

Appendix L
BLM Regional Hydrologic Report Burck
(2024)

MEMORANDUM

DATE: November 14, 2024

TO: Joella R. Campbell, Geologist, Barstow Field Office

FROM: Peter W. Burck, Hydrologist, National Operations Center

SUBJECT: Ash Meadows / St. Cloud Mine Groundwater Evaluation

Introduction

I reviewed and evaluated available materials related to the hydrogeology of the Ash Meadows / St. Cloud Mine site in Inyo County, California. Approximately 43 exploratory drill holes are planned at the mine site (Figure 1). The analysis included a review of:

- Water levels in nine existing wells at the mine site
- Water levels in other nearby wells
- Grapevine Springs Complex
- Existing geologic cross sections

The primary focus of this analysis was on the likelihood of exploratory drilling encountering pressurized water zones that might lead to loss of control of the borehole and an unregulated discharge of groundwater at the land surface.

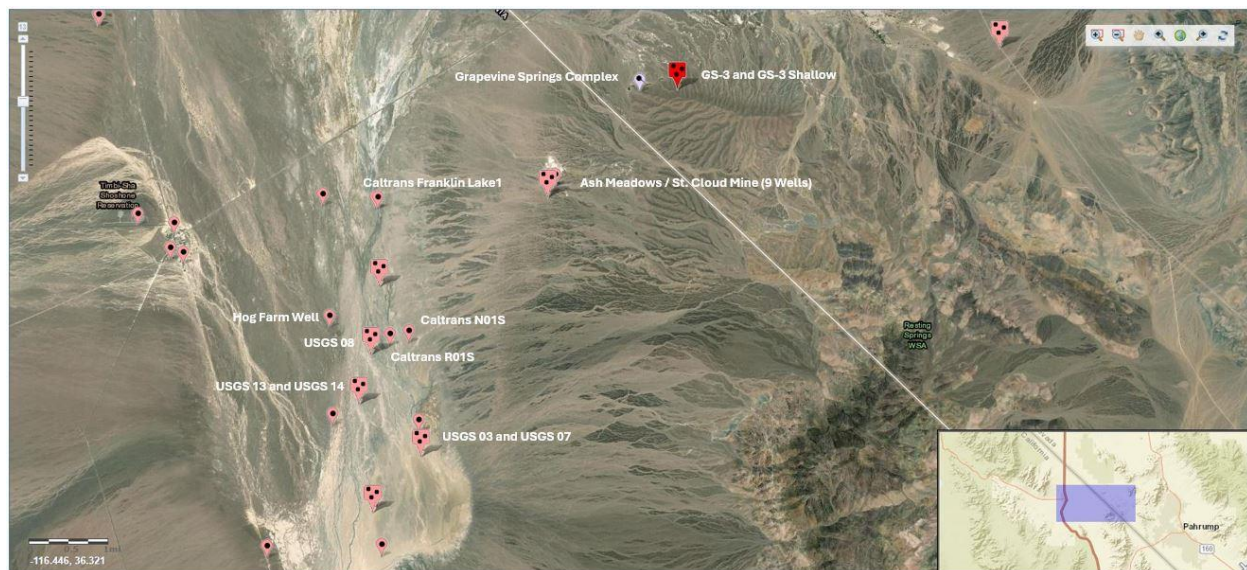


Figure 1: Mine Location with Selected USGS Wells and Springs Labeled

This mine is within the Amargosa North Area of Critical Environmental Concern and is close to Ash Meadows National Wildlife Refuge and Devil's Hole. Groundwater dependent sensitive species including critically endangered species are present in the area.

Existing Wells at Site

According to information available from the US Geological Survey (USGS) National Water Information System (NWIS), there are 9 existing wells at the project site. Existing well locations are shown in Figure 2. Details about the existing wells, including well depths and water levels, are provided in Table 1.

Water levels taken between May 1984 and February 2018 range from 83.60 feet to 110.28 feet below land surface. Water level elevations were between 2,111.38 feet to 2,143.67 feet above NGVD29. Land surface elevations varied from about 2,220 feet to about 2,230 feet NGVD29.



Figure 2: Existing Well Locations at the Mine (USGS NWIS)

Wells GA-08J and GA-08J Rathole appear to be in the same location. Well GA-08J was completed at a depth of 98.7 feet below land surface, and Well GA-08J Rathole was completed

at a depth of 85 feet below land surface. There appears to be a downward vertical gradient at this location because the water level in Well GA-08J is lower than the water level in Well GA-08J Rathole.

Additional exploratory boreholes in this same area would be expected to encounter water at approximately the same depths and under the same water table, non-pressurized conditions as encountered in the existing boreholes. The risk of encountering a pressurized water zone appears to be low. Regardless, state drilling regulations should be followed during exploratory drilling so that any unexpected, pressured water zones can be controlled and properly plugged and abandoned.

Table 1: Information about Existing Wells at the Mine (USGS NWIS)

Site Number Site Name	Latitude Longitude (NAD83)	Well Depth (feet)	Land Surface Elevation (feet above NGVD29)	Range of Water Elevations (feet above NGVD29)	Range of Water Levels (feet)	Vertical Gradient
361840116184002 230 025N006E09R01S USGS GA-08B	36°18'48.2" 116°19'44.5"	213	2,230	2,138.60 – 2,143.67	86.33 – 91.40	NA
361840116184003 230 025N006E10N01S USGS GA-08C	36°18'48.1" 116°19'42.9"	115	2,230	2,132.15 – 2,136.88	93.12 – 97.85	NA
361840116184004 230 025N006E10N02S USGS GA-08D	36°18'48.2" 116°19'42.7"	217	2,230	2,131.44 – 2,136.29	93.71 – 98.56	NA
361840116184005 230 025N006E10N03S USGS GA-08E	36°18'48.2" 116°19'41.5"	191	2,230	2,126.50 – 2,132.07	97.93 – 103.50	NA
361840116184006 230 025N006E10N04S USGS GA-08F	36°18'47.96" 116°19'38.42"	252	2,224.18	2,111.38 – 2,117.35	104.31 – 110.28	NA
361845116193708 230 025N006E10N08S GA-08J	36°18'43.7" 116°19'40.5"	98.7	2,220	2,123.52	96.48	Downward
361845116193707 230 025N006E10N07S GA-08J Rathole	36°18'43.7" 116°19'40.5"	85	2,220	2,135.16 – 2,136.40	83.60 – 84.84	Downward
361840116184001 230 025N006E10N05S USGS GA-08K	36°18'43.6" 116°19'41.8"	107	2,220	2,122.68 – 2,128.09	91.91 – 97.32	NA
361840116184007 230 025N006E10N06S USGS GA-08M	36°18'48.0" 116°19'38.4"	110	2,224.2	2,112.48 – 2,123.91	97.77 – 109.20	NA

Hog Farm Well

The Hog Farm Well is a flowing or leaking artesian well located approximately 3.4 miles southwest of the site. In the USGS NWIS, this well is identified as Site Number

361718116223800, Site Name 230 025N006E19M01S Well-16. The well total depth is 56 feet, and the land surface elevation is 2,019 feet above NGVD29. No information has been found about well construction or screened or perforated intervals of the well casing. The location of the well is shown in Figure 3, a satellite image of the well and the surrounding area provided by Andy Zdon of the Roux organization. Based on the apparently wet areas shown in this satellite image and field notes from Mr. Zdon, this well is probably leaking. Information about this well provided to BLM by Mr. Zdon is included in Appendix A.

BLM filed a statement with the State of California for the well in July 1984. The application number is S011512. The use of the water is for wildlife and wild horses.

This well is at a land surface elevation that is about 200 feet lower than at the mine site.



Figure 3: Hog Farm Well

Exploratory drilling is not proposed in this area, but, if it were, the risk of encountering a pressurized water zone is high because this is an area of regional groundwater discharge and groundwater is shallow. The area is variously known as Carson Slough, Franklin Lake, and Franklin Lake Playa. If drilling in this area is contemplated in the future, special precautions

should be followed to avoid a situation involving a borehole or well from which groundwater discharge becomes uncontrollable.

Other Wells in the Vicinity of Franklin Lake / Franklin Lake Playa / Carson Slough

Based on information in the USGS NWIS, some but not all other wells in this area are pressurized. Table 2 provides information on eight other wells in this regional discharge area that have water levels above the land surface some or all the time. It is unknown whether any of these wells are leaking or have uncontrolled flow. Well locations are shown on Figure 1.

Table 2: Other nearby Wells with Water Levels above Land Surface Some or All of the Time (USGS NWIS)

Site Number Site Name	Latitude Longitude (NAD27)	Well Depth (feet)	Land Surface Elevation (feet above NGVD29)
361835116220301 230 025N006E18A02S Caltrans - Franklin Lake 1	36°18'33" 116°22'02"	28	2,033
361703116215001 230 025N006E19R01S Caltrans	36°17'03" 116°21'50"	3	2,013.7
361705116213501 230 025N006E20N01S Caltrans	36°17'05" 116°21'35"	8	2,015
361553116212104 230 025N006E32C05S USGS-03	36°15'53" 116°21'21"	32	2,006.1
361553116212103 230 025N006E32C04S USGS-07	36°15'53" 116°21'21"	27	2,009.6
361727116170900 230 025N006E19R01S USGS-08	36°17'00" 116°22'02"	29.07	2,019
361627116221201 230 025N006E30K02S USGS-13	36°16'27" 116°22'12"	27.1	2,010.92
361627116221202 230 025N006E30K03S USGS-14	36°16'27" 116°22'12"	21.1	2,011.01

Grapevine Springs Complex

The Grapevine Springs Complex is in Nye County, Nevada, approximately 1.5 miles northeast of the mine site. The USGS NWIS site number is 361950116182901, and the site name is 230 S19 E50 02ACAB1 Grapevine Springs Complex. The land surface elevation is 2,251 feet above NAVD88. Although water chemistry data are available from the USGS, no water level or discharge information is provided. The presence of the spring indicates groundwater is discharging naturally at this location. Numerous green areas are visible in satellite imagery suggesting water is discharging at the land surface in multiple locations.

GS-3 Wells

Two wells are located about 2.1 miles northeast of the mine site and about 0.5 miles east of Grapevine Springs. These wells are also in Nye County, Nevada. One well is completed at a depth of 160 feet below land surface, and the other well is completed at a depth of 2000 feet

below land surface. The shallow well has a site number of 361954116181202 and a site name of 230 S19 E50 01BBD 2 GS-3 Shallow Well. The deep well has a site number of 361954116181201 and a site name of 230 S19 E50 01BBD 1 GS-3 Well (AD-11). Both wells have a land surface elevation of 2,351.3 feet above NGVD29. Water levels in the shallow well ranged from 72.6 to 84.7 feet above NGVD29. Water levels in the deep well ranged from 205.3 to 226.4 feet above NGVD29. The deeper water level elevation in the deeper well indicates a downward vertical gradient.

USGS Geologic Cross Section

The USGS published interpretive geologic cross sections for the Death Valley regional flow system (Sweetkind et al. 2001). Section H-9 is an east-west cross section that includes the area close to the mine site (Figure 4). Although the cross-section scale makes interpretation a challenge, it appears the main geologic formations in the mine area are Qu and Ts4. Qu represents undifferentiated Quaternary surficial deposits. Ts4 represents continental sedimentary rocks. Ts4 is further described as Unit 4 (Pleistocene? to Miocene) – late synextensional to post-extensional sedimentary rocks, predominantly post 6 Ma. The designation includes the Funeral Formation (Pleistocene? and Pliocene) of the Furnace Creek basin.

The mine site is near where the H-26 cross section intersects the H-9 cross section.

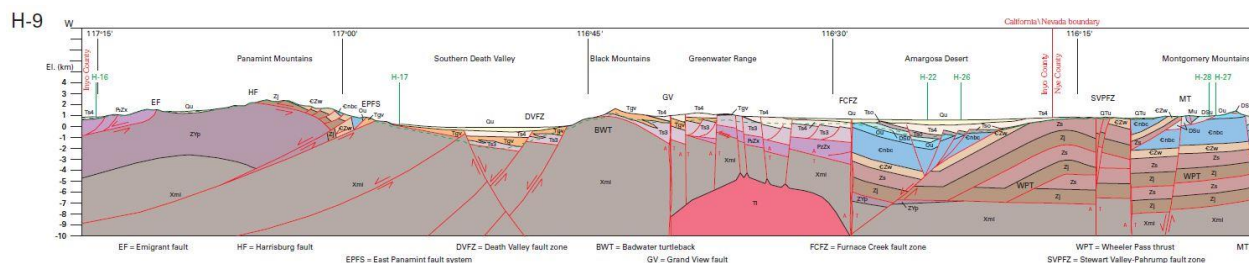


Figure 4: Part of USGS Geologic Cross Section H-9 (Sweetkind et al. 2001)

BLM Hydrologic Cross Section

The cross section in Figure 5 incorporates water level data along a line from Hog Farm Well in the west, through the mine site, through the Grapevine Springs Complex, and ending at the GS-3 wells in the east. Instead of focusing on the geology shown in the USGS cross section, the BLM cross section provides available information about water elevations at the mine site and the other locations.

The land surface elevation was derived from the USGS National Elevation Dataset (NED). The USGS NED land surface elevations do not always match well with the USGS NWIS land surface elevations given in Table 1.

Preliminary Conclusion

Based on the available hydrogeologic information exploratory drilling at the mine site will probably encounter water between about 80 and 110 feet below land surface. Existing wells at

the site indicate water is unlikely to be under pressure. If pressurized water is found, the operator would be required to follow the applicable procedures in the California Water Code, California Water Well Standards, Department of Water Resources Bulletins 74-81 and 74-90.

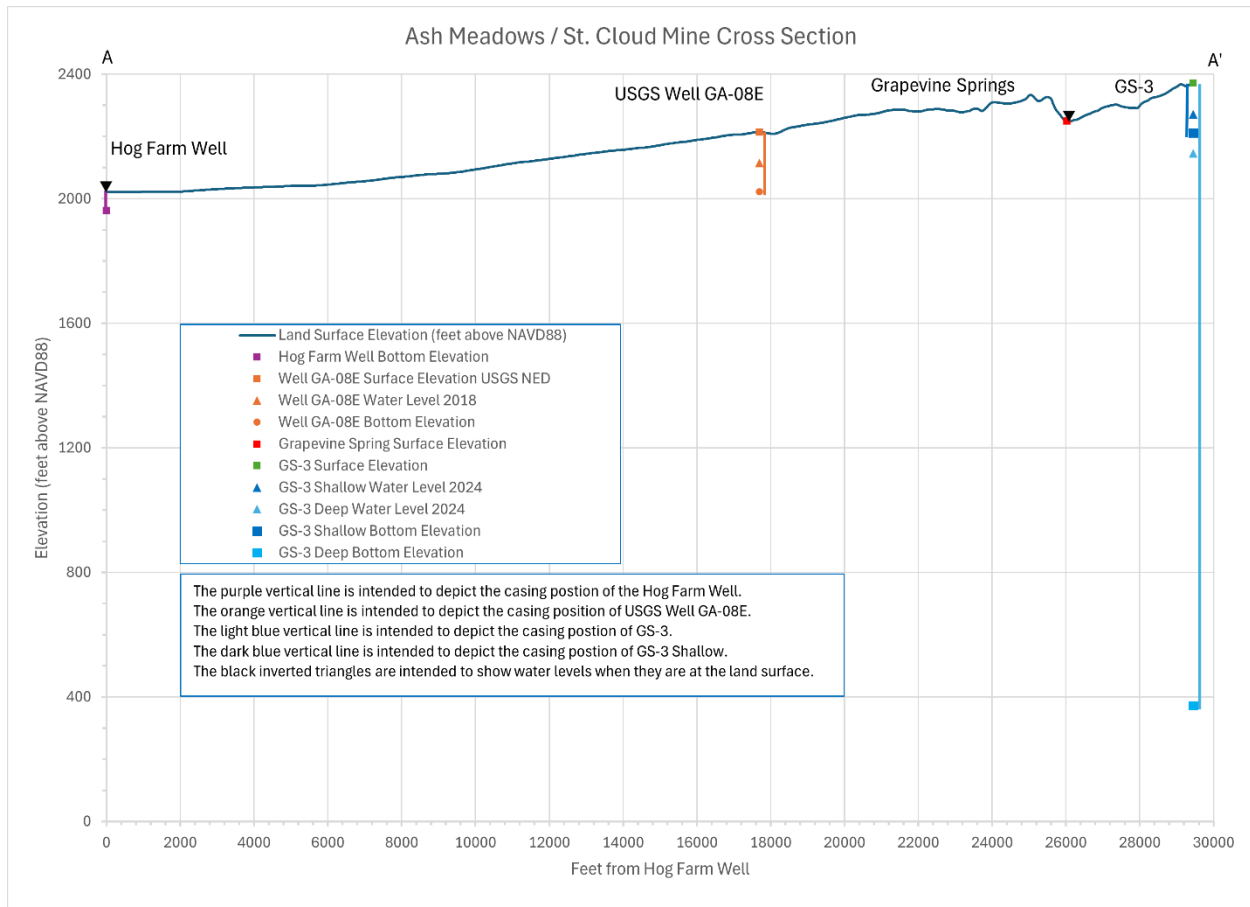


Figure 5: BLM Hydrologic Cross Section

During this analysis, wells connected to pressurized water were identified in the lower lying area to the west of the mine site. This area is a regional groundwater discharge location. No drilling is proposed in this discharge area for this project. If drilling in this area is considered in this area in the future, appropriate measures will need to be taken to ensure any boreholes and wells are properly drilled, constructed, and sealed to prevent unwanted flow or leakage of groundwater at the land surface.

Reference

Sweetkind, D.S., R.P. Dickerson, R.J. Blakely, and P.D. Denning. 2001. Interpretive Geologic Cross Sections for the Death Valley Regional Flow System and Surrounding Areas, Nevada and California. Miscellaneous Field Studies Map MF-2370. U.S. Department of the Interior, U.S. Geological Survey, Denver, CO.

Appendix A

Hog Farm Well Information Provided to BLM by Mr. Andy Zdon, Roux

ANDY ZDON & ASSOCIATES, INC.
2121 N. California Blvd., Suite 290, Walnut Creek, CA 94596 (925) 974-3680

LEVEL 1 SPRING AND WELL SURVEY FIELD FORM

Date 5/5/14 Surveyors JP, LW
Locality Hog Farm Well T 25N R 6E 1/4Sec SW 1/4 of section 19
State CA County Inyo USGS 1:100000 Quad Death Valley Junction
Groundwater Basin Middle Amargosa (6-29)
Source Lat: 36.28748 Long 116.37854 Elevation 2017
Access: Approximately 2 miles south of State Line Rd, SE of Death Valley Junction. ZWD w/ clearance.
Land Status: BLM
Spring Type: Helocrene Rheocrene Limnocrene Dry Qanat Cased Well Other
Estimated Discharge < 5 gpm Spring Brook Length: ~ 50 ft (several interconnected pools/bags)
Average Water Depth < 6 inches Average Water Width 5 ft
Dissolved Oxygen (mg/L) 0.14 Temperature (deg. C) 21.6
pH 8.74 Salinity (mg/L) 880 Conductivity (uS or mS) 1627
Diversion Type: Spring Box Trough/Tank Pipe Channelized Impounded None
Well Depth to Groundwater ~ 40 ft TOC +/- GL 3 ft
Well Groundwater Elevation ~ 2020
Equipment Used:
Emergent Cover % 5 Vegetative Bank Cover % 5
Substrate % fines 20 % sand 50 % gravel 30 % cobble 0 % boulder 0 bedrx 0
Bedrock type NA
Important Animals: None Springsnails (Scarce/Common/Abundant) Fish Clams Amphipods
Other Non-Native Fauna
Vegetation: Mesquite Rushes Reeds Phragmites Cottonwood Palm Tree Baccharis
Grapevine Watercress Whitetop Arundo Sedge
Other Vegetation:
Site Disturbance: Undisturbed Slight Moderate High
Disturbance Type: Livestock Recreation Diversion Residence Fire Flood Dredging Other
Recreation Types: Picnic Area Trail/hiking Climbing ORV Camping Trash (light / medium / heavy)
Notes: ie water is fairly trickling out the top of the casing. outflow forms large pools with minor veg cover. wild burros or horses.

Figure A1: Spring and Well Survey Field Form for Hog Farm Well May 2014

HOG FARM WELL

Location: Within the Death Valley Junction area in the southwest quarter of Section 19, T25N, R76. The artesian well is within the boundary of the Middle Amargosa Valley groundwater basin (#6-20) in Inyo County, California.

Directions: Approximately two miles south of State Line Rod, southeast of Death Valley Junction. 2WD with good clearance recommended.

Latitude: N36.28748 (NAD83)

Longitude: W-116.37854

Elevation: 2,017 ft

BLM Map: Death Valley Junction (This feature does not appear on the BLM map, although the map does show a dirt track that ends at the well location)

Description: This artesian well is present in basin fill deposits. There is mesquite and baccharis (sp) present, along with some sedges. This feature is not a spring and spring-related reporting (e.g. PFC reporting) was not conducted.

Water Quality Parameters: No odor noted.

Date	Flow (gpm)	Temp (oC)	Cond (μS)	TDS (mg/L)	DO (mg/L)	pH	Salinity (ppt)
5/5/2014	2.5	21.6	1,627	880 mg/L	0.14	8.74	nm

Use: The feature appears to be used by wildlife (e.g. coyotes) as well as wild horses and/or burros. BLM has filed a State of Diversion and Water use on this feature since 1984 for wildlife enhancement and preservation (wild horses).

Access: The spring is accessible from paved road on BLM-managed land.

Figure A2: Hog Farm Well Notes from May 2014 Field Visit

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
Division of Water Rights

P.O. BOX 2000 SACRAMENTO, CA 95810
901 P ST. SACRAMENTO, CA
(916) 322-4503

(916) 324-5741
SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

DIVERTER OF RECORD:

STATEMENT NO: 011512

U S BUREAU OF LAND MANAGEMENT
1695 SPRUCE STREET
RIVERSIDE, CA 92507

TELEPHONE NUMBER:
(714) 351-6402

IF NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE: UNNAMED SPRING

TRIBUTARY TO: UNNAMED STREAM

COUNTY: INYO

DIVERSION

WITHIN: SE1/4 OF SW1/4 SECTION 30, T25N, R06E, SBB&M.

INSTRUCTIONS: Please complete Items A, B and C. Item D should be completed if you replaced all or part of your regular water supply with reclaimed or polluted water. RETURN THIS FORM BY JULY 1, 1987. (Additional information on reverse side of this form.)

- A. Amount of Use - Fill in the amount of water used each month. If monthly and annual use are not known, check the months in which water was used.
- Amounts below are: ☐ Gallons ☐ Acre-feet ☐ (other)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1984	X	X	X	X	X	X	X	X	X	X	X	X	unknown
1985	X	X	X	X	X	X	X	X	X	X	X	X	unknown
1986	X	X	X	X	X	X	X	X	X	X	X	X	unknown

- B. Purpose of Use - Specify number of acres irrigated, stock watered, persons served, etc.

Irrigation _____

Stockwatering _____

Domestic _____

Other (specify) wildlife, 13 wild horses.

- C. Changes in Method of Diversion - Describe any changes in your project since your previous statement was filed. (New pump, enlarged diversion dam, location of diversion, etc.)

No change

- D. If part of the water listed in Part A consists of reclaimed or polluted water, please indicate the annual amounts of reclaimed or polluted water in the space below.

N/A

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

DATED: MAR 23 1987, 19 at Barstow, California

Signature:

Alden Sauer
Area Manager, Barstow Resource Area
Bureau of Land Management

WR 40-1 (11/85)
1213

1986

Figure A3: Hog Farm Well Supplemental Statement of Water Diversion and Use 1984-1986

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
 Division of Water Rights.

P.O. BOX 2000 SACRAMENTO, CA 95810
 901 P ST. SACRAMENTO, CA
 (916) 322-4503

(916) 324-5676

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

STATE WATER RESOURCES CONTROL BOARD
 DIV. OF WATER RIGHTS
 STATEMENT NO. 011512

PH 3:36

DIVERTER OF RECORD:

U S BUREAU OF LAND MANAGEMENT - BAR
 1695 SPRUCE STREET
 RIVERSIDE, CA 92507

TELEPHONE NUMBER:
 (714) 351-6402
 296

IF NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE: UNNAMED SPRING

TRIBUTARY TO: UNNAMED STREAM

COUNTY: INYO

DIVERSION
 WITHIN: SE1/4 OF SW1/4 SECTION 30, T25N, R06E, SBB&M.

INSTRUCTIONS: Please complete Items A, B and C. Item D should be completed if you replaced all or part of your regular water supply with reclaimed or polluted water. **RETURN THIS FORM BY JULY 1, 1990.** (Additional information on reverse side of this form.)

A. Amount of Use - Fill in the amount of water used each month. If monthly and annual use are not known, check the months in which water was used.

Amounts below are: ☐ Gallons ☐ Acre-feet ☐ (other)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1987	x	x	x	x	x	x	x	x	x	x	x	x	unknown
1988	x	x	x	x	x	x	x	x	x	x	x	x	unknown
1989	x	x	x	x	x	x	x	x	x	x	x	x	unknown

B. Purpose of Use - Specify number of acres irrigated, stock watered, persons served, etc.

Irrigation _____

Stockwatering _____

Domestic _____

Other (specify) wildlife, wild horses

C. Changes in Method of Diversion - Describe any changes in your project since your previous statement was filed. (New pump, enlarged diversion dam, location of diversion, etc.)

no change

D. If part of the water listed in Part A consists of reclaimed or polluted water, please indicate the annual amounts of reclaimed or polluted water in the space below.

n/a

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

DATED: APR 27 1990, 19____, at Barstow, California

Signature: *Alden Sevens* MAY 21 1990 MSN

Area Manager, Barstow Resource Area
 Bureau of Land Management

WR 40-1 (11/85)
 2001

1989

Figure A4: Hog Farm Well Supplemental Statement of Water Diversion and Use 1987-1989

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
Division of Water Rights

P.O. BOX 2000 SACRAMENTO, CA 95812-2000
901 P ST. SACRAMENTO, CA 95814
(916) 322-4503
(916) 657-1875

RECEIVED
BUREAU OF LAND MANAGEMENT

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

DIVERTER OF RECORD:

STATEMENT NO: 011512

U S BUREAU OF LAND MANAGEMENT
CALIFORNIA DESERT DISTRICT - BAR
6241 BOX SPRING BLVD
RIVERSIDE, CA 92507

TELEPHONE NUMBER:
(619) 256-3591

IF NAME/ADDRESS/PHONE NO. IS WRONG OR MISSING, PLEASE CORRECT.

SOURCE: UNNAMED SPRING

TRIBUTARY TO: UNNAMED STREAM

COUNTY: INYO

DIVERSION

WITHIN: SE1/4 OF SW1/4 SECTION 30, T25N, R06E, SBB&M.

INSTRUCTIONS: Please complete Items A, B and C. Item D should be completed if you replaced all or part of your regular water supply with reclaimed or polluted water. RETURN THIS FORM BY JULY 1, 1993. (Additional information on reverse side of this form.)

- A. Amount of Use - Fill in the amount of water used each month. If monthly and annual use are not known, check the months in which water was used.
- Amounts ☐ Gallons
below are: ☐ Acre-feet
☐ (other)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Annual
1990	x	x	x	x	x	x	x	x	x	x	x	x	unknown
1991	x	x	x	x	x	x	x	x	x	x	x	x	unknown
1992	x	x	x	x	x	x	x	x	x	x	x	x	unknown

- B. Purpose of Use - Specify number of acres irrigated, stock watered, persons served, etc.

Irrigation

Stockwatering

Domestic

Other (specify) Wildlife, 12 Wild horses

- C. Changes in Method of Diversion - Describe any changes in your project since your previous statement was filed. (New pump, enlarged diversion dam, location of diversion, etc.)

No change

- D. If part of the water listed in Part A consists of reclaimed or polluted water, please indicate the annual amounts of reclaimed or polluted water in the space below.

N/A

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

DATED: July 9, 1993, at Barstow, California

WR 40-1 (2/90)

2105

Signature: Michael J. DeKemp
Area Manager, Barstow Resource Area
Bureau of Land Management

1992

Figure A5: Hog Farm Well Supplemental Statement of Water Diversion and Use 1990-1992

S-11512

**** PLEASE COMPLETE, SUBMIT THE ORIGINAL AND MAKE A COPY FOR YOUR RECORDS ****

**STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS**

P.O. BOX 2000 SACRAMENTO, CA 95812-2000

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

STATEMENT NO: S011512
OWNER OF RECORD: U S BUREAU OF LAND MANAGEMENT

U S BUREAU OF LAND MANAGEMENT
6221 BOX SPRINGS BLVD
RIVERSIDE, CA 92507

SOURCE: UNSP
TRIBUTARY TO: UNST
COUNTY: INYO
DIVERSION
WITHIN: SE¼ OF SW¼ SECTION 30, T25N, R6E, MDB&S.

TELEPHONE NUMBER:
(909) 697-5200
YEAR OF FIRST USE:
PARCEL NO:

(If any of the above information is inaccurate or missing, please correct. Notify this office if ownership or address changes occur during the coming year.)

COMPLETE AND RETURN THIS FORM BY JULY 1, 1995

- A. Water is used under: Riparian claim _____; Pre 1914 right _____; Other (explain) _____
- B. Year of first use (Please provide if missing above) _____
- C. Amount of Use - Enter the amount of water used each month. If monthly and annual use are not known, check the months in which water was used.

Amounts below are: ☒ Gallons ☐ Acre-feet ☐ (other) _____

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL ANNUAL
1992	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1993	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1994	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

- D. Purpose of Use - Specify number of acres irrigated, stock watered, persons served, etc.

Irrigation _____ acres; Stockwatering ☒ _____; Domestic _____

Other (specify) wildlife

***** CONTINUE ON BACK PAGE *****

WR40-1 (1/85)

Figure A6: Hog Farm Well Supplemental Statement of Water Diversion and Use 1992-1994
Front

*** PLEASE COMPLETE, SUBMIT THE ORIGINAL AND MAKE A COPY FOR YOUR RECORDS ***

- E. Changes in Method of Diversion - Describe any changes in your project since your previous statement was filed. (New pump, enlarged diversion dam, location of diversion, etc.)

- F. If part of the water listed in Part C consists of reclaimed or polluted water, please indicate the annual amounts of reclaimed or polluted water in the space below.

I declare under penalty of perjury that the information in this report is true to the best of my knowledge and belief.

DATED: DEC 11 1995, 19____, at CALIFORNIA DESERT DISTRICT, California

SIGNATURE: _____

6021 BOX SPRINGS BOULEVARD
RIVERSIDE, CA 92504-7111

PRINTED NAME: _____

(FIRST NAME)

(M. NAME)

(LAST NAME)

COMPANY NAME: _____

MOLLY S. BRADY

ADM. PLANNING & RENEWABLE RESOURCES

GENERAL INFORMATION PERTAINING TO WATER RIGHTS IN CALIFORNIA

There are two principal types of surface water rights in California. They are riparian and appropriative rights.

A riparian right enables an owner of land bordering a natural lake or stream to take and use water on his riparian land. Riparian land must be in the same watershed as the water source and must never have been severed from the sources of supply by an intervening parcel without reservation of the riparian right to the severed parcel. Generally, a riparian water user must share the water supply with other riparian users. Riparian rights may be used to divert the natural flow of a stream but may not be used to store water for later use or to divert water which originates in a different watershed, or return flows from use of groundwater.

An appropriative right is required for use of water on nonriparian land and for storage of water. Generally, appropriative rights may be exercised only when there is a surplus not needed by riparian water users. Since 1914 new appropriators have been required to obtain a permit and license from the State.

Statements of Water Diversion and Use must be filed by riparian and pre-1914 appropriative water users. The filing of a statement (1) provides a record of water use, (2) enables the State to notify such users if someone proposes a new appropriation upstream from their diversion, and (3) assists the State to determine if additional water is available for future appropriators.

The above discussion is provided for general information. For more specific information concerning water rights, please contact an attorney or write to this office. We have several pamphlets available. They include:

"Statements of Water Diversion and Use"

"Information Pertaining to Water Rights in California"

"Water Rights for Stockpounds Constructed Prior to 1969"

"Appropriation of Water in California"

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Figure A7: Hog Farm Well Supplemental Statement of Water Diversion and Use 1992-1994
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