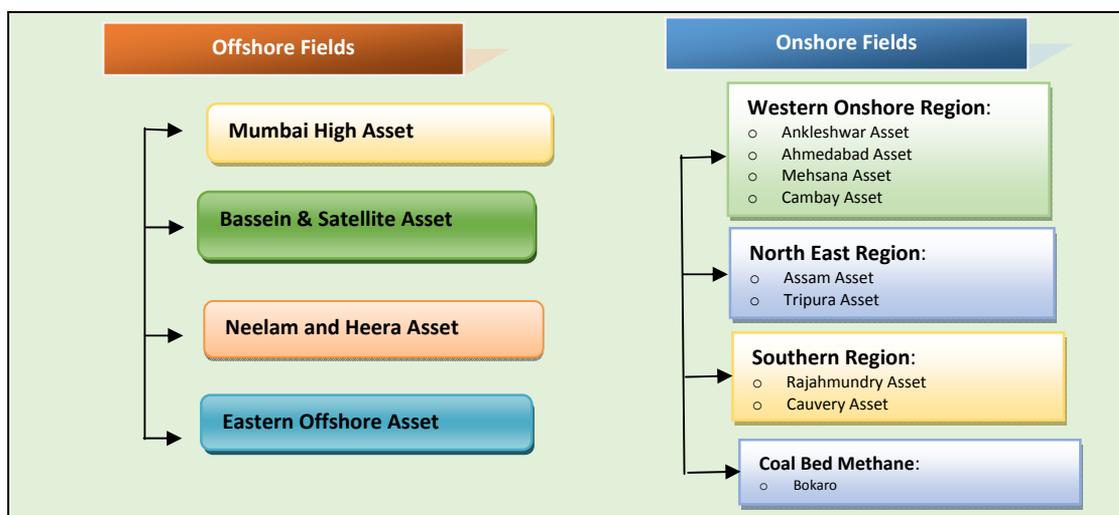


Chapter 1 Introduction

1.1. Introduction

Oil and Natural Gas Corporation (ONGC) Limited (the Company) is an integrated oil exploration and production company. The Company conducts its exploration activities through ‘Basins’ and production activities through ‘Assets’. Presently, the Company has 13 crude oil producing Assets¹ in both offshore and onshore areas as indicated in Figure-1 below.

Figure-1: Crude oil Producing Assets



The production of crude oil reported by the Company for the last five years (2010-11 to 2014-15) including those from Joint Ventures and New Exploration Licensing Policy (NELP) is tabulated below.

¹ Asset: It refers to an entity in ONGC that is involved in production activities from existing wells and transportation of oil and gas on onshore plants. 13 Assets are Ahmedabad, Mehsana, Ankleshwar, Cambay, Assam, Tripura, Rajahmundry, Cauvery, Mumbai High, Neelam-Heera, Bassien-Satellite, Eastern Offshore Asset, Coal Bed Methane- Bokaro.

Table-1: Crude Oil Production Reported by ONGC

(Figures in MT)

Year	Onshore			Offshore		Production of Joint Ventures	Onshore NELP	Total Production of ONGC including NELP and JVs
	Western Onshore	North Eastern Onshore	Southern Region	Eastern Offshore	Western Offshore			
2010-11	5756676	1152021	537549	0	16972261	2859771	0	27278278
2011-12	5629262	1204507	550988	38458	16289179	3212953	0	26925347
2012-13	5186507	1224262	532950	44470	15572652	3564767	1506	26127114
2013-14	4916987	1264823	523424	25815	15514874	3747232	951	25994106
2014-15	4512939	1060798	494367	18191	16176615	3678874	986	25942770

Source: Corporate crude tally statement of the Company

Note: Western Offshore includes Mumbai High, Bassein and Satellite, and Neelam and Heera Assets

The total offshore crude oil production was around **65 per cent** of total reported production of the Company.

1.2. Audit Objectives

The objectives of the audit was to:

- Assess whether crude oil production has been accurately measured and reported
- Estimate the impact of inaccurate measurement and reporting of crude oil production, if any.

1.3. Scope of Audit

Audit examined the measurement and reporting system of crude oil production in nine out of the total thirteen Assets owned by the Company for the period 2010-11 to 2014-15. The Assets covered in the audit are:

- **Offshore Assets:** Mumbai High, Bassein & Satellite, Neelam & Heera.
- **Onshore Assets:** Ankleshwar, Ahmedabad, Mehsana, Assam, Cauvery, Rajahmundry.

1.4. Audit Criteria

The criteria for the audit was drawn from:

- (i) The Oilfields (Development & Regulation) Act, 1948.
- (ii) Oil Industry (Development) Act, 1974.
- (iii) Petroleum & Natural Gas Rules (PNG Rules), 1959.
- (iv) Internal Standard Operating Procedures/circulars/guidelines for measurement of production of crude oil, norms for transit loss.
- (v) Domestic and international practices for reporting of crude oil production.

- (vi) Industry norms for pipeline loss, permissible variations in meter readings.
- (vii) The policy of the Company for calibration and maintenance of crude oil metering system.

1.5. Audit Methodology

The field audit commenced in August/ September 2015. Review of records was supplemented by field visits to selected field and processing installations. Discussions were also held with the Management at different levels during the course of the audit to understand the process and limitations of the audited asset. The preliminary audit findings were discussed with the Management and thereafter audit observations were issued to them for their response.

After incorporating the responses received, the draft audit report was issued to the Management of the Company. Replies to the draft audit report were received on 11 January 2016. After incorporating the Management response, the revised report was issued to Ministry in February 2016 and Ministry's response was received in April 2016. The responses of the Ministry have been incorporated in this report.