

**6301 - Wilderness Characteristics Inventory**

**Summary of Findings and Conclusion**

**Unit Name and Number:** Silurian Hills CA-080-222-2

**Results of Analysis:**

1. Does the area meet any of the size requirements?     Yes     No
2. Does the area appear to be natural?     Yes     No     N/A
3. Does the area offer outstanding opportunities for solitude or a primitive and unconfined type of recreation?     Yes     No     N/A
4. Does the area have supplemental values?     Yes     No     N/A

**Conclusion**

The area, or a portion of the area, has wilderness characteristics and is identified as Land with Wilderness Characteristics (LWC).

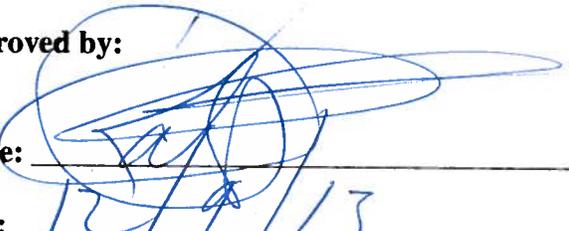
The area does not have wilderness characteristics.

**Prepared by:**

Team Members:

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**Approved by:**

Name:  \_\_\_\_\_

Title: Barstow Field Manager

Date: 12/9/13

*This form documents information that constitutes an inventory finding on wilderness characteristics. It does not represent a formal land use allocation or a final agency decision subject to administrative remedies under either 43 CFR parts 4 or 1610.5-2.*

**Wilderness Inventory**  
**CDCA Wilderness Inventory Unit #222-2**  
**Silurian Hills CA-080-222-2**  
**November 6, 2013**

**Background**

Under Section 201 of the Federal Land Policy Management Act (FLMPA) the Bureau of Land Management (BLM) is required to maintain an inventory of public land resources, including lands with wilderness characteristics. Wilderness characteristics are part of the resource values to be considered in inventories the BLM undertakes. The Wilderness Act of 1964 established the National Wilderness Preservation System which identified a system of federally managed areas designated by Congress as "wilderness areas". The goal of the Wilderness Act was to "secure for the American people of present and future generations the benefit of an enduring resource of wilderness." While the terms "wilderness character" and "wilderness characteristic" are not explicitly defined in the Wilderness Act, Section 2(c) identifies the wilderness characteristics used for evaluation of lands proposed for wilderness protections. The terms generally used to describe and evaluate lands with wilderness characteristics include size, naturalness, opportunities for solitude and/or primitive and unconfined recreation and special features of "ecological, geological or other features of scientific, scenic or historic value."

All public lands within the California Desert District (CDD) were inventoried between 1978 and 1979 through a sequential process to determine if any of the CDD lands possessed wilderness characteristics. This process initially involved identifying Wilderness Inventory Units (WIUs) that were considered to potentially contain wilderness characteristics. Through a BLM cataloging of resources and with public involvement all the WIUs were reviewed at that time. The WIUs or portions of land within a WIU that were found to have wilderness characteristics were identified by the BLM in 1979 as Wilderness Study Areas (WSAs) and lands not found to have wilderness characteristics were managed without wilderness considerations. A WSA is managed to maintain their wilderness suitability until Congress either designates them as wilderness or denies this designation. A final intensive study phase between 1979 and 1991, which included the preparation of mineral surveys and an environmental impact statement and additional public involvement, led the BLM to recommend to the Secretary of the Interior that some of these WSAs should be designated as wilderness and others released for other management. The Secretary then forwarded his recommendations to Congress which has taken action to designate wilderness areas and WSAs in the CDD.

Since the original wilderness characteristic inventories are more than thirty years old, they are being updated at this time. The reason for this update is to accommodate the Desert Renewable Energy Conservation Plan (DRECP) in designating lands being considered for development by determining if conditions in the units have changed (i.e., do wilderness characteristics exist in

locations where they were not present in the 1979). Several management factors could result if changes are found in these units. Specific examples would be, if natural or agency-initiated reclamation projects have restored the natural conditions or if land acquisitions have restored the ability for a solitary recreation, in either case wilderness characteristics are now present and the agency might have to manage these lands for their existence.

As part of the preparation of this wilderness update, a records research was done. Since WIU 222-2 is a new area created from the larger Area 222, that report was used. The permanent inventory file for WIU #222 could not be located for this review however the descriptive narrative for the unit was found in the *California Desert Conservation Area, Wilderness Inventory, Final Descriptive Narratives, March 31, 1979*

([http://www.blm.gov/style/medialib/blm/ca/pdf/pa/wilderness/wi.Par.92238.File.dat/CDCAWildernessInvNarr\\_Final\\_March1979.pdf](http://www.blm.gov/style/medialib/blm/ca/pdf/pa/wilderness/wi.Par.92238.File.dat/CDCAWildernessInvNarr_Final_March1979.pdf)) and the pages which describe this unit have been included

in the appendix section. Other sources of information used in the research and writing of this inventory report were: *the California Desert Conservation Area Plan of 1980*

([http://www.blm.gov/style/medialib/blm/ca/pdf/pdfs/cdd\\_pdfs.Par.aa6ec747.File.pdf/CA\\_Desert.pdf](http://www.blm.gov/style/medialib/blm/ca/pdf/pdfs/cdd_pdfs.Par.aa6ec747.File.pdf/CA_Desert.pdf)),

the 1999 Owlshead Mountains Desert Access Guide (DAG), the 2000 Soda Mountains DAG and the 1990 Kingston Range Wilderness Study Report

([http://www.blm.gov/ca/pa/wilderness/wilderness\\_pdfs/wsa/Volume-4/Kingston%20Range.pdf](http://www.blm.gov/ca/pa/wilderness/wilderness_pdfs/wsa/Volume-4/Kingston%20Range.pdf)).

A field reconnaissance trip was made on November 5, 2013 to record and photograph the unit's environmental situation. The trip involved driving designated routes within and the state highway around the unit to help redefine the 1979 boundaries.

**Year 2013    Inventory Name/Unit Number    Silurian Hills CA-080-222-2**

**Documentation of BLM Wilderness Inventory Findings on Record**

**1. Is there existing BLM wilderness inventory information on all or part of this area?**

Yes

**Inventory Source:** 1979 Wilderness Inventory files, California Desert Conservation Area

**Inventory Unit Name(s)/Number(s):** Silurian Hills CA-080-222-2

**Map Name(s)/Number(s):** USDI BLM California Desert Wilderness Final Inventory, Dec. 1979

**BLM District(s)/Field Office(s):** Barstow Field Office

**2. BLM Inventory Findings on Record**

Existing inventory information regarding wilderness characteristics:

Inventory Source: 1979 Wilderness Inventory files, BLM Barstow FO  
1990 Kingston Range Wilderness Study Report

<b>Unit#/ Name</b>	<b>Size (historic acres)</b>	<b>Natural Condition? Y/N</b>	<b>Outstanding Solitude? Y/N</b>	<b>Outstanding Primitive &amp; Unconfined Recreation? Y/N</b>	<b>Supplemental Values? Y/N</b>
222	255,058	N	Y	Y	N/A
222	284,025	N	Y	Y	Y

Summarize any known primary reasons for prior findings in this table:

While Area 222 was deemed to have wilderness characteristics within certain places of the section it appears that the section that is now Area 222-2 was not then designated either a wilderness or wilderness study area. The 1979 findings included specific recommendations that the qualities of naturalness and developedness were not present in this location and that further wilderness consideration should not be pursued. The 1990 Kingston Range Wilderness Study Report repeated the findings and recommended the area be "managed for low-intensity carefully controlled use".

## **Documentation of Current Wilderness Inventory Conditions**

**Unit Number/Name:** Silurian Hills CA-080-222-2

### **(1) Sufficient size**

**Acreage:** The rough estimate of Area 222-2 is 41,097 acres pending a GIS calculation with a perimeter of 48 miles long.

**Boundaries:** This area does not have well defined boundaries for the eastern and northern borders. The eastern boundary is the Kingston Range Wilderness boundary and the Powerline corridor. The northern boundary is a combination of the Kingston Range Wilderness and the Kingston Range Wilderness Study Area boundaries. The western boundary is State Highway 127. The southern boundary is Designated Route D112 and the Powerline corridor.

### **Description of Current Conditions**

**Land ownership:** The majority of land within Area 222-2 is managed by the BLM with a contiguous stretch across the whole area. There are four State owned locations that total roughly 1954 acres. There are also nine small parcels of private land that total roughly 600 acres.

**Location:** Area 222-2 is located in San Bernardino County in the State of California around an area called the Silurian Hills in the northeastern portion of the BLM Barstow Resource Area. The area is 16 miles north of the City of Baker and 35 miles south of the Village of Shoshone. The area is on the southwest border of the Kingston Wilderness Area and southern border of the Kingston Range Wilderness Study Area and east of State highway 127.

**Topography:** Hills and mountains are located in the eastern and northern parts of the unit. The area is interspersed with washes and small drainages roll into a long basin. The entire area lies rough and rugged, with water often difficult to find, however the northwest section does have a perennial spring which intermittently feeds a creek that fills with water after precipitation events. This creek leads to a three mile long playa which is usually dry with a ring of vegetation. The soil is many a dirt/sand mix with rocks scattered throughout the region. Temperatures in the area range from below freezing in January to 100 degrees Fahrenheit or more in July (the dry lake bed regularly achieves a day-time summer temperature above 115 degrees).

**Vegetation features:** The dominant vegetation type throughout the area is creosote bush scrub however in the vicinity of the Silurian Dry Lake a Saltbush community exists. Creosote plants range from scarce with spots of bare ground between the plants to sections where the creosote bushes grow closer and quite tall and wide. Various grass species are intermingled through the sloping region and then give way to a more saltbush scrub community around the dry lake section. In the hills vegetation thins out with the land becoming a rocky shoal. White bur-sage and brittlebush can also be found in the area in addition to an array of seasonal wildflowers scattered in every type of terrain feature. This habitat supports small mammals like ground squirrels, jackrabbits and coyotes while nongame birds and ravens intermingle with insects, lizards and rattlesnakes.

**Major human uses/activities:** The major recreational use within this unit is motorized recreation which includes all types of off-highway vehicular (OHV) use on designated routes. However, anecdotal evidence on the ground, obtained through on-site visits to the area, is that motorized recreational activity in this area is low in comparison to activity in other areas in the vicinity. Participation levels in other common forms of desert recreation (recreational target shooting, rock-hounding, climbing, hiking, wildlife study and hunting) in this area are also low when compared desert recreational activities in other areas. Dispersed camping is evidenced in a handful of locations in the area. The area does not have a grazing allotment. There are a few historic mines and pits in the area that attract public interest. The Tonopah and Tidewater Railroad, referred to as the T&T, was a mining/borax railroad that went out of existence midcentury. The elevated rail line is evident in a portion of the unit and is a known historic piece of California's rich mining and railroad history.

## **(2) Natural condition**

Yes

The low levels of visitation within this area, of which anecdotal evidence suggests most traffic occurs within the designated route network and within the dry lake, indicate that there are natural forces shaping the landscape more than modern human use. Plants and undisturbed soils are creating a more natural condition. The roads described in earlier reports are becoming two tracks due to inactivity at the mining sites and cessation of regular maintenance. The historic T&T Railway is slowly eroding away over time; trestles and ties are gone or are few in number. In the Riggs area west of the Silurian Hills there is evidence of old foundations and historic debris with assorted evidence of an old mining site. These too are seen as weathering the sands of time and becoming more natural with the erosion process taking over.

## **(3) Outstanding opportunities for solitude**

Yes

The mountains unit, located in the northeastern section, offers the visitor the best opportunity for a solitary experience. This area provides a barrier from the noises associated with the state highway to the west. An individual seeking the challenge of a solitary experience can roam the unit with little chance of bumping into others due to the low visitation and the terrain helps mask outside influences.

## **(4) Outstanding opportunities for primitive and unconfined recreation**

Yes

The shape of the area, with mountains to rolling small undulations with extensive western sloping leading to large dry lake, offers the visitor opportunities for both types of recreation. The opportunity to rely on personal skills to travel and camp rather than on facilities or outside help exists for this area. The idea to provide opportunities for physical and mental challenges

associated with adventure and self-direction as well as the personal growth that results from facing and overcoming obstacles is available in this area.

**(5) Supplemental values**

Yes

There are a handful of tunnels and caves associated with California's mining history that also provide an opportunity to experience life as it once was for early pioneers. Combine that with the physical remains of the T&T Railway and then this unit has features of scientific, educational, scenic and historical value to society.

## Appendix A

### Route Analysis of Area 222-2

WIU # 222-2

Appendix C - Route Analysis

Date: 11/5/13

Evaluator(s): Brad Mastin and Tim Williamson

Route #	Purpose	ROW Y/N/UK	ROW In Use?	Constructed Mechanically	Type of Evidence	Improved Mechanically	Hand Tools Or Machinery	Type of Evidence
Powerline	Powerline	Y	Y	Y	Bladed and Berms	Y	Mach	Bladed and Berms
D112	Recreation	N	N	Y	Berms in spots, now two-track	N		Route washed out in places
D125	Old Mine Road	N	N	Y	Berms	N		Now two-track
D126	Old Mine Road	N	N	Y	Berms	N		Now two-track
D1211	Recreation	N	N	U/K	Two-track	N		Two-track
D1612	Recreation (Borders the T & T)	N	N	U/K	Two-track, washed out in places	N		Two-track
Tonopah and Tidewater Rail Grade	Historic	N	N	Y	Rail Grade	N		Most ties missing and washed out in locations
D153	Recreation	N	N	U/K	Two-track	N		Two-track

**Appendix B**

**Images & Photos of Area 222-2**

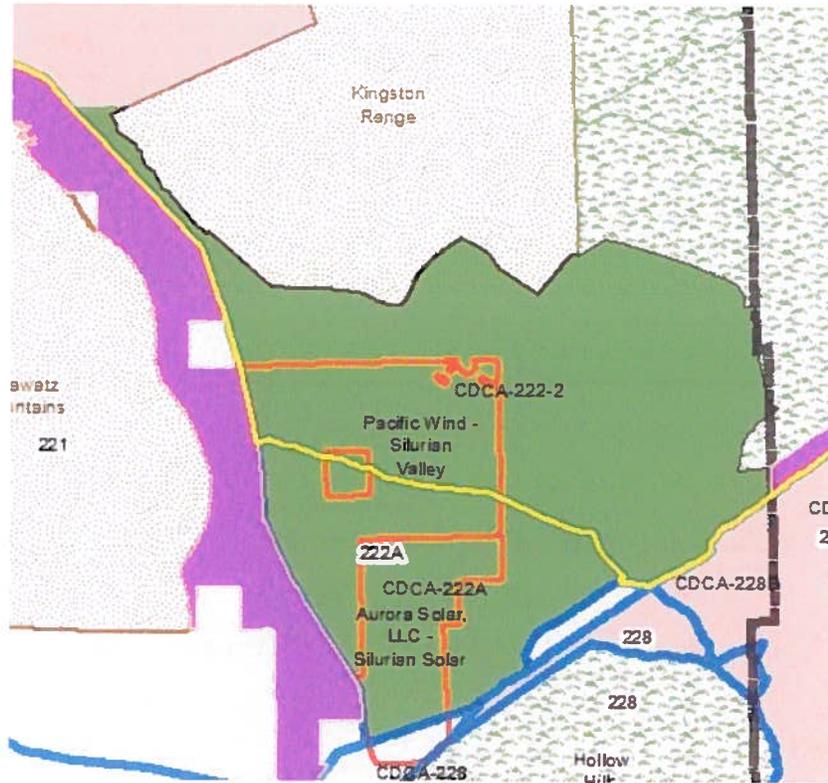


Image #1 - Boundary View of Area 222-2 with Proposed Energy Projects

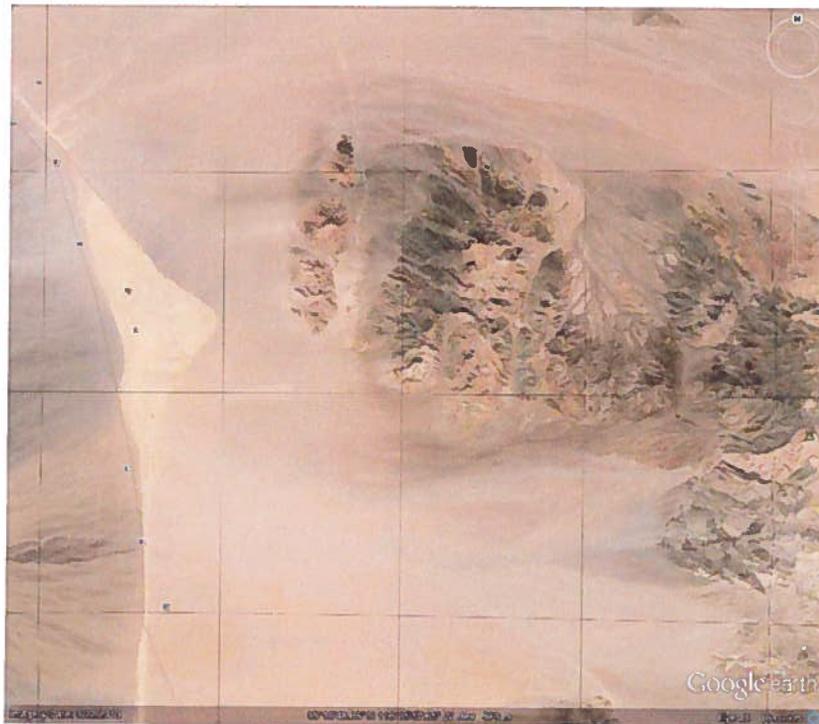


Image #2 - Goggle Earth™ View of Area 222-2



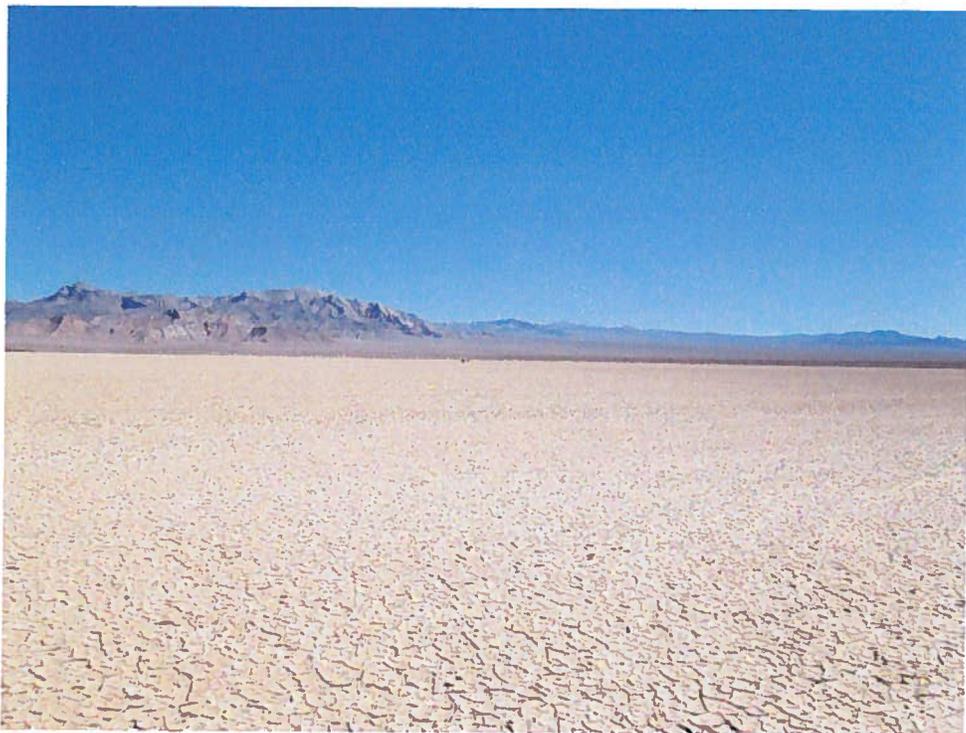
**Photo #3 – Designated Route D1211 - Northwestern View**



**Photo #4 - Junction of Designated Routes D1211 and D112 - Northeastern View**



**Photo #5 - Tidewater & Tonopah Historic Rail Grade - Northern View**



**Photo #6 - Silurian Dry Lake - Eastern View**

**Photo Log for Area  
222-2**

<b>Photo #</b>	<b>GPS</b>	<b>Town &amp; Range</b>	<b>Dir</b>	<b>Description</b>
3	3924787 N 587470 E	T 16 N R 9 E Sec 17	NW	North of Designated Route D1211, downslope from hills and mountains in the background, coarse sandy loam, creosote scrub plant community
4	3923890 N 587822 E	T 16 N R 9 E Sec 21	NE	Junction of Designated Routes D1211 and D112, alluvial fan with mountains in the background, coarse sandy loam, creosote scrub plant community
5	3926470 N 579457 E	T 16 N R 8 E Sec 15	N	Tidewater & Tonopah Historic Rail Grade, basin, crisscrossed with dry washes, creosote scrub with coarse sandy loam
6	3931530 N 574836 E	T 17 N R 8 E Sec 25	E	Silurian Dry Lake, little vegetation, silt.

Appendix C

BLM California Desert Conservation Area Wilderness Final Inventory, Dec. 1979

Written Description & Map of Area 222

V. OUTSTANDING OPPORTUNITIES FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED TYPE OF RECREATION

Outstanding opportunities for solitude are found within the roadless area. The canyons and washes within the southern Avawatz Mountains provide topographic screening and separation into enclosed spaces. Outside of the mountains, large areas are visible from the bajada including the Soda Mountains and the Avawatz Mountains. The unbroken view of these large features provides a psychological feeling of vastness and outstanding opportunities for solitude. The diversity of terrain within the area provides outstanding opportunities for a variety of forms of primitive recreation.

VI. SUMMARY OF PUBLIC COMMENTS

Most comments supported the findings.

AREA 222

I. PHYSICAL BOUNDARIES

This, extremely large area is located about 15 miles north and east of the town of Baker. The western boundary is a combination of Highway 127; a dirt road just east of Renoville, running southeast to connect with a dirt road running southwest across Silurian Dry Lake to Highway 127; and, the triangular shaped roads joining at the Riggs site. The southern boundary of the Wilderness Study Area is the northern edge of the utility right-of-way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right-of-way). The northern boundary is the combination of the Excelsior Mine Road which passes through Tecopa Pass and the town of Tecopa; the graded road from Mine Camp, southwest of Tecopa and running 2.5 miles southeast to elevation 2465; and, the graded dirt road from elevation 2465 running a mile north to elevation 2284 at the Excelsior Mine Road. The eastern boundary is a combination of the Excelsior Mine Road and a water line and tank maintenance road in Kingston wash.

II. LAND OWNERSHIP

This large area consists primarily of public land with approximately 6 percent in scattered blocks of non-public land.

III. DESCRIPTION OF ENVIRONMENT

This area has an extremely diverse terrain, including the steep Kingston Mountains, the Shadow Mountains, the Dumont Hills, the Silurian Hills, the Valjean Valley, the Dumont Dunes, and the western top of the Ibex Mountains. The rugged Kingston Mountains are the highest mountains in the area and display the largest variety of colors. A bajada slopes south from the Kingston Mountain Range and leads to the Kingston wash. The Shadow Mountains have smooth ridges and rounded peaks with gentle interior canyons and numerous erosion channels. The Dumont Hills have a soft rolling topography, with numerous small interior valleys, located west of the Kingston Mountains. The Silurian Hills also have a soft rolling topography. Between the Kingston Range and the Silurian Hills is a very large interior valley called Valjean Valley, which is virtually flat. Located along Highway 127 are the Dumont Dunes, a relatively large sand dune system rising some six to eight hundred feet from the valley floor. Just north of the Dunes is the Amargosa River, which has surface running water most of the year. North of the river is the western tip of the Ibex Mountains. This zone has flat-top mountains, laced with numerous rocky, steep-walled canyons, developed from continual erosion in volcanic rock. The vegetation of this area is as diverse as the landform and changes primarily with elevation. In the washes, interior valleys, and at the base of the mountains, are a variety of low desert shrubs with creosote being the dominant plant. In the higher interior valleys there are Joshua trees, yucca, barrel cactus, and cholla. Above the high interior valleys, on the steep mountain sides, there is a Pinyon Pine-Juniper forest, which finally leads to a White Fir forest at the highest elevations in the Kingston Mountains.

IV. NATURAL CONDITION

The area contains areas both disturbed and undisturbed by man. The following areas along the perimeter have been excluded from further wilderness consideration because they do not meet criteria established by the Wilderness Act: (1) The southwestern side of the Silurian Hills because of extensive silver and talc mining opera-

tions and associated scars, roads and ways, including the Rigg, Talc, Silver Lake and S.S. Mines; (2) An improved way from Highway 127, at Renoville, to the Eastern Star Mine, Kingston Spring and a patented mine at Section 30 (T. 18 N., R. 10 E.); (3) The Dumont Dunes, a BLM-designated "open area," where extensive vehicular use is evident in the area in the form of vehicle tracks, ways and an absence of vegetation; (4) Portions of the Spring Hills and the bajada north and west of them for ORV scars, ways, mining scars, the Dumont Dunes entrance road, and a ranch house complex and road in Section 36, (T. 18 N., R. 6 E.); (5) A paved highway maintenance circle approximately one mile south of the Ibex Spring Road, east of Highway 127; (6) An area just south of Ibex Pass for the old paved route of Highway 127 and a wood pole utility line and associated road; (7) The extreme northwest corner of the area in the vicinity of McLain Park for mining operations and scars; (8) The areas south of the Excelsior Mine Road from Tecopa to approximately five miles south east of Horse Thief Springs for the town of Tecopa, the China Ranch and road and patented mining in Section 33, 34, 35, 36, 26, and 27 (T. 20 N., R. 7 E.), the town of Mine Camp southeast of Tecopa Pass, a waterline road, a house and associated facilities at Horse Thief Springs, a water tank, a corral, fire break, extensive mining operations and associated roads, ways, buildings, tunnels, pits, scars, and locations of the patented Western Talc, Smith, ACME and Omega Mines and other patented mines in Section 33 - 35 (T. 20 N., R. 8 E.) and Section 3, 4, 12 and 13 (T. 19 N., R. 8 E.); (9) The road leading west off the Excelsior Mine Road to the Horse Thief Mine and its associated talc mine operations; (10) An improved fence line road heading west off the Excelsior Mine Road to the southern edge of the Kingston Range; (11) The abandoned Shadow Mountain Mine because of extensive bulldozing scars, mine shafts, slag piles and associated structures; (12) A road running north off the southern boundary into the Shadow Mountains for its associated mines and roads. The remaining area has been affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable. There are a few primitive ways south of the Kingston Mountains in the bajada, none of which detract from the naturalness of the area. The old Tonapah-Tidewater Railroad bed runs in a north-south direction through this area and is of historical significance. The Sperry Wash Road also runs through the northern portion of the area. It is unmaintained from the northern edge of the Dumont Dunes area to the Western Talc Mine. Within this area it runs through a wash and has an insignificant effect upon the naturalness of the area.

V. OUTSTANDING OPPORTUNITIES FOR SOLITUDE OR A PRIMITIVE AND UNCONFINED TYPE OF RECREATION

Because of the extreme diversity in both terrain and plant type, those portions of the area which meet wilderness criteria have outstanding opportunities for solitude. The area has substantial topographical and vegetational screening and is of such a great size as to be able to keep visitors apart. In addition to solitude, outstanding opportunities for a primitive and unconfined type of recreation are also available because of the diversified vegetation and terrain.

VI. SUMMARY OF PUBLIC COMMENTS

Comments directed to the inventory included: (1) a map correction for the location of Baker; (2) statements on unnatural areas that have been excluded; (3) agreement on the naturalness of the area meeting wilderness criteria; (4) questions on the validity of deletions. The area has been extensively field checked to verify public comments. A few minor boundary changes have been made.

AREA 222A

I. PHYSICAL BOUNDARIES

The northern boundary is the dirt road from Highway 127 running east to Riggs. The northeast boundary is the graded road from the Riggs Road to the Silver Lake Mine. The eastern boundary is the dirt road running south from the Silver Lake Mine Road, one and one-quarter miles to Riggs Wash. The southern boundary of the Wilderness Study Area is the northern edge of the utility right-of-way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right-of-way). The western boundary is Highway 127.

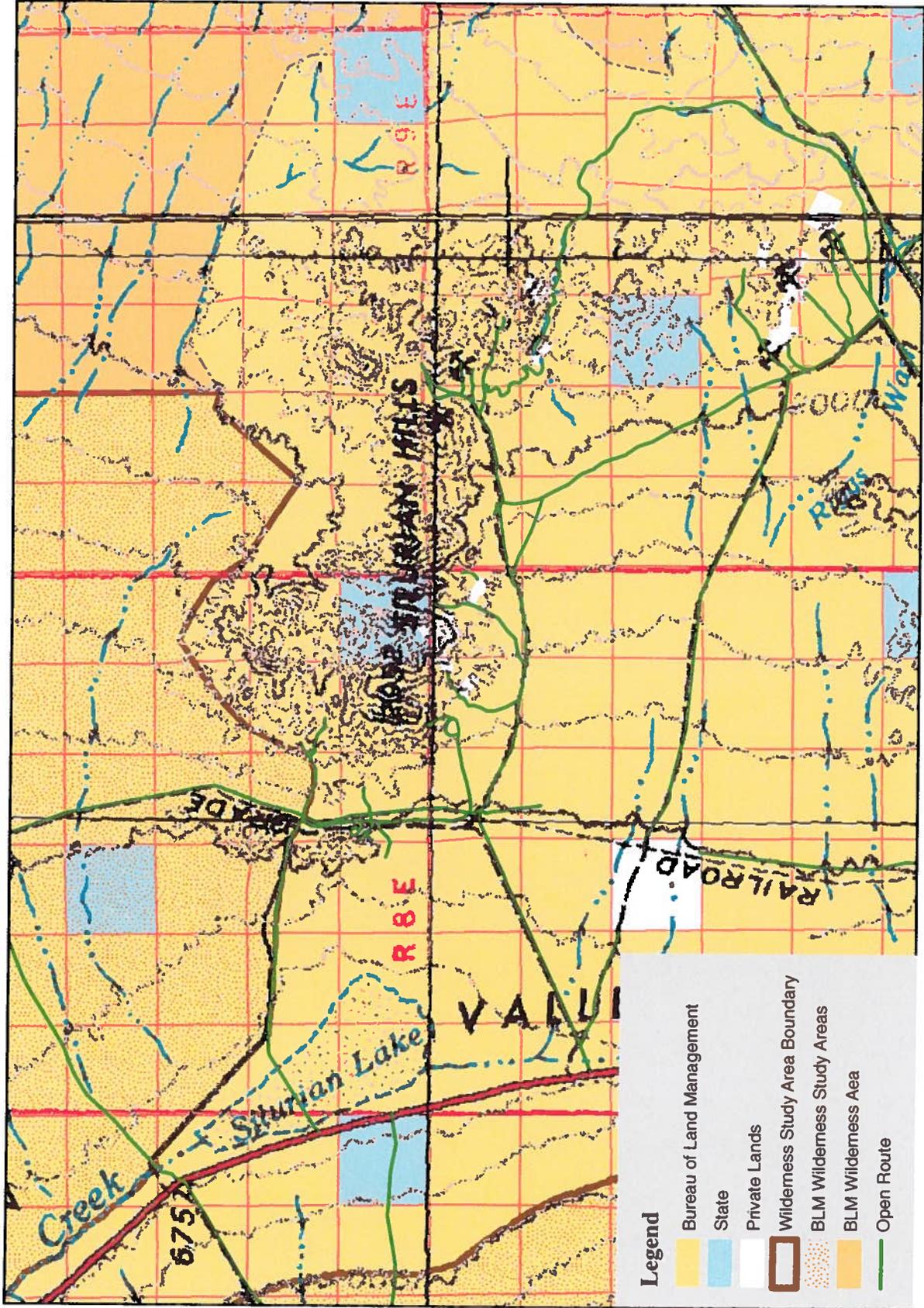
II. LAND OWNERSHIP

Approximately 5 percent of this area is non-public lands.

Appendix D

Current Land Status Map of Area 222-2

# Current Land Status of Area 222-2



0 0.5 1 2 3 Miles