

Dirty Business Soil 1115 11th Street Arcata, CA 95521 707,633,8885 DBSanalytics.com

October 31, 2016

Client: Rama Boyd Phone: 707-223-2789

Email:ramaboyd@gmail.com

Mailing Address: 7777 Old Briceland Rd Garberville, CA 95542

Surveyed Address: Same as mailing

APN: 220-241-017

Your Soil STORIE Index Rating:

Site 1: 81 Site 2: 86 Site 3: 86

Site 4: 77 Site 5: 90

Site 6: 90

Site 7: 86

The parameters for this index are based on Storie Index Soil Rating, Special Publication by the Division of Agricultural Sciences, University of California (2003).

As parameters set forth by Humboldt County ordinance 2544, the area of cultivation surveyed for sites 1, 2, 3, 5, 6 and 7 are considered Prime Agricultural Land via STORIE index greater than 80%.

Site 4 had a STORIE index of less than 80 and therefore is not considered Prime Agricultural Land.

In addition to these mapped sites, there are two other areas of the property that have prime agricultural land already mapped by the most current mapping of Humboldt County (Humboldt County Soil Survey, NRCS). This soil is map unit 151, Parkland-Garberville complex, 0-9% slope, land capability class 2. Please see comprehensive map (figure 1) for location and area.

Please reference tables below for ratings of individual parameters of the STORIE soil index.

Please reference figures below for mapped areas.





Client: Rama Boyd

Your STORIE Index: 81

Table 1: Site 1

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	8-15%	95
X*	Drainage	Fairly well	90
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.1)	100
	Acidity	Slight (pH=5.7)	95
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $100 \times 100 \times 0.95 \times 0.86 = 0.81 \times 100 = 81$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.





Client: Rama Boyd

Your STORIE Index: 86

Table 2: Site 2

Factor	Property	Characteristic	Rating
А	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	0-3%	100
X*	Drainage	Fairly well	90
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.3)	100
	Acidity	Slight (pH=5.6)	95
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 1.00 \times 0.86 = 0.86 \times 100 = 86$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.





Client: Rama Boyd

Your STORIE Index: 86

Table 3: Site 3

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	8-15%	95
X*	Drainage	Well	100
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.2)	100
	Acidity	Moderate (pH=5.4)	90
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $100 \times 100 \times 0.95 \times 0.90 = 0.86 \times 100 = 86$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.



Client: Rama Boyd

Your STORIE Index: 77

Table 4: Site 4

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	8-15%	95
X*	Drainage	Fairly well	90
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.2)	100
	Acidity	Moderate (pH=5.2)	90
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 0.95 \times 0.81 = 0.77 \times 100 = 77$ 

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Client: Rama Boyd

Your STORIE Index: 90

Table 5: Site 5, Hole 1

Factor	Property	Characteristic	Rating
А	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	5-15%	95
X*	Drainage	Well	100
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.4)	100
	Acidity	Slight (pH=6.0)	95
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 0.95 \times 0.95 = 0.90 \times 100 = 90$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.





Client: Rama Boyd

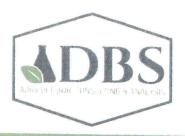
Your STORIE Index: 90

Table 6: Site 5, Hole 3 (Hole 2 was a confirmation hole)

	Table 3, Hole 3 (Hole 2 was a committation hole)				
Factor	Property	Characteristic	Rating		
А	Physical Profile	Upland deep	100		
В	Surface texture	SiL	100		
С	Slope	5-15%	95		
Х*	Drainage	Well	100		
	Alkali	None present	100		
	Nutrient Level	Fair (EC=0.4)	100		
	Acidity	Slight (pH=5.6)	95		
	Erosion	None	100		
	Mircorelief	Smooth	100		

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 0.95 \times 0.95 = 0.90 \times 100 = 90$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.



Client: Rama Boyd

Your STORIE Index: 90

Table 7: Site 6, Hole 1

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	0-8%	100
X*	Drainage	Well	100
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.3)	100
	Acidity	Moderate (pH=5.4)	90
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 1.00 \times 0.90 = 0.90 \times 100 = 90$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.





Client: Rama Boyd

Your STORIE Index: 90

Table 8: Site 6, Hole 2

Factor	Property	Characteristic	Rating
А	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	0-8%	100
X*	Drainage	Well	100
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.1)	100
	Acidity	Slight (pH=5.5)	95
	Erosion	None	100
	Mircorelief	Smooth	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 1.00 \times 0.95 = 0.95 \times 100 = 95$ 

<sup>\*</sup>Factor X --Conditions exclusive of profile, soil texture, and slope are considered in factor X on the soil rating chart. If two or more conditions exist that are listed under factor X, the rations for each are treated independently; that is, they are multiplied in order to secure the factor X rating.





Client: Rama Boyd

Your STORIE Index: 86

Table 9: Site 7

Factor	Property	Characteristic	Rating
А	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	0-2%	100
Χ*	Drainage	Fairly well	90
	Alkali	None present	100
	Nutrient Level	Fair (EC=0.2)	100
	Acidity	Slight (pH=5.6)	95
	Erosion	None	100
	Mircorelief	Smooth	100

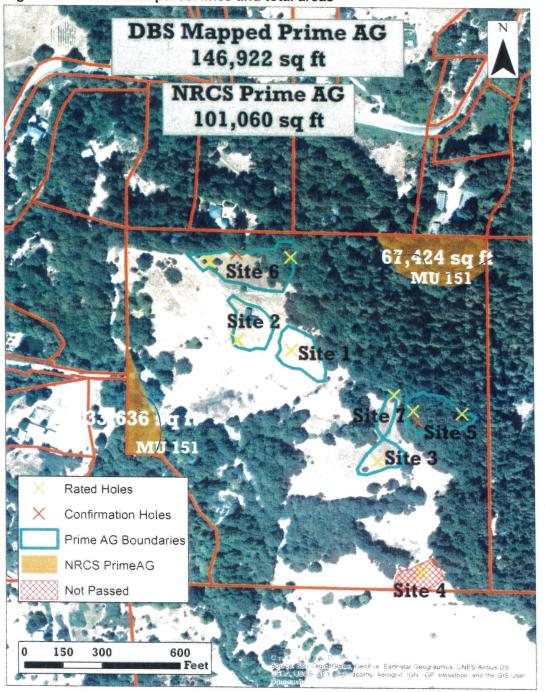
Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 1.00 \times 0.86 = 0.86 \times 100 = 86$ 

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Figure 1. All sites with parcel lines and total areas





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Figure 2. Sites 1, 2, and 6 with areas

Note: Site 6 has been disturbed. Holes were dug in undisturbed areas and represent the whole site.

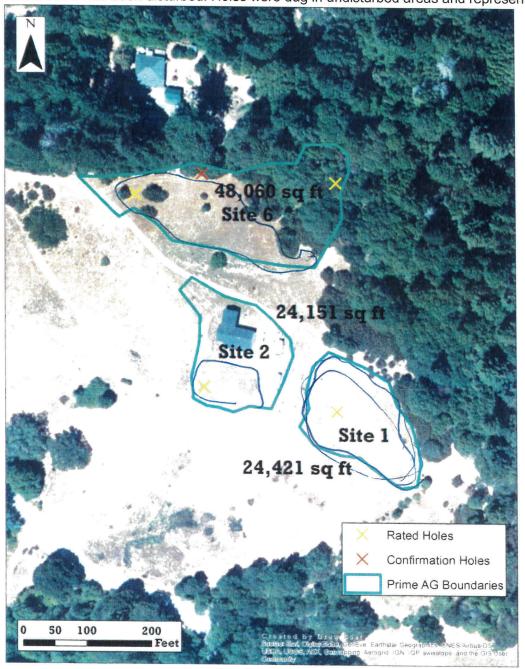
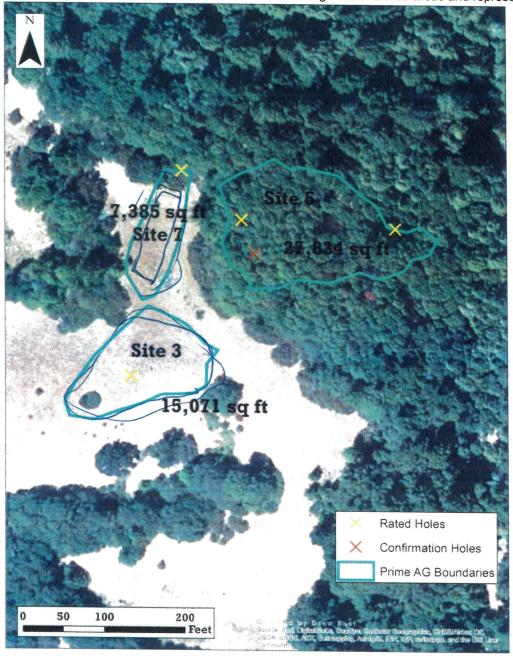


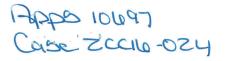




Figure 3. Sites 3, 5, and 7 with areas

Note: Sites 5 and 6 have been disturbed. Hole were dug in undisturbed areas and represent the whole site.







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July 11, 2016

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Email:ramaboyd@gmail.com

Mailing Address: 7777 Old Briceland Rd Garberville, CA 95542

Surveyed Address: Same as mailing

APN: 220-241-017

Your Soil STORIE Index Rating:

Site 1: 65 (due to a combination of very poor nutrient level, fairly well drained soil, and a slope of 8-15%)

Site 2: 86 Site 3: 81

Site 4: 73 (due to moderate acidity, poor nutrient levels, fairly well drained soil and a slope of 8-15%)

The parameters for this index are based on Storie Index Soil Rating, Special Publication by the Division of Agricultural Sciences, University of California (2003).

As parameters set forth by Humboldt County ordinance 2544, the area of cultivation surveyed for sites 2 and 3 are considered Prime Agricultural Land via STORIE index greater than 80%. Sites 1 and 4 had a STORIE index of less than 80 and therefore are not considered Prime Agricultural Land.

Please reference tables below for ratings of individual parameters of the STORIE soil index.

Please reference figures below for mapped areas.





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#### **STORIE INDEX**

Client: Rama Boyd

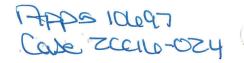
Table 1: Site 2

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	0-3%	100
X*	Drainage	Fairly	90
	Alkali	None	100
	Nutrient Level	Fair	100
	Acidity	Slight	95
	Erosion	Erosion	100
	Mircorelief	None	100

Your STORIE Index: 86

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $1.00 \times 1.00 \times 1.00 \times 0.86 = 0.86 \times 100 = 86$ 

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#### **STORIE INDEX**

Client: Rama Boyd

Your STORIE Index: 81

Table 2: Site 3

Factor	Property	Characteristic	Rating
Α	Physical Profile	Upland deep	100
В	Surface texture	SiL	100
С	Slope	8-15%	95
X*	Drainage	Well	100
	Alkali	None	100
	Nutrient Level	Poor	95
	Acidity	Moderate	90
	Erosion	Erosion	100
	Mircorelief	None	100

Factor A x Factor B x Factor C x Factor X = STORIE Soil Index Rating Your STORIE Index Rating:  $100 \times 100 \times 0.95 \times 0.86 = 0.81 \times 100 = 81$ 

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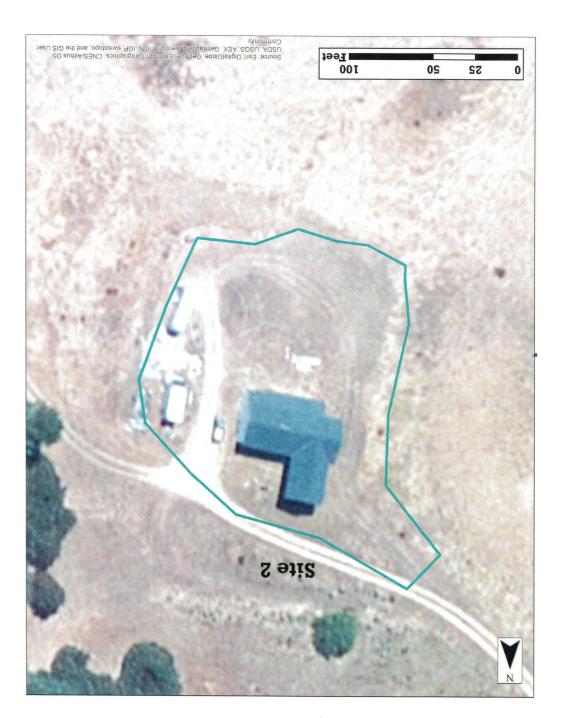
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Figure 1. Site 2. Area = 24,151 square feet







Site 3

100 Feet

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# 17-05 10697 Casso ZCC16-054



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Figure 3. All sites surveyed

