

0010

File no, 307/033 #2

Moab District  
Price River Resource Area  
900 North 700 East  
Price, Utah 84501

RECEIVED  
FEB 28 1990

DIVISION OF  
OIL, GAS & MINING

Nike Glasson  
Andalex Resources  
P. O. Box  
Price, Utah 84501

FEB 26 1990

Dear Mr. Glasson:

Enclosed is a copy of a staff report documenting Andalex Resources' successful completion of a 15-acre wildlife habitat enhancement project. This project fulfills a mitigation requirement by the Utah Division of Oil, Gas and Mining for the permitting of the wildcat loadout facility.

As mentioned in the staff report, Andalex also cooperated with BLM in completing a similar browse interseeding project on 10 acres of critical mule deer winter range approximately two miles from the loadout facility. Attached to the staff report are copies of the original project design and a cooperative agreement for the actual work completed.

It has been a pleasure working with you on both of these projects. As with past projects, your personnel are always committed to doing the best job possible.

Sincerely yours,

MARK E. BAILEY

Area Manager

Enclosure:  
Staff Report

cc: Niles Moretti  
Pamela Grubaugh-Littig

DMills:ks:2/20/90  
Wang 0266G

Bureau of Land Management  
Moab District  
San Rafael Resource Area  
900 North 700 East  
Price, Utah 84501

STAFF REPORT

TITLE: Andalex Resources Mitigation Project Competition

DATE: February 16, 1990

Andalex Resources completed a wildlife project fulfilling a mitigation requirement of the Utah Division of Oil, Gas and Mining for the permitting of the wildcat loadout facility. The requirement was to mitigate impacts to 15 acres of critical winter range which has been taken out of production as mule deer critical winter range.

Andalex Resources completed Option 1, Browse Interseeding, as outlined in the attached Project Design Package. This work was completed in December of 1989. In addition to fulfilling the initial requirements, Andalex cooperated with the Bureau of Land Management to complete an additional 10 acres of browse interseeding on critical mule deer winter range. Both of these projects were covered in a cooperative agreement, see Attachment 2.

Attachments (2):  
1-Project Design Package  
2-Cooperative Agreement

A handwritten signature in dark ink, appearing to be "D. Hill", is located to the right of the attachments list.

PROJECT DESIGN PACKAGE FOR MITIGATION OF  
IMPACTS TO MULE DEER CRITICAL WINTER RANGE

ANDALEX RESOURCES COAL LOADOUT FACILITY

The following off-site mitigation package is provided to Andalex Resources by the BLM in coordination with the Utah Division of Wildlife Resources to meet a mitigation requirement of the Utah Division of Oil, Gas and Mining for the permitting of the Wildcat loadout facility. Two options are presented. Either option will meet the requirement to: mitigate impacts to 15 acres of critical winter range which has been taken out of production as mule deer critical winter range.

OPTION 1 - BROWSE INTERSEEDING

**Project Objective:** Improve winter and spring forage for mule deer on critical winter range in close proximity to surface disturbance associated with the loadout facility.

**Project Description:** Treat identified area (existing PJ chainings) on Map 1 as follows:

Seed a total of fifteen acres (approximately 50 percent) of the treatment area with the forb-browse seed mixture listed below. Treatment should be accomplished during the period from October 15 until November 15 or as otherwise mutually agreed on by operator and authorized officer.

**Project Outline:**

1. Complete an archaeological clearance on 30-acre project area.
2. Using D7 Crawler tractor with dozer blade, pull brushland plow across treatment areas, strictly along the contour, to prepare suitable seed bed in which to drill seed. Adjust the pull angle of the plow to ensure all sodded grasses are turned over. The entire treatment area will be worked in a contour strip pattern in which 50 percent will be prepared for seeding while 50 percent is left undisturbed. The strip pattern should approximate 6 feet scalps separated by 6 feet strips of undisturbed ground.
3. Following seed bed preparation, use D4 Crawler tractor or suitable rubber-tired implement to pull rangeland drill along seed bed.
4. Hand seed all other disturbed sites associated with enhancement project (i.e., equipment load and unload sites).



Note: All hand seeding will include hand raking following application of seed.

5. Use the following listed species and application rates for seeding within the treatment area. All seed must meet or exceed specifications listed below or otherwise be approved by the authorized officer prior to use in the enhancement project. Special attention should be given to the seed source requirement.

Equipment needed:

- 1 - D4 or similar size Crawler tractor
- 1 - D7 or other 60-70 Drawbar horsepower Crawler tractor
- 1 - Rangeland drill, equipped with depth bands (provided by BLM)\*
- 1 - Brushland plow (provided by BLM)\*
- 2 - Track-mounted seed dribblers

\*See terms for equipment loan.

SEED SPECIFICATIONS

<u>Species</u>	<u>Lbs/acre (PLS)</u>
Mtn. big sage	.5
Antelope bitterbrush <sup>1</sup>	2.0
Fourwing saltbush <sup>1</sup>	3.0
Prostrate Kochia	.5
Utah serviceberry <sup>1</sup>	.5
True mountain mahogany <sup>1</sup>	.5
Whitestem rubber rabbitbrush	1.0
Small burnet	2.0
Common sainfoin	2.0
Alfalfa (Nomad/Ladak, Ranger)	<u>2.0</u>
Total	12.0

<sup>1</sup>Seed source requirement:

Antelope bitterbrush: Maybell variety or Utah seed collected at elevation between 6,000 and 6,800 feet.

Fourwing saltbush: Rincon variety or seed collected at elevation between 5,500 and 6,800 and collected within 200 airline miles of project area.

Utah serviceberry, True mtn. mahogany: Collected at elevation between 5,500 and 6,800 feet and collected within 200 airline miles of project area.

### Terms for Use of Government Equipment

Andalex Resources agrees to hold the Bureau of Land Management free from liability for any claims against them for damages caused during the use of the government equipment.

Andalex Resources agrees to repair or replace damaged, lost, or stolen equipment while in their custody. Replacement will be made at fair market value of the equipment at the time of destruction or loss.

Andalex Resources agrees to do routine periodic maintenance on government equipment while in custody.

Andalex Resources accepts responsibility for transporting government equipment from Price BLM wareyard and returning it to the Price BLM wareyard within 10 days following project completion.

The Bureau of Land Management does not make any warranties regarding the condition of equipment provided to Andalex Resources Coal Company.

The Bureau of Land Management does not assume liability for damages of any kind resulting from the use of the equipment provided to Andalex Resources.

The authorized officer shall have a representative present during all phases of enhancement work. The representative, experienced with the use of these specialized pieces of equipment and this seeding method, will provide direction and guidance onsite for any problems that may occur.

### OPTION 2 - WATER CATCHMENT INSTALLATION

**Project Objective:** Improve distribution of mule deer and elk on critical winter range and thereby reduce pressure on browse in highly concentrated use areas. The guzzler will serve to increase use in the area of the catchment in fall, winter and spring and reduce use on the adjacent critical winter range.

This mitigation project will also benefit a large diversity of other game and nongame wildlife species dependant on free water.

**Project Description:** Place water catchment device in location shown on Map 1. Recommended catchment design is included as Attachment 1. Minimum specifications for catchment design are listed below.

### Catchment Specifications

2,100 gallon storage capacity, heavy construction top exterior drinking ramp, top and ramp black (for greater solar radiation).

#### Project Outline:

1. Excavate a circular basin 16 inches deep and 16 feet in diameter.
2. Assemble 4 quarter panels to make basin or storage tank, position and level.
3. Assemble 4 quarter panels to make top and set in place.
4. Excavate an area about 4 feet from catchment to set trough and connect to catchment with 1 1/2-inch insulated PVC pipe.
5. Bolt rib caps on top, fill in around catchment and hand seed disturbed soil.

Installation requires about 34 work hours to complete. The archaeological clearance for this project can be completed by the BLM.

#### Equipment and manpower needed:

Hand tools (shovels, breaker bar, 2 - 1/2 inch ratchet sets)  
1 - caulking gun  
1 - full size pickup - 1/2 or 3/4 ton  
3 - laborers

The authorized officer shall have a representative present during project construction. The representative will select the exact site location and assist in the construction.

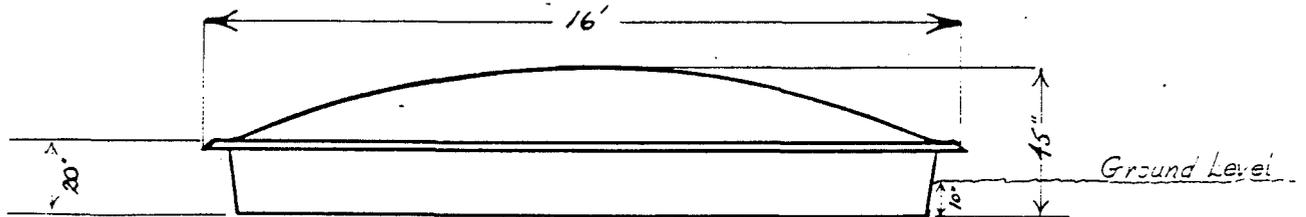
Wang 0202G

# "THE RANGE GUZZLER"

## WATER COLLECTION AND STORAGE UNIT

### PARABOLIC TANK COLLECTOR

Collecting Area..... 200 Sq. Ft.  
Storage Capacity ..... 2,100 Gal.  
Rainfall required to fill unit ..... 17 In.  
Weight ..... 950# Approx.

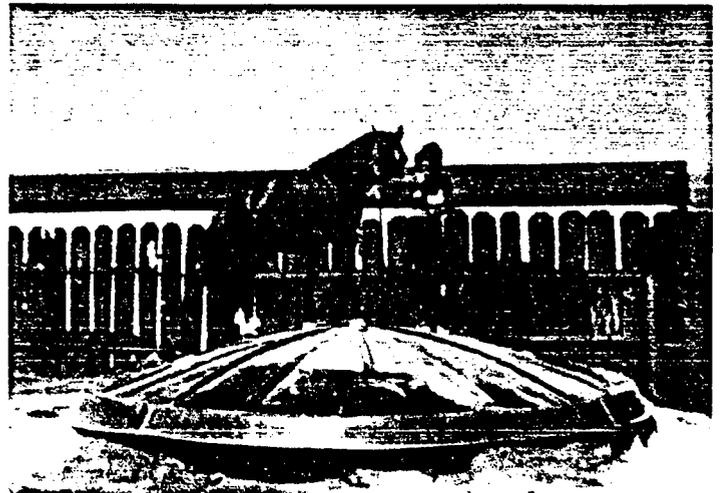


PATENT PENDING

Evaporation Resistant Water Collection  
& Storage Unit

### ADVANTAGES

IT WORKS — Eliminates up to 99% of evaporation. Unit is light and can be relocated if water needs change. Eliminates maintenance, there are no floats or valves. Fiberglass construction assures very long life. Installation requires three men for one day — Excavation is only ten inches deep in a 16-foot circle, backhoe not required. A survival ramp is included so small game or rodents won't drown in unit. Easily transported. Unit is shipped complete with special tools needed for installation.

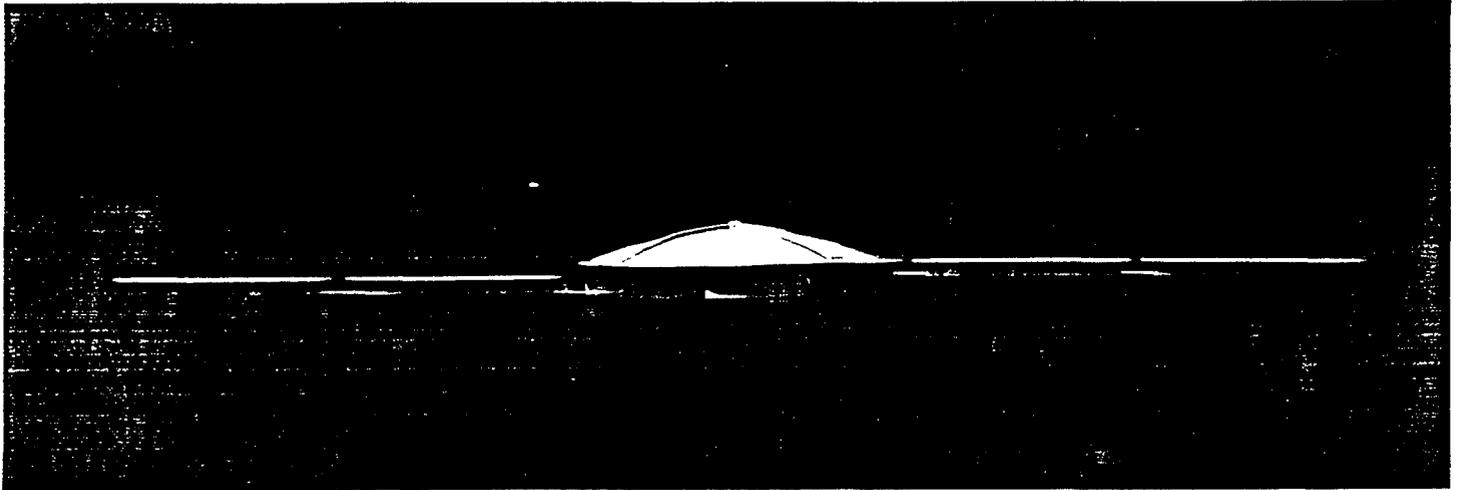


1,100-lb. horse walking across extra heavy top,  
designed to support moose or elk and accommodate  
snow loads of more than 6 feet. Optional.

PHONE (916) 527-1515

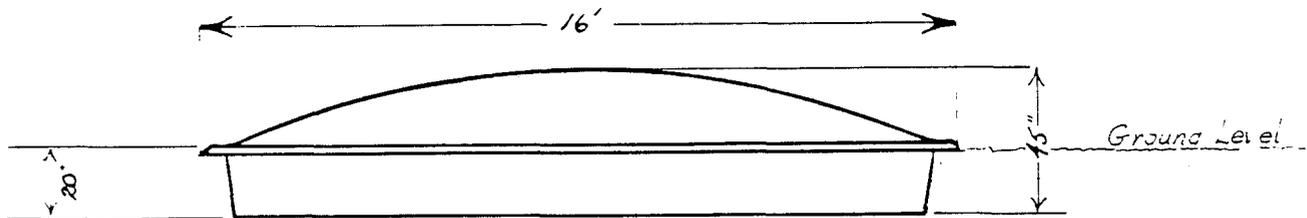
# ADDITIONAL USES FOR THE "RANGE GUZZLER"

We now have sheep troughs available for our 2,100-gallon unit. These troughs are ten feet long, eleven inches deep and 18 inches wide. The troughs installed at the higher elevation fill as the unit fills. When these troughs are emptied by the sheep, the shepherd opens the valve in the lower elevation troughs and fills the second set of troughs. When the unit has been emptied, he closes the valve and the unit is then ready to again collect rainwater. Each trough holds 100 gallons of water.



## PARABOLIC TANK COLLECTOR

Collecting Area ..... 200 Sq. Ft.  
Storage Capacity ..... 2,100 Gal.  
Rainfall required to fill unit ..... 17 In.  
Weight ..... 950 = Approx.



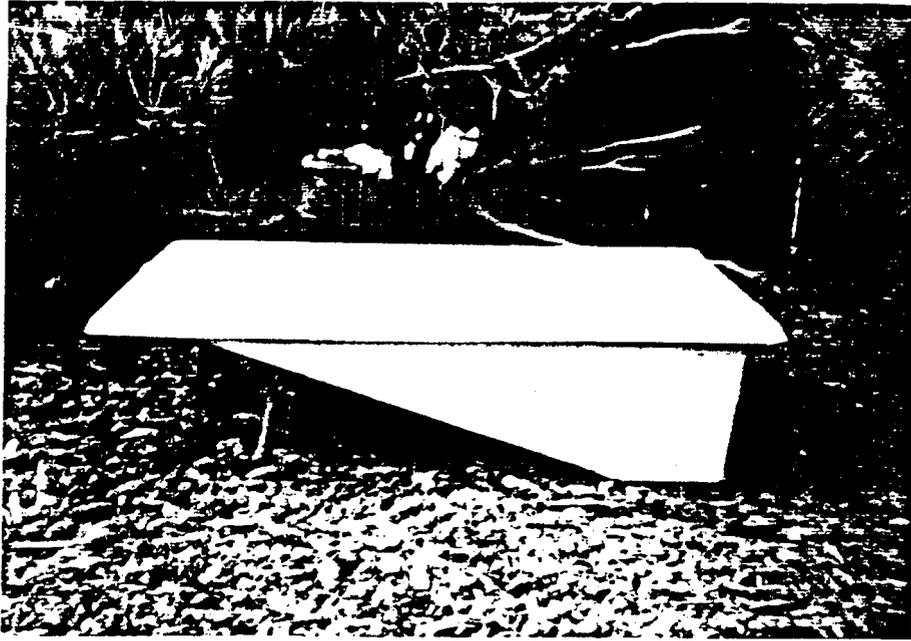
All of the water inside the unit is protected from evaporation.

PATENTS PENDING #419062 & #418822

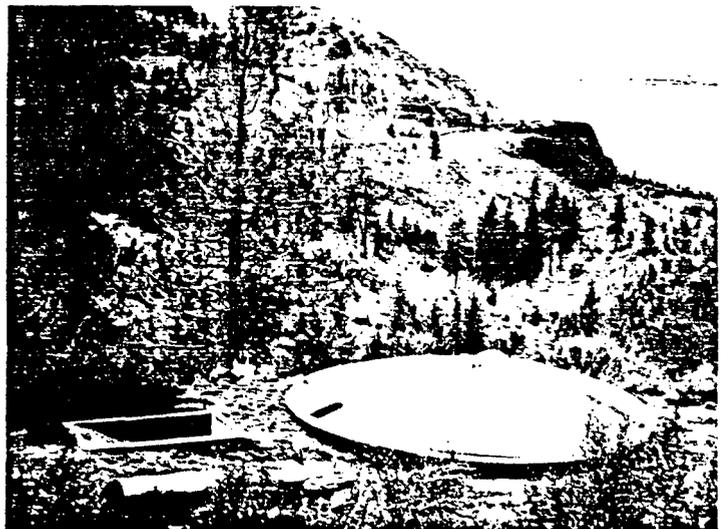
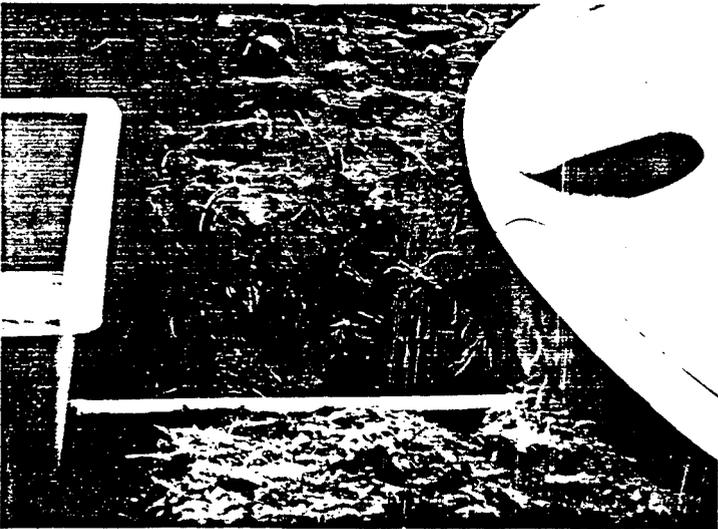
**FIBER ERECTORS, INC.**

P.O. Box 1009 • Red Bluff, CA 96080 • (916) 527-1515

# THE NEW "EXTERIOR DRINKING RAMP" For Attachment to the "Range Guzzler"



Six feet long, four feet wide, 20 inches deep — holds 100 gallons.



All of the water inside the unit is protected from evaporation.

The "Exterior Drinking Ramp" adapts our 2,100-gallon unit for small game as well as large game without the use of floats or valves. The ramp has a non-skid surface, so even new-born fawns can use it.

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
ANDALEX RESOURCES  
AND  
BUREAU OF LAND MANAGEMENT

Purpose: This Memorandum of Understanding (MOU) serves to outline project responsibilities and liabilities regarding use of federally owned equipment by Andalex on a cooperative wildlife mitigation (habitat enhancement) project.

Objective: Enhance a total of 50 acres of mule deer critical winter range in two project areas by plowing and seeding a browse/forb seed mix on 25 acres, or 50 percent, of the project areas.

Andalex Resources Responsibilities/Liabilities:

Provide suitable equipment with operators to pull brushland plow and rangeland drill.

Provide 210 lbs.(pls) of seed meeting specifications presented in the attached seed specification list.

Plow and seed 15 acres of the 30-acre project area west of Wildcat loadout and plow and seed 10 acres of the 20-acre project area southwest of the Wildcat loadout.

Agree to the following terms for use of government equipment.

Terms for Use of Government Equipment

Hold the BLM free from liability for any claims against them for damages caused during the use of the government equipment.

Repair or replace damaged, lost, or stolen equipment while in custody. Replacement will be made at fair market value of the equipment at the time of destruction or loss.

Routine periodic maintenance on government equipment while in custody.

Accept responsibility for transporting government equipment from Price BLM wareyard and returning it to the Price BLM wareyard.

BLM makes no warranty regarding the condition of equipment provided to Andalex.

BLM assumes no liability for damages of any kind resulting from the use of the equipment provided to Andalex.

BLM Responsibilities/Liabilities

Complete all environmental documentation on the 30-acre browse interseeding project area located due west of the Wildcat loadout and on the 20-acre project area located approximately 2.5 miles southwest of the Wildcat loadout.

Conduct an archaeological clearance on both project areas.

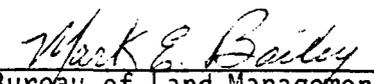
Provide 200 pounds of browse/forb seed mix to be used on the 20-acre project area.

Permit Andalex to use a brushland plow and a rangeland drill (see terms for use of government equipment) to accomplish the browse interseeding project.

Have a representative present onsite during all phases of enhancement work to oversee project implementation.

  
\_\_\_\_\_  
Andalex Resources

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Bureau of Land Management

11-20-89  
\_\_\_\_\_  
Date

SEED SPECIFICATIONS

<u>Species</u>	<u>Lbs./acre (PLS)</u>
Big sage (50% Wyoming, 50% Mountain)	1.0
Antelope bitterbrush <sup>1</sup>	2.0
Fourwing saltbush	3.0
Prostrate Kochia	.5
Utah serviceberry	.5
True mountain mahogany <sup>1</sup>	.5
Yellow sweetclover	.5
Small burnet	2.0
Common sainfoin	2.0
Alfalfa (Nomad/Ladak, Ranger)	<u>2.0</u>
	Total 14.0

<sup>1</sup>Seed source requirement:

Antelope bitterbrush: Maybell variety or Utah seed collected at elevation between 6,000 and 6,800 feet.

Fourwing saltbush: Rincon variety or seed collected at elevation between 5,500 and 6,800 feet and collected within 200 airline miles of project area.

Utah serviceberry, True mtn. mahogany: Collected at elevation between 5,500 and 6,800 feet and collected within 200 airline miles of project area.