

R E P O R T

**DOCKET**

**11-AFC-4**

DATE FEB 28 2012

RECD. FEB 28 2012

ADDENDUM TO THE  
PALEONTOLOGICAL TECHNICAL  
REPORT FOR THE RIO MESA SOLAR  
ELECTRIC GENERATING FACILITY  
RIVERSIDE COUNTY, CALIFORNIA

*Prepared for*

BrightSource Energy, Inc.  
1999 Harrison Street., Suite 2150  
Oakland, CA 94612

URS Project No. 27651004

February 2012

**URS**

4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
Phone: 858.812.9292

# Table of Contents

Introduction .....	3
Description Of Additional Paleontological Survey Areas.....	3
Additional Paleontological Survey Methodology .....	3
Record Search Review .....	4
Additional Paleontological Survey Results .....	4
Conclusions .....	5
Statement Of Limitations .....	5
Key Personnel .....	6
References .....	7

## **Figures:**

Figure 1 Supplemental Paleontological Survey

## **Attachments:**

Attachment A – Combined paleontological field survey results summary

Attachment B – Confidential Map (Filed Separately)

## INTRODUCTION

This report includes the results of the additional paleontological surveys for these two parcels. Detailed information regarding these two parcels is provided below:

- **Riverside County Parcel (APN 879230021):** covers 160 acres adjacent to the lower slopes of the Mule Mountains, transected by the Bradshaw Trail, located within the northeastern quarter of Section 16 (Township 8S, Range 21E).
- **Loraine Cromwell Parcel (APN 879210013):** Privately owned parcel consisting of 47.4 acres located north of the Bradshaw Trail, situated within the southern half of the southwestern quarter of Section 11 (Township 8S, Range 21E).

This report discusses the additional survey area, methodology, key personnel, and record search review, as well as additional survey results and recommendations stemming from paleontological resources investigations of the 207.4 acres. This report is intended to serve as an addendum to the original Paleontological Technical Report (PTR) for the Rio Mesa SEGF, which was submitted in 2011 by URS on behalf of the Rio Mesa SEGF Applicant. The PTR forms the basis for the paleontological resources analysis set forth in the Rio Mesa SEGF AFC, which was filed in October 2011 and accepted as data adequate in December 2011.

## DESCRIPTION OF ADDITIONAL PALEONTOLOGICAL SURVEY AREAS

The paleontological survey area addressed in this supplemental report includes the two parcels described above as well as the required 200-foot buffer around each parcel. Generally, the Riverside County parcel is located on the northwest portion of the original Rio Mesa SEGF project area and is transected from east-to-west by the Bradshaw Trail. The private parcel (Loraine Cromwell parcel) is located on the eastern portion of the original project area, positioned to the north of Bradshaw Trail (Figure 1). The Loraine Cromwell parcel is transected, from north-to-south, by existing electric transmission lines as well as the Project's proposed gen-tie line.

## ADDITIONAL PALEONTOLOGICAL SURVEY METHODOLOGY

Following the protocols utilized during the 2011 survey, the principal paleontological survey method consisted of a systematic, intensive pedestrian walk-over in parallel transect intervals no greater than 10 meters, across the additional paleontological survey area. The additional paleontological survey area comprises the entire horizontal portions of the project area that would be subject to direct disturbance, equating to the confines of the two aforementioned parcels. The survey crew was guided by a sub-meter Global Positioning System (GPS) unit that contained previously uploaded locality data and additional survey area boundaries. A Garmin GPS unit was also carried as a backup device. The survey team also had digital cameras.

Figure 1 shows the survey coverage areas. A full discussion of these recordation methods and protocols can be found in the 2011 Rio Mesa SEGF AFC and affiliated PTR.

## RECORD SEARCH REVIEW

A paleontological records search and a literature search were completed as part of the initial Rio Mesa SEGF paleontological resources investigation completed by URS in 2011 and are inclusive of the additional paleontological survey areas. This research included the submission of a record search request to the San Bernardino County Museum (SBCM) on February 24, 2011. For a detailed summary of the entire record search results, refer to Appendix 1 of the 2011 PTR.

## ADDITIONAL PALEONTOLOGICAL SURVEY RESULTS

On January 4 and 5, 2012, URS paleontologists Joe Stewart and Mike Williams, and field paleontologist Marjorie Hakel, conducted the additional paleontological resources survey of two parcels totaling 207.4 acres (201.2 acres within the Project site and 6.2 acres in buffer), resulting in the identification of seven additional paleontological resource sites. Proposed project activities to occur within the surveyed parcels are not anticipated to impact significant paleontological resources if recommended paleontological mitigation measures are adhered to. These mitigation measures have been provided in Section 5.8.7 of the AFC (October 2011), and can also be found in Section 7 of the PTR. The mitigation measures would reduce potential impacts to paleontological resources to a less than significant level in the event that paleontological resources are identified within the project boundaries during construction. Through the implementation of mitigation measures, no significant impacts to paleontological resources are anticipated for the construction, operation, and maintenance of the proposed Rio Mesa SEGF.

The additional paleontological field survey identified seven paleontological specimens (Appendix B: Confidential Figure 1). The stratum that produced all of the seven specimens was the widespread paleosol described in the AFC and the PTR. The previous data on file and field observations for paleontological sites newly recorded during the 2012 additional survey are summarized below. Table 1 provides a list of all newly recorded paleontological resources within the surveyed parcels.

**Table 1**  
**Newly Recorded Paleontological Specimens within the two Surveyed Parcels**

1

Specimen Number	Field	Parcel (Side)	Description
1155		County	Bone fragment with caliche
1156		Private (West)	Thin sliver of bone
1157		Private ( West)	Four bone fragments
1158		Private (West)	Tortoise shell fragment
1159		Private (East)	Bone fragment with caliche
1160		Private (East)	Eight bone and three mammalian enamel fragments
1161		Private (East)	Bone fragment

## CONCLUSIONS

The 2011 Rio Mesa SEGF AFC and PTR found that the site contains Holocene and Pleistocene sediments, some of which produce significant paleontological resources. They reported that these are particularly concentrated in paleosol that produced approximately 650 Pleistocene vertebrate fossils, and that recovery, preparation, reporting, and curation of these fossils was ongoing. Since those reports were written, the number of vertebrate fossils identified grew to 735. Approximately 75% of these are unidentified bone fragments. Tortoise fossils (bones and eggshell) constitute 21%; rabbit fossils account for only 3%. In addition to a badger skull and mandibles, there are lizard, snake, and bird bones as well as fragments of deer antler, proboscidean ivory, and horse teeth. An Accelerator Mass Spectrometry (AMS) radiocarbon dating of fragments of tortoise eggshell yielded a 2 Sigma (95% confidence interval) result of 13,620 to 13,790 calendar years before present. This is an approximate date for the vertebrate fossils, not of the paleosol. Many of these specimens were deposited in burrows within the paleosol. Thus, the paleosol should be somewhat older than the fossils. The additional survey produced seven additional vertebrate fossils from the Riverside County and Loraine Cromwell parcels, bringing the total number of vertebrate fossils found within the Project footprint is 742.

Overall, the project is not expected to impact significant or unique paleontological resources because these resources have been recovered and are being curated. However, buried paleontological resources that have not been previously identified could be encountered during the project construction phase and may be encountered during ground-disturbing activities. Paleontological monitoring to avoid impacts during construction is assumed. Additional mitigation measures have been provided in Section 5.8.6 of the AFC (October 2011) that would reduce potential impacts to paleontological resources to a less than significant level in the event that paleontological resources are identified within the project boundaries during construction. With implementation of mitigation measures, no significant impacts to paleontological resources are anticipated for the construction, operation, and maintenance of the proposed project.

## STATEMENT OF LIMITATIONS

This report has been prepared based on certain key assumptions made by URS which substantially affect the conclusions and recommendations of this report. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. The conclusions and recommendations of URS are conditioned upon these assumptions.

The additional paleontological survey was performed based upon information provided by the SBCM on March 31, 2011, and direct observations of site conditions and other information that is generally applicable as of 25 January, 2012, and the conclusions and recommendations herein are therefore applicable only to that timeframe.

Information obtained from these sources in this timeframe is assumed to be correct and complete. URS will not assume any liability for findings or lack of finding based upon misrepresentation of information presented to the URS paleontological survey team for items not visible, made available, accessible, or present at the time of the Rio Mesa SEGF site survey.

## KEY PERSONNEL

Key paleontological resources personnel who conducted and/or supervised the additional field survey and participated in the preparation of additional paleontological resources assessment are:

- Joe Stewart, Ph.D. (URS Principal Investigator for this project)
- Mike Williams, Ph.D. (URS Paleontologist)
- Marjorie Hakel (Manpower Field Paleontologist)

Drs. Stewart and Williams are certified paleontologists in the County of Riverside. A detailed summary of key personnel and qualifications can be found in Appendix 2 of the 2011 PTR.

## REFERENCES








California Energy Commission (CEC)

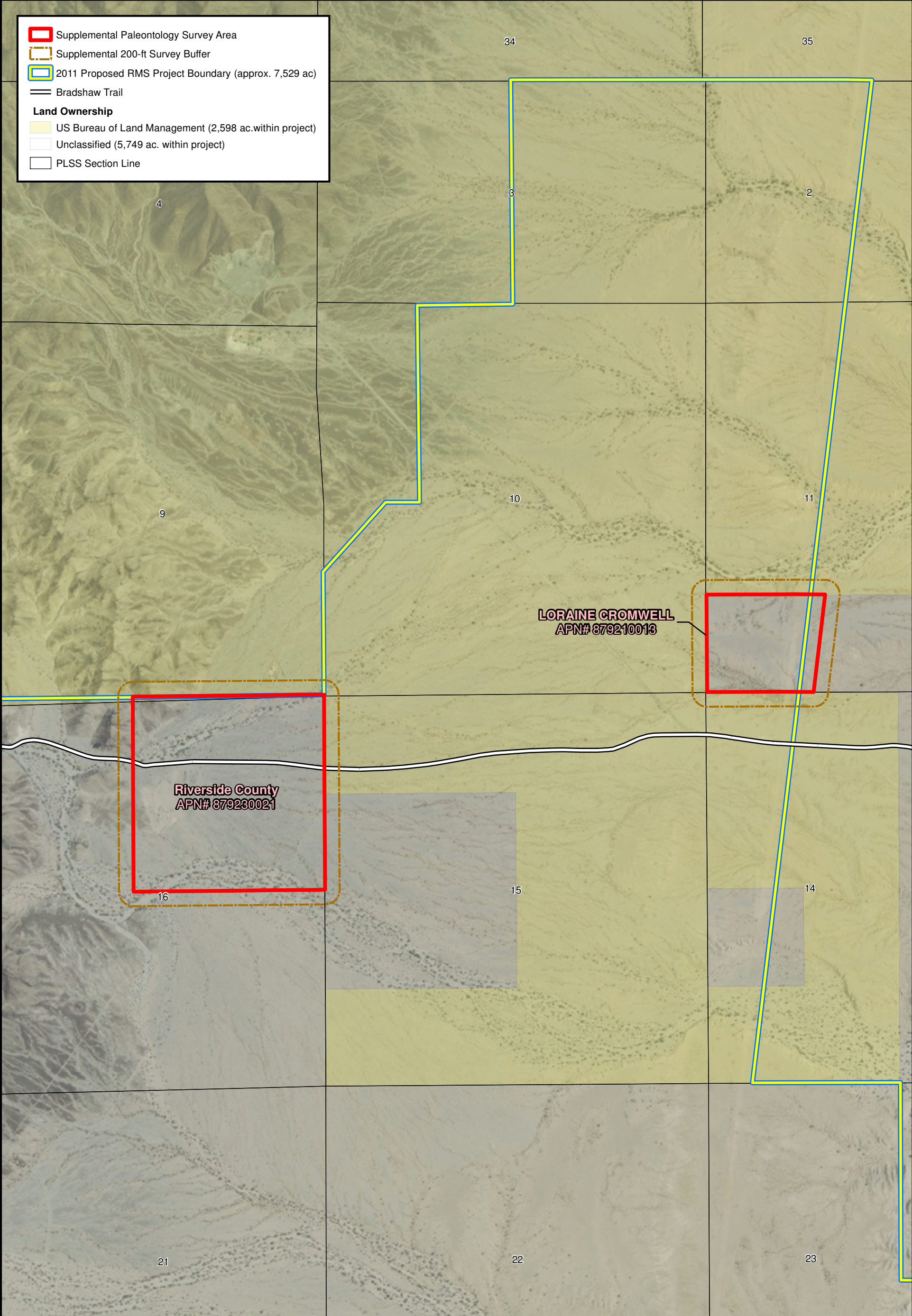
2007 Rules of Practice and Procedure and Power Plant Site Certification Regulations. Title 20. California Code of Regulations. <http://www.energy.ca.gov/2007publications/CEC-140-2007-003/CEC-140-2007-003.PDF>, accessed January, 2012.



Stewart, Joe

2011 Confidential Appendix 5.8A *Paleontological Technical Report* . Prepared by URS Corporation. Submitted to Bureau of Land Management (BLM) and the California Electric Commission (CEC). Unpublished report on file at the CEC and BLM.



 Supplemental Paleontology Survey Area  
 Supplemental 200-ft Survey Buffer  
 2011 Proposed RMS Project Boundary (approx. 7,529 ac)  
 Bradshaw Trail  
**Land Ownership**  
 US Bureau of Land Management (2,598 ac. within project)  
 Unclassified (5,749 ac. within project)  
 PLSS Section Line



 	SOURCES: Supplemental Survey Area, Supplemental Buffer (URS 2011), Project Site (VTN, 3-15-2011), Aerial Imagery (NAIP, 5-25-2009), Land Ownership (BLM, 2011), PLSS Sections (BLM, 12-11-2007), Bradshaw Trail (ESRI, 2009).		<b>SUPPLEMENTAL PALEONTOLOGY SURVEY RIO MESA SOLAR</b>		
	750 0 750 1500 Feet SCALE: 1" = 1500' (1:18,000) SCALE CORRECT WHEN PRINTED AT 11X17		CHECKED BY: DS	DATE: 1/26/2012	FIG. NO: 1
		PM: AL	PROJ. NO: 27651006.80001		

Path: G:\gis\project\1577651002\map\_docs\mxd\paleo\paleo\_supp\_2012\_Overview.mxd, diana\_smith, 1/26/2012, 9:02:34 AM



**Attachment A**  
**Combined Paleontological Field Survey Results Summary**

## REPORT OF FINDINGS

The following information combines the 2011 and 2012 survey results to generate totals and tables that include paleontological resources finding for the complete project area. In total, there are 742 vertebrate fossils collected within the project area. 735 were found in 2011, and seven (highlighted in gray) were found during the January 2012 survey.

Specimen Number	Description	Parcel Ownership
254	tortoise shell fragment	MWD
275.1.2.15.16	microfaunal locality (EBI)	BLM
277	rabbit calcaneum, misc. bone fragments and eggshell fragments	Private
278	rabbit skeleton	Private
284.1	ungulate tooth fragment	BLM
287	fragment	?BLM
288	partial metapodial	?BLM
289	rabbit cheek tooth (broken)	BLM
292	microfaunal locality (EBII)	BLM
306.1	eggshells <i>in situ</i>	BLM
306.2	eggshells <i>in situ</i>	BLM
307.1	eggshells <i>in situ</i>	BLM
307.2	<i>Gopherus</i> majority of shell	BLM
308	eggshell fragment	BLM
309	6 tortoise fragments	BLM
310	shaft of hollow bone	BLM
311	2 pieces of elongate bone	BLM
312	bone fragment	BLM
313	tortoise fragment	BLM
317	ivory fragment	BLM
318	2 bone fragments	BLM
319	ivory? fragment	BLM
320	thin layer of bone	BLM
338	rabbit skull	BLM
344	<i>Gopherus</i> . peripheral	BLM
346	numerous ivory fragments	BLM

Specimen Number	Description	Parcel Ownership
348	tortoise fragment	BLM
349	tortoise fragment with suture; large mammal bone fragment	BLM
356	bone fragment	BLM
357	large curved mammal bone fragment	BLM
367	eggshell <i>in situ</i>	BLM
370	mammal bone fragment	BLM
373	bone fragment	BLM
376	bone fragment with caliche	BLM
377	<i>Gopherus</i> epiplastron, entoplastron, and hypoplastron	Private
378	two tortoise fragments	BLM
379	phalanx	BLM
380	tortoise peripheral	BLM
381	tortoise peripheral, two tortoise fragments, and a limb bone (maybe not tortoise)	BLM
382	<i>Gopherus</i> hypoplastron fragment	BLM
382.2	tortoise costal	BLM
386	bone fragment	Private
387	<i>Gopherus</i> (three pieces)	BLM
389	tortoise	BLM
390	<i>Gopherus</i>	BLM
391	carapace fragment	BLM
392	bone fragment	BLM
394	bone splinter	BLM
395	bone splinter	BLM
396	4 rectangular bone fragments	BLM
397	2 tortoise fragments	BLM
398	5 bone fragments	BLM
399	badger skull	BLM
400	bone fragment	BLM
401	bone fragment	BLM
402	Bone fragment	BLM
403	proximal end of mammalian metapodial	BLM

Specimen Number	Description	Parcel Ownership
404	bone fragment	BLM
412	elongate piece of bone	BLM
413	bone fragment	BLM
414	bone fragment	BLM
415	bone fragment	BLM
416	bone fragment (3 pieces)	Private
418	2 inch rounded mammal bone	BLM
419	multiple eggshell fragments	BLM
419.2	10 misc. bone fragments	BLM
420	bone fragment	Private
421	tiny bone	BLM
422	tortoise fragment?	BLM
424	<i>Gopherus hyoplastron?</i> fragment	BLM
429	phalanx	BLM
433	bone fragment	BLM
434	<i>Gopherus</i> cf. <i>G. flavomarginatus</i> left anterior hyoplastron (male)	BLM
435	tortoise shell fragment	BLM
438.1	<i>Gopherus</i> upper costal fragment	BLM
439	<i>Gopherus</i> right hyoplastron? (of male)	BLM
455	<i>Lepus</i> tibia	MWD
456	2 fragments of carnivore jaw	MWD
457	rabbit calcaneum	MWD
458	large mammal bone fragment	MWD
459	<i>Sylvilagus</i> tibia fragments	MWD
461	large curved mammal bone fragment	MWD
462	5 tortoise fragments including fragment of plastron	MWD
464	spindle-shaped bone & tortoise fragment	MWD
466	tortoise bone	MWD
467	fish fin in six pieces (six fragments)	MWD
468	bone fragment	MWD
471	tortoise fragment	MWD
472	<i>Gopherus</i> peripheral	MWD

Specimen Number	Description	Parcel Ownership
474	bone fragment	BLM
481	bone fragment	BLM
482	bone fragment	BLM
483	bone fragment	BLM
484	bone fragment	BLM
485	bone fragment	BLM
487	artiodactyl phalanx	BLM
488	bone fragment	BLM
490	bone fragment in two pieces	BLM
491	bone fragment	BLM
492	<i>Gopherus</i> right epiplastron	BLM
493	3 bone fragments	BLM
494	3 ?ivory fragments	BLM
495.1	small metapodial and bone fragment	BLM
495.2	tortoise costal	BLM
495.3	<i>Gopherus</i> hyoplastron	BLM
495.4	<i>Gopherus</i> hyoplastron (female)	BLM
495.5	rabbit calcaneum	BLM
495.6	artiodactyl astragalus	BLM
495.7	tortoise fragment	BLM
495.8	bone fragment	BLM
495.9	bone fragment	BLM
495.11	bone fragment	BLM
495.12	bone fragment	BLM
495.13	tortoise fragment and bone fragment	BLM
495.14	bone fragment	BLM
495.15	bone fragment	BLM
495.16	bone fragment	BLM
495.17	bone fragment	BLM
495.18	bone fragment	BLM
495.19	bone fragment	BLM
495.21	tortoise fragment and bone fragment	BLM



Specimen Number	Description	Parcel Ownership
495.22	tortoise fragment	BLM
495.23	bone fragment	BLM
495.24	2 bone fragments	BLM
495.25	2 bone fragments	BLM
495.26	tortoise fragment and bone fragment	BLM
495.27	partial phalanx	BLM
495.29	bone fragment	BLM
495.31	bone fragment	BLM
495.32	bone fragment	BLM
495.33	2 bone fragments	BLM
494.34	bone fragment	BLM
496	turtle limb bone	BLM
497	2 bone fragments ?tortoise	BLM
499	bone fragment	BLM
500	mammal enamel	BLM
501	rabbit calcaneum	BLM
502	artiodactyl humerus	BLM
503	<i>Sylvilagus</i> humerus	BLM
504	<i>Gopherus</i> peripheral	BLM
505	tortoise plastron fragment	BLM
506	2 pieces of tortoise	BLM
507	<i>Gopherus</i> R epiplastron (male?)	BLM
509	small tortoise piece and 2 bone fragments	BLM
510	<i>Gopherus</i> R tip of gular projection	BLM
511	hollow bone shaft	BLM
512	large mammal jaw fragment	BLM
513	mammal carpal or tarsal	BLM
514	tortoise piece and bone fragment	Private
517	small complete humerus	Private
519	small piece of tortoise	BLM
521	radius	BLM
522	one fragment	BLM

Specimen Number	Description	Parcel Ownership
523	tortoise costal	BLM
524	2 bone fragments	MWD
525	bone fragment	MWD
526	small fragment of tortoise	MWD
527	large tortoise peripheral and bone fragment	MWD
528	tortoise fragment and bone fragment	MWD
529	tortoise fragment and bone splinter	MWD
530	tortoise fragment	MWD
531	bone fragment	MWD
533	2 bone fragments	MWD
534	bone fragment	MWD
535	bone fragment	MWD
536	bone fragment	MWD
537	bone fragment	MWD
538	3 bone fragments	MWD
539	bone splinter	MWD
540	bone fragment	MWD
541	bone fragment	MWD
541.2	2 tortoise fragments	MWD
542	bone fragment	MWD
544	bone fragment	MWD
545	2 bone fragments	MWD
546	?tortoise fragment	MWD
547	tortoise fragment	MWD
548	tortoise fragment and bone fragment	MWD
549	tortoise piece	MWD
550	bone splinter & large cancellous bone fragment	MWD
551	?skull fragment and other fragments	MWD
552	tortoise fragment and bone fragment	MWD
553	bone fragment	MWD
554	bone fragment	MWD
556	bone fragment	MWD

Specimen Number	Description	Parcel Ownership
557	bone fragment	MWD
558	bone splinter	MWD
559	bone fragment	MWD
560	bone fragment	MWD
561	bone fragment	MWD
562	tooth fragment	MWD
563	3 bone fragments	MWD
564	2 bone fragments	MWD
565	5 bone fragments	MWD
566	bone splinter	MWD
568	bone fragment	MWD
570	3 tortoise fragments	MWD
571	?ivory	MWD
572	tortoise fragment	MWD
573	bone fragment	MWD
575	large piece of cancellous bone	MWD
576	tortoise fragment and bone fragment	MWD
577	tortoise fragment	MWD
581	tortoise and egg fragments, & small bone shaft	Private
583	tortoise fragments	MWD
584	<i>Gopherus costal</i>	MWD
585	<i>Gopherus?</i>	MWD
586	tortoise fragment	MWD
587	<i>Gopherus?</i>	MWD
588	bone fragment	MWD
589	bone fragment	MWD
590	multiple bone fragments	MWD
591	large bone fragment	MWD
592	bone fragment	MWD
593	mammal tooth fragment	MWD
594	bone fragment	MWD
595	3 bone fragments	MWD

Specimen Number	Description	Parcel Ownership
596	2 tortoise fragments	MWD
597	small mammal humerus	MWD
598	small bone shaft	MWD
599	tortoise fragment	MWD
600	<i>Gopherus?</i>	MWD
601	ivory?	MWD
602	bone fragment	MWD
603	ivory?	MWD
604	bone fragment	MWD
605	eggshell fragment	MWD
606	eggshell fragment	MWD
607	eggshell fragment	MWD
608	2 bone fragments	MWD
609	3 eggshell fragments	MWD
610	bone fragment	MWD
611	bone fragment	MWD
612	<i>Gopherus?</i>	MWD
613	hollow bone shaft	MWD
614	3 tooth fragments	MWD
615	2 tortoise fragments	MWD
616	13 bone fragments	MWD
617	multiple fragments of large tortoise	BLM
618.1	bone fragment	BLM
618.2	2 bone fragments	BLM
619	bone fragment	BLM
624	7 small bone fragments	Private
625	ivory fragment?	MWD
626	bone fragment	MWD
627	tortoise fragment	MWD
628	tortoise fragment	MWD
629	bone fragment	MWD
630	4 bone fragments	MWD

Specimen Number	Description	Parcel Ownership
631	bone fragment	MWD
632	tortoise fragment	MWD
633	bone fragment	MWD
634	3 tortoise fragments	MWD
635	tooth fragment and bone fragment	MWD
636	tooth fragment and bone fragment	MWD
637	tortoise fragment	MWD
638	3 tortoise fragments	MWD
639	tortoise fragment	MWD
640	tortoise? fragment	MWD
641	bone fragment	MWD
642	2 ivory fragments	MWD
643	tortoise fragment	MWD
644	bone fragment	MWD
645	2 bone fragments	MWD
646	bone fragment	MWD
647	bone fragment	MWD
648	hollow bone shaft	MWD
649	eggshell	MWD
650	eggshell	MWD
651	3 eggshell	MWD
652 (137)	2 eggshell fragments	MWD
653	2 eggshell fragments	MWD
654	3 bone fragments	MWD
655	3 tortoise costals and a limb bone	MWD
656	tooth fragment	MWD
657	2 bone fragments	MWD
658	2 bone fragments	MWD
659	bone fragment	MWD
660	? ivory fragment	MWD
661	bone fragment	MWD
662	bone fragment	MWD



Specimen Number	Description	Parcel Ownership
663	bone fragment	MWD
664	bone fragment	MWD
665	rodent tibia	MWD
667	over 100 tortoise fragments	Private
669	bone fragment	Private
670	multiple tortoise fragments	Private
671	bone fragment	Private
672	2 bone fragments; ?bird	BLM
673	bone fragment	BLM
674	bone fragment	BLM
675	bone fragment	BLM
676	tortoise bone	BLM
677	bone fragment	BLM
678	bone fragment	BLM
679	?ivory fragment	Private
680	bone fragment	Private
681	tortoise fragment	Private
682	?acetabulum	Private
683	rabbit calcaneum	Private
684	small bone	Private
685	tortoise fragment	Private
686	bone fragment	BLM
688	small bone fragment	Private
690	cervid antler fragments	MWD
692	bone fragment	MWD
694	bone fragment	MWD
695	tortoise fragment	MWD
696	bone fragment	MWD
698	small bone fragment	MWD
699.1	partial tortoise skeleton	MWD
699.2	mammal bone fragment	MWD
699.4	tortoise fragment	MWD

Specimen Number	Description	Parcel Ownership
700	2 bone fragments	MWD
701	bone fragment	MWD
702	bone fragment	MWD
703	limb bone of ?tortoise	MWD
704	2 cervid antler fragments	BLM
706	bone fragment	BLM
707	bone fragment	BLM
708	2 bone fragments	BLM
709	2 tortoise fragments	BLM
710	bone fragment	BLM
712	hollow bone shaft	Private
713	bone flake	Private
714	bone splinter	Private
715	?distal end of tibia of large artiodactyl	Private
722	eggshell fragment	MWD
723	bone fragment	MWD
724	mandible with fragments	MWD
725	bone fragment	MWD
726	bone fragment	MWD
727	2 small bone fragments	MWD
728	bone fragment	MWD
729	bone fragment	MWD
730	bone fragment	MWD
731	bone fragment	MWD
732	?ivory fragment	MWD
733	bone fragment	MWD
734.1	horse tooth fragment	MWD
734.2	horse tooth fragment	MWD
734.3	horse tooth fragment	MWD
735	large tortoise fragment	MWD
736	small tortoise fragment	MWD
737	horse tooth fragment	MWD

Specimen Number	Description	Parcel Ownership
738	bone fragment	MWD
739	tooth fragment	MWD
740	bone fragment	MWD
741	bone fragment	MWD
742	bone fragment	MWD
743	bone fragment	MWD
744	<i>Gopherus</i> R gular?	MWD
745	bone fragment	MWD
746	2 fragment of large tortoise	MWD
747	bone fragment	MWD
748	bone fragment	MWD
749	tortoise fragment	MWD
750	bone sliver	MWD
751	hollow bone shaft	MWD
752	fragment of ?tortoise	MWD
753	2 bone fragments	MWD
754	bone fragment	MWD
755	2 bone fragments	MWD
756	4 bone fragments	MWD
758	bone fragment	MWD
759	<i>Gopherus</i> R epiplastron	MWD
760	4 bone fragments	MWD
761	2 bone fragments	MWD
762	bone fragment	MWD
763	bone fragment	MWD
764	3 bone fragments	MWD
765	2 bone fragments	MWD
766	tortoise fragment	MWD
767	tortoise fragment	MWD
768	bone fragment	MWD
769	2 tortoise fragments	MWD
770	2 bone fragments	MWD

Specimen Number	Description	Parcel Ownership
771	tortoise fragment	MWD
772	?tortoise pcvlis	MWD
773	bone fragment	MWD
774	tortoise fragment and bone fragment	MWD
775	2 bone fragments	MWD
777	tortoise fragment and bone fragment	MWD
778	bone fragment	MWD
779	bone fragment	MWD
780	bone fragment	MWD
781	small tortoise fragment	MWD
782	2 tortoise fragment	MWD
783	bone fragment	MWD
784	Bone fragment	MWD
785	bone fragment with caliche	MWD
786	bone fragment with caliche	MWD
787	bone fragment with caliche	MWD
788	tortoise fragment	MWD
789	bone fragment with caliche	MWD
790	bone fragment with caliche	MWD
791	bone fragment	MWD
792	two bone fragments	MWD
793	tortoise fragment-moderate size	MWD
794	tortoise fragment with caliche	MWD
795	bone fragment	MWD
796	mammalian bone fragment	MWD
797	bone fragment with caliche	MWD
798	bone fragment	MWD
799	bone fragment	MWD
800	possible rabbit tibia & tortoise fragment	MWD
801	tortoise fragment with caliche	MWD
802	bone fragment with caliche	MWD
803	2 tortoise fragments	MWD

Specimen Number	Description	Parcel Ownership
804	tortoise fragment	MWD
805	tortoise fragment	MWD
806	2 bone fragments	MWD
807	2 tortoise fragments	MWD
808	tortoise fragment	MWD
809	tortoise fragment	MWD
810	bone fragment	MWD
811	bone fragment	MWD
812	2 tortoise fragments and one bone fragment	MWD
813	bone fragment	MWD
814	tortoise fragment	MWD
815	tortoise fragment	MWD
816	ivory? fragment	MWD
817	tortoise fragment	MWD
818	tortoise fragment	MWD
819	tortoise fragment	MWD
820	bone fragment	MWD
822	tortoise fragment	MWD
823	bone fragment	MWD
824	<i>Gopherus</i> fragment	MWD
825	3 tortoise fragments	MWD
826	large tortoise fragment and small tortoise fragment	MWD
827	1 small and 1 large tortoise fragment	MWD
828 and 831	<i>Gopherus</i> left hypoplastron (828 and 831 fit together)	MWD
829	large tortoise plastral element	MWD
830	moderate-sized tortoise fragment	MWD
831 and 828	<i>Gopherus</i> left hypoplastron (828 and 831 fit together)	MWD
832	tortoise fragment	MWD
833	tortoise fragment	MWD
834	tortoise fragment	MWD
835	3 tortoise fragments	MWD
836	large tortoise fragment	MWD



Specimen Number	Description	Parcel Ownership
837	2 tortoise fragments	MWD
838	large tortoise fragment	MWD
839	tortoise fragment	MWD
840	tortoise fragment	MWD
841	very thick tortoise fragment	MWD
842	very thick tortoise fragment	MWD
843	wmall tortoise fragment	MWD
844	tortoise fragment	MWD
845	tortoise fragment	MWD
846	tortoise plastral fragment	MWD
847	2 tortoise fragments	MWD
848	thick tortoise fragment	MWD
849	bone fragment	MWD
850	2 bone fragments	MWD
851	3 mammal tooth fragments	MWD
852	bone fragment	MWD
853	part of pelvic bone? and bone fragment	MWD
854	tortoise fragment	MWD
855	bone fragment	MWD
856	bone fragment	MWD
857	bone fragment	MWD
858	tortoise fragment	MWD
859	tortoise fragment	MWD
861	rabbit calcaneum	MWD
862	bone fragment	MWD
863	two bone fragments	MWD
864	bone fragment	MWD
865	tortoise fragment	MWD
866	2 tortoise fragments	MWD
867	bone fragment	MWD
868	tortoise fragment	MWD
869	tortoise fragment and bone fragment	MWD

Specimen Number	Description	Parcel Ownership
871	bone fragment	MWD
872	2 tortoise fragments	MWD
873	tortoise fragment	MWD
874	tortoise fragment?	MWD
875	large tortoise fragment	MWD
876	tortoise fragment	MWD
878	tortoise fragment	MWD
879	bone fragment	MWD
880	femur and bone fragment	MWD
881	burnt fragment	MWD
882	burnt bone sample	Private
883	tortoise fragment	
884	tortoise fragment	MWD
886	bone fragment	MWD
887	bone fragment	MWD
888	bone fragment	MWD
889	tortoise fragment	MWD
890	bone fragment	MWD
891	tortoise fragment	MWD
892	2 bone fragments	MWD
893	2 tortoise fragments	MWD
894	tortoise fragment	MWD
895	bone fragment	MWD
896	3 tortoise fragments	MWD
897	2 bone fragments	MWD
898	tortoise fragment and bone fragment	MWD
899	tortoise fragment	MWD
900	2 bone fragments	MWD
901	tortoise fragment	MWD
902	tortoise fragment	MWD
903	large tortoise piece	MWD
904	small bone fragment	MWD

Specimen Number	Description	Parcel Ownership
905	small bone fragment	MWD
906	tortoise shell fragment	MWD
907	tortoise bone; bone fragment	MWD
908	tortoise bone fragment	MWD
909	thick tortoise shell fragment	MWD
910	tortoise shell fragment	MWD
911	4 small bone fragments	MWD
912	tortoise shell fragment	MWD
913	bone fragment	MWD
914	two bone fragments	MWD
915	tortoise limb bone?	MWD
916	bone fragment	MWD
917	tortoise fragment	MWD
918	tortoise limb bone	MWD
919	bone fragment	MWD
920	bone fragment	MWD
921	3 bone fragments with caliche	MWD
922	bone fragment	MWD
923	bone fragment	MWD
924	bone fragment	MWD
926	bone fragment	MWD
927	bone fragment	MWD
928	bone fragment	MWD
929	bone fragment	MWD
930	tortoise fragment?	MWD
931	bone fragment	MWD
933	tortoise ulna	MWD
934	bone fragmen	MWD
935	tortoise shell fragment	MWD
936	1 bone fragment; 1 tortoise fragment	MWD
937	1 large bone fragment; 1 small bone fragment	MWD
938	tortoise fragment	MWD

Specimen Number	Description	Parcel Ownership
939	tortoise shell fragment	MWD
940	3 bone fragments	MWD
941	2 bone fragments	MWD
942	bone fragment	MWD
943	bone fragment	MWD
944	bone fragment	MWD
945	bone fragment	MWD
946	bone fragment	MWD
947	bone fragment	MWD
949	bone fragment	MWD
950	bone fragment	MWD
951	bone fragment	MWD
952	2 bone fragments	MWD
953	bone fragment	MWD
954	bone fragment	MWD
955	bone fragment	MWD
956	bone fragment	MWD
959	large bone fragment	MWD
960	bone fragment	MWD
961	bone fragment	MWD
962	bone fragment	MWD
963	bone fragment	MWD
964	6 bone fragments	MWD
966	large bone fragment	MWD
967	small bone fragment	MWD
968	bone fragment	MWD
969	bone fragment	MWD
970	eggshell	MWD
971	numerous eggshells <i>in situ</i>	MWD
972	enamel fragment	MWD
973	<i>in situ</i> eggshell fragment	MWD
974	<i>in situ</i> bone fragments	MWD

Specimen Number	Description	Parcel Ownership
976	tortoise shell fragment	MWD
977	?tortoise fragment	MWD
978	tortoise fragment	MWD
979	hollow bone shart	MWD
980	tortoise fragment	MWD
981	bone fragment	MWD
983	<i>Gopherus</i>	MWD
984.1	tortoise fragment	MWD
984.2	6 bone fragments	BLM
985	bone fragment	BLM
986	tortoise shell fragment	BLM
987	tortoise shell fragment	BLM
989	tortoise peripherpal	BLM
990	tortoise	BLM
991	bone fragment	BLM
992	bone fragment	BLM
993	bone fragment	BLM
994	2 bone fragments	BLM
995	tortoise shell fragment	BLM
996	3 bone fragments	BLM
997	tortoise fragment	BLM
998	bone fragment	BLM
1000	tortoise fragment, bone fragment	BLM
1001	small tortoise costal	BLM
1002	bone fragment	BLM
1003	tortoise bridge peripheral	BLM
1004	bone fragment	BLM
1005	bone fragment	BLM
1006	bone fragment	BLM
1007	bone fragment	BLM
1008	tiny tortoise peripheral & 2 bone fragments	BLM
1009	3 bone fragments	BLM



Specimen Number	Description	Parcel Ownership
1010	bone fragment	BLM
1011	bone fragment	BLM
1012	3 bone fragments	BLM
1013	partial vertebral fragment	BLM
1014	2 bone fragments	BLM
1015	large tortoise fragment	BLM
1016	bone fragment	BLM
1017	2 bone fragments	BLM
1018	tortoise peripheral & 2 bone fragments	BLM
1019	tortoise coastal & bone fragment	BLM
1020	?tortoise peripheral	BLM
1021	bone fragment	BLM
1022	bone fragment	BLM
1023	3 tortoise fragments	BLM
1024	hollow bone shaft	BLM
1025	tortoise bridge peripheral	BLM
1026	tortoise nuchal?	BLM
1027	tiny tortoise peripheral	BLM
1028	tortoise fragment	BLM
1029	tortoise fragment	BLM
1030	large tortoise piece	BLM
1031	large tortoise piece	BLM
1032	2 fragments	BLM
1033	tiny phalanx	BLM
1034	tortoise fragment	BLM
1035	2 tortoise fragments	BLM
1036	3 bone fragments	BLM
1037	tortoise fragment	BLM
1038	bone fragment	BLM
1039	bone fragment and tortoise fragment	BLM
1040	?tortoise orbit and tubular bone	BLM
1041	bone fragment	BLM

Specimen Number	Description	Parcel Ownership
1042	bone fragment	BLM
1043	tortoise fragment	BLM
1044	?tibia fragment; mammal	BLM
1045	2 tortoise fragments	BLM
1046	small tortoise peripheral	BLM
1047	tortoise peripheral	BLM
1048	tortoise fragment	BLM
1049	tortoise fragment	BLM
1050	bone fragment	BLM
1051	bone fragment	BLM
1053	bone fragment	BLM
1054	tortoise fragment	BLM
1055	tiny phalanx	BLM
1056	bone fragment	BLM
1057	large mammal bone fragment	BLM
1058	tiny bone fragment	BLM
1059	bone fragment	BLM
1060	2 tortoise fragments	BLM
1061	bone fragment	BLM
1062	bone fragment	BLM
1063	tortoise fragment	BLM
1064	2 bone fragments	BLM
1065	bone fragment	BLM
1066	2 bone fragments	BLM
1067	tortoise fragment	BLM
1068	tortoise peripheral	BLM
1069	tortoise bridge peripheral	BLM
1070	Bone fragment	BLM
1071	fragment of ?mammal jaw	BLM
1072	tortoise fragment	BLM
1073	rodent tibia	Private
1074	<i>Sylvilagus</i> metapodial	Private

Specimen Number	Description	Parcel Ownership
1076	artiodactyl phalanx	BLM
1077	tortoise fragment	BLM
1078	tortoise fragment	BLM
1079	tortoise fragment	BLM
1080	mammal petrosal	BLM
1081	large bone fragment	BLM
1082	bone fragment	BLM
1083	tooth fragment	Private
1084	rabbit calcaneum	Private
1086	tortoise fragment	Private
1087	tortoise fragment	Private
1088	acetabulum	Private
1089	bone fragment	Private
1090	bone fragment	Private
1091	large mammal bone	Private
1092	rodent metapodial	Private
1093	several pieces of tooth enamel	Private
1094	tortoise peripheral	Private
1095	mammal tooth fragment	Private
1096	canine tooth	Private
1097	2 bone fragments	Private
1098	hollow bone shaft	Private
1099	large phalanx	Private
1100	2 bone fragments	Private
1101	tortoise plastron	Private
1102	tiny phalanx	Private
1103	proximal end of artiodactyl phalanx	Private
1104	large piece of tortoise	BLM
1105	<i>Sylvilagus</i> metapodial & bone fragment	BLM
1106	bone fragment	BLM
1107	bone fragment	BLM
1108	bone fragment	BLM

Specimen Number	Description	Parcel Ownership
1109	bone fragment	BLM
1110	tortoise fragment	BLM
1111	tortoise fragment	BLM
1112	rodent femur	BLM
1113	bone fragment	BLM
1114	large bone fragment	BLM
1115	2 tortoise fragments	BLM
1117	tortoise fragment	MWD
1118	bone fragment	MWD
1119	tortoise fragment	MWD
1120	large mass of eggshell	BLM
1121	bone fragment	Private
1122	bone fragment	Private
1123	hollow bone fragment	MWD
1124	bone fragment	MWD
1127	horse upper tooth fragment	MWD
1129	bone fragment	MWD
1130	bone fragment	MWD
1131	bone fragment	MWD
1132	several bone fragments	MWD
1133	2 rodent incisors & bone fragment	BLM
1134	egg fragment and rabbit humerus	BLM
1135	<i>Lepus californicus</i> mandibles	BLM
1136	2 egg fragments, tooth fragment & bone fragment	BLM
1137	?rabbit calcaneum	BLM
1138	bone fragment	BLM
1140	2 tibiae	MWD
1141	?canine	MWD
1142	tortoise fragment	MWD
1145	eggshell fragment	MWD
1146	tortoise fragment	MWD
1147	bone fragment	MWD

Specimen Number	Description	Parcel Ownership
1148	bone fragment	MWD
1149	tortoise fragment	MWD
1151	large egg in situ	MWD
1152	tortoise fragment	MWD
1153	rabbit calcaneum	BLM
1154	metapodial and bone fragments	BLM
1155	bone fragment	County of Riverside
1156	bone sliver	private
1157	4 bone fragments	private
1158	tortoise fragmentt	private
1159	bone fragmentx	private
1160	8 bone and 3 tooth fragments	private
1161	1 bone fragment	private



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
1-800-822-6228 – WWW.ENERGY.CA.GOV**

**APPLICATION FOR CERTIFICATION  
FOR THE RIO MESA SOLAR  
ELECTRIC GENERATING FACILITY**

**DOCKET NO. 11-AFC-04  
PROOF OF SERVICE  
(Revised 2/27/12)**

**APPLICANTS' AGENTS**

BrightSource Energy, Inc.  
Todd Stewart, Senior Director  
Project Development  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
[tstewart@brightsourceenergy.com](mailto:tstewart@brightsourceenergy.com)

BrightSource Energy, Inc.  
Michelle Farley  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
[mfarley@brightsourceenergy.com](mailto:mfarley@brightsourceenergy.com)

BrightSource Energy, Inc.  
Brad DeJean  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
*e-mail service preferred*  
[bdejean@brightsourceenergy.com](mailto:bdejean@brightsourceenergy.com)

**APPLICANTS' CONSULTANTS**

Grenier and Associates, Inc.  
Andrea Grenier  
1420 E. Roseville Parkway,  
Suite 140-377  
Roseville, CA 95661  
*e-mail service preferred*  
[andrea@agrenier.com](mailto:andrea@agrenier.com)

URS Corporation  
Angela Leiba  
4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
[angela\\_leiba@urscorp.com](mailto:angela_leiba@urscorp.com)

**COUNSEL FOR APPLICANTS**

Ellison, Schneider, & Harris  
Christopher T. Ellison  
Brian S. Biering  
2600 Capitol Avenue, Suite 400  
Sacramento, CA 95816-5905  
[cte@eslawfirm.com](mailto:cte@eslawfirm.com)  
[bsb@eslawfirm.com](mailto:bsb@eslawfirm.com)

**INTERESTED AGENCIES**

Mojave Desert AQMD  
Chris Anderson, Air Quality Engineer  
14306 Park Avenue,  
\*Victorville, CA 92392-2310  
[canderson@mdaqmd.ca.gov](mailto:canderson@mdaqmd.ca.gov)

California ISO  
*e-mail service preferred*  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

Bureau of Land Management  
Cedric Perry  
Lynnette Elser  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553  
[cperry@blm.gov](mailto:cperry@blm.gov)  
[elser@blm.gov](mailto:elser@blm.gov)

**INTERVENORS**

Center for Biological Diversity  
Lisa T. Belenky, Senior Attorney  
351 California Street, Suite 600  
San Francisco, CA 94104  
*e-mail service preferred*  
[lbelenky@biologicaldiversity.org](mailto:lbelenky@biologicaldiversity.org)

Center for Biological Diversity  
Ileene Anderson  
Public Lands Desert Director  
PMB 447, 8033 Sunset Boulevard  
Los Angeles, CA 90046 *e-mail  
service preferred*  
[ianderson@biologicaldiversity.org](mailto:ianderson@biologicaldiversity.org)

**ENERGY COMMISSION –  
DECISIONMAKERS**

CARLA PETERMAN  
Commissioner and Presiding Member  
[CPeterma@energy.state.ca.us](mailto:CPeterma@energy.state.ca.us)

KAREN DOUGLAS  
Commissioner and Associate Member  
*e-mail service preferred*  
[kldougl@energy.state.ca.us](mailto:kldougl@energy.state.ca.us)

**ENERGY COMMISSION –  
DECISIONMAKERS (cont.)**

Kourtney Vaccaro  
Hearing Adviser  
*e-mail service preferred*  
[kvaccaro@energy.state.ca.us](mailto:kvaccaro@energy.state.ca.us)

Galen Lemei  
Advisor to Commissioner Douglas  
*e-mail service preferred*  
[glemei@energy.state.ca.us](mailto:glemei@energy.state.ca.us)

Jennifer Nelson  
Advisor to Commissioner Douglas  
*e-mail service preferred*  
[jnelson@energy.state.ca.us](mailto:jnelson@energy.state.ca.us)

Jim Bartridge  
Advisor to Commissioner Peterman  
[jbartrid@energy.state.ca.us](mailto:jbartrid@energy.state.ca.us)

**ENERGY COMMISSION STAFF**

Pierre Martinez Project  
Manager  
[pmartine@energy.state.ca.us](mailto:pmartine@energy.state.ca.us)

Lisa DeCarlo  
Staff Counsel  
*e-mail service preferred*  
[ldecarlo@energy.state.ca.us](mailto:ldecarlo@energy.state.ca.us)

Eileen Allen  
Commissioners' Technical  
Advisor for Facility Siting  
*e-mail service preferred*  
[eallen@energy.state.ca.us](mailto:eallen@energy.state.ca.us)

**ENERGY COMMISSION –  
PUBLIC ADVISER**

Jennifer Jennings  
Public Adviser's Office  
*e-mail service preferred*  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

DECLARATION OF SERVICE

I, Michelle L. Farley, declare that on February 28, 2012, I served and filed copies of the attached Addendum to the Paleontological Technical Report for the Rio Mesa Solar Electric Generating Facility, Riverside County, California, dated February 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: [<http://www.energy.ca.gov/sitingcases/riomesa/index.html>].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

*(Check all that Apply)*

**For service to all other parties:**

Served electronically to all e-mail addresses on the Proof of Service list;

Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

**AND**

**For filing with the Docket Unit at the Energy Commission:**

by sending electronic copies to the e-mail address below (preferred method); **OR**

by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

**CALIFORNIA ENERGY COMMISSION – DOCKET UNIT**

Attn: Docket No. 11-AFC-4

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

***OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:***

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission

Michael J. Levy, Chief Counsel

1516 Ninth Street MS-14

Sacramento, CA 95814

[mlevy@energy.state.ca.us](mailto:mlevy@energy.state.ca.us)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

  
\_\_\_\_\_