



— BUREAU OF —
RECLAMATION

Why Test at BGNDRF?

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Research Facility Manager

Background

- **43 Acre Complex**
- **Primarily Focused on Pilot Scale Technologies**
- **Clients: Universities, Businesses, Entrepreneurs, Government Agencies etc.**
- **Indoor Test Bays, Outdoor Test Pads, 5-acre Agriculture Research Area, Evaporation Ponds**





Various Types of Testing Performed at BGNDRF

- **Proof of Concept**
- **Research and Development (R&D)**
- **Third Party Validation**
- **Reclamation Verification Testing**
- **Demonstration**

#1 – Variety of Waters Available at One Location

- **4 Brackish Groundwater Wells**
 - TDS: 1,200 to 5,900 mg/L
 - Warm Groundwater: 104 deg F, TDS of 1,200 mg/L
 - PFAS in 2 of 4 Wells
 - Water Chemistry on BGNDRF Website
- **Evaporation Pond Concentrate**
 - 20,000 to >200,000 mg/L
 - Pond Water Chemistry on BGNDRF Website

#1 – Continued

- **Special Water Shipped to BGNDRF Including:**
 - **Produced Water**
 - **Septage and Wastewater**
 - **Blended BGNDRF Well Water**
 - **Other**

#2 – Facility Use Fees Waived

2012 Fee Schedule (subject to change)	Price	Unit
Level 3 Engineer/Scientist	976	\$/Staff Day
Level 2 Engineer/Scientist	800	\$/ Staff Day
Level 1 Technicians	592	\$/ Staff Day
Interior Bay Rental	250	\$/week
Exterior Bay Rental	400	\$/week
Power	0.15	\$/kWhr
Water RO Permeate (Set up fees vary) †	10	\$/kgal
On-site groundwater	2	\$/kgal
Imported (Depends on source)		TBD

#2 – Facility Use Fees Waived

- **Facility Use Fees Waived Through September 30, 2020**
- **New Facility Use Fees Implemented October 1, 2020**
 - **Propose charges for electricity, water and equipment storage fees**

#3 – NMED Discharge Permit

- **The work and expense of getting a discharge permit is already done at BGNDRF**
 - **Discharge to our evaporation ponds**
 - **Discharge to the city waste water treatment plant with some upcoming restrictions**
 - **Land apply up to 4,200 mg/L water up to a specified volume per year**

#4 – Flexible Operating Times

- **Open 24 hrs/day, 7 days/week on request**

#5 – Local Affordable Labor

- **~\$12/hour Unskilled**
- **~\$25/hour Skilled with Some College Education**

#6 – Broad Project Exposure

- **Numerous Tours Throughout the Year**
 - **Pitch to Pilot Event**
 - **Congresswoman Torres Small and Group of Agriculture Specialists**
 - **Illinois Farm Bureau Young Leader Program**
 - **NM Legislative Science and Technology Committee**
 - **NMSUA Natural Resource Management Class**
 - **Two Nations One Water Conference Tour**
- **Option of Non-Public Exposure**

#7 – Two Nearby Universities

- **NMSU is ~60 miles away in Las Cruces**
 - Dr. Pei Xu
- **UTEP CIDS ~ 80 miles away in El Paso**
 - Dr. Shane Walker
- **3rd Party Validation**
- **Add Technical Expertise**
- **University equipment on site that might be available for collaborative efforts**
- **Reports**

#8 – BGNDRF Verification Report

- **Work with Dr. Zach Stoll, BGNDRF's Research Scientist**
 - Pay for his time
- **Planning meeting**
 - Discuss technology claims to be verified
 - Discuss minimum mandatory reporting requirements
 - Zach's involvement in the testing phase
- **Test Plan**
- **Testing and Data Collection**
- **Data Analysis by Zach**
- **Final Report – No Endorsements**

#9 – Annual WIN Workshop

- **Presentation of your work to an audience with a wide range of interests**
- **Rich networking environment**

#10 – Amenities of BGNDRF

- Office Space
- Water Lab
- Conference Room
- Service-Oriented Staff
- Philosophy of “Let’s find a way to do it”

Questions Regarding Bringing a Project to BGNDRF

- **Talk to myself or any of the staff and they can help answer questions**
- **Tours – Zach will be in the laboratory and can answer questions**

Questions?

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