over airport development have dragged on for several years with no amendment to the airport lease.

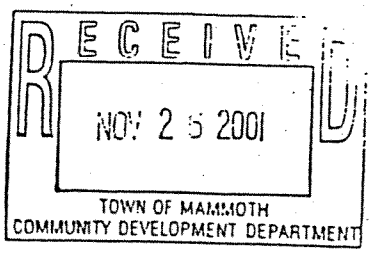
Asked how Inyo will respond to problems with LADWP, County Counsel Paul Bruce said that the county "has been examining a number of options in view of ongoing difficulties."

N. Rob Perlman, Mammoth Lakes, California

Response to Comment N-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

Mr. Bill Taylor, Senior Planner
Mammoth Lakes Town Offices
P. O. Box 1609
Mammoth Lakes, CA 93546-1609



Dear Mr. Taylor:

I have reviewed the Draft Supplement to Subsequent Environmental Impact Report (SSEIR) for the Mammoth Yosemite Airport Expansion Project, and would like to present my comments.

First, I feel the SSEIR is very complete and very good. Much additional information is presented which makes this document better than the already good previous efforts. It reinforces the choice of "our" airport as the best one for this area. O-1

The Mammoth Yosemite Airport is an existing airport, and has been there since the World War II time. Only improvements to it are proposed, not any large and new developments. The area has been used as an airport for nearly 50 years; other nearby uses have gone on at least as long, if not longer. In no way is the area or its environment "pristine" or "untouched".

These improvements are nothing new. The need for air travel was incorporated in the Town General Plan in 1986, after much discussion and many meetings. More discussion ensued when the Town proposed purchasing the airport, which was done in 1991 after passage of a referendum of Mammoth Lakes voters. Expanded air service from an expanded airport was included in the Town Vision Statement in 1992. During this time, there was scheduled air service at various times and levels. A hearing on the Airport Environmental Assessment was held on 14 November 2000. Airport and air service improvements have been goals of Mammoth Lakes for a long time.

It would be more convenient, and less polluting, for guests to come to Mammoth by short air flights, rather than by long drives in their cars. Many of these guests would probably come from other parts of our country, thereby broadening our market base. These guests would probably stay for a week, and "fill up" the town midweek, when it is now usually empty. They would stay in new and improved facilities that already exist or are being constructed. Statistics from Vail Resorts Inc. annual reports suggest that about 25% of snowsport visitor days at their resorts come from guests arriving and departing from Vail/Eagle County airport. A similar percentage could be expected for Mammoth from the Mammoth Yosemite Airport.

The recreational activities that Mammoth area guests want are overwhelmingly done in areas far from the airport. Few are done nearby, and it is unlikely that they would be disturbed by airport activities, since airplanes like the 757 and 737 are extremely quiet.

Furthermore, sprawl is impossible. Mammoth Lakes town is surrounded by US Forest Service land, and major land exchanges would be required. Presently, none are contemplated.

Safety issues are not really a concern. The proposed partner, American Airlines, has examined the airport carefully; they are not going to risk $130,000,000 airplanes in marginal situations! A personal examination of FAA/NTSB Accident Reports from 1992 to early 1999 suggests that the present Mammoth Airport is no more "unsafe" than similar airports used by other Western wintersports resorts. Furthermore, when there was air service at the Mammoth Airport, it is understood that flight cancellations due to weather were relatively infrequent.

Finally, as explained in the SSEIR, the Bishop Airport is a bad choice for several reasons. The two most important are that: 1) it is 47 miles away from Mammoth Lakes, rather than 7 miles, and 2) Mammoth Lakes has no control over it. Bishop Airport is in another county, whose supervisors we cannot vote for. This situation would be impossible to live with.

Please include these comments in the records of these proceedings.

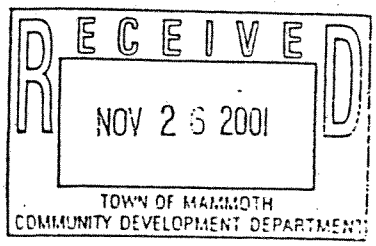
Rick Jali
P. O. Box 1717
Mammoth Lakes, CA 93546

O. Rick Jali, Mammoth Lakes, California

Response to Comment O-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

ALLAN DAY SAPP
850 SHERIDAN LANE
GARDNERVILLE, NEVADA 89410



November 26, 2001

Mr. Bill Taylor
Senior Planner
Mammoth Lakes Town Offices
PO Box 1609
Mammoth Lakes, CA 93546-1609

Dear Mr. Taylor:

In connection with the CEQA comment period for the Mammoth Yosemite Airport expansion, I would like to offer the following comments. As an avid skier and proponent of Mammoth, it has pained me to watch Mammoth's competitive position slip over the last two decades, relative to the Utah and Colorado resorts, as scheduled air service disappeared from the Eastern Sierra. P-1

In recent years, I have been unable to attract any of my California friends to visit the Mammoth area because of the difficulty and time required by the winter drive. Most find it easier, quicker and more cost effective to simply hop a plane to Salt Lake City or Colorado.

I have witnessed small, vocal minorities in several other California resorts oppose growth and economic development. This "I've got mine, screw you" attitude can seriously handicap the silent majority working to live in a vibrant, scenic, prosperous community.

The planned improvements to the Mammoth Yosemite Airport would allow Mammoth to rebuild the economic foundation of the region. The return of scheduled air service, along with the real estate and ski area developments currently going on, will enable Mammoth to once again gain its share of the resort and tourism market.

Sincerely,

Allan D. Sapp

cc: Mammoth Times

P. Allan D. Sapp, Garnerville, Nevada

Response to Comment P-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

November 20, 2001

Bill Taylor
PO Box 1609
Mammoth Lakes, CA 93546-1609

Dear Bill:

The expansion of the Mammoth Yosemite airport is a tremendous benefit to the region. Expansion of the airport will not only help alleviate traffic congestion in the Eastern Sierra corridor, it will greatly benefit the surrounding communities by providing a much needed link in regional transit services. Q-1

After reviewing the supplementary Environmental Impact Report, I am fully convinced that there will be no negative impact on the flora and fauna in the region. The research was done in a thorough, precise manner with great attention paid to potentially threatened species.

There is no reason to further delay the process. All guidelines were follwed correctly, it is now time to move forward with the expansion of the Mammoth Yosemite airport.

Sincerely,

Karen McGillis

Q. Karen McGillis

Response to Comment Q-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

To Whom It May Concern:

My wife and I have been full time homeowner residents of Mammoth Lakes since 1989. We have watched and listened carefully to the Pro Development supporters and the Anti Growth proponents. We have listened carefully while our Town Counsel struggled with the many proposals submitted by the representatives of the Mountain, Real Estate Developers, Permanent and Second home owner Residents. We have found ourselves agreeing at times with the position of each of the participants. R-1

My five grandson's ages 10 T0 14 have convinced us that the development of Mammoth Lakes as an All Season's recreational area is the correct decision. They live in southern California in big city environments and have come to cherish their time spent in the rural, safe and relaxed atmosphere of Mammoth Lakes. They know every ski run by name and spend a great amount of time persuading their parents to bring them here.

In my younger years Arrowhead, Big Bear, Crestline Yosemite, Tahoe were the area of choice when looking for rural mountain winter and summer sports. These, except for Yosemite which is filled to capacity annually, are now bedroom communities to larger cities.

The Forest's and the mountains belong to the people and the responsibilities of the people are to use their skills to develop the best community possible. I believe that the Development Plan crafted over the past 20 years by the Mammoth Lake community, to reduce automobile traffic, create a safe and efficient Air Transportation system, to open the forest and mountain's to their rightful owners, the people, is sound, well thought out and meets Environmental Standards.

Need's for development and change will always be a demand on society, it is incumbent on the people to do their best as Guardians of The Environment.

Fred Howley
P.O. Box 3038
Mammoth Lakes, CA 93546

R. Fred Howley, Mammoth Lakes, California

Response to Comment R-1

The commentor expresses support for the development plans crafted by the Mammoth Lake community. The Town acknowledges these comments and has made them part of the official record for this project.

November 22, 2001

Bill Taylor, Senior Planner
Mammoth Lakes Town Office
P O Box 1609
Mammoth Lakes, CA 93546-1609

Re: Mammoth Lakes Airport CEQA

Dear Mr Taylor:

[We submit the following comments in support of the much needed improvements for the Mammoth Lakes Airport.] S-1

- As residents of the Mammoth Lakes/June Lake communities for over 30 years, we were here in the 80's to enjoy the air service run by the ski area and others. We very much look forward again to the convenience of having a commercial airline service to use when weather does not allow us to fly our own private plane.

- We have visited several other ski towns that have commercial air service, such as Sun Valley, Aspen, and Vail and have seen how it creates a more pedestrian friendly town. With air service, Mammoth could become less reliant on the automobile, resulting in fewer cars in town and reduced pollution and congestion.

- The airport could be, and has been, used for commercial service as it is today. With the future expansion and demand, it is very probable that a commercial airline service with frequent flights of small and noisy airplanes would step in to fill this need. American Airlines which requires the proposed safety upgrades is planning to use the Boeing 757 – one of the quietest and most efficient aircraft in service today.

- As private pilots, we look forward to the upgrades to the existing airport facilities, for ourselves and other private pilots. Those who oppose this project are really prohibiting the Town in making safety improvements at the airport.

Our understanding of the FAA's EA is that the airport project has no significant adverse impacts and, in fact, has positive impacts which will enhance the economy and living conditions of those of us who live in this isolated area of California. We, therefore, urge you to recommend approval of this project.

Sincerely,

Don & Pam Rake

Don & Pam Rake
P O Box 571
June Lake, CA 93529

S. Don & Pam Rake, June Lake, California

Response to Comment S-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

from the desk of: **Philip R. Jobe**
21115 Banlynn Court
Topanga, CA 90290
818-883-5507
818-883-6538 Fax

Mammoth Mountain Town Offices
C/O Bill Taylor
Senior Planner
PO Box 1609
Mammoth Lakes, CA 93546-1609

Subject: In Favor of Mammoth Yosemite Airport Safety Improvements and Resuming Commercial Air Service T-1

Dear Mr. Taylor:

I am a native Californian and frequent Eastern Sierra Nevada traveler, visitor, and user. My parents are retired in Minden, Nevada and still have property in Kirkwood Meadows, Ca. I learned to ski in Yosemite's Badger Pass and have spent many summers and vacations there and other areas of the Sierra. I have also encouraged my children to use and appreciate the Sierra Nevada Mountains, forests, and recreational areas. I believe that the Eastern Sierra is one of the most beautiful areas of the country and should be seen and enjoyed by all who are willing to make the trip. Furthermore, unlike other areas of the Sierra, Yosemite in particular, I believe Mammoth Lakes is uniquely capable of accommodating the planned commercial airport without negative impact to the surrounding area. I believe that it will benefit the very sensitive Yosemite National Park by enabling more travelers to go in from the east by bus and reduce the number of personal vehicles and related negative impacts. And, as a Los Angeles resident that looks forward to spending more time skiing than driving, I believe that commercial air travel to Mammoth will help reduce the vehicles going to and crowding the streets of Mammoth! Though air travel will increase the numbers of people going to the Eastern Sierra and using Mammoth Mountain ski area, I very strongly believe that the appreciation that they take home with them will further help protect and improve the beautiful treasures of Mammoth and the Eastern Sierra!

Sincerely,

Philip R. Jobe

cc: Letters to the editor
PO Box 3929
Mammoth Lakes, CA 93546

T. Philip R. Jobe, Topanga, California

Response to Comment T-1

The commentor expresses support for the project. The Town acknowledges these comments and has made them part of the official record for the project.

November 21, 2001

Town Offices,
C/O Bill Taylor, Senior Planner,
PO Box 1609
Mammoth Lakes, CA 93546-1609

Dear Mr. Taylor:

This letter is to support commercial air service into Yosemite/Mammoth airport. The CEQA process provides a complete environmental review. I want to highlight some of the benefits of enhanced commercial air service. U-1

- Greater exposure of citizens to the environmental wonders of the Owens Valley and Yosemite region.
- Reduced traffic on US highway 395 and a corresponding reduction in auto emissions, traffic, and automobile accidents.
- The ability for injured hikers and skiers to fly out rather than to take long cars trips.

On a more personal note, I work with at San Diego State University and we have are conducting a major cancer prevention project funded by the National Cancer Institute. We are attempting to institute a sun-safety program at Mammoth Mountain that will reduce the epidemic of skin cancer at high altitudes. A commercial airport would greatly facilitate this project and assist in our battle against skin cancer.

I know there are some environmental concerns about such a project. Please consider the health and environmental benefits that I have suggested will accrue from such a project.

Sincerely yours

Dr. Peter Andersen
3897 Hidden Trail Drive
Jamul, CA 91935

U. Dr. Peter Anderson, Jamul, California

Response to Comment U-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

MARY WALKER
Post Office Box 1382
Mammoth Lakes, California 93546
760.934.2362

November 23, 2001

Mr. Bill Taylor
Senior Planner
Town of Mammoth Lakes
Post Office Box 1609
Mammoth Lakes, California 93546-1609

Dear Bill:

This letter is written in support of the Mammoth Yosemite Airport expansion project. After review of the Draft Supplement to Subsequent Environmental Impact Report (SSEIR) for the Mammoth Yosemite Airport Expansion Project, I feel the environmental document to be complete and supports the location of the already existing airport as the logically best one for the Eastern Sierra. V-1

As the existing airport, the Mammoth Yosemite Airport has stood the test of time. The proposed improvements for the airport would only enhance an already existing infrastructure and thus support the planned expansion and developments.

~~The improvements are nothing new and have been in the plans~~ for two decades. The need for air travel was clearly established and incorporated in The Town General Plan in 1986. Years of meetings with community support were held and the issue were addressed and a town referendum of the Mammoth Lakes voters. Airport and air service improvements have been goals of Mammoth Lakes for a long time.

Air service is the environmental choice for Mammoth Lakes and the surrounding communities. It would be far less polluting for guests to come to Mammoth by short air flights, rather than by long drives in their cars. Air service would also help to provide economic stability to the area and increase mid-week visits by guests reducing the huge impact of the weekend tourist season.

I am a long time supporter of the expansion of the Mammoth Yosemite Airport and cannot wait until scheduled commercial air service returns to the Mammoth area.

Please include these comments in the records of these proceedings.

Very truly yours,

Mary Walker

Mary Walker

V. Mary Walker, Mammoth Lakes, California

Response to Comment V-1

The commentor expresses support for the project and the adequacy of the EIR. The Town acknowledges these comments and has made them part of the official record for the project.

November 26, 2001

To Whom It May Concern:

I live in Los Angeles and am looking forward to the upcoming season. Knowing several Intrawest employees, I have been educated on the several phases of their involvement. I have been going to Whistler for 20 years and have seen what Intrawest can do for a ski resort. But the key element is the AIRPORT! W-1

We in the southern part of California are looking very forward to being able to get to Mammoth by jet.. To people who are reluctant to do the drive (min.5.5hrs), I have been spreading the word of this fabulous new airport and how there will be flights from other part of the U.S. whom didn't have access before now do to the jewel of California. "Great idea".

Maybe I'll start going back to Mammoth. This airport is essential to the whole picture of success in creating a world-class resort. Mammoth has the potential the same way Whistler did 20yrs ago. There are always myopic people who just can't grasp a vision. Let's hope they are the minority. Last note, is that Bishop is nice and all but it is not the attraction. The airport is already there; it's a no brainer.

Thanks avid skier,

James Laing (jlbink@aol.com)

W. James Laing

Response to Comment W-1

The commentor expresses support for the project. The Town acknowledges these comments and has made them part of the official record for the project.

November 26, 200

Town of Mammoth Lakes
Attn: Bill Taylor, Senior Planner

Re: Mammoth Yosemite Airport (CEQA)

Dear Mr. Taylor:

I read in the Mammoth Times that the public comment period for the CEQA process closes this afternoon.

I support the effort to bring commercial air service to the Mammoth Yosemite Airport. As a 25 year Mammoth resident who has been active in community affairs for many years, I know that there are numerous reasons to support this project. I would like to briefly discuss the one reason, which has always been of paramount importance to me. X-1

Looking back over Mammoth's economic health for the last 25 years, I am always mindful of the ebb and flow of economic prosperity in this community. We have sometimes come close to achieving a local economy that provides income and job stability, but we have never quite made the grade. I have seen first hand the flight of individuals and small business from our town when the financial future seemed bleak and reasonable goals of steady jobs and providing for the future seemed unattainable. It seems that, now, that we have a rare opportunity to achieve long term financial health and stability. The further development of the airport is a vital part of the community wide effort to bring the benefits of financial prosperity to Mammoth Lakes.

Sincerely,

Rick Bramble

X. Rick Bramble

Response to Comment X-1

The commentor expresses support for the project. The Town acknowledges these comments and has made them part of the official record for the project.

Stephen Kalish
892 Rimrock Drive
Swall Meadows, CA 93514

Bill Manning, Airport Manager
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546
Sent via telefax to: 760.934.8608 and 760.934.7493

26 November 2001

Re: Draft SSEIR for expansion of the Mammoth-Yosemite Airport

Dear Mr. Manning:

I offer the following comments in response to the Draft SSEIR for the proposed Mammoth-Yosemite Airport expansion. I am a full-time resident of Mono County, and have a number of concerns regarding the proposal to bring Boeing 757 aircraft to the local airport, and specific questions regarding the quality, character and adequacy of analysis provided in Section IV: Alternatives.

1. Safety. The Draft SSEIR minimizes safety issues related to bringing large commercial jets in to the local airport. The specific consideration of safety, and the relative safety of using the Mammoth-Yosemite Airport (in either its present configuration or "upgraded") *vis-a-vis* other area airports is not adequately evaluated or addressed, in either the Draft SSEIR or the previously circulated EA for the FAA completed last year and selectively incorporated into the Draft SSEIR. Topography immediately adjacent to the airport, close proximity to Highway 395, high elevation, winter weather conditions, and lack of a cross-wind runway all downgrade the safety of upgrading the airport to accommodate local 757 service. Occasional strong winds and turbulence, frequent cross-winds, possible wind shear and hostile winter flying conditions are not evaluated as a negative environmental impact on the flying- and flight-path-located- public. These are, I would argue, serious and substantial issues that require impartial analysis and discussion prior to adoption of a final SSEIR. Y-1

2. Aircraft Diversion. How often are planes diverted away from, or unable to depart from, the Mammoth-Yosemite Airport? (Last Wednesday was a classic example: cross-winds steady at 39, gusting to 65 knots.) Are the records of the frequency of Alpha Air diversions available—certainly there must be local records of how many times a bus was sent to the Bishop Airport to drop-off or pick-up Mammoth-bound skiers who could not be flown into the Mammoth Airport due to hazardous flying conditions that were non-existent at Bishop? This current and historic pattern of aircraft diversion cannot be mitigated under the "preferred alternative" and speaks to the need to adopt an alternative that does not attempt to bring Boeing 757s to Mammoth. Y-2

3. A Safer Alternative, Unreasonably Rejected. Section IV of the Draft SSEIR, Alternatives, purports to evaluate reasonable alternatives to the expansion of the Mammoth-Yosemite Airport, and yet the alternatives evaluated all come down to variations on a single theme: a long runway, a longer runway, or the longest runway. Other alternatives are summarily rejected (more on this below). This is certainly not the kind of analysis required by CEQA Sec. 15126. Most egregious is rejection of the off site alternative, the Bishop Airport, as an infeasible alternative, and stated "Reasons for Eliminating Alternative 8 —Develop Another Airport in the Region" (4.4.3). The following six subparagraphs refer to, quote from, and raise questions about, the seven paragraphs of 4.4.3 in the Draft SSEIR. Y-3

- "Access from Bishop Airport...would require drivers to pass through downtown Bishop along a two-lane residential street and through a major downtown intersection. This would generate neighborhood compatibility...issues in Bishop..." (4.4.3) This argument is specious at best, suggesting that the only access to the Bishop Airport is via East Line Drive. The fact is that Wye Road connects with the north end of Bishop, does not encounter any residential neighborhood, and with a minor pavement extension to the Airport terminal would provide quicker and shorter access to Mammoth than does East Line Drive. Won't the Town of Mammoth Lakes here admit the obvious, that this first and primary objection to Alternative 8 is overblown and not insurmountable?

- "The primary population center of Bishop, California is located within one to five miles of the Bishop Airport and directly under the flight path for the east-west runway." (4.4.3) Another specious argument. Bishop's east-west runway (7-25) is neither the primary nor secondary runway, neither the longest nor second-longest runway, neither the greatest load-bearing nor second-greatest load bearing runway at the Bishop Airport. The east-west runway is the shortest, least developed, and by far the least used runway at the Bishop Airport (except for the 4th of July, when the town gathers there for fireworks, with many exiting via Wye Road). The fact is that runway 7-25 is almost never used as a runway at all, and neither the primary runway (12-30, 7948 ft.), nor the secondary runway (16/34, 5600 ft.) has a flight path over the center of Bishop. Won't the Town of Mammoth Lakes here admit the obvious, that this second objection to Alternative 8 is a red-herring, hardly worth mentioning, and certainly no reason to declare Alternative 8 infeasible?

- "Moreover U.S. Highway 395 between Bishop and Mammoth Lakes has a steep grade making for difficult driving during periods of inclement winter weather.." (4.4.3) This is for all intents and purposes another specious argument, as it is most unlikely that any commercial planes would be landing or taking-off from Mammoth-Yosemite Airport if Highway 395 was impassable (not to mention that the same highway continues north to Mammoth Lakes, and would most likely be in worse shape the father north one drives towards Mammoth.) Won't the Town admit the obvious, that during periods of inclement winter weather it would be less hazardous to fly to Bishop and drive from there to Mammoth Lakes than to try landing at Mammoth-Yosemite Airport? And that in fact diverted planes would in all likelihood most likely land in Bishop anyway, and the Mountain will be happy to send a bus down Sherwin Grade to pick up its passengers and bring them and their money to Mammoth?

Y-3

- "The airfield at Bishop Airport is currently not certified for FAR Part 139..." (4.4.3) Another self-defeating argument: if Alternative 8 were seriously evaluated/considered/adopted and funded obtaining Part 139 status for the Bishop Airport would be essentially a mere formality, mostly a matter of paperwork. Does the Town of Mammoth Lakes really believe that given a choice of landing at the (relatively safe) Bishop Airport or landing at the (relatively unsafe) Mammoth-Yosemite Airport, that "...it is uncertain as to whether the air carriers would opt to serve the Mammoth Lakes market from Bishop airport" (4.4.3)?

- "Representatives from Bishop indicated their potential plans to attract commuter service to Bishop Airport." (4.4.3, paragraph 5) "However, they are not planning on obtaining an FAR Part 139 certification because of the high costs of upgrading the facilities to meet the requirements for commuter operations." (4.4.3, paragraph 6) Is it the Town of Mammoth's position that if the money being requested for Mammoth-Yosemite Airport upgrades were diverted to Bishop Airport that Bishop would not be interested in the money, and would decline to upgrade to a Regional Airport, complete with FAR Part 139

certification? Isn't the real issue that there can be at most one commercial airport in the Eastern Sierra, and that Bishop Airport (Alternative 8) is deemed infeasible primarily because Mammoth Lakes is trying to grab all available funds for themselves?

- "Based upon all of the above reasons, this alternative was considered to be infeasible and would no meet project objectives and was eliminated from further consideration." (4.4.3) If the reasons are bad, false, and spurious, can the Town reasonably conclude that Alternative 8 should be eliminated from further consideration?

I live closer to the Mammoth-Yosemite Airport than to the Bishop Airport. It would be nice, if environmental issues could be resolved, to be able to fly on a commercial flight in to and out of the Eastern Sierra. But it is obvious to me, having used both airports, that Bishop offers by far the safest alternative for air travel to and from our area.

The alternative of improving the Bishop Airport is preferable on safety and feasibility grounds, as it has multiple long runways eminently suitable for safe takeoffs and landings by aircraft even larger that 757s. It is not subject to heavy snowfall, severe cross-winds, or dangerous local topography, and is located away from the Highway and in better proximity to sources of jet fuel.

Now that Bishop is moving forward with airport improvements, I believe that the Town of Mammoth Lakes, the City of Bishop, the FAA and the airlines should work together to develop a single regional airport, and for the reasons cited above the regional airport should be in Bishop. The Town, and commercial airlines, should place the safety and well-being of the public ahead of this "shoe-box" approach to use the Mammoth-Yosemite Airport for large jet takeoffs and landings. This Draft SSEIR should be rejected as insufficient under CEQA. Alternative 8 should be revived, and should receive a thorough and detailed analysis and environmental review before any significant airport expansion plan is adopted.

Thank-you for the opportunity to comment on this Draft SSEIR for the Mammoth-Yosemite Airport.

Sincerely,

Stephen Kalish

Y. Stephen Kalish, Swall Meadows, California

Response to Comment Y-1

Mammoth Yosemite Airport currently is certificated for air carrier charter operations by the FAA under 14 CFR Part 139. The proposed project would enable the Airport to be certified for scheduled air carrier operations under 14 CFR Part 139. A 14 CFR Part 139 certification is a determination from the FAA that the Town of Mammoth Lakes operates the Airport in a manner consistent with FAA requirements. The FAA conducts annual on-site certification reviews of the Airport to maintain its Part 139 status. The last review of Mammoth Yosemite Airport was done in June 2001.

Any air carrier operating under 14 CFR Part 121 would require FAA approval to fly into Mammoth Yosemite Airport. This approval would take the form of Mammoth Yosemite Airport being added to the air carrier's Operating Specifications. Operating Specifications are FAA approved documents that clearly state what airfields the Part 121 air carrier may operate into with any restrictions if necessary. Inclusion of an airport into a Part 121 air carrier operation specifications is a determination from the FAA that Part 121 air carrier operations may be conducted in an Airport in a safe manner.

The existing terrain around the Airport has been assessed for hazards to air navigation. While it is acknowledged that some terrain features, such as Doe Ridge, penetrate FAR Part 77 imaginary surfaces, aeronautical studies have determined these obstructions are not a hazard to air navigation. The Global Positioning System (GPS) Standard Instrument Approach Procedure (SIAP) to Runway 27 has FAA-certified descent and visibility requirements designed to avoid surrounding terrain.

The variable wind conditions at the Airport are noted in the Airport/Facility Directory published by the U.S. Department of Commerce and this document is available to pilots. Hourly wind and weather data has been provided to American Airlines to help them develop flight plans and schedules which would enable them to avoid the times with high probability of inclement weather when aircraft are likely to hold at their originating airports until the storm has subsided as with any other air carrier airport.

Response to Comment Y-2

Any air carrier aircraft operating under Part 121 diverted from Mammoth Yosemite Airport would probably land in Reno, Los Angeles, or Las Vegas depending on the airline operating the flight where air carrier passenger and aircraft servicing are readily available. It is likely that larger air carrier aircraft would divert to airports with sufficient runway strength and passenger processing facilities. Bishop is an unlikely destination for diverted air carrier flights. Please also see Response to Comment M-3.

Response to Comment Y-3

Please see Response to Comment I-48.

November 26, 2001

Mr. William T. Taylor
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Subject: Mammoth Yosemite Airport Expansion Project
Draft Supplement to Subsequent Environmental Impact Report

Dear Mr. Taylor:

Please accept my comments on the subject documents. I have many concerns with the document, some of which are mentioned below.

Sage Grouse: in the discussion of the impacts on the biological resources, the document concludes a reduced mortality for sage grouse in the "Fencing" section on page III-37. The discussion in the preceding paragraph makes this conclusion inaccurate. The sage grouse have shown a proclivity for colliding with fences ".....especially in the dark and in low light levels." Yet the SSEIR claims the new chain link fence, which is 4 feet higher then the existing fence will reduce mortality because it will have greater visibility. This chain link fence, as claimed elsewhere, offers "unobstructed views." If that is so, how could the grouse see the new fence better and since it is 4 feet higher, they will have more opportunity to collide with it. Also, Lek 2, is close enough to the runway to disturb the grouse using it. There is no evidence presented that supports the claim of no significant impacts. Z-1

Mule Deer: Page III-45. It seems that more traffic from increased air travel would likely cause many more deaths to mule deer which already suffer high mortality on Highway 395. Is the proposed mitigation sufficient prevent this? Z-2

Raptors: Pages III-47, 48. A sentence indicates a potential increase in the hazards to raptors due to airports. The last sentence states that the proposed mitigation would reduce the potential impacts. No evidence is presented nor is it stated what the reduction would be related to. Paragraph on III-48 talks about low bird densities in the area. There is no evidence to support this. I expect bird densities are high because of Laurel Pond, Crowley Lake, Hot Creek, other ponds and Mono Lake's migratory birds. Birds do fly and therefore would leave their potential nesting areas and perhaps fly over and to the airport. Z-3

Page III-60, Cumulative Impacts. Cumulative impacts are not adequately addressed. Many projects taken together may have significant impacts. Z-4

Traffic Volumes on Hatchery Road. This number was determined by a two-hour hand count on Nov. 16, 2000. A traffic count should be done by a mechanical counter (with a hose across the street) for a longer period of time. This could have been at a low-volume time, before Thanksgiving holiday, when few people visit Mammoth and would not have been representative of traffic during the winter. Also, a summer study is needed. Additional traffic created by airport expansion would most likely require a much larger parking lot. This is not addressed. Z-5

Water. Page III-82. Will Sierra Business Park get its water from the same source as the airport? If so, calculations should be done for both and compared against availability. Page III-79: Are the water and sewer demands from the 1997 report? Since the number of passengers and flight operations are much higher, the estimated demands for both water and sewage are low. New calculations should be made based on the projected flight and enplanement figures. Z-6

blic Services and Utilities, Page III-95. This section is inadequate as it considers only the construction of a ckage treatment plant and the relocation of the Green Church. As the increase in air operations is significant, police and fire protection, roadway maintenance, waste generation and disposal, and utility and water use should be considered. The increase in air operations will lead to a greater potential of fires and spills, requiring Z-7

increased fire protection. More traffic will lead to quicker deterioration of roadways and parking lots, requiring increased maintenance.

Section IV, Project Alternatives, IV-1. The alternative of an airport in Bishop is discounted. It need to be considered as a viable alternative. The difference in weather conditions between Mammoth and Bishop needs to be addressed. Z-8

Growth Inducing Impacts, Page V-2. The purpose of the airport expansion is to encourage growth as it will permit more people to visit than now do. CEQA requires environmental impacts be considered against present conditions. Throughout Section 5.3 the impacts are compared to a future envisioned condition. Growth-inducing impacts as not adequately addressed. Z-9

Sincerely,

Wilma Wheeler

Wilma Wheeler
P.O. Box 3802
Mammoth Lakes, CA 93546

Z. Wilma Wheeler, Mammoth Lakes, California

Response to Comment Z-1

Please see Responses to Comments I-26, I-27, and I-29. Please refer to page III-41, Section 3.3.2.2, "Noise", in the Supplement. In addition, this section has been revised to address the comment as stated in Response to Comment I-26.

Response to Comment Z-2

Impacts to mule deer from project related traffic are discussed under Section 3.3.2.2, "Wildlife", subsection "Mule Deer". Such potential impacts were determined to be less-than-significant. Refer to Response to Comment I-28 concerning the requirements for mitigation measures. Please also see Response to Comment I-37.

Response to Comment Z-3

Please see Response to Comment I-38.

Response to Comment Z-4

Please see Responses to Comments B-11 and B-12.

Response to Comment Z-5

Please see Response to Comment I-17.

Response to Comment Z-6

Sierra Business Park will get water from the same source. The location and depth of the well and selection of the groundwater aquifer would depend on water chemistry analysis done for project independently. Please see Response to Comment C-1.

Response to Comment Z-7

Please see Response to Comment L-31.

Response to Comment Z-8

Please see Response to Comment I-48. The Airport, and the Airport expansion project, meet FAA requirements for safe airport operations. (*See* Supplement at Appendix E.) The rejection of expanding the Bishop Airport as an alternative is discussed in the Supplement and in Response to Comment I-48.

Response to Comment Z-9

Please see Responses to Comments B-11, B-12 and L-34.

John and Nancy Walter
PO Box 2383
Mammoth Lakes
CA 93546

Town of Mammoth Lakes
Community Development Department Nov.26, 2001

Atn: William Taylor Subject: Draft Supplemental EIR
Mammoth Yosemite Airport Expansion Project

Thank you for the opportunity to comment on the Draft Supplemental EIR for the proposed expansion of the Mammoth Lakes Yosemite Airport. The document as currently done raises many questions and leaves others unanswered. It is recommended that if you decide to proceed with this project, you prepare a full EIR incorporating all up to date data and evaluations for the complete project. A complete new EIR is required because the huge expansion in expected traffic over previous estimates completely changes the scope of the project. A major difficulty with the document is its failure to deal in any substantial manor with the tremendous potential impacts of this project in its mature phases. The magnitude of the problems are highlighted in the base case estimates of 200,300 winter emplacements .and 133,500 summer emplacements in 2022. The high case estimate of 449,800 emplanements in 2202 is never addressed. Common sense alone indicates that almost a million passengers passing through a small airport in a relatively pristine area will have huge impacts that must be fully analyzed in detail and mitigated as require.

AA-1

Most of the winter emplanements would occur during the 112 day peak winter ski season. with about 30 takeoffs and 30 landings per day by commercial aircraft.. If most of the summer traffic occurs between mid June and Labor day, about 75 days, one comes up with similar numbers, about 30 in and 30 out per day in the summer time. The estimates presented do not give the peak traffic but do allow that at least some of the commercial flights will be concentrated on weekends. It seems reasonable to assume that the peak departures will be over 40 per day. Most of this air traffic will peak between 11am and 3 PM since the FAA correctly discourages commercial night flights and night comes early in the winter at Mammoth. The need to be at an airport over 2 hours before departure limits the practicality of early arrivals at Mammoth. Who wants to start a vacation getting up at 2 in the morning to catch a flight out of Chicago or Dallas? The peak traffic would then be about 10 takeoffs and 10 landings/hour. The corresponding peak passenger flow would be about 750 coming and 750 going each hour. This assumes that the planes will be about 90% loaded at peak holiday times. The estimated 12000 general aviation departures is not discussed in detail but allowing for peaks at holidays and a preference for daylight flying a peak of 10 departures per hour seems reasonable. This high a commercial traffic density both in terms of commercial aircraft flights and

AA-2

commercial passengers raises many serious questions. Mixing in the general aviation use only makes the potential problem worse as would the high case estimates of flights and passengers. These year 2022 problems, need to be analyzed in detail, particularly with respect to the following problem areas.

1. Can 10 commercial landings and 10 commercial takeoffs mixed with an equal number of general aviation operations be safely handled each hour on a single runway mountain airport subject to extreme weather conditions with NO AIRCRAFT CONTROL SYSTEM? It doesn't seem reasonable, much less safe. If further traffic control systems and ground support facilities will be needed to handle this traffic, then these additional requirements should be detailed and analysed in the EIR AA-3

2. Can the terminal, tarmac, baggage handling, number of terminal employees, parking, car rental operations, access roads, buses to Yosemite, turning lanes on and off 395 etc, handle a peak of 750 passengers per hour? This situation is not analyzed but it seems doubtful if this level of passenger traffic could be handled. AA-4

If the airport scales up to handle this peak load, where will the employees come from? where will they live? and what will they do during the approximately 170 day slack season? AA-5

A proper analysis should also include the effect of about 1000 passengers stranded at the airport when a blizzard closes both the airport and the highway. AA-6

The DSEIR does not give sufficient detail to allow the reasonableness of the proposed terminal and support facilities to handle thee proposed peak traffic. AA-7

The cost, manpower, equipment and facilities to handle the security requirements brought on by the unfortunate Sept 11 events should be included in the proposed project. As an example will the increased emphasis on security allow only an eight foot chain link fence with a gate left open as suggested by the Long Valley Fire Department?. AA-8

3.If the facility and infrastructure can't handle this level of traffic, and it seems on the surface at least that they can't, then these levels will never be allowed from a safety standpoint at the proposed airport. Then the financial analysis which apparently assumes these high levels of traffic and supports the FAA, the Town of Mammoth Lakes, and MMSA investing in this airport are flawed and should be reconsidered. The project seems to have a catch 22 in that to justify the project very high passenger levels were assumed. If in fact these levels are unachievable, and or are undesirable from a safety or environmental impact standpoint then investing over $40 million would mean financial disaster to the Town and Airport and a financial waste to the FAA AA-9

Other issues that are either not discussed or are discussed in such a summery fashion that they can not be properly evaluated are:

A. Flight Safety: It is incredible that when discussing a very large increase in traffic into an at least somewhat questionable airport, little or no mention is made of flight safety. We had expected extensive analysis of weather, winds and wind shear, obstacles, and AA-10

off normal conditions. Surely this issue requires extensive evaluation before proceeding with a major airport expansion.

B. Fuel use, availability, and storage. The current 12000 gallon airport jet fuel tank is about one fill up of a 757. The report estimates 18000 gallons per day in 2007. What about 2022? How much fuel will be required? What will be the peak demand in the winter when the weather is the worse. A peak daily estimate of 80,000 to 100,000 gallons seems to be the range that must be analyzed for 2022. How will it be stored? How will potential spills, particularly in inclement weather, be handled? and how many truck loads of jet fuel will have to come up and turn on and off 395? Please do not neglect that his fuel storage is occurring close to the area of peak earthquake activity in recent years. AA-11

C. How will fire, medical and other emergencies be handled? Even if the Town or Mammoth Lakes buys equipment and stores it at the airport, there is no certainty that one of the volunteer firemen (the only kind we have) will be available. The problem like many at Mammoth would certainly be compounded by blizzard conditions. AA-12

D. Vehicle traffic. The DSEIR contains an incomplete traffic analysis. The situation to analyze is how to get the peak traffic which will include a mixture of autos, buses (many if 113,000 / year are to be bused to Yosemite) and trucks on and off the highway. As discussed above the nature of the airport and the expected service should result in a very large peak in the vehicular traffic near midday. Today a full little league schedule can make turns on and off 395 difficult.. AA-13

E. Employee housing: The major expansion proposed has to call for a large increase in employees. Where will they live? AA-14

F. Sage Grouse, Sierra Nevada Big Horn Sheep and Deer. A major airport operation like the one proposed will certainly have major impacts on the extensive deer herd and the probably soon to be listed Sage Grouse and potentially effect the recently listed Sierra Nevada Big Horn Sheep. Detailed analyze of the effects of the airport on deer migrations and the effect of the airport noise, air pollution, traffic etc beyond the fence of the proposed airport should be conducted and mitigated as necessary. This analysis should be AA-15

based on the peak air traffic and passenger conditions expected in 2022.The Sage Grouse are a serious situation because so little is know about them in this area. It is known that they are here and the area around the airport is what they like the most. Detailed field studies over several years and extensive analyses are probably required just to properly AA-16

define the problem. As discussed below commuter aircraft will probably use the canyons through the Sierra as they did in the past. These unanalyzed flights will potentially have a negative impact on the largest remaining herd of Sierra Nevada Bighorn Sheep (Wheeler Crest herd) AA-17

G. Noise: The noise section seems to ignore the local situation. The generic discussion does not take into account altitude, local atmospheric effects, reflection off mountains and ridges, the low ambient noise that our very nearby wilderness areas demand, and the

potential negative impacts of noise on our tourist industry. Actual data should be taken from not only 757, but from 737 and other aircraft operating out of this airport. In the past the sparse commuter flights used the canyons extenuating from the Sierra peaks through the Wilderness areas to approach the airfield coming either from the north or south. The increased traffic from these unanalyzed flights will probably have negative impacts on the Wilderness Areas and Devils Postpile National Monument. The analyses of noise must include the peak 2022 conditions with a mix of aircraft going to and from a variety of locations. The airport already seems to be trying to pacify the residents of the Community of Crowley Lake by saying it will direct traffic away from the community and out to the east over Crowley Lake. Such a path would put aircraft right over the largest Sage Grouse lek.

AA-1

AA-19

AA-20

H. Sprawl and conformance to regional planning. It is not clear how much of the current thinking on spawl and land use by the local communities and County are factored into the analysis. It is clear that the airport expansion, if approved, will continue to grow beyond that approved in previous planning documents like the 97 airport EIR. The only way to make sure these growth issues are properly addressed is to do a new complete EIR addressing all aspects of the airport expansion.

AA-21

I. Potential effects of over 55 tons of NOX per year on air quality and water quality. The effects on our pristine environment particularly with respect to the water quality at the fish hatchery and the Tui Chub spring locations must be analyzed.

AA-22

Another major flaw in the document is the failure to fully evaluate what is considered by many residents and pilots as the preferred alternative, the development of Bishop airport as the regional airport center. I'm sure others will go into great detail on why this should be the preferred alternative. Another alternative that should be considered is to only upgrade the airport to the extent necessary to handle commuter type aircraft. This alternative would only require minor airstrip, terminal and infrastructure upgrading. The investment, number of daily flights, and number of passengers would be less, which is probably fitting if our carrying capacity and our needs are realistically considered.

AA-23

AA-24

In summery please do not accept this DSEIR. If you decide to precede please do a full EIR with the required detailed studies, analyses, public review and peer review on the entire project, with particular reference to the reasonableness and desirability of a third of a million air visitors. The Alternatives in the EIR should include Bishop airport and a less ambitious approach at Mammoth Yosemite airport. The DSEIR does not give these alternatives serious consideration.

Thank you for the opportunity to comment.

John Walter

Dr Nancy Peterson Walter, PhD

AA: John and Nancy Walter, Mammoth Lakes, California

Response to Comment AA-1

Please see Response to Comment B-1.

Response to Comment AA-2

The majority of the air carrier/commuter operations coming to Mammoth Yosemite Airport would likely be from regional markets and these operations would be spread throughout the day. The commentor's assertion that all operations (10 landings and 10 takeoffs) would occur in one hour is contrary to the forecasts. Air carrier traffic would be spread throughout a reasonable daylight time period. The forecast number of aircraft operations at Mammoth Yosemite Airport (23,650 in 2022) is well below the capacity of a single runway, non-towered airport as stated in the FAA Capacity Handbook. [FAA Advisory Circular 150/5060-5, *Airport Capacity and Delay.*]

Under the current airfield design being evaluated in the Supplement, there would be up to six apron parking positions. Hence it is not reasonable for 20 aircraft operations (10 takeoffs and 10 landings) to occur in an hour. Please also see Response to Comment B-1.

Response to Comment AA-3

The Airport has handled significantly greater number of aircraft operations in the past than its current level. (40,000 aircraft operations in 1979, FAA Terminal Area Forecasts.) The fleet mix in the forecast included in the Supplement contains air carrier aircraft operations, which comprise of only 6,000 operations out of a total of 23,650 in the year 2022.

The level of forecast aircraft traffic is well below the FAA criteria for the need for an Air Traffic Control Tower (ATCT) at the Airport. (See FAA Order 7031.2C *Airway Planning Standard Number One – Terminal Air Navigation Facilities and Air Traffic Control Services.*)

Procedures for the operation of aircraft at non-towered airports are described in FAA Advisory Circular (AC) 90-42F, *Traffic Advisory Practices at Airports Without Operating Control Towers,* and AC 90-66A *Operations at Airports Without Operating Control Towers.* AC 90-42F states that "the key to communicating at an airport without an operating control tower is the selection of the correct common frequency." This common frequency is called a Common Traffic Advisory Frequency (CTAF). The Mammoth Yosemite Airport CTAF is 122.8. Personnel employed by the local Fixed Based Operator (FBO - Hot Creek Aviation), monitor this frequency. This type of operation is called a UNICOM and provides airport information.

AC 90-66A states that "the FAA believes that observance of standard traffic patterns and CTAF procedures as detailed in AC 90-42F will improve the safety and efficiency of aeronautical operations at airports without operating control towers." The traffic patterns at Mammoth Yosemite Airport are published in the Airport Facility Directory and the Airport has a CTAF. The Airport is operated in accordance with all applicable FAA recommendations for operations at non-towered airports.

Should aircraft traffic demand dictate, the Town of Mammoth Lakes could consider the construction of an ATCT in the future. This ATCT would probably not be a FAA-staffed tower but rather would be staffed by FAA certified air traffic control specialists employed by private companies. The Airport has appropriate sites available for an ATCT if one was required in the future. However, construction of an ATCT is not foreseen at this time and would require further environmental analysis if ever proposed.

Response to Comment AA-4

All Airport facilities will be designed based upon the forecasted number of passengers and the employees required to serve those passengers. Please also see Responses to Comments L-18 through L-24.

Response to Comment AA-5

In 2000, the Town of Mammoth Lakes adopted Affordable Housing Mitigation regulations. These regulations require the construction or acquisition of affordable housing for new development projects. The regulations are triggered at time of application for a building permit. Upon application for a building permit for the project, the Town will submit to the Planning Commission a Housing Mitigation Development Plan for approval prior to issuance of the permit.

Response to Comment AA-6

Weather forecasting would provide sufficient time to adjust airline schedules or notify passengers to keep them from coming to the Airport if most or all flights were cancelled. Thus it is not likely that a large number of passengers would be stranded overnight at the Airport. Operations during blizzard conditions would not occur, and either would be delayed or rescheduled. This would be coordinated between the Airport operator, airlines, bus service (since the Airport Manager is responsible for the Town bus transportation system), and resort/hotel operators to avoid inconvenience to the passengers to the extent possible. Also closures or delays would be less of an inconvenience at a non-hub airport like Mammoth Yosemite Airport because passengers can stay where they are or leave the airport rather than in a hub airport where they have arrived by plane and remain stranded at the airport. Because of the coordinated activities of the transportation systems and visitor operations at the Town, it would likely be easier to manage such situations at Mammoth Yosemite Airport than at many other airports.

Response to Comment AA-7

Appendix L in the Supplement contains a detailed traffic impact analysis study, which was conducted to calculate the impacts of the proposed project. Appropriate mitigation measures were incorporated into the project to accommodate traffic/transportation in and around the Airport. (See Supplement at Page III-67.)

Response to Comment AA-8

All Airport facilities will be designed and constructed to conform with current FAA security requirements. 14 CFR Part 107 "Airport Security," section 107.3, requires the operator of an airport serving scheduled passenger operations of carriers required to have a security program, and to

produce a written security program to be approved by the Director of Civil Aviation Security that provides for "the safety of persons and property traveling in air transportation and intrastate air transportation against acts of criminal violence and aircraft piracy." The security program must include a detailed description of each air operations area, any areas on or adjacent to the airport affecting security of any air operations area, and each exclusive area and its pertinent establishing agreement. The security program must also delineate security procedures, facilities and equipment used by both the airport operator and by each air carrier in its exclusive area, and the notification procedures by which air carriers would alert the airport operator to any inadequacies. Any alternate emergency or unusual condition-procedures the airport operator intends to use must be outlined in the security program and law enforcement requirements and training must also be reviewed. Finally, the program must clearly describe a records maintenance system for security purposes.

All questions of security, personnel, training, screening, access control, security jurisdiction in specific airport areas, and unusual situations requiring security would be covered under such a security program. Section 107.5 of CFR Part 107 details the approval of such a security program and the timeframe necessary to obtain such approval. This section requires the submittal of the proposed program to the Director of Civil Aviation Security at least 90 days before any scheduled passenger operations requiring the security program are expected to begin. The design of airfield access, security fencing, terminal design, and all other facilities at the Airport would comply with the requirements of FAR Part 107. The Town of Mammoth Lakes will complete all activities necessary to comply with these requirements prior to re-initiating passenger air carrier service.

Response to Comment AA-9

This comment addresses issues outside the scope of CEQA (fiscal effects), therefore, no response is required.

Response to Comment AA-10

Please see Responses to Comments Y-1 and AA-3.

Response to Comment AA-11

Please see Response to Comment I-13.

Response to Comment AA-12

The Town currently provides for Crash Fire Rescue ("CFR") training for Airport employees. A Long Valley Fire Protection District ("LVFPD") fire truck is located at the Airport to help fight structural fires. The capital improvement plan for the Airport also includes the acquisition of an additional Aircraft Rescue & Fire Fighting Vehicle ("ARFF") vehicle to meet FAA Part 139 certification requirements for air carrier operations. The Town would fund the emergency response equipment and training. There would not be any aircraft operation in severe weather conditions like blizzards.

Response to Comment AA-13

Please see Response to Comment I-18.

Response to Comment AA-14

Please see Response to Comment AA-5.

Response to Comment AA-15

Please see Response to Comment I-37.

Response to Comment AA-16

The Supplement relies on long-term sage grouse studies conducted in Long Valley by agency biologists (e.g., Bureau of Land Management ("BLM"), and California Department of Fish & Game ("DFG").) and university researchers (e.g., Dr. Robert Gibson, University of Nebraska), as well as on studies conducted in other regions (e.g., Jackson Hole, Wyoming).

Response to Comment AA-17

The analysis of potential impact in the Supplement is sufficient since aircraft would use the flight paths as documented in the Supplement.

Response to Comment AA-18

Please see Response to Comment B-9.

Response to Comment AA-19

Please see Response to Comment I-25.

Response to Comment AA-20

There would be no significant impacts on any sage grouse lek sites due to aircraft over flights as described in detail in Section 3.3 of the Supplement.

Response to Comment AA-21

Please see Responses to Comments B-11 and B-12.

Response to Comment AA-22

Please see Response to Comment I-40.

Response to Comment AA-23

Please see Response to Comment I-48.

Response to Comment AA-24

The proposed project would enable the Airport to accommodate air carrier, regional jet, and commuter turboprop aircraft. Under current operational and facility constraints and assuming the projected 20-year growth of general aviation to 12,000 annual operations, the Airport could accommodate approximately 35,000 charter aircraft operations of commuter or smaller jets and nearly 500,000 commercial enplanements annually. Improving the Airport to accommodate only commuter turboprop aircraft would not meet the purpose and need of the project. A primary reason for improving the Airport to accommodate air carrier turbojet aircraft is the demonstrated demand for such operations per the agreement with American Airlines to provide such service at Mammoth Yosemite Airport. Many of the major national commuter airlines are transitioning a large percentage of their fleets to regional jets, which would require the Airport improvements indicated. The development of the proposed project would also provide facilities to support regional/commuter service as well as air carrier service. As stated in Appendix H of the Supplement, it is anticipated that, as has been the case at other similar airports initiating commercial service, both air carrier and commuter service would develop. Most of the Airport improvements required for the air carrier service would also be required for regional/commuter service. These improvements include the terminal building facilities for passenger processing associated with larger commuter or regional jet aircraft operations typically used by the nationwide commuter operators, ticketing, passenger and baggage processing security requirements, and concessions. The terminal building developed as part of the Airport improvement program is consistent with these requirements.

American Eagle, a national commuter operator, has also specified that, as a company policy, they would require the same 150-foot wide runway width as the air carrier operators, although they may initiate service at an airport with only a 100-foot wide runway if there are near-term plans to widen the runway to 150 feet.

The FAA has published a notice of proposed rulemaking for changes in the 14 CFR Part 139 airport certification requirements. Under the existing 14 CFR Part 139, the FAA requires airport operators to comply with certain safety requirements prior to serving operations of air carrier aircraft with more than 30 seats. Recent changes in the FAA Part 139 certification requirements have also specified that the eight-foot high security fencing, or six-foot with three strand barbed wire on top, around the perimeter of the airfield is required to accommodate scheduled turboprop aircraft of more than 30 seats. (CFR 139.335.)

Pat Eckart
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November 26, 2001

To: Bill Taylor, Senior Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Re: Draft of Subsequent Environmental Impact Report (SSEIR), Mammoth Yosemite Airport Expansion Project (Project)

Dear Bill:

> "CEQA requires that the EIR discuss ways in which the proposed project could foster economic and *population growth* or directly or indirectly lead to the construction of new housing." [V-1-2 SSEIR 15126.2(d); italics mine]

The above-referenced SSEIR, including referenced documents, fails to address the long-term implications of the proposed Project, specifically the Project's growth-inducing impacts on the Town of Mammoth Lakes and surrounding region. The Project's major objective (by bringing in American Airlines and 757s) is to fill Intrawest's yet-to-be-built beds, achieve Mammoth Mountain Ski Area's goal of a million additional skiers, and compete with U.S. ski resorts whose success is attributed to direct, scheduled flights. [See the Town/Intrawest/MMSA's MOU, May, 2000, Air Services Agreement (Appendix M), and SSEIR, p. I-2.]

This latest Airport Expansion Project is an integral component in the creation of a "competitive world-class destination resort." Not all visitors will arrive via 757s, but the Project's underlying purpose and effect is to increase visitor numbers, notwithstanding the statement that ". . . this growth is expected with or without the improvements at the airport [SSEIR, v-4, 5.3.2].

BB-1

How much growth are we talking about? Recent town "buildout" figures (11,000 permanent residents) exceed those found in the Town's 1987 General Plan (8,400 permanent residents). Mammoth Community Water District's October 2000 Urban Water Management Plan also relies on the 8,400 figure. In the last census, Mammoth Lakes' permanent resident population experienced rapid growth, increasing 48.2% (from 4,785 to 7,093). Will the proposed airport expansion contribute to visitor and resident increases beyond those already planned for? In that event, what would be the impact, for example, on the town's water supply? (Not to mention housing, traffic, services, etc.)

BB-2

Do town officials know the carrying capacity of our resources? In the case of water, will supply meet future demand? At a recent (11/6/01) joint meeting of the Town/MCWD

liaison committees, Kathy Cage, mayor and town councilmember, raised the specter of the Town changing its zoning to higher densities, and she questioned whether or not there would be sufficient water to meet the increased demand.

Water availability near the top of a watershed (as in our case) has severe limitations, as evidenced by a building moratorium (1970s), drought (1986-1992), State Water Resources Control Board's 1991 Cease & Desist Order (to eliminate "chronic demand/supply deficiency"), water restrictions, and 1994 Assessment District. Lack of coordination (and knowledge) can have serious consequences. For example, "...[MCWD], in letters to the Town of Mammoth Lakes issued in March 1991, indicated that the District would not be able to serve the proposed large North Village,' 'Lodestar,' and 'Juniper Ridge' developments until other firm supplies are developed" [Boyle Engineering Feasibility Study, 1992, p. 2-5]. According to MCWD, the town's current water supply does not meet demand during a multi-year drought.

The groundwater basin is not well understood and surface water (Lake Mary) is dependent upon annual snowfall. Mammoth Lakes' is once again in another drought, and MCWD is looking at drilling a new well in town (bell-shaped parcel) next summer. (Dry Creek appears to still be on hold). In addition to visitor and resident growth, other factors could increase demand. MMSA has, in the past, sought water from MCWD for snowmaking. More recently, the ski area, which is outside the water district, was included in a "change in place of use" petition to the SWRCB. Sierra Star Golf Course (Lodestar) is required to use reclaimed water, which has yet to become available. Both MMSA and Sierra Star are excluded from the water calculations ("demand" figures) in MCWD's Urban Water Management Plan. BB-3

Reasonably accurate projections for maximum PAOT are absolutely essential to avoid future shortfalls in water. Beyond drilling new wells in town and Dry Creek, alternative water sources are few, very expensive, and problematic (importing and storage). According to the Boyle Study, the best apparent alternative water source is the Convict Creek wellfield (the identified source for the airport's expansion and development). Construction costs were estimated at $16.5M and annual O&M $781,000 (electricity over $0.5M) in 1992 prices.

The SSEIR does not address the cumulative impacts and unintended consequences that the creation of a major destination airport will have on the region's natural and human environment. Specifically, the SSEIR and its referenced documents do not address the airport's contribution to population growth (through tourism) in the region, and BB-4

particularly in Mammoth Lakes. Intrawest, MMSA, and the Airport are dependent on each other for future economic success, measured by visitor numbers. Nowhere in the SSEIR have the Project's growth-inducing impacts been addressed. BB-5

Pat Eckart

Pat Eckart

BB. Pat Eckart, Mammoth Lakes, California

Response to Comment BB-1

Please see Responses to Comments B-11 and B-12. The commentor misinterprets Figure 3 on page 11 of the Town of Mammoth Lakes General Plan. The future 8,400 permanent residents is a 20-year projection as is stated in paragraph one on page 14 of the General Plan. This is further described on pages 57 and 77 through 79 of the EIR for the General Plan, where it is stated that the 8,400 permanent population projection is based upon 80 percent development of the Town during the 20-year planning horizon (beginning in 1986). The 11,000 resident population estimate referred to by the commentor is for full build out of the community under the existing General Plan and zoning, which includes the proposed Airport improvements.

The Commentor also refers to the Mammoth Community Water District Urban Water Management Plan ("UWMP"). The UWMP does refer to the 8,400 population figure, however, the UWMP also includes a total build out number of 15,600 units, which is in line with the projections in the EIR for the General Plan (page 79). Further, the UWMP was not adjusted for the 2000 census as those figures were not available at the time of its adoption.

In any case, the most relevant projections for this analysis are the projections of future tourist visits and the planned and in-progress expansions of tourist attractions and accommodations. Those projections demonstrate that the proposed Airport expansion is appropriately sized to serve the demand for air travel that the expanded tourist base will create. The residents of the Mammoth Lakes area will contribute to the demand for air travel as well, but that contribution will be small in relation to the tourist demand.

Response to Comment BB-2

Please see Responses to Comments BB-1.

Response to Comment BB-3

Please see Responses to Comments B-11 and B-12.

Response to Comment BB-4

Please see responses to comments B-7 and B-11. The number of paid skiers went from 1.5 million during the winter of 1985-86 to 463,987 in 1990-01. The downturn in visitation was a result of several factors including: the economic situation in Southern California, poor snowpack conditions for several consecutive winter seasons, the lack of snowmaking at the ski area, the ease of travel to other ski areas in the west via air service from Southern California, and the outdated facilities at MMSA. With the upturn in the economy, a reinvestment in facilities at MMSA (including an extensive snowmaking effort), and the revitalization of facilities within the Town of Mammoth Lakes, the number of visitors to the ski area has shown a steady increase since the early 1990's. Even though the number of skiers is not yet back to the high of 1985-86, the 1.1 million of the 2000-01 season has given a good indication that the improvement in facilities is leading to increased visitation, even without the airport improvements.

Response to Comment BB-5

See Section V of the Supplement for a discussion of growth inducing impacts of the proposed project. Please also see Responses to Comments B-7 and B-12.

To: Airport Manager
Town of Mammoth Lakes

Nov. 25, 2001

I wish to express my full support for the Airport Expansion project in Mammoth Lakes. I have been to several previous Planning Commission/FAA meetings and stood up to voice my support for scheduled air service to Mammoth Lakes.

CC-1

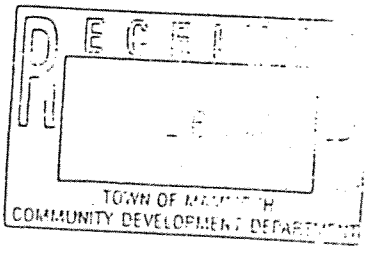
I am sorry the project has already been delayed by lawsuits. With Mammoth offering so many resort and natural amenities, I think the community will be well served to have additional visitors come see and enjoy our area and spend their money.

I could have used the Mammoth airport connection last month when my family flew to New England for a trip. Instead, I had to drive 3 hours each way to Reno and spend money at a Reno airport hotel on each end of the trip. It would have been a lot easier and cheaper to fly out of Mammoth. The same with another upcoming trip to Atlanta. It is risky to drive to Reno in the middle of winter for any reason. It would be safer to fly out of Mammoth.

Please add my strong support to this ongoing development at the airport. Mammoth needs to grow and prosper and can do so harmoniously with Mother Nature. The new, upgraded, expanded Airport is a vital piece of our prosperity puzzle.

Sincerely yours,

Bruce Hopper



Bruce Hopper P.O. Box 374, ML, CA. 8 year resident of Mammoth.
Office 924-0235

CC. Bruce Hopper, Mammoth Lakes, California

Response to Comment CC-1

The commentor expresses support for the project. The Town acknowledges these comments and has made them part of the official record for the project.

Steve Miesel
PO Box 7383
Mammoth Lakes, CA 93546

Town of Mammoth Lakes
Planing and Community Development

Dear Town of Mammoth Lakes,

These comments pertain to the Draft Supplement to Subsequent Environmental Impact Report (SSEIR) Mammoth Yosemite Airport Expansion Project Mammoth Yosemite Airport dated Oct 5,2001.

1. The difference between the construction of twelve 3-bedroom rental units and the creation of 108 new jobs found on page A-5 now has a substantially more sever effect on housing than when the 1997 SEIR/EA was prepared. This is due to the increased severity of the shortage of housing in the area. Thus the mitigation measures should be updated. DD-1
2. The indirect impacts on housing from the increased tourism sought by the Mammoth Yosemite Airport Expansion Project are substantially more sever than when the 1997 SEIR/EA was prepared and should now be addressed in the SSEIR. DD-2

Thank you,
Steve Miesel

Steve Miesel

11-21-2001

DD. Steve Miesel

Response to Comment DD-1

Indirect employee growth in the Town is evaluated at the time of development of new projects in the community. Mitigation of these impacts is required of new development pursuant to the Affordable Housing Mitigation Regulations of the Town of Mammoth Lakes as explained in Response to Comment AA-5. New employees will be addressed in the employee housing mitigation plan required to be submitted to and approved by the Town Planning Commission prior to issuance of a building permit for the terminal. The housing plan addresses the needs of those households in the median income or lower categories. The analysis leading to the adoption of the Affordable Housing Mitigation Regulations showed that above median income households have housing opportunities and mitigation is not required for those employees.

Response to Comment DD-2

Please see Response to Comment DD-1.

OCTOBER 30, 2001

SUBMITTED FOR INCLUSION IN THE MAMMOTH AIRPORT EXPANSION EIR PROCESS C/O MR. BILL TAYLOR, SENIOR PLANNER, CITY OF MAMMOTH LAKES, CALIFORNIA.

DEAR MR. TAYLOR,

SINCE THE E.I.R. COMMENT PERIOD FOR THE PROPOSED MAMMOTH AIRPORT EXPANSION HAS BEEN EXTENDED, MAY I PLEASE PRESENT MY CONCERNS?

AFTER SEPTEMBER 11, IT COMES TO MIND THAT THE CRASH OF A LARGE JET INTO THE MOUNTAIN AT THE NORTH END OF THE RUNWAY WOULD CAUSE A HUGE AND IMMEDIATE WILDFIRE IN THAT AREA OF EXTREME SUMMER FIRE HAZARD. WHILE THIS IS NOT PARTICULARLY LIKELY, THE MAMMOTH AIRPORT IS INFAMOUS FOR ITS HIGH ELEVATION, WIND SHEAR, ITS RUNWAY'S DISORIENTATION TO THE ELEMENTS, AND FOR THE NORTH END OBSTACLE JUST MENTIONED. EE-1

THE PROPOSED PROJECT IS BEING PROMOTED AS THE "MAMMOTH YOSEMITE" AIRPORT. AS SUCH, A FULL AND FORMAL OPINION/RESPONSE FROM THE PARK MUST BE INCLUDED IN ANY THOROUGH AND VALID IMPACT ANALYSIS, IF IT IS NOT ALREADY SO. EE-2

SOMEWHAT MORE GENERALLY SPEAKING, I'M SURE THE WHOLE CITY OF MAMMOTH IS UNDER PRESSURE FROM INTRAWEST CORP TO GET THIS AND OTHER FAVORS DONE. IMPARTIALLY CONSIDERED THOUGH, IS IT REALLY THE WISEST CHOICE OF LOCATIONS AND WILL THE TOWN BE ABLE TO COMFORTABLY HANDLE AND RECOUP ITS MASSIVE FINANCIAL OBLIGATIONS IN THIS PROJECT? WILL PEOPLE WANT TO FLY AND ALSO TO FLY THAT FAR AND COME TO MAMMOTH AS OPPOSED TO WHISTLER OR VAIL, etc? PLEASE REMEMBER THAT YOU ARE DEALING WITH CORPORATE BILLIONAIRE SPECULATORS TO WHOM MAMMOTH OWES NOTHING. LIFE WILL GO ON WITHOUT A METROPOLITAN AIRPORT MILES DOWN-HILL FROM A SNOWY TOWN OF A FEW THOUSAND. CONVERSELY, IF AND WHEN IT IS CLEARLY NEEDED AND APPROPRIATE IT WILL HAPPEN. IN THE MEANTIME YOUR TOURIST BASE OF CALIFORNIANS IS HOOKED ON CARS AND NEITHER GREY-HOUND NOR AIRLINES HAVE MADE A GO OF THIS ROUTE. EE-3

ANY ENVIRONMENTAL DEGRADATION OR IMPACT WHATSOEVER IS ADVERSE AND SIGNIFICANT IF IT IS UNNECESSARY.

AR 001755

THANK YOU VERY MUCH

DANIEL BACON

675 MOUNTAIN VIEW
BISHOP, CA 93514

EE. Daniel Bacon, Bishop, California

Response to Comment EE-1

FAA has put in security measures to reduce the potential of aircraft crashes after September 11th incidents. Mammoth Yosemite Airport will comply with all federal and State security regulations to ensure the safely of all passengers. Please also see Responses to Comments Y-1, AA-3, AA-6, and AA-8.

Response to Comment EE-2

Yosemite officials or representatives have been notified of the availability of the Supplement and were sent a copy of the document. (*See* Supplement at Appendix B.) They were free to comment on the document, but since Yosemite is not a trustee or responsible agency as defined by CEQA, there is no obligation to specifically seek out a response or opinion from park officials or representatives or for park officials or representatives to provide such a response or opinion regarding the project or the Supplement. No comments were received from park officials.

Response to Comment EE-3

EE-3. This comment does not address impacts of the project and no response is required.

Asim Rizwan

Subject: Goner Virus Received and Comments on Mammoth Yosemite Airport SSEIR

From: Jim Lerner [mailto:jlerner@arb.ca.gov]
Sent: Wednesday, December 05, 2001 5:47 PM
To: B Taylor
Cc: James Lerner
Subject: Goner Virus Received and Comments on Mammoth Yosemite Airport SSEIR

Bill:

Yesterday I received an email from you with the subject "Hi!". It was the now infamous Goner Screen Saver virus and I made bad decision to open the attachment to see what "you" had sent me. Bad move. I don't know if you are even aware of this virus infecting your computer and computers of everyone else on your email distribution list, but if not, then this will tell you to get it fixed. Since we hadn't communicated in nearly one year, I was surprised to receive this message. Recall that you and I discussed the potential air quality impacts from the proposed runway extension at the Mammoth Yosemite Airport over a year ago. So, having recently read portions of the Draft SSEIR for the airport project, I assumed you were sending a humorous message to those of us who had been involved one way or the other in the review of the project. That's why I threw caution to the wind and clicked on the Goner screen saver. Once the screen saver appeared and then disappeared, I knew someting wasn't right, but wasn't sure I had introduced a virus to my computer. I went home and didn't think about it again until I read the front page story in the Sacramento Bee and realized what had happened. The rest you know. I was concerned about all of the people whose computers would be infected as a result of the virus sending out emails to everyone on the email address book list. Since we use Netscape software, it turns out that I didn't infect other computers, but for Microsoft Outlook users, it's a different story. Just a while ago a 21 year old computer engineer from our information services office came by and ran the new software to delete all of the Goner files. It was an easy fix. I hope restoration of your computer and those of your contacts went equally well.

Regarding the airport draft SSEIR, you may have noticed that ARB did not submit comments on the air quality analysis. We had 45 days for this review, but I was not able to devote time to the review until one week before the deadline, so I was unable to provide my comments to Gary Honcoop with sufficient lead time to enable Gary and his manager to review and edit my comments. In my review I noticed that the air quality analysis was little changed from the revised analysis that was given to us by Ricondo and Associates on December 20, 2000. In fact, the analysis in the SSEIR lacks some of the analysis that was contained in the version I saw last year. My conclusion was that the air quality analysis is inadequate and does not provide an adequate factual basis to support the findings of no significant air quality impacts. You are aware of the issues I raised a year ago. In the current review, I focused more on the impacts relative to fine particulate matter, or PM-10, since that is the pollutant for which the region is in nonattainment of both federal and State air quality standards. The EIR analysis does not clearly show the net impacts from vehicle-related PM-10 with and without the proposed project, and doesn't address whether or not the developments will violate the PM-10 control measure that resulted from the PM-10 SIP for Mammoth Lakes. This is the Great Basin APCD rule that limits daily vehicle miles traveled to

FF-1

FF-2

FF-3

106,600. That cap is directly related to PM-10 emissions. We discussed this last year and the assumption was that passengers arriving by air would use shuttles and transit so the trips to and from Town would be minimized. In last year's analysis there was an attempt made to estimate the net changes in VMT resulting from the project. The concept was corect, although the assumptions behind the analysis was not presented. The SSEIR does not include such an analysis that would clearly show whether or not the project along with related projects would violate the 106,600 VMT cap. I mention the related projects because the SSEIR shows that there is a planned hotel/condo/restaurant project that would be built on the airport property as well as the Sierra Business Park to be built nearby. The analysis would have to show all of the trips and VMT in the Town of Mammoth Lakes as a result of these and other projects to demonstrate that the VMT cap is not exceeded or if it is exceeded, by how much. Then, you could design mitigation measures to deal with it. Also, we discussed last year the comment that you may get increased VMT in the Town as a result of skiers who are unable to find lodging in Town and who stay overnight in Bishop and drive to Mammoth and return. If the goal of the air service is to attract skiers from distant states to stay in town, then the locals will have to stay somewhere and that could mean additional trips and VMT. These are not all of my comments, but this is the one that I think is perhaps the most significant one and wanted to share with you so that you would have the benefit of my thinking.

FF-4

FF-5

FF-6

FF-7

I believe that a subsequent and more comprehensive air quality analysis is required in order to assess the significance of potential air quality impacts. In addition, I believe that approval of the project could require that the ARB Executive Officer (delegated by the Governor) "certify that there is a reasonable assurance the the project will be located, designed, constructed, and operated in compliance with applicable air ... quality standards". We usually defer to the FAA to inform us whether or not an airport project requires this certification. In October 2000 we were told by Bill Manning that the FAA informed him that certification would be required. In November or December 2000 Dr. Elisha Novak of FAA told us that an air quality certification would not be required. On December 7, 2000, and again on May 16, 2001, I asked Dr. Novak to provide me with the FAA's analysis that supported such a decision. I did not receive a response to these requests. I recently asked another FAA staff person to pose the same question to the manager, Mr. Joe Rodriguez, and was told that FAA would not be able to provide me with that information at this time because of a lawsuit that has been filed. So, I am still in the dark about how FAA reached their determination. From my research of FAA's guidelines, I note that a "major runway extension" determination can be based on a finding of a 1.5 dB increase in noise over any noise sensitive area located within the 65 dB CNEL contour, or it can arise if the project is likely to violate the local, state or federal standards for air quality. If the noise analysis in the SSEIR is correct, there are no noise sensitive receptors within the 65 dB contour, so it could be argued that the project doesn't meet the noise threshold. But, I note that the planned condo/hotel/restaurant project will be located very close to the runway centerline, on the order of 500 feet from the runway centerline to the southern boundary of the development. Thus, residents would be exposed to elevated noise from 5,000 jet operations and 6,600 turboprop operations at buildout. I find it hard to believe that for these residents the project would not be considered a "major runway extension", however, I await details from FAA on that topic. ON the other possible condition, violation of air quality standards, the EIR and a subsequent EIS would need to make a convincing case that the 24 hour PM-10 standards are not going to be violated.

FF-8

FF-9

I hope these comments are helpful to you as you evaluate the other comments on the draft SSEIR. These comments are my own professional assessment and do not reflect any official position of the ARB

mamagement. I am submitting them to you as a professional courtesy.

`est Regards,
im Lerner, Ph.D.
CARB
Airport Air Quality Team
916.322.6007

FF. Jim Lerner, California

Response to Comment FF-1

The California Air Resources Board did not comment on the Supplement. The comments in this letter, therefore are responded to as an individual commentor.

Response to Comment FF-2

The Town prepared the Supplement to analyze the potential environmental impacts from changes to the proposed project since that certified in the 1997 Subsequent EIR/EA. These changes included extension of the runway by 1,200 feet (rather than 2,000 feet), increasing its width from 100 feet to 150 feet, replacement of an existing 4.8-foot barbed wire fence with an 8-foot chain link security fence, and construction of a new package wastewater treatment plant (instead of a new leach field). The Supplement also analyzed impacts associated with an updated aviation demand forecast, and the relocation or replacement of "Green Church" building formerly used by the High Sierra Community Church.

The Air Quality Analysis for the proposed project in the Supplement did not include a comparison with the no project alternative with regards to total vehicle miles traveled (VMT). Ground vehicle traffic volumes and VMT for the proposed project and no project alternatives are summarized in **Table N-2**. For the ground vehicle emissions inventories it was assumed that all passenger vehicles originating at the Airport would travel a roundtrip distance of approximately 19 miles (i.e., to and from the Town of Mammoth Lakes). The number of vehicle trips modeled for the two alternatives included direct vehicle trips that would originate or terminate at the Airport, and in the case of the no project alternative, trips to the town of Mammoth Lakes by visitors who, if not accommodated by air carrier aircraft, would drive to Mammoth Lakes from Los Angeles and other locations. An average trip length of 19 miles was used to calculate emissions for these "indirect" vehicle trips,[4] however, it is expected that car trips "replaced" by aircraft service would travel much greater distances and would be responsible for substantially more emissions of criteria pollutants. There is a substantial reduction in VMT with the implementation of the proposed project, which would result in lower PM_{10} emissions.

The annual emissions inventories for PM_{10} are presented in **Table N-3**. As shown in Table N-3, the primary source of particulate emissions at the Airport are ground access vehicles (including passenger vehicles, courtesy shuttles, and taxis) on roadways and in parking areas. Re-establishment of air carrier service at the Airport would also increase the number of ground motor vehicle trips originating at the Airport and hence could cause additional particulate emissions. These emissions would be produced by high occupancy vehicles such as buses and vans that will have a net benefit on air quality by replacing single occupancy vehicles and in effect reducing total miles traveled in the area as indicated in Table N-2.

Table N-2

	Total Vehicles by Alternative		Vehicle Miles Traveled	
	No Action	Proposed Project	No Action	Proposed Project
1999				
Buses	0	n.a.	n.a.	0
Shuttle vans	394	n.a.	n.a.	7,335
Rental cars	0	n.a.	n.a.	0
Cabs	3,154	n.a.	n.a.	58,721
Private vehicles, parking	7,886	n.a.	n.a.	146,822
Private vehicles, dropoff/pickup	2,110	n.a.	n.a.	39,284
total	13,545	n.a.	n.a.	252,181
2003				
Buses	0	1,505	0	28,018
Shuttle vans	421	623	7,842	11,594
Rental cars	0	3,736	0	69,563
Cabs	3,370	2,283	62,735	42,511
Private vehicles, parking	8,424	2,076	156,838	38,646
Private vehicles, dropoff/pickup	2,254	1,071	41,970	19,941
Indirect vehicle trips	12,333	0	229,622	0
total	26,802	11,294	499,007	210,273
2007				
Buses	0	4,565	0	84,984
Shuttle vans	483	1,889	8,992	35,166
Rental cars	0	11,333	0	210,995
Cabs	3,864	6,926	71,940	128,941
Private vehicles, parking	9,660	6,296	179,850	117,219
Private vehicles, dropoff/pickup	2,585	3,249	48,128	60,485
Indirect vehicle trips	53,300	0	992,339	0
total	69,892	34,257	1,301,250	637,790
2022				
Buses	0	9,177	0	170,865
Shuttle vans	766	3,798	14,260	70,703
Rental cars	0	22,785	0	424,215
Cabs	6,127	13,924	114,076	259,243
Private vehicles, parking	15,318	12,658	285,191	235,675
Private vehicles, dropoff/pickup	4,099	6,532	76,317	121,608
Indirect vehicle trips	89,867	0	1,673,138	0
total	116,177	68,875	2,162,981	1,282,309

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Table N-3

Airport Emissions Inventories – 1999, 2003, 2007, and 2022

Year and Source	PM-10 (tons/yr)
1999	
Aircraft	0.07
GSE (a)	0.01
Roadways and Parking (b)	10.07
Stationary Sources	0.00
Total	10.15
2003 Proposed Project	
Aircraft	0.12
GSE (a)	0.03
Roadways and Parking (b)	8.40
Stationary Sources	0.00
Total	8.55
2003 No Project	
Aircraft	0.08
GSE (a)	0.01
Roadways and Parking (b)	19.93
Stationary Sources	0.00
Total	20.02
2007 Proposed Project	
Aircraft	0.24
GSE (a)	0.22
Roadways and Parking (b)	25.47
Stationary Sources	0.00
Total	25.93
2007 No Project	
Aircraft	0.09
GSE (a)	0.01
Roadways and Parking (b)	51.96
Stationary Sources	0.00
Total	52.06
2022 Proposed Project	
Aircraft	0.44
GSE (a)	0.38
Roadways and Parking (b)	51.21
Stationary Sources	0.00
Total	52.03
2022 No Project	
Aircraft	0.14
GSE (a)	0.02
Roadways and Parking (b)	86.37
Stationary Sources	0.00
Total	86.53

(a) EDMS default GSE settings used for both alternatives.
(b) PM-10 emissions include exhaust, tire wear, break wear, and entrained road dust

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Table N-4

Total Project Emissions and De Minimis Criteria (Tons per year)

	PM-10
2002 Construction Impacts	
Alternative 1 (No Project)	0
Alternative 2 (Proposed Project)	58.73
2003 Operational Impacts	
No Project	20.02
Proposed Project	8.55
Change in Emissions	(-11.47)
2007 Operational Impacts	
No Project	52.06
Proposed Project	25.93
Change in Emissions	(-26.13)
2022 Operational Impacts	
No Project	86.53
Proposed Project	52.03
Change in Emissions	(-34.50)
De minimis criteria	100
Total Annual Emissions Great Basin Valleys (a)	20,075
Total Annual Emissions Mono County (c)	9,950

(a) 1996 Estimated Value. Produced by the California Air Resources Board
(b) Estimate is for Reactive Organic Compounds (ROG)
(c) 2000 Estimated Value. Produced by the California Air Resources Board

Source: Ricondo & Associates, Inc.
Prepared by: Ricondo & Associates, Inc.

Total project related emissions (construction and operational) for the project and no-project alternative are summarized in **Table N-4**. As discussed in the air quality management plan for the Town of Mammoth Lakes, particulate emissions in the Mammoth Lakes region are predominantly caused by woodburning stoves and motor vehicle traffic. As shown in Table N-4, introduction of commercial air service to Mammoth Lakes Yosemite Airport is expected to reduce particulate emissions in the region when compared to the no project alternative. In summation the proposed project will have a beneficial impact to air quality in the region and will reduce visitor vehicle miles traveled (VMT) as more people are accommodated in higher occupancy vehicles. It is noted that reduction/control of VMT in and around the City of Mammoth Lakes is a stated goal in SIP.

Response to Comment FF-3

Please see Response to Comment FF-2. The 106,600 VMT number mentioned by the commentor is a goal, not a cap. (Town of Mammoth Lakes General Plan at Chapter 8.30) The Town is always evaluating the total particulate load, not just the roadway component. The 106,000 VMT number also relates to the roads within the Town itself. (See State Implementation Plan at Figure 30.) In the traffic modeling for North Village Specific Plan Amendment EIR, the town was evaluated at full build out which included the proposed Airport improvements and it was determined that the Town

will meet the goals of the Air Quality Management Plan (AQMP) at full build out. The VMT goal was based upon specific roadway segments identified in the AQMP.

Vehicle trips in the AQMP include all trips at full development of the Town. These trips include trips originating outside of the Town. Whether they originate at the Airport or in Los Angeles is not relevant. The limiting factors for vehicle trips are accommodations and recreation amenities in Mammoth Lakes, not arrival modes. PM-10 emissions from sources at the Airport (ground service vehicles, aircraft, etc.) do not increase the pollutant levels in the Town. Exceedences of the NAAQS only occur on cold days with inversions leading to stagnant air conditions. During these periods, air is trapped in the community. The Airport is at a lower elevation than the Town and five miles to the east. Emissions from the Airport cannot travel uphill to combine with emissions in Town from woodsmoke and road dust during inversions. Under conditions when particulates from the Airport could reach Town (east wind, no inversion) the PM-10 generated in Town would disperse. As shown in Table N-4, the project, by itself is below de minimus thresholds.

Furthermore, the air quality analysis done for the North Village Specific Plan Amendment EIR assumed only 20 percent transit use by visitors. With the implementation of the proposed project some of these visitors would use shuttle service provided from the Airport to various lodgings within the Town. (70 percent of the travelers using the Airport are expected to use the shuttles, See Supplement at Page III-64.) This supports the Specific Plan EIR conclusion that there would be no significant impacts on the air quality with the full build out of the town.

Response to Comment FF-4

The proposed project would result in a reduction of total vehicle miles traveled as compared to the no–project scenario, therefore it would be in compliance with the Town of Mammoth Lakes Air Quality Management Plan's stated goal of limiting the total VMT to 106,600. Please also see Response to Comment FF-2.

Response to Comment FF-5

Please see Response to Comment FF-4.

Response to Comment FF-6

Please see Response to Comment FF-4.

Response to Comment FF-7

Although the initial service provided by American Airlines is from Chicago and Dallas (American Airlines hubs), it is expected that in the future, the majority of the visitors flying to Mammoth Lakes ski resort would be coming from Los Angeles, Reno, Las Vegas and other nearby airports. They would be flying into Mammoth Lakes through these connecting airports instead of driving. This would result in a substantial decrease of total vehicle miles traveled. Currently most of these potential airport users have no viable option other than driving if they want to come to Mammoth Lakes area. This would result in providing an alternative mode of transport to the people who are part of the projected growth in the visitors to the region.

Currently there are some visitors who stay in Bishop and use Mammoth Mountain ski areas. Therefore, the proposed project will not induce any additional travelers to stay in Bishop and drive to Mammoth Lakes.

Response to Comment FF-8

The FAA has determined that neither the proposed project or any of the alternatives meet the criteria of a major runway extension as they don't exceed de minimis threshold for any of the criteria pollutants and therefore air quality certification is not required. Consequently an assurance letter from the State of California is not required.

Response to Comment FF-9

The proposed project would not exceed, either individually or cumulatively, the 106,600 vehicle miles traveled goal, which is a control measure in the Town of Mammoth Lakes PM-10 SIP as stated in Chapter 8.30 of the Town's General Plan. As shown in Table N-2 the proposed project would result in a reduction of total VMT in the region and hence will not contribute to any increase in VMT.

As described in comment FF-2, the proposed project will not violate 24-hour PM-10 standards.

Attachment A
Wildlife Management News &
Excerpt from Department of Fish & Game Website

Wildlife Management News

Sierra Nevada Bighorn Sheep

The Sierra Nevada Bighorn Sheep, a unique race of bighorn found only in this rugged mountain expanse will likely soon join the list of Federally Endangered Wildlife, and also be uplisted to Endangered by the State of California. Currently it is listed as a State of California, Threatened Species but has no designation under the Federal Endangered Species Act. Its population over the last century has declined from probably at least 1,000 animals in the last century, to right around 100 animals in 1998. Why has it declined so precipitously? It all started with the advance of settlers into the Sierra. Pior to their arrival, sheep ranged from Sonora Pass north of Bridgeport clear down to the Olancha Peak country west of Olancha and maybe as far down as Mojave. The sheep population soon was decimated by disease brought in from domestic sheep grazing in the high country, as well as overhunting from market hunters, and the food needs of the 49er's during the Gold Rush days. By the late twentieth century, two remnant populations persisted. The Mt. Baxter herd was found to number 220 animals in 1978, and the Mt.Williamson herd, 30 sheep. Both herds lived relatively close to each other in the high Sierran peaks west of the town of Independence. Wildlife biologists realized all the eggs were in just 2 baskets and if something happened to these remaining populations it would be disastrous for the sheep. A better insurance policy with more coverage was needed. How prophetic this realization would become! So biologists began to establish other populations by transplanting sheep from the Mt. Baxter herd to other locations. The goal was for bighorns at these new sites to establish healthy stable populations and decrease the risk of any event such as bad winters, avalanches, or disease transmission from affecting all sheep. Separate bighorn herds increased in their new habitats in Lee Vining Canyon country west of Mono Lake, Wheeler Ridge northwest of Bishop, and Mt. Langley country west of Lone Pine. By the mid 80's the herds totalled about 300 sheep and the future looked bright. But then something unexpected happened! Wildlife biologists had an interesting and difficult management dilemma to deal with!

The largest population at Mt. Baxter began a precipitous decline. Bighorns were no longer being seen at their low elevation winter ranges. Researchers combed the high peaks and found to their dismay the sheep were wintering up high, very high!... at 12,000 and 13,000 feet on windswept ridges. This was not good news since forage is very scarce at these elevations and weather is extreme. Why was this occuring? The same pattern showed up at the Lee Vining population, and also at Mt. Langley, Wheeler Ridge and Mt. Williamson. Wildlife detectives delved into the mystery and soon the evidence pointed to a management dilemma no one was expecting. The expression "everything is connected to everything else in nature took on a harsh reality".

In the 70's and 80's mule deer populations were at record numbers. At the same time mountain lions were correspondingly increasing to very high numbers since deer prey were abundant. The success of lion populations are intricately linked to deer numbers. When deer numbers are high...so too are mountain lion numbers. Also the lion population was on the increase from the passage in

1990 of the California State ban on killing them for sport or predator control. High deer numbers and the end of predator control spelled a hey day for lions. This increase in their numbers sent an expanding population right into the path of wintering bighorn sheep.

Bighorn through history have coevolved successfully with predation by lion, but this time it was the straw that broke the camels back. Sheep numbers were just to low to cushion the effect of the increased lion population. Over 60 bighorn kills were documented from the late 70's to present from mountain lion. This is just what biologists could locate! The bighorn attempted to use their mountain climbing skills to outwit their feline stalkers! The sheep were being so heavily predated upon that they abandoned their traditional low elevation winter ranges where food was good and the weather favorable, and headed to the high country where lions could not easily follow. There the false security of the high country refuge was chipped away at by the severity of the winters and the poor quality of the forage found on these high windswept expanses. What sheep were not being killed by lions at low elevations were being decimated by winter losses including poor lamb survival and loss to avalanches. Today, the population numbers are so low that with every new sheep killed, particularly ewes, the probability the population will survive is rapidly diminishing. Field surveys have documented the presence of lion in virtually every portion of the low elevation winter range where sheep need to be.

So now what will Federal listing mean? What can biologists do to help stave off the tide of extinction? First, a Conservation Strategy has been prepared by a group of Federal and State biologists from Sequoia-Kings Canyon and Yosemite National Parks, California Department of Fish and Game, The University of California, and the Inyo National Forest to develop specific proposals to recover the bighorn population back from the brink of extinction to a herd capable of withstanding the natural factors facing any wildlife species.

Proposals are in the works to develop a captive breeding herd where a few sheep will be brought in from the wild and bred in captivity to supplant the dwindling numbers of bighorn in the wild. Captive breeding has been instrumental in recovering a number of high profile endangered species like the eastern bald eagle, the peregrine falcon and the California condor. It is currently in progress to help recover the Peninsular bighorn sheep from southern California.

Secondly, the threat of pneumonia disease transmission from domestic sheep to bighorn must also be addressed. Federal land managers are working hard to insure livestock grazing allotments have a sufficient buffer from known bighorn populations to prevent future interactions. No recent documented cases of disease transmission have occured in the Sierra, but it is recognized that it only takes one interaction between a domestic sheep and one bighorn to spell doom for an entire bighorn herd.

A third, and most important element of the recovery effort deals with what to do about mountain lion predation, for without addressing this issue the chances of recovering the bighorn are questionable. It is the principal factor in the recent decline of the sheep. State and Federal managers have agreed that some level of mountain lion control will be necessary to remove the high threat of predation of sheep on the winter range and allow bighorns to once again fully utilize their low elevation winter ranges. The placement of the Sierra bighorn on the Fedral Endangered Species List will hopefully allow this issue to be adequately addressed. Its a tough one, but biologists believe the predation factor must be reduced and there is not alot of time left to do something. The sand is sifting through the hour glass!

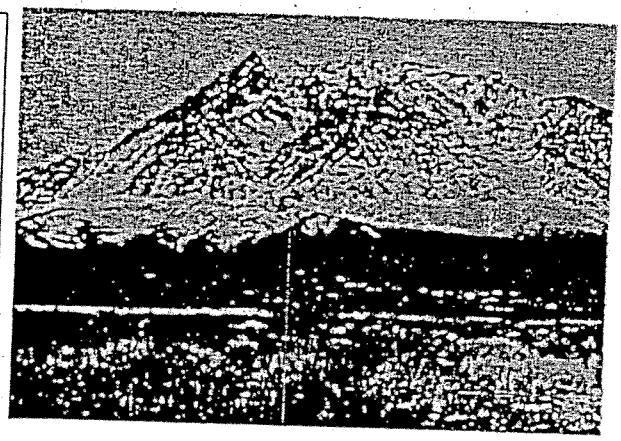
So look for the headlines in your newspapers concerning the listing of the species and keep your fingers crossed that bighorn can be brought back from the brink and once again be a great part of the high Sierran wildlife legacy!

Mule deer winter range and FIRE

Mule Deer

Natural fires once played a pivotal role in modifying wildlife habitat. What we find today on mule deer winter range is human caused fire is also having a profound effect on mule deer winter range condition. The photo to the left shows mule deer in their shrub habitat winter range principally composed of shrubs and grasses. The most important shrub for deer survival through the winter in the Eastern Sierra, and many other western winter ranges is bitterbrush. Its high in fats and calories and together with sagebrush composes its principal diet through the winter months.

Winter range burned during the Tom Fire



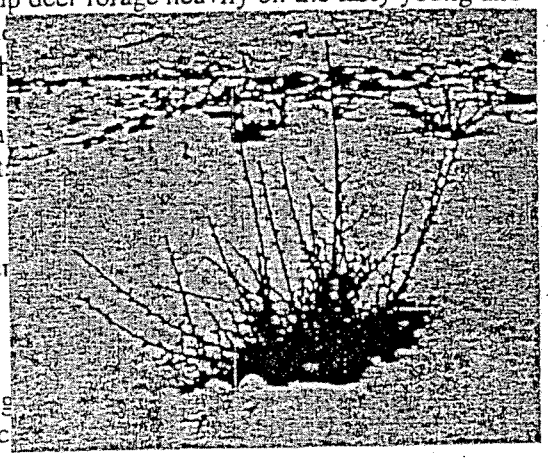
Winter Range after 1998 Tom Fire

Winter Range before 1998 Tom Fire

In the last four years we have had 2 major human caused fires to the west of Bishop on the Round Valley Deer Winter Range. These burns have affected over 8,000 acres of winter range habitat. The photo above is from the 1998 Tom fire which burned 3,000 acres of bitterbrush habitat. Mule deer just do not take kindly to eating charred shrub skeletons as a major part of their winter diet.

Before the Tom fire, 5,000 acres burned in 1995 on Bureau of Land Management land and Forest Service land in the Pole Fire. What does this all mean to the Round Valler deer? Less winter range food to assist a herd on the upswing from a population decline that began in the mid 1980's. The population, previously at record numbers "crashed" (unscientific terminology) from roughly 6,000 animals down to 1,500 in the early 90's. The herd is now bounding back and is now estimated at 2,500 deer. By the way, deer populations naturally go through boom and bust cycles. The Round Valley deer winter range probably could not support record deer numbers forever! High deer populations ultimately experience die-offs from some ecological event, maybe they eat out their winter food supply and startvation takes its toll, maybe a severe winter or a drought finally takes it

toll, or as some biologists believe in this case, high mortality from a very high mountain population that gradually increased as deer numbers increased took its toll. In the end the bell will ultimately toll sooner or later when wildlife populations exceed their carrying capacity with the land. The balance of nature is really more of a dynamic force with wildlife populations never staying static but rather in constant upswings and downturns. But for the moment, back to bitterbrush! To confound the problem of lost bitterbrush food on the winter range, this plant returns very slowly over many years and requires good wet springs and summers for germination and survival of young plants. To add to this, once these young plants come up deer forage heavily on the tasty young and nutriti growth like alfalfa sprout to us! The challe today for Land Manag Agenc



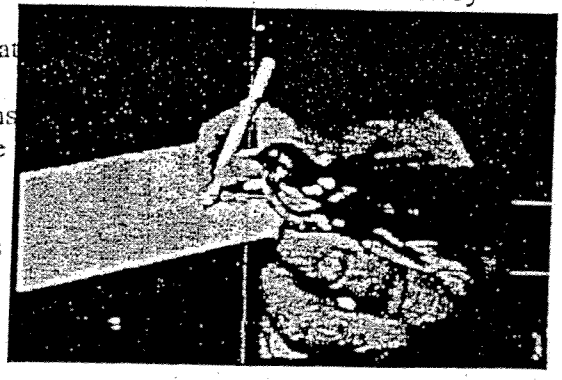
is to prevent human caused fires on winter range since they generally produce (at least in the short-term) undesireable results. A project is now underway on the 1995 Pole Fire by the Bureau of Land Management in cooperation with California Department of Fish and Game to see how bitterbrush can be replantedsuccessfully. For now deer will have to utilize the remaining bitterbrush. Deer management biologists believe the loss of bitterbrush from those fires will adversely effect the recovering herd. Time will tell!

Now back to the deer population crash? Biologists debate as to whether it was a sustained drought in the Eastern Sierra or increased predation from the steady buildup of the mountain lion population in response to record numbers of deer that caused the deer numbers to ultimately decline. Parts of the winter range were not in good shape to begin with before the wildfires since the bitterbrush was very old and part of its nutritious growth was becoming unavailable to deer. High deer numbers had a dramatic effect on the bitterbrush plants since they can only take so much munchin on. Branches were growing higher than deer could reach and the ones that were available were eaten so heavily that they were dying. The photo above left shows a bitterbrush plant with its twigs heavily eaten, or browsed as biologists say. Notice the short stubby nature of the branches in contrast to the long braches of a lightly eaten bitterbrush on the right. Deer have been making quite a meal of the shrub on the left. But there is only so much eatin on a self-respecting bitterbrush can take! As I said, If branches become to heavily browsed they die. Periodically nature brings in fire to rejuevenate these heavily browsed plants. After a fire, bitterbrush over time either rapidly resprouts a plant from the rootcollar at the base of the burned branches, or it sprouts from seed that in many cases has been buried by rodents. If resprouting is to occur it usually happens the next Spring after the fire and deer food is ready right away. What biologists have noticed on this winter range is bitterbrush is not resprouting back and so the availability of bitterbrush for deer food will take alot longer since it must come back by seed germination primarily, like the photo to the above right. Notice you just do not see many shribs in that photo. In the short run the loss of bitterbrush to wildfire can be traumatic to deer numbers, but in the big picture assuming one has the patience to wait long enough (maybe decades), bitterbrush will return to the winter range and deer will once

again have good pickins of tasty, healthy bittterbrush plants. In the meantime the spring green-up on these burns can be a good forage supply if deer can find the bitterbrush forage they need to get them through the winter. Biologists know that everything is cyclic in the natural scheme of things. Sometimes the cycles take longer than we would like and in many cases we have little control over such cycles.

Today the Inyo National Forest is beginning to use prescribed fire as a management tool to reduce the chance of large fires occuring. Our goal is to manage important wildlife habitat areas such as key deer winter ranges, bighorn sheep winter ranges, riparian areas, and oak hardwood groves to perpetuate these habitats while still allowing fire to once again play its role on the landscape. Look for prescribed burns to be occuring on several areas of the Forest. The bottom photo is a prescribed burn conducted last October at Division Creek northwest of Independence in the Sierra foothills. The principal objective was to reduce tall shrub fuels adjacent to a native stand of California Live Oaks to prevent a potentially catastrophic wildfire from burning the oak groves. Secondarily it was designed to rejuvenate portions of a key bitterbrush mule deer winter range to determine if and how prescribed fire can be used for long-term deer habitat management. Monitoring of shrub recolonization and deer use will be ongoing for the next several years. Stay tuned to this page for more.

....And by the way did you know the Inyo is in partnership with PRBO and the Bureau of Land Management, California Department of Fish and Game, Mono Lake Committee and Eastern Sierra Audubon Society in a 3 year study of birds in riparian zones of the Eastern Sierra. This study focuses on the collection of baseline bird species



information and relations of these species to their habitats along the streams in the foothill zone of the Eastern Sierras. Each year crews from PRBO accompanied by volunteers from folks like Audubon and Mono Lake Committee head out in the spring to tally all the species living along survey routes on 28 streams along the Eastern Sierra from Cartago clear north to Bridgeport. Data is collected on what bird species are heard or seen, the sex and age of the birds, dates of nesting, egg laying, hatching of young, survival of young, and information about what types of trees and shrubs the birds are using for nesting. This information will help establish long-term baseline monitoring data and help managers identify important bird areas, what factors affect birds,

and what we need to do when managing the land to insure birds are given a fair consideration. Tune in for more info as study results are published.

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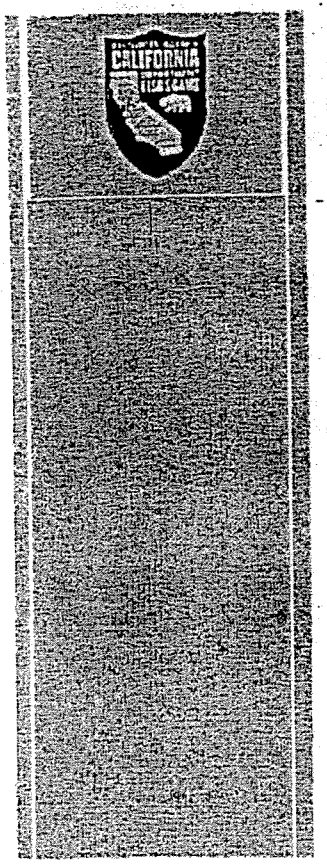
Centrocercus urophasianus
A California Species of Special Concern, Harvest Species

Life History

The sage grouse, or "sage hen" as it is commonly called, is the largest native grouse in North America. Among the fowl-like birds, only the turkey is larger than the sage grouse. The sage grouse is a permanent resident in northeastern California, ranging from the Oregon border along the east side of the Cascade Range and Sierra Nevada to northern Inyo County. Lassen and Mono counties have the most stable populations. The greatest abundance of sage grouse are found in a combination of sagebrush, perennial grassland or wet meadow, and water. Bitterbrush and alkali desert scrub are also commonly present. Males from several square miles gather at traditional strutting areas (leks) in late winter and early spring. These leks are located on patches of bare ground surrounded by sagebrush stands of moderate canopy. Some population movements may occur in winter.

Open areas within sagebrush communities are needed for courtship displays. Fairly open stands of sagebrush are needed for nesting. The nest is a shallow scrape with a thin lining of plant material; often placed under sagebrush. Breeding occurs from mid-February to late August. The peak strutting period is March-April. Nesting and brooding period is May-July. All males in a local area gather to display (lek) during the early breeding period. A few dominant males do most of the mating. Clutch size is 5-13; averaging 7-8. The incubation period is 25 days. The female cares for the young. Young sage grouse first fly at 7-14 days.

Adult feed primarily on sagebrush and leafage of green grass, forbs, clover, sunflower and supplement their diet with insects, particularly grasshoppers.



Hunting

Sage grouse when alarmed will emit a sharp cackle, "kek-kek-kek". Sage grouse rise from the ground slowly under labored wing beats, however, they are able to gain speed quickly for such a large bird.

Young sage grouse are excellent eating and are considered a prized game bird by those who hunt them. Older birds may be tough and often have a strong sage flavor as a result of their diet. This flavor can often be prevented by cleaning the bird quickly after they are shot.

Attachment B
Analysis of 96-hour Aquifer Test Data, Mammoth Yosemite Airport, Mono County, California. Report dated February 8, 2002, by Richard C. Slade & Associates.

ANALYSIS OF 96-HOUR AQUIFER TEST DATA
MAMMOTH YOSEMITE AIRPORT
MONO COUNTY, CALIFORNIA

BY

RICHARD C. SLADE & ASSOCIATES

FEBRUARY 8, 2002

This report provides an analysis of a 96-hour aquifer test performed from January 10 through January 14, 2002, on four water-supply wells (Well Nos. 1, 2, AP and LV-19) owned by Mammoth Yosemite Airport (MYA), Mono County, California, and on two other offsite water-supply wells, the Sierra Nevada Aquatic Research Laboratory (SNARL) well and the Mammoth School (ESN) Well.

Figure 1 – Well Location Map – shows the location of the five wells that were monitored during the aquifer test. The Church well, shown on Figure 1, was also monitored during the aquifer test but the collected data were determined to be invalid. However, manual water level data were collected from that well prior to and after the end of the 96-hour aquifer test. One other well that is considered in this report, but was not monitored during the aquifer test, is the Sierra Materials ("Sierra Quarry" or SQ) Well.

Water level monitoring during the 96-hour aquifer test was performed by Triad/Holmes Associates (THA) between January 9 and 16, 2002. Richard C. Slade and Associates LLC (RCS), Consulting Groundwater Geologists was retained by THA to analyze the resulting test data.

BACKGROUND INFORMATION

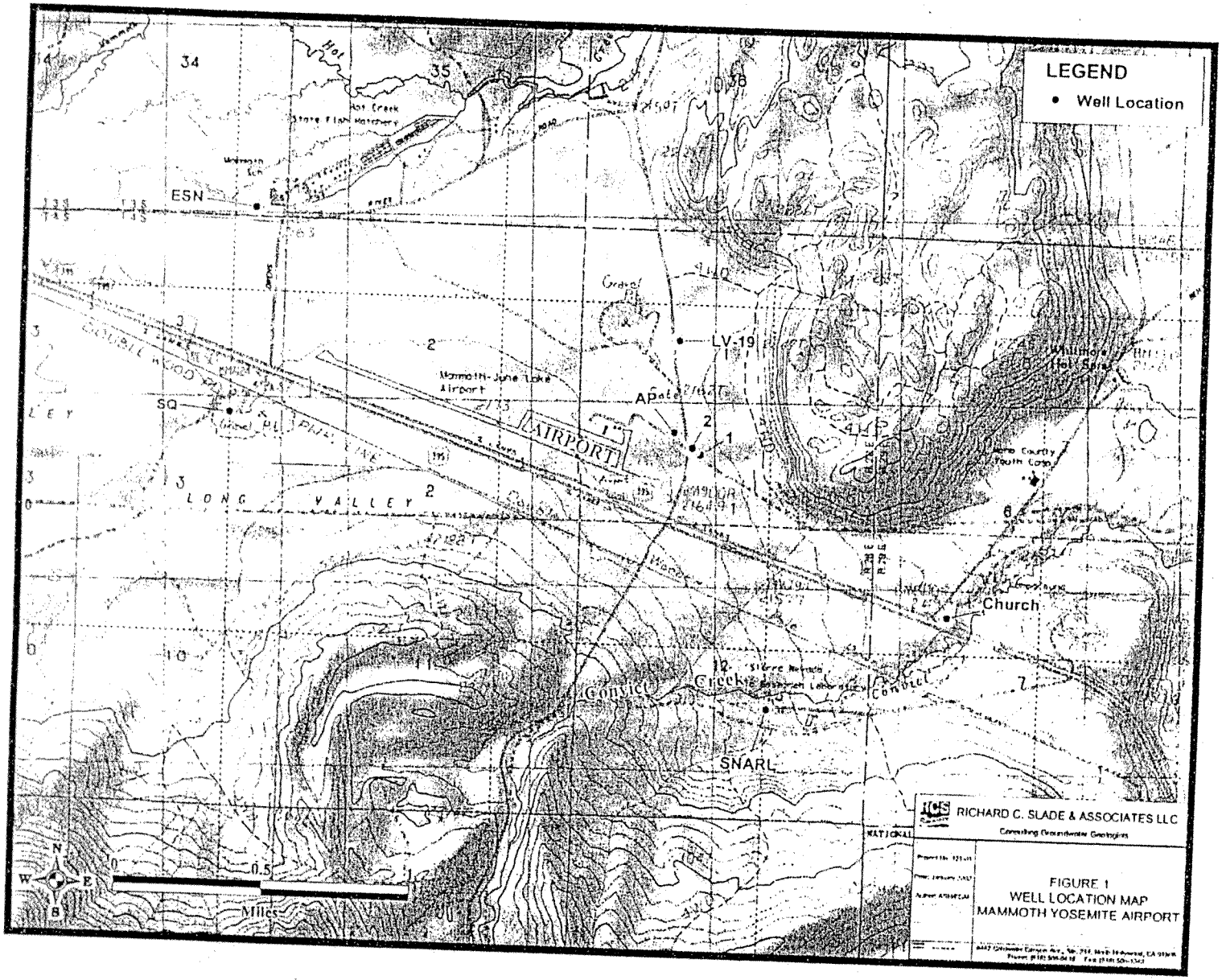
This letter-report has been prepared to address an issue raised by the California Regional Water Quality Control Board, Lahontan Region (RWQCB) with regard to the potential impact of pumping of MYA's existing well on other nearby water-supply wells. Mr. Reinard W. Brandley (RWB), Consulting Airport Engineer, in a letter dated December 21, 2001 and submitted to THA, requested that THA perform an aquifer test; a copy of that letter is appended to this letter-report. In their letter, the RWQCB directed that the pumping rate to be used during the aquifer test should be equal to the average daily rate of water consumption for MYA. This average daily rate of consumption was determined by RWQCB to be 59,000 gallons per day (gpd). At a 100% operational pumping rate (i.e., 24 hours per day), this amounts to approximately 41 gallons per minute (gpm). Hence, the purpose of the aquifer test was to determine the potential water level effects of pumping of one MYA well, at the above average daily consumption, on the other three MYA wells and on the offsite well(s). In addition, the RWQCB was reported as being "particularly interested" in determining the transmissivity of the aquifer system(s) from which the MYA wells are extracting their groundwater.

AVAILABLE MYA WELL DATA

The attached Figure 1 illustrates the approximate locations of the existing water-supply wells that were used in the aquifer test. Construction data for MYA Well Nos. 1 and 2, the ESN well and the SQ well were obtained from the driller's logs that were supplied to us by THA. Available construction information for the AP, LV-19, SNARL, and Church wells were obtained from U.S. Geological Survey (USGS) Open-File Report (OFR) 00-230.

Key well construction data for MYA Well Nos. 1 and 2 are as follows:

> *Well No. 1*: This well has 8-inch inside diameter (I.D.) by ¼-wall thick wall steel casing that extends to a depth of 143 ft below ground surface (bgs). Casing perforations are set between the depths of 100 and 140 ft bgs; the perforation slot openings are 3/16-inches in width. A cement sanitary seal was set from ground surface to a depth of 55 ft bgs; a minimum 50-foot deep sanitary seal is required in a well if it is to be used for domestic purposes.


LEGEND
Well Location
ESN
LV-19
SQ
AP
AIRPORT
Mammoth-June Lake Airport
LONG VALLEY
Church
Convict Creek
SNARL
Hot Creek State Fish Hatchery
Mammoth Hot Springs
Mono County Youth Camp
RICHARD C. SLADE & ASSOCIATES LLC
Consulting Groundwater Geologists
FIGURE 1
WELL LOCATION MAP
MAMMOTH YOSEMITE AIRPORT
N
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0.5
Miles

Well No. 2: This well is also provided with 8-inch I.D. by ¼-wall thick wall steel well casing to a depth of 143 ft bgs. Casing perforations are set in the depth zones from 100 to 140 ft bgs. The cement sanitary seal extends from ground surface to a depth of 100 ft bgs.

The driller's logs indicate that the aquifer system(s) encountered consist of "cobble rock and sand." Based on those logs, there appears to be possibly two aquifer systems. The first, a shallow aquifer system, may extend from ground surface to a depth of approximately 65 ft bgs. A second, deeper aquifer system appears to occur between the depths of approximately 100 to 136 ft bgs; this deeper system is perforated by the MYA wells. Separating these two systems is a "cobble rock and green clay" that reportedly occurs between the depths of 61 ft and 100 ft bgs. At a depth of 135 to 136 ft bgs, a gray to blue clay was encountered in the MYA wells according to the driller; the pilot holes for these wells were terminated in this clay. Because the lateral extent and continuity of the clay between 100 and 136 ft bgs are not known, it is probable that the lower aquifer system is under semi-confined groundwater conditions.

Well construction data for the remaining wells are as follows:

AP Well: This well has a 10-inch diameter casing set to a depth of 70 bgs. Casing perforations are reported to be between a depth of 52 and 66 ft bgs. There is no other construction information available for this well.

LV-19: This is a 2-inch diameter observation well reportedly installed to a depth of 98.6 ft bgs. Casing perforations are reported to be between the depths of 96.6 and 98.6 ft bgs. There is no other construction information available for this well.

SNARL Well: The SNARL well is reported to consist of 6-inch diameter casing installed to a depth of approximately 70 ft bgs. Casing perforations reportedly extend from 34 ft to 70 ft bgs; no other construction information is available for this well.

Church Well: This well is reported to also consist of 6-inch diameter casing that has been installed to a depth of 45.5 ft bgs. No other construction information is available on this well.

ESN Well: This well is reported to also consist of 6-inch diameter casing that has been installed to a depth of 74 ft bgs. The well has perforations that extend from 50 ft to 74 ft bgs. Based on the driller's log for this well, the perforations appear to have been placed within interbedded clay, sand and gravel lenses.

SQ Well: The SQ well reportedly consists of 6-inch diameter casing that has been installed to a depth of 127 ft bgs. The driller's log notes that perforations extend from 27 ft to 127 ft bgs. The driller's log also shows that the well appears to have

been installed within fractured andesite and basalt between 10 ft and 125 ft bgs. Earth materials in the uppermost 10 ft of the borehole were reported to consist of "large" gravel, boulders and coarse sand.

Based on available construction information, it appears that the AP Well is screened entirely within the upper aquifer system, and thus is isolated from the perforated zones in MYA Well Nos. 1 and 2 by a 30 to 40-foot thick layer of cobble/clay. This clayey unit, if it is laterally extensive, can be interpreted to be a zone of relatively low permeability; in essence, it would tend to serve as an aquitard. However, LV-19, the 2-inch observation well contains 2 ft of perforations just above the top of the lower aquifer system that likely begins at a depth of approximately 100 ft bgs.

The SNARL and Church wells appear to be screened in an upper aquifer system, due to the shallow depths of these wells and/or their reported perforations intervals. However, because the SNARL and Church wells are located at a significant distance (3350 ft and 3775 ft, respectively) south and east of MYA Well No. 1, respectively, it is unlikely that the shallow aquifer systems encountered in those two wells are identical to those encountered in MYA Well Nos. 1 and 2. Finally, the ESN and the SQ wells also appear to be screened in aquifer systems that are not connected to those aquifer systems in MYA Well Nos. 1 and 2, AP, and LV-19. The different type of rock/earth material encountered in those two wells (interbedded clay, sand and gravel in the ESN well, and basalt in the SQ well) suggests that the aquifer systems are different.

It should also be noted that the source of recharge water to the shallow aquifer system in the SNARL and Church wells appears to be derived from the watershed area of Convict Creek (see Figure 1).

TESTING PROTOCOL

Field measurement and recording of water levels in each well during aquifer testing was performed solely by THA geologists. A minor amount of liaison and assistance were provided to THA by an RCS geologist prior to the commencement of the aquifer test.

MYA Well No. 1 was designated as the pumping well and water levels in this well were manually measured (with an electric tape sounder) and recorded by THA geologists on a regular basis during the 96-hour test. In addition, manual measurements of water levels were periodically performed in Well LV-19 during the aquifer test by THA.

Water levels in all five wells were monitored continuously using In-Situ Inc. Mini-Troll pressure transducers, which were installed by THA geologists. Transducer data for the ESN well were obtained from USGS personnel by THA geologists and were used in our analysis. Water levels in the other five wells (Well No. 2, AP, SNARL, ESN and the SQ well) were not manually measured or recorded by THA geologists.

In the AP and Church wells, the data cables in two of the pressure transducers leaked during the test. This leakage caused a failure of the transducers, which did not allow the data to be readily retrieved by THA geologists from each transducer. However, data from the AP Well were subsequently recovered by personnel from In-Situ, Inc. (the manufacturer of the transducers), and these data were then used in our analysis. Data from the Church Well, which was also recovered by In-Situ personnel, appeared to be erratic and, as a result, were deemed invalid and were not used in our analysis.

RESULTS OF THE 96-HOUR AQUIFER TESTING

Pumping in MYA Well No. 1 was performed continuously at a pumping rate of 45 gpm from January 10 through January 14, 2002 for the subject 96-hour (5758 minutes) aquifer test. This pumping rate is slightly greater than the 41 gpm average daily demand rate for water supply at MYA. Pumping was not performed in any of the other wells during this 96-hour period, with the exception of the SNARL Well which was pumped intermittently for very short periods by its owner.

Static Water Levels

Table 1 –Static Water Levels- lists the pre-test static (non-pumping) water levels as measured by THA geologists from an established reference point atop each respective well casing.

Table 1
Static Water Levels

Well Name/No.	Approximate Reference Point Elevation (ft above msl)	Depth to Water (ft brp)	Approximate Water Level Elevation (ft above msl)
No. 1	7086.8	29.2	7057.6
No. 2	7090.5	31.8	7058.7
AP	7092.8	27.4	7065.4
LV-19	7091.6	38.7	7052.9
SNARL	7095.0	34.4	7060.6
Church	7035.1	10.8	7024.3
ESN	7085.8	ND	ND
SQ	7104.4	ND	ND

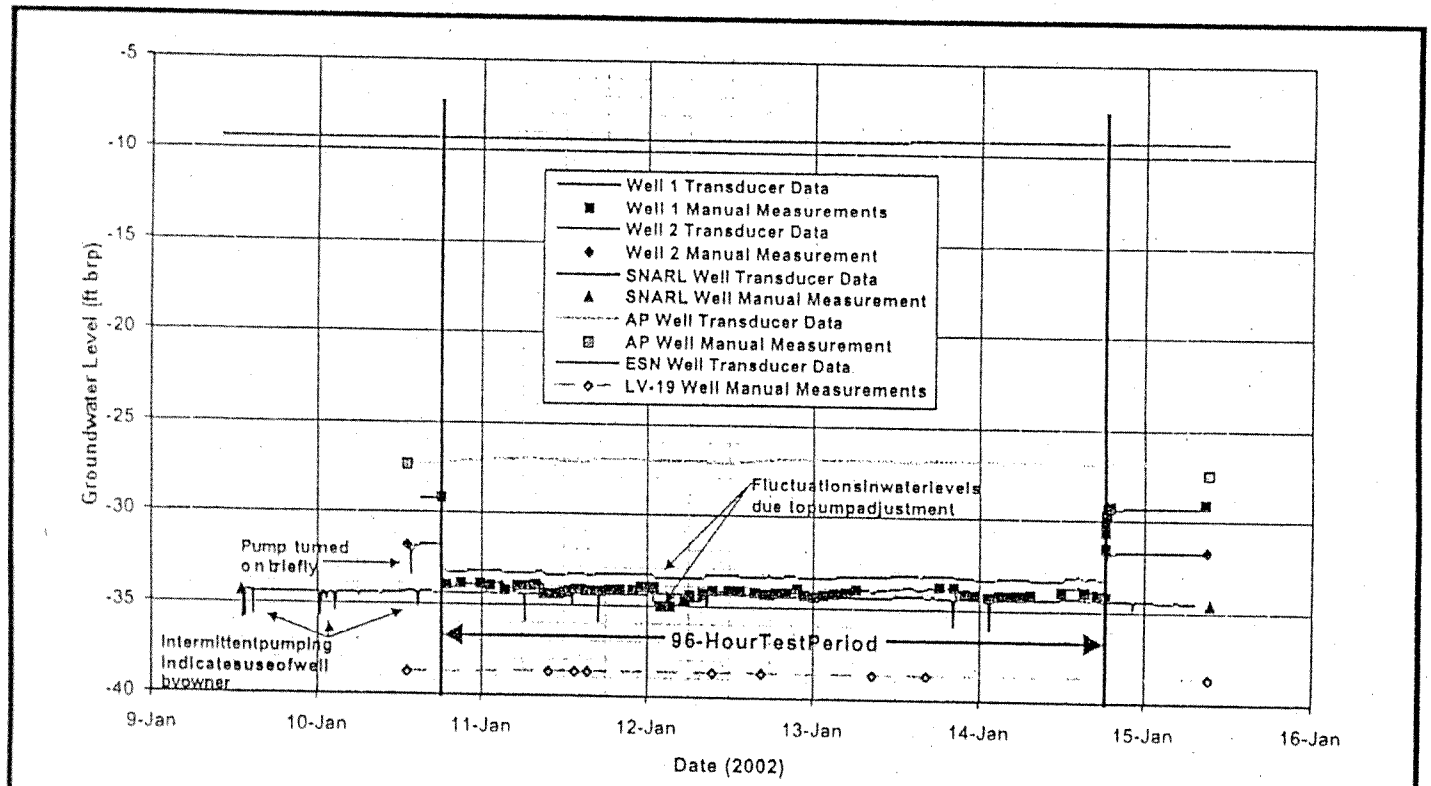
Note: brp = below reference point
msl = mean sea level
ND = No Data

Once corrected to an elevation datum, the above static water levels appear to indicate that the regional groundwater flow is generally flowing in an easterly direction in the vicinity of MYA. However, because the wells are perforated in different aquifer system(s) (e.g., the AP Well is perforated in the upper aquifer system whereas MYA Well Nos. 1 and 2 are perforated in the lower aquifer system), and because recharge to the wells may originate from different sources and directions, then it is not possible to accurately determine the groundwater flow direction for either the upper or lower aquifer system without additional monitoring points and more accurate elevation control.

Water Level Data

Figure 2 –Water Level Data- provides graphs of the available water level data collected before, during, and after the aquifer test for MYA Well Nos. 1 and 2, the AP Well, LV-19, and the SNARL well. Pressure transducer data for Well Nos. 1 and 2, the AP Well, and the SNARL Well have been plotted along with the available manually-collected data for these wells. In addition, only the manually collected data for LV-19 have been plotted. Because the pressure transducer data for the Church Well were considered invalid, they have not been plotted on Figure 2.

Pumping of Well No. 1 created a total water level drawdown in this well of approximately 4.8 ft (from a pre-test static water level of 29.2 ft to a depth of 34 ft bgs). This maximum water level



RICHARD C. SLADE & ASSOCIATES LLC
CONSULTING GROUNDWATER GEOLOGISTS

FIGURE 2
WATER LEVEL DATA
96 HOUR AQUIFER TESTING
MAMMOTH YOSEMITE AIRPORT

JOB NO. M121-01 JANUARY 2002

drawdown was created shortly following startup of pumping and subsequent water levels during the remainder of the test generally remained at that depth while the well was continuing to pump at the 45 gpm rate. It should be noted, however, that water levels fluctuated somewhat during the test as a result of frequent readjustment of the pump rate during the test by THA geologists in order to maintain the 45-gpm pump rate.

During pumping of Well No. 1, Well No. 2 (located approximately 190 ft to the west), showed a water level drawdown interference of approximately 1.4 ft. Moreover the drawdown pattern in Well No. 2 mimics that of Well No.1 because water levels in Well No. 2 declined relatively quickly to a specific level and then remained more or less at that depth for the duration of the pumping at Well No. 1. However, the pressure transducer data for the AP Well (located approximately 556 ft northwest of Well No. 1), for the SNARL Well (located approximately 3350 ft southeast of Well No. 1), for the ESN Well (located approximately 9080 ft northwest of Well No. 1), and the manual water level measurement data for LV-19 (located approximately 2100 ft north of Well No. 1) showed no significant changes in water levels during the test. This indicates that water level drawdown interference, by virtue of pumping Well No.1, was not occurring in the AP Well, the ESN Well, or in the SNARL Well during this test. The limited number of manual water level measurements in LV-19 suggest that drawdown interference was not occurring in that well either. The lack of response of water levels in the AP Well and in LV-19, to pumping of Well No. 1, indicates those two wells are not in hydraulic communication with Well No. 1 or Well No. 2.

CALCULATED AQUIFER TRANSMISSIVITY

Aquifer Test Drawdown Data

Transmissivity (T) is a measure of the ability of an aquifer to transmit water to a pumping well, and is expressed in units of gallons per day per foot of aquifer width (gpd/ft). Values of T were calculated from measured water level drawdowns that were monitored in Well No. 1 and in Well No. 2, using the software program AQTESOLV™ (vers.3.01). A number of different analytical (curve-fitting) solutions were used, and the Hantush-Jacob Solution for a leaky confined (or semi-confined) aquifer was found to generally provide the best solution for the water level data from the two wells. This analytical solution also assumed there was no groundwater in storage

in the cobble/clay zone of low permeability (the probable aquitard) that lies between the upper and lower aquifer zones in the area.

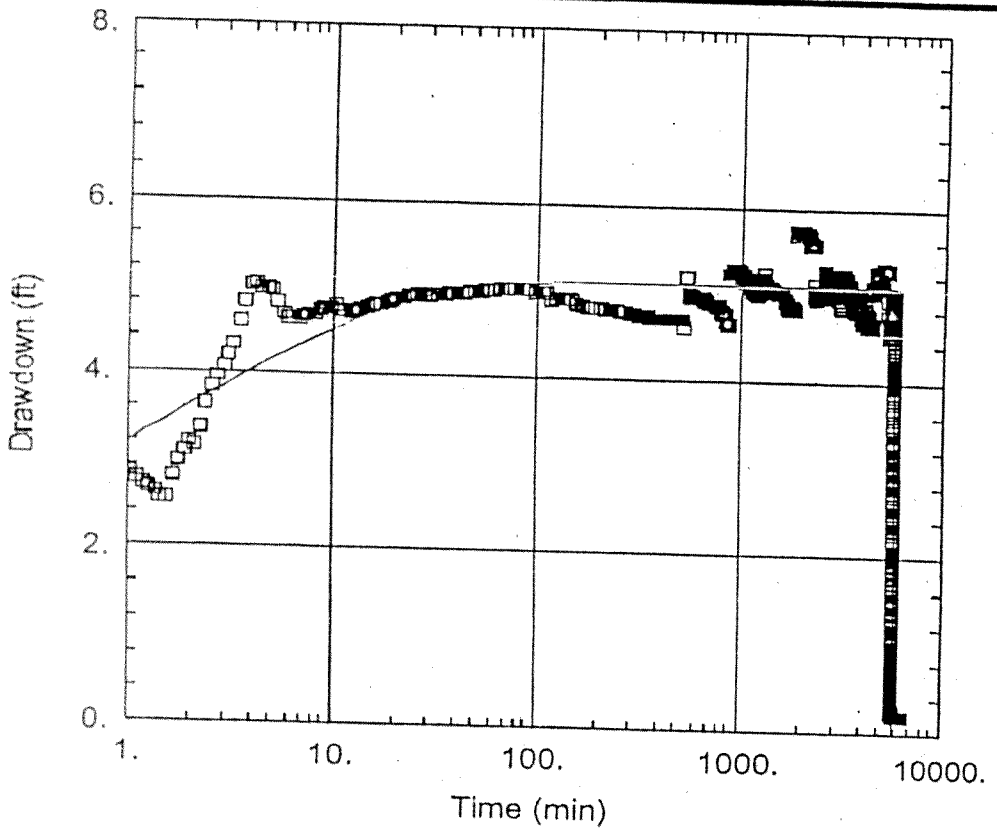
Figure 3 –Analytical Solution for 96-Hour Aquifer Test Data Well No. 1- and Figure 4 –Analytical Solution for 96-Hour Aquifer Test Data Well No. 2- illustrate the results of plotting and applying the Hantush-Jacob Solution to the aquifer test data for each well. Figures 3 and 4 show that the calculated T values were 7,900 gpd/ft for Well No. 1 test data and 10,000 gpd/ft for Well No. 2 test data. In addition, aquifer storativity (symbol, S; a unitless/dimensionless number) was calculated to be 0.0064 for Well No. 1, whereas a value of 0.000083 was calculated for Well No. 2. However, because Well No. 1 is the pumping well, the S value derived from the data for that well is deemed inaccurate and, thus, the S value for Well No. 2, a water level monitoring well for this test, is likely more representative of aquifer storativity for the lower aquifer system penetrated by each well. The magnitude of this S value (0.000083) is indicative of semi-confined groundwater conditions.

Aquifer Test Recovery Data

Values for T were also determined from water level recovery data collected from each well by THA. Figure 5 – Analytical Solution for Recovery Data Well No. 1 and Figure 6 –Analytical Solution for Recovery Data Well No. 2- provide the results of applying the Theis solution to the water level recovery data for the two wells. Figures 5 and 6 show that the calculated T values, based on the recovery data, ranged from 8,000 gpd/ft for Well No. 1 to 9,000 gpd/ft for Well No. 2. Such values are consistent with those generated for these two wells using the water level drawdown data acquired during the pumping portion of the test in Well No. 1.

THEORETICAL DISTANCE-DRAWDOWN CALCULATIONS

Theoretical parameters for the aquifer system in Well Nos. 1 and 2 were simulated (calibrated) using the analytical software program PUMPIT (vers. 4.3) based on the results of aquifer testing in those two wells. Calculation of these parameters was performed by modifying the T value for the aquifer system to obtain the actual amounts of water level drawdown monitored in Well Nos. 1 and 2. Once the calibration of the model was achieved, the calculated aquifer parameters were used to perform additional simulations to obtain theoretical drawdown values at the offsite wells (the AP, SNARL, Church, ESN, and SQ wells), which are likely constructed into the lower



Well Monitored
□ Well 1

Aquifer Model
Leaky

Solution
Hantush-Jacob

ParametersCalculated
T = 7,900 gpd/ft
S = 0.0064

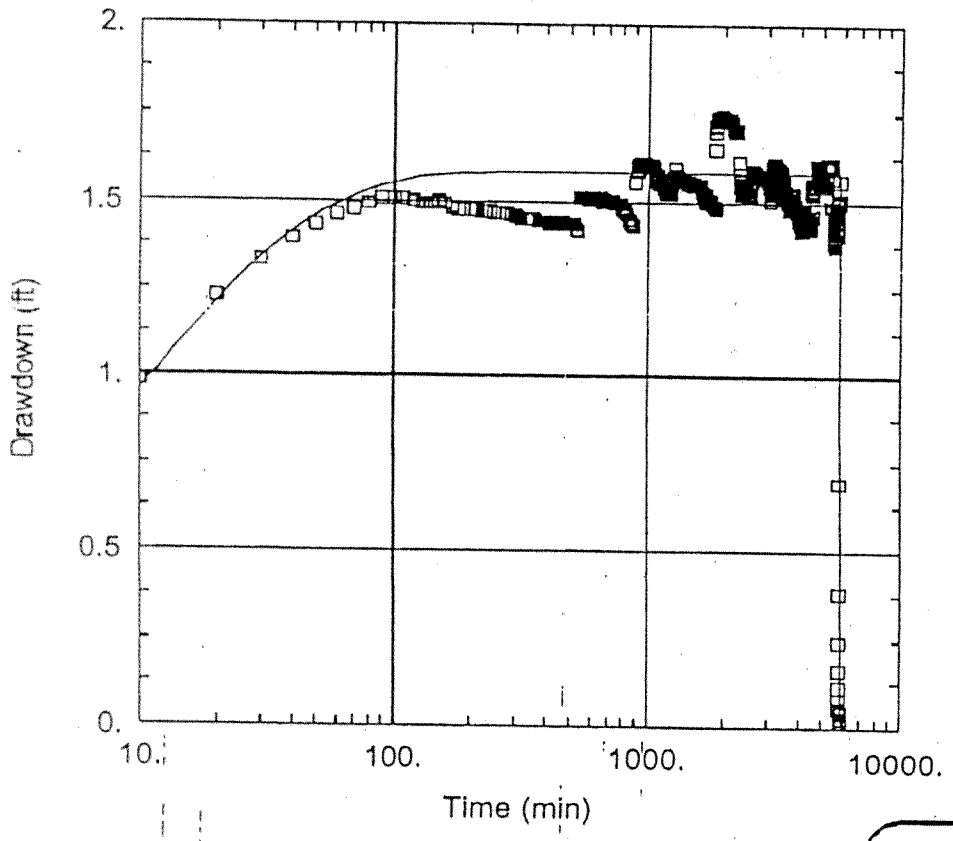
Static WaterLevelDepth:29.2 ftbrp, measuredmanually on1/10/2002,priortopumping.
AveragePumping Rate: 45gpmafter5758minutesofpumping.

GraphicalSolution by: AQTESOLVVers.3.0,byHydrosolve,Inc.

RICHARD C. SLADE&ASSOCIATESLLC
CONSULTINGGROUNDWATER GEOLOGISTS

FIGURE 3
ANALYTICAL SOLUTION FOR
96-HOUR AQUIFERTEST DATA
WELLNO.1

JOBNO.M121-01 JANUARY 2002



WellMonitored
□ Well 2

Aquifer Model
Leaky

Solution
Hantush-Jacob

Parameters Calculated
T = 10,000 gpd/ft
S = 0.000083

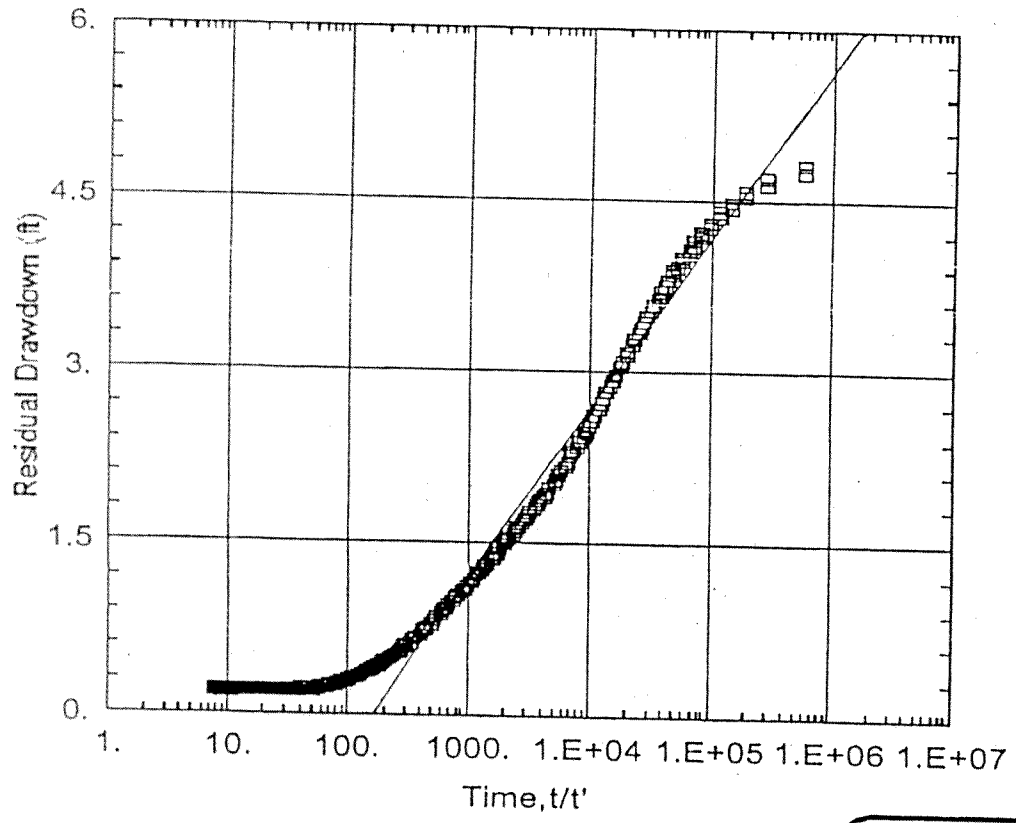
StaticWaterLevelDepth:31.8ftbrp,measuredmanually on1/10/2002, prior to pumping.
Average PumpingRate: 45gpm in WellNo.1 after 5758minutes ofpumping.
WellNo 2.located193ftfromWellNo.1.

GraphicalSolutionby: AQTESOLVVers.3.0,byHydrosolve,Inc.

RICHARD C. SLADE&ASSOCIATESLLC
CONSULTINGGROUNDWATER GEOLOGISTS

FIGURE4
ANALYTICALSOLUTION FOR
96-HOURAQUIFER TEST DATA
WELL NO . 2

JOBNO.M121-01 JANUARY2002



Well Monitored
□ Well 1

AquiferModel
Confined

Solution
Theis (Recovery)

Parameter Calculated
T = 8000 gpd/ft

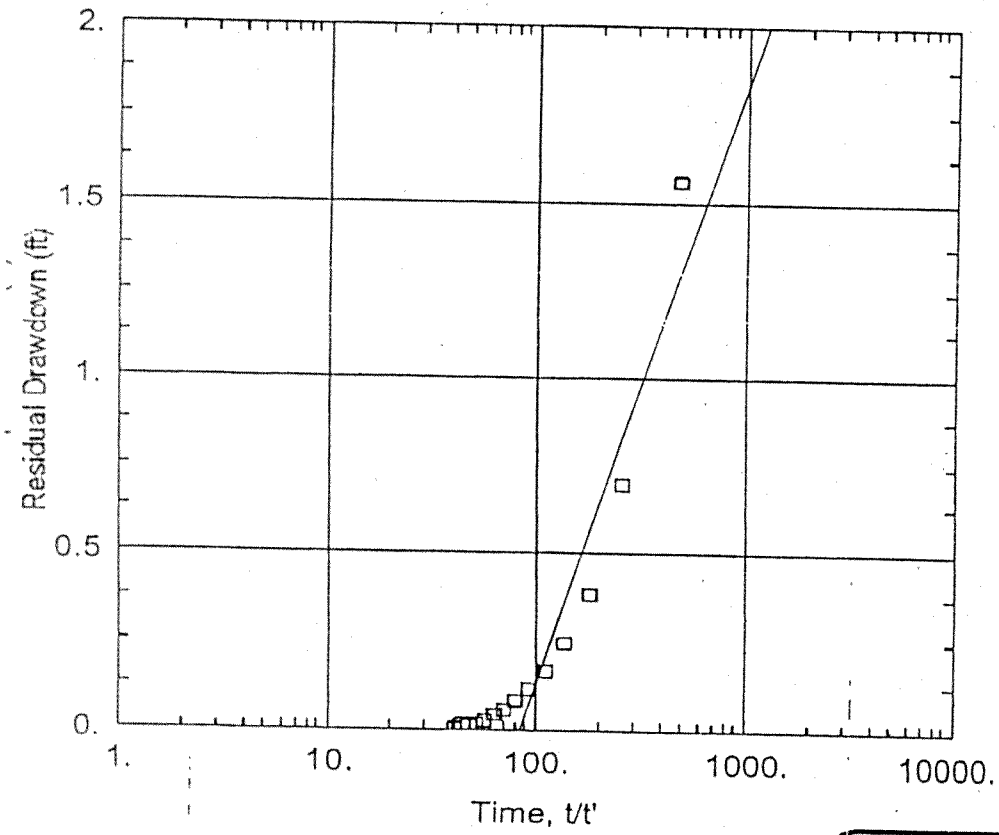
ResidualDrawdownsbasedonstaticwaterlevel depth of29.2 ftbrp measured manuallypriortostartof aquiferteston1/10/2002.
AveragePumping Rate: 45gpmafter5758minutesofpumping

GraphicalSolution by: AQTESOLVVers.3.0,byHydrosolve,Inc.

RICHARD C. SLADE&ASSOCIATESLLC
CONSULTINGGROUNDWATER GEOLOGISTS

FIGURE 5
ANALYTICAL SOLUTIONFOR
RECOVERY DATA
WELLNO.1

JOBNO.M121-01 JANUARY2002



WellMonitored
□ Well 2

Aquifer Model
Confined

Solution
Theis (Recovery)

ParameterCalculated
T = 9000gpd/ft

ResidualDrawdownsbasedonstaticwaterlevel depth of31.8 ftbrp measured manuallypriortostartof aquiferteston1/10/2002.
AveragePumping Rate: 45gpmafter5758minutesofpumping inWellNo.1

GraphicalSolution by: AQTESOLVVers.3.0,byHydrosolve,Inc.

RICHARD C. SLADE&ASSOCIATESLLC
CONSULTINGGROUNDWATER GEOLOGISTS

FIGURE 6
ANALYTICAL SOLUTIONFOR
RECOVERY DATA
WELLNO.2

JOBNO.M121-01 JANUARY2002

aquifer system. It is noteworthy that because each of these wells is not perforated in the lower aquifer system, the pumping of MYA Well Nos. 1 or 2 would not be likely to induce drawdown in those wells. Moreover, the results obtained above are only for corresponding imaginary wells that are assumed to be perforated in the same lower aquifer system as is known to be perforated in the MYA wells.

In using PUMPIT, implicit assumptions are used to simulate conditions for ideal aquifer systems, although the system on which the simulation is performed may not exhibit those ideal conditions. The assumptions used in our simulation for the two wells are:

- The aquifer is homogeneous, isotropic, and of infinite areal extent.
- All wells being evaluated fully penetrate the aquifer systems present.
- Pumping is on a continuous basis (24-hours per day).
- Simulation of drawdown in the aquifer is time dependent. That is, flow to the wells(s) is unsteady and changes with time. Thus, drawdown is considered to be under transient conditions.

Notwithstanding the degree of difference between ideal aquifer systems and the aquifer system penetrated by Well Nos. 1 and 2, the results can be used to determine an approximate range of T values for the lower aquifer system. The following conditions were used in the aquifer simulation for the two wells in order to identify the theoretical distance-drawdown relationships in the area:

1. A pumping rate of 45 gpm was used for Well No. 1 under transient conditions.
2. An aquifer storativity (S) value ranging between 0.00008 for a confined aquifer system, to 0.0005 for a semi-confined aquifer system.
3. A porosity of 0.2.
4. The gradient of the water table surface is flat; i.e., there is no preferred flow direction.
5. Monitored drawdown in Well No. 1 was 4.8 ft whereas in Well No. 2 it was 1.4 ft at the end of the 96-hour aquifer test. Separate simulations were performed for each drawdown value.

6. Well No. 2 is approximately 193 ft from Well No. 1, and the AP Well was located approximately 556 ft from Well No. 1.

Based on the above conditions, our simulation yielded T values ranging from 21,000 gpd/ft to 35,000 gpd/ft. These values are considerably greater than the T values calculated from the aquifer test data. However, typical T values calculated for ideal aquifer systems, and calibrated to actual drawdown values, will differ significantly from T values calculated directly from the aquifer test data.

The next step was to simulate the theoretical amount of drawdown interference that might occur in each of the offsite wells as a result of simulated periods of continuous pumping by MYA Well No. 1. The simulations were based on the above-derived aquifer parameters and using a constant pumping rate of 45 gpm. The simulated drawdown interference values from the pumping of Well No. 1 were calculated for continuous pumping periods of 1 year, 5 years, and 10 years by Well No. 1. Table 2 illustrates the result of those calculations at each offsite well.

TABLE 2
THEORETICAL DRAWDOWN INTERFERENCE VALUES
IN OBSERVATION WELLS

Well No./Name	Distance from Pumping Well (ft)	Theoretical Drawdown Interference (ft)		
		1 year	5 years	10 years
Well No. 2	193	2.1	2.3	2.4
AP Well	556	1.8	2.0	2.1
Church Well	2100	1.4	1.6	1.7
SNARL Well	3350	1.2	1.5	1.6
ESN Well	9080	0.9	1.2	1.3

The results reveal that pumping of Well No. 1 will result in a maximum drawdown interference of 1.3 ft, at a point in the lower aquifer system corresponding to the distance of the ESN well, after 10 years of continuous pumping of Well No. 1 at 45 gpm and under the above listed aquifer conditions. Once again, it should be noted that the values presented above are to be used only as an indication of the possible impact of pumping Well No. 1 or Well No. 2 on water levels in wells at points corresponding to the distances to the existing offsite wells listed above, were they to be perforated in the same lower aquifer system only and under ideal aquifer systems. The drawdown values listed above do not represent the impact of pumping Well No. 1 or No. 2

on the existing wells, because those wells are perforated in aquifer systems that are very likely not in hydraulic continuity with the lower aquifer system in MYA Well Nos. 1 and 2.

PRELIMINARY CONCLUSIONS

Based on the available data from the wells in the vicinity of MYA, on the results of the 96-hour aquifer testing on Well No. 1, and on review of water level data for Well No. 2, the AP Well, LV-19, the SNARL and ESN wells, the following represent our preliminary conclusions:

1. MYA Well Nos. 1 and 2 appear to be perforated in and, thus, are interpreted to be producing their respective water supply from the lower of two, possibly distinct, aquifer systems underlying the airport area. On the other hand, the AP, SNARL, and Church wells appear to be obtaining their water supply from the shallower aquifer system in the area.

2. The aquifer test consisted of pre-test water level monitoring, monitoring of water levels during the pumping of Well No. 1 for 96 continuous hours at a rate of 45 gpm from January 10 through January 14, 2002, and then post-test monitoring of water level recovery.

3. At the beginning of the test on January 10, 2002 water levels in MYA Well Nos. 1 and 2 declined quickly in the first 100 minutes of the pumping test, but once these drawdown levels were attained, they tended to remain relatively stable for the remainder of the test (i.e., the subsequent 5658 minutes of the test).

4. At the end of the 96-hour aquifer test, a total drawdown of approximately 4.8 ft was observed in MYA Well No. 1 at a pumping rate of 45 gpm; a maximum drawdown of 1.4 ft was recorded in MYA Well No. 2. The AP, SNARL, and ESN wells showed essentially no change in water levels during the aquifer test. In addition, water levels in LV-19 (a 2-inch observation well), which appears to be screened in the lower aquifer system, also showed no response to the pumping of Well No. 1.

5. Analytical solutions applied to the monitored aquifer test data revealed that the aquifer system penetrated by MYA Well Nos. 1 and 2 may be a confined to semi-confined, leaky, artesian system. Values of T were calculated from the water level drawdown and recovery data to be on the order of 8,000 to 10,000 gpd/ft.

6. Simulation of drawdown values from pumping of Well No. 1 for periods ranging from 1 to 10 years pumping continuously at a rate of 45 gpm reveals that the maximum amount of drawdown at a point in the lower aquifer system corresponding the most distant monitored well (ESN) would be approximately 1.3 ft.

7. Because the monitoring wells in which the drawdown simulations were performed are perforated in the upper aquifer system, and because that system does not appear to be in hydraulic continuity with the lower aquifer system, then pumping of Well No. 1 and/or Well No. 2 at a rate of 45 gpm will very likely not affect water levels in those other wells.

8. Due to the small amount of drawdown interference observed (1.4 ft.) in close nearby Well No. 2 during pumping of Well No. 1, and the lack of water level drawdown effects from pumping Well No. 1 on water levels in other wells in the area, then pumping of Well Nos. 1 and/or 2 at somewhat higher rates and for longer periods of time (much greater than the 4-day aquifer test) would likely not produce any drawdown in other offsite wells in the vicinity because of their distance from the pumping well and because the other wells have been screened in aquifer systems that appear not to be in hydraulic continuity with Well Nos. 1 and 2.

We are pleased to have had the opportunity to be of service to you with regard to analysis of the 96-hour aquifer test data. If you have any questions regarding this report, please contact us.

Very truly yours,
RICHARD C. SLADE & ASSOCIATES LLC

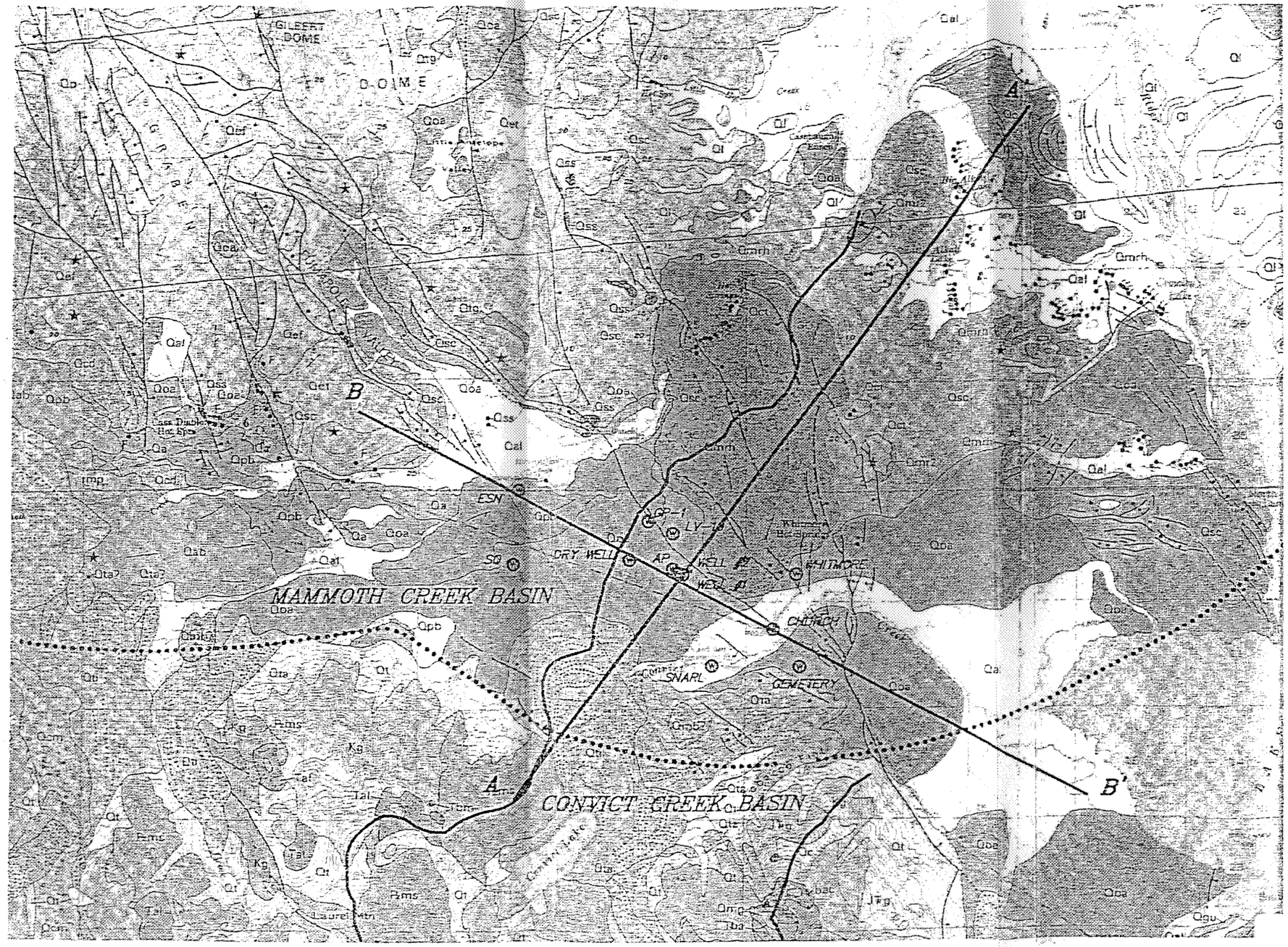
Earl F. LaPensee
California Certified Hydrogeologist No. 134

Richard C. Slade
Registered Professional Hydrogeologist
American Institute of Hydrology No. 106

Attachments

Attachment C
Regional Geologic Map and Geologic Cross Sections from Triad/Holmes Associates

1"=5280'



LEGEND

WELL #1 — GPS POSITION OF WATER/MONITORING WELL SURVEYED JANUARY 31, 2002

B — B' GEOLOGIC CROSS SECTION LINE LOCATION

SOURCE: BAILEY, 1989; U.S. GEOLOGICAL SURVEY MISCELLANEOUS INVESTIGATIONS SERIES MAP I-1933

AR 001795

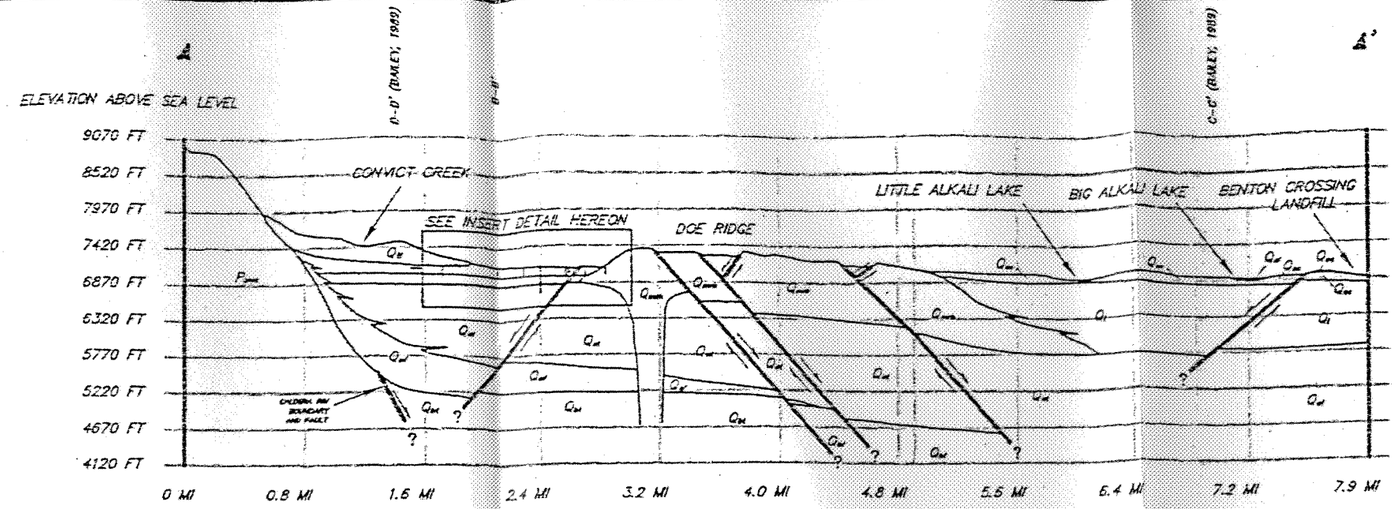
MAMMOTH – YOSEMITE AIRPORT
WELL #1 PUMP TEST STUDY

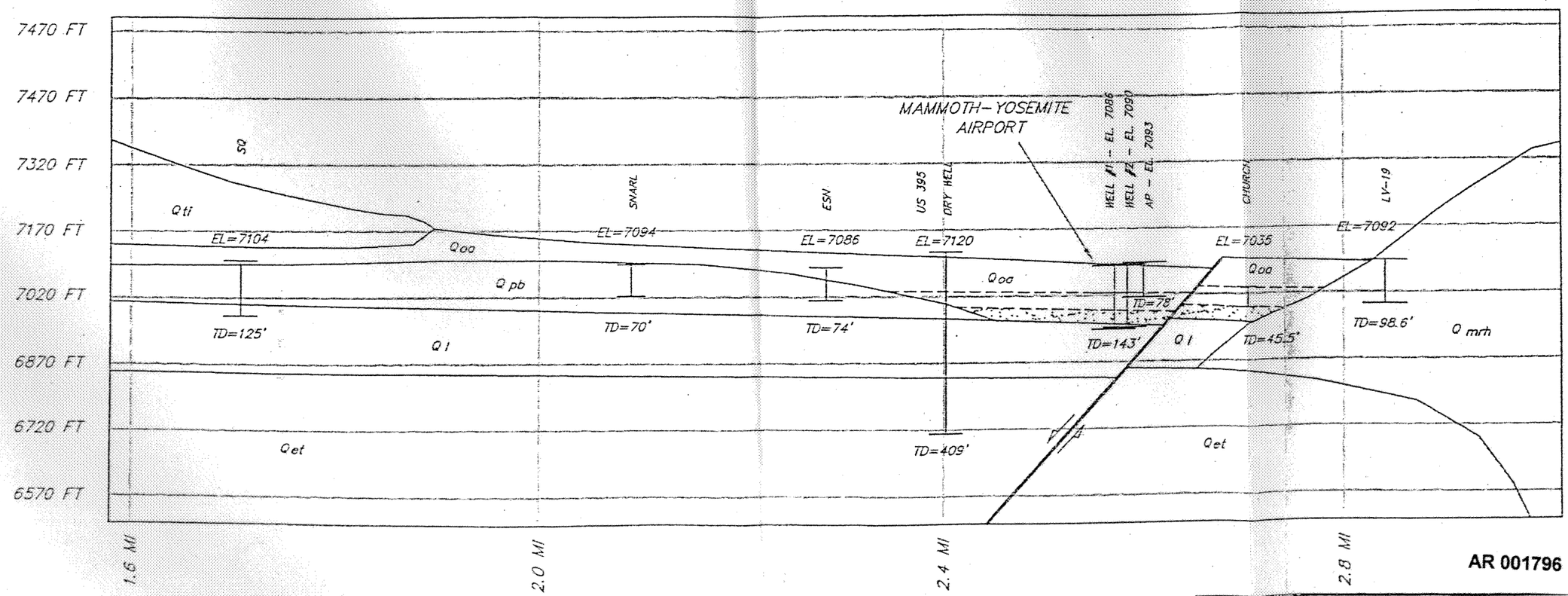
REGIONAL GEOLOGIC MAP

269.4 | triad/holmes associates | FIGURE 1

LEGEND

Q_{al}	YOUNGER ALLUVIUM
Q_{sc}	SANDSTONE AND CONGLOMERATE
Q_{ti}	GLACIAL TILL (TIOGA STAGE)
Q_l	LACUSTRINE (LAKE) SEDIMENTS
Q_{oa}	OLDER ALLUVIUM
Q_{mrh}	RHYOLITE OF HOT CREEK (DOE RIDGE)
Q_{pb}	PORPHYRITIC TRACHYBASALT
Q_{et}	EARLY TUFF (POST CALDERA)
Q_{af}	OLDER ALLUVIAL FAN DEPOSITS
Q_{bt}	BISHOP TUFF
P_{zms}	PALEOZOIC METASEDIMENTARY MOUNT MORRISON ROOF PENDANT
	HILTON CREEK/INTRA-CALDERA FAULTS (ARROWS INDICATE RELATIVE MOVEMENT)
	AQUIFER FOR WELL #1





AR 001796

MAMMOTH - YOSEMITE AIRPORT
WELL #1 PUMP TEST STUDY

GEOLOGIC CROSS SECTION A-A'

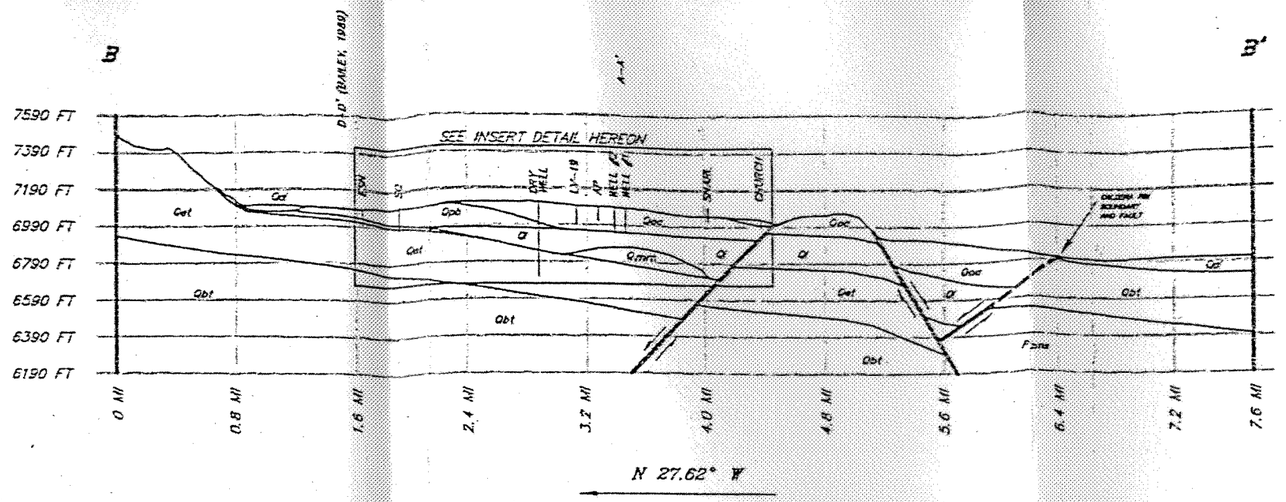
Job No. 259.4 | tnbd/holmes associates | FIGURE 2

LEGEND

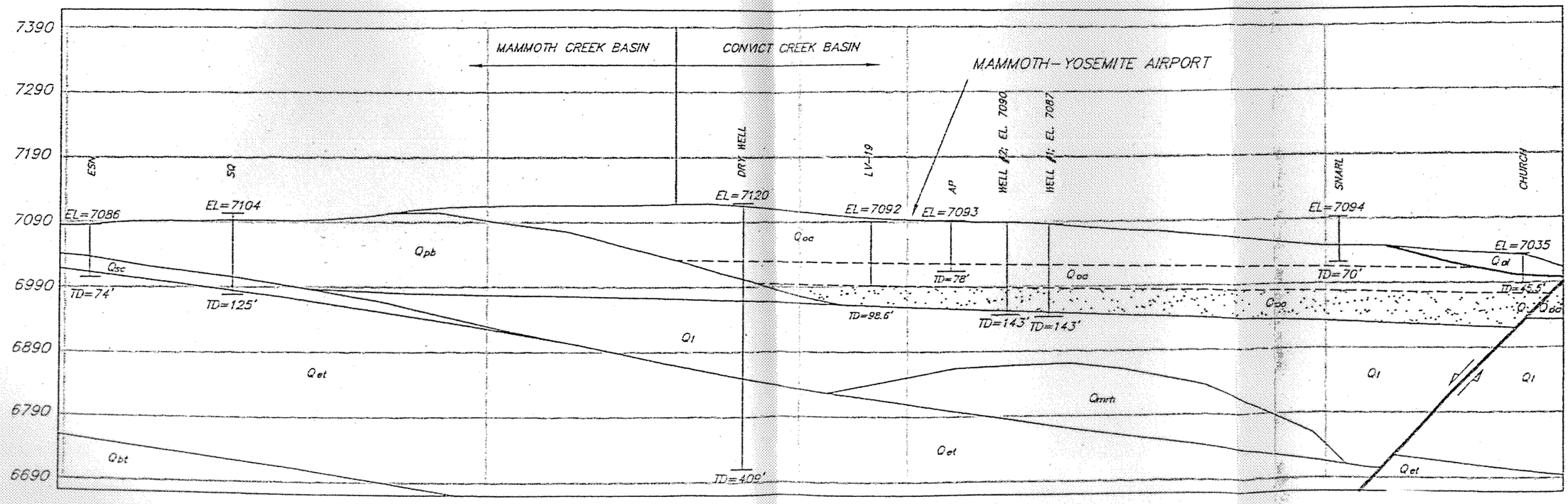
- Q_{al} YOUNGER ALLUVIUM
- Q_{sc} SANDSTONE AND CONGLOMERATE
- Q_{ti} GLACIAL TILL (TIOGA STAGE)
- Q_l LACUSTRINE (LAKE) SEDIMENTS
- Q_{oa} OLDER ALLUVIUM
- Q_{rmrh} RHYOLITE OF HOT CREEK (DOE RIDGE)
- Q_{pb} PORPHYRITIC TRACHYBASALT
- Q_{et} EARLY TUFF (POST CALDERA)
- Q_{af} OLDER ALLUVIAL FAN DEPOSITS
- Q_{bt} BISHOP TUFF
- P_{zms} PALEOZOIC METASEDIMENTARY MOUNT MORRISON ROOF PENDANT

HILTON CREEK/INTRA-CALDERA FAULTS (ARROWS INDICATE RELATIVE MOVEMENT)

AQUIFER FOR WELL #1



ELEV. (FT.)



AR 001797

MAMMOTH - YOSEMITE AIRPORT
WELL #1 PUMP TEST STUDY

GEOLOGIC CROSS SECTION B-B'

Job No. 4604 | trad/holmes associates | FIGURE 3

Attachment D
Draft Spill Prevention, Control and Countermeasure Plan

Spill Prevention, Control, and Countermeasure Plan

Facility:

Mammoth Yosemite Airport

Physical Location:

6 miles East of MAMMOTH LAKES, CA

Adjacent U.S. Highway 395

Facility Contact and Phone Number:

Bill Manning, Airport Manager

(760)-934-3813

Date:

March 2002

Summary

1. Name and Location of Facility	Mammoth Yosemite Airport U.S. Highway 395, North Airport Road Mammoth Lakes. California 93546
2. Name of Operator	Town of Mammoth Lakes
3. Name of Person in Charge of Facility	Bill Manning Airport Manager Telephone: (760) 934-3813 (daytime) (760) 924-3326 (home)
4. Name and Telephone of Person for Oil Spill Prevention at facility	Bill Kerns Telephone: (760) 934-3813 (daytime) (760) 935-4950 (home)
5. Nearest Navigable Waters	1. Hot Creek, one half mile north of the Airport. 2. Convict Creek, one half mile south of the Airport.
6. Possible Spill Sources	The possible sources of spills of oil or other hazardous substances are limited at the Mammoth Yosemite Airport. The Fixed Base Operator maintains above ground aviation fuel on the field. There is a possibility of a fuel spill of aviation and automobile gasoline. The location of these fuel tanks is shown on the attached Exhibit. There is also mechanical work done to aircraft on the field that could result in the spillage of a small amount of engine motor oil. No other use of fuel or other hazardous materials occurs on the Airport.
7. Distances from Mammoth Yosemite Airport	1. Nearest Hospital: Mammoth Hospital, six miles 2. Nearest Fire Department: Mammoth Lakes Fire Protection District, six miles. Long Valley Fire Protection District, seven miles. 3. Nearest Hazmat Team: No Team in area, contact Long Valley Fire Protection District.
8. Spill Prevention and Control Equipment available at the Airport.	1. Shovels: 8 2. Loaders: 2

SPCC PLAN REVIEW - 40 CFR 112.5(b)

A review and evaluation of the SPCC plan is completed at least once every three years. All substantive amendments to the plan are certified by a registered professional engineer in accordance with §112.3(d). Evidence of these reviews and applicable certifications is recorded in the table below. [Note: Administrative modifications are made, as appropriate, to ensure the accuracy of plan information in response to modifications in the assignment of personnel or contact information (e.g., telephone numbers).]

Date	Reason for Review	SPCC Coordinator's Name and Initials	Professional Engineer Name and Initials

MANAGEMENT APPROVAL - 40 CFR 112.7

This SPCC plan is fully approved by the management of the Airport, which will provide all the necessary funds and man-power to fully implement the plan as it is described in this document.

NAME DATE

1. Introduction

This section provides background information, presents the objectives of the plan, explains when amendments/updates to the plan need to be performed, lists the Plan Coordinator, states the location of the Plan and provides for Plan certifications.

1.1 Background

This document presents the Spill Prevention, Control, and Countermeasure (SPCC) Plan for the Mammoth Yosemite Airport. The Airport is owned and operated by Town of Mammoth Lakes. The SPCC Plan (the plan) is a requirement of the Oil Pollution Act of 1990 (OPA), which mandates a spill response system for the proper handling, storage, and transportation of oil in the event a discharge occurs. OPA is authorized under Section 311 of the Clean Water Act (CWA). The regulations pertaining to preparing a SPCC Plan are found at Title 40 Code of Federal Regulations (CFR), Part 110 and 112 (40 CFR § 112). (See **Appendix A** for a copy of the regulations.)

A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, or the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the navigable waters of the United States. This plan establishes procedures, methods, and equipment and other requirements to prevent discharge of oil from onshore facilities into or upon the navigable water of the United States. Owners or operators of facilities that, due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States must prepare a SPCC Plan. Oil is defined as oil of any kind or in any form including, but not limited to petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil. Oil in harmful quantities results when the discharge causes: (40 CFR § 110.3.)

- Violations of applicable water quality standards. The water quality standards are discussed in Section 2.2, "NPDES Permit" of this Plan.
- A film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The Town of Mammoth Lakes has prepared this Spill Prevention, Control, and Countermeasure Plan as part of the environmental analysis done for the improvements at the Airport. Mammoth Yosemite Airport is not required to prepare a Facility Response Plan. (see Appendix B - Determination of Substantial Harm).

Two 12,000 gallons above ground fuels tanks are presently located at the Airport as shown on **Exhibit 1**. Existing Airport facilities were designed to accommodate an additional 12,000 gallons tank at the Airport. This would result in a total fuel storage capacity of 36,000 gallons.

Section 3, "Spill Prevention and Containment" explains the spill prevention procedures employed by the Airport, and Section 4, "Spill Response" explains the Town's response procedures in the event of a spill and discusses when federal and State agencies need to be informed in the event of a spill.

1.2 Objectives of the Plan

This SPCC Plan is intended to meet or exceed the OPA requirements for the preparation of an SPCC Plan for the facilities at the Airport.

1.3 Plan Amendments and Updates

The SPCC Plan needs to be amended whenever there is a change in facility design, construction, operation or maintenance, which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States. Also, a complete review and evaluation of the SPCC Plan must be performed once every three years. (40 CFR § 112.5.)

Also, if the facility discharges more than 1,000 gallons of oil into the surrounding waters in a single spill event, or discharges oil in harmful quantities, as defined in 40 CFR Part 110, in two spill events reportable under Section 311 (b)(5) of the CWA within a 12 month period, the facility must submit within 60 days of the event to the Lahontan Regional Water Quality Control Board (RWQCB) and U.S. Environmental Protection Agency detailed information about the nature and cause of the spill. (40 CFR § 112.4.)

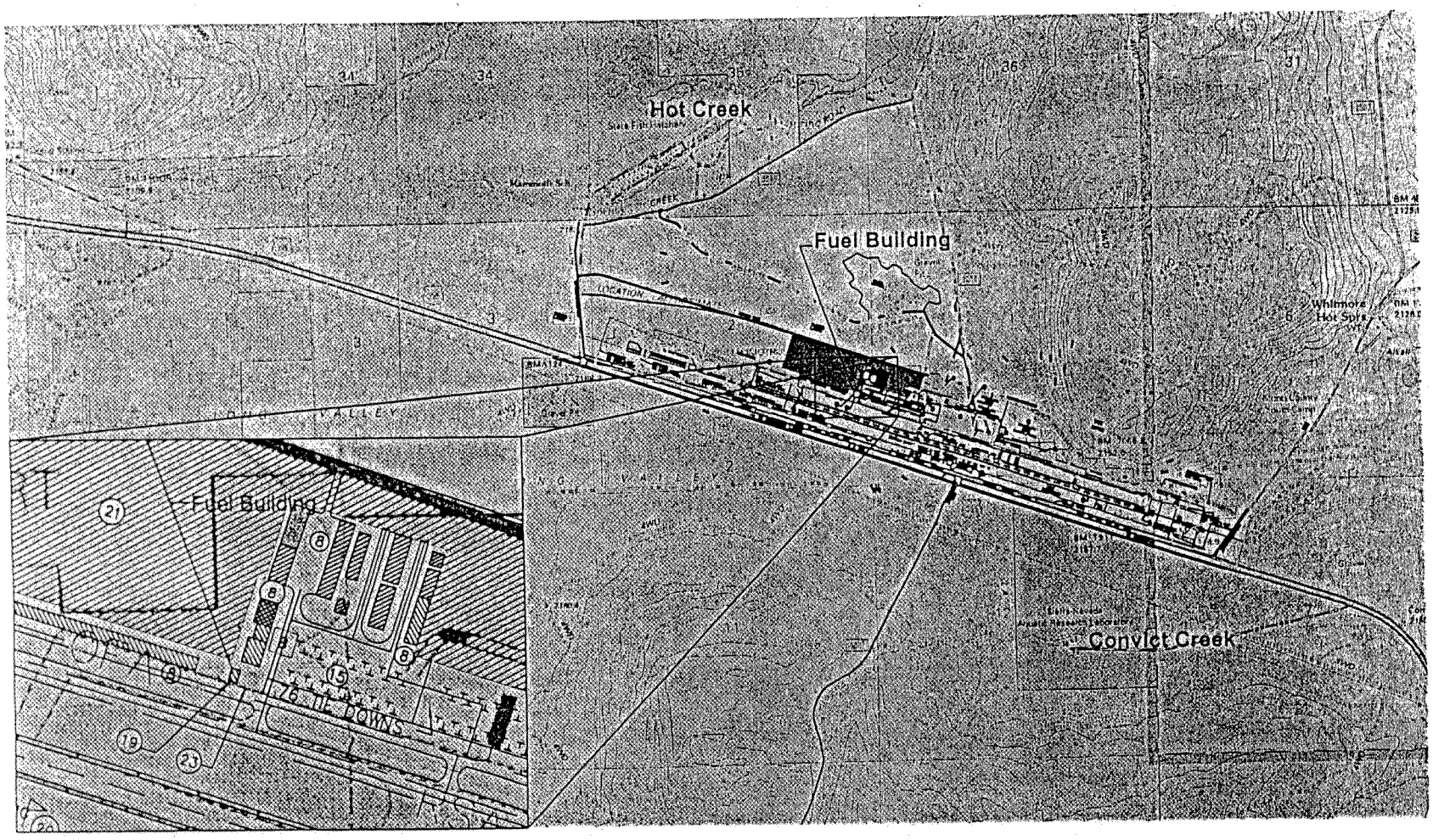
1.4 Plan Coordination

A person needs to be designated who is accountable for oil spill prevention. The Airport Manger of Mammoth Yosemite Airport will be the Spill Coordinator. The Spill Coordinator has the following responsibilities as part of the SPCC Plan implementation:

- prevent the willful discharge of oil from any facilities or vehicle onto the land or into surrounding waterways;
- keep an adequate amount of absorbent materials at potential spill sites for containment purposes;
- ensure that all waste materials from spills are disposed in compliance with local, State, and federal regulations;
- ensure compliance with federal SPCC Plan requirements;
- ensure that any hazardous substance spill from the Airport that exceeds reportable quantities (RQ) is reported to the appropriate State and federal authorities;
- ensure that contractors are available that can support the Long Valley Fire Protection District, if needed, during any spill that may occur at the Airport; and
- conduct personnel briefing twice a year to review spill events or failures.

1.5 Plan Locations

The SPCC Plan is located at the office of the Airport Manager and Fixed Base Operator (FBO) facilities.



Source: U.S. Geological Survey; Mammoth Lakes Airport Expansion Subsequent EIR and Updated EA, March 1997.
Prepared by: Ricondo & Associates, Inc.

Exhibit 1

Mammoth Yosemite Airport Area
Fuel Storage Locations

2. Facility Description

The purpose of this section is to explain drainage systems at Mammoth Yosemite Airport, determine potential sources of spills and discuss how a spill might be transferred to a surrounding waterway. A review of historical spills is also provided.

2.1 Site Drainage

There are no bodies of water on Airport property. There are, however, three surface drainage systems in the vicinity of the Airport. These drainage systems are depicted in **Exhibit 2**. The area west of the Airport is within the western portion of the Mammoth Creek/Hot Creek watershed of the Mammoth Basin drainage system. The area south of the Airport is within the Convict Creek watershed. The drainage divide between the Mammoth Basin and Convict Creek watersheds passes through the westerly portion of the Airport. The third drainage divide lies east of Doe Ridge and flows into Crowley Lake.

The lower reaches of the Mammoth Basin drainage system are significantly affected by rising geothermal ground waters, which include mixed hot-cold spring discharges at the Hot Creek Fish Hatchery and numerous hot springs within the Hot Creek Gorge. The Convict Creek drainage system appears to contain only cold groundwater elements. Studies conducted by the California State Department of Water Resources and U.S. Geological Service (USGS) indicate that geological formations located north of the Airport confine a relatively extensive cold groundwater basin.

The two nearest navigable waters to the Airport as shown on Exhibit 1 are the following:

1. Hot Creek, one half mile north of the Airport.
2. Convict Creek, one half mile south of the Airport.

2.2 NPDES Permit

Mammoth Yosemite Airport operates under NPDES Permit Number 6B26S003690 granted by Regional Water Quality Board. A new permit would be needed for the planned improvements at the Airport.

2.3 On-Site Activities of Concern

Following are some of the activities, which can be the cause of a potential spill.

- aircraft fuel storage, transport, transfer and fueling operations
- non-aircraft fuel handling and storage
- runway deicer/anti-icer storage, handling, and transport
- used oil collection and storage from maintenance activites
- waste oil storage handling

The potential impacts of spills generated by the activities described above vary significantly. The potential impacts determined by factors such as the types and quantities of materials involved and the location of spills.

2.4 Potential Sources of Spills

2.4.1 Storage Tanks

Currently, there are two above ground 12,000 gallons fuel tanks at Mammoth Yosemite Airport as shown in **Exhibit 3** and **4**. One additional 12,000 gallons tank can be accommodated at the existing fuel tank enclosure.

The Aboveground Storage Tanks (AST) are situated on a concrete pad located to the east of the six existing hangars. The ASTs are of double wall design/construction, and surrounded by a secondary containment system and a spill prevention system that exceeds all permit requirements.

2.4.2 Hazardous Substances

The storage and use of hazardous substances can present instances when spills can occur that could be released into the surrounding waterways.

2.4.3 Transfer Operations

The transfer of oil and fuel may create a situation where a spill could occur. Currently, the fuel supplier to the Airport utilizes an 8,000-gallon transport that makes deliveries to the Airport approximately two times a month. After the implementation of the proposed project a 14,000 gallon transport is expected to make 1 to 2 daily round trips in the future to satisfy the daily fuel uplift requirements. The current aircraft fueling plan calls for a capacity of 20,000 to 24,000 gallons stored in a combination of existing above ground storage tanks and trucks. Airfield fuel trucks would deliver fuel from the storage areas to the aircraft.

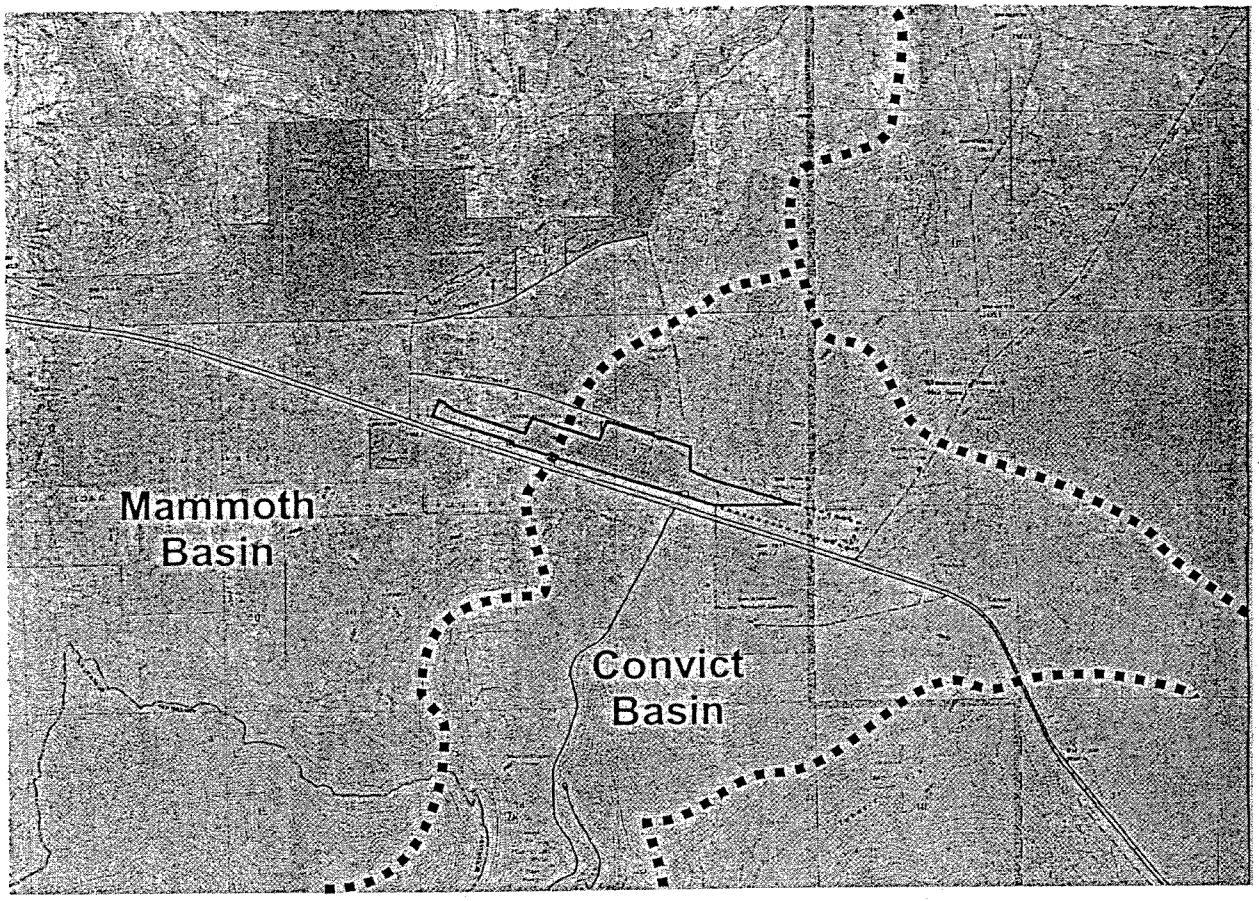
2.5 Spill Pathways & Scenarios

Scenarios were developed as part of this plan to suggest how oil might be released into the surrounding waterways and also to develop a spill response plan. The drainage system in the vicinity of the Airport was described in Section 2.1 "Site Drainage". The various scenarios that could result in spills are described as: Storage Tank Operations, Airplane Accident, Vehicle Accident, or Hazardous Substance Storage or Transfer. These scenarios are more fully discussed below:

2.5.1 Storage Tank Operations

Storage tank operations include filling or removing fuel or hazardous substances to or from a storage tank. It is during these operations that a spill may occur. Tanks could also rupture or the associated equipment and piping could be subject to failure, which can result in a release. All aboveground storage tanks at the Airport are within double walls therefore a spill or release from these tanks would not reach the water bodies near the Airport. The fuel farm is surrounded by a modern secondary containment system that reduces the chances of any potential spill reaching the navigable waters of United States.

Table 1 shows various potential spill volumes and rates from the fuel storage tanks.



Legend

- Drainage Divide
- Existing Airport Property Line
- Proposed Airport Property Line

Source: Mammoth Lakes Airport Expansion, Subsequent EIR and Updated EA, March, 1997.
Prepared by: Ricondo & Associates, Inc.

Exhibit 2

north Scale 1" = 5,000'

Mammoth Yosemite Airport Area Drainage System

Table 1

Potential Spill Volumes and Rates for Above Ground Storage Tanks

Type of Major Failure	Max. Possible Quantity Released	Rate of Flow
Complete failure of a full tank\	12,000 gallons (largest tank size)	Instantaneous
Partial failure of a full tank	1 to 12,000 gallons	Gradual to instantaneous
Tank overfill while transferring to and from truck	1 to many gallons	10 to 100 gallon per minute

Source: Mammoth Yosemite Airport and Super tanks, Inc.
Prepared By: Ricondo & Associates, Inc.

2.5.2 Airplane Accident

A crash on a runway or taxiway could present a problem with aviation fuel being spilled. The worst case scenario is based on the largest aircraft being fully loaded with fuel and losing half the contents of its tanks. The largest aircraft that would be used at the Airport would be a Boeing 757. These planes hold approximately 11,466 gallons of fuel. (Boeing Commercial Airplane Group, *757-200 Airplane Characteristics for Airport Planning*, October 1994.) If half of the tanks were to puncture and loose all of the fuel, approximately 5,700 gallons of jet fuel would be spilled onto the airfield.

The possibility of an aircraft accident at Mammoth Yosemite Airport is very low. Any such occurrences at on the apron area would be contained in the apron drainage system.

2.5.3 Vehicle Accident

A vehicle on the Airport could potentially have its tank rupture or leak as a result of valve or fitting failure or leaking hoses. The type of fuel that could be spilled from a vehicle tank could include: gasoline, diesel, ethylene glycol, or propane. The worst case scenario is that a fully loaded truck delivering product would be involved in an accident that would result in a spill of all of the contents of the truck. Currently the Airport is served by a 8,000 gallon transport.

2.5.4 Hazardous Substance Storage or Transfer

Currently the following items are stored at the Airport in addition to the fuel in the storage tanks.

- 100 gallons of de-icer fluid
- 50 gallons of tractor hydraulic/motor oil

For the most part all of the substances are stored in buildings in locations where the substance would not reach exposed soil in and around the Airport

2.6 Spill History

The spill history lists any spills that have occurred at Mammoth Yosemite Airport. A spill event is defined as a discharge of a "harmful quantity" into the navigable waters of the United States. (40 CFR § 112.1 (b)(1).). **Table 2** provides a list of previous spills at Mammoth Yosemite Airport, action taken to reduce the impacts of the spill and prevent future occurrences.

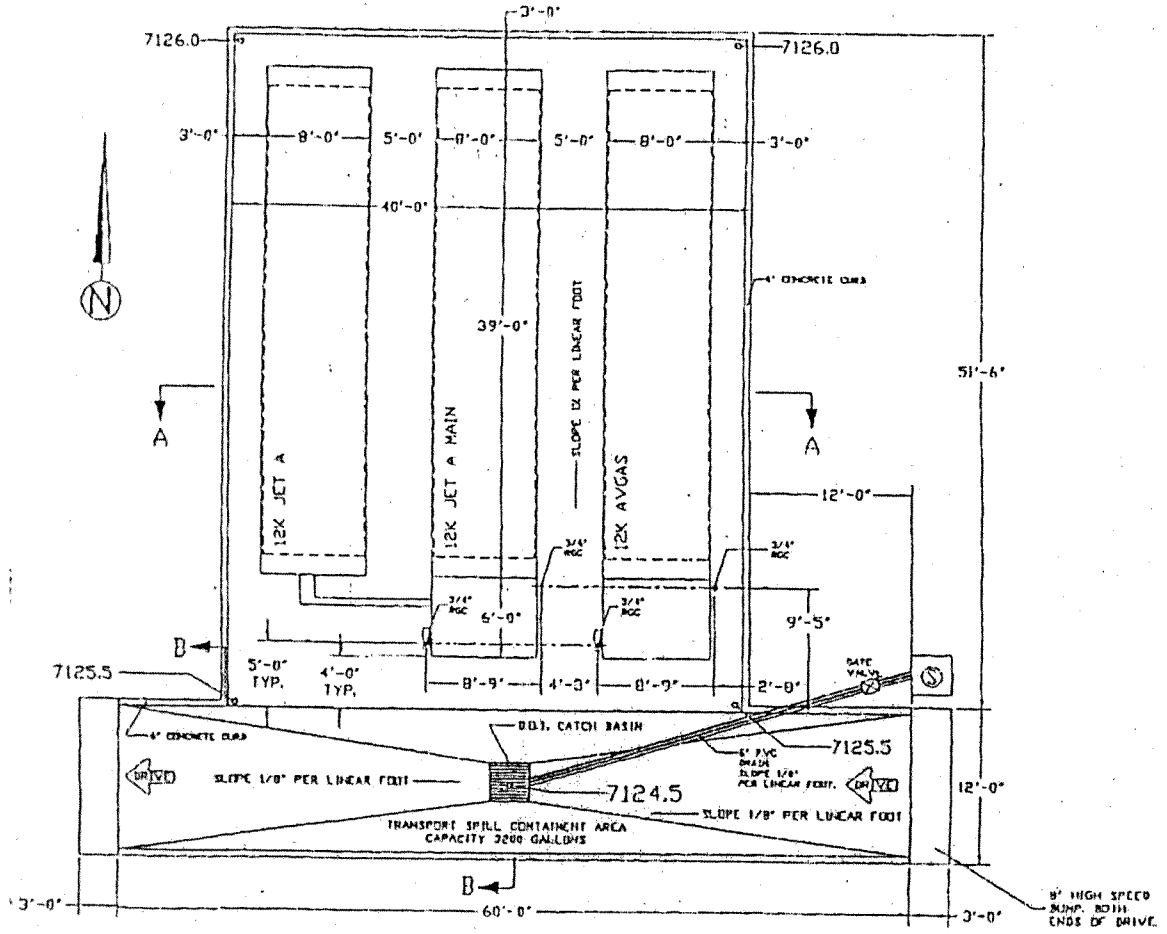
Table 2

Spill History at Mammoth Yosemite Airport

Date	Time	Estimated Amount	Material Spilled	Company (s) Involved	Action Taken	Remarks

Source: Mammoth Yosemite Airport
Prepared By: Ricondo & Associates, Inc.

There have been no known incidents of spills at the Airport in the last couple of years. Several Underground Storage Tanks (UST) left over from military operations at the Airport were removed from the Airport facility and site characterizations/remedial investigations performed on the soil under and around the former USTs. The removal of these USTs was conducted in accordance to the direction of the Mono County Environmental Health Department, the lead agency for the remediation projects at the Airport property. No soil contamination was noted in the former area containing the four USTs situated to the east of the terminal building. Contaminated soil was noted in the area of the three former USTs situated to the west of the terminal building. Contaminated soil was removed from this location. The contamination did not impact the ground water in and around the Airport.



Source: SuperSafe Tanks, Inc.
Prepared by: Ricondo & Associates, Inc.

Exhibit 3

not to scale

Fuel Storage Tank Details