

Environmental Monitoring Report

Project Number: 52282-001
Semestral Report
July to December 2021
April 2022

Indonesia: Geothermal Power Generation Project

Prepared by PT Geo Dipa Energi (Persero) for the Asian Development Bank.

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Appendix E Revegetation in Patuha 2

PT Geo Dipa Energi (Persero)/**GeoDipa** carried out revegetation activities of 1000 trees with 50 different species in the work area of the Patuha 2 Geothermal Power Plant (PLTP) in an area of ±3 Ha.

This event was coincided with the Day of a Million Trees, on Monday (10/01/2022).

Revegetation activity is GeoDipa's commitment to reduce carbon emissions which is inline with Global commitments mentioned in SDGs (Sustainable Development Goal) goal No. 13, namely Handling Climate Change,”

This event is also in order to implement one of the company's four pillars of community development, namely Geo Dipa Hijau (Geo Dipa Green) through planting 1000 trees to increase carbon sinks in the work area.

This tree planting is an ongoing event that was previously carried out as a pre-event, in the form of tree planting which was held on Tuesday (21/12/2021) in an area of 6 hectares.

In this event GeoDipa collaborated with various parties, including the West Java Provincial Forestry Service, Perum Perhutani, the Natural Resources Conservation Center (BBKSDA), and also environmentalists, including the Panata Giri Raharja Foundation, Pemuda Pancasila, Citarum Watershed Forum, and Gajah Putih Foundation.

This event was widely covered by the mass media, here are some coverages by the mass media:

<https://www.inilahkoran.com/bandung-raya/pr-1182352125/geo-dipa-menanam-1000-pohon-di-hari-gerakan-satu-juta-pohon-sedunia>

<https://jabar.jpnn.com/nyarita/410/tingkatkan-serapan-emisi-karbon-geodipa-tanam-1000-pohon-di-unit-patuha-2>

<https://jabar.idntimes.com/news/jabar/yogi-pasha/jaga-kondisi-alam-geo-dipa-tanam-1000-pohon-di-kawasan-pltp-patuha>

<https://jabar.tribunnews.com/2022/01/10/1000-bibit-pohon-ditanam-di-kawasan-proyek-pltp-patuha-2-di-kabupaten-bandung>

<https://www.gorajuara.com/news/pr-1002346673/lestarikan-alam-geo-dipa-tanam-1000-pohon-di-hari-gerakan-satu-juta-pohon-sedunia>

<https://www.radarbandung.id/2022/01/10/ribuan-pohon-ditanam-di-wilayah-kerja-pltp-patuha-2/>

<https://portalbandungtimur.pikiran-rakyat.com/warta-bandung-timur/pr-943444232/seribu-batang-bibit-pohon-untuk-gunung-patuha-dari-geodipa>

<https://jurnalpolisinasional.com/lestarikan-alam-geo-dipa-tanam-1000-pohon-dalam-gerakan-satu-juta-pohon-sedunia/>

<https://www.dejurnal.com/2022/01/di-hari-gerakan-satu-juta-pohon-sedunia-geodipa-tanam-1000-pohon/>

<https://bipol.co/hari-gerakan-satu-juta-pohon-sedunia-geo-dipa-tanam-1000-pohon.html>

<https://www.swarajabbarnews.com/2022/01/11/melestarikan-alam-geo-dipa-menanam-1000-pohon-di-hari-gerakan-satu-juta-pohon-sedunia/>

<https://madania.co.id/sebelumnya-dihujat-sejumlah-komunitas-geodipa-tanam-seribu-pohon-di-hari-gerakan-sejuta-pohon-sedunia/>

Following is some photograph of the revegetation activity.



Revegation at PPL 7 by Geodipa



Government Authorities Involve in Revegetation Activity



Government Authorities Involve in Revegetation Activity



Revegation Ceremonial Event



Environmentalis/Local Leader in Revegetation Activity



Geodipa Personnel in Revegetation Activity

Appendix F Sidendang Spring Water Analysis Result



Sertifikat No. 06943/CLBGAO
Tanggal: 8 Desember 2021



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LAPORAN HASIL ANALISA

PELANGGAN : **PT. GEO DIPA ENERGI (PERSERO)**
Aldevco Octagon
Jl. Warung Buncit Raya No. 75, RT.12/RW.5, Kalibata, Kec. Pancoran,
Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12740

JENIS CONTOH : **AIR BERSIH**

TANGGAL DITERIMA CONTOH : 29 November 2021

ANALISA YANG DIMINTA : Peraturan Menteri Kesehatan Republik Indonesia Nomor 32
Tahun 2017, Lampiran I A. Tentang Standar Baku Mutu
Kesehatan Lingkungan dan Persyaratan Kesehatan Air
untuk keperluan Higiene Sanitasi

TANGGAL ANALISA : 29 November s/d 7 Desember 2021

KETERANGAN CONTOH : Pengambilan contoh dilakukan oleh petugas Laboratorium
Cabang Semarang PT. SUCOFINDO di **PLTP UNIT DIENG,
Dieng – Wonosobo**
Tanggal sampling : 29 November 2021
Kemasan : Jerigen Plastik
Kode : **SUMBER MATA AIR SIDENDANG**
Koordinat : -

REFERENSI : -

Hasil uji ini hanya terkait dengan contoh uji yang diserahkan saat itu saja dan laporan/sertifikat hasil uji tidak dapat direproduksi dengan cara apapun, kecuali dalam konteks penuh dengan persetujuan tertulis sebelumnya dari Laboratorium Sucofindo.

Lampiran yang ada merupakan bagian yang tidak terpisahkan dari sertifikat ini.

Penerbitan Sertifikat/Laporan ini tunduk pada Syarat dan Ketentuan Umum layanan jasa PT. SUCOFINDO (PERSERO), yang salinannya dapat diperoleh atas permintaan atau dapat diakses pada www.sucofindo.co.id

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Bidang Inspeksi dan Pengujian



Eko Yuliyanto



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SCI-2007A

LAPORAN HASIL ANALISA

AIR BERSIH

Kode : SUMBER MATA AIR SIDENDANG

No.	Parameter	Satuan	Hasil Uji	Kadar Maks. yg diperbolehkan	Metode
1.	PARAMETER WAJIB				
	A. FISIKA :				
1.	Kekeruhan	NTU	4,38	25	SNI 06-6989.25-2005
2.	Warna	Pt-Co	< 2,5	50	SNI 06-6989.80-2011
3.	Jumlah Zat Padat Terlarut (TDS)	mg/L	423	1000	SNI 06-6989.27-2019
4.	Temperatur	°C	18,9	Suhu Udara + 3	SNI 06-6989.23-2005
5.	Rasa	-	Tidak Berasa	Tidak berasa	SNI 3554:2015 bagian 3.2.1
6.	Bau	-	Tidak Berbau	Tidak berbau	SNI 3554:2015 bagian 3.2.2
	B. MIKROBIOLOGI :				
1.	Total Coliform	Jml/100 ml	8,6x10 ¹	50	9222 B [#]
2.	E. coli	Jml/100 ml	0	0	9222 G [#]
	C. KIMIA				
1.	pH	-	6,6	6,5 - 8,5	SNI 06-6989.11-2019
2.	Besi (Fe)	mg/L	< 0,030	1,0	SNI 06-6989.84-2019
3.	Flourida (F)	mg/L	< 0,080	1,5	SNI 06-6989.29-2005
4.	Kesadahan (CaCO ₃)	mg/L	104	500	SNI 06-6989.12-2004
5.	Mangan (Mn)	mg/L	< 0,030	0,5	SNI 06-6989.84-2019
6.	Nitrat sebagai N (NO ₃ -N)	mg/L	11,2	10	4500-NO3 B [#]
7.	Nitrit sebagai N (NO ₂ -N)	mg/L	1,87	1,0	SNI 06-6989.9-2004
8.	Sianida (CN)	mg/L	< 0,040	0,1	SNI 06-6989.77-2011
9.	Deterjen sebagai (MBAS)	mg/L	< 0,030	0,05	SNI 06-6989.51-2005
	PARAMETER TAMBAHAN :				
	C. KIMIA				
1.	Air Raksa (Hg)	mg/L	< 0,0005	0,001	SNI 06-6989.78-2019
2.	Arsen (As)	mg/L	< 0,002	0,05	SNI 06-6989.81-2018
3.	Cadmium (Cd)	mg/L	< 0,0001	0,005	SNI 06-6989.38-2005
4.	Kromium Valensi 6 (Cr ⁶⁺)	mg/L	< 0,016	0,05	SNI 06-6989.71-2009
5.	Selenium (Se)	mg/L	< 0,002	0,01	SNI 06-6989.83-2018
6.	Seng (Zn)	mg/L	< 0,035	15	SNI 06-6989.84-2019
7.	Sulfat (SO ₄)	mg/L	0,221	400	SNI 06-6989.20-2019
8.	Timbal (Pb)	mg/L	< 0,002	0,05	SNI 06-6989.46-2009
9.	Zat Organik sbg (KMnO ₄)	mg/L	1,2	10	4500-KMnO4 B [#]

**Standard methods for the examination of water and waste water 23 rd Edition 2017 APHA-AWWA-WEF*



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