# Vessel science party:

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| --- | --- | --- |
| **Name** | **Position** | **Email/Phone** |
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# Cruise notes: Completed 10 Deep CTD casts along the 45km arc in clockwise movement from 045 to 180 from wellhead. Survey techs on 12 hour watches. Three physical scientists are helping with 24 hour water sample collection and monitoring EK60 data.

# Daily Operations:

|  |  |  |
| --- | --- | --- |
| **Data Collection** | **Collected (Y/N)?** | **Comment** |
| CTD Casts | Y | 10 completed |
| Fluorometry | Y | Sensor on CTD |
| LISST |  |  |
| Dissolved Oxygen | Y | Sensor on CTD |
| Sampling – TPH | Y |  |
| Sampling – VOA | Y |  |
| GCMS | Y |  |
| Acoustics | Y | EK 60 on |
| MOCNESS |  |  |
| PAH Detection |  |  |
| Biota |  |  |
| Rototox |  |  |
| Other: |  |  |

# Science results and preliminary interpretations: (please attach any figures/images at end of document)

*Fluorometry and Dissolved Oxygen preliminary results*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| StationID | Distance from  Wellhead (km, bearing) | Fluorescence Signal\* | Signal Depth (m) | DO Comments |
| 11 | 45km, 045° T | 13.63 | 1243 |  |
| 12 | 45 km, 060 ° T | 13.52 | 1169 | Around 1150m, DO dropped to 5.5. Observation that sample water temp warmer than normal |
| 13 | 45km, 075° T | 13.84 | 1476 |  |
| 14 | 45km, 090° T | 14.16 | 1950 |  |
| 15 | 45km, 105° T | 13.94 | 1574 |  |
| 16 | 45 km, 120° T | 13.89 | 2200 |  |
| 17 | 45 km, 135° T | 13.77 | 2170 |  |
| 18 | 45 km, 150° T | 13.40 | 1911 |  |
| 19 | 45 km, 165° T | 13.4 | 1188 |  |
| 20 | 45 km, 180° T | 13.52 | 1749 |  |

\*Use Fluorescence Signal scale from Location Table: No Signal (Background); Very Weak (<= 1 mg/m3);

Weak (> 1 mg/m3 and <= 5 mg/m3); Moderate (>5 mg/m3 and <=15 mg/m3); Strong (> 15 mg/m3)

*Chemistry: GCMS / HAPSITE*

Samples have been analyzed by GCMS with no hits.

*Microbial analysis (if applicable)*

*Other Observations*

## Operational / Logistical issues:

## No issues other than data manager sending out the wrong format of ship sample locations. Data manager is working to correct conversion of Lat/ Long positions.

## Planned activities for next 24 hours:

Record EK60 data for seep monitoring. Finish the last 2 southerly 45km stations and move to 60km starting at station bearing 210° T from wellhead until reaching 045 T. Water sample collection at 3 depths per cast unless noticeable low DO reading or fluorescence spike then collect more as necessary. Run samples through GCMS at each station.