

## NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

<b>1. NMCRIS Activity No.:</b> 113862	<b>2a. Lead (Sponsoring) Agency:</b> NM State Land Office	<b>2b. Other Permitting Agency(ies):</b>	<b>3. Lead Agency Report No.:</b>									
<b>4. Title of Report:</b> <i>Cultural Resource Survey of 640 Acres for the Arkansas Junction Site, Lea County, New Mexico</i>  <b>Author(s)</b> S. Daras		<b>5. Type of Report</b> <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive										
<b>6. Investigation Type</b> <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other												
<b>7. Description of Undertaking (what does the project entail?):</b> The proposed project is for the construction of the International Isotopes Inc. depleted uranium de-conversion and fluorine extraction processing facility. The facility will be located within a limited footprint inside the 640 acres, with extensive buffer zones.		<b>8. Dates of Investigation:</b> (from: May 18, 2009 to May 25, 2009)										
<b>10. Performing Agency/Consultant:</b> Lone Mountain Archaeological Services, Inc. <b>Principal Investigator:</b> Cathy Travis <b>Field Supervisor:</b> Thoras R. Dye <b>Field Personnel Names:</b> Richard Fransisco and Francisco Britton		<b>9. Report Date:</b> May 26, 2009										
<b>13. Client/Customer (project proponent):</b> Gordon Environmental <b>Contact:</b> Dacia R. Tucholke <b>Address:</b> 213 S. Camino del Pueblo Bernalillo, NM 87004 <b>Phone:</b> (432) 688-6884		<b>11. Performing Agency/Consultant Report No.:</b> 1224  <b>12. Applicable Cultural Resource Permit No(s):</b> NM State Permit: NM 09-073										
<b>14. Client/Customer Project No.:</b>												
<b>15. Land Ownership Status (<u>Must be indicated on project map</u>):</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Land Owner</th> <th style="text-align: center;">Acres Surveyed</th> <th style="text-align: center;">Acres in APE</th> </tr> </thead> <tbody> <tr> <td>State</td> <td style="text-align: center;">640</td> <td style="text-align: center;">640</td> </tr> <tr> <td style="text-align: right;"><b>TOTALS</b></td> <td style="text-align: center;"><b>640</b></td> <td style="text-align: center;"><b>640</b></td> </tr> </tbody> </table>				Land Owner	Acres Surveyed	Acres in APE	State	640	640	<b>TOTALS</b>	<b>640</b>	<b>640</b>
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<b>16. Records Search(es):</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 40%;">Date(s) of ARMS File Review April 17, 2009</td> <td style="width: 30%;">Name of Reviewer(s) C. Travis</td> <td style="width: 30%;"></td> </tr> <tr> <td>Date(s) of NR/SR File Review April 17, 2009</td> <td>Name of Reviewer(s) S. Daras</td> <td></td> </tr> <tr> <td>Date(s) of Other Agency File Review</td> <td>Name of Reviewer(s)</td> <td style="text-align: center;">Agency</td> </tr> </table>				Date(s) of ARMS File Review April 17, 2009	Name of Reviewer(s) C. Travis		Date(s) of NR/SR File Review April 17, 2009	Name of Reviewer(s) S. Daras		Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency
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<b>17. Survey Data:</b> <p>a. Source Graphics    <input checked="" type="checkbox"/> NAD 27    <input type="checkbox"/> NAD 83  <input checked="" type="checkbox"/> USGS 7.5' (1:24,000) topo map    <input type="checkbox"/> Other topo map, Scale:  <input checked="" type="checkbox"/> GPS Unit    Accuracy <input type="checkbox"/> &lt;1.0m    <input checked="" type="checkbox"/> 1-10m    <input type="checkbox"/> 10-100m    <input type="checkbox"/> &gt;100m</p> <p>b. USGS 7.5' Topographic Map Name    USGS Quad Code  <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 60%;">Monument North, NM</td> <td style="width: 40%;">32103-G8</td> </tr> </table> </p> <p>c. County(ies): Lea</p>				Monument North, NM	32103-G8							
Monument North, NM	32103-G8											

17. Survey Data (continued):

d. Nearest City or Town: Hobbs

e. Legal Description:

Township (N/S)	Range (E/W)	Section	1/4	1/4	1/4
18 S	36 E	27	Entire section		

Projected legal description? Yes [ ], No [X] Unplatted [ ]

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.): Barbed wire fences border the northern and western areas of project and NM State 483 extends along the western edge of the project area. The southern and eastern sides of the project area are not bounded. Two large power lines run east-to-west just outside of the southern boundary of the project area.

18. Survey Field Methods:

Intensity:  100% coverage  <100% coverage

Configuration:  block survey units  linear survey units (l x w):  other survey units (specify):

Scope:  non-selective (all sites recorded)  selective/thematic (selected sites recorded)

Coverage Method:  systematic pedestrian coverage  other method (describe)

Survey Interval (m): 15 Crew Size: 3 Fieldwork Dates: May 18, 2009 to May 25, 2009

Survey Person Hours: 180 Recording Person Hours: 0 Total Hours: 180

Additional Narrative:

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located on a flat plain with a few shallow intermittent playas. A southeast-trending drainage is located in the far southwest quarter of the project area. The area is characterized by gently sloping terrain in the Querecho Plains, dominated primarily by the Kimbrough-Lea complex with 0 to 3 percent slopes (USDA Web Soil Survey 2009). The soil is derived from mixed alluvium and/or eolian sands. Other soil associations present are the Kimbrough gravelly loam, Portales loam, Portales-Stegall loams, and Stegall and slaughter soils.

Vegetation is characteristic of semidesert grassland (Brown 1994), and includes ringtail muhley, hairy grama, and other various forbs and grasses. Mesquite, prickly pear, horse crippler cacti, and rainbow cacti were also observed. Elevation is 3,814 ft (1,163 m) amsl in the northwest corner and 3,784 ft (1,153) amsl in the southeast corner of the project area.

a. Percent Ground Visibility: 100% in burned areas and 75-80% in grassy areas b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): Numerous power lines, buried pipelines, and associated two-track roads are present throughout the project area. Approximately 45 percent of the survey area (eastern portion of the survey area) has been burned by recent grass fires. The south 1/2 of the southeast 1/4 has been utilized as a gravel pit, crusher and hot plant site. One dry hole (abandoned well pad) is also located in the SW 1/4 of the SW 1/4, and it appears to have been capped in the 1980's or 1990's.

21. CULTURAL RESOURCE FINDINGS  Yes, See Page 3  No, Discuss Why: Three isolated occurrences were identified. A files check yielded three previous NMCRIS activities, but no previously recorded sites within 1 km of the project area. The absence of cultural resources in the project area may be explained by the presence of shallow sediments with exposed caliche (indicating a lack of lithic raw materials), and a lack of permanent water sources. This may have made the location unattractive to prehistoric peoples.

22. Required Attachments (check all appropriate boxes):

- USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
- Copy of NMCRIS Mapserver Map Check
- LA Site Forms - new sites (*with sketch map & topographic map*)
- LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
- Historic Cultural Property Inventory Forms
- List and Description of isolates, if applicable see page 3)
- List and Description of Collections, if applicable

23. Other Attachments:  
 Photographs and Log  
 Other Attachments  
 (Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Cathy Travis

Signature Cathy Travis

Date May 26, 2009 Title (if not PI):

<b>25. Reviewing Agency:</b> Reviewer's Name/Date  Accepted ( )    Rejected ( )  Tribal Consultation (if applicable): <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>26. SHPO</b> Reviewer's Name/Date:  HPD Log #: SHPO File Location: Date sent to ARMS:
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### CULTURAL RESOURCE FINDINGS

*[fill in appropriate section(s)]*

<b>1. NMCRIS Activity No.:</b> 113862	<b>2. Lead (Sponsoring) Agency:</b> NM State Land Office	<b>3. Lead Agency Report No.:</b>
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**SURVEY RESULTS:**

Sites discovered and registered: 0  
 Sites discovered and NOT registered: 0  
 Previously recorded sites revisited *(site update form required)*: 0  
 Previously recorded sites not relocated *(site update form required)*: 0  
**TOTAL SITES VISITED: 0**  
 Total isolates recorded: 3      **Non-selective isolate recording?**   
 Total structures recorded *(new and previously recorded, including acequias)*: 0

**MANAGEMENT SUMMARY:** Three isolated occurrences were encountered during this survey. The isolated occurrences have been completely recorded in a manner consistent with current standards and do not require any additional work. Therefore, the proposed undertaking will have no effect on cultural resources.

**Isolated Occurrences (UTM NAD 27, Zone 13)**

IO No.	Northing	Easting	Description
IO 1	3621150	656161	A brown chert San Jose projectile fragment, distal end, reworked (35 mm x 23 mm x 7 mm)(see Figure 1)
IO 2	3621745	655564	One gray quartzite hammerstone, one end and edge battered (53 mm x 43 mm x 26 mm)
IO 3	3621263	654810	Three manganese decolorized glass body fragments, ¼ in thick

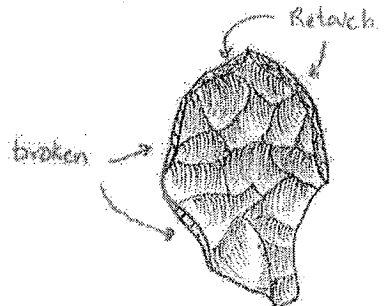


Figure 1: IO 1, San Jose Projectile Point (actual size)

**IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.**

**SURVEY LA NUMBER LOG**

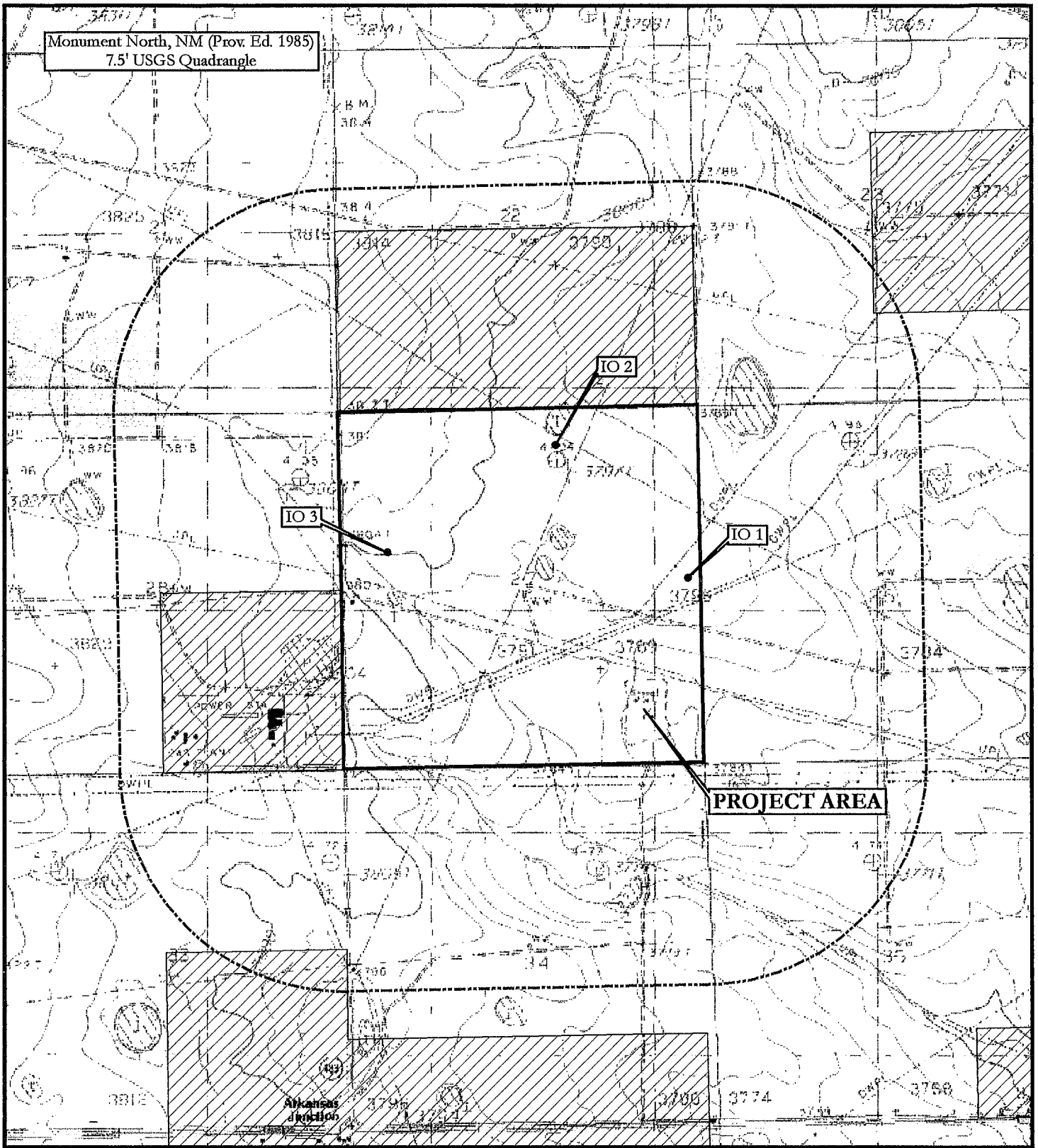
**Sites Discovered:**

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

**Previously recorded revisited sites:**

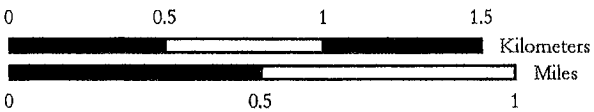
LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

Monument North, NM (Prov. Ed. 1985)  
7.5' USGS Quadrangle



**Legend**

- Isolated Occurrence
- ARMS Search Radius (1 km)



**Land Ownership**

- State
- ▨ Private

Monument North, NM (Prov. Ed. 1985)  
USGS 7.5' Quadrangle

T18S, R36E,  
Section 27  
Lea County, NM



**Arkansas Junction Site  
Cultural Resource Survey  
Project Area Map**

**Lone Mountain  
Archaeological Services, Inc.**

Drawn by: S. Daras  
LMAS No. 1224

Client:  
Gordon Environmental

