

**Decision Notice and Finding of No Significant Impact
Revised Environmental Assessment
Oil and Gas Exploration in the Katalla Area,
Chugach National Forest, Cordova Ranger District,
R-10, Alaska Region**

I. Introduction

The Forest Service prepared a Revised Environmental Assessment (EA) to evaluate potential effects of approving Cassandra Energy Corporation's (CEC) Plan of Operations for oil and gas drilling near Katalla, Alaska. The decision consists of whether to approve the Plan of Operations. There are two major components of the Plan of Operations: (1) exploratory oil and gas drilling operations and establishment of a crew camp on private lands; and (2) access to the drill site and crew camp which consists of establishment of a temporary staging area, and use and maintenance of an existing temporary access road¹ on National Forest System lands.

Approval of this Plan of Operations constitutes a federal action because the proposal is to drill directionally from private land into Chugach Alaska Corporation's reserved oil and gas estate, which invokes the terms of the 1982 (CNI)² Settlement Agreement thereby requiring Forest Service approval. Additionally, the existing temporary access road and 550 foot of new temporary access road are located on federal lands. This analysis is in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations.

Project Area - The project area is defined as ¼ mile on either side of the existing temporary access road and the proposed new temporary road between the Katalla River and the existing temporary road. The actual drill site and crew camp are on private land. The area is located in the east Copper River Delta region, near the old town site of Katalla. It is approximately 56 miles southeast of the city of Cordova, on the Cordova Ranger District, Chugach National Forest, Alaska Region, (See Revised EA Figure 1). The drilling operations would occur within the historic Katalla oil field on private land, which produced oil from 1902 to 1933.

II. Decision and Rationale for the Decision

A. Decision

Based on the EA, public comments received on the EA and comments received during the two 30-day public review periods of the document, and supporting documents completed for this project, it is my decision to select Alternative 4, approve the Plan of

¹ The existing road is a temporary road as defined in Forest Service Manual 7700: Roads authorized by contract, permit, lease, other written authorization, or emergency operation not intended to be part of the forest transportation system and not necessary for long-term resource management (36CFR 212.1).

² CNI - Chugach Natives Incorporated, now known as Chugach Alaska Corporation (CAC).

Operations, and subsequently issue a Special Use Permit authorizing the following activities:

- Exploratory drilling as proposed in the Plan of Operations subject to conditions of approval;
- Construction of a two-acre staging area and approximately 550 feet of new temporary road; and use and maintenance of an existing temporary road on National Forest System lands and location, design, and standards for such activities;
- Mitigation measures including access management measures and monitoring requirements and;
- Restoration requirements upon completion of the project.

Alternative 4 is similar to the original proposed action, except that the operator would build approximately 550 feet of new temporary road extending from the end of the old existing roadway to a gravel bar downstream on the east bank of the Katalla River. This alternative was proposed by the State of Alaska during the Coastal Zone Consistency review process.

B. Rationale for the Decision

In making my decision, I considered the issues and competing interests and values expressed by the public, and existing rights specified in the 1982 Settlement Agreement. Many divergent opinions were expressed during the analysis. Some people wanted me to select the no action alternative, as they were concerned about the effects of this type of activity in a very remote and wild area of the Forest. People expressed concerns about the effects of the activity on pink salmon spawning in the Katalla River. These are understandable concerns. I considered new information provided by both public and State agencies during the comment periods. The selected alternative provides access to private land and reserved minerals within the framework of existing laws, regulations, policies, public needs and desires, and capabilities of the land, while responding to the purpose and need for the project. In making my decision, I carefully considered and balanced the various environmental consequences and tradeoffs between the alternatives, such as the effects on the Roadless Area, fish and wildlife resources, and recreation that takes place in the area.

1. Applicable Laws, Regulations and Policies.

Alaska Native Claims Settlement Act (ANCSA) of 1971, as amended by the 1982 Chugach Natives Incorporated (CNI) Settlement Agreement (authorized under ANCSA, ANILCA, and Alaska Statutes 38.05.020 and 38.05.315). On September 17, 1982, the U.S. Secretary of Interior, the U.S. Secretary of Agriculture, the State of Alaska's Commissioner of the Department of Natural Resources, and Chugach Natives Incorporated (CNI) entered into a settlement agreement to the above mentioned lawsuit. This agreement is called the 1982 CNI Settlement Agreement. In addition to land selection rights and a cash payment, CNI was granted development rights to oil and gas in the Katalla Area. In making my decision I considered section 6H(2a), (Process for

Approving an Operating Plan), of the 1982 CNI Settlement Agreement which states:

CNI will submit a proposed operating plan to the Forest Supervisor, Chugach National Forest, or such other officer as may be designated by the Secretary of Agriculture. The Forest Service, in cooperation and consultation with the BLM, will evaluate the proposed operating plan. This review and evaluation may be done in the context of an environmental analysis, and will insure that any operations permitted to be conducted pursuant to the plan will not impair the natural values of the Katalla Area, will provide for the restoration and reclamation of the area, and will otherwise conform with applicable laws and regulations.

I have reviewed the environmental analysis completed for the operating plan and I find that the natural values of the Katalla Area will not be unduly impaired as summarized in this decision notice and Table 1 of the EA. Specifically, the 966,240 acre Bering Lake Roadless Area will be temporarily reduced by 833 acres or 0.108% over the next two to three years, the duration of the project. When I consider the legal rights of access in Section 1323(a) of ANILCA and the rights with respect to the CNI Settlement Agreement, I find that temporary reduction of 0.108% of the roadless area is an acceptable tradeoff. This does not mean that 833 acres of land will be disturbed. The actual new disturbance of National Forest System lands will be approximately 5.1 acres, which are the storage and staging areas and the 550 feet of new temporary road. In addition there will be approximately 5.0 acres of disturbance on private land, which was previously disturbed by past drilling. The 833 acres of temporary reduction is based upon the roadless criteria of ¼ mile influence zone on either side of a road (Final Environmental Impact Statement, Revised Forest Plan, Appendix C). In addition, the existing temporary road is located on the edge of the Bering Lake Roadless Area (see Revised EA Map 1, and Final Environmental Impact Statement, Revised Forest Plan, Appendix C, page C-157). Therefore, the temporary reduction will be occurring on the edge of the Roadless Area, which will be much less intrusive than if it were to occur in the center of the Roadless Area.

Fish and wildlife resources are another component of the natural values. Referring to Table 1 of the EA, the effects of implementing Alternative 4 are negligible on the fish and wildlife resources of the area, and again, I find that the natural values will not be impaired.

Alaska National Interest Lands Conservation Act (ANILCA) of 1980. In making my decision I also considered Section 1323 (a) of ANILCA, which states:

“Notwithstanding any other provisions of law, and subject to such terms and conditions as the Secretary of Agriculture may prescribe, the Secretary shall provide such access to nonfederally owned land within the boundaries of the National Forest System as the Secretary deems adequate to secure to the owner the reasonable use and enjoyment thereof: Provided, That such owner comply with rules and regulations applicable to ingress and egress to or from the National Forest System.”

The rules and regulations applicable to ingress and egress to or from the National Forest System are complied with and I see no reason to deny access to the private inholdings through the use of an existing temporary road that has been used in the past for access to the same private inholdings.

Forest Plan direction. Alternative 4 selection moves toward implementation of the Revised Forest Plan and is consistent with the Revised Forest Plan. Specifically, it meets the goal of providing opportunity to develop minerals for personal and commercial use, without precluding or causing detrimental effects to the other uses and resources of the Forest as summarized in Table 1 of the EA. It is consistent with the goals and objectives, standards and guidelines, and Management Area Prescriptions in the Revised Forest Plan.

2. How Issues Were Considered

The following is a summary of issues raised during the analysis, and how the ID team considered them. For additional information see the Revised EA.

Issue 1: Effects on fish and wildlife and historic resources. Concerns were expressed about possible fish mortality from barge/landing craft traffic in the Katalla River, roads, fuel spills or other accidents with hazardous materials, and the use of water from Arvesta Creek for camp and drilling operations. Referring to Table 1 in the EA, there will be temporary disturbance of fish in a 1.4 mile section of the Katalla River from passing barges, and temporary disturbance of 0.4 miles of pink salmon spawning habitat. This temporary disturbance is not expected to have a measurable effect on the populations of salmon in the river. The barge would temporarily frighten fish, however they are expected to return when the barge passes (EA page 7). The thrust from the propellers is not expected to disturb eggs, nor is it expected to have any long term effect on migrating salmon, (EA page 75). There is also concern that increased coho salmon harvest by the drilling camp workers, in addition to the harvest by the guided clients in the area, could affect the fish population. The applicant has stated he will limit freezer space to store caught salmon and will limit the number of workers fishing at one time. The effects of the alternatives are summarized in Table 1 of the EA. Additional mitigation measures are listed in Chapter 2 of the EA.

Concern for the effects on wildlife stem from disturbances through the alteration of habitat, effects on nesting migratory birds, and increased presence of humans leading to greater hunting or trapping. There will be a temporary reduction in wildlife habitat of 5.1 acres from construction and clearing of storage areas as shown in Table 1 of the EA. The reduction will have a negligible effect on wildlife populations, as there is an abundance of this habitat type in the area. For the concern of an increase in hunting pressure the applicant has stated he would not allow hunting or unauthorized firearms in the crew camp. For bears, the concern is that the attraction to human foods or garbage and possible taking of bears under Defense of Life or Property (DLP) provisions, along with an increase in people from the drilling camp hunting in the area, will cause a decline in bear populations. In response to this concern, garbage will be incinerated and/or kept in bear proof containers, which will lessen the possibility of taking of bears under DLP.

An active bald eagle nest is located along the old temporary roadway, and there is concern that disturbance from trucks and increased use on the roadway will cause the birds to abandon the nest or cause the nest to fail. In order to maintain the 330 feet

distance from the nest a short section of new road would need to be built. However, the clearing of trees and construction of a road for a detour around the eagle nest could cause more disturbance to eagles, and a possibility of blowdown of timber. A variance was granted by the U.S. Fish and Wildlife Service to allow activity less than 330 feet from an active nest along the existing roadway. The variance stipulates that a biologist or other person familiar with eagle behavior will monitor the nest site to determine its use; and vehicles will maintain normal operating speed within 330 feet of the nest tree and not stop or markedly slow down in that area (Mike Jacobson USFWS eagle management specialist letter May 10, 2002). Commenters also expressed general concerns that increased activity would cause a decline in presence of shorebirds and other migratory birds in the area. The U.S. Fish and Wildlife Service stated that migratory bird nests, eggs, and young could be harmed by brush clearing during nesting season, approximately April 15 to July 15. Depending on the timing of the Plan of Operations and permits, CEC proposes to begin work in the winter of 2002-2003, which would prevent adverse effects to nesting migratory birds. Thus, nesting birds would not be affected. The loss of this brush for habitat would have no effect since this type of habitat is abundant in the area. The loss of brush would also be temporary and would grow back once the project has ended.

Issue 2: Risk of natural hazards of earthquakes and storms with respect to spills of drilling materials, fuel, and any produced water or oil. Given the possibility of natural hazards such as earthquakes or storms, human error, shipping or other transport mishaps, and equipment failure, there are concerns that spills or accidents involving hazardous materials associated with drilling operations will pollute the waters or contaminate the ground. The severity of effects depends on the type and amount of material, location, circumstances and conditions, and upon the contingency plans and other precautionary measures that could be taken. Concern was expressed about disposal of drilling fluids, cuttings or hazardous materials. The risks of the alternatives are summarized in Table 1 of the EA. An oil spill contingency and containment plan was developed by the proponent. I reviewed the potential risk factors and the contingency and containment plans, and I find this is an acceptable risk. The contingency and containment plans developed with the State of Alaska and other federal agencies will provide a safeguard. I see no reason to deny access to the private land or reserved rights based on the potential risks of natural hazards.

Issue 3: Effects on recreational users. The potential effects of this project on recreation users originate from disturbances from truck and barge activity, noise, recreational conflicts with drilling workers, and changes in the visual quality. These effects are summarized in Table 1 of the EA. People visit the area in late summer and fall with the expectation of a unique fishing experience in a wild and remote area of Alaska. The presence of barges and drilling equipment or the anticipation of these effects may also affect the business of cabin owners and outfitter-guides that cater to the recreational users. The effects of the alternatives are summarized in Table 1 of the EA. Discussions were held between the proponent and private landowners along the Katalla River in order to understand potential negative effects. Most of the barge traffic will occur outside the fishing season and the landowners will be notified in advance of activity in the fishing season. There will be a temporary reduction in the wild setting of the area from barge and vehicle traffic on the road, however, I find this temporary

reduction is an acceptable tradeoff when I consider the rights of access to the private land and reserved mineral rights, and the fact the road was used in the past for the same type of activity proposed.

Issue 4: Consider the proposal in the context of the Roadless Area Conservation

Rule. The project is in the Bering Lake Roadless Area. The Roadless Area Conservation Rule of January 12, 2002, prohibited road construction and reconstruction activities (including temporary road construction) within inventoried roadless areas of the National Forest System. The Roadless Rule is enjoined from being implemented by a lawsuit filed in Idaho Federal District Court. The Forest Service has interim direction to protect roadless values. This decision is consistent with the interim direction. The proposed action constitutes a prior existing reserved right (CNI Settlement Agreement 1982).

People are concerned that the presence of a road, heavy drilling equipment and people coming and going for up to 2 to 3 years would reduce the natural integrity and reduce opportunity for solitude in the area. These effects are short term with minimal impact on the ground and will not affect the longer-term roadless characteristics of the area. There is a concern that this activity would preclude the area from being recommended as Wilderness. The Bering Lake Roadless Area was considered for Wilderness in Alternatives D, E, and F of the FEIS for the recently Revised Forest Plan; however, it was not recommended for Wilderness in the Record of Decision of May 31, 2002.

Issue 5: Monitoring of resources, e.g. water quality, and oversight of operations.

Monitoring requirements were developed with respect to a variety of resource concerns and are summarized in Chapter 2 of the EA, and described in Chapter 3, page 104.

C. Activities I am Not Approving at this Time

Activities I am not approving and are not proposed at this time are additional exploratory wells and field development; including placement and construction of production and shipping facilities, pipelines, and service roads. If the proponent proposes additional wells or field development, additional environmental analysis to comply with NEPA will occur. Only those activities, which are specifically addressed in this decision notice, are approved. Other state or federal permits do not constitute approval by the Forest Service. These other permits must be obtained when required, but must be obtained in addition to Forest Service approval, not to replace approval.

III. Alternatives Considered.

Four alternatives were considered in detail in the revised EA. They were developed in response to issues and concerns raised by the public, state and federal agencies and the ID team. A key factor in developing alternatives was the presence of an existing road.

On April 30, 2002, the Environmental Assessment was released for a 30-day public review and comment period as per 36 CFR 215.3. During the review period Cassandra Energy Corporation sought review of the project by the State of Alaska for consistency with the Alaska Coastal Management Program. In this review, the Alaska Department of Fish and Game objected to Alternative 2 and suggested a modification of the Alternative. The specific concern that was the basis for development of a new alternative was the barge access ramp to be constructed in Alternative 2. It was felt that construction would further destabilize an unstable stream bank of the Katalla River. The State of Alaska,

Department of Fish and Game suggested a new barge landing area, and a modification of Alternative 2. The modified Alternative 2 is now Alternative 4. The Forest Service decided to revise the EA, rather than supplement the existing EA. The following alternatives were analyzed in detail:

Alternative 1. No Action. The proposed action would not be authorized. The holder of the current road use permit would request renewal of the permit, and any activity on the private land would continue. CAC's rights under the 1982 CNI Settlement Agreement would continue until December 31, 2004. The oil and gas potential of the area would not be further evaluated at this time. This alternative was not selected because it does not meet the purpose and need for the proposed action. In addition, I did not select this alternative because I did not find that the safety and environmental consequences to be so great as to cause serious loss of habitat which would jeopardize fish/wildlife populations, cause long term reduction in recreation quality, reduce roadless values, lower water quality, or result in the loss of soil.

Alternative 2 (EA Appendix A, Map 2). A large ocean-going barge would off load equipment and supplies at a site on the west side of the Katalla River on State of Alaska land (see EA Appendix A, Map 2). Up to 2.5 acres of storage area may be required to temporarily store equipment and supplies until it can be hauled up the Katalla River by a shallow draft small barge. Brush clearing will be required to remove small diameter recent growth from the storage area. Occasional helicopter and/or small plane flights will provide for personnel access, and deliver equipment and supplies to an existing airstrip located on State of Alaska lands near Katalla (see EA Appendix A, Map 2). Under this alternative, drilling equipment, supplies, and other materials would be barged 1.5 miles up the Katalla River to a landing site near the end of an old 2.5-mile existing roadway, which leads to the camp and drilling site. The river is shallow in places, so even a shallow-draft barge will need a 10-foot tide³ or greater to access the site (Wingham Island/Controller Bay tide tables). At the landing site, the riverbank will be graded to create a 25 by 25-foot access ramp (EA Appendix C) to transport supplies from the barge to the end of the old roadway.

A staging area up to two acres would be cleared of trees and vegetation along the roadway about 200 yards east of the river. Rig matting (EA Appendix D) would be placed on the cleared area as required to protect the soil. Slash and stumps would be stored along the edge of the clearing and then scattered back over the area when the project is completed (FSH 2509.22.14.19). The area is flat, therefore the debris or disturbed soil would not be easily transported to streams or other areas where it could harm fish habitat or cause erosion or flow problems.

The opening of the old roadway would require clearing of fallen trees and brush, minor grading, and installation of seven temporary pre-fabricated bridges over stream crossings. The operator will not disturb the stream banks, alter the channels, or have equipment in the streams to install the bridges. No culverts will be installed; although existing culverts and ditches will need to be maintained. No sand, gravel or rock (mineral materials) will be required.

³ The Revised EA references a 12 foot-tide. The 12-foot tide is using a Cordova Tide Table, in the Wingham Island/Controller Bay Tide Table, the equivalent tide is 10-foot.

The drilling activity and crew camp would take place on private land and would use land that was cleared in 1985-86. A crew camp, a drill pad, storage facilities, and other support facilities would be constructed, again on private land. The buildings and tent platforms that comprise the existing crew camp would be cleared prior to setting up a new crew camp. Water for the camp will be taken from Arvesta Creek at the rate of 31,700 gallons per day. The drill pad and storage area for hazardous wastes will be designed to prevent soil and water contamination if there are spills or leaks.

This alternative was not selected because ADF&G believed that it would further destabilize the stream bank of the Katalla River. ADF&G felt that 550 feet of new temporary road constructed under Alternative 4 would have less effects than potentially further destabilizing the stream bank by building a ramp upstream in this alternative. In addition after further survey work in 2002, it was found that a deep draft barge needed to transport large pieces of equipment would only be able to access the ramp on about five tides per year, occurring during the winter (Wingham Island/Controller Bay 2002 tide tables). Cassandra Energy submitted a channel survey of the Katalla River in 2001, which indicated it was deep enough for the barge to pass. Further depth sounding in the summer of 2002 by Cassandra Energy, the U.S. Forest Service and ADF&G showed it was only passable at the highest of tides. In summary:

Feasibility – Access by the 5-foot draft barge is limited, since there are only about five suitable tides a year and these only occur in the winter. When the tide is unsuitable, the barge cannot maintain the required 1-foot clearance above the river bed; if not maintained, the barge would churn bottom gravels which impacts pink salmon eggs.

There is a possibility of further destabilizing the Katalla River bank where it is already unstable.

The barge would be offloading in a deep hole on the Katalla River and that would disturb a salmon holding area and impact recreational fishing there. There would be greater disturbance and displacement of spawning salmon and recreational fishing than in Alternatives 3 and 4.

Alternative 3 (EA Appendix A, Map 3). Alternative 3 is similar to Alternative 2, except that the operator would build 2,600 feet of new temporary road extending from the end of the old roadway to a point one-half mile downstream on the east bank of the Katalla River. Then barges would travel 1.0 mile upstream and could use 9-foot tides (Wingham Island/Controller Bay tide tables). This road would require crossing the upstream end of a 40-foot wide slough with either a bridge or multiple culverts. A staging area up to two acres would be cleared at the landing site using the methods described above. An additional 900 feet of new road would also be built along the old roadway to create a detour around an eagle nest tree. The proposed road construction would require mineral materials from either private land or shipped in from elsewhere.

This alternative was not selected because the construction of approximately 2,600 feet of new temporary road had greater negative effects than the selected alternative. Additional factors considered:

Approximately 2,600 feet of new temporary road construction will require placement of rig matting, which makes this alternative more expensive.

Aesthetics of 2,600 feet of road construction verses barge traffic in river. Temporary road construction is more disturbing over the long-term versus the temporary presence of a barge on the river.

Greater terrestrial habitat disturbance than Alternatives 2 or 4 because of brush clearing and crossing of slough. Less disturbance to fish spawning area and recreational fishing because of less distance barges will travel in the river. Higher potential for sediment run-off.

Clearing of trees and construction of road for detour around eagle nest may cause more disturbance to eagles or chance of blowdown than using existing road.

Alternative 4 (EA Appendix A, Map 4). This is the selected alternative. This alternative was proposed by the State of Alaska during the Coastal Zone Consistency review process. A large ocean-going barge would off load equipment and supplies at a site on the west side of the Katalla River on State of Alaska land (see EA Appendix A, Map 2). Up to 2.5 acres of storage area may be required to temporarily store equipment and supplies until it can be hauled up the Katalla River by a shallow draft small barge. Brush clearing will be required to remove small diameter recent growth from the storage area. Occasional helicopter and/or small plane flights will provide for personnel access, and deliver equipment and supplies to an existing airstrip located on State of Alaska lands near Katalla (see EA Appendix A, Map 2). Under this alternative, drilling equipment, supplies, and other materials would be barged 1.5 miles up the Katalla River to a landing site 550 feet downstream from the end of an old 2.5-mile existing roadway, which leads to the camp and drilling site. The river is shallow in places, so even a shallow-draft barge will need a 10-foot tide⁴ or greater to access the site (Wingham Island/Controller Bay tide tables).

A staging area up to two acres would be cleared of trees and vegetation along the roadway about 600 feet east of the river. Rig matting (EA Appendix D) would be placed on the cleared area as required to protect the soil. Slash and stumps would be stored along the edge of the clearing and then scattered back over the area when the project is completed (FSH 2509.22.14.19). The area is flat, therefore the debris or disturbed soil would not be easily transported to streams or other areas where it could harm fish habitat or cause erosion or flow problems.

Alternative 4 is similar to Alternative 2, except that the operator would build approximately 550 feet of new temporary road extending from the end of the old existing roadway to a gravel bar downstream on the east bank of the Katalla River. The (shallow) barge landing point is approximately 550 feet downstream from the Alternative 2 landing.

The river bank above the gravel bar is a gradual slope that would not require any excavation for an access ramp. It is covered with young alder and appears to have been

⁴ The Revised EA references a 12 foot-tide. The 12-foot tide is using a Cordova Tide Table, in the Wingham Island/Controller Bay Tide Table, the equivalent tide is 10-foot.

used as an access point and staging area during the 1985-86 activities. An area about 100 by 100 feet (0.2 acres) would be needed for an access road and a turning area for trucks and other equipment. Rig matting would be used in this area to protect the soil from erosion. A 30-50 foot vegetation buffer would be left next to the river to prevent sediment from being washed into the river.

After the slope area the road would run about 250 feet over an old uplifted flood channel vegetated with young Sitka spruce. The soils consist mainly of gravels and sand, and rig matting may be laid on the cleared surface. There are four intermittent streams that would be crossed with temporary bridges. The final 300 feet of road would cross through a dense stand of young Sitka spruce (150 feet) and then over a sphagnum moss wetland area with small spruce and some alder patches (150 feet). The soil has a layer of marine clays and sediments overlying the previously mentioned gravel. Rig matting will be required, with logs and brush or other materials for additional support in the wetter areas.

For Alternative 4, a road and staging area would be 0.5 acres, 550 ft long and 20 feet wide. CEC would need an area at least 100 feet wide at the stream entry point in order to turn equipment around. A two-acre staging area at the old roadway, as proposed in Alternative 2, would be also be needed.

The opening of the old roadway would require clearing of fallen trees and brush, minor grading, and installation of seven temporary pre-fabricated bridges over stream crossings. The operator will not disturb the stream banks, alter the channels, or have equipment in the streams to install the bridges. No culverts will be installed; although existing culverts and ditches will need to be maintained. No sand, gravel or rock (mineral materials) will be required.

The drilling activity and crew camp would take place on private land and would use land that was cleared in 1985-86. A crew camp, a drill pad, storage facilities, and other support facilities would be constructed. The buildings and tent platforms that comprise the existing crew camp would be cleared prior to setting up a new crew camp. Water for the camp will be taken from Arvesta Creek at the rate of 31,700 gallons per day. The drill pad and storage area for hazardous wastes will be designed to prevent soil and water contamination if there are spills or leaks.

Feasibility – More consistently accessible to deep draft barge than Alternative 2.

Requires 550 feet of new temporary road construction, less terrestrial disturbance than Alternative 3. Will require placement of rig matting.

The proposed road would cross an area within the 100-foot riparian zone of a backwater tributary to Katalla Slough, the site specific analysis in the EA indicates the road would not effect water quality or fish habitat.

Barge would cross 150 feet less spawning area than Alternative 2, and avoid barge traffic in deep hole in Alternative 2, which is a popular fishing area and is a holding area for migrating salmon. Less disturbance to spawning salmon and recreational fishing than Alternative 2.

Direct barge access on a gravel bar, therefore no cutting into unstable stream bank causing additional erosion of the stream bank.

Additional Alternatives Considered but not in detail

Five additional alternatives were considered during the analysis, but not studied in detail. These are described below, along with the reasons for not considering them further:

1. Ice road in winter. This was eliminated from detailed study because the relatively warm maritime climate of the area is not favorable to a stable ice road. While it might be possible to build an ice road in the winter during cold spells, warmer periods would destabilize it. Additionally, there is already an old roadway in the area that provides access, and is stable and usable with some maintenance.
2. Direct barge access to the west side of the Katalla River. This would involve constructing 2,600 feet of temporary road on the west side of the Katalla River, a bridge across the river, and use and maintenance of the 2.5 miles of the old roadway. Equipment would be transported to a crew camp and drill site on private land. This was eliminated from detailed study because there is an old roadway on the east side of the river and extensive wetlands on the west side of the river. Also, on the west side greater disturbance would occur to people at fishing lodges and cabins. This would be nearly identical to Alternative 3 with the exception that a major bridge across the Katalla River would be constructed. Construction of a major bridge would not reduce environmental consequences, given the additional impacts to the wetlands and disturbance associated with bridge construction.
3. Use of helicopters to deliver drilling equipment and materials. This alternative would require helicopter lifting large pieces of equipment to the drilling sites, including drilling rigs, trucks, pumps, and other large pieces of equipment. The helicopter noise would disrupt recreation use and wildlife in the area. Frequent storms in the winter and rainy or foggy weather in the summer make it difficult to get helicopters to the site safely on a regular basis. A large landing area would need to be cleared for helicopters to land equipment. This alternative would be very expensive. This alternative was eliminated from detailed analysis because of the presence of an existing old roadway, the noise from numerous helicopter trips, the high cost and the weather.

The following two additional alternatives were proposed in the public review and comment period of April 30, 2002:

1. Construct a new road from the Strawberry Point area along the coast directly to the private land where the drilling is proposed. This would avoid barging equipment and materials on the Katalla River. This would involve construction of approximately two miles of new temporary road. This was eliminated from detailed study because there is an existing old roadway on the east side of the Katalla River, and extensive wetlands between Strawberry Point and the private land. Construction of approximately two miles of new temporary road would not reduce environmental consequences, given the additional impacts to the wetlands and disturbance associated with construction. It would result in less disturbance to spawning gravels and recreation associated with the Katalla River. In the event a discovery of oil and gas is made, this could be a viable alternative for long-term access.

2. Utilize the Katalla Slough to barge drilling equipment and supplies to the private land. This would avoid the Katalla River with its pink salmon spawning and sport fishing areas. This was eliminated from detailed study because Forest Service channel depth measurements show that the slough is too shallow for barging equipment and supplies. To be a viable alternative, the slough would have to be dredged and a road built across wetlands. The actions would not have less disturbance than barging on the Katalla River and utilizing an existing old roadway.

IV. Public Involvement.

To date, the public has been invited to participate in the Katalla project in the following ways:

Public Mailing - In August 2001, a letter providing information and seeking public comment was mailed to 92 individuals and groups that had previously shown interest in Forest Service projects on the Chugach National Forest. This included Alaska Native groups, federal and state agencies, municipal offices, businesses, interest groups, and individuals. The letter was also sent by e-mail to an additional 103 addresses. A total of 124 responses were received. Overall, people are concerned about the effects of this project on fish and wildlife, recreational users, and the risks with respect to possible spills of drilling materials, fuel and any produced water or oil. These comments were grouped to develop the issue statements. Many people expressed support for the proposal. In addition, the Katalla project has been listed on the Chugach National Forest Schedule of Proposed Actions since January 2001. This was mailed out four times a year to approximately 300 individuals and organizations, and posted on the Forest website.

Local News Media - Announcements about the project were printed in the Anchorage Daily News and Cordova Times. Newspaper stories about the project have appeared in these local newspapers as well as nationally in the New York Times and the Los Angeles Times. Flyers announcing the public meeting in Cordova were posted at six business public bulletin boards and at the U.S. Post Office. An announcement was also placed on the Cordova cable television "scanner" channel, where local advertisements are run.

Public Meetings - Public meetings were held in Cordova and Anchorage, Alaska. The purpose was to provide project information, present the proposed action, take comments and discuss concerns and interests to be addressed in the environmental analysis.

Meetings with Native Alaskan Groups, Communities, Agencies, and Others - The Executive Director of the Native Village of Eyak was contacted and informed, as well as the Eyak Native Village Corporation. Continuous contact was made with Chugach Alaska Corporation. The mayor of Cordova was contacted and informed about the proposal. On August 8, 2001, George Brewster, Cassandra Energy, and Dave Ryland, Habitat Biologist, representing Alaska Department of Fish and Game, met with the ID team on site to discuss barge and road issues. Carol Huber, Forest Service Geologist, has met repeatedly with Greg

Noble, BLM petroleum engineer, concerning technical aspects of drilling operations on public lands. Numerous additional field reviews were conducted in the summer of 2002 with ADF&G, Cassandra Energy, and the Forest Service. The Forest Service attended meetings held by the State of Alaska, Department of Governmental Coordination, under the Coastal Zone Management program.

Public review and comment of the Environmental Assessment - On April 30, 2002, the Environmental Assessment was released for a 30-day public review and comment period as provided by 36 CFR 215.3. The Forest received approximately 38 comments during the review period. These comments are summarized in Appendix F of the revised EA along with Forest Service responses.

During the review period, Cassandra Energy Corporation sought review with the State of Alaska under the Coastal Management Program. In this review, the Alaska Department of Fish and Game objected to Alternative 2, and suggested a modification of the Alternative be considered. The modified Alternative is now Alternative 4. The Forest Service revised the EA rather than supplement the existing EA, to avoid confusion and clarify information in the first EA.

A second 30-Day Public Comment Period was held on the Revised Environmental Assessment starting on September 25, 2002. It was sent to approximately 132 persons who had expressed an interest in the proposal. Copies of the EA were available at the Forest Supervisor's Office in Anchorage, the District Ranger's Office in Cordova, and the Regional Forest Service Headquarters in Juneau, Alaska. A legal Notice of Availability was published in the Juneau Empire and the Anchorage Daily News on September 25, 2002. The comments and responses are attached to this decision notice. The EA is available on the Internet at:

http://www.fs.fed.us/r10/plans_projects/katalla/index.html

V. Monitoring and Mitigation

Monitoring and mitigation items shown on pages 52-56 of the EA are one of the conditions of approval of the Plan of Operations and include the previously described monitoring items.

VI. Finding of No Significant Impact

I have determined that these actions will not significantly affect the quality of the human environment; therefore, an environmental impact statement is not needed. This determination is based on the following criteria identified in implementing regulations for the National Environmental Policy Act (NEPA) (40 CFR 1508.27):

Context

The selected alternative applies to a project limited in scope and duration. The proposed action will take place on private land, utilizing an existing temporary road on the edge of the Bering Lake Roadless Area (Final Environmental Impact Statement, Revised Forest Plan, Appendix C, pages C-157 to C-168). The Roadless area has a gross acreage of 1,032,730 acres, of which 966,240 acres are National Forest System lands. The Bering Lake Roadless Area was considered for Wilderness in Alternatives D, E, and F of the Final Environmental Impact Statement for the recently Revised Forest Plan; however, it was not recommended for Wilderness in the Record of Decision of May 31, 2002. The potential effects of implementing Alternative 4 will be confined to approximately 2.5 miles of an existing temporary road, 550 feet of construction of new temporary road, and an existing drill site and crew camp on private land. This amounts to approximately 5.5 acres of actual disturbed area on National Forest System land. The temporarily presence of heavy drilling equipment and up to 66 people coming and going would reduce the natural integrity and opportunity for solitude along the road. The temporarily sounds of heavy trucks and drilling equipment would be noticeable along the road and in the vicinity of the private land where the drilling would take place for the life of the project which is estimated at 2 to 3 years.

Intensity

- Both beneficial and adverse effects have been taken into consideration when making this determination of significance. Beneficial effects have not, however, been used to offset or compensate for potential adverse effects. The benefits are the employment opportunities and potential revenue and royalty resulting from a discovery of oil and gas. The adverse effects are summarized in Table 1 of the revised EA, (page 46).
- Public health and safety would not be adversely affected. Mitigation measures will prevent adverse effects to water quality and stream habitat. Public health and safety are minimally affected by the proposed action, (EA, pages 92-95).
- The characteristics of the geographic area do not make it uniquely sensitive to the effects of the drilling operations. The site is on the edge of the Forest and a roadless area. Site-specific analysis and review of other similar activities lead me to expect no measurable off-site environmental effects or serious on-site environmental effects. The area was the site of the first production of oil for the State of Alaska at the turn of the century and oil was produced and refined in the area for many years. It was recently considered for recommendation as Wilderness in revision of the Forest Plan but was not recommended for designation in the Final Revised Forest Plan. There are no known significant irreversible resource commitments.
- Scientific and professional experts consulted agree that the activities can be implemented without significant effects on the environment. Oil and gas exploratory drilling activities have been conducted on National Forest System lands for many years. Specific mitigation measures were developed between the proponent, the Forest Service, State of Alaska and local landowners to lessen potential effects.

- The mitigation and monitoring included in this decision are standard techniques and are not considered highly uncertain nor do they represent unique or unknown risks. They were developed in conjunction with the BLM and the State of Alaska. Oil and gas drilling has taken place in Alaska for many years. There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks, (EA, pages 11-17, pages 52-56, and Appendix A of the revised EA).
- This decision does not set a precedent for future decisions, (EA, pages 21-23). Any future decisions with respect to oil and gas exploration and/or production within this project area or any other area on the Forest will need to consider all relevant scientific and site-specific information available at that time and will be subject to additional review and disclosure under NEPA regulations at 40 CFR 1500-1508 at the time they are proposed.
- This action does not represent potential cumulative adverse impacts when considered in combination with other past or reasonably foreseeable actions. There are no known significant cumulative effects between this project and other projects implemented or planned in the area or in areas separated from the affected area of this project, (EA, pages 105-106).
- The project area has been inventoried for cultural/historic resources. Known sites will be avoided to ensure there are no adverse effects. There are no known cultural/historic resources affected, (EA, pages 67-68).
- No proposed or listed endangered, threatened, or sensitive species will be adversely affected, (EA, pages 88-90, and the biological evaluation, available in the project files). The physical and biological effects are limited to the existing temporary road, drill site, and crew camp on private land, (EA, pages 11-17).
- The actions are in compliance with all Federal, State, and local laws or requirements for the protection of the environment, (Table 1, page 46).

VII. Findings Required by Other Laws and Regulations.

ANILCA Section 501(b) Consistency Determination

The Copper River Delta is mandated under Section 501(b) of ANILCA to be managed primarily for the conservation of fish and wildlife and their habitat. As per 36 CFR 241.22 Consistency Determinations (a), Subject to valid existing rights, a multiple-use activity may be permitted or authorized within areas of the Chugach National Forest subject to this subpart only after a determination by the responsible Forest Officer that such activity is consistent with the conservation of fish, wildlife, and their habitat. A use or activity may be determined to be consistent if it will not materially interfere with or detract from the conservation of fish, wildlife and their habitat.

The Katalla Project is exercising a valid existing right of Chugach Alaska Corporation from the 1982 CNI Settlement Agreement, and thus under both Sections 1323(a) and 501(b) of ANILCA the proposal is not required to be consistent with the conservation of fish, wildlife, and their habitat. Nonetheless, the applicant and Forest Service have worked to minimize environmental impacts. The proposal will utilize standards and guidelines developed for the ANILCA 501(b) management area, and will use the Forest Service BMPs (Best Management Practices) during layout, construction, and maintenance of all activities. As a result, the proposed project will only have a negligible effect on fish and wildlife resources, including habitat. See Table 1 of the revised EA.

ANILCA Section 810, Subsistence Evaluation and Finding

The effects of this project have been evaluated to determine potential effects on subsistence opportunities and resources. Although some vegetation or habitat types would be altered, the project would not significantly reduce the amount of these types of vegetation or habitat available in the area or the subsistence resources they provide. For this reason, none of the alternatives would result in a significant possibility of a significant restriction of subsistence use of wildlife, fish, or other foods.

Coastal Zone Management Act of 1972, as Amended

On April 30, 2002, the Environmental Assessment was released for a 30-day public review and comment period as per 36 CFR 215.3. During the review period Cassandra Energy Corporation sought review of the project by the State of Alaska for consistency with the Alaska Coastal Management Program. In this review, the Alaska Department of Fish and Game objected to Alternative 2 and suggested a modification of the Alternative. The specific concern that was the basis for development of a new alternative was the barge access ramp to be constructed in Alternative 2, the preferred alternative. It was felt that construction would further destabilize an unstable stream bank of the Katalla River. The State of Alaska, Department of Fish and Game suggested a new barge landing area, and a modification of Alternative 2. The modified Alternative 2 is now Alternative 4. The Forest Service decided to revise the EA, rather than supplement the existing EA. At this time the State of Alaska is reviewing the proposal for consistency with the Alaska Coastal Management Program.

Endangered Species Act of 1973

A Biological Evaluation has been completed for this action which indicates that no Federally listed threatened or endangered species will be affected by this activity. An informal consultation was conducted with the U. S. Fish and Wildlife Service (USFWS). In this consultation, USFWS concurred with a finding of no significant impact to species listed as Threatened or Endangered under the Act, and granted a variance for the eagle nest.

National Historic Preservation Act of 1966

The Forest Service program for compliance with the National Historic Preservation Act includes location, inventory, and nomination of all cultural sites that may be directly or indirectly affected by scheduled activities. This activity has been reviewed by a qualified

archeologist and a determination made that no known cultural resources are present in the project area that will be affected by the activities proposed.

Magnuson –Stevens Fishery Conservation and Management Act of 1996

After consultation with the National Marine Fisheries Service and ADF&G Habitat Division, the Forest Service has determined that there will be no adverse effect to pacific salmon populations or essential fish habitat as defined in this act. Passing barges may cause temporary displacement of individual fish. Landing barges on the gravel bar may stir up some sediment. However, these effects are temporary and will not endanger fish or their habitat. Mitigation measures include monitoring barge traffic to ensure salmon eggs in the stream substrate are not disturbed by the propellers. Implementation of BMPs, hazardous material handling and storage regulations, and spill contingency plans and equipment will prevent or reduce the risk of adverse effects from road construction, spills, or other potential impacts.

Migratory Bird Act of 1918 (as amended)

Comments and suggestions from the U.S. Fish and Wildlife Service have been incorporated into the revised EA. Timing mitigation measures will be taken to minimize effects to nesting migratory birds during clearing and road construction.

Floodplain Management (E.O. 11988), Protection of Wetlands (E.O. 11990)

In accordance with these Executive Orders, the proposed action will minimize the effects on floodplains and wetlands to the greatest extent practical. The proposed temporary road will cover approximately 0.1 acre of wetland, but this area will be bridged to avoid impacts.

To proceed with implementation of the decisions Cassandra Energy will obtain the following permits:

U.S. Fish and Wildlife Service

There is an eagle nest less than 330 feet from the existing temporary road. An eagle nest variance is required if the road is less than 330 feet from an eagle nest. Otherwise, the road could not be used for periods of time when eagles are present, which is from March 15 to May 31; June 1 to July 1; and August 1 to August 31. A variance has been issued to allow use of the road with various mitigation measures. The U.S. Fish and Wildlife Service determined that use of the existing road would cause less disturbance to eagles or risk to the nest tree than construction of a new section of road.

U.S. Environmental Protection Agency

Storm water discharge permit is not required for construction activities which will disturb less than 5 acres; over 5 acres of disturbance requires a permit. The Section 402 of the Clean Water Act requires that all point source waste water dischargers obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. This operation will discharge wastewater. A "spill prevention, control, and countermeasure plan" (SPCC), is required under 40 CFR Part 112 and any discharge of oil (oil spill) must be reported immediately to the National Response Center, EPA.

U.S. Coast Guard

The Barge Company must have a permit to transport fuels and other hazardous materials to the offloading site.

State of Alaska, Oil and Gas Conservation Commission

Before drilling an oil well in the state of Alaska, a person shall submit and obtain the commission's approval of an application for a Permit to Drill (20 AAC 25.005).

State of Alaska, Department of Natural Resources

Tidelands Permit is required (State has management authority from water line to mean-high water line) for occupancy and use of tidelands and submerged lands. A temporary water use permit (5 years) or water rights permit is required for use of water from Arvesta Creek for drilling and camp operation.

State of Alaska, Department of Environmental Conservation

Certification of compliance with Alaska Water Quality Standards (Section 401 Certification) if needed. Solid Waste Disposal Permit (Section 402 of the Clean Water Act) is required as follows:

1. Camp waste: If they intend to bury the incinerator ash or waste onsite, they will need a permit.
2. Drilling waste: The applicant will need either a permit or an approval from DEC for disposal and/or storage of drilling waste. A permit is required to dispose of the drilling waste at the site, per 18 AAC 60.430(b)-(e). Storing drilling waste prior to disposal offsite at a permitted facility must be approved by the Department per 18 AAC 60.430(a).
3. Septic system for camp use must be constructed to DEC standards. 18AAC50.390; Alaska Statute 46.14, requires DEC Air Permit (Permit-by-Rule) for oil and gas drilling operations.
4. 18AAC75; Alaska Statute 46.04.030(b) requires a DEC Oil Discharge Prevention and Contingency Plan (C-Plan) Approval.
5. 18AAC72.500 Requires a DEC permit for disposal of non-domestic wastewater into or onto land, surface water, or groundwater.

State of Alaska, Department of Fish and Game

A Title 16 permit is required for activities within or across anadromous streams. These activities include the size and timing of barge traffic, unloading barges in an anadromous stream, placing fill for barge landing site if needed, and use of water from Arvesta Creek for drilling and camp operation, Alaska Statute 16.05.840, (Fishway Act) and Alaska Statute 16.05.870, (Anadromous Fish Act).

VIII. Implementation.

If no appeal is received, implementation of this decision, may occur on, but not before, five business days from the close of the appeal filing period, pursuant to 36 CFR 215. If an appeal is received, implementation may not occur for 15 days following the date of the appeal disposition.

IX. Administrative review.

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. A written notice of appeal must be filed with the Appeal Deciding Officer:

Regional Forester
Alaska Regional Office
P.O. Box 21628
Juneau, AK 99802-1628

The Notice of Appeal must be filed within 45 days of publication of notice of this decision in the *Anchorage Daily News* newspaper.

In accordance with 36 CFR Section 215.14, it is the responsibility of those who appeal a decision to provide the Appeal Deciding Officer sufficient evidence and rationale to show why the Responsible Official's decision should be remanded or reversed. The written notice of appeal must contain the following requirements:

1. State that the document is a Notice of Appeal filed pursuant to 36 CFR part 215.
2. List the name, address, and telephone number of appellant.
3. Identify the decision document by title and subject, date of decision, and name and title of the responsible Official.
4. Identify the specific change(s) in the decision that the appellant seeks or portion of the decision to which the appellant objects.
5. State how the Responsible Official's decision fails to consider comments previously provided, either before or during the comment period specified in 36 CFR 215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

X. Contact Persons.

Copies of the Revised Environmental Assessment can be obtained from the Cordova District Ranger, P.O. Box 280, Cordova, Alaska, 99574-0280; and the Forest Supervisor's Office, 3301 C St., Anchorage, Alaska, 99520. For information on this Revised Environmental Assessment and Decision Notice please call Ken Hodges, Cordova Ranger District at (907) 424-4738; or Chuck Frey, Supervisor's Office, Anchorage, at (907) 743-9557. The Revised Environmental Assessment and Decision Notice are also available on the Internet at:

http://www.fs.fed.us/r10/plans_projects/katalla/index.html

XI. Signature and Date.

_____/s/ Dave R. Gibbons_____

Dave R. Gibbons
Forest Supervisor

___12/13/02_____

Date