State of Alaska
Department of Environmental Conservation
Division of Spill Prevention and Response

Trip Summary of 23 March 2017 Aerial Overflight of Hilcorp Natural Gas Leak, Cook Inlet

In Attendance:

Keegan Fleming (Environmental, Hilcorp Alaska, LLC)
Sue Saupe (Cook Inlet Regional Citizens Advisory Council)
Jacob Cunha (Habitat Biologist, ADF&G)
Josh Brekken (Habitat Biologist, ADF&G)
Katrina Chambon (Water Quality, ADEC)
Jody Barthlow (Spill Prevention and Response, ADEC)
Craig Ziolkowski (Spill Prevention and Response, ADEC)
Travis (Pilot, Ross Aviation)
Colt (Pilot, Ross Aviation)

Weather Conditions: During the survey period, surface air temperature at the Ted Stevens International Airport ranged from 23to 30 F. Visibility was 10 miles and winds were calm throughout the survey period.

Tide: The tide was incoming, with high tide occurring at 2:30 pm with a height of 16.82 feet for Nikiski, Alaska. When adjusted for local offset of the release location, the high tide would occur at approximately 3:20 pm.

Ice Concentrations: South of Kalgin Island, south of Boulder Point, and along the east and west sides of Cook Inlet ice concentrations ranged from 0 to 2 tenths or (No Ice to Very Open Drift). In Chickaloon Bay as well as in the area of release, ice concentration were 9 to 10 tenths or (Very Close Pack to Compact). Ice was observed in multiple stages of development from new ice to first year thin ice. Ice forms ranged from fast and beach ice in Chickaloon Bay, to medium floe occurring in the area of release. Other ice forms observed included pancake ice, ice cakes, small flow, belts and strips.

Trip Summary: Prior to the flight, in discussion with Ross Aviation pilots, Travis and Colt, it was determined this survey would be conducted at an altitude of 1000 feet and airspeed of 130 knots. If objects of interest or aggregations of birds were observed: circling, reduction in speed, or decrease in altitude could be requested and implemented based on concurrence with pilots. Marine mammal sightings would require an altitude increase to 1500 feet prior to circling to avoid disturbance.

12:04 pm: Departed Ross Aviation and transited toward Chickaloon Bay (Figure 1). From Chickaloon Bay the survey continued south following the eastern shoreline of Cook Inlet to the release area. Shoreline survey was undertaken at a distance of approximately ½ mile from shore.

12:13 to 12:20 pm: Surveyed the Chickaloon Bay area at 1000 feet altitude and airspeed of 130 knots. Shore fast and beach ice was heavily concentrated throughout the mudflats with small open leads occurring in the channelized areas. Between Chickaloon Bay and Boulder Point ice was variable.

12:39 pm: Transited past East Foreland area and headed toward the release site. Upon arrival at the release area, the aircraft circled three times at an elevation of 700 feet and airspeed of 100 knots. The bubble field was unobservable as it was obscured by large pancakes of ice interspersed with brash ice.

1:00 pm: Arrived at Kalgin Island (north side) for shoreline survey, which was conducted counter clockwise around the circumference at a distance of approximately ½ mile from shore. Upon conclusion of this survey area, the aircraft transited southwest to Redoubt Bay to survey the west shoreline to the West Foreland.

1:25 pm: Observed aggregation of approximately 100 gulls on broken ice, with few individuals in water. Aircraft slowed to 90 knots and circled twice to re-sight group.

1:40 pm: Arrived at south side of West Foreland area and transited toward the release area where we circled twice before returning to West Foreland. While at the release area, the bubble field remained unobservable due to continued ice presence.

1:52 pm: Resumed west side shoreline survey from West Foreland at an altitude of 1000 feet and airspeed of 130 knots.

2:17 pm: Arrived at the Little Susitna River and concluded the west side survey.

2:21 pm: Arrived at Ted Stevens International Airport, taxi to terminal.

Observations: Overall reduction of shorefast ice was observed throughout survey area. In addition large concentrations of ice were largely confined to the center of the inlet. Figure 2 contains select photos.


Area where gulls were observed
Release area
Survey Trackline 23 March
Map by Cunha J. and C. Ziolkowski

Figure 2, select photos from aerial overflight

Location: Upper Cook Inlet
Date Photos Taken: 23 March 2017

Photographers: Ziolkowski, C and J. Cunha

Variable ice formations between Chickaloon Bay and Boulder Point.

Area of release.

Platform and work vessel near release area.

One of several aggregations of gulls observed on ice, enlarged and cropped.