

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO)

RECORD OF TECHNICAL CHANGE (ROTC)

Corrective Action Unit (CAU) Number: 550

CAU Description: Smoky Contamination Area

CAU Owner: Soils - Environmental Restoration (ER)

ROTC No. DOE/NV--1532-ROTC 1 **Page** 1 of 42

Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

The following technical changes (including justification) are requested by:

Tiffany Gamero

Requestor Name

Long-Term Monitoring Activity Lead

Requestor Title

Description of Change:

1. This ROTC replaces the Use Restriction (UR) forms listed in the CAU 550 CADD/CR (DOE/NV--1532).

These UR forms have been updated to list all UR requirements, including but not limited to: post-closure site controls, inspection and maintenance requirements, Geographic Information Systems (GIS) coordinate information. The UR Forms attached to this ROTC are the current UR requirements for each UR in this CAU and supersede any existing UR documentation.

2. The FFACO UR for Corrective Action Sites (CASs) 08-23-03, 08-23-06, and 08-23-07 was separated into URs for each CAS. The figures showing the FFACO URs were updated to show straight lines between boundary coordinate points. An Administrative UR identical to the Administrative UR for CAS 08-23-04 was added to each new UR form.
3. In the previous version of the UR form for CASs 08-23-03, 08-23-04,

Justification:

1. Changes in UR requirements from those found in closure documents have been documented in letters, memos, and inspection reports. This has resulted in difficulty in determining current UR requirements. A review of the post-closure requirements for this CAU has been conducted to ensure that all UR requirements have been identified and documented on the new UR form. The new UR form was developed to be inclusive of all requirements for long-term monitoring and standardize information contained in the URs.
2. Current protocol is to have separate URs for each CAS. The Administrative URs were added to each of the CASs because the releases associated with each of these CASs may have contributed to the contamination encompassed by the Administrative UR boundary.
3. This depth of contamination within the administrative UR area for

**FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO)
RECORD OF TECHNICAL CHANGE (ROTC)**

Corrective Action Unit (CAU) Number: 550

CAU Description: Smoky Contamination Area

CAU Owner: Soils - Environmental Restoration (ER)

ROTC No. DOE/NV--1532-ROTC 1 **Page** 2 of 42

Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

Description of Change:

08-23-06, and 08-23-07, the depth for the Administrative UR was N/A.
The depth was changed to 0 to 15 centimeters on the new UR forms.

Justification:

CASs 08-23-03, 08-23-04, 08-23-06, and 08-23-07 was corrected to reflect the presence of surface radiological contamination above action levels and areas where removable contamination is present that meets Contamination Area conditions. The contamination within this area is limited to the surface soil and was changed to 0 to 15 cm to be consistent with the CAU 550 CADD/CR and depth of the FFACO UR at CAU 550.

Schedule Impacts:

No impacts to schedule.

ROTC applies to the following document(s):

- U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

**FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO)
RECORD OF TECHNICAL CHANGE (ROTC)**

Corrective Action Unit (CAU) Number: 550

CAU Description: Smoky Contamination Area

CAU Owner: Soils - Environmental Restoration (ER)

ROTC No. DOE/NV--1532-ROTC 1 **Page** 3 **of** 42
Document Type Corrective Action Decision Document/Closure Report (CADD/CR) **Date** 02/14/2019

Approvals:

/s/ Kevin Cabbie **Date** 2/14/19

Kevin Cabbie

Activity Lead

Environmental Management (EM) Nevada Program

/s/ Wilhelm R. Wilborn **Date** 2/20/2019

Bill Wilborn

Deputy Program Manager, Operations

Environmental Management (EM) Nevada Program

/s/ Chris Andres **Date** 2/25/19

Chris Andres

Chief, Bureau of Federal Facilities

Nevada Division of Environmental Protection (NDEP)

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

Use Restriction (UR) Type(s):	Both FFACO and Administrative
Corrective Action Unit (CAU) Number & Description:	550 - Smoky Contamination Area
Corrective Action Site (CAS) Number & Description:	08-23-03 - Atmospheric Test Site T-8B
CAU/CAS Owner:	Soils - ER
Note:	CAS previously shared UR Form with CASs 08-23-06 and 08-23-07.

Section I. *Federal Facility Agreement and Consent Order (FFACO) UR*

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Radiological contaminants that were released at this site. Radiological contaminants are assumed to be present that exceed CAS 08-23-03 final action levels under the Occasional Use Area (80 hours per year) exposure scenario. Removable contamination is present that exceeds the criteria for establishing a High Contamination Area.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
FFACO Boundary	1	582,323	4,114,471
	2	582,203	4,114,682
	3	582,191	4,115,073
	4	582,203	4,115,455
	5	582,453	4,115,735
	6	582,841	4,115,662
	7	582,946	4,115,305
	8	583,240	4,114,994
	9	583,460	4,114,838
	10	583,440	4,114,782
	11	582,323	4,114,471

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

Control	Criteria
Signage	Present and legible.

Inspection Frequency: Annual

Additional Considerations:

Consideration	Criteria
None	None

Requirements Comments: N/A

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 08-23-03 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
Admin Boundary	1	582,433	4,114,109
	2	582,202	4,114,663
	3	581,762	4,116,707
	4	582,667	4,117,389
	5	583,330	4,116,699
	6	582,747	4,116,389
	7	583,860	4,115,049
	8	583,956	4,114,484
	9	582,433	4,114,109

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 550 CADD/CR (DOE/NV--1532), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

Attachments

- CAU 550, CAS 08-23-03 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-03 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-03 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero


Tiffany Gamero

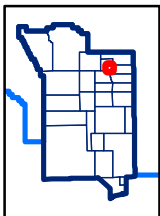
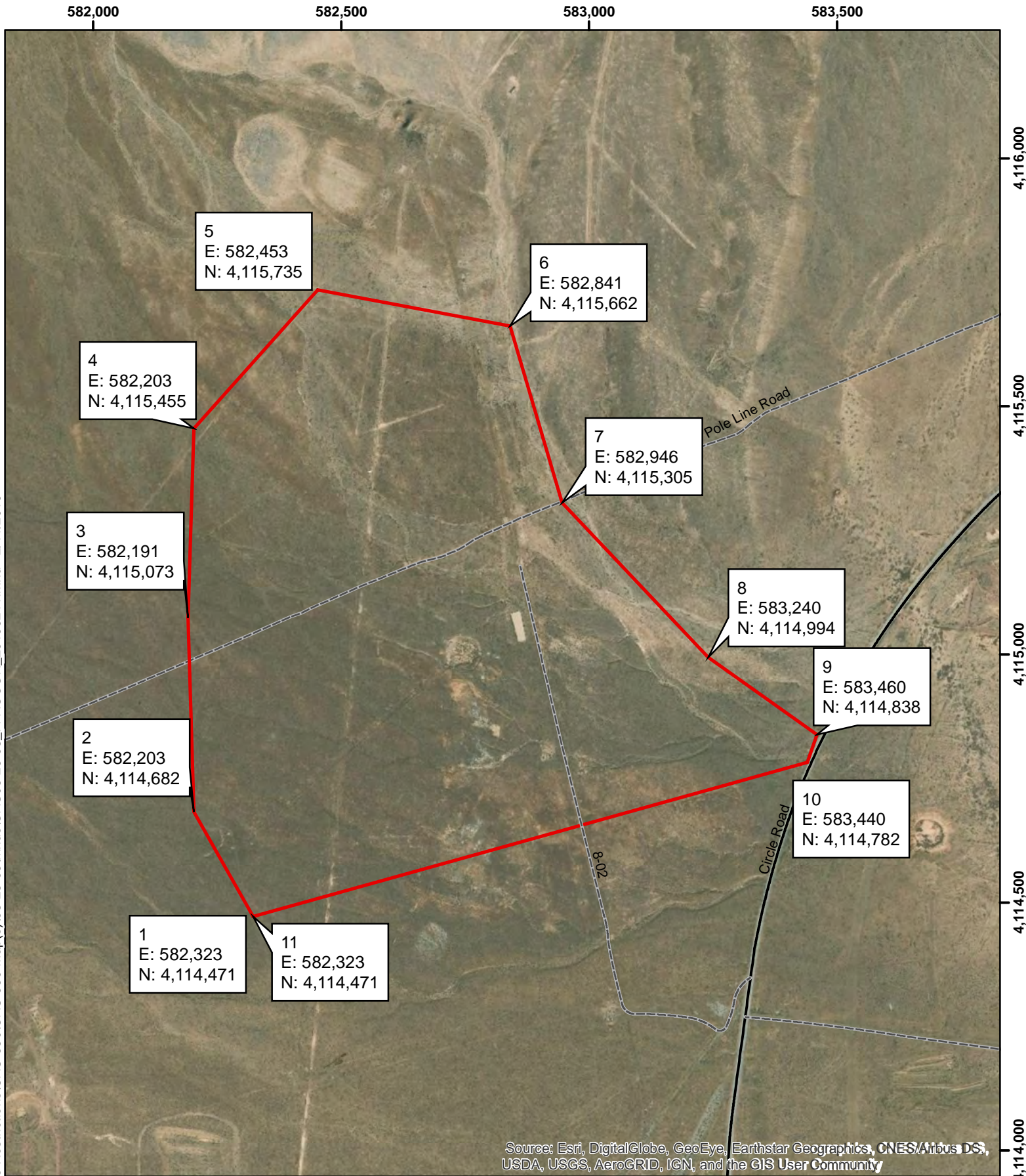
Activity Lead

EM Nevada Program

Date:


2/14/2019

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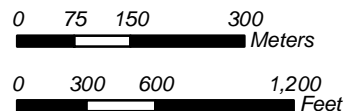
CAU 550, CAS 08-23-03 Atmospheric Test Site T-8B FFACO UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-06,
and CAS 08-23-07 share the same
FFACO use restriction boundary.

Source: Navarro GIS, 2019

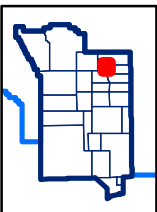
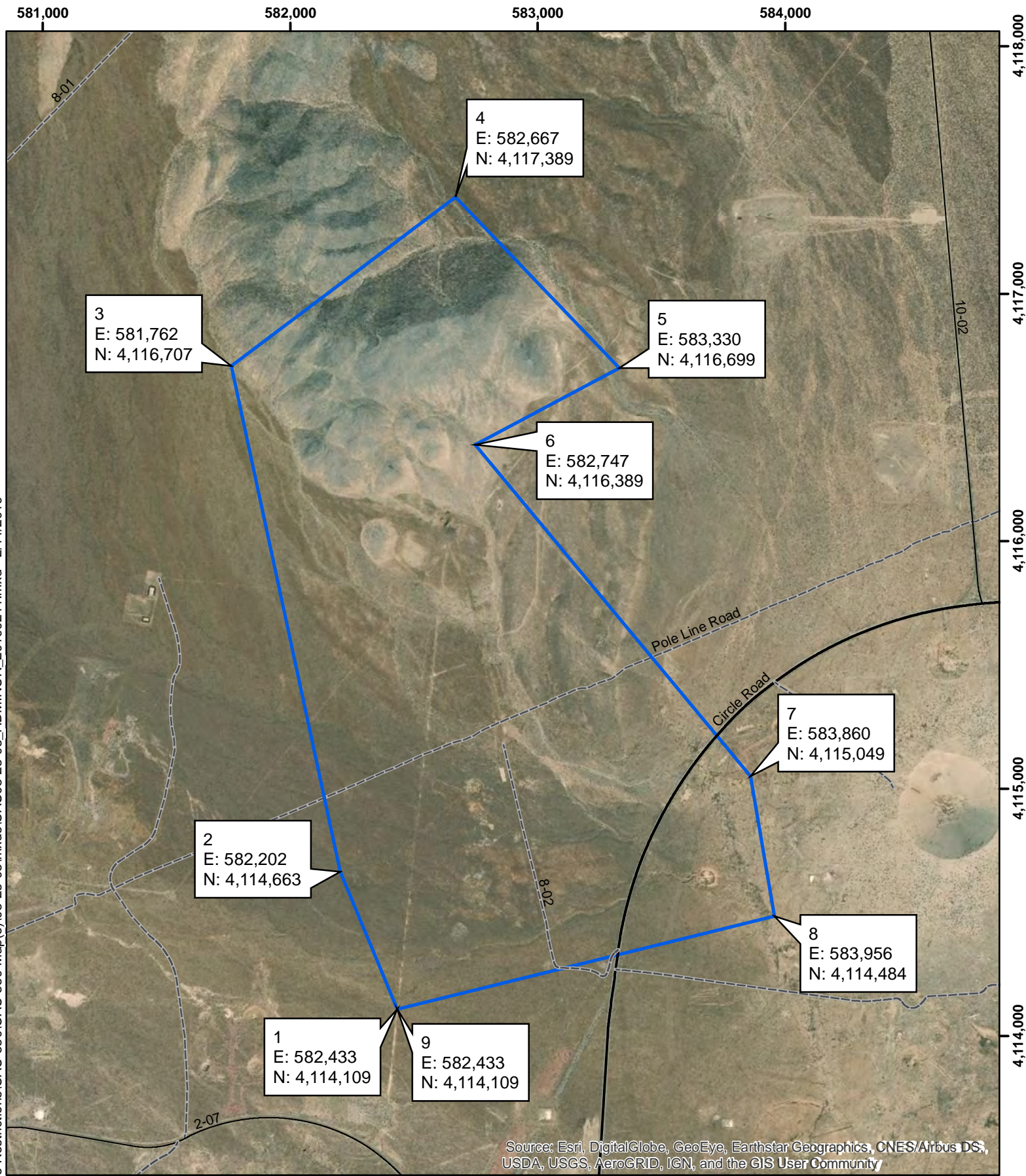
Explanation

- FFACO UR
- Secondary Road
- Vehicular Trail



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

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CAU 550, CAS 08-23-03 Atmospheric Test Site T-8B Administrative UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-04, CAS 08-23-06, and CAS 08-23-07 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation	
	Administrative UR
	Secondary Road
	Local Road
	Vehicular Trail



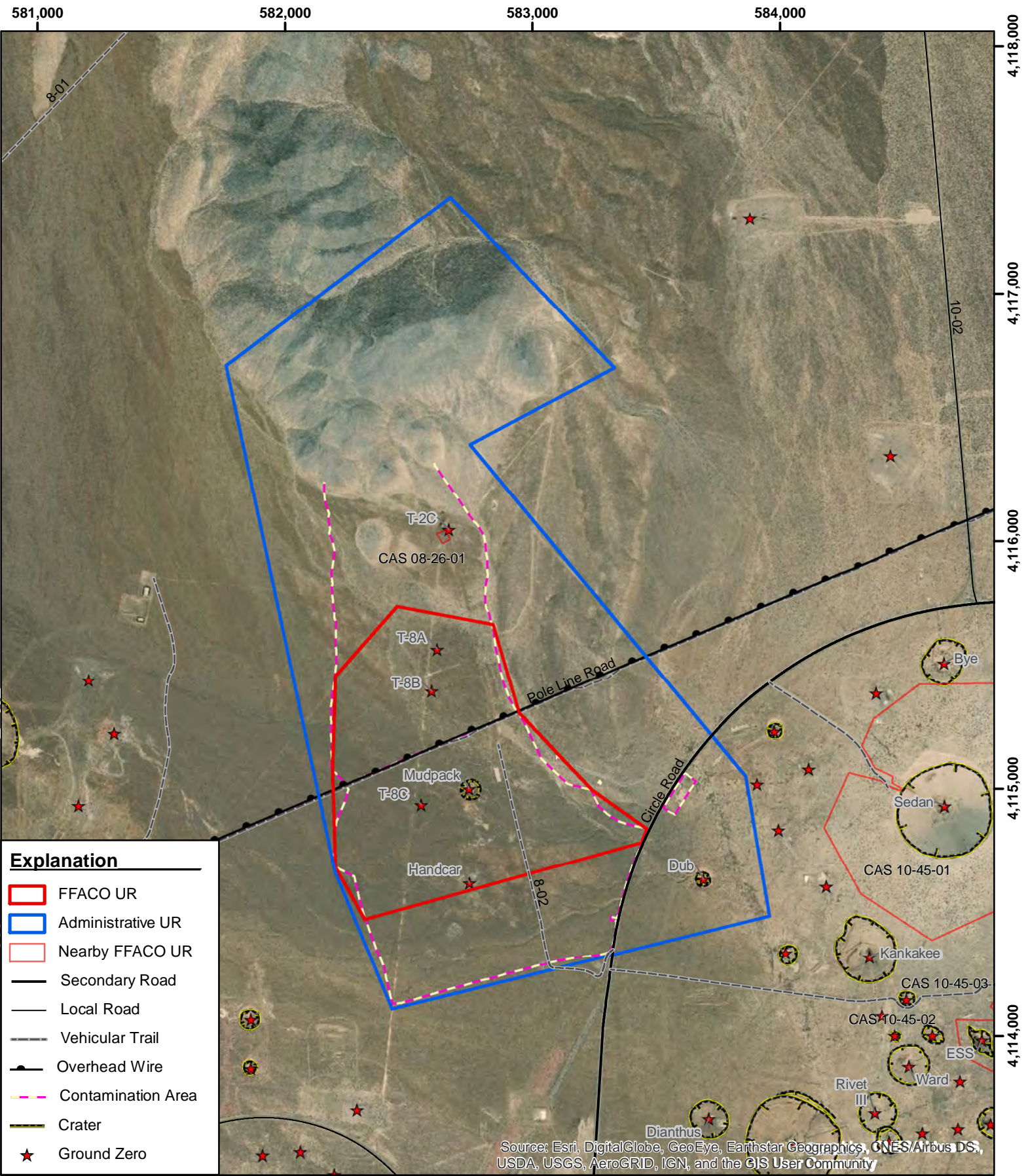
NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

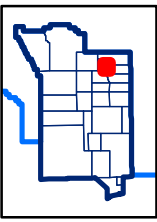
This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

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Explanation

- FFACO UR
- Administrative UR
- Nearby FFACO UR
- Secondary Road
- Local Road
- Vehicular Trail
- Overhead Wire
- Contamination Area
- Crater
- Ground Zero



**CAU 550, CAS 08-23-03
Atmospheric Test Site T-8B
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Source: Navarro GIS, 2019

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

Use Restriction (UR) Type(s):	Administrative Only
Corrective Action Unit (CAU) Number & Description:	550 - Smoky Contamination Area
Corrective Action Site (CAS) Number & Description:	08-23-04 - Atmospheric Test Site T-2C
CAU/CAS Owner:	Soils - ER
Note:	N/A

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

An FFACO UR is not identified for this site.

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 08-23-04 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
Admin Boundary	1	582,433	4,114,109
	2	582,202	4,114,663
	3	581,762	4,116,707
	4	582,667	4,117,389
	5	583,330	4,116,699
	6	582,747	4,116,389
	7	583,860	4,115,049
	8	583,956	4,114,484
	9	582,433	4,114,109

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²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 550 CADD/CR (DOE/NV--1532), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

Attachments

- CAU 550, CAS 08-23-04 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-04 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

Tiffany Gamero

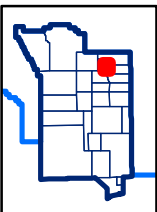
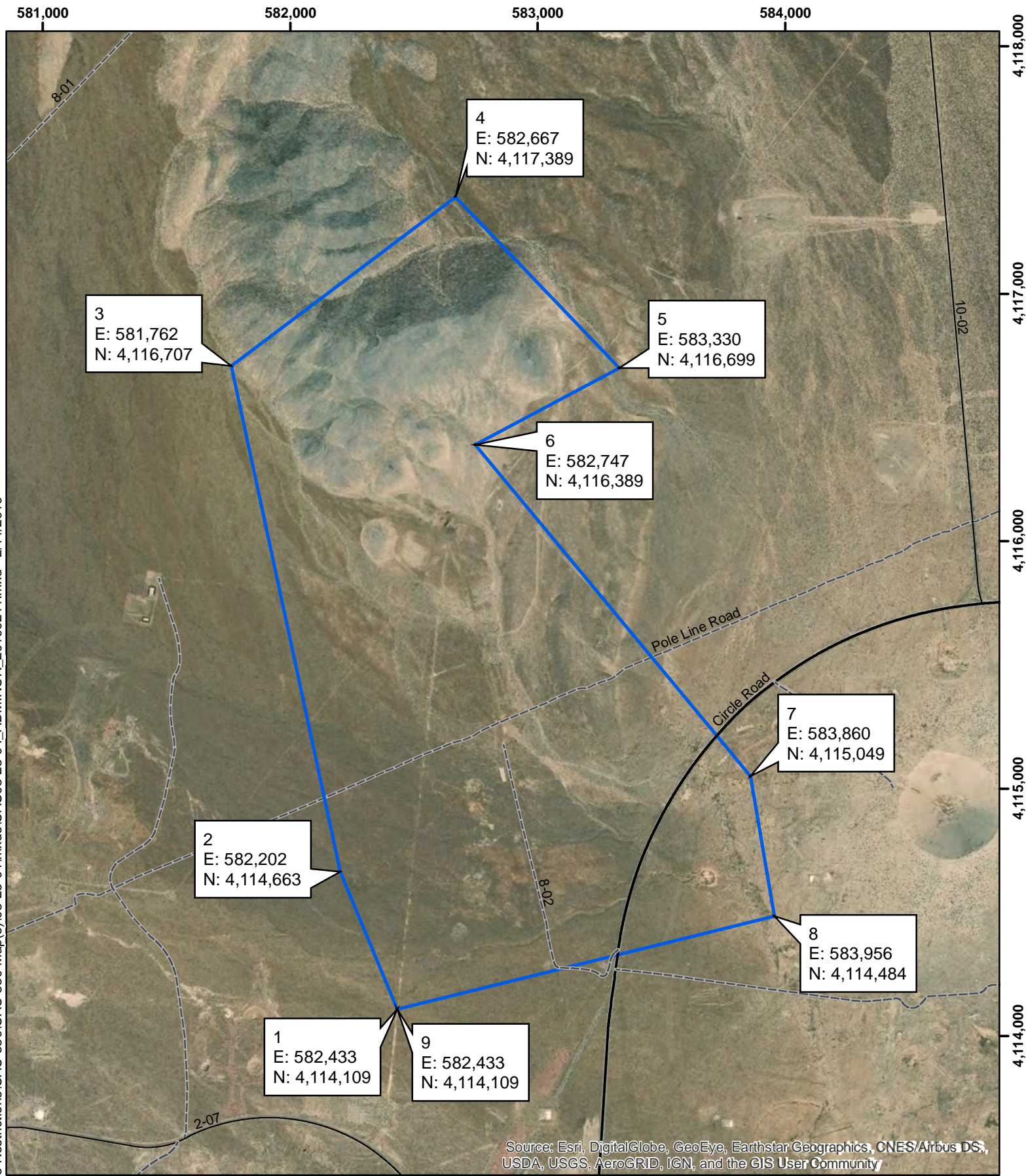
Activity Lead

EM Nevada Program

Date:

2/14/2019

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CAU 550, CAS 08-23-04 Atmospheric Test Site T-2C Administrative UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-04, CAS 08-23-06, and CAS 08-23-07 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation

- Administrative UR
- Secondary Road
- Local Road
- Vehicular Trail

0 200 400 800 Meters

0 750 1,500 3,000 Feet

NOTE: Size and location of features are approximated.

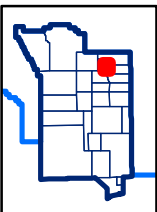
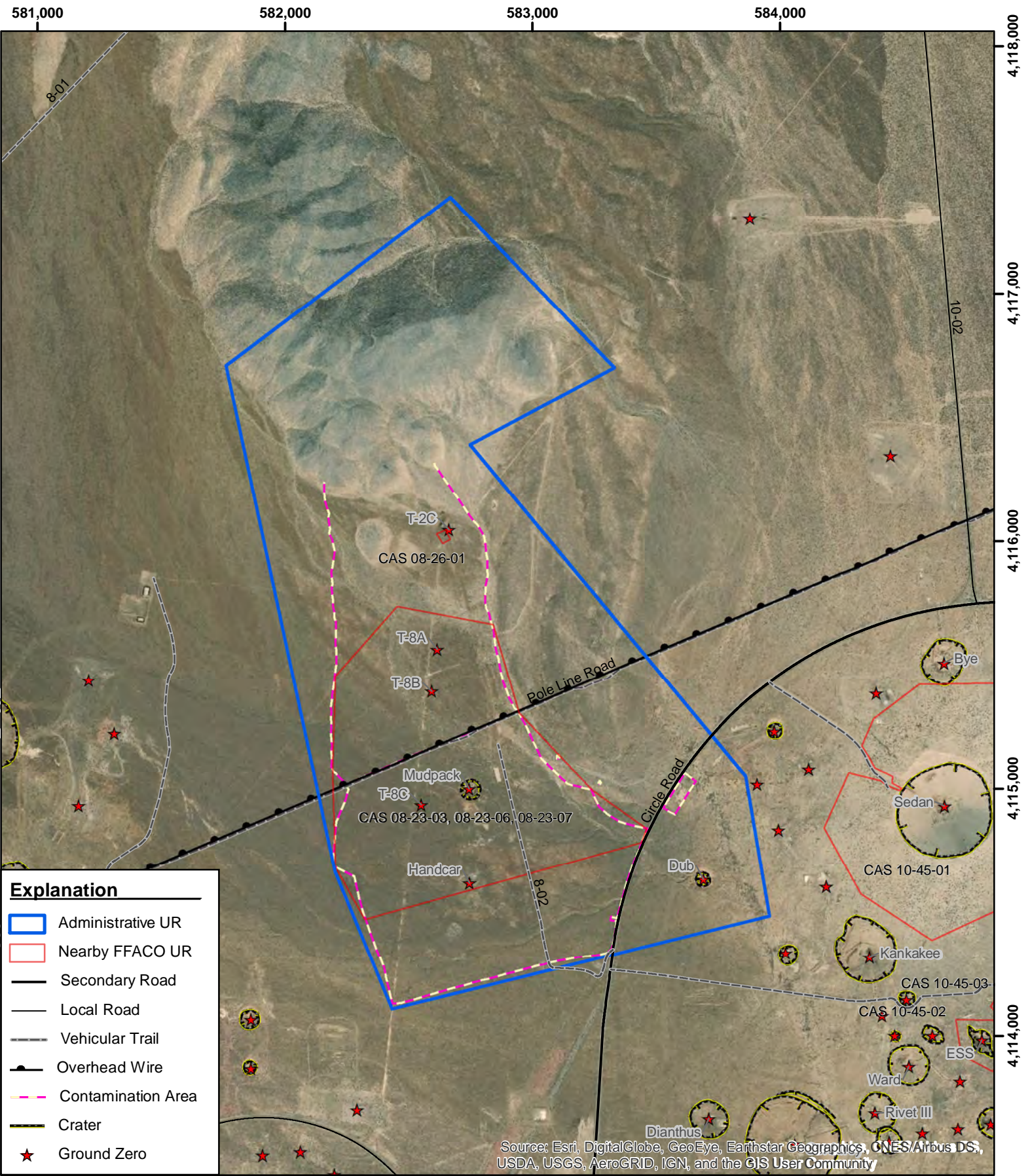
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

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**CAU 550, CAS 08-23-04
Atmospheric Test Site T-2C
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

Use Restriction (UR) Type(s):	Both FFACO and Administrative
Corrective Action Unit (CAU) Number & Description:	550 - Smoky Contamination Area
Corrective Action Site (CAS) Number & Description:	08-23-06 - Atmospheric Test Site T-8A
CAU/CAS Owner:	Soils - ER
Note:	CAS previously shared UR Form with CASs 08-23-03 and 08-23-07.

Section I. *Federal Facility Agreement and Consent Order (FFACO) UR*

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Radiological contaminants that were released at this site. Radiological contaminants are assumed to be present that exceed CAS 08-23-06 final action levels under the Occasional Use Area (80 hours per year) exposure scenario. Removable contamination is present that exceeds the criteria for establishing a High Contamination Area.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
FFACO Boundary	1	582,323	4,114,471
	2	582,203	4,114,682
	3	582,191	4,115,073
	4	582,203	4,115,455
	5	582,453	4,115,735
	6	582,841	4,115,662
	7	582,946	4,115,305
	8	583,240	4,114,994
	9	583,460	4,114,838
	10	583,440	4,114,782
	11	582,323	4,114,471

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²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

Control	Criteria
Signage	Present and legible.

Inspection Frequency: Annual

Additional Considerations:

Consideration	Criteria
None	None

Requirements Comments: N/A

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 08-23-06 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
Admin Boundary	1	582,433	4,114,109
	2	582,202	4,114,663
	3	581,762	4,116,707
	4	582,667	4,117,389
	5	583,330	4,116,699
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Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 550 CADD/CR (DOE/NV--1532), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

Attachments

- CAU 550, CAS 08-23-06 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-06 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-06 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

Tiffany Gamero

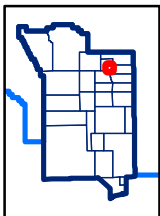
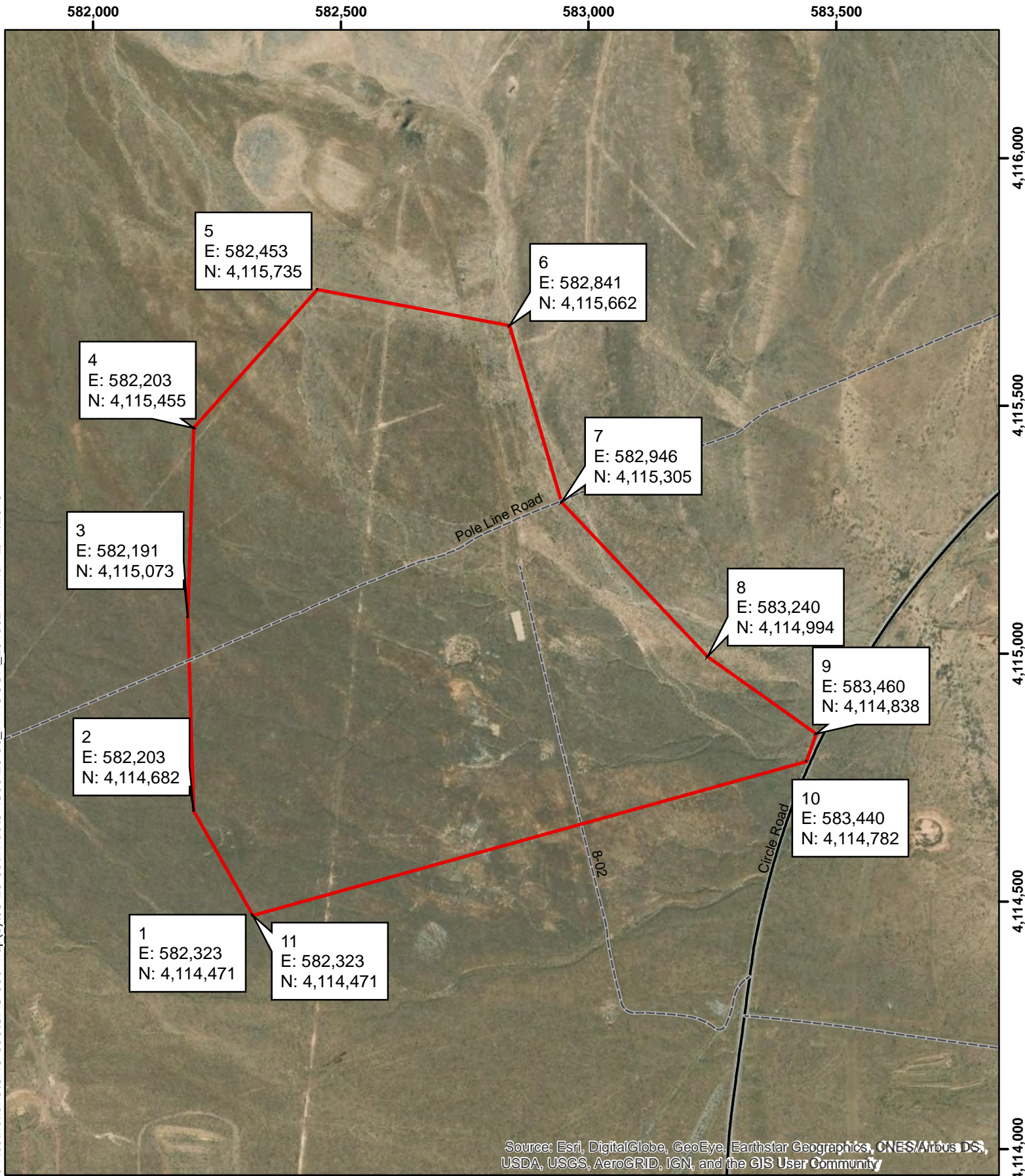
Activity Lead

EM Nevada Program

Date:

2/14/2019

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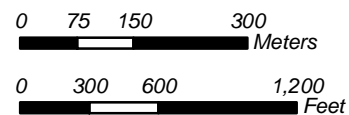
CAU 550, CAS 08-23-06 Atmospheric Test Site T-8A FFACO UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-06,
and CAS 08-23-07 share the same
FFACO use restriction boundary.

Source: Navarro GIS, 2019

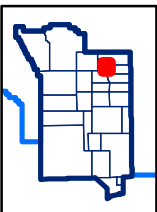
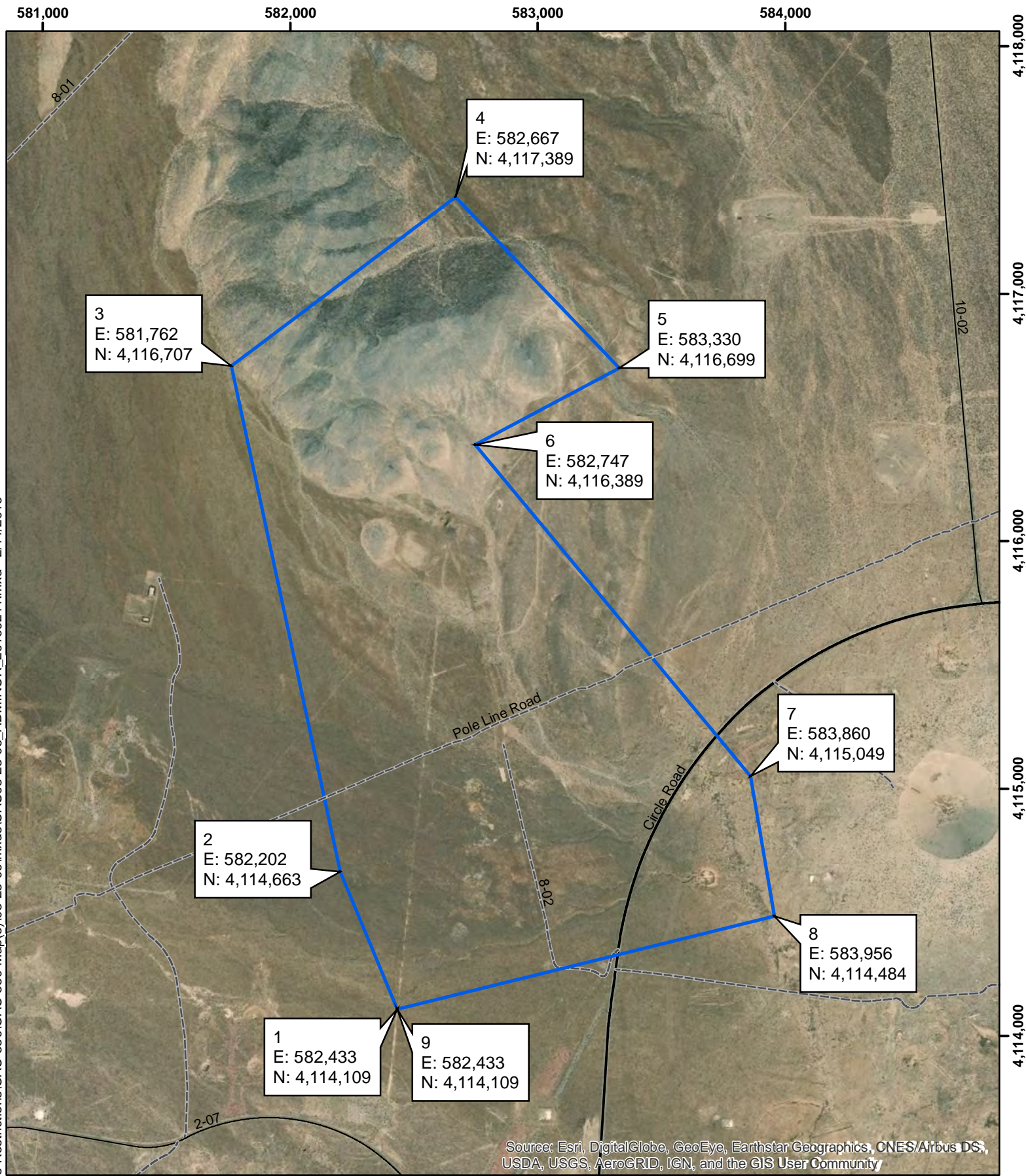
Explanation

- FFACO UR
- Secondary Road
- Vehicular Trail



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

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CAU 550, CAS 08-23-06 Atmospheric Test Site T-8A Administrative UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-04, CAS 08-23-06, and CAS 08-23-07 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation	
	Administrative UR
	Secondary Road
	Local Road
	Vehicular Trail



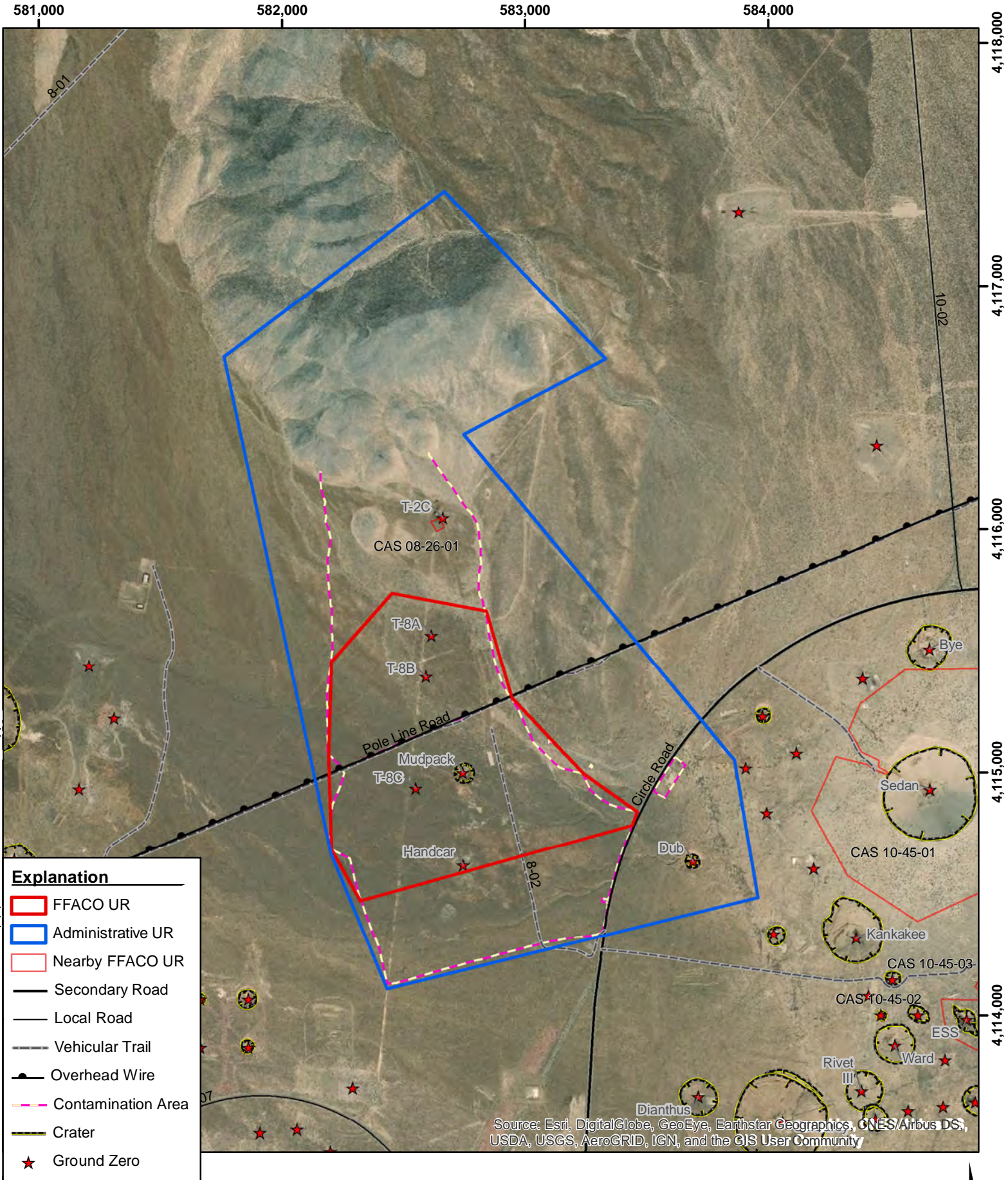
NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

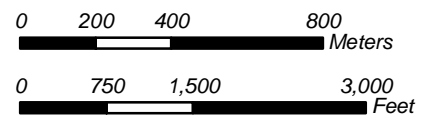
The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

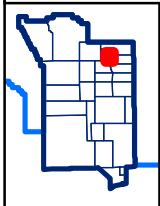
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**CAU 550, CAS 08-23-06
Atmospheric Test Site T-8A
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter



Source: Navarro GIS, 2019

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

Use Restriction (UR) Type(s):	Both FFACO and Administrative
Corrective Action Unit (CAU) Number & Description:	550 - Smoky Contamination Area
Corrective Action Site (CAS) Number & Description:	08-23-07 - Atmospheric Test Site T-8C
CAU/CAS Owner:	Soils - ER
Note:	CAS previously shared UR Form with CASs 08-23-03 and 08-23-06.

Section I. *Federal Facility Agreement and Consent Order (FFACO) UR*

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Radiological contaminants that were released at this site. Radiological contaminants are assumed to be present that exceed CAS 08-23-07 final action levels under the Occasional Use Area (80 hours per year) exposure scenario. Removable contamination is present that exceeds the criteria for establishing a High Contamination Area.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
FFACO Boundary	1	582,323	4,114,471
	2	582,203	4,114,682
	3	582,191	4,115,073
	4	582,203	4,115,455
	5	582,453	4,115,735
	6	582,841	4,115,662
	7	582,946	4,115,305
	8	583,240	4,114,994
	9	583,460	4,114,838
	10	583,440	4,114,782
	11	582,323	4,114,471

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

Control	Criteria
Signage	Present and legible.

Inspection Frequency: Annual

Additional Considerations:

Consideration	Criteria
None	None

Requirements Comments: N/A

Section II. Administrative UR

Basis for Administrative UR

Summary Statement: This Administrative UR is established to protect workers should future land use result in increased exposure to site contaminants. Radiological contaminants are present that exceed CAS 08-23-07 final action levels under the Industrial Area (2,000 hours per year) exposure scenario.

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

Administrative UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
Admin Boundary	1	582,433	4,114,109
	2	582,202	4,114,663
	3	581,762	4,116,707
	4	582,667	4,117,389
	5	583,330	4,116,699
	6	582,747	4,116,389
	7	583,860	4,115,049
	8	583,956	4,114,484
	9	582,433	4,114,109

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Surface

Starting Depth: 0

Ending Depth: 15

Depth Unit: Centimeters

Survey Source: GIS

Administrative UR Requirements

Administrative URs do not require onsite postings or other physical barriers, and they do not require periodic inspections or maintenance.

Site Controls:

This Administrative UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area defined by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 550 CADD/CR (DOE/NV--1532), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

Attachments

- CAU 550, CAS 08-23-07 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-07 Administrative UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-23-07 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

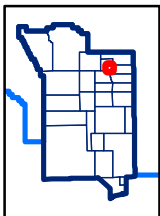
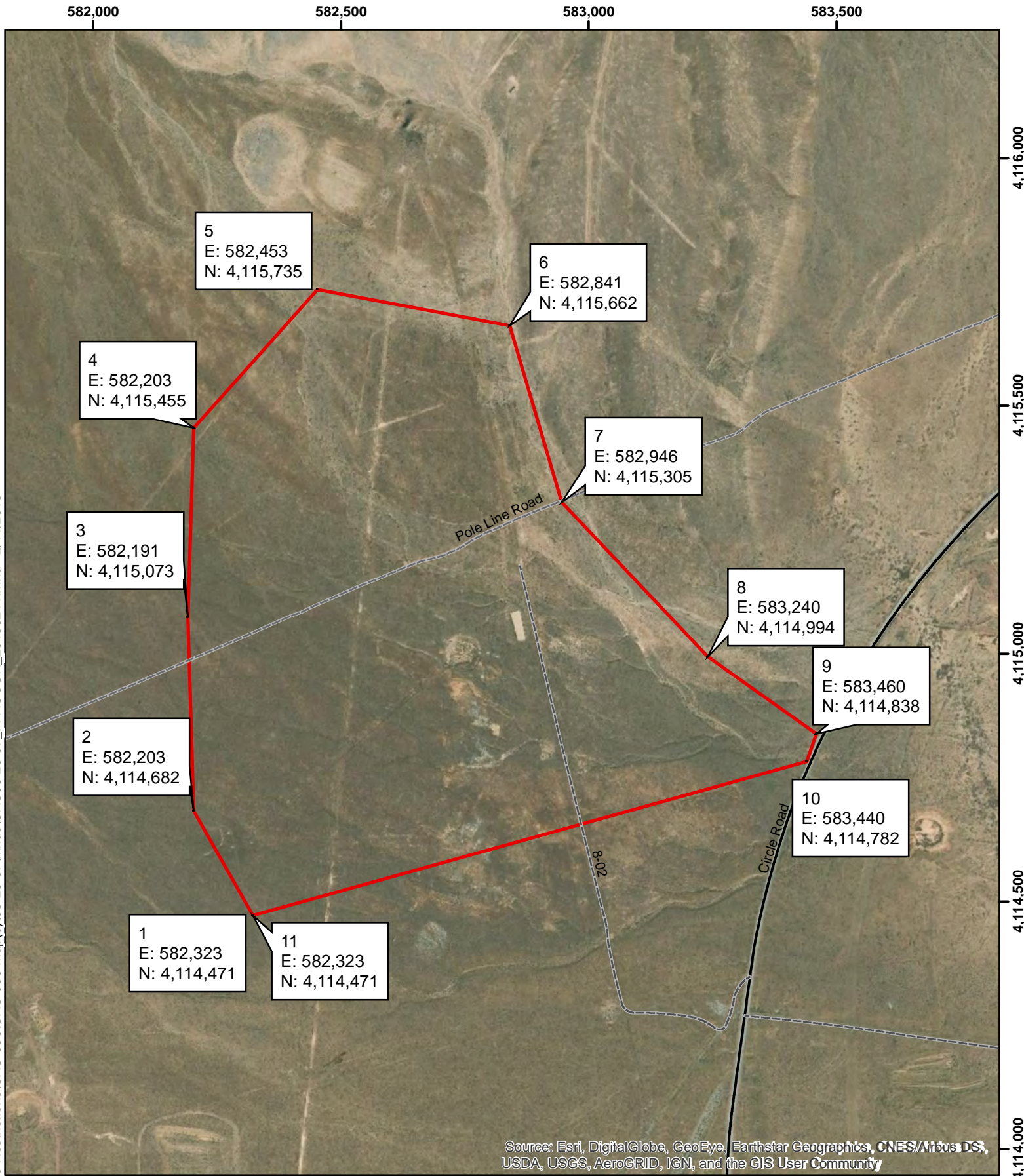

Tiffany Gamero

Activity Lead

EM Nevada Program

Date: 2/14/2019

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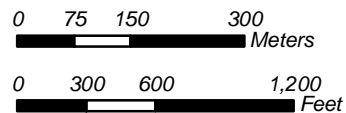
CAU 550, CAS 08-23-07 Atmospheric Test Site T-8C FFACO UR Boundary

NOTE: CAS 08-23-03, CAS 08-23-06,
and CAS 08-23-07 share the same
FFACO use restriction boundary.

Source: Navarro GIS, 2019

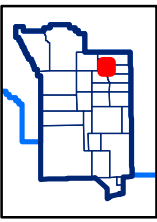
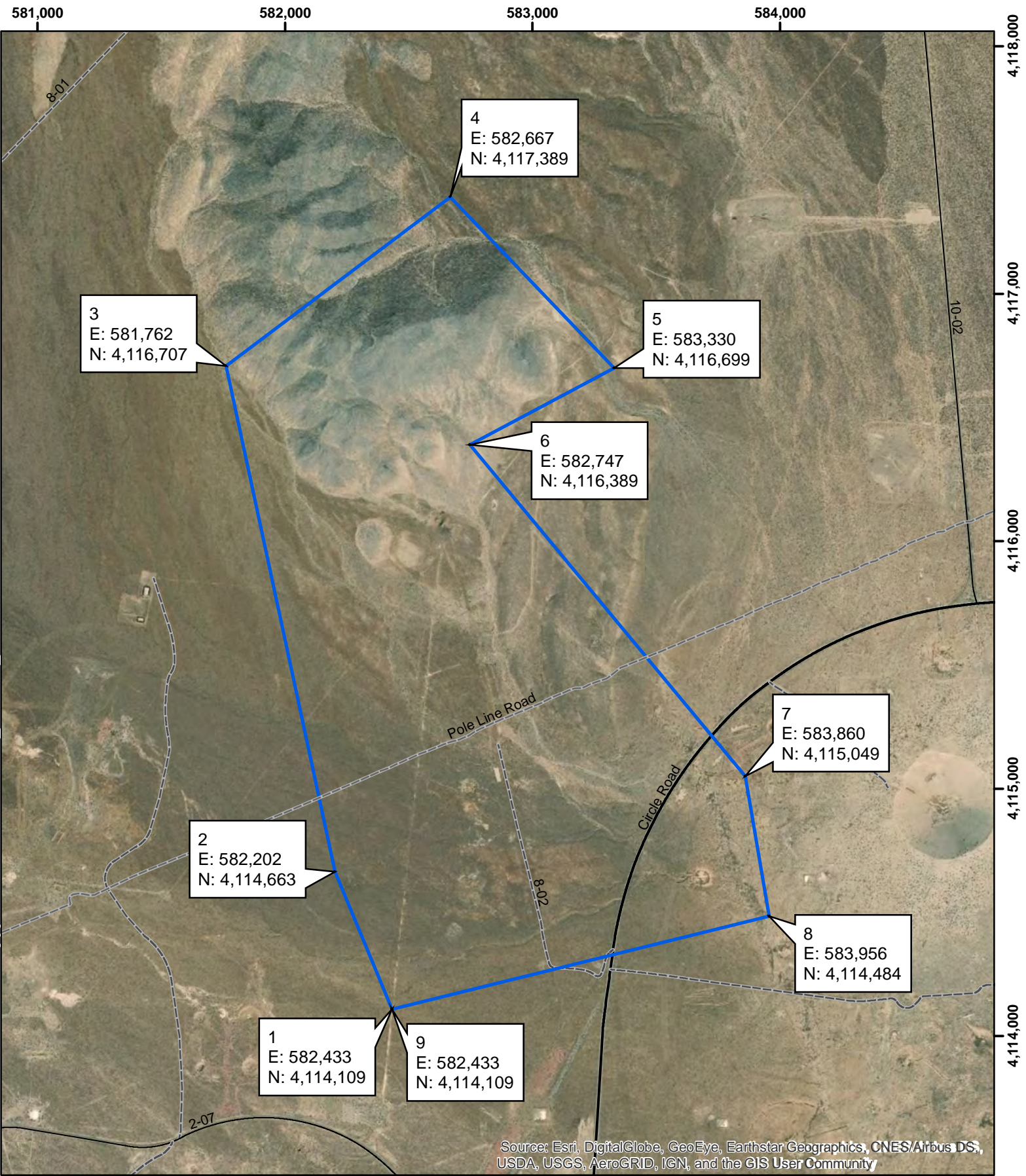
Explanation

- FFACO UR
- Secondary Road
- Vehicular Trail



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

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**CAU 550, CAS 08-23-07
Atmospheric Test Site T-8C
Administrative UR Boundary**

NOTE: CAS 08-23-03, CAS 08-23-04, CAS 08-23-06, and CAS 08-23-07 share the same administrative use restriction boundary.

Source: Navarro GIS, 2019

Explanation

- Administrative UR
- Secondary Road
- Local Road
- Vehicular Trail

0 200 400 800 Meters

0 750 1,500 3,000 Feet

NOTE: Size and location of features are approximated.

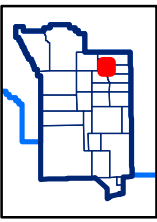
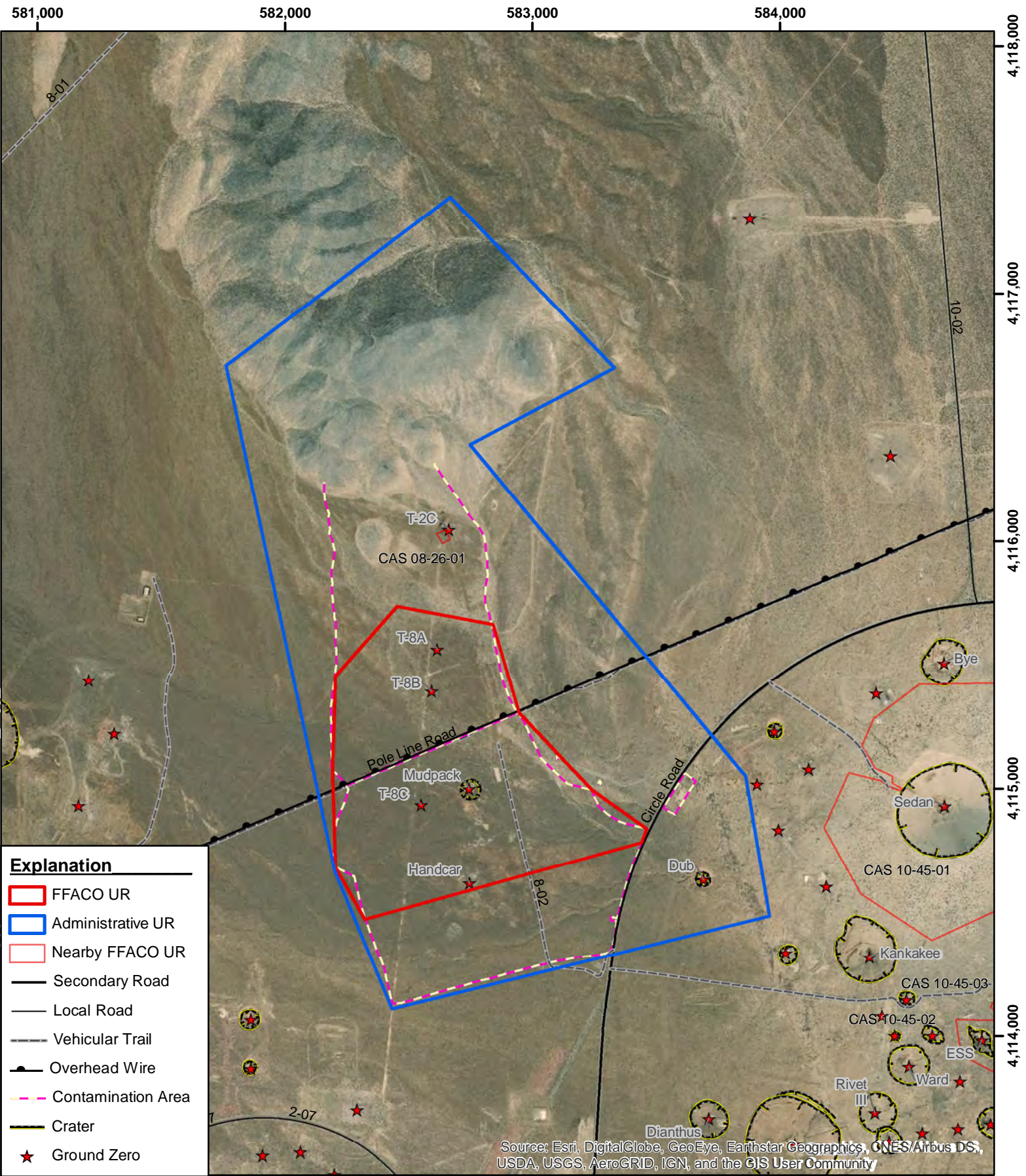
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

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**CAU 550, CAS 08-23-07
Atmospheric Test Site T-8C
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

U.S. Department of Energy, Environmental Management Nevada Program

Use Restriction Information

General Information

Use Restriction (UR) Type(s):	FFACO Only
Corrective Action Unit (CAU) Number & Description:	550 - Smoky Contamination Area
Corrective Action Site (CAS) Number & Description:	08-26-01 - Lead Bricks (200)
CAU/CAS Owner:	Soils - ER
Note:	N/A

Section I. Federal Facility Agreement and Consent Order (FFACO) UR

Basis for FFACO UR

Summary Statement: This FFACO UR is established to protect workers from inadvertent exposure to Chemical contaminants that were released at this site. Chemical contaminants are assumed to be present that exceed CAS 08-26-01 final action levels under the Occasional Use Area (80 hours per year) exposure scenario.

FFACO UR Physical Description

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Boundary	UR Point ¹	Easting ²	Northing ²
FFACO Boundary	1	582,637	4,115,989
	2	582,611	4,116,028
	3	582,647	4,116,043
	4	582,667	4,116,006
	5	582,637	4,115,989

¹UR Points are listed clockwise beginning at the southernmost point. If multiple points share the southernmost Northing coordinate, the easternmost point is listed as Point 1.

²UR Coordinate values presented herein were captured in North American Datum of 1983, and rounded to the nearest meter when necessary; due to that rounding, coordinates may not reflect the original precision of values contained within the source GIS data set.

Boundary Applies to: Both Surface and Subsurface

Starting Depth: 0

Ending Depth: 30

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Depth Unit: Centimeters

Survey Source: GPS

FFACO UR Requirements

Site Controls:

This FFACO UR is recorded as described in **Section IV. Recordation Requirements** to restrict activities within the area by the coordinates listed above and depicted in the attached figure without prior notification of NDEP unless the activities are conducted under the provisions of 10 CFR, Part 835, Occupational Radiation Protection and 10 CFR, Part 851, Worker Safety and Health Program.

Control	Criteria
Signage	Present and legible.

Inspection Frequency: Annual

Additional Considerations:

Consideration	Criteria
None	None

Requirements Comments: N/A

Section II. Administrative UR

An Administrative UR is not identified for this site.

Section III. Supporting Documentation

UR Source Document(s)

ROTC 1 for CAU 550 CADD/CR (DOE/NV--1532), dated 02/14/2019.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2015. Corrective Action Decision Document/Closure Report for Corrective Action Unit 550: Smoky Contamination Area, Nevada National Security Site, Nevada, Rev. 0, DOE/NV--1532. Las Vegas, NV.

U.S. Department of Energy, Environmental Management Nevada Program Use Restriction Information

Attachments

- CAU 550, CAS 08-26-01 FFACO UR Boundary Map (UTM, Zone 11, NAD 83 meters)
- CAU 550, CAS 08-26-01 Supplemental Information Figure (UTM, Zone 11, NAD 83 meters)

Section IV. Recordation Requirements

Recordation:

The above UR(s) are recorded in the:

- FFACO Database
- NNSA M&O Contractor GIS
- EM Nevada Program CAU/CAS Files

Section V. EM Nevada Program Approval

/s/ Tiffany Gamero

Tiffany Gamero

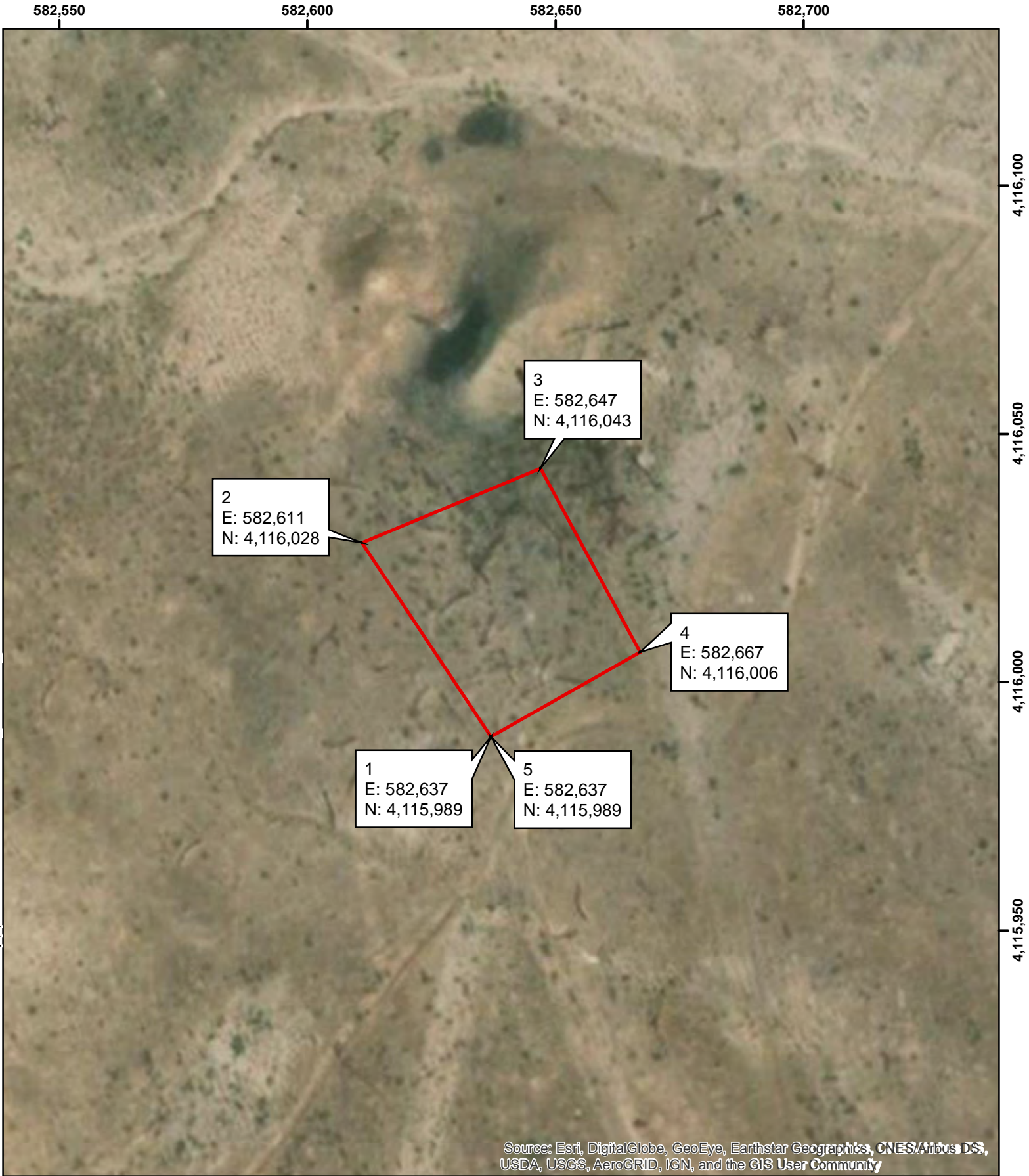
Activity Lead

EM Nevada Program

Date:

2/14/2019

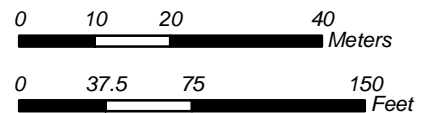
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CAU 550, CAS 08-26-01
Lead Bricks (200)
FFACO UR Boundary

Explanation

 FFACO UR



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter

Supplemental Information Figure

The attached supplemental information figure contains additional information on site features. This information was derived from readily available existing sources and has not been verified. Therefore, site features may not be accurately represented.

This information is not required by the FFACO UR and does not imply any additional regulatory requirements. It is solely intended to benefit site users.

582,000 582,250 582,500 582,750 583,000

4,116,250
4,116,000
4,115,750
4,115,500
4,115,250
4,115,000

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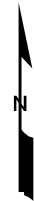
Explanation

- FFACO UR
- Nearby FFACO UR
- Overhead Wire
- Road
- Vehicular Trail
- Contamination Area
- Ground Zero

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**CAU 550, CAS 08-26-01
Lead Bricks (200)
Supplemental Information
General Location of Site Features**



NOTE: Size and location of features are approximated.
Coordinate System: NAD 1983 UTM Zone 11N, Meter