1,428.7	0.0	0.0	-539.2	-889.5	-219.3
000520	NWPRT 1 RD2 BP	24,000	0	8,400	22,320	0	0	2,663.9	0.0	0.0	2,663.9	0.0	145.0	296.7	2,222.2	667.8
000710	NWPRT 2 RD2 EXT	1,017	0	476	946	0	0	112.9	0.0	0.0	112.9	0.0	0.0	47.0	65.9	6.4
000720	NWPRT 4 EXT	851	0	343	791	0	0	94.4	0.0	0.0	94.4	0.0	0.0	47.0	47.4	4.6
000530	NWPRT 5 BP1	92,800	0	37,120	86,304	0	0	10,300.4	0.0	0.0	10,300.4	0.0	230.0	841.7	9,228.7	4,401.4
000730	NWPRT 6 RD1 EXT	1,010	0	576	939	0	0	112.1	0.0	0.0	112.1	0.0	0.0	47.0	65.1	6.3
000540	NWPRT 7 RD1 BP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	1,446	0	448	1,345	0	0	160.5	0.0	0.0	160.5	0.0	0.0	47.0	113.5	11.0
000690	NWPRT 9 STB IPB	-17,308	0	-6,975	-16,097	0	0	-1,921.2	0.0	0.0	-1,921.2	0.0	0.0	-727.2	-1,194.0	-425.9
000560	NWPRT 9 STB BP	90,682	0	36,273	84,335	0	0	10,065.4	0.0	0.0	10,065.4	0.0	172.0	771.2	9,122.2	3,464.9
000750	NWPRT 10 RD1 EXT	906	0	524	843	0	0	100.6	0.0	0.0	100.6	0.0	0.0	47.0	53.6	5.2
000760	NWPRT 11 RD1 EXT	601	0	637	559	0	0	66.7	0.0	0.0	66.7	0.0	0.0	47.0	19.7	1.9
000770	NWPRT 12 RD5 EXT	523	0	274	486	0	0	58.0	0.0	0.0	58.0	0.0	0.0	47.0	11.0	1.1
000780	NWPRT 13 RD2 EXT	1,350	0	656	1,256	0	0	149.9	0.0	0.0	149.9	0.0	0.0	47.0	102.9	10.0
000790	NWPRT 14 RD3 EXT	734	0	348	682	0	0	81.4	0.0	0.0	81.4	0.0	0.0	47.0	34.4	3.3
000700	NWPRT 15 RD1 RTP	19,564	0	8,178	18,194	0	0	2,171.5	0.0	0.0	2,171.5	0.0	300.0	698.9	1,172.6	548.9
000630	FIXED EXPENSE PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	611.5	-611.5	-59.5
008000	ABANDONMENT PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8
	FIELD TOTAL	205,305	0	74,278	190,933	0	0	22,787.8	0.0	0.0	22,787.8	0.0	847.0	2,376.6	19,564.2	8,446.9
то	OTAL CALIFORNIA	205,305	0	74,278	190,933	0	0	22,787.8	0.0	0.0	22,787.8	0.0	847.0	2,376.6	19,564.2	8,446.9
т	DTAL ALL LEASES	205,305	0	74,278	190,933	0	0	22,787.8	0.0	0.0	22,787.8	0.0	847.0	2,376.6	19,564.2	8,446.9

![](_page_63_Picture_0.jpeg)

#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

### PROBABLE RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

LEASE			ACT COMP	IVE	GROSS UL	TIMATE GAS	WOR	KING REST	REVE	NUE	OIL/C \$/B	OND BL	NG \$/BI	BL	GA \$/M0	S CF	GROSS OP	ERATING E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOF	RNIA											
NEWF	PORT, W FIELD, ORANGE C	OUNTY																	
000680	NWPRT 1 RD2 IPB	D5, SAN	0	0	-12,871	-13,000	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000520	NWPRT 1 RD2 BP	C SAND	1	0	24,000	8,400	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	17.5
000710	NWPRT 2 RD2 EXT	2747-3477 MD	1	0	1,017	476	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000720	NWPRT 4 EXT	D0, D5	1	0	851	343	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000530	NWPRT 5 BP1	D5	1	0	92,800	37,120	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	24.4
000730	NWPRT 6 RD1 EXT	NWPT	1	0	1,010	576	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000540	NWPRT 7 RD1 BP	D5	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	SAN, NWPT	1	0	1,446	448	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000690	NWPRT 9 STB IPB	NWPT	0	0	-17,308	-6,975	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	23.8
000560	NWPRT 9 STB BP	D5	1	0	90,682	36,273	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000750	NWPRT 10 RD1 EXT	3755-3964 MD	1	0	906	524	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000760	NWPRT 11 RD1 EXT	D0, D5	1	0	601	637	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000770	NWPRT 12 RD5 EXT	D0, D5	1	0	523	274	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000780	NWPRT 13 RD2 EXT	DPR THN NWPT	1	0	1,350	656	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000790	NWPRT 14 RD3 EXT	D0, NWPT, SAN	1	0	734	348	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	25.1
000700	NWPRT 15 RD1 RTP	DPR THN NWPT	1	0	19,564	8,178	100.000	100.000	93.000	93.000	119.350	119.350	0.000	0.000	0.000	0.000	3.1	3.1	20.6
000630	FIXED EXPENSE PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	40.8	25.1
00800	ABANDONMENT PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	26.1
	FIELD TOTAL		13	0	205,305	74,278													
Т	OTAL CALIFORNIA		13	0	205,305	74,278													
Т	OTAL ALL LEASES		13	0	205,305	74,278													

![](_page_64_Picture_0.jpeg)

### ECONOMIC PARAMETERS ESCALATION CASE SENSITIVITY WITH MICRO TURBINE WEST NEWPORT FIELD, ORANGE COUNTY, CALIFORNIA AS OF DECEMBER 31, 2011

As requested, an Escalation Case Sensitivity has been prepared to demonstrate the sensitivity of reserves and future net revenue to oil price. Oil prices for this sensitivity are based on NYMEX Brent Crude prices for 2012 through 2016. Oil prices are adjusted for quality, transportation fees, and a regional price differential. The average prices, before adjustments, along with escalation parameters are shown in the following table:

Period	Oil Price
Ending	(\$/Barrel)
12-31-2012	105.17
12-31-2013	101.36
12-31-2014	97.23
12-31-2015	94.32
12-31-2016	92.39

Then escalated 3 percent on January 1 of each year through December 31, 2026, and held constant thereafter.

As requested, all costs are escalated 3 percent on January 1 of each year through December 31, 2026, and held constant thereafter.

For probable reserves, we have included the installation of two gas micro turbines in the field. The capital cost and the costs to operate these turbines, as well as the expected reduction in electricity expenses, have all been modeled in this sensitivity case.

![](_page_65_Picture_0.jpeg)

#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	NET RESERVES			AVE	RAGE PRICE	S		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL		NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BE	L	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	24,045	0	13,212	22,361	0	(	93	.500	0.000	0.000	2,090.7	0.0	0.0	2,090.7
12-31-2013	22,970	0	12,613	21,363	0	(	) 89	.690	0.000	0.000	1,915.7	0.0	0.0	1,915.7
12-31-2014	21,942	0	12,041	20,405	0	(	) 85	.560	0.000	0.000	1,746.0	0.0	0.0	1,746.0
12-31-2015	20,964	0	11,494	19,498	0	(	) 82	.650	0.000	0.000	1,611.4	0.0	0.0	1,611.4
12-31-2016	20,029	0	10,974	18,629	0	(	) 80	.720	0.000	0.000	1,503.5	0.0	0.0	1,503.5
12-31-2017	19,138	0	10,480	17,800	0	(	) 83	.492	0.000	0.000	1,485.9	0.0	0.0	1,485.9
12-31-2018	18,288	0	10,004	17,004	0	(	) 86	.347	0.000	0.000	1,468.5	0.0	0.0	1,468.5
12-31-2019	17,251	0	9,430	16,044	0	(	) 89	.287	0.000	0.000	1,432.5	0.0	0.0	1,432.5
12-31-2020	16,263	0	8,879	15,126	0	(	) 92	.316	0.000	0.000	1,396.4	0.0	0.0	1,396.4
12-31-2021	15,541	0	8,477	14,452	0	(	) 95	.435	0.000	0.000	1,379.3	0.0	0.0	1,379.3
12-31-2022	14,853	0	8,095	13,813	0	(	98	.649	0.000	0.000	1,362.5	0.0	0.0	1,362.5
12-31-2023	14,192	0	7,730	13,200	0	(	) 101	.958	0.000	0.000	1,345.7	0.0	0.0	1,345.7
12-31-2024	13,566	0	7,381	12,615	0	(	0 105	.367	0.000	0.000	1,329.3	0.0	0.0	1,329.3
12-31-2025	12,963	0	7,050	12,056	0	(	108	.878	0.000	0.000	1,312.6	0.0	0.0	1,312.6
12-31-2026	12,392	0	6,734	11,522	0	(	) 112	.494	0.000	0.000	1,296.6	0.0	0.0	1,296.6
SUBTOTAL	264,397	0	144,594	245,888	0	(	92	.225	0.000	0.000	22,676.6	0.0	0.0	22,676.6
REMAINING	27,732	0	15,059	25,791	0	(	) 116	.219	0.000	0.000	2,997.7	0.0	0.0	2,997.7
TOTAL	292,129	0	159,653	271,679	0	(	) 94	.503	0.000	0.000	25,674.3	0.0	0.0	25,674.3
CUM PROD	5,677,670		2,037,693											
ULTIMATE	5,969,799		2,197,346											

				NET DEDU	ICTIONS/EXPEND	DITURES		FUTU	RE NET REVEN	IUE		
PERIOD	NUMBER	ROF	TAX	KES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	NTED	DISC AT 10.000%	PRESENT WOR	RTH PROFILE
ENDING	ACTIVE COMP	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	12	12.00	0.0	0.0	0.0	0.0	940.4	1,150.3	1,150.3	1,097.6	8.000	4,380.2
12-31-2013	12	12.00	0.0	0.0	0.0	0.0	955.0	960.7	2,111.0	1,930.9	12.000	4,047.1
12-31-2014	12	12.00	0.0	0.0	0.0	0.0	970.2	775.8	2,886.8	2,542.8	15.000	3,792.0
12-31-2015	12	12.00	0.0	0.0	0.0	0.0	985.7	625.7	3,512.5	2,991.2	20.000	3,408.2
12-31-2016	12	12.00	0.0	0.0	0.0	0.0	1,001.8	501.7	4,014.2	3,318.1	25.000	3,083.0
12-31-2017	12	12.00	0.0	0.0	0.0	0.0	1,018.3	467.6	4,481.8	3,595.4	30.000	2,816.0
12-31-2018	12	12.00	0.0	0.0	0.0	0.0	1,035.3	433.2	4,915.0	3,828.7	35.000	2,594.8
12-31-2019	12	12.00	0.0	0.0	0.0	0.0	1,034.0	398.5	5,313.5	4,023.7	40.000	2,409.7
12-31-2020	11	11.00	0.0	0.0	0.0	0.0	1,033.3	363.1	5,676.6	4,185.5	45.000	2,255.4
12-31-2021	11	11.00	0.0	0.0	0.0	0.0	1,051.9	327.4	6,004.0	4,317.8	50.000	2,122.6
12-31-2022	11	11.00	0.0	0.0	0.0	0.0	1,071.0	291.5	6,295.5	4,425.1		
12-31-2023	11	11.00	0.0	0.0	0.0	0.0	1,090.7	255.0	6,550.5	4,510.4		
12-31-2024	11	11.00	0.0	0.0	0.0	0.0	1,111.0	218.3	6,768.8	4,576.6		
12-31-2025	11	11.00	0.0	0.0	0.0	0.0	1,132.0	180.6	6,949.4	4,626.7		
12-31-2026	11	11.00	0.0	0.0	0.0	0.0	1,153.5	143.1	7,092.5	4,662.6		
SUBTOTAL			0.0	0.0	0.0	0.0	15,584.1	7,092.5	7,092.5	4,662.6		
REMAINING			0.0	0.0	0.0	2,765.4	2,841.7	-2,609.4	4,483.1	4,217.3		
TOTAL OF 18.4 YE	RS		0.0	0.0	0.0	2,765.4	18,425.8	4,483.1	4,483.1	4,217.3		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

ESCALATION CASE SENSITIVITY

![](_page_66_Picture_0.jpeg)

#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

#### PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GR	OSS RESERV	'ES	N	ET RESERVE	S	GRO	DSS REVENU	JE	TOTAL	NET CAP	ABDNMNT	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TAXES	COST	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFOR	NIA								
NEW	PORT, W FIELD, ORANGE CO	OUNTY														
000180	NWPRT 1 RD2	22,756	0	22,983	21,163	0	0	2,001.7	0.0	0.0	0.0	0.0	0.0	654.9	1,346.8	721.7
000190	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000200	NWPRT 1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000400	NWPRT 2 RD2	26,351	0	12,332	24,506	0	0	2,327.1	0.0	0.0	0.0	0.0	0.0	654.9	1,672.2	868.9
000410	NWPRT 3 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000430	NWPRT 3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000440	NWPRT 4	27,479	0	11,074	25,555	0	0	2,411.1	0.0	0.0	0.0	0.0	0.0	654.9	1,756.2	949.7
000460	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000450	NWPRT 5 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000470	NWPRT 6 RD1	37,344	0	21,323	34,730	0	0	3,264.5	0.0	0.0	0.0	0.0	0.0	654.9	2,609.6	1,429.9
000480	NWPRT 7 RD1	3,981	0	2,217	3,702	0	0	319.8	0.0	0.0	0.0	0.0	0.0	282.0	37.8	32.5
000490	NWPRT 7 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000500	NWPRT 8 RD1	39,130	0	12,130	36,391	0	0	3,451.0	0.0	0.0	0.0	0.0	0.0	654.9	2,796.1	1,454.0
000510	NWPRT 9 STB	19,656	0	7,921	18,280	0	0	1,731.1	0.0	0.0	0.0	0.0	0.0	654.9	1,076.2	575.5
000210	NWPRT 10 RD1	22,487	0	12,998	20,913	0	0	1,988.3	0.0	0.0	0.0	0.0	0.0	654.9	1,333.4	689.7
000220	NWPRT 11 RD1	19,397	0	20,561	18,039	0	0	1,701.8	0.0	0.0	0.0	0.0	0.0	654.9	1,046.9	576.1
000240	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000250	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000230	NWPRT 11 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000280	NWPRT 12 RD5	15,452	0	8,097	14,370	0	0	1,359.1	0.0	0.0	0.0	0.0	0.0	654.9	704.2	387.3
000290	NWPRT 13 RD2	39,893	0	19,388	37,101	0	0	3,509.2	0.0	0.0	0.0	0.0	0.0	654.9	2,854.3	1,505.9
000300	NWPRT 14 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000310	NWPRT 14 RD3	18,203	0	8,629	16,929	0	0	1,609.6	0.0	0.0	0.0	0.0	0.0	654.9	954.7	497.5
000320	NWPRT 14 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000340	NWPRT 16 RD2 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000350	NWPRT 16 RD3	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000360	NWPRT 16 RD3 SI	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000170	FIXED EXPENSE PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	10.939.9	-10.939.9	-4.991.5
000570	ABANDONMENT PDP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	2,765.4	0.0	-2,765.4	-479.9
	FIELD TOTAL	292,129	0	159,653	271,679	0	0	25,674.3	0.0	0.0	0.0	0.0	2,765.4	18,425.8	4,483.1	4,217.3
т	OTAL CALIFORNIA	292,129	0	159,653	271,679	0	0	25,674.3	0.0	0.0	0.0	0.0	2,765.4	18,425.8	4,483.1	4,217.3
т	OTAL ALL LEASES	292,129	0	159,653	271,679	0	0	25,674.3	0.0	0.0	0.0	0.0	2,765.4	18,425.8	4,483.1	4,217.3

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

![](_page_67_Picture_0.jpeg)

#### BASIC DATA AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROVED DEVELOPED PRODUCING RESERVES

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACT	TIVE	GROSS UL	TIMATE	WOR	KING	REVE	NUE	OIL/C	OND	NG	3L	GA	S	GROSS OF	ERATING	
LEASE			COMF	PLTNS	OIL/COND	GAS	INTE	REST	INTEF	REST	\$/B	BL	\$/B	BL	\$/M	CF	EXPENS	E M\$/M	LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
								νιια											
							UALII UI												
NEVVI	PORT, W FIELD, ORANGE C				000.047	05 000	400.000	100.000	~~ ~~~	~~ ~~~	00 500								
000180	NWPRT1RD2	D5, SAN	1	0	223,647	95,869	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000190	NWPRT 1 SI	NWPI	0	0	54,741	19,585	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000200	NWPRT 1 SI	SAN	0	0	182,072	51,631	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000370	NWPRT 2 RD1 SI	D0, D5	0	0	127,582	26,741	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000390	NWPRT 2 RD1 SI	D0, D5	0	0	66,716	12,518	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000380	NWPRT 2 RD1 SI	D5	0	0	32,000	9,707	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000400	NWPRT 2 RD2	2747-3477 MD	1	0	259,512	63,701	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000410	NWPRT 3 RD1 SI	D0, D5	0	0	88,251	25,285	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000420	NWPRT 3 RD1 WINJ	D0	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000430	NWPRT 3 SI	NWPT	0	0	59,296	24,528	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000440	NWPRT 4	D0, D5	1	0	322,712	95,745	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000460	NWPRT 5 SI	NWPT	0	0	129,743	68,490	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000450	NWPRT 5 SI	SAN, D5	0	0	27,030	19,523	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000470	NWPRT 6 RD1	NWPT	1	0	792,001	299,222	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000480	NWPRT 7 RD1	DPR THN NWPT	1	0	188,549	68,831	100.000	100.000	93.000	93.000	93.500	89.287	0.000	0.000	0.000	0.000	3.1	3.1	7.5
000490	NWPRT 7 SI	DPR THN NWPT	0	0	13,781	6,130	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000500	NWPRT 8 RD1	SAN, NWPT	1	0	594,524	221,549	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000510	NWPRT 9 STB	NWPT	1	0	386,433	137,811	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000210	NWPRT 10 RD1	3755-3964 MD	1	0	427,190	222,827	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000220	NWPRT 11 RD1	D0, D5	1	0	303,230	92,214	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000240	NWPRT 11 SI	D0, D5	0	0	14,949	6,790	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000250	NWPRT 11 SI	D0. D5 FRC PCK	0	0	76.580	11,159	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000230	NWPRT 11 SI	SAN, NWPT	0	0	81.002	36,122	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000260	NWPRT 12 RD1 SI	D0	0	0	23,985	7,796	100.000	100.000	93,000	93,000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000270	NWPRT 12 RD2 SI	D0 D5	0	0	65 332	17 968	100 000	100 000	93 000	93 000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000280	NWPRT 12 RD5	D0 D5	1	0	276 847	91 654	100.000	100 000	93 000	93 000	93 500	116 219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000290	NWPRT 13 RD2	DPR THN NWPT	1	0	530 413	206.300	100.000	100 000	93 000	93 000	93 500	116 219	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000300	NWPRT 14 RD2 SI	D0 D5	0	0	86,803	30 173	100.000	100.000	93.000	93.000	0 000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000310	NWPRT 14 RD3	DO NWPT SAN	1	0	99.415	44 663	100.000	100.000	93.000	93.000	93 500	116 210	0.000	0.000	0.000	0.000	3.1	3.1	17 /
000310	NWPRT 14 RD3 SI	NWPT SAN	0	0	42 737	36 309	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000330	NWPRT 15 RD1 SI		0	0	200 182	113 979	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000340			0	0	235,102	2 017	100.000	100.000	03.000	03.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000340			0	0	21,327	2,317	100.000	100.000	02.000	02.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000350			0	0	41,030	23,050	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000360		DPRIMNWPI	0	0	30,379	5,959	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000170			0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.6	03.5	17.4
000570	ABANDONMENT PDP		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	18.4
	FIELD TOTAL		12	0	5,969,799	2,197,346													
Т	OTAL CALIFORNIA		12	0	5,969,799	2,197,346													
T	OTAL ALL LEASES		12	0	5,969,799	2,197,346													

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

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#### SUMMARY PROJECTION OF RESERVES AND REVENUE AS OF DECEMBER 31, 2011

CITY OF NEWPORT BEACH INTEREST

PROBABLE RESERVES

SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

PERIOD	GF	ROSS RESERVES		1	NET RESERVES		AV	ERAGE PRICE	ES .		GROSS RE	VENUE	
ENDING	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TOTAL
M-D-Y	BBL	BBL	MCF	BBL	BBL	MCF	\$/BBL	\$/BBL	\$/MCF	M\$	M\$	M\$	M\$
12-31-2012	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2013	0	0	0	0	0	0	0.000	0.000	0.000	0.0	0.0	0.0	0.0
12-31-2014	12,529	0	5,052	11,651	0	0	85.560	0.000	0.000	996.9	0.0	0.0	996.9
12-31-2015	11,275	0	4,547	10,487	0	0	82.650	0.000	0.000	866.7	0.0	0.0	866.7
12-31-2016	13,897	0	5,589	12,923	0	0	80.720	0.000	0.000	1,043.2	0.0	0.0	1,043.2
12-31-2017	17,677	0	7,096	16,440	0	0	83.492	0.000	0.000	1,372.4	0.0	0.0	1,372.4
12-31-2018	15,836	0	6,358	14,728	0	0	86.347	0.000	0.000	1,271.7	0.0	0.0	1,271.7
12-31-2019	14,182	0	5,694	13,190	0	0	89.287	0.000	0.000	1,177.6	0.0	0.0	1,177.6
12-31-2020	12,699	0	5,098	11,809	0	0	92.316	0.000	0.000	1,090.1	0.0	0.0	1,090.1
12-31-2021	12,935	0	4,711	12,028	0	0	95.435	0.000	0.000	1,147.9	0.0	0.0	1,147.9
12-31-2022	13,653	0	4,528	12,697	0	0	98.649	0.000	0.000	1,252.6	0.0	0.0	1,252.6
12-31-2023	11,932	0	3,906	11,096	0	0	101.958	0.000	0.000	1,131.4	0.0	0.0	1,131.4
12-31-2024	10,421	0	3,361	9,694	0	0	105.367	0.000	0.000	1,021.3	0.0	0.0	1,021.3
12-31-2025	9,100	0	2,884	8,463	0	0	108.878	0.000	0.000	921.4	0.0	0.0	921.4
12-31-2026	7,938	0	2,469	7,383	0	0	112.494	0.000	0.000	830.5	0.0	0.0	830.5
SUBTOTAL	164,074	0	61,293	152,589	0	0	92.563	0.000	0.000	14,123.7	0.0	0.0	14,123.7
REMAINING	67,341	0	29,209	62,627	0	0	116.219	0.000	0.000	7,278.8	0.0	0.0	7,278.8
TOTAL	231,415	0	90,502	215,216	0	0	99.447	0.000	0.000	21,402.5	0.0	0.0	21,402.5
CUM PROD	0		0										
ULTIMATE	231,415		90,502										

				NET DEDU	JCTIONS/EXPEND	DITURES		FUTU	RE NET REVEN	NUE		
PERIOD	NUMBER	ROF	TAX	XES	CAPITAL	ABDNMNT	OPERATING	UNDISCOU	NTED	DISC AT 10.000%	PRESENT WO	RTH PROFILE
ENDING	ACTIVE COM	PLETIONS	PRODUCTION	AD VALOREM	COST	COST	EXPENSE	PERIOD	CUM	CUM	DISC RATE	CUM PW
M-D-Y	GROSS	NET	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	%	M\$
12-31-2012	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.000	7,321.4
12-31-2013	0	0.00	0.0	0.0	793.1	0.0	0.0	-793.1	-793.1	-669.9	12.000	5,341.8
12-31-2014	2	2.00	0.0	0.0	116.7	0.0	15.9	864.3	71.2	7.9	15.000	4,286.7
12-31-2015	2	2.00	0.0	0.0	0.0	0.0	19.5	847.2	918.4	615.5	20.000	3,057.4
12-31-2016	2	2.00	0.0	0.0	193.6	0.0	14.6	835.0	1,753.4	1,154.2	25.000	2,248.8
12-31-2017	2	2.00	0.0	0.0	0.0	0.0	14.2	1,358.2	3,111.6	1,959.2	30.000	1,696.8
12-31-2018	2	2.00	0.0	0.0	0.0	0.0	18.4	1,253.3	4,364.9	2,634.6	35.000	1,306.7
12-31-2019	2	2.00	0.0	0.0	0.0	0.0	22.7	1,154.9	5,519.8	3,200.4	40.000	1,022.8
12-31-2020	2	2.00	0.0	0.0	0.0	0.0	26.6	1,063.5	6,583.3	3,673.9	45.000	811.4
12-31-2021	2	2.00	0.0	0.0	189.2	0.0	26.2	932.5	7,515.8	4,049.6	50.000	651.1
12-31-2022	2	2.00	0.0	0.0	0.0	0.0	31.3	1,221.3	8,737.1	4,499.3		
12-31-2023	2	2.00	0.0	0.0	0.0	0.0	34.6	1,096.8	9,833.9	4,866.3		
12-31-2024	2	2.00	0.0	0.0	0.0	0.0	37.7	983.6	10,817.5	5,165.5		
12-31-2025	2	2.00	0.0	0.0	0.0	0.0	40.5	880.9	11,698.4	5,409.0		
12-31-2026	2	2.00	0.0	0.0	0.0	0.0	43.0	787.5	12,485.9	5,607.0		
SUBTOTAL			0.0	0.0	1,292.6	0.0	345.2	12,485.9	12,485.9	5,607.0		
REMAINING			0.0	0.0	0.0	0.0	4,899.6	2,379.2	14,865.1	6,233.1		
TOTAL OF 22.5 YF	RS		0.0	0.0	1,292.6	0.0	5,244.8	14,865.1	14,865.1	6,233.1		

All estimates and exhibits herein are part of this NSAI report and are subject to its parameters and conditions.

ESCALATION CASE SENSITIVITY

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#### RESERVES AND ECONOMICS AS OF DECEMBER 31, 2011

PROBABLE RESERVES

CITY OF NEWPORT BEACH INTEREST

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

		GROSS RESERVES			NET RESERVES			GRO	DSS REVENI	JE	TOTAL	NET CAP	ABDNMNT	OPERATING	NET	CUM P.W.
LEASE		OIL	NGL	GAS	OIL	NGL	GAS	OIL	NGL	GAS	TAXES	COST	COST	EXPENSE	REVENUE	10.000%
NUMBER	LEASE NAME	BBL	BBL	MCF	BBL	BBL	MCF	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
							CALIFOR	NIA								
NEWF	PORT, W FIELD, ORANGE CO	OUNTY														
000680	NWPRT 1 RD2 IPB	-8,138	0	-8,219	-7,568	0	0	-812.8	0.0	0.0	0.0	0.0	0.0	-297.7	-515.1	-148.2
000520	NWPRT 1 RD2 BP	24,000	0	8,400	22,320	0	0	2,361.5	0.0	0.0	0.0	189.2	0.0	296.7	1,875.6	548.6
000710	NWPRT 2 RD2 EXT	4,026	0	1,884	3,744	0	0	435.1	0.0	0.0	0.0	0.0	0.0	153.7	281.4	44.7
000720	NWPRT 4 EXT	3,598	0	1,450	3,346	0	0	388.8	0.0	0.0	0.0	0.0	0.0	153.7	235.1	37.5
000530	NWPRT 5 BP1	89,369	0	35,748	83,113	0	0	7,830.2	0.0	0.0	0.0	236.9	0.0	733.4	6,859.9	3,156.2
000730	NWPRT 6 RD1 EXT	4,444	0	2,538	4,133	0	0	480.3	0.0	0.0	0.0	0.0	0.0	153.7	326.6	52.0
000540	NWPRT 7 RD1 BP	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	5,799	0	1,798	5,393	0	0	626.8	0.0	0.0	0.0	0.0	0.0	153.7	473.1	75.1
000690	NWPRT 9 STB IPB	-13,080	0	-5,271	-12,165	0	0	-1,197.3	0.0	0.0	0.0	0.0	0.0	-485.7	-711.6	-273.4
000560	NWPRT 9 STB BP	85,259	0	34,104	79,291	0	0	7,790.4	0.0	0.0	0.0	193.6	0.0	636.3	6,960.5	2,597.8
000750	NWPRT 10 RD1 EXT	3,541	0	2,047	3,293	0	0	382.7	0.0	0.0	0.0	0.0	0.0	153.7	229.0	36.4
000760	NWPRT 11 RD1 EXT	2,540	0	2,692	2,362	0	0	274.5	0.0	0.0	0.0	0.0	0.0	153.7	120.8	19.3
000770	NWPRT 12 RD5 EXT	2,153	0	1,128	2,003	0	0	232.8	0.0	0.0	0.0	0.0	0.0	153.7	79.1	12.7
000780	NWPRT 13 RD2 EXT	5,560	0	2,702	5,171	0	0	600.9	0.0	0.0	0.0	0.0	0.0	153.7	447.2	71.0
000790	NWPRT 14 RD3 EXT	2,866	0	1,359	2,666	0	0	309.8	0.0	0.0	0.0	0.0	0.0	153.7	156.1	24.8
000700	NWPRT 15 RD1 RTP	19,478	0	8,142	18,114	0	0	1,698.8	0.0	0.0	0.0	309.0	0.0	689.5	700.3	273.0
000820	MICROTURBINE	0	0	0	0	0	0	0.0	0.0	0.0	0.0	363.9	0.0	-822.9	459.0	41.1
000630	FIXED EXPENSE PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	3,111.9	-3,111.9	-490.2
00800	ABANDONMENT PRB	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	154.7
	FIELD TOTAL	231,415	0	90,502	215,216	0	0	21,402.5	0.0	0.0	0.0	1,292.6	0.0	5,244.8	14,865.1	6,233.1
т	OTAL CALIFORNIA	231,415	0	90,502	215,216	0	0	21,402.5	0.0	0.0	0.0	1,292.6	0.0	5,244.8	14,865.1	6,233.1
т	OTAL ALL LEASES	231,415	0	90,502	215,216	0	0	21,402.5	0.0	0.0	0.0	1,292.6	0.0	5,244.8	14,865.1	6,233.1

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#### BASIC DATA AS OF DECEMBER 31, 2011

PROBABLE RESERVES

CITY OF NEWPORT BEACH INTEREST

# LOCATE

#### SUMMARY - CERTAIN PROPERTIES LOCATED IN WEST NEWPORT FIELD ORANGE COUNTY, CALIFORNIA

			ACTIVE		GROSS ULTIMATE		WORKING		REVENUE		OIL/COND		NGL		GAS		GROSS OPERATING		
LEASE	EASE		COMPLTNS OIL		OIL/COND	GAS	INTEREST		INTEREST		\$/BBL		\$/BBL		\$/MCF		EXPENSE M\$/M		LIFE
NUMBER	LEASE NAME	RESERVOIR	OIL	GAS	BBL	MCF	START	END	START	END	START	END	START	END	START	END	START	END	YRS
							CALIFOF	RNIA											
NEWF	PORT, W FIELD, ORANGE C	OUNTY																	
000680	NWPRT 1 RD2 IPB	D5, SAN	0	0	-8,138	-8,219	100.000	100.000	93.000	93.000	93.500	95.435	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000520	NWPRT 1 RD2 BP	C SAND	1	0	24,000	8,400	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	17.5
000710	NWPRT 2 RD2 EXT	2747-3477 MD	1	0	4,026	1,884	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000720	NWPRT 4 EXT	D0, D5	1	0	3,598	1,450	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000530	NWPRT 5 BP1	D5	1	0	89,369	35,748	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000730	NWPRT 6 RD1 EXT	NWPT	1	0	4,444	2,538	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000540	NWPRT 7 RD1 BP	D5	0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	0.0
000740	NWPRT 8 RD1 EXT	SAN, NWPT	1	0	5,799	1,798	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000690	NWPRT 9 STB IPB	NWPT	0	0	-13,080	-5,271	100.000	100.000	93.000	93.000	93.500	80.720	0.000	0.000	0.000	0.000	3.1	3.1	17.4
000560	NWPRT 9 STB BP	D5	1	0	85,259	34,104	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000750	NWPRT 10 RD1 EXT	3755-3964 MD	1	0	3,541	2,047	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000760	NWPRT 11 RD1 EXT	D0, D5	1	0	2,540	2,692	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000770	NWPRT 12 RD5 EXT	D0, D5	1	0	2,153	1,128	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000780	NWPRT 13 RD2 EXT	DPR THN NWPT	1	0	5,560	2,702	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000790	NWPRT 14 RD3 EXT	D0, NWPT, SAN	1	0	2,866	1,359	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	21.5
000700	NWPRT 15 RD1 RTP	DPR THN NWPT	1	0	19,478	8,142	100.000	100.000	93.000	93.000	93.500	116.219	0.000	0.000	0.000	0.000	3.1	3.1	20.3
000820	MICROTURBINE		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	-2.4	21.5
000630	FIXED EXPENSE PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	40.8	63.5	21.5
008000	ABANDONMENT PRB		0	0	0	0	100.000	100.000	93.000	93.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.0	22.5
	FIELD TOTAL		13	0	231,415	90,502													
TOTAL CALIFORNIA			13	0	231,415	90,502													
T	OTAL ALL LEASES		13	0	231,415	90,502													