

GEOSCIENTIFIC PROGRAMS

Program Number	Operator/Survey (Location)	Vessel	Authorization Date	km Completed (km Planned)		Current Status
				line km	km ²	
45120-020-006	Multi Klient Invest/ 2D Seismic (Northeast NL Slope)	M/V Sanco Spirit	30-May-2014	8315.2 (16655)	NA	1244.15 km acquired during the reporting period
25120-020-011	Statoil/ 3D Seismic (Flemish Pass)	M/V WG Columbus	11-Jun-2014	NA	1327.692 (2570)	459.532 km ² acquired during the reporting period
24120-020-012	ExxonMobil/ Seabed Survey (Hebron)	M/V Maersk Chignecto	3-Jul-2014	99.75 (560.85)	NA	0 km acquired during the reporting period
22120-020-013	HMDC/ Seabed Survey (Hibernia)	M/V Maersk Chignecto	3-Jul-2014	162 (622.5)	NA	86 km acquired during the reporting period
56120-020-001	EMGS/ CSEM (Flemish Pass/Orphan)	M/V Boa Galatea	23-Jul-2014	61.5 (2229)	NA	Receiver deployment and 61.5 km (bathymetry) acquired during the reporting period
45120-020-007	Multi Klient Invest/ 2D Seismic (Northeast NL Slope)	M/V Atlantic Explorer	25-Jul-2014	71.031 (10975)	NA	71.031 km acquired during the reporting period

WELL OPERATIONS

Well (Unique Well Identifier)	Coordinates (NAD83)	Licence	Installation	Spud Date	Current Status (Current Depth / Projected Total Depth)
HMDC Hibernia B-16 20X (320B164650048453)	46° 45' 01.91" N 48° 46' 54.53" W	PL-1001	Hibernia Platform	April 10th, 2005	Well Intervention/Workover Operations: (6,000m/6,000m)
HMDC Hibernia B-16 17Z (317B164650048451)	46° 45' 01.43" N 48° 46' 53.82" W	PL 1001	Hibernia Platform	July 12th, 2014	Drilling Operations: (4,632m/4,948m)
HMDC Hibernia P-02 1A (300P024650048450)	46° 41' 54.428" N 48° 44' 59.46" W	PL 1005	West Aquarius	January 25th, 2014	Drilling Operations: (4,674m/5,520m)
Husky Oil et al North Amerthyst E-18 12A (312E184650048000)	46° 47' 21.2" N 48° 2' 37.7" W	PL 1006	GSF Grand Banks	December 6th, 2013	Mobilizing to Wellsite:
Suncor Energy et al Terra Nova G-90 2W (302G904630048154)	46° 29' 21.66" N 48° 27' 38.12" W	PL 1002	Skandi Constructor	August 27th, 2000	Suspended:

WELL OPERATIONS					
Well (Unique Well Identifier)	Coordinates (NAD83)	Licence	Installation	Spud Date	Current Status (Current Depth / Projected Total Depth)
Suncor Energy et al Terra Nova L-98 1Y (300L984630048152)	46° 27' 42.19" N 48° 29' 51.18" W	PL 1002	Henry Goodrich	July 21st, 2014	Drilling Operations: (1,517m/4377m)
Suncor Energy et al Terra Nova G-90 3 (303G904630048150)	46° 29' 21.71" N 48° 27' 37.72" W	PL 1002	Skandi Constructor	July 21st, 1999	Well Intervention/Workover Operations: (4,282m/4,282m)

Categories of Operations	
Mobilizing to Wellsite:	All activities associated with mobilizing the drilling installation/drilling rig to the well.
Preparing to Spud:	All pre-spud activities from the time that the drilling installation arrives on location until the well is spudded (initial penetration of the seafloor to start the drilling of a well).
Drilling Operations:	All operations associated with drilling a well including casing, cementing, running BOP stack, fishing, sidetracking, reaming, logging, coring and formation flow testing as well as any downtime associated with equipment failure (or otherwise) while drilling operations are in progress.
Completion Operations:	All operations associated with completing a well including installation of the production tree and all other operations associated with preparing a well for production or injection operations.
Ice Delay:	Any downtime associated with pack ice or icebergs.
Weather Delay:	Any downtime associated with heavy weather.
Suspension/Abandonment Operations:	All activities associated with either plugging and abandoning a well, or suspending a well as well as operations associated with demobilizing the drilling installation from the well.
Well Intervention/Workover Operations:	All activities associated with performing a workover or well intervention.
Operation Suspended	Any suspension operation for reasons other than equipment failure or ice or weather delay.

Glossary of Terms	
BOP Stack:	Blowout preventer stack - an assembly of heavy-duty valves attached to the wellhead to control well pressure and prevent a blowout.
Casing:	Steel pipe set in a well to prevent the hole from sloughing or caving and to enable formations to be isolated (there may be several strings of casing in a well, one inside the other).
Cementing:	Pumping a liquid slurry of cement, water and other additives behind a string of casing to isolate formations.
Fishing:	Operations to recover an object lost or stuck in the wellbore that is obstructing operations.
Injection/Injecting:	Injecting fluids into the reservoir to provide a driving mechanism for increased oil or gas production.
Logging:	Acquisition of downhole data using tools run in the well, usually on wireline.
Producing/Production:	Flowing reservoir fluids from a well to the production system.
Production Tree:	An arrangement of heavy-duty valves and fittings installed on the wellhead to control production from the well and/or to facilitate injection operations.
Reaming:	An operation to restore a wellbore to its original diameter (occasionally, a wellbore will cave in).
Seismic kilometers:	The total number of kilometers of data recorded in a geophysical program.
Sidetracking:	The operation of deviating a well around a fish.
Well Intervention/Workover:	An operation to repair equipment or to restore or increase production or injection.