## Pardee Resources Company's Executive Summary of Forecon, Inc.'s Summary Appraisal Report of a Market Valuation

Of:

Surface and Timber Rights

On:

Approximately 136,200.17 Acres

Located in:

West Virginia, Kentucky and Virginia

Owned by:

Pardee & Curtin Realty LLC

Prepared on:

January 31, 2014

## **Summary of Salient Facts**

Type of Appraisal Report	Summary Appraisal Report
Definition of Value	Market
Effective Date	September 30, 2013
Report Date	December 6, 2013
Owner	Pardee & Curtin Realty LLC
Location (States)	West Virginia, Kentucky and Virginia
Acres	136,200.17±
Forested Acres (84%)	114,095.87±
Improvements (If Any)	No Contributory Value
Leased Fee Interest	Minimal
Restrictions	Minimal
Volume of Sawtimber (bf Doyle Log Rule)	547,997,744±
Approximate Sawtimber Volume per Forested Acre (bf)	4,803±
Volume of Pulpwood (Tons)	1,388,857±
Approx. Pulpwood Volume per Forested Acre (Tons)	12±
Approximate Value of Timber per Total Acres	\$ 885.19±
Estimate of Value	\$136,000,000
Allocated Real Estate Value	\$39,568,742
Allocated Sawtimber Value	\$93,767,725
Allocated Pulpwood Value	\$2,663,533

Pardee & Curtin Realty LLC, a wholly owned subsidiary of Pardee Resources Company, in connection with its timberland management responsibilities, recently hired Forecon, Inc. ("Forecon"), a forestry consulting and certified timberland appraisal company, to perform an appraisal of its core timberland properties. Forecon prepared a Summary Appraisal Report as defined in guidelines set forth by the Uniform Standards of Professional Appraisal Practice ("USPAP") and the Code of Professional Ethics and Standards of Professional Appraisal Practice of The Appraisal Foundation and The Appraisal Institute. The reported items in the Summary Appraisal Report contain the requirements as set forth by Standard Rule 2-2 (b) of USPAP along with those Supplemental Standards of The Appraisal Foundation.

The **Purpose and Intended Use** of this document is to provide an Executive Summary of Forecon's Summary Appraisal Report which estimated the Market Value of the described rights to the subject property for financial planning, reporting, and overall asset management purposes.

Market Value is defined in the Summary Appraisal Report as: "the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- 1) buyer and seller are typically motivated;
- 2) both parties are well informed or well advised, and acting in what they consider their own best interests;
- 3) a reasonable time is allowed for exposure in the open market;
- 4) payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and
- 5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."

It should be noted that Forecon previously performed several timber inventories as noted herein and some timber sale marking work and boundary line services. Other than these services, Forecon has not performed any other appraisal or consulting services regarding the subject property within the three years preceding the Summary Appraisal Report.

The **Scope of Work** for the Summary Appraisal was to estimate the market value of the surface and timber interest as of September 30, 2013. All three general approaches to value (*Sales Comparison*, *Phased Acquisition Cost*, and *Income Capitalization*) were used in the Summary Appraisal to estimate the final opinion of value.

The **Subject Property Appraised** is comprised of approximately 136,200.17 acres of surface and timber rights in West Virginia, Kentucky and Virginia. The property is further comprised of fourteen (14) Management Units in three distinct geographic areas.

<sup>&</sup>lt;sup>1</sup> Appraisal Standards Board, *Uniform Standards of Professional Appraisal Practice*, 2014-2015 Edition, The Appraisal Foundation, page A-102.

		Tax/Deed		Total GIS	Forested GIS
Management Unit	Location	Acres	Percent	Acres	Acres
Berthy Blair	Central WV	11,169.17	8%	11,171.30	9,793.30
Pardee & Curtin	Central WV	62,213.88	46%	61,874.90	57,178.80
Pardee & Curtin Nicholas	Central WV	559.35	0%	529.74	500.00
Tioga	Central WV	16,252.39	12%	15,851.20	13,581.70
Subtotal	Central WV	90,194.79	66%	89,427.14	81,053.80
Big Huff Land Co.	Southern WV	2,416.44	2%	2,274.80	1,587.50
Courtney	Southern WV	5,605.00	4%	5,779.11	2,160.40
George	Southern WV	827.50	1%	823.00	795.00
Hinchman	Southern WV	1,989.91	1%	2,180.50	1,942.50
Pardee Land Co.	Southern WV	20,377.40	15%	20,429.20	16,375.20
Powellton	Southern WV	3,827.00	3%	3,824.64	2,225.79
Reedy Branch Land Co.	Southern WV	2,106.70	2%	2,128.70	2,128.70
Wittenberg Heirs	Southern WV	684.16	1%	706.00	589.60
Subtotal	Southern WV	37,834.11	28%	38,145.95	27,804.69
Blackwood	Virginia	1,557.61	1%	1,637.68	1,276.18
Calvin	Kentucky - Virginia	6,613.66	5%	6,462.58	3,961.20
Subtotal	KY-VA	8,171.27	6%	8,100.26	5,237.38
Total to be Appraised	14 Tracts	136,200.17	100%	135,673.35	114,095.87

The subject property is part of a larger ownership that was granted to Pardee & Curtin Realty LLC from Pardee Resources Group, Inc. on September 7, 2001 and recorded in the various counties comprising the ownership.

The subject property consists of surface and timber rights. The mineral and extraction rights were retained by Pardee Resources Group, Inc. When these deeds were recorded a *Memorandum of Shared Use Agreement* was also recorded. This *Memorandum* refers to a more definitive *Shared Use Agreement* between Pardee Resources Group, Inc. (now Pardee Minerals LLC) and Pardee & Curtin Realty LLC that is confidential and held by company personnel, and defines the rights retained by Pardee Minerals LLC. In general, Pardee & Curtin Realty LLC owns the surface and timber rights while Pardee Minerals LLC retained the minerals and associated extraction rights, and is generally not required to compensate the surface owner (Pardee & Curtin Realty LLC) for such things as damages, royalties or wheelage. *Note that for the purposes of the Summary Appraisal, Forecon imposed the hypothetical condition that the owner of the surface and timber rights will be compensated for damages to the surface and timber because of the extraction of oil, gas or minerals.* 

The timber resource on the subject property has been actively managed for decades. Pardee & Curtin Realty LLC and its predecessors have addressed long-term sustainability together with monitoring the timber resource by developing periodic inventory updates.

The **Property Rights Appraised** were the timber and surface rights of the property described herein. The rights appraised are subject to the *Shared Use Agreement* with Pardee Resources Group, Inc. (now Pardee Minerals LLC) and to more typical easements such as utilities and rights-of-way, as well as the restrictions of eminent domain, escheat, police power and taxation. Any existing improvements and oil, gas and mineral rights were excluded from the Summary Appraisal. There were no extraordinary forest management or easement restrictions pertaining to the subject property. The subject property exists in areas that are somewhat heavily forested and known for their generally good quality hardwood timber species.

A property's *Highest and Best Use* is defined as "the reasonably probable use of vacant land or improved property which is: physically possible, legally permissible, economically feasible, and which will result in the highest value."

**Physically possible uses:** location, terrain and soil capability conditions generally indicate that this property is well suited to timber production and some recreational usage. Topographic characteristics and access limitations generally impede development potential.

**Legally permissible uses:** as stated previously, the property is subject to a *Shared Use Agreement*, but otherwise the potential uses are largely unrestricted; accordingly, this should not affect the timber management use that is deemed central to the value of this property.

**Economically feasible uses:** based on the past use and remote character of the subject property, the surrounding land uses, and general economic trends, it was Forecon's opinion that this property, as a whole, is economically unfeasible for development, but can provide a significant investment return on the managed selling of timber. Under proper management, this "maximally productive use" could be sustained indefinitely, notwithstanding any unknown market changes.

Based on a review of the above elements, it was Forecon's opinion that as of September 30, 2013, the **Highest and Best Use of the subject property**, as constrained within the real estate rights owned by Pardee & Curtin Realty LLC, was that of timber production; this was the use that would produce the highest net return. This ownership was believed to be at its Highest and Best Use as of September 30, 2013.

Forecon used the following various **Components of Value** of the subject property. Since **Bare Land** value (unimproved) is fundamental to a property's total value (with improvements), it is important to estimate land value before the applicable approaches to total value are discussed and implemented. For the purposes of the Summary Appraisal, "bare land" was defined as the land and non-commercial timber of all sizes.

Forecon determined that there were no reported **Improvements** of any substantial contributory value located on the subject property that would have any material effect on market value. Should such improvements actually exist, they were not taken into consideration by Forecon in the Summary Appraisal.

Estimates of merchantable **Sawtimber** were determined by Forecon by variable radius, ten or twenty basal area factor (10 or 20 BAF) prism cruises with sample points systematically placed across the subject property. The initial inventory work was started in 2005-2006 by Forecon on the Pardee Curtin Management Unit in Central West Virginia. A total of 18,124 sample points were obtained on 114,095.87 forested acres or an overall average of one sample point per 6.3 acres.

In general, at each point, all trees greater than 1.1" in diameter breast height ("dbh") were measured and tallied by Forecon. Each tree was further identified for species, measured for diameter and height and was characterized as either sawtimber (11.5 inches dbh and greater, meeting at least USFS Grade 3 specifications, containing at least one 8 foot bolt and to a minimum 10" top), pulpwood (6 inches dbh and greater containing at least one 16 foot log), or cull (stems with no commercial value).

The information was collected on hand held data recorders with Pocket Dog inventory software, then downloaded and compiled on Forecon's propriety inventory software system, TIGER, which has geographic information system ("GIS") features and growth modeling functionality. New inventory data for the stands with any harvest activity is updated on a continuous basis with new sample data that is brought into TIGER and grown, if applicable, to the effective date.

In order to increase the accuracy and to provide more detailed management opportunities, Forecon stratified the forest for many of the Management Units into numerous timber type stands. As a result of this process, Forecon estimated an overall sawtimber volume of 547,997,744 board feet of merchantable sawtimber (Doyle Log Rule). The dominant species by volume was tulip poplar with 31% of the volume, followed by red oak (12%), chestnut oak (9%), red maple (9%), hard (sugar) maple (7%), basswood (6%) and a wide variety of other species. Overall the Forecon cruise identified thirty-five different sawtimber species on the subject property. Overall the dominant size class was 18" dbh stock with 19% of the volume, followed by the 16" class with 18% of the volume. A significant percentage of the merchantable sawtimber volume (82%) was in the 16" class and higher.

Concurrent with the sawtimber inventory, a Forecon cruise of the merchantable **Pulpwood** on the subject property was also included as part of the original inventory which was subsequently resampled for harvest and adjusted for growth. As a result, Forecon estimated an overall volume of 1,388,857 tons of merchantable pulpwood on the subject property.

The subject property contains a **Leased Fee Component**, which was incorporated by Forecon into the *Income Approach*.

These Components of Value were then incorporated by Forecon into **Valuation Models** utilized in the Summary Appraisal of the subject property. In the Summary Appraisal, Forecon considered all three general approaches to value (*Sales Comparison*, *Phased Acquisition Cost*, and *Income Capitalization*).

Appraisal technique seeks to duplicate the process by which typical sellers and buyers in a given transaction reach agreement on the price for that transaction. Appraisal theory holds that both buyer and seller use one or more approaches to arrive at value.

With respect to the *Sales Comparison Approach*, Forecon indicated that this approach is often thought of as the most reliable approach when market data is available and verifiable, and when the need to adjust the data to fit the subject is kept to a minimum. A major premise of this approach is that the market value of a property is directly related to the prices of comparable properties (the principle of *Substitution*). Accordingly, Forecon used six comparable land sales in the region, which ranged in size from approximately 10,129 acres to 69,928 acres.

Regarding the *Phased Acquisition Cost Approach*, Forecon noted that the value of a property can be estimated by adjusting the current cost to replicate or replace the property by subtracting the amount of depreciation present in all improvements. A version of the *Cost Approach*, known as the *Phased Acquisition Method*, was developed for use in the appraisal of timberland by the late Dr. William Sizemore, MAI, of Alabama.

Forecon stated that the *Income Capitalization Approach* is based on the *Principle of Anticipation* and assumes that the present value of the future benefits of property ownership is an indicator of that property's market value. Income streams (positive and negative) and, sometimes, property reversion (resale) are capitalized into a present lump-sum value.

A property management scenario is developed which forms the framework for a *Discounted Cash Flow Analysis* ("DCF"), which incorporates both projected income from the sale of timber and other income streams as well as projected expenses (ad valorem taxes, management costs, timber sale administration expenses, etc.). Also necessary to develop this DCF were assumptions concerning projections of stumpage value appreciation, annual growth rate, discount rate (or alternative investment rate), land value inflation, and ad valorem tax inflation.

For the **Final Estimate of Market Value, Forecon used** all three valuation approaches. The results of the *Sales Comparison*, *Phased Acquisition Cost*, and *Income Capitalization Approaches* were:

Valuation Approach	Value Estimate
Sales Comparison	\$143,414,000
Phased Acquisition Cost	\$144,910,000
Income (DCF)	\$127,600,000

Based on the methodology as mentioned above and subject to all the factors, assumptions and limiting conditions as described in the Summary Appraisal Report, it was Forecon's opinion that, as of September 30, 2013, the market value of the subject property, consisting of approximately 136,200.17 acres owned by Pardee & Curtin Realty LLC was:

One Hundred Thirty-Six Million Dollars (\$136,000,000)