

## STATEMENT OF WORK

Requisition Number 10-4555-002

23 February 2010

The U.S. Geological Survey has a need for a vessel to take seafloor sediment samples and near-bottom water samples in the northwestern part of the California Continental Borderland – specifically offshore of Palos Verdes, CA. Sampling equipment will be provided by the U.S. Geological Survey. The cruise plan specifically includes:

- five (5) box cores at four (4) stations offshore of Palos Verdes, CA (water depths 60 to 900 m).
- four near-bottom water samples (water depths ~60-900 m)
- grab samples at up to forty-one (41) stations (water depths ~30-150 m)

USGS-provided sampling devices:

- NEL box corer (gross deck weight 1500 lbs)
- Grab samplers (gross deck weight variable: 70-400 lbs)
- Niskin water sampler (gross deck weight <50 lbs)

The vessel will be mobilized at the Scripps Institute of Oceanography Nimitz Marine Facility in San Diego, California. The work is expected to require a total of 3 days including transits. A fourth day is required as a contingency day for weather, equipment failure, etc. The desired time for the work to occur is 4 operational days between March 30 and April 3, 2010. Our tentative plans are to:

- (a) mobilize 0800 hours 3/30/2010,
- (b) transit to Palos Verdes, CA (~12 hours) departing 1700 hours 3/30/2010,
- (c) inshore grab sampling (6 hours),
- (d) box core and water sampling (12 hours),
- (e) grab sampling (12 hours),
- (f) box core and water sampling (6 hours),
- (g) transit to San Diego.

1. The vessel shall be fully licensed by the U.S. Coast Guard as required by law and shall have passed all appropriate U.S. Coast Guard requirements for safety and seaworthiness.
2. The vessel shall be equipped with radar, depth sounder, safety equipment, medical kit, current nautical charts and it is desirable that it have GPS navigation.
3. The vessel must be able to accommodate up to 11 USGS personnel.
4. The vessel must have a stern mounted U-Frame or J-Frame capable of handling static loads of up to 2,000 pounds. It must have 10 feet of deck clearance and able to accommodate packages up to 7 feet wide. It must also have a winch and enough wire to

safely deploy and recover a 1500 pound box core in 900 meters of water. The working wire rope must be sound, be a minimum of 3/8" in diameter, and be able to withstand dynamic pull-outs upwards of 5000 pounds.

5. It is desired that the vessel have 500 square feet of open deck space.
6. It is necessary for the ship to have station keeping abilities for coring and equipment deployment.
7. The vessel must have tie-down cleats for tag lines and a means to secure coring/grab sampling equipment to the deck.
8. Contract or Vessel shall have marine and general public liability insurance with limits of liability for: i) bodily injury of not less than \$100,000 for each person and \$500,000 for each occurrence, and ii) property damage of not less than \$100,000 for each incident and \$500,000 in the aggregate. Proof of insurance shall be provided after contract award.