

The Confederated Tribes Of Warm Springs

Presentation to DOE Department of Renewable Energy

October , 2007

***For
Geothermal Development Potential
On
Confederated Tribes of Warm Springs
Reservation of Oregon Lands***

Prepared by: Warm Springs Power & Water Enterprises



History With Energy Developments

- Intro to Power business in 1955 with the development of the Pelton Project.
- 1970 with the installation of three 3 MW steam turbines at Warm Springs Forest Products Industries (WSFPI).
- 1982 completed the installation of the Pelton Reregulating Dam Hydroelectric Project
- 1990 begin preliminary Geothermal reconnaissance
- 2003 begin wind energy assessment on tribal lands, currently started phase two, will be reviewing that program next.
- 2004 Working with Tribal, State, Federal and private firms to expand Biomass at WSFPI complex. Replacing existing units with one 20 Mw unit Co-Gen plant.

CTWS Geothermal Assessment Program

Warm Springs Power & Water is the business entity of the Tribes charged with managing energy developments and investigating development opportunities.

WSPWE has a Board of Directors and operates under a Plan of Operations.

Project Participants

- Tribal Council, 11 members
- WSPWE
- DW McClain Associates, Project oversight,
- GeothermEx, Inc.
- Power Systems Engineers, Inc
- Warm Springs GEO Visions Enterprises
- CTWS Natural Resources Branch

Objectives

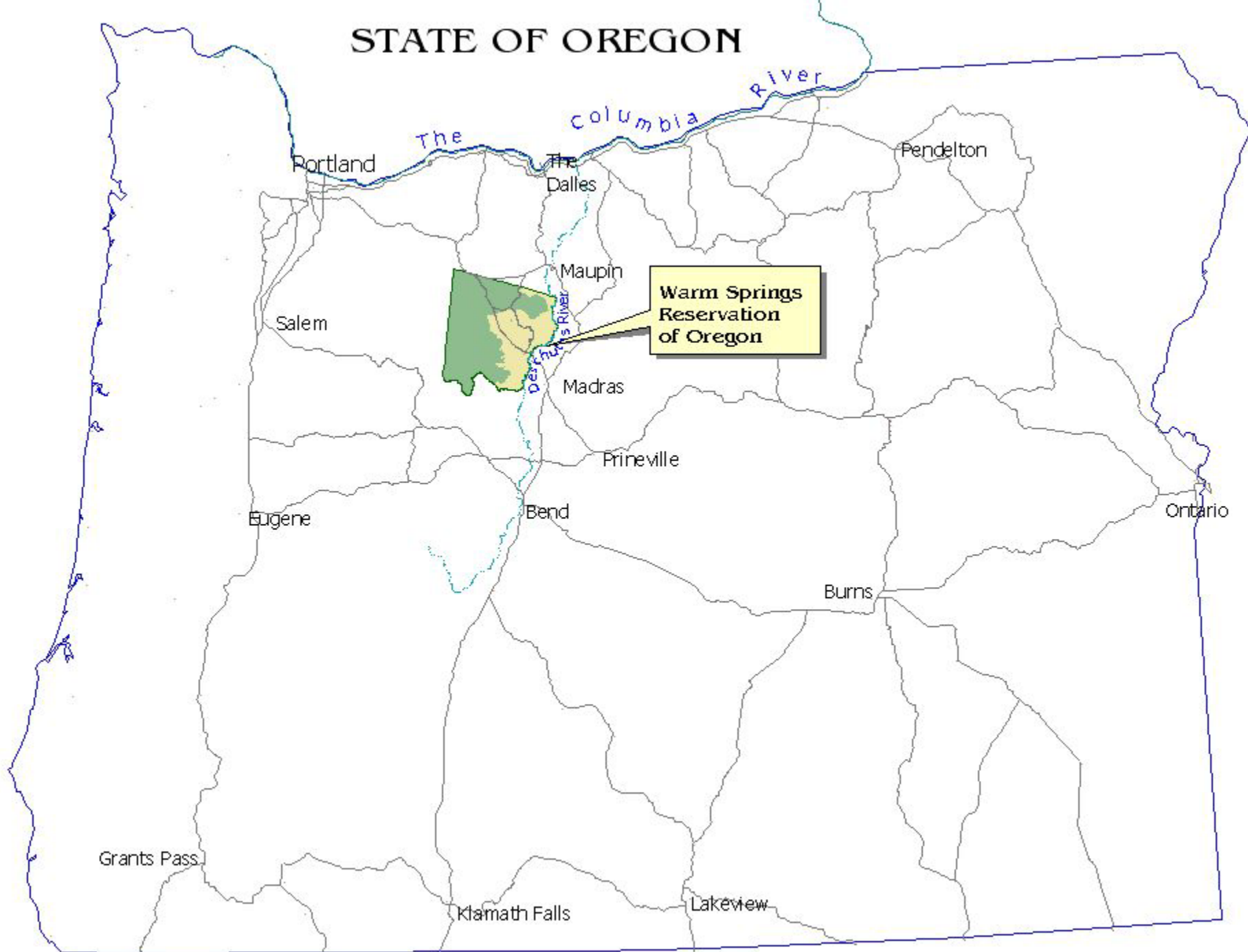
- To investigate the possibilities of Geothermal energy development.
- Discovery of any significant environmental barriers.
- Review transmission interconnection options.
- To review the information that was compiled by Cal Energy back in 1990.
- Is there potential for a commercial development of a geothermal project.
- What is the current environmental constraints for such a development.
- What infrastructure is necessary to interconnect a development
- What are current energy market conditions
- Economic modeling
 - Market pricing
 - Interconnection costs
 - Social acceptance of such a development
 - Preliminary financing



Geothermal Exploration Summary

- January 1990 Tribal Council visits Geothermal developments.
- June 1990 Tribal Council enters into MOU with Cal Energy.
- November 1990 Cal Energy submitted report to Tribal Council.
- Conclusion was promising for resource potential
- Energy Markets not at level to proceed.
- 2005 CTWS receives grant from DOE to confirm previous findings and preliminary review the next step in exploration stage.

STATE OF OREGON



Area of interest

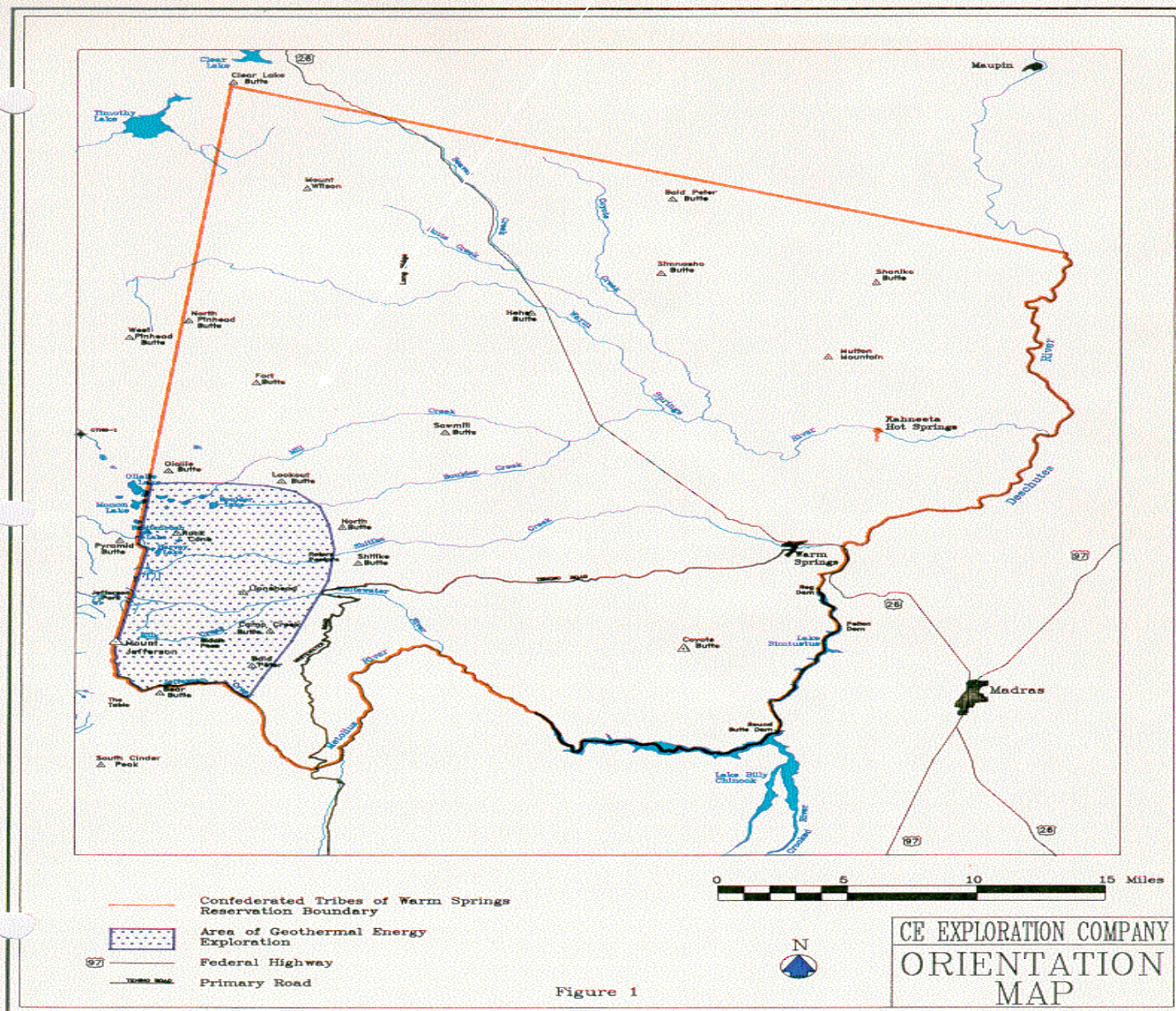


Figure 1

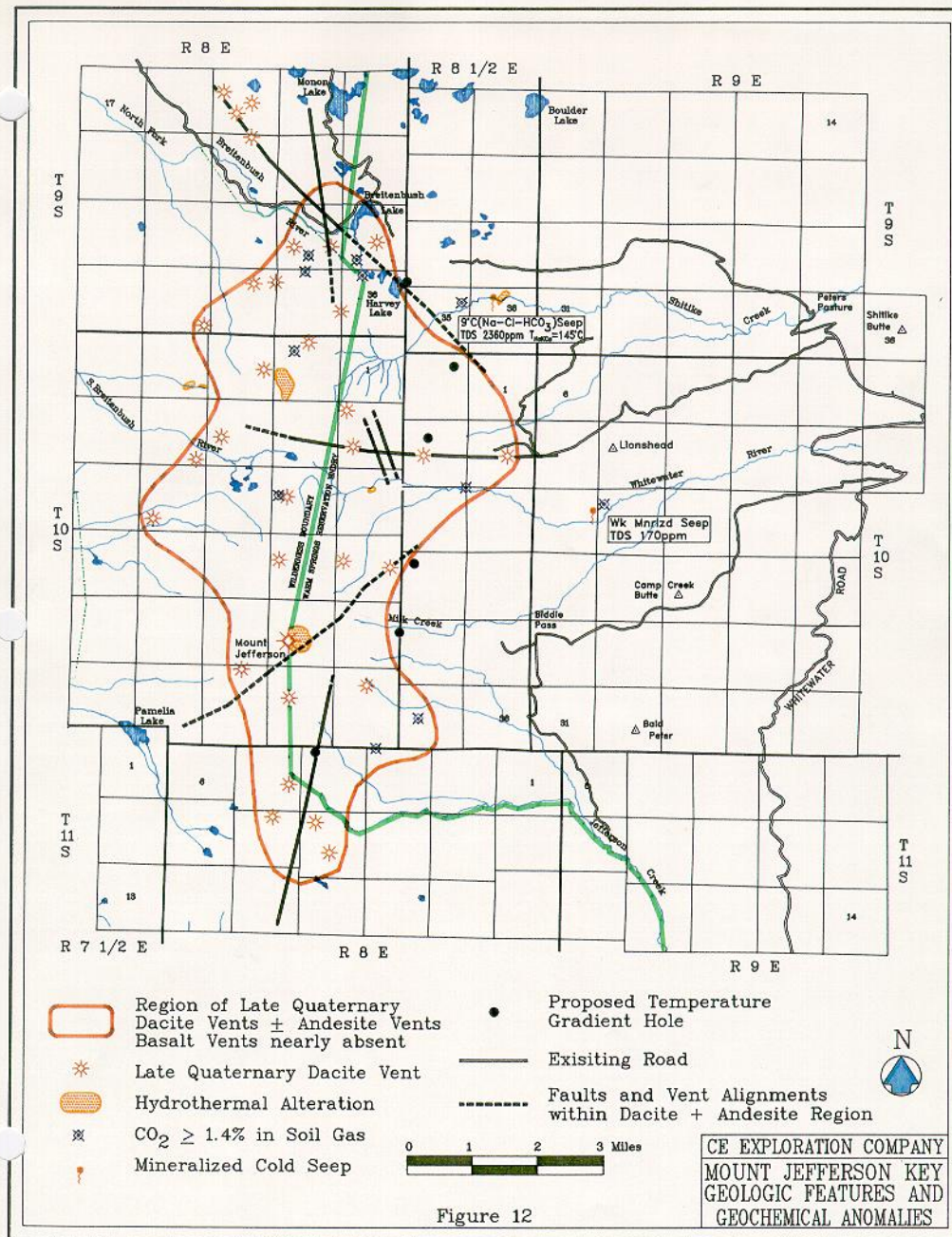


Figure 12

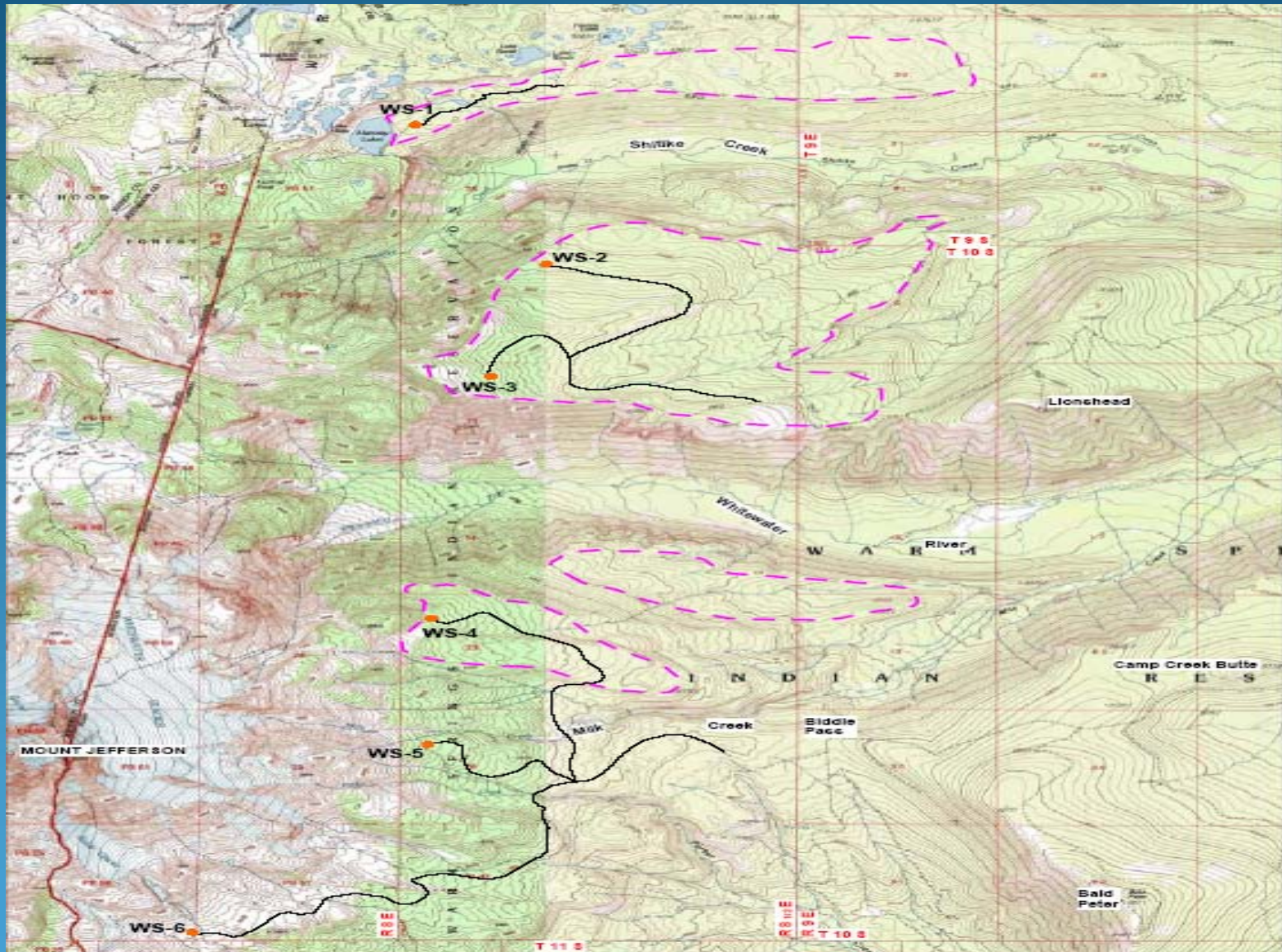


View of Water Meadows & Milk Creek from Lionshead





Exploration Well Locations



Proposed site for WS2 & WS3 test holes



MINERALS AND ENERGY RESOURCES OF THE WARM SPRINGS INDIAN RESERVATION

excerpt for IRMP Document of CTWS

- **Mission Statement:** The prudent development of natural resources (consistent with the Tribal cultural framework), for the benefit of the Tribal members.

Conclusions & Next Steps

- Continue to explore funding opportunities for next step.
 - Next step is to drill two exploratory well down to a maximum 5,000 foot depth well.
 - Initiate due diligence review on environmental impacts and prepare mitigation proposals for impact.
- Resource is considered high probability.
- Continue to monitor Energy markets for price movement.
- There are environmental issues that were identified, however initial review showed that these can be mitigated for.
- Transmission is one of the biggest challenges for this resource development. It is remote and though a timber landscape. As energy markets move the economics of this challenge will decrease.
- Develop information material for Tribal Member
- Complete energy market development strategy for WSIR.
- CTWS has applied for funding assistance though the US DOI Energy & Mineral grant program to implement the next phase.

Closing

- Tribal Council supports continued review for possible future exploration.
- Market driven decisions to advance to development stage.
- Natural resource considerations paramount in development options.



Questions or comments?

Thank you for your time