Pyramid Lake Paiute Tribe

Pyramid Lake Energy Project
Geothermal Assessment
Pyramid Lake Paiute Reservation

40 miles north of Reno

475,000 acres

Pyramid Lake 125,000 surface acres
Northern Reservation Needles Area
Needles Geyser

- Exploration conducted in 1968
- Hot water was found at 160 degrees f
- Was not considered feasible
PLEP History

- Negotiations began with developers in 2000
- It was determined that the Tribe wanted to participate in the income stream 2002
- Funding was solicited and received by the BIA Mineral Assessment Program in 2003
- Funding was solicited and received through earmark funding in 2004 and 2005
PLEP Geothermal Assessment Program

- 2003 Technical Consultant was contracted to outline assessment needs and program timeframe.
- 2004 GIS data base was developed and historical reports compiled by UNR
- 2004 Aerial review and analysis, and surface exploration began
PLEP Geothermal Assessment Program (cont.)

- 2005 May  Aerial analysis and surface exploration completed
- 2005 June  Final report completed and survey areas identified.
- 2005 July  Gravity and Magnetic surveys started
- 2005 August Final Surveys submitted
PLEP Geothermal Assessment Program (cont.)

- 2005 September gradient exploration sites selected
- 2005 October Drilling contractor mobilizes and begins gradient exploratory drilling
PL Tribal Council
Tribal Chairman- Norman Harry
Project Administrator- John Jackson
Project Coordinator- Donna Noel

Technical Consultant
High Desert Geoculture
Shuman Moore
Mack Shelor

Drilling
Welsco Drilling
Jim Biffle

Geologist
Ehni Consulting
John Ehni

GIS/Research Group
University of Nevada Reno
Center for Geothermal Research
Mark Coolbaugh

Permitting/Regulatory Advisor
Holland & Knight
Don Cory

Geophysical Services
Magee Geophysical Services
Future Activities 2005

More drilling exploration
Implement Tribal Business Ordinance
Implement Corporate By Laws
Energy Development
for
The Pyramid Lake Paiute Tribe
Geophysical Investigation
Geophysical Investigations

- Historical information collection essentially done.
- Hyperspectral Analysis Done.
- Compilation of data with GIS data nearing completion.
- Field data collection near completion.
- Detailed Magnetic and Gravity surveys in progress.
- Selection of location(s) for gradient hole and slim hole (small geothermal production well drilling) to be complete within the next 60 to 90 days.
- Final report due by 12-31-05.
3 Areas

Stars =
- springs and wells
  - red > 37C
  - orange > 26C
  - yellow > 20C
  - green < 20C
  - white = no info

HyMap Colors
2 Northern Areas

Stars = springs and wells
red > 37C
orange > 26C
yellow > 20C
green < 20C
white = no info

Iso Gravity Contours
HyMap Colors
2 Northern Areas

Stars = springs and wells
red > 37°C
orange > 26°C
yellow > 20°C
green < 20°C
white = no info

Iso Gravity Contours
Magnetics Colors
Summary

• Geothermal geophysics investigations to be complete by 12-31-05 – high degree of success expected
• There are a large number of renewable electricity and fuel options available to the The Pyramid Lake Paiute Tribe – Geothermal is best.
• There are “down-stream” business opportunities (Ethanol/Aquaculture/Greenhouses) available
• HDG (Shuman Moore and Mack Shelor) looks forward to assisting the PLPT in making informed decisions and managing these opportunities – we thank the PLPT for this working relationship.