

FOCUSED DESERT TORTOISE SURVEY

LILAC DEVELOPMENT LLC & WELLSPRING DEVELOPMENT LLC CONDITIONAL USE PERMIT APN 3128-481-10 & 11

SAN BERNARDINO COUNTY, CALIFORNIA
(USGS Adelanto, CA Quad.; Township 5 North, Range 5 West, Section 8)

Owner/Applicant

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Project No: RCA#2013-61

September 6, 2013

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EXECUTIVE SUMMARY

Protocol surveys for the desert tortoise were conducted on a 17.6-acre parcel located at north of Mojave Drive in San Bernardino County (Section 8, Township 5 North, Range 5 West). The site supports a somewhat disturbed creosote bush (*Larrea tridentata*) community typical of this portion of the Mojave Desert (Figures 1, 2, and 3). Co-dominants consisted of saltbush (*Atriplex canescens*), cottonthorn (*Tetradymia spinosa*), rabbitbrush (*Chrysothamnus depressus*) and yellow-green matchweed (*Gutierrezia sarothrae*). An existing school is located northeast of the site and single-family dwellings border the site on the south.

The property is located within the known distribution of the desert tortoise; therefore, focused surveys were performed for the species on September 6, 2013 from approximately 0630 to 1400 hours. Surveys were also conducted in the zone of influence to the north, east, and west as per survey protocol. The surveys were performed by Randall Arnold using the standard survey protocol for the species (i.e., 10-meter belt transects) as required by California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS).

The site supports suitable habitat for the desert tortoise; however, no tortoises or tortoise sign (burrows, scats, carcasses, etc.) were observed on the site. The species has been documented in the region and populations have been documented approximately 3.5 miles east of the site (CNDDDB, 2013). However, the species is unlikely to occur on the site in the future based on the low population levels in the region, the absence of any populations in adjacent areas, and the presence of existing developments in the area.

1.0 PROJECT AND PROPERTY DESCRIPTION

The property is approximately 17.6-acres in size (gross) and is located in the Adelanto area about 1.25 miles west of Highway 395 along Mojave Drive at the intersection of Lilac Road and Mojave Drive in San Bernardino County (T5N, R5W, Section 8) (Figures 1, 2, 3, and 4 Appendix A). The property consists of relatively flat terrain with no prominent ridges or hills with an elevation of approximately 3,050 to 3,060 feet, MSL. The soils consisted primarily of sandy-loam. A drainage easement bisects the site in a north-south direction and a very deep drainage channel is located in the central portion of the site and bisects the site in a north-south direction. The drainage channel is not depicted as a blue line stream channel on the Adelanto, CA USGS quadrangle (Figure 2). Temperatures during the April 16, 2010 surveys were in the low 50's (°F) (AM) to low 60's (°F) (PM) with winds of 0 to 5 mph. Cloud cover was estimated at 0 to 5 percent. No rare or sensitive wildlife habitats were observed, and no distinct wildlife corridors bisect the property.

The project proponent is proposing to construct a retail/commercial development consisting of several buildings and parking lots. Figure 1 depicts the various retail and office buildings that would be built on the site following approval of the application. The legal description is provided below.

THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ OF THE SOUTHEAST ¼ AND THE SOUTHEAST ¼ OF THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ OF SECTION 8, TOWNSHIP 5 NORTH, RANGE 5 WEST, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA.

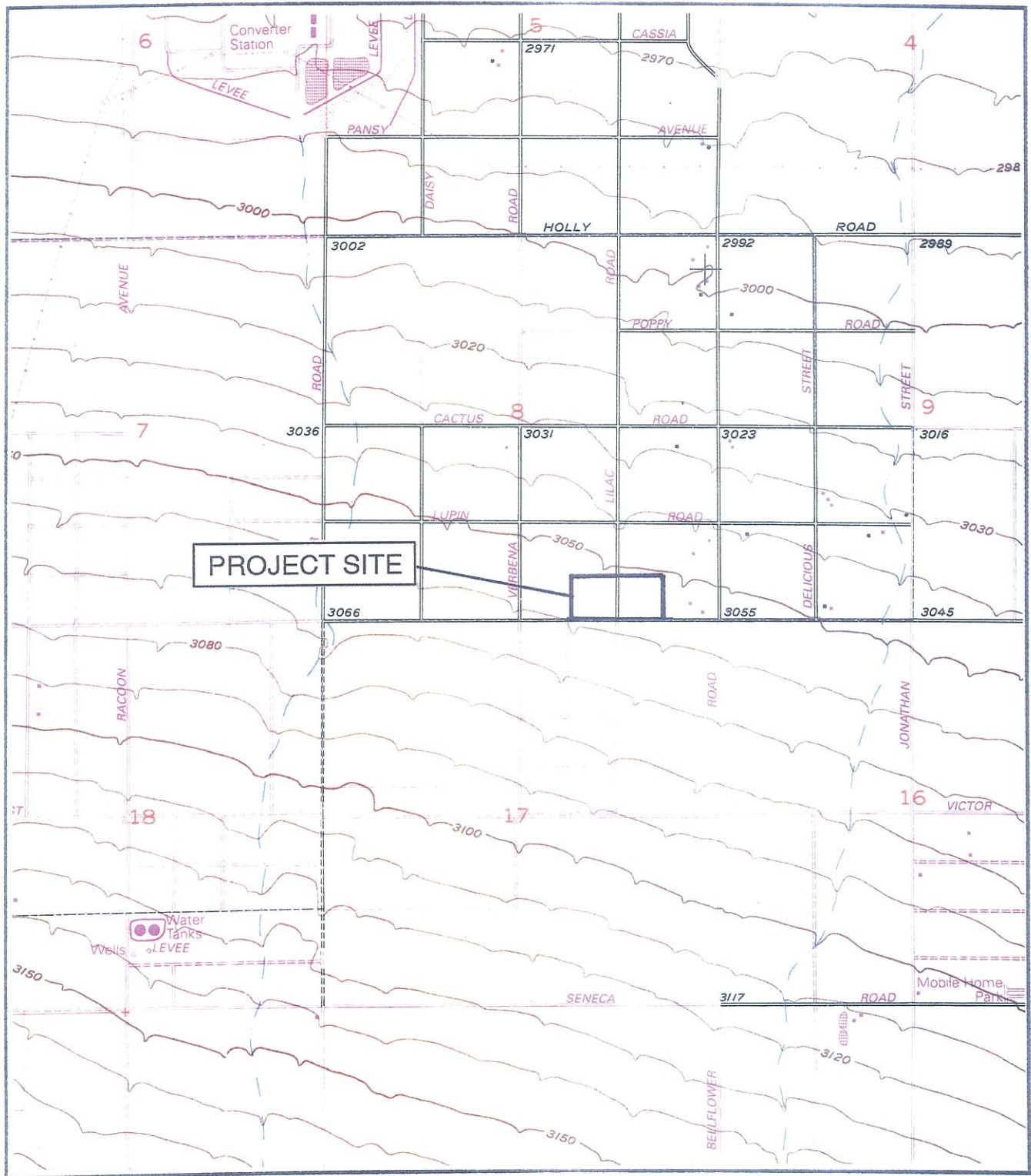
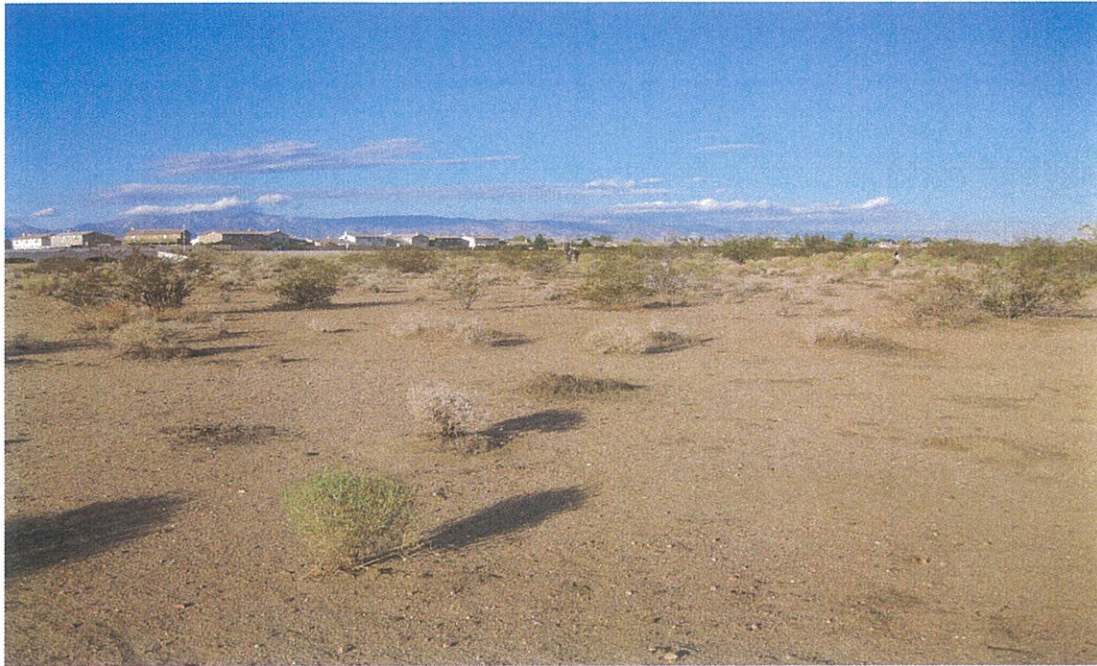


FIGURE 2
PROPERTY LOCATION
 (Lilac Deve. LLC & Wellspring Deve. LLC)
 (Source: USGS Adelanto, CA Quad., 1956)





NORTHEAST CORNER LOOKING SOUTHWEST



SOUTHEAST CORNER LOOKING NORTHWEST

FIGURE 3
PHOTOGRAPHS OF SITE
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)



SOUTHWEST CORNER LOOKING NORTHEAST



NORTHWEST CORNER LOOKING SOUTHEAST

FIGURE 3, cont.
PHOTOGRAPHS OF SITE
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)

2.0 LITERATURE/RECORDS REVIEW - DESERT TORTOISE

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to initiation of field surveys to determine if the tortoises have been documented on the site or in the area surrounding the property. Based on the literature review and evaluation of the CNDDDB database for the Adelanto quadrangle, it was determined that the site is located within the general distribution of the desert tortoise. However, populations of desert tortoises have not been identified in the immediate surrounding area according to CNDDDB (2013). The nearest documented observation (2007) of tortoises is about 3.5 miles east of the site according to CNDDDB (2013). Tortoise population levels in the immediate area surrounding the site are expected to be relatively low (BLM, 1990).

There are no USFWS designated critical habitats for the tortoise in the immediate area nor is there any proposed critical habitat in the area. The protocol survey results outlined in this report are valid for one year as per CDFW and USFWS requirements, and an additional survey may be required if the 12-month time limit is exceeded before development activities are completed. However, regardless of the results of the tortoise survey, desert tortoises cannot be taken under State and Federal law. The survey report and any mitigation included do not constitute authorization for incidental take of the desert tortoise. If tortoises are observed during future site activities, all on-site activities should cease immediately and CDFW and USFWS should be contacted.

The desert tortoise is the largest reptile in the arid southwest United States, and it historically occupied a range that included a variety of desert communities in southeastern California, southern Nevada, western and southern Arizona, southwestern Utah, and through Sonora and northern Sinaloa, Mexico (Luckenbach, 1982). Today populations are largely fragmented and studies indicate a steady and dramatic decline over most of its former range (BLM, 1988). A highly contagious respiratory disease has infected tortoise populations over the last 20+ years, primarily in the western Mojave Desert region, which has had a very detrimental impact on population levels. Given the continued habitat loss and the rapid decline in numbers of tortoises brought about by the disease, the U.S. Fish and Wildlife Service exercised its emergency authority and determined tortoise populations north and west of the Colorado River to be an endangered species under the Endangered Species Act of 1973, as amended (USFWS, 1989). The emergency rule was published in the Federal Register on August 4, 1989, and remained in effect until April 1, 1990. On April 2, 1990, the U.S. Fish and Wildlife Service officially listed the desert tortoise as a threatened species under the Endangered Species Act of 1973, as amended.

3.0 METHODOLOGY

The site was surveyed for desert tortoises by Randall Arnold September 6, 2013 and as required by the CDFW and USFWS survey protocol, 10 meter, parallel belt transects were walked in a north-south direction until the property had been checked for tortoises and/or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the surrounding area to the north, east, and west. All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable tortoise foraging habitat. Surveys were performed on the site and in the surrounding area from about 0630 to about 1400 hours.

USFWS and CDFW specify when surveys for tortoises can be conducted (i.e., April through May and September through October); therefore, surveys were performed on September 6, 2013. Comprehensive surveys combined with identification of the habitat on the site and in the surrounding area will provide data on the potential presence or absence of tortoises on a property site. Temperatures during the September survey were in the high 50's to low-90's (AM, °F) with wind speeds of about 5 mph (mainly from the south), and clear skies. No precipitation was recorded during the survey.

Limitations:

(1) This report is valid for 12 months from the date of the survey as per CDFW and USFWS requirements. An updated report will be required if project activities do not occur within the next 12-month period as per CDFW and USFWS requirements.

(2) The results of this report do not constitute authorization for the "take" of the desert tortoise or any other listed or sensitive wildlife species. The authorization to impact the tortoise can only be granted by CDFW and USFWS. If desert tortoises are observed during future project activities, project activities should cease immediately and CDFW and USFWS should be contacted to discuss mitigation measures which may be required for the desert tortoise.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The site supports a disturbed creosote bush (*Larrea tridentata*) community with co-dominants saltbush (*Atriplex canescens*), ephedra (*Ephedra nevadensis*), and cotton-thorn (*Tetradymia spinosa*) also present (Figures 3 and 4). A few other perennials were also observed such as Joshua tree (*Yucca brevifolia*), burrobrush (*Franseria dumosa*), and rabbitbrush (*Chrysothamnus depressus*). A few annuals were also including erodium (*Erodium texanum*), bunchgrass (*Phleum pretense*), schismus (*Schismus barbatus*), and buckwheat (*Eriogonum fasciculatum*). Table 1 provides a compendium of plants observed on the site and in the ZOI (Appendix A).

The only mammals observed included Jackrabbits (*Lepus californicus*) and antelope ground squirrels (*Ammospermophilus leucurus*); although, coyote scats (*Canis latrans*) were also present. Merriam's kangaroo rats (*Dipodomys merriami*) are very common in the region and may also inhabit the site. Reptiles observed included side-blotched lizards (*Uta stansburiana*) and western whiptail lizards (*Cnemidophorus tigris*). Desert spiny lizards (*Sceloporus magister*) are also common in the region and may inhabit the site. Ravens (*Corvus corax*) and sage sparrows (*Amphispiza belli*) were the only birds identified during the September 6 surveys. Table 2 provides a compendium of wildlife species observed on the property (Appendix A).



FIGURE 4
BIOLOGICAL RESOURCES MAP
(LILAC DEVELOPMENT & WELLSPRING DEVELOPMENT)

5.0 RESULTS – DESERT TORTOISE

The site does not support populations of tortoises based on the results of the protocol surveys conducted on September 6, 2013. The tortoise populations in the region are very low which and only a few tortoises have been observed in the Adelanto area in recent years. As previously indicated, the nearest documented population is about 3.5 miles east of the property (CNDDDB, 2013). Tortoises are not expected to migrate onto the site in the near future based on the results of the field investigations, the low population levels in the region, and the presence of single-family dwellings and schools in the area which act as barriers to movements.

6.0 IMPACTS AND RECOMMENDATIONS

Future development activities are not expected to have any direct or indirect impacts on tortoises or tortoise habitat based on the results of the September 6, 2013 survey. The project is not expected to disrupt any continuity of any important wildlife habitat or habitat/wildlife corridors. No additional investigations are recommended at this time; however, the survey results are only valid for 12-months, and CDFW, USFWS, and the County may require the site be re-surveyed for desert tortoise if future development activities are not completed by September 6, 2014.

If the site is modified by grading or otherwise disturbed prior to project approval, which results in the loss of desert tortoises, CDFW, USFWS, and the County Building and Safety Department should be notified. Such action prior to project approval will violate State and Federal endangered species laws and may be considered grounds for denial of the project. Mitigation and restoration plans will be required under such actions.

7.0 PROPOSED MITIGATION MEASURES

The site does not support tortoises at the present time and future development activities are not expected to impact the species. No mitigation measures are proposed at the present time; however, if tortoises are observed on the property during future activities, all on-site activities should cease immediately and CDFW and USFWS should be contacted to initiate consultations, and to discuss mitigations which will be required prior to continuation of on-site activities. CDFW and USFWS are the only agencies which can grant authorization for the “take” of the desert tortoise.

8.0 REFERENCES

- California Department of Fish and Game
1990 California's Wildlife, Volumes 1, 2, and 3. Sacramento.
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- Johnson, H.
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1982 Ecology and Management of the Desert Tortoise (*Gopherus agassizii*) in California. In North American Tortoises: Conservation and Ecology. U.S. Department of Interior, Fish and Wildlife Service. Wildlife Research Report No. 12. pp. 1-36.
- U.S. Department of the Interior, Bureau of Land Management
1988 Desert Tortoise Habitat Management on the Public Lands: A Rangeland Plan. BLM, Washington, D.C.
- 1988 Recommendations for Management of the Desert Tortoise in the California Desert Conservation Area. BLM, Riverside, CA.
- U.S. Department of the Interior, Fish and Wildlife Service.
1989 The Desert Tortoise Emergency and Proposed Listing. Portland , OR.
- 1989 Endangered and Threatened Wildlife and Plants; Desert Tortoise; Proposed Rule. Federal Register 50 CFR Part 17:42270-42278.
- 1990 Desert Tortoise Density Category Designation Maps. Maps obtained from Ray Bransfield, U.S.F.W.S. biologist, Laguna Niguel office, Laguna Niguel, CA.

TABLES

Desert Tortoise Occurrences

Table: Desert tortoise observations within 5 to 10-miles of property site (CNDDDB, 2013).

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Desert tortoise (<i>Gopherus agassizii</i>)	Federal: T State: T	Desert scrub communities	Site supports suitable habitat; however, no tortoises or tortoise sign observed	Documented observations 3.5 miles to east (Occ. #51) and ten miles to north (Occ. #1) (CNDDDB, 2013).

FIGURES

Vicinity Map

SITE PHOTOGRAPHS



CENTER OF PROPERTY LOOKING WEST



CENTER OF PROPERTY LOOKING EAST

SITE PHOTOGRAPHS
(LILAC DEVELOPMENT & WELLSRING DEVELOPMENT)

APPENDIX A

Flora and Fauna Compendia

Table 1 - Plants observed during field investigations.

Common Name	Scientific Name	Location
Erodium	<i>Erodium texanum</i>	On-site & ZOI
Schismus	<i>Schismus barbatus</i>	“
Buckwheat	<i>E. fasciculatum</i>	“
Brome grass	<i>Bromus sp.</i>	“
Fiddleneck	<i>Amsinckia tessellate</i>	“
Cotton-thorn	<i>Tetradymia spinosa</i>	“
Saltbush	<i>Atriplex canescens</i>	“
Creosote bush	<i>Larrea tridentata</i>	“
Burrobush	<i>Franseria dumosa</i>	“
Joshua tree	<i>Yucca brevifolia</i>	“
Bunchgrass	<i>Phleum sp.</i>	“
Rabbitbrush	<i>Chrysothamnus depressus</i>	“


Table 2 - Wildlife observed on the site and those species expected to occur in surrounding area.

Common Name	Scientific Name	Location
Common raven	<i>Corvus corax</i>	Observed on-site
Song sparrow	<i>Melospiza melodia</i>	“
Morning dove	<i>Zenaida macroura</i>	Observed in area
Horned lark	<i>Eremophila alpestris</i>	“
Western whiptail lizard	<i>Cnemidophorus tigris</i>	Observed on-site
Side-blotched lizard	<i>Uta stansburiana</i>	“
Antelope ground squirrel	<i>Ammospermophilus leucurus</i>	Observed on-site
Desert spiny lizard	<i>Sceloporus magister</i>	May occur on-site
California ground squirrel	<i>Spermophilus beecheyi</i>	Occurs in area
Coyote	<i>Canis latrans</i>	Scats observed
Merriam’s kangaroo rat	<i>Dipodomys mohavensis</i>	May occur on-site

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, LLC, or which are common species in the region.

CERTIFICATION FOR DESERT TORTOISE SURVEY

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by myself. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 9-6-2013 Signed: 
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist