

**DECISION RECORD  
and  
FINDING OF NO SIGNIFICANT IMPACT**

I. Decision:

It is my decision to permit Veritas' geophysical exploration of the following Bureau of Land Management administered lands only:

Seward Meridian

Parcel 1. Lot 1, N $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ , and that portion of the NE $\frac{1}{4}$ SE $\frac{1}{4}$  north of the Sterling Hwy., exclusive of that portion of the N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  northwest of the Sterling Hwy., Sec. 21, T. 2 N., R. 12 W. (240 acres)

Parcel 2. Lot 1, Sec. 23, T. 1 N., R. 13 W. (39.08 acres)

Parcel 3. N $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 13, T. 1 N., R. 13 W. (10 acres)

Parcel 4. S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  and SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 24, T. 1 N., R. 13 W. (15 acres)

II. Rationale for the Decision:

The goal of the Set America Free Act of 2005 is to develop an energy policy that will achieve energy self-sufficiency by 2025 within the three contiguous North American nations of Canada, Mexico, and the United States, Section 1422, 119 Stat. 1064. The Bureau of Land Management's oil and gas program is intended to encourage the development of domestic oil and gas reserves; thereby, reducing national dependence upon foreign energy supplies. The Proposed Action would provide high definition imaging of the subsurface geology in the seismic survey area and would aid in the identification of potential sub-surface geologic targets that may contain commercial quantities of oil and/or natural gas. The subsurface geologic information generated from the survey may ultimately reduce the number of exploratory wells required to evaluate the subject acreage thereby resulting in less overall surface disturbance associated with any future exploratory drilling operations.

III. Finding of No Significant Impact (FONSI):

The proposed action is consistent with existing national environmental policies and objectives as set forth in Section 101 (a) of the National Environmental Policy Act of 1969 (NEPA). Further and based on the analysis of potential environmental impacts contained in the attached environmental assessment, it is my determination that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment and that an environmental impact statement is not required.

IV. ANILCA Section 810 Compliance:

The proposed action will not significantly restrict Federal subsistence uses, decrease the abundance of federal subsistence resources, alter the distribution of federal subsistence resources, or limit qualified Federal subsistence user access.

V. Adverse Energy Impact Compliance:

This action has been analyzed as required by Washington Office Instruction Memorandum 2002-053 to determine if it will cause an adverse impact on energy development. The action will not have an adverse direct or indirect impact on energy development, production or distribution. The preparation of a Statement of Adverse Energy Impact is not required.

VI. Compliance and Monitoring Plan:

- 1) The authorization to conduct geophysical exploration on Bureau administered lands shall be evidenced by a properly executed BLM Form 3150-4, NOTICE OF INTENT AND AUTHORIZATION TO CONDUCT OIL AND GAS GEOPHYSICAL EXPLORATION OPERATIONS.
- 2) In accordance with the provisions of 43 CFR §3154.1, Veritas shall provide the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507, with an appropriate bond to conduct geophysical exploration on federal public lands on the Kenai Peninsula, Alaska.
- 3) Within 30 days of completing its on shore geophysical survey operations, Veritas will file BLM form 3150-5, NOTICE OF COMPLETION OF OIL AND GAS GEOPHYSICAL EXPLORATION OPERATIONS, with the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507.
- 4) Veritas will submit all data and information obtained in carrying out the seismic survey to the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507, 43 CFR §3152.6.
- 5) Veritas shall conduct its operations in compliance with all Federal, State, and Local laws and orders, rules and regulations and ordinances; including but not limited to those relating to the environment.
- 6) Veritas agrees to indemnify, defend and hold the United States, its employee's, representatives, agents, successors and assigns, harmless from any and all claims, damages, injuries or death arising out of or in connection with its geophysical exploration operations including but not limited to any claim of or liability for error, omission or negligent or intentional act of Veritas, its agents, subcontractors or employees.
- 7) Veritas will provide the Bureau of Land Management with a copy of its State of Alaska, Department of Natural Resources, Division of Oil and Gas Geophysical Exploration Permit and application.
- 8) Operations will be conducted in such a manner as to leave the surface in as near its original condition as reasonably possible.

- 9) When the project has been finalized in design and routes have been selected based on resource concerns or avoidance, Veritas shall furnish the BLM with a revised NOI and final project maps.
- 10) All explosives stored or not used in the blasting operation will be destroyed or removed from federal lands.
- 11) Veritas shall protect all land survey markers.
- 12) Crews shall not camp or reside on federal lands during the course of the project.
- 13) Crew and equipment deployment, pickup, troubleshooting and other operations will be accomplished on foot and/or with helicopter support.
- 14) All terrain vehicles will be speed limited and be equipped with low ground pressure tires.
- 15) Veritas will conduct an environmental briefing for all employees, contractors and subcontractors, including pilots, which will cover the Conditions of Approval.
- 16) Veritas' geophysical exploration activities must not impede Alaska rural residents from pursuing traditional subsistence activities.

Kierson Crume  
*for* Mike Zaidlicz  
Anchorage Field Manager

September 12, 2007  
Date

## CONDITIONS OF APPROVAL

### GENERAL PROVISIONS

- 1) CGGVeritas d/b/a Veritas DGC Land Inc (Veritas) is permitted conduct geophysical exploration on the following described Bureau administered lands only:

#### Seward Meridian

Parcel 1. Lot 1, N $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ , and that portion of the NE $\frac{1}{4}$ SE $\frac{1}{4}$  north of the Sterling Hwy., exclusive of that portion of the N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  northwest of the Sterling Hwy., Sec. 21, T. 2 N., R. 12 W. (240 acres)

Parcel 2. Lot 1, Sec. 23, T. 1 N., R. 13 W. (39.08 acres)

Parcel 3. N $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 13, T. 1 N., R. 13 W. (10 acres)

Parcel 4. S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  and SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 24, T. 1 N., R. 13 W. (15 acres)

- 2) Authorization to conduct geophysical exploration on the above described lands shall be evidenced by a properly executed BLM Form 3150-4, NOTICE OF INTENT AND AUTHORIZATION TO CONDUCT OIL AND GAS GEOPHYSICAL EXPLORATION OPERATIONS.
- 3) In accordance with the provisions of 43 CFR §3154, Veritas shall provide the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507 with an appropriate bond to conduct geophysical exploration on federal public lands on the Kenai Peninsula, Alaska.
- 4) Within 30 days of completing its on shore geophysical survey operations, Veritas will file BLM form 3150-5, NOTICE OF COMPLETION OF OIL AND GAS GEOPHYSICAL EXPLORATION OPERATIONS, with the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507.
- 5) Veritas will submit all data and information obtained in carrying out the seismic survey to the Bureau of Land Management, Minerals Division, Attn: Greg Noble, 6881 Abbott Loop Rd., Anchorage, AK 99507, 43 CFR §3152.6.
- 6) Veritas shall conduct its operations in compliance with all Federal, State, and Local laws and orders, rules and regulations and ordinances; including but not limited to those relating to the environment.
- 7) Veritas agrees to indemnify, defend and hold the United States, its employee's, representatives, agents, successors and assigns, harmless from any and all claims, damages, injuries or death arising out of or in connection with its geophysical exploration operations including but not limited to any claim of or liability for error, omission or negligent or intentional act of Veritas, its agents, subcontractors or employees.

- 8) Veritas will provide the Bureau of Land Management with a copy of its State of Alaska, Department of Natural Resources, Division of Oil and Gas Geophysical Exploration Permit and application.
- 9) Operations will be conducted in such a manner as to leave the surface in as near its original condition as reasonably possible.
- 10) When the project has been finalized in design and routes have been selected based on resource concerns or avoidance, Veritas shall furnish the BLM with a revised NOI and final project maps.
- 11) All explosives stored or not used in the blasting operation will be destroyed or removed from federal lands.
- 12) Veritas shall protect all land survey markers.
- 13) Crews shall not camp or reside on federal lands during the course of the project.
- 14) Crew and equipment deployment, pickup, troubleshooting and other operations will be accomplished on foot and/or with helicopter support.
- 15) All terrain vehicles will be speed limited and be equipped with low ground pressure tires.
- 16) Veritas will conduct an environmental briefing for all employees, contractors and subcontractors, including pilots, which will cover the Conditions of Approval.
- 17) Veritas' geophysical exploration activities must not impede Alaska rural residents from pursuing traditional subsistence activities.

#### PROFFERED MITIGATION MEASURES AND CONDITIONS OF APPROVAL

The proffered mitigation measures are appropriate actions or measures to avoid, minimize, rectify, reduce, eliminate or compensate for adverse environmental impacts and were an integral part of the proposed action and alternatives analysis. To the extent that they are consistent with the additional Conditions of Approval that follow this section they are accepted.

#### Proffered mitigation measures and conditions of approval:

- 1) Upon completion of the project, all of the recording instruments or geophones and lathing marking shot holes will be recovered and removed from the survey area. All trash and personal waste associated with work crews will be gathered, removed from the survey area and properly disposed of.
- 2) Existing roads, trails, and natural clearings will be used wherever possible while satisfying seismic survey location requirements. Trail and line widths will be kept to a minimum. There will be no site or trail clearing. The use of ground contact vehicles for off-road travel is limited to those areas that have adequate ground frost and snow cover to prevent damage to the ground surface and vegetative mat. Existing snow machine trails, will be marked with crossed survey lath where they intersect receiver cables and the receiver cables will be buried in the snow beneath the traveled surface of the existing trail.
- 3) Equipment, other than vessels, will not enter open water areas of a watercourse during winter. All stream crossings shall be over ice of sufficient thickness to support the weight of the vehicles and equipment. Ice or snow bridges

constructed at stream crossings will not contain extraneous material (i.e., soil, rock, wood, or vegetation) and will be removed or breached before spring breakup.

- 4) Stream banks will not be modified, altered, or disturbed to facilitate stream crossings without prior written approval from the Alaska Department of Natural Resources, Office of Habitat Management and Permitting with notification to Alaska Department of Natural Resources, Division of Oil and Gas (907 269-8776 or fax 907 269-3484).
- 5) To the extent practical the crossing of major fish bearing water bodies by mechanized equipment will be minimized by using batch line installation techniques on each side of the fish bearing water body.
- 6) To the extent feasible and prudent new access routes and seismic lines must cross water bodies perpendicular or near perpendicular to the watercourse to minimize crossing length and potential bank disturbance. Clearings at water body crossings will employ a jogged approach along both sides to obstruct line of sight from the crossing.
- 7) Explosives will not be detonated within, beneath, or adjacent to marine, estuarine, or fresh waters that support fish and wildlife during periods when fish or marine mammals are present unless the detonation of the explosive produces an instantaneous pressure rise in the water body of no more than 2.5 psi or unless the water body, including its substrate, is frozen. Explosives will not produce a peak particle velocity greater than 0.5 inches per second in a spawning bed during the early stages of egg incubation.
- 8) For the shallow hole explosive technique the minimum offset from fish-bearing stream and lakes for explosive speeds up to 26,000 feet per second (such as Pentolite):

<u>Charge</u>	<u>Minimum Offset</u>
1 lb.	37 feet
2 lbs.	52 feet
5 lbs.	82 feet
10 lbs.	116 feet
25 lbs.	184 feet
50 lbs.	200 feet

- 9) Quantities (lbs.) of charge between the categories will use the minimum offset for the next higher category. Exceptions to this setback, or new categories, will be approved by the Alaska Department of Natural Resources, Division of Oil and Gas in consultation with the Alaska Department of Fish and Game.
- 10) Minimum offsets for shallow-hole explosives are based upon the use of explosives with detonation delays of 8 milliseconds or greater occurring between each charge such that no explosion or combination of explosions will produce an instantaneous pressure in fish bearing waters which exceeds 2.5 psi.
- 11) Although no fuel storage or fueling operations will occur on Bureau of Land

Management lands, stationary fuel storage facilities will not be placed within the annual floodplain of a watercourse or closer than 100 ft. to a water body. There will be no fueling, servicing or repair of vehicles or equipment, and no vehicles will be left unattended within the floodplain or below the ordinary high water line of any river, lake or stream or closer than 100 ft. to a water body.

- 12) Hazardous materials, petroleum, or petroleum products will be stored within a lined impermeable basin with a minimum storage capacity equivalent to 110% of the largest independent storage container plus 12 inches of freeboard. Sorbent material in sufficient quantity to handle operation spills will be on hand at all times for use in the event of an oil or fuel spill. All hazardous material containers and fuel drums will be marked with the contents and Veritas' name.
- 13) Trails and campsites will be kept clean. Trash, survey lath, trail markers, and other debris will be picked up and disposed of at an Alaska Department of Environmental Conservation approved landfill or solid waste transfer site. Domestic garbage and putricibles may be incinerated in compliance with the air quality regulations in 18 AAC 50 and the ashes backhauled to an Alaska Department of Environmental Conservation approved disposal facility; stored frozen on-site in animal-proof containers with periodic backhaul to an approved waste disposal facility; or stored non-frozen on-site in animal-proof containers with daily backhaul to an approved waste disposal facility.
- 14) Seismic lines will be inspected for damage and debris by helicopter after the snow melts. Trash or debris will be recovered and properly disposed of prior to freeze-up the next winter. Surface damage will be recorded and reported to the proper land management authority for follow-up action by Veritas.
- 15) Intentional harassment, disturbance or displacement of wildlife by crew will not be allowed. Activities will not be conducted within one-half mile of known occupied grizzly and black bear dens, unless alternative mitigation measures are approved by Alaska Department of Fish and Game with notice to the Alaska Department of Oil and Gas. Known den sites will be obtained from Alaska Department of Fish and Game's Division of Wildlife Conservation prior to entering the survey area. Occupied dens encountered in the field will be reported to the above, and subsequently avoided by one-half mile until alternative measures are approved.
- 16) The crew will be transported to and from field locations by personnel carriers, vehicles or small aircraft.
- 17) Due to the amount of lakes and streams in the area, Veritas will have an aggressive ice checking program in place. Surveyors who are the first people in the area will check streams and lakes with 18 Volt Dewalt drills and 2" drill stems to insure sufficient ice cover exists. They will log the freeboard and depth of water under the ice.
- 18) Crossings will be made from bank to bank in a direction that is substantially perpendicular to the direction of normal stream flow and will be made only at locations with gradual sloping banks. There will be no crossings at locations with

- sheer or cut banks.
- 19) The bed or banks of any stream will not be bored, excavated or altered. Drills will not operate within 100' of any streams other than to traverse the area when proper conditions allow.
  - 20) Equipment will not enter open water areas of any watercourses during these operations. Crossings will occur only while low water, frozen conditions are adequate to facilitate crossings and prevent equipment from becoming trapped or stranded. Ice checking equipment will be used to insure ice can support equipment crossing it.
  - 21) To avoid additional freeze-down of deep-water pools harboring over wintering fish, watercourses shall be crossed at shallow riffle areas from point bar to point bar. Compaction or removal of the insulating snow cover from deep-water pool areas of rivers will be avoided. Exceptions can be authorized on a case by case basis if it is determined that the pool is deep enough to prevent complete freeze down.
  - 22) When conditions do not allow survey crews to cross a stream where a shot hole line or geophone line intersect it, Extreme Surveys will scout to either side to find a suitable location to cross the stream. On many of the streams in this area the existing winter trail system already crosses area streams. Every effort will be made to use existing crossings whenever possible.
  - 23) There are numerous private properties within the program area. Permissions will be obtained from each individual whose property or easement is crossed. This permitting effort will take place prior to the project's inception. In the case of landowners who deny access, lines will be moved as needed to avoid those properties.
  - 24) Winter trail systems will be used by crews to access and travel through the area. Traveling an existing trail is preferred to creating new trails. The seismic vehicles are well lit with beacons and should be very visible to the recreational users in the area. The rights of private landowners and recreational users will be respected by the seismic teams.
  - 25) The following also appears in the notice and solicitations sent to the split estate property owners:
  - 26) Recording equipment will be transported by helicopter, and/or packed in from roads or access points. Shot holes will remain an adequate distance from all water wells, building and foundations to ensure no damage occurs. Operations will be conducted without any cutting or clearing of vegetation.
  - 27) Veritas will maintain a set back of 300 feet from all improvements including drinking water wells, septic systems and foundations.

ADDITIONAL CONDITIONS OF APPROVAL

To the extent the proffered mitigation measures and conditions of approval are consistent with the following, the proffered mitigation measures and conditions of approval are accepted; where there is an inconsistency or conflict between the following and the proffered mitigation measures and conditions of approval, the following shall control:

Right to suspend operations:

- 1) Operations will be suspended for flagrant or willful violations of terms of the NOI until such time as the problem is cured to the satisfaction of the authorized BLM officer or his/her designated representative.
- 2) Operations will be suspended when in the opinion of the authorized BLM officer or his/her designated representative such action is necessary to insure public health and safety.
- 3) The authorized BLM officer may suspend operations during periods of extreme fire danger, when warranted by conditions, (i.e., large fire activity on unit, severe shortage of resources, high potential for fire starts, fuel moistures are extremely low, etc.).
- 4) Operations will be suspended if the opinion of the authorized BLM officer or his/her designated onsite representative weather conditions or soil/slope conditions may result in unacceptable soil damage in excess of that analyzed in the EA document.

Explosive Handling and Blasting Operation requirements:

- 1) Veritas its agents and contractors will perform all work with explosives in such a manner as not to endanger life or property.
- 2) The method of storing and handling explosives and flammable materials shall be in accordance with Occupational Safety and Health Administration (OSHA), U.S. Bureau of Alcohol, Tobacco, and Firearms (BATF), and U.S. Department of Transportation (DOT) regulations. Explosives and detonator caps shall be stored in a designated area in secure magazines. Signage for the magazines shall not be placed on the magazines, but on adjacent posts or other permanent structures. All storage places for explosives and flammable material shall be marked in accordance with applicable regulations.
- 3) In case of the loss or theft of explosives, the BLM and the Alaska State Troopers shall be notified immediately.
- 4) Flagmen or warning devices shall be used while operations are being conducted within or adjacent to road right-of-ways.
- 5) Observers, guards, or flagmen shall be posted at safe distances during blasting operations. There shall be a minimum of two crew members observing each detonated shot hole. The shot point coordinator shall wear PPE as prescribed by regulation or Company policy. The shot point coordinator shall ascertain that no personnel, public, wildlife or livestock are within 200 feet or the visual horizon of the hole to be detonated prior to detonation.

- 6) Roads/trails leading into the area shall be posted by the permittee stating, "Seismic Crew Ahead" or some similar verbiage.
- 7) No explosives boxes or prima cord reels shall be left in the field nor may they be burned on federal lands.

Fire Prevention and Reporting Measures:

- 1) Veritas shall coordinate project activities with appropriate fire-response agencies. The applicant shall prepare a brief but specific instruction plan (crew contingency plan) for emergency fire response and shall submit it to the authorized BLM officer or his/her designated representative for concurrence. The crew contingency plan will include a fire communications protocol for contacting the BLM and/or other appropriate agencies (i.e., Kenai Peninsula Borough) in the event of a fire.
- 2) Veritas will report all fires to the appropriate authorities.
- 3) All vehicles shall be equipped with fire extinguishers and shovels.
- 4) Helicopter landing zones at each staging area shall be equipped with fire extinguishers. In addition, each helicopter shall have a 100-gallon water bucket should the helicopters be needed to fight a fire in the area, regardless of the fire's source.
- 5) Vehicles with catalytic converters will be restricted to existing roads and motorized trails; parking or idling will not be permitted in portions of roads or trails with taller vegetation as determined by the authorized BLM officer or his/her designated representative.
- 6) Portable generators used in the project area will be required to have spark arresters.
- 7) All brush build-up around mufflers, radiators, headers, and other engine parts will be avoided; periodic checks shall be conducted to prevent this build-up.
- 8) Smoking will only be allowed in company vehicles and/or designated smoking areas; all cigarette butts shall be placed in appropriate containers and not thrown on ground or out windows of vehicles.
- 9) Cooking, campfires, or fires of any kind are not allowed on federal public lands.
- 10) Veritas will be strictly liable for all expenses incurred as a result of incidences of fire attributable to its geophysical exploration operations.

Helicopter Operation Requirements:

- 1) Helicopters shall maintain FAA required distances for overflights of residences, buildings and other private land facilities.
- 2) Helicopters shall not harass or intentionally disturb wildlife species. This means helicopter pilots shall not go out of their way to observe or photograph wildlife; helicopter pilots shall take deliberate evasive action to avoid wildlife when observed.
- 3) Any sling loads or other materials intentionally jettisoned for safety purposes or accidentally dropped from helicopters shall be immediately retrieved.

Rights-of-way protection:

- 1) Shot holes shall be offset at industry accepted distances from rights-of-way, as set forth by the International Association of Geophysical Contractors to avoid disturbance to utility, access road, canal/drainage, and other land and realty features.

Cultural Resources:

- 1) Since areas with high potential for previously undiscovered cultural resources are located within the Area of Potential Effect, a qualified archaeologist should examine these areas before the seismic lines are set and shot holes are drilled. High potential areas for this area are within 1000 feet of the shoreline bluff and areas around stream inlets and outlets of interior lakes. If cultural sites are found, the shot holes should be relocated to at least 300 feet away from the site. Known cultural sites should have an archaeological monitor present during surface disturbance. The archaeologist should also record the site location, provide a site description and sketch map of any new sites. BLM should be provided a copy of the ensuing report that will be submitted to the SHPO.
- 2) All of the applicant's employees and their contractors shall be informed before commencement of project operations of critical elements of compliance with the Archeological Resources Protection Act (ARPA) and the National Historic Preservation Act (NHPA); and that any effects on, defacement of, or removal and/or disturbance of archaeological, historical, or sacred material shall not be permitted. Violation of the laws that protect these resources will be treated as a law enforcement/administrative disciplinary action.
- 3) If subsurface cultural resources are found during project operations, all work in the vicinity of the resource shall cease and the applicant shall notify the authorized BLM officer immediately. The applicant shall implement appropriate measures requested by that agency to protect the resource until it can be adequately evaluated.
- 4) If human remains are encountered during project operations, all work in the vicinity of the remains shall cease and the remains shall be protected from further exposure or damage. The applicant shall notify the authorized BLM officer immediately of such a discovery.
- 5) Veritas is responsible for informing all persons associated with this project including employees, contractors and subcontractors under their direction that they shall be subject to prosecution for damaging, altering, excavating or removing any vertebrate fossil objects on site. Collection of vertebrate fossils (bones, teeth,) is prohibited without a permit. Unlawful removal, damage, or vandalism of paleontological resources will be prosecuted by federal law enforcement personnel.
- 6) If vertebrate paleontological resources (fossils) are discovered on BLM-administered lands during 3D seismic project operations, Veritas shall suspend operations that could disturb the materials, and immediately contact the authorized BLM officer or his/her designated representative. The authorized BLM officer will arrange for evaluation of the find within an agreed time frame and determine the

need for any mitigation actions that may be necessary. Any mitigation would be developed in consultation with Veritas, who may be responsible for the cost of site evaluation and mitigation of project effects to the site. If Veritas can avoid disturbing a discovered site, there is no need to suspend operations; however, the discovery shall be immediately brought to the attention of the authorized BLM officer.

- 7) All vertebrate or scientifically important paleontological resources deemed to be of scientific value found as a result of the project baseline inventory will be avoided during operations. Avoidance in this case means “No heli-portable drilling/shot hole source generation within a distance of at least 50 linear feet of the outer edge of the paleontological locality as marked on the ground”.

Threatened and Endangered Species:

- 1) Veritas will comply with the recommendations of the U.S. Fish and Wildlife Service where seismic survey operations may affect Steller’s eiders, Attachment F.
- 2) No activities shall occur within 200 feet of a Bald Eagle or raptor nest, and helicopters shall avoid direct over flights of unoccupied Bald Eagle or raptor nests to protect their structural integrity.

Waste, Hazardous/Solid:

- 1) The project clean-up phase shall proceed concurrently with the recording phase. Equipment, pin flags, lathe, flagging, trash and any other materials brought in by the seismic crews shall be removed as the recording crew works through the project area.
- 2) Trash shall be packed out and disposed of properly at an Alaska Department of Environmental Conservation approved disposal site. No explosives boxes or prima cord reels shall be left in the field nor may they be burned on federal lands.
- 3) Storage containers are required for all refuse or garbage that may contain attractants. At staging areas, litter containers (for non-attractant litter) with functional, protective lids from wind shall be in use at all times. Litter shall be placed in containers immediately and not left on the ground to be policed at a later time.
- 4) Self-contained portable sewage disposal units shall be provided and used at staging areas. Contents of these units shall be disposed of at appropriate facilities. Away from staging areas, individuals shall bury human waste in holes six to eight inches deep.
- 5) Fuels, petroleum products, chemicals, or hazardous materials will not be stored on federal public lands.
- 6) Major hazardous waste spills shall be reported immediately to the authorized BLM officer or his/her designated representative, and the applicant shall clean up spills in accordance with all applicable regulatory guidelines and as outlined in the applicant’s Emergency Response/Contingency Plan.

- 7) All spills or leaks of diesel fuel, hydraulic fluid, lubricating oil, and coolant, including contaminated soil material, shall be excavated to an appropriate container and transported to an approved disposal site.
- 8) The applicant shall clean up all project lath, flagging, solid waste, and incidental trash as operations proceed through an area. The collected trash shall be hauled to an Alaska Department of Environmental Conservation approved disposal site

Water Quality (Surface/ground):

- 1) Shot holes will not be located in active rivers or streams beds. Forging of rivers or streams shall be by foot perpendicularly from stream bank to stream bank. Vehicular travel up and down streambeds except by watercraft is prohibited unless ice is frozen to a sufficient depth to sustain the activity and the stream banks are a sufficient distance apart to allow for passage without adverse impacts to the banks..
- 2) Unless authorized by NPDES or state permit, disposal of wastewater into freshwater bodies, including wetlands, is prohibited.
- 3) Operations in river or stream channels will be avoided.
- 4) No operations of any kind will occur in anadromous steams.

Wetlands/Riparian Zones:

- 1) If soils are saturated geophysical exploration activities must be suspended to avoid trail braiding and rutting.
- 2) It is preferred that seismic survey operations on Bureau administered lands be conducted with adequate snow cover and ground frost to avoid wetland, vegetation and soil damage.
- 3) All ATV's used in the field by Veritas or Extreme Surveys will be speed limited and will employ low ground pressure tires.
- 4) Drilling of shot holes for geophysical exploration is prohibited where:
  - Artesian wells are suspected.
  - In wetland or riparian zones where perennially high water tables exist.
  - In areas where and when soils are saturated.
  - Immediately upslope from springs or bogs.
- 5) Drilling, off-road vehicular use (including ATVs), or any other surface-disturbing activity will be prohibited within 150 feet of the high water mark of any body of water or riparian/wetlands areas on federal lands. Helicopters shall be used to drop equipment to support placement of recording lines to reduce surface disturbance. River and stream channels will be avoided.
- 6) No wetland/riparian vegetation shall be removed during any phase of the project.

Noise:

- 1) Veritas will conduct all seismic survey operations, including but not limited to helicopter operations and drill rig operation, in compliance with all local ordinances regarding noise and the appropriate time to conduct operations.

Surface Property Owners:

For the purpose of this section, the following parcels are split estate parcels:

Seward Meridian

- Parcel 5. Lot 1, Sec. 12, T. 1 N., R. 13 W. (49.84 acres) [Under Lease, A-024399], Patent No. 50-72-0282
- Parcel 6. N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 13, T. 1 N., R. 13 W. (20 acres), Patent No. 1213093
- Parcel 7. S $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 13, T. 1 N., R. 13 W. (10 acres), Patent No. 50-66-0606
- Parcel 8. Lot 5, Sec. 23, T. 1 N., R. 13 W. (4.96 acres) [Under Lease, A-024399], Patent No. 1225971
- Parcel 9. N $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 24, T. 1 N., R. 13 W. (20 acres), Patent No. 1235371
- Parcel 10. N $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 24, T. 1 N., R. 13 W. (5 acres), Patent No. 50-72-0170
- Parcel 11. E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 24, T. 1 N., R. 13 W. (5 acres), Patent No. 50-65-0650
- Parcel 12. Lot 2, Sec. 6, T. 1 N., R. 12 W. (40.91 acres), Patent No. 1195689
- Parcel 13. SW $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$  Sec. 8, T. 1 N., R. 12 W. (160 acres), Patent No. 50-64-0114
- Parcel 14. Lots 1, 2, 3 and 4, Sec. 18, T. 1 N., R. 12 W. (154.08 acres), Patent No. 50-64-0224
- Parcel 15. Lot 2, Sec. 21, T. 2 N., R. 12 W. (1 acre), Patent No. 50-2004-0419
- Parcel 16. Lots 2 and 3, Sec. 12, T. 1 N., R. 13 W. (51.6 acres), Patent No. 50-65-0628 [Under Lease, A-024399]
- Parcel 17. Lot 1, Sec. 14, T. 1 N., R. 13 W. (29.01 acres), Patent No. 50-65-0628 [Under Lease, A-024399]

- 1) Veritas must provide notice to the current owners of the parcels identified above as split estate. The notice must advise the current owners of Veritas' intent to conduct a seismic survey on the real property and the date of operations.
- 2) Veritas must obtain the consent of the current owners of the split estate parcels to enter and conduct seismic survey operations.
- 3) Minimally, Veritas will exercise the same level of care on the surface of the split estate parcels, as it will on the Federal Surface Estate Parcels identified herein.
- 4) Shot holes shall be located a minimum of 300 feet from any surface improvement including water wells, septic systems and building foundations regardless of ownership unless written consent to encroach further is obtained from the affected surface owner.

Oil and Gas Lease, A-024399:

The following parcels are subject to Federal oil and gas lease A-024399:

Seward Meridian

Parcel 2. Lot 1, Sec. 23, T. 1 N., R. 13 W. (39.08 acres)

Parcel 5. Lot 1, Sec. 12, T. 1 N., R. 13 W. (49.84 acres) [Under Lease, A-024399], Patent No. 50-72-0282

Parcel 8. Lot 5, Sec. 23, T. 1 N., R. 13 W. (4.96 acres) [Under Lease, A-024399], Patent No. 1225971

Parcel 16. Lots 2 and 3, Sec. 12, T. 1 N., R. 13 W. (51.6 acres), Patent No. 50-65-0628 [Under Lease, A-024399]

Parcel 17. Lot 1, Sec. 14, T. 1 N., R. 13 W. (29.01 acres), Patent No. 50-65-0628 [Under Lease, A-024399]

- 1) Veritas must negotiate appropriate setbacks with the operator under oil and gas lease A-024399 and minimally will exercise the same level of care on parcels subject to the lease, as it will under this permit on federal public lands. Veritas will take all necessary precautions to avoid interference with operations on the lease and damage of existing structures and facilities.
- 2) Shot holes shall be located a minimum of 300 feet from oil/gas wells and pipelines, unless written permission to encroach closer has been given by the owner or lessee.

Vegetation:

- 1) No cutting of trees, shrubs or vegetation is authorized.
- 2) Veritas will clean mud and debris from all equipment and personal field gear prior to locating on Bureau administered lands. This will help prevent the inadvertent introduction of invasive, noxious, and non-native plants.
- 3) Driving of any wheeled vehicles in areas void of vegetation and having soils where tracks could be long-lasting shall be avoided, or the area hand-raked immediately after use to reduce the visual impact.

Reclamation:

- 1) All shot holes shall be plugged in order to prevent the potential interchange of surface and ground water and harm to yearling and newborn moose calves. Drilling mud shall be dispersed in the shot hole vicinity to allow for natural vegetation regeneration. Drilling mud shall be dispersed such that there will be no noticeable drilling mud visible within two years of the site disturbance.
- 2) Veritas shall reclaim and reseed all off-road areas disturbed by geophysical operations as directed by the authorized BLM officer or his/her designated representative. Reclamation efforts may include disking or ripping the ground surface, reseeding and mulching. Best management practices will be used in the re-vegetation efforts to insure a higher success rate in problematic areas.

- 3) The locations for reclamation efforts will be discussed and agreed upon between the BLM and Veritasr after the completion of the project.
- 4) Reclamation of vegetation resources is considered met if there is evidence that the disturbed area is stable and that vegetation is or will become established to the same degree as the immediately adjacent area. Vegetation establishment normally takes two years or longer following reseeding.
- 5) Veritas will use certified "Weed Free" Alaska Seed when seeding reclamation sites. The seeds will be compatible with vegetation in the surrounding ecoregion.
- 6) In order to discourage the future use of seismic lines for unauthorized ORV/ATV travel, signs and barricades shall be placed at access points to seismic lines as deemed necessary by the authorized BLM officer or his/her designated representative. Natural barriers such as rocks and/or dead vegetation will also be used to the extent available in place of signs and/or artificial barriers.