0024

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

August 18, 1999

TO: Mary Ann Wright, Associate Director of Mining
Daron Haddock, Permit Supervisor
Mike Suflita, Reclamation Hydrologist
Wayne Western

FROM: Pamela Grubaugh-Littig, Permit Supervisor

RE: Chronology of Correspondence from the Forest Service - Box Pond, Johnson Pond, and Rock Pond, SUFCO Mine, Canyon Fuel Company, LLC, ACT/041/002, Folder #2, Sevier County, Utah

I have attached the correspondence and the chronology for the situation of the ponds at the SUFCO Mine above the Quitchupah Lease. Please review and we can discuss at your convenience.

If you have any questions, please let me know.

Thank you.

Enclosure
O:\041002.CON\FINAL\PONDCHRO.WPD

SUFCO Pond Situation
Chronology

July 1, 1989	Quitchupah Lease (U-63214) issued with 22 Stipulations, including: Lease Stipulation #17 - "Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replace to provide for the continuance of current land uses," and Lease Stipulation #21 - "The lessee at his expense will be responsible to replace any surface water identified for protection, that may be lost or adversely affected by mining operations, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, or other land used."
July 6, 1995	Letter from Janette S. Kaiser (signed by Aaron Howe) re: response to Ken May's June 22, 1995 letter about Rock Pond and their expeditious action during a June 21, 1995 joint inspection. Concurred with proposals to haul water to Johnson and Hans Ponds in 1995 until July 4, 1995. Also concurred with proposed to seal subsidence cracks with bentonite during the fall of 1995. No grazing will occur during the 1996 season and opportunity to monitor. Low snowpack, but historic data, indicates that water levels in Rock Pond should be adequate to fill the pond. Request to set up a plan by SUFCO to monitor and mitigate/prevent the potential loss of water in ponds (especially Box pond - major water source for the allotment.)
July 30, 1996	Letter to Division from Janette Kaiser (signed by Aaron Howe) about the Mitigation Plan for Box Pond for 1997 grazing season. It states that FS agrees with SUFCO's assessment that continued subsidence in sequential longwall panels will probably restore the flow gradient of surface water at the head of Box Canyon. However, FS believes that if the gradient and flow of Box Canyon, or attempts to restore water impounds to their pre-mining function are not successful, SUFCO will be required to propose alternative measure for water replacement and implement approved measures for as long as necessary to provide an adequate water supply to grazing operations consistent with pre-mining conditions.
February 24, 1997	Letter to Ken Christiansen, President of Emery Stock Grower's Association from Charles Jankiewicz, Ferron-Price District Ranger, about meeting on January 21, 1997 with a recap of events since 1995. It was suggested to have a meeting in the spring of 1997 with FS and grazing folks.
December 14, 1998	A memo to Liane Mattson from Jeff DeFreest went through a chronology of each of the ponds: Rock Pond, Box Pond, and Johnson Pond.

May 17, 1999	Memo from Sandra Kaminski (Range Management Specialist to Jeff DeFreest about Water Needs in Wildcat Knolls Unit. Both Johnson and Rock Pond were dry on April 27 when inspected by John Healy, Sandra Kaminski and Stan Anderson.
June 11, 1999	Letter to Mary Ann Wright from Donald Fullmer, Acting Forest Supervisor, requesting a "mine permit action by the Division at SUFCO to ensure coordination between FS and DOGM regarding water replacement/mitigation.

O:\041002.CON\FINAL\CHRONOLO.WPD

United States Department of Agriculture
Forest Service
Manti- La Sal National Forest
Supervisor's Office
599 West Price River Drive
Price UT 84501
Phone # (435) 637-2817
Fax # (435) 637-4940

File Code: 2820-4

Date: June 11, 1999

RECEIVED
JUN 14 1999
DIV. OF OIL, GAS & MINING

Ms. Mary Ann Wright
Utah Division of Oil, Gas and Mining
1594 West North Temple
Salt Lake City, Utah 84114

ACT/041/002 #2
Copy Mary Ann, PFO, Dorian, Joe, PAM

Dear Mary Ann:

This letter is a request for mine permit action by the Utah Division of Oil, Gas and Mining (UDOGM) at the Canyon Fuel Company, LLC SUFCO Mine and to ensure coordination between our agencies regarding water replacement/mitigation. *

Mining in the Quitchupah Lease (UTU-63214) by Canyon Fuel (SUFCO Mine) has subsided a number of stock ponds. Two of these ponds will not hold water consistently due to cracking caused by mining-induced subsidence. An attempt was diligently made by Canyon Fuel to seal Rock Pond (summer 1995) and Johnson Pond (summer 1997) using bentonite clay during the summer immediately following the damage; bentonite was also placed in the cracks directly uphill of the Rock Pond, where they were visible through the thin soil mantle, in an attempt to repair the catchment area for Rock Pond. Water was hauled during 1995 and 1997 but because of the rotation of the cattle out of the unit, was not required in 1996 or 1998. Water hauling and water replacement occurred only in Johnson Pond in 1997 but was not effective. The amount of water hauled was not sufficient to offset seepage into the ground and overuse because one of the other major historic water sources in this grazing unit (Rock Pond) was dry.

During the last couple of years, range permittees and Forest Service employees have been monitoring the effectiveness of this repair. Unfortunately these ponds no longer hold water consistently. Other ponds in the area have been observed to be full or near full even during low precipitation years, such as this past winter, whereas the Johnson and Rock Ponds have been found to be dry. Canyon Fuel will need to propose another plan to UDOGM and Forest Service for more comprehensive repair in the long-term, in order to meet the requirements of the water replacement stipulation on their lease and Mining and Reclamation Plan.

The affected area has a number of ponds which are required to maintain proper distribution of cattle across the range allotment units. Johnson and Rock Ponds are very important ponds for one of those grazing units. Until such time as the repair has been deemed successful, the mine will need to install stock troughs in areas identified by the Forest Service (range specialists) and haul water to meet the needs of the range permittees and to maintain proper distribution of the cattle in the unit.

3. Page 4-6, **Cultural and Historic Information.** In the FEIS, the MLS deemed the cultural resource data for Pines Tract Project Area, as a whole, adequate to proceed with the NEPA analysis and rendering the decisions to lease. However, now at the permitting stage, the MLS believes that an additional focused archaeological survey data is warranted to maintain protection/mitigation options for currently undiscovered, significant cultural resources. The MLS requires that an additional focused archaeological survey be completed along the western edge of the IBC area, where drainage heads/canyon rims will be subsided.

4. Page 7-39. In Table 7-2, the reference to Pines 210 should be Pines 212, to be consistent with the discussion on page 4 of Canyon Fuel's responses. The MLS also requires that either spring 218 or 219 be added to the monitoring program. Springs 206, 209, and 212 are all in the Blackhawk Formation, the addition of 218 or 219 would include a spring discharging from the Castlegate Sandstone. The MLS believes this additional monitoring is necessary in order to discern potential impacts by geologic formation.

Once these points are clarified, the MLS will proceed with consenting to the M&RP revision. If you have any questions, please contact Carter Reed or Aaron Howe at (435) 637-2817.

Sincerely,

for
DONALD G. FULLMER
Acting Forest Supervisor

cc:
Mr. Ken May, Canyon Fuel SUFCO Mine

United States
Department of
Agriculture

Forest
Service

Manti-La Sal
National Forest

Ferron/Price Ranger District
Ferron Work Center
115 West Canyon Road
P O Box 310
Ferron UT 84523
Phone # (435) 384-2372
Fax # (435) 384-3296

File Code: 2210 Emery C&H /2800 **Date:** May 17, 1999

Subject: Water Needs in Wildcat Knolls Unit

To: Jeff Defreest, Geologist

The Wildcat Knolls unit of the Emery Cattle Allotment is scheduled for use this spring. Both Johnson and Rock Ponds were dry on April 27 when inspected by John Healy, Sandra Kaminski and Stan Anderson. Based on the amount of precipitation we have received and water levels of some of the other ponds in the area, Rock Pond and Johnson Pond should have water in them. Verduses Pond was approximately half full indicating there was adequate precipitation to put water into the ponds. Other ponds in the area are low but do have water in them. The SNOWTEL report for the Dills Camp station has been within 60 to 70 percent of average until May when it was up to average for snow water equivalent and total precipitation.

Cattle are scheduled to be in the Wildcat unit from June 18 through May 5. In order to achieve proper livestock distribution water will need to be hauled to a location mid way between Johnson Pond and Rock Pond in section 28 T21S R5E (see attached map). If cattle are properly distributed we would expect one third (462 head) of the herd to be in this area, a cow drinks approximately 20 gallons of water a day, this would require around 9, 250 gallons of water per day at this watering location. The amount of water needed each day may vary based on actual distribution of livestock and weather conditions. Two years ago water was hauled to and placed in Johnson Pond, this did not work well and did not provide for distribution into the Rock Pond area. Placing two or three water troughs, that hold at least 500 gallons, at the above location would be needed. Water would need to be kept in these troughs at all times to keep cattle distributed into this area. If cattle come to the troughs to drink and there is no water they will move to an area were there is water. This would result in overgrazing of portions of the unit where water availability is constant and increased trailing impacts as livestock are redistributed.

/s/ Sandra Kaminski

SANDRA KAMINSKI
Range Management Specialist

United States Department of Agriculture

Forest Service

Manti-La Sal National Forest

Ferron/Price Ranger District
Ferron Work Center
115 West Canyon Road
P O Box 310
Ferron UT 84523
Phone # (435) 384-2372
Fax # (435) 384-3296

File Code: 2820 **Date:** 14 December 1998
Route To:

Subject: Ponds & Mitigation: Quitchupau Lease Tract

To: Liane Mattson, IDT Leader

The subject lease tract, adjacent to the Pines Tract, has had numerous subsidence related problems, all of which have been mitigable to date.

Rock Pond:

In the spring of 1995 undermining and subsidence of what became known as "Rock Pond" caused surface cracks which apparently allowed the water to drain from the pond, and possibly its (snow) catchment area. Cracks in the bedrock, uphill of the pond may have been hidden from view under the thin soil mantle there, and yet prevented melt-water from reaching the pond.

The SUFCo Mine was contacted and "replaced" water for livestock needs for a couple of weeks in late June/early July of 1995, until the cattle rotated out of the Wildcat Unit around the 4th of July weekend. According to the Range Specialist at the time, Larry Mickelsen, the mine hauled water for a couple of weeks to two different ponds. When Larry contacted the cowboys and their herder about it, they were "satisfied with the effort".

In April 1996, the ponds were found to be dry once more. The Wildcat Unit was in a rest-rotation for the season, so livestock watering was not a critical issue. The mine was contacted and a plan devised to seal the pond and visible cracks with bentonite clay. In June 18 & 20, 1996, 2.6 tons of Bentonite was placed in Rock Pond, and about 400 pounds poured onto the cracks visible in the bedrock uphill of the pond.

Mr. Staley of the Emery Stock Growers Assn. commented at a public meeting that neither the Forest Service nor the Mine had done anything at the Rock Pond in the Wildcat Unit. I publicly stated that the sealing work had been done.

Later in the year (1996) Mr. Staley again stated at a public meeting that nothing had been done, and as I recall, I again stated the bentonite had been placed, and I think I presented him with photographs from the June placement (as witnessed by Angela Coleman, seasonal FS employee).

On January 21st 1997, we met with the cattleman at the Forest Service Office in Ferron, and Mr. Staley apologized, and verbally conceded that the benonite placement had been done.

In the spring of 1997, the pond was again found to be dry, as witnessed by Rusty Lee, in his report dated April 30th.

On May 19th 1998 Rock Pond was found to be low, and its likely the bentonite treatment has not been completely successful, though the "healing" process should continue. Later in the 1998 field season , with abnormally high rainfall during the summer, the pond was found to be holding some water during September and October.

Johnson Pond:

On April 30th 1997, Johnson Pond was also found to have an abnormally low water level, and a joint in the rock opened to about 1 inch. In a letter dated May 16th 1997, SUFCo committed to performing a benonite treatment on that pond as well. (SUFCo referred to it as Jensen Pond in the letter; the current Range Specialist, Sandra Kaminski informed me there is no Jensen Pond)

On June 12th 1997, Bob Thompson reported that he'd seen the mine hauling water to Johnson pond in preparation for the livestock to be moved into the area, and he also stated there was evidence of the bentonite having been placed.

Johnson Pond was found to be holding water during 1998, although the level was somewhat low throughout the year.

Box Pond:

Box Pond is a large pond serving three grazing units; Wildcat, The Pines, and Greens/Cowboy. The catchment area to this pond was undermined during the last few years and two "sag ponds" developed up hill of the Box Pond. There was a concern over the water being impounded before reaching the Box Pond where it was needed to support the 3 grazing units on rotation. During the summer of 1997, the lower of the two artificial ponds covered the Forest Development Road, and as the subsidence wave continued into 1998, the road prism eventually was raised above the water level of the sag pond.

The catchment area and flow toward Box Pond was not interrupted, and there was sufficient water reaching the pond to support the livestock throughout this sequence.

Box Pond was undermined/subsided during the summer of 1998, and the SUFCo Mine has been monitoring it closely. Initially they were to mitigate the potential for leakage, by placing bentonite in the pond. There was discussion of draining the pond, in order to dig it deeper and to disk in the bentonite, to better seal any potential cracks.

Mining commenced, and the pond held water throughout the year. A crack developed along the access road, but there is no noticeable water loss from the ponds bottom. The dam itself was lowered in the subsidence, and was built up by SUFCo in late November (1998), at the request of the Forest Service and the range permittees. It was decided not to drain the pond to dig it deeper and treat the bottom because it is apparently not leaking, and the disturbance may cause it to leak. The mine has agreed to make any repairs if a problem does develop.

One concern has come up relative to the depth of the Box Pond. The dam seems to have been lowered, perhaps more than the bottom of the pond, thereby reducing its capacity (volume). There may be a need to haul water next year if the volume of water is not sufficient to support the livestock. In the long term, if the subsidence wave doesn't lower the center of the pond proportionally, there still may be a need to have the mine dig it deeper.

Please let me know if you need greater detail in any of the above listed accounts. I will keep you posted on further developments.

Sincerely,

J. Wade DeFreest
Ferron-Price District Geologist

United States Department of Agriculture | Forest Service | Manti-La Sal National Forest | Ferr[illegible]/P[illegible]e Ranger District
Pri[illegible] Work Center
599 West Price River Drive
Price, Utah 84501

File Code: 2210/2820

Date: 27 February 1997

RECEIVED
MAR 07 1997
DIV. OF OIL, GAS & MINING

Mr. Ken Christiansen, President,
Emery Stock Growers Association
PO. 552
Emery Utah 84522

ACT/041/002 #2
Copy Mary Ann, Daron, Joe, PBM
~~FAX Pete~~
@ PFO

Dear Ken,

Thank you for meeting with us on January 21, regarding mining activties and impacts to stock watering ponds. Those attending: Livestock operators- Ken Christiansen, Morris Sorenson, Russ Jensen, Wayne Staley. Forest Service- Jeff DeFreest, John Healy, Sandy Remund and Rusty Lee.

As was discussed, the need for water on your allotment is apparent, and it is believed that the undermining of the pond, known as Rock Pond, has caused the underlying bedrock to crack, and in June of 1995, Rock Pond was found to be drained. A field inspection took place on June 21, 1995 and was followed up with a letter from Southern Utah Fuel Co. (SUFCO) on the next day. The mitigation plan was verbally approved, and they were to begin hauling water to meet the immediate needs of the livestock. According to Larry Mickelsen, the Range Management Specialist on the project during 1995, he had spoken to a permittee and the herder, shortly after the water hauling operation during the last 2 weeks of June. He was told by the cattlemen, that they were satisfied with the effort.

We asked SUFCO to provide a monitoring and mitigation plan, for Rock Pond, and also to consider the Box Pond, on what could be done in advance of mining. Monitoring was conducted during the summer and autumn of 1995. Repair of Rock Pond, by sealing it with bentonite clay, was initially to be done in the autumn of 1995. The above referenced monitoring and aerial photos taken in the autumn of 1995 showed the pond had held water during that period, so the mine did not follow through with the sealing of the pond. On April 15th, 1996, the mine attempted to resume monitoring, but was not able to get to the ponds due to snow conditions. By April 30th the roads had cleared and the Forest Service found the pond to be dry. On May 1st, Wes Sorensen from SUFCO surveyed the ponds, and found Rock Pond was in fact dry, without sign that it had held water recently. SUFCO decided to proceed with the bentonite placement and on the 15th of May, a letter was sent to the Division of Oil, Gas and Mining, documenting Forest Service consent to the plan to seal the cracks with bentonite. In late May or early June, Jeff DeFreest and Stan MacDonald, the Forest Archeologist, inspected the area and determined a route for the SUFCO truck to use in transporting the bentonite. Placement of the bentonite was begun soon after, around June 11th, and was witnessed by Jeff DeFreest, and later, field assistant Angela Coleman. Photographs were taken to illustrate the filling of visible cracks and also dispersal and raking-in of the bentonite on the pond bottom.

We look forward to seeing the results of the bentonite placement, and hopefully the impoundment of water again in Rock Pond. In the event that the pond still does not hold water or that runoff is not reaching the pond due to subsidence cracks, further repairs or other mitigation measures will be required of SUFCO, to replace lost water, pursuant to our lease stipulation #17.

Forest Service Stipula n /.

The Lessees, at their expense, will be responsible to replace any surface water identified for protection, that may be lost or adversely affected by mining operations, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, or other land uses.

Attached is a map of the ponds and indicated name corrections that were made at the meeting. This was prepared with you so that we are all referring to the same ponds in the future. The map also indicates whether the pond usually has water, occassionally had water or has never held water. Your suggestion to inspect the ponds this spring is a good idea and we will look forward to meeting with you this spring. This will also let us monitor the ponds through the summer to determine if they are holding water as long as they have in the past. *

I hope this sums the history and assures you of our intent to pursue this matter with you and the mining company. Please contact Jeff DeFreest, District Geologist, at this office if you have any questions pertaining to the mining operations as they relate to your cattle alottment.

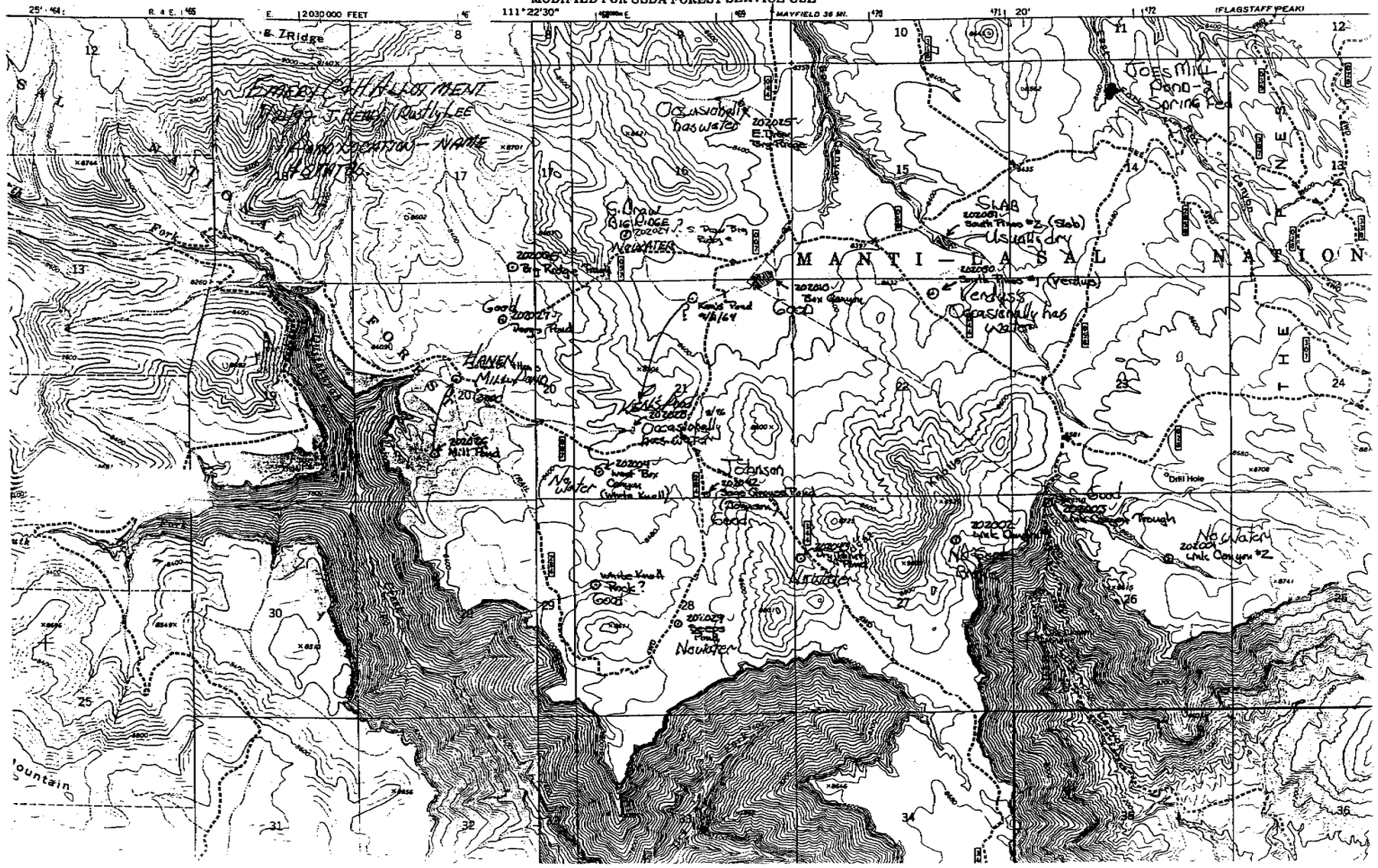
Sincerely,

CHARLES J. JANKIEWICZ
Ferron-Price District Ranger

Enclosure:

cc: Pam Littig, Division of Oil, Gas, and Mining
cc: Wayne Staley, Emery Irrigation Co. Box 83, Emery, Utah 84552

MODIFIED FOR USDA FOREST SERVICE USE



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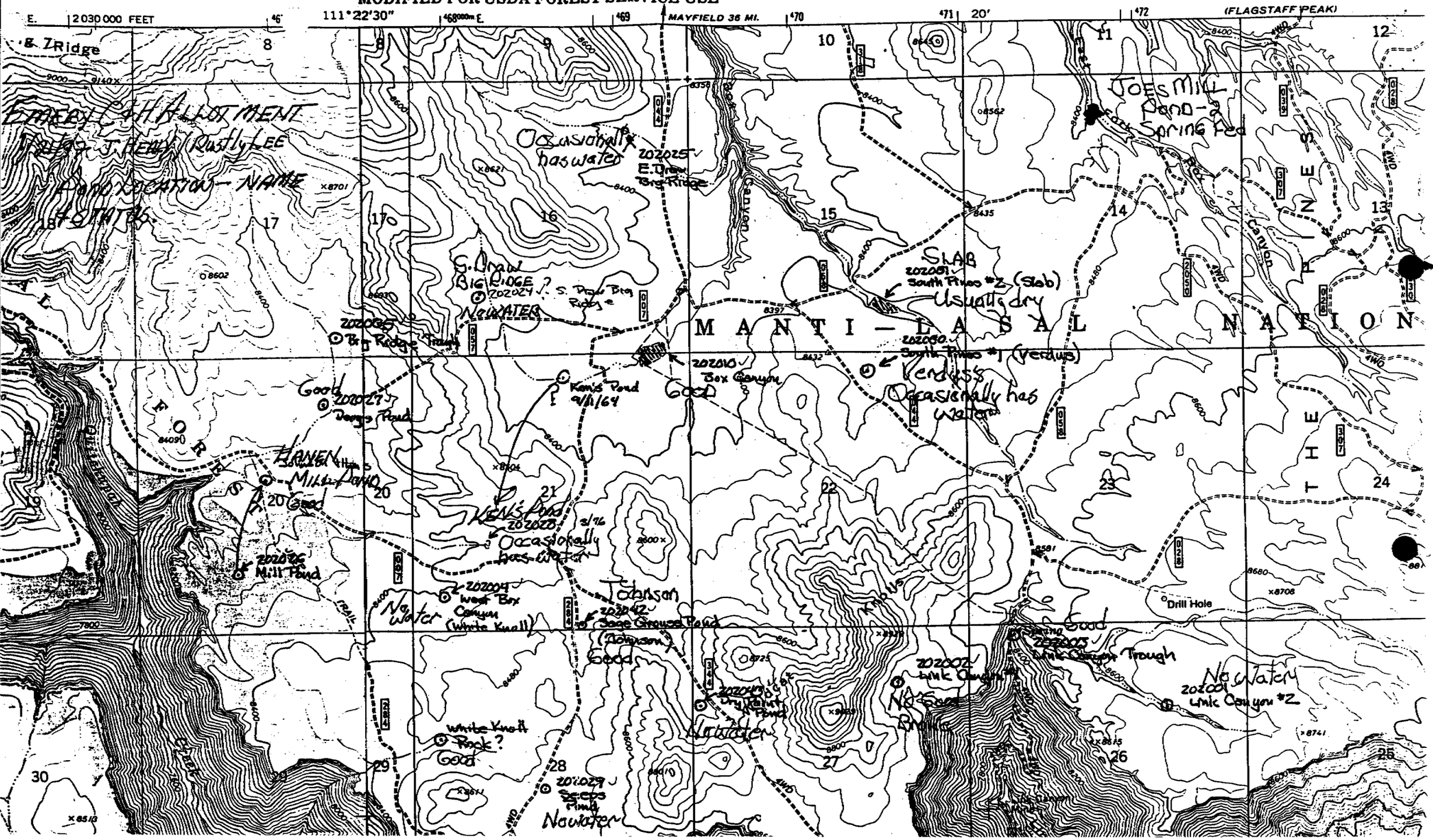

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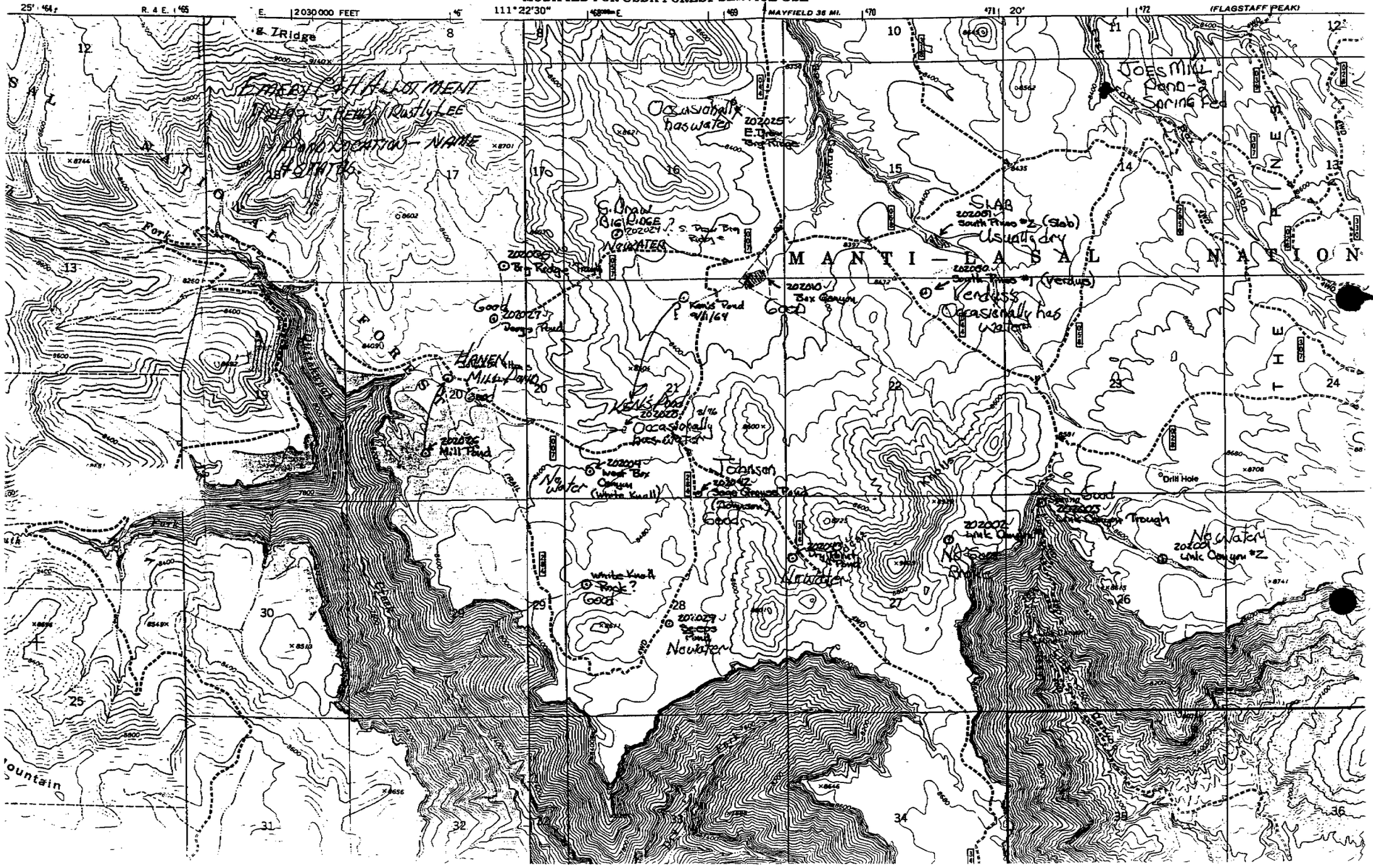

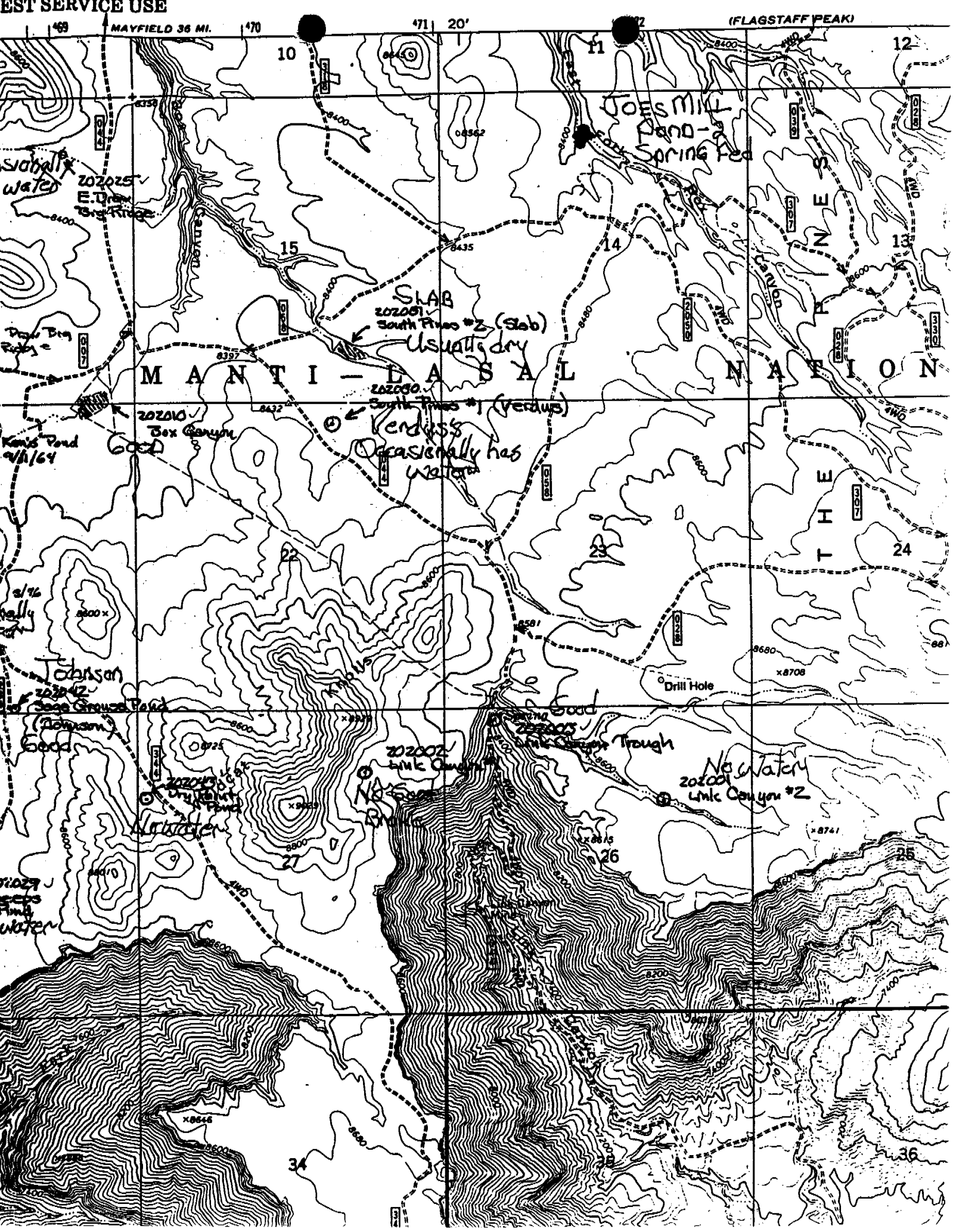
EST SERVICE USE
MAYFIELD 36 MI.
(FLAGSTAFF PEAK)
20'
Joes Mill Pond-2 Spring Fed
202025 E. Draw Big Ridge
SLAB
202051 South Pines #2 (Slab)
Usually dry
MANTI-LASAL NATION
202050 South Pines #1 (Verdus)
Verdus's Occasionally has water
202010 Box Canyon
Good
Johnson
202042 Sage Grouse Pond (Johnson)
Good
202002 Link Canyon
No Good Brake
202001 Link Canyon #2
No Water
Drill Hole
Spring Good
Link Canyon Trough
Canyon
Knolls
THE PINES
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36

United States
Department of Agriculture

Forest Service

Manti-La Sal National Forest

599 West Price River Dr.
Price, Utah 84501

Reply to: 2820

Date: July 30, 1996

RECEIVED
AUG 01 1996
DIV. OF OIL, GAS & MINING

Utah Coal Regulatory Program
Division of Oil, Gas and Mining
Attention: Pamela Grubaugh-Littig
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Southern Utah Fuel Company (SUFCo), Convulsion Canyon Mine, Mitigation Plan for Box Pond

ACT/041/002 #2

Dear Ms. Littig:

We received a copy SUFCo's letter to Peter Hess, Division of Oil, Gas and Mining in regard to the mitigation plan for Box Pond. This letter is in response to Peter's telephone request for Forest Service consent.

We reviewed the proposal and consent to SUFCo's proposal to apply two inches of bentonite to Box Pond during the 1997 field season to provide sealing capabilities in the event that surface cracks result from mining-induced subsidence. In addition, we agree with SUFCo's assessment that continued subsidence in sequential longwall panels will probably restore the flow gradient of surface water at the head of Box Canyon. However, if the gradient and flow of Box Canyon, or attempts to restore water impoundments to their pre-mining function are not successful, SUFCo will be required to propose alternative measures for water replacement and implement approved measures for as long as necessary to provide an adequate water supply to grazing operations consistent with pre-mining conditions.

SUFCo has proposed to conduct the required cultural resource survey in the vicinity of the alcove site in 1997. The survey must be completed during the 1996 field season to allow adequate time to develop and review a mitigation plan, and prepare an environmental analysis, if needed.

If you have any questions, please contact Jeff DeFreest (District Geologist, Ferron-Price Ranger District) or Stan McDonald (Forest Archaeologist) at the Forest Supervisor's Office in Price.

Sincerely,

for
JANETTE S. KAISER
Forest Supervisor

cc:
D-2/3
Peter Hess, DOGM, 451 East 400 North, Price, Utah 84501
Ken May, Southern Utah Fuel Co., 397 South 800 West, Salina, Utah 84654

United States
Department of
Agriculture

Forest
Service

Manti-La Sal
National Forest

599 West Price River Dr.
Price, Utah 84501
(801) 637-2817

RECEIVED
JUL 10 1995
DIV. OF OIL, GAS & MINING

File Code: 2820

Date: July 6, 1995

Ken May
Southern Utah Fuel Company
397 South 800 West
Salina, Utah 84654

Copy Daron & Joe
ACT/041/002 #2

Dear Mr. May:

We received your letter dated June 22, 1995, in regard to Rock Pond within the permit area for the SUFCO Mine on July 3, 1995. Your expedicious action on this matter is appreciated.

As discussed during our joint inspection of Rock Pond on June 21, we concur with your proposal to haul water to Johnson and Hans Ponds this season to replace the loss of water from subsidence until July 4. We also concur with your proposal to seal the subsidence cracks with bentonite this fall. The presence of an extensive fracture system in the Castlegate Sandstone that has sealed naturally and data from monitoring of subsidence cracks in the vicinity indicate that the cracks will seal naturally over time, however action is needed to prevent the loss of water for cattle over both the short and long-term. Since the allotment will not be grazed during the 1996 season, we have an opportunity to monitor the success of crack sealing efforts without disturbance from the cattle and the need to haul additional water.

Low snowpack in the vicinity of the ponds may have been a factor that contributed to the lack of water in Rock Pond, however we feel that there is clear evidence that the surface cracks in the drainage intercepted surface flow and diverted it underground. The location of surface cracks in the drainage, capacity water levels observed in the other ponds outside of the subsided area, and historic data on water levels in Rock pond indicate that the snowpack was adequate to fill the pond.

Since effective sealing of the cracks by natural and artificial processes will take several years and mining will progress under the remaining ponds within the next few years, we feel that development of a plan to monitor and prevent/mitigate the potential loss of water needs to be developed by SUFCo. The plan will be subject to review and approval by the Utah Division of Oil, Gas and Mining and Forest Service. Of particular importance is Box pond which is the major water source for the allotment and is large enough to retain water year-round.

If you have any questions or need additional information, contact Jeff DeFreest or Carter Reed at the Forest Service Office in Price, Utah.

Sincerely,

for
JANETTE S. KAISER
Forest Supervisor

cc:
Pam Littig, UDOGM
D-2/3
R.Player

Bureau of Land Management
Utah State Office
324 South State, Suite 301
Salt Lake City, Utah 84111-2303

RECEIVED
JUL 30 1999
DIV. OF OIL, GAS & MINING

28 ac-4

3425
U-63214
(U-942)

JUN 1 ? 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DECISION

Coastal States Energy Company	:	
175 East 400 South, Suite 800	:	Coal Lease
Salt Lake City, UT 84111	:	U-63214

Lease Issued
Bond Accepted

On May 10, 1989, coal lease bond number U605244-10 in the amount of $30,000 with Coastal States Energy Company, as principal, and United Pacific Insurance Company, as surety, was received in this office to provide bond coverage for coal lease U-63214. The bond has been examined, found to be satisfactory, and is accepted effective May 10, 1989, the date of filing.

Pursuant to the April 17, 1989 lease by application coal sale, the bid of Coastal States Energy Company was determined to be the high bid. Satisfactory evidence of the qualifications and holdings of Coastal States Energy Company has been filed; therefore, coal lease U-63214 is hereby issued effective July 1, 1989.

ACTING
/s/ M. Willis
Chief, Minerals
Adjudication Section

Enclosure
Coal Lease

cc: Resource Development Coordinating Committee w/encl.
[redacted] w/encl.
MMS, AFS, Denver, CO w/encl.
Moab District Office w/encl.
U-921

NLH

~~CC D-2~~

It is now [illegible]

CR

FILE COPY

Form 3400-12
(April 1986)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COAL LEASE

Serial Number

U-63214

PART I. LEASE RIGHTS GRANTED

This lease, entered into by and between the UNITED STATES OF AMERICA, hereinafter called lessor, through the Bureau of Land Management, and *(Name and Address)*

Coastal States Energy Company
175 East 400 South, Suite 800
Salt Lake City, UT 84111

hereinafter called lessee, is effective *(date)* JUL 1 1989, for a period of 20 years and for so long thereafter as coal is produced in commercial quantities from the leased lands, subject to readjustment of lease terms at the end of the 20th lease year and each 10-year period thereafter.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☒ Mineral Lands Leasing Act of 1920, Act of February 25, 1920, as amended, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

and to the regulations and formal orders of the Secretary of the Interior which are now or hereafter in force, when not inconsistent with the express and specific provisions herein.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to drill for, mine, extract, remove, or otherwise process and dispose of the coal deposits in, upon, or under the following described lands:

SEE ATTACHED DESCRIPTION

containing acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

PART II. TERMS AND CONDITIONS

Sec. 1. (a) RENTAL RATE - Lessee shall pay lessor rental annually and in advance for each acre or fraction thereof during the continuance of the lease at the rate of $3.00 for each lease year.

(b) RENTAL CREDITS - Rental shall not be credited against either production or advance royalties for any year.

Sec. 2. (a) PRODUCTION ROYALTIES - The royalty shall be 12½ & 8 percent of the value of the coal as set forth in the regulations. Royalties are due to lessor the final day of the month succeeding the calendar month in which the royalty obligation accrues.

(b) ADVANCE ROYALTIES - Upon request by the lessee, the authorized officer may accept, for a total of not more than 10 years, the payment of advance royalties in lieu of continued operation, consistent with the regulations. The advance royalty shall be based on a percent of the value of a minimum number of tons determined in the manner established by the advance royalty regulations in effect at the time the lessee requests approval to pay advance royalties in lieu of continued operation.

Sec. 3. BONDS - Lessee shall maintain in the proper office a lease bond in the amount of $30,000. The authorized officer may require an increase in this amount when additional coverage is determined appropriate.

Sec. 4. DILIGENCE - This lease is subject to the conditions of diligent development and continued operation, except that these conditions are excused when operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee. The lessor, in the public interest, may suspend the condition of continued operation upon payment of advance royalties in accordance with the regulations in existence at the time of the suspension. Lessee's failure to produce coal in commercial quantities at the end of 10 years shall terminate the lease. Lessee shall submit an operation and reclamation plan pursuant to Section 7 of the Act not later than 3 years after lease issuance.

The lessor reserves the power to assent to or order the suspension of the terms and conditions of this lease in accordance with, inter alia, Section 39 of the Mineral Leasing Act, 30 U.S.C. 209.

Sec. 5. LOGICAL MINING UNIT (LMU) - Either upon approval by the lessor of the lessee's application or at the direction of the lessor, this lease shall become an LMU or part of an LMU, subject to the provisions set forth in the regulations.

The stipulations established in an LMU approval in effect at the time of LMU approval will supersede the relevant inconsistent terms of this lease so long as the lease remains committed to the LMU. If the LMU of which this lease is a part is dissolved, the lease shall then be subject to the lease terms which would have been applied if the lease had not been included in an LMU.

Sec. 6. DOCUMENTS, EVIDENCE AND INSPECTION - At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing the amounts and quality of all products removed and sold from the lease, the proceeds therefrom, and the amount used for production purposes or unavoidably lost.

Lessee shall keep open at all reasonable times for the inspection of any duly authorized officer of lessor, the leased premises and all surface and underground improvements, works, machinery, ore stockpiles, equipment, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or under the leased lands.

Lessee shall allow lessor access to and copying of documents reasonably necessary to verify lessee compliance with terms and conditions of the lease.

While this lease remains in effect, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 7. DAMAGES TO PROPERTY AND CONDUCT OF OPERATIONS - Lessee shall comply at its own expense with all reasonable orders of the Secretary, respecting diligent operations, prevention of waste, and protection of other resources.

Lessee shall not conduct exploration operations, other than casual use, without an approved exploration plan. All exploration plans prior to the commencement of mining operations within an approved mining permit area shall be submitted to the authorized officer.

Lessee shall carry on all operations in accordance with approved methods and practices as provided in the operating regulations, having due regard for the prevention of injury to life, health, or property, and prevention of waste, damage or degradation to any land, air, water, cultural, biological, visual, and other resources, including mineral deposits and formations of mineral deposits not leased hereunder, and to other land uses or users. Lessee shall take measures deemed necessary by lessor to accomplish the intent of this lease term. Such measures may include, but are not limited to, modification to proposed siting or design of facilities, timing of operations, and specification of interim and final reclamation procedures. Lessor reserves to itself the right to lease, sell, or otherwise dispose of the surface or other mineral deposits in the lands and the right to continue existing uses and to authorize future uses upon or in the leased lands, including issuing leases for mineral deposits not covered hereunder and approving easements or rights-of-way. Lessor shall condition such uses to prevent unnecessary or unreasonable interference with rights of lessee as may be consistent with concepts of multiple use and multiple mineral development.

Sec. 8. PROTECTION OF DIVERSE INTERESTS, AND EQUAL OPPORTUNITY - Lessee shall : pay when due all taxes legally assessed and levied under the laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at lease twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; restrict the workday to not more than 8 hours in any one day for underground workers, except in emergencies; and take measures necessary to protect the health and safety of the public. No person under the age of 16 years shall be employed in any mine below the surface. To the extent that laws of the State in which the lands are situated are more restrictive than the provisions in this paragraph, then the State laws apply.

Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 9. (a) TRANSFERS

- [X] This lease may be transferred in whole or in part to any person, association or corporation qualified to hold such lease interest.
- [ ] This lease may be transferred in whole or in part to another public body or to a person who will mine the coal on behalf of, and for the use of, the public body or to a person who for the limited purpose of creating a security interest in favor of a lender agrees to be obligated to mine the coal on behalf of the public body.
- [ ] This lease may only be transferred in whole or in part to another small business qualified under 13 CFR 121.

Transfers of record title, working or royalty interest *must* be approved in accordance with the regulations.

(b) RELINQUISHMENT - The lessee may relinquish in writing at any time all rights under this lease or any portion thereof as provided in the regulations. Upon lessor's acceptance of the relinquishment, lessee shall be relieved of all future obligations under the lease or the relinquished portion thereof, whichever is applicable.

Sec. 10. DELIVERY OF PREMISES, REMOVAL OF MACHINERY, EQUIPMENT, ETC. - At such time as all portions of this lease are returned to lessor, lessee shall deliver up to lessor the land leased, underground timbering, and such other supports and structures necessary for the preservation of the mine workings on the leased premises or deposits and place all workings in condition for suspension or abandonment. Within 180 days thereof, lessee shall remove from the premises all other structures, machinery, equipment, tools, and materials that it elects to or as required by the authorized officer. Any such structures, machinery, equipment, tools, and materials remaining on the leased lands beyond 180 days, or approved extension thereof, shall become the property of the lessor, but lessee shall either remove any or all such property or shall continue to be liable for the cost of removal and disposal in the amount actually incurred by the lessor. If the surface is owned by third parties, lessor shall waive the requirement for removal, provided the third parties do not object to such waiver. Lessee shall, prior to the termination of bond liability or at any other time when required and in accordance with all applicable laws and regulations, reclaim all lands the surface of which has been disturbed, dispose of all debris or solid waste, repair the offsite and onsite damage caused by lessee's activity or activities incidental thereto, and reclaim access roads or trails.

Sec. 11. PROCEEDINGS IN CASE OF DEFAULT - If lessee fails to comply with applicable laws, existing regulations, or the terms, conditions and stipulations of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation by the lessor only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Sec. 12. HEIRS AND SUCCESSORS-IN-INTEREST - Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

Sec. 13. INDEMNIFICATION - Lessee shall indemnify and hold harmless the United States from any and all claims arising out of the lessee's activities and operations under this lease.

Sec. 14. SPECIAL STATUTES - This lease is subject to the Clean Water Act (33 U.S.C. 1252 et. seq.), the Clean Air Act (42 U.S.C. 4274 et. seq.), and to all other applicable laws pertaining to exploration activities, mining operations and reclamation, including the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et. seq.).

Sec. 15. SPECIAL STIPULATIONS -

T. 21 S., R. 4 E., SLM, Utah
Sec. 12, E½SE¼;
Sec. 13, E½NE¼, S½;
Sec. 14, E½SW¼, SE¼;
Sec. 23, E½, E½W½;
Sec. 24, all.

T. 21 S., R. 5 E., SLM, Utah
Sec. 15, W½;
Secs. 16-21, all;
Sec. 22, W½;
Sec. 26, W½NW¼SW¼, SW¼SW¼;
Sec. 27, all;
Sec. 28, N½, N½SW¼, SE¼SW¼, SE¼;
Sec. 29, E½NE¼, NE¼SE¼;
Sec. 30, lot 1, N½NE¼;
Sec. 33, lots 2-4, NE¼, E½NW¼,
NE¼SW¼, N½SE¼;
Sec. 34, all;
Sec. 35, lots 1, 2, W½NW¼, N½SW¼.

T. 22 S., R. 5 E., SLM, Utah
Sec. 3, lots 1-4, S½N½, NE¼SW¼,
S½SW¼, N½SE¼, SW¼SE¼;
Sec. 4, lots 1, 2, S½NE¼, SE¼SE¼,
Sec. 9, NE¼NE¼;
Sec. 10, W½NE¼, NW¼, N½SW¼.

Containing 9,905.46 Acres

Sec. 15. SPECIAL STIPULATIONS (Cont'd.) -

SEE ATTACHED STIPULATIONS

	THE UNITED STATES OF AMERICA Bureau of Land Management Utah State Office 324 South State, Suite 301 Salt Lake City, Utah 84111-2303
Coastal States Energy Company Company or Lessee Name	By
James L Van Loren (Signature of Lessee)	M. [illegible] (Signing Officer)
President (Title)	ACTING Chief, Minerals Adjudication Section (Title)
May 8, 1989 (Date)	JUN 10 1989 (Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require OMB approval.

1. The Regulatory Authority shall mean the State Regulatory Authority pursuant to a cooperative agreement approved under 30 CFR Part 745 or in the absence of a cooperative agreement, Office of Surface Mining. The authorized officer shall mean the State Director, Bureau of Land Management. The authorized officer of the Surface Management Agency shall mean the Forest Supervisor, Forest Service. Surface Management Agency for private surface is the Bureau of Land Management. For adjoining private lands with Federal minerals and which primarily involve National Forest Service issues, the Forest Service will have the lead for environmental analysis and, when necessary, documentation in an environmental assessment or environmental impact statement.

2. The authorized officers, of the Bureau of Land Management, Office of Surface Mining (Regulatory Authority), and the Surface Management Agency (Forest Service) respectively, shall coordinate, as practical, regulation of mining operations and associated activities on the lease area.

3. In accordance with Sec. 523(b) of the "Surface Mining Control and Reclamation Act of 1977," surface mining and reclamation operations conducted on this lease are to conform with the requirements of this Act and are subject to compliance with Office of Surface Mining Regulations, or as applicable, a Utah program equivalent approved under cooperative agreement in accordance with Sec. 523(c). The United States Government does not warrant that the entire tract will be susceptible to mining.

4. Federal Regulations 43 CFR 3400 pertaining to Coal Management make provisions for the Surface Management Agency, the surface of which is under the jurisdiction of any Federal agency other than the Department of Interior, to consent to leasing and to prescribe conditions to insure the use and protection of the lands. All or part of this lease contain lands the surface of which are managed by the United States Department of Agriculture, Forest Service Manti-LaSal National Forest.

The following stipulations pertain to the lessee responsibility for mining operations on the lease area and on adjacent areas as may be specifically designated on National Forest System lands.

5. Before undertaking activities that may disturb the surface of previously undisturbed leased lands, the lessee may be required to conduct a cultural resource inventory and a paleontological appraisal of the areas to be disturbed. These studies shall be conducted by qualified professional cultural resource specialists or qualified paleontologists, as appropriate, and a report prepared itemizing the findings. A plan will then be submitted making recommendations for the protection of, or measures to be taken to mitigate impacts for identified cultural or paleontological resources.

If cultural resources or paleontological remains (fossils) of significant scientific interest are discovered during operations under this lease, the lessee prior to disturbance shall immediately bring them to the attention of the appropriate authorities. Paleontological remains of significant scientific interest do not include leaves, ferns, or dinosaur tracks commonly encountered during underground mining operations.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the lessee.

6. If there is reas to believe that threatened or .dangered (T&E) species of plants or animals, or migratory bird species of high Federal interest occur in the area, the lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist and a report of findings will be prepared. A plan will be prepared making recommendations for the protection of these species or action necessary to mitigate the disturbance.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the lessee.

7. The lessee shall be required to perform a study to secure adequate baseline data to quantify the existing surface resources on and adjacent to the lease area. Existing data may be used if such data is adequate for the intended purposes. The study shall be adequate to locate, quantify, and demonstrate the inter-relationship of the geology, topography, surface hydrology, vegetation, and wildlife. Baseline data will be established so that future programs of observation can be incorporated at regular intervals for comparison.

8. Powerlines used in conjunction with the mining of coal from this lease shall be constructed so as to provide adequate protection for raptors and other large birds. When feasible, powerlines will be located at least 100 yards from public roads.

9. The limited area available for mine facilities at the coal outcrop, steep topography, adverse winter weather, and physical limitations on the size and design of the access road, are factors which will determine the ultimate size of the surface area utilized for the mine. A site specific environmental analysis will be prepared for each new mine site development and for major modifications to existing developments to examine alternatives and mitigate conflicts.

10. Consideration will be given to site selection to reduce adverse visual impacts. Where alternative sites are available, and each alternative is technically feasible, the alternative involving the least damage to the scenery and other resources shall be selected. Permanent structures and facilities will be designed, and screening techniques employed, to reduce visual impacts, and where possible achieve a final landscape compatible with the natural surroundings. The creation of unusual, objectionable, or unnatural land forms and vegetative landscape features will be avoided.

11. The lessee shall be required to establish a monitoring system to locate, measure, and quantify the progressive and final effects of underground mining activities on the topographic surface, underground and surface hydrology and vegetation. The monitoring system shall utilize techniques which will provide a continuing record of change over time and an analytical method for location and measurement of a number of points over the lease area. The monitoring shall incorporate and be an extension of the baseline data.

12. The lessee shall provide for the suppression and control of fugitive dust on haul roads and at coal handling and storage facilities. On Forest Development Roads (FDR), lessees may perform their share of road maintenance by a commensurate share agreement if a significant degree of traffic is generated that is not related to their activities.

13. Except at specifically approved locations, underground mining operations shall be conducted in such a manner so as to prevent surface subsidence that would: (1) cause the creation of hazardous conditions such as potential escarpment failure and landslides, (2) cause damage to existing surface structures, or (3) damage or alter the flow of perennial streams. The lessee shall provide specific measures for the protection of escarpments, and determine corrective measures to assure that hazardous conditions are not created.

14. In order to avoid surface disturbance on steep canyon slopes and to preclude the need for surface access, all surface breakouts for ventilation tunnels shall be constructed from inside the mine, except at specifically approved locations.

15. If removal of timber is required for clearing of construction sites, etc., such timber shall be removed in accordance with the regulations of the surface management agency.

16. The coal contained within, and authorized for mining under this lease, shall be extracted only by underground mining methods.

17. Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replaced to provide for the continuance of current land uses. *

18. In order to protect big game wintering areas, elk calving and deer fawning areas, sagegrouse strutting areas, and other critical wildlife habitat and/or activities, specific surface uses outside the mine development area may be curtailed during specific periods of the year.

19. Support facilities, structures, equipment, and similar developments will be removed from the lease area within 2 years after the final termination of use of such facilities. This provision shall apply unless the requirement of Section 10 of the lease form is applicable. Disturbed areas and those areas previously occupied by such facilities will be stabilized and rehabilitated, drainages reestablished, and the areas returned to a premining land use.

20. The lessee at the conclusion of the mining operations, or at other times as surface disturbance related to mining may occur, will replace all damaged, disturbed, or displaced corner monuments (section corners, quarter corners, etc.) their accessories and appendages (witness trees, bearing trees, etc.), or restore them to their original condition and location, or at other locations that meet the requirements of the rectangular surveying system. This work shall be conducted at the expense of the lessee, by a professional land surveyor registered in the State of Utah and to the standards and guidelines found in the manual of surveying instruction, U.S. Department of the Interior.

21. The lessee at his expense will be responsible to replace any surface water identified for protection, that may be lost or adversely affected by mining operations, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, or other land uses. *

22. The lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by a permit/operation plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor
Manti-LaSal National Forest
599 West Price River Drive
Price, Utah 84501

Telephone No.: 801-637-2817

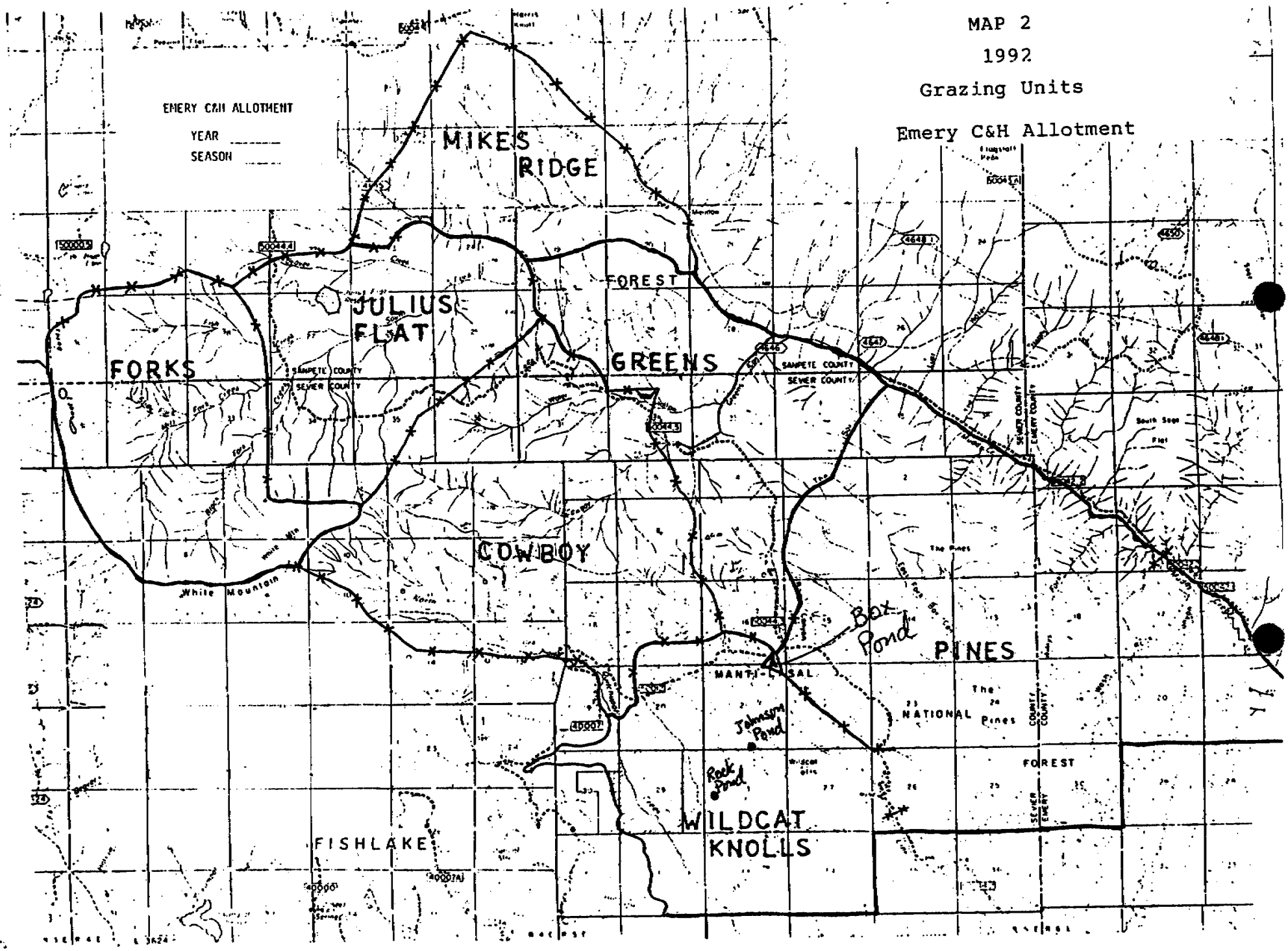
who is the authorized representative of the Secretary of Agriculture.

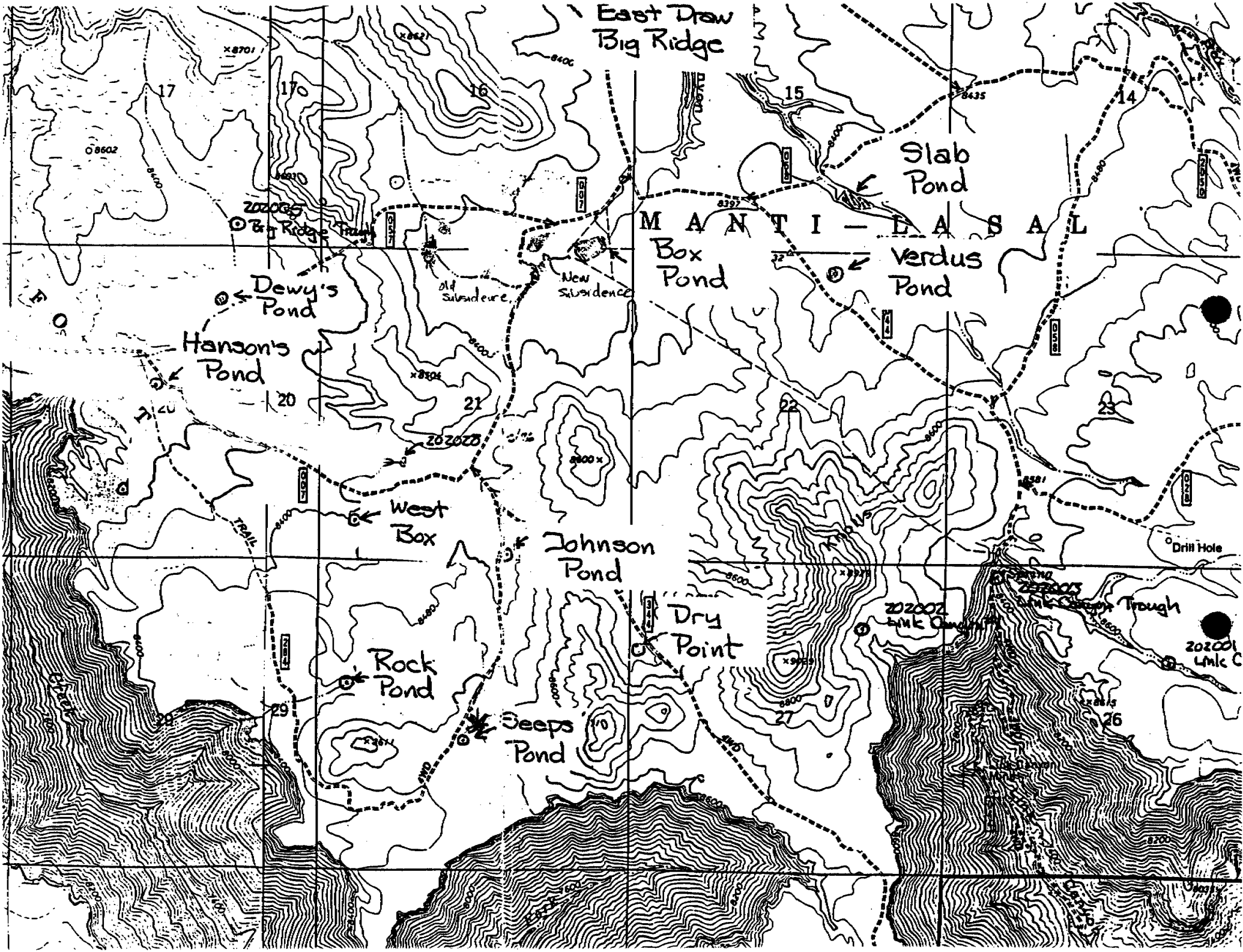
MAP 2

1992

Grazing Units

Emery C&H Allotment




East Draw
Big Ridge
Slab Pond
M A N T I — L A S A L
Box Pond
Verdus Pond
Big Ridge Trough
Dewy's Pond
Old Subsidence
New Subsidence
Hanson's Pond
West Box
Johnson Pond
Dry Point
Rock Pond
Seeps Pond
Drill Hole
Link Canyon Trough
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