

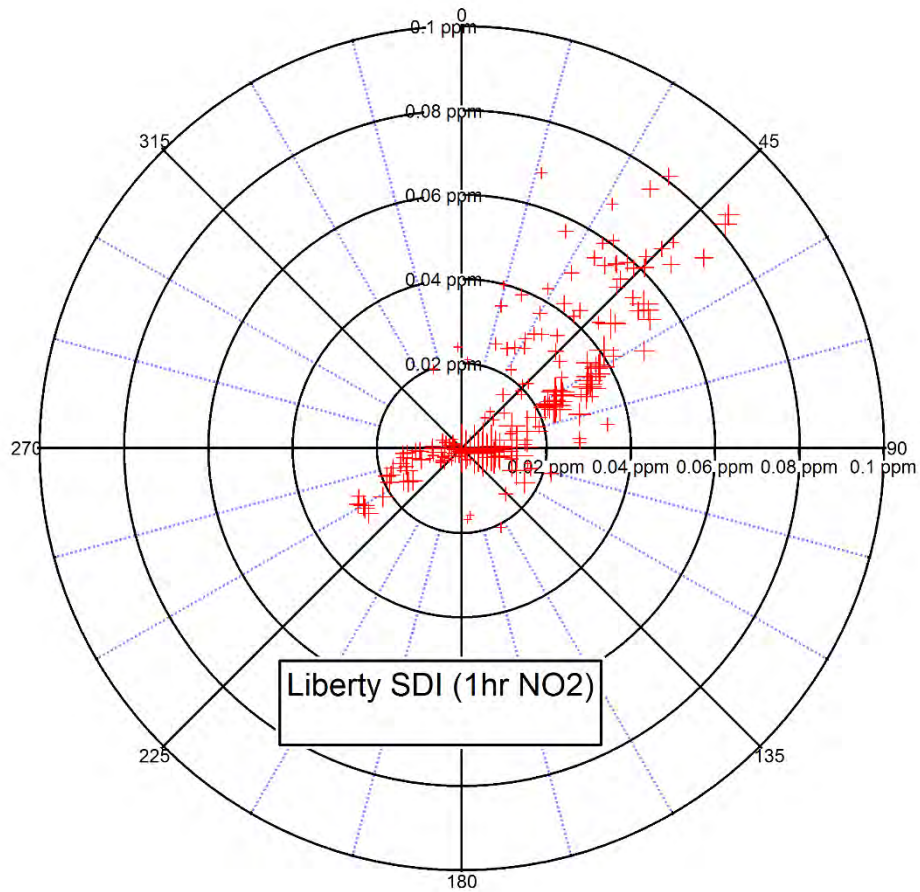
# Summary of the Transportable Drill Rig Technical Subcommittee Findings

May 15, 2014

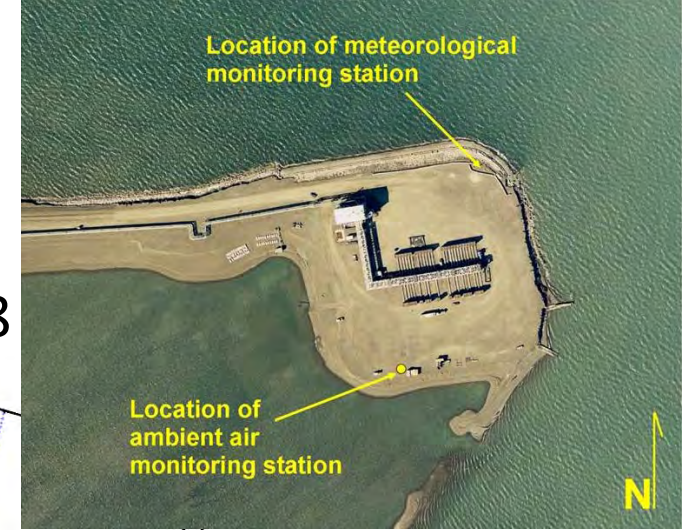
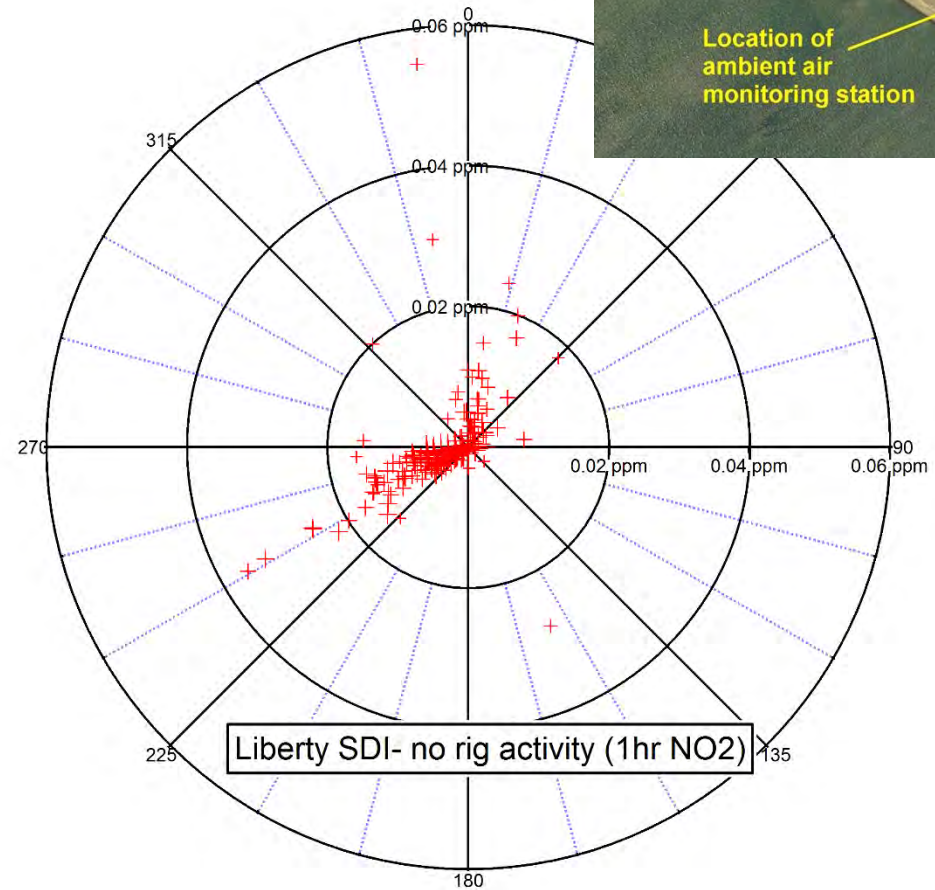
## Summary of representative drill rig active data:

Drill Rig Episode Description	Date (period)	Number of Rigs	Rig Hours-data	Power	Max Fuel (gal/day)	Max NO2 (ppb)
CD1- Doyon19- Sidetrack (wells 1, 47,49)	10/1/12-10/31/13 Sidetrack 1, (31 days) 11/1/12-1/25/13 Original 47,49 (25 days) 5/3/13-7/14/13 Original 49 (72 days)	1	1789	On grid	2436	68
CD3- Doyon 19, 141 Original (wells 125,127,198)	2/21/2011-4/16/2011 (54 days)	2	1293	On grid	2856	87
DS1F- sidetrack, 1F-16	1/4-11/14/01 ( 10 days)	1	240	On grid	2850	33
Apad- 2006- Doyon14- workover Well 43	10/30/2006 -11/10/2006 (11 days)	1	287	Off grid	2540	72
Apad 2006- Nabors 4ES Well 2 workover	7/31/2006 -8/27/2006 (28 days)	1	671	Off grid	2540	156
Apad-2007 Nabors 2ES sidetrack Well 05i	1/1/2007 -2/9/2007 (40 days)	1	957	Off grid	3444	111
Liberty SDI- Doyon 16	2/5-2/16/2007 (11 days)	1	263	Off grid	3375	84

# Liberty SDI – rig only data 2/5/2007 2/16/2007 DOYON 16



# No rig activity: 2/17/2007- 1/31/2008



# ADEC Conclusions after reviewing data

- There are no violations of the 1 hour NO<sub>2</sub> NAAQS in these data sets
- The data could be considered adequate for determining that drilling under similar North Slope conditions (i.e. similar number of rigs, fuels use, met conditions, duration of activities, type of drill rigs, etc.) would not cause a violation of the 1-hour NO<sub>2</sub> standard
- However, the data are not adequate to conclude that drill rig emissions under **any scenario** will not threaten the 1 hour NO<sub>2</sub> NAAQS.
- The technical subcommittee is working to develop a proposal to be presented to the Options Subcommittee.

# Current Status

- Decision to look at creating scenarios that could reduce permitting requirements
- Modeling shows: Drilling impacts are near field and are driven by fuel use, not the amount of equipment on the pad
- AOGA and ASIA produced a presentation on possible Drill Rig Activity Categories.
  - Premises: All drilling scenarios have been represented by the monitoring data supplied to the workgroup
  - Waiting for completed modeling results to better define drill rig activity categories
- Include recommendations from Options group into final work group recommendations

# Proposed Drill Rig Activity Categories- Still under development

- Onshore routine infill drilling at isolated pad
- Onshore developmental drilling at isolated pad
- Onshore routine infill drilling at collocated pad
- Onshore developmental drilling at collocated pad
- Offshore drilling