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UkrLithiumMining Polokhivske Lithium Deposits-Factual Report of Site Supervision and Geotechnical Laboratory Testing

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Pozitif Sondaj

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Appendix-B: Core Photographs
Appendix-C: Trial Pit Logs
Appendix-D: Trial Pit Photographs
Appendix-E: Lugeon Test Results
Appendix-F: Laboratory Test Results
Appendix G: Project Area Photographs from Trial Pits
Appendix H: Structural Logging Data of BH1-21

1. Introduction

The geotechnical services of Polokhivske lithium deposit was awarded to Fugro Sial Geosciences and Consulting Ltd. Şti..

The Polokhivske lithium deposit is located in the central part of Ukraine, in the Malovyskivsky district of the Kirovograd region, approximately 350 km to the south-south-east of Kiev, near the village of Giavka (previously Lenina).

Limited Liability Company UkrLithiummining (ULM) acquired the deposit in 2019 and has undertaken further geological and metallurgical work on the deposit in the intervening period. Property acquisition by ULM followed historical geological investigations of the region that had resulted in the discovery of the deposit in 1990.

This report documents factual data obtained from site supervision (core logging, lugeon testing and trial pitting) and geotechnical laboratory testing (rock and soil mechanics) at the Polokhivske lithium deposit area.

1.1 Project Description

As part of the the Polokhivske lithium deposit, site supervision (core logging, lugeon testing and trial pitting) and geotechnical laboratory testing (rock and soil mechanics) are planned.

Pozitif Sondaj requested Fugro to perform geotechnical logging of 3 numbers of boreholes, 4 number of lugeon testing, 12 number of trial pitting and laboratory testing.

1.2 Scope and Purpose

The scope of work details associated field-work required to determine the geotechnical parameters of the site. This assessment will enable the Project Team to determine suitable founding, platform and road recommendations required to support the process plant and surface infrastructure.

Fugro has undertaken logging of boreholes & trial pits, lugeon testing, soil & rock sampling and laboratory testing to provide the geotechnical information and design parameters necessary allowing to allow the civil and structural design to Project Consultant.

This report:

- documents the methods and procedures used for the field exploration,
- includes maps showing the locations of the explorations,
- provides tabulations listing pertinent factual details for each exploration,
- includes borehole logs and core photographs,
- includes trial pit logs and photographs,
- Includes the laboratory test results.

The site investigations were performed between 21 February and 9 March 2021.

1.3 Project Organization and Personnel

The project stakeholders include the Client (Pozitif Sondaj). Site investigation operations were conducted 7 days per week. Key stake holders and personnel associated with the site investigation activities are identified in Table 1-1.

Table 1-1 Key Project Personnel

Client	Name
Pozitif Sondaj	Canberk Özen
Project Management Team	Name
Fugro Geoconsultancy Service Line Manager	Önder Yönlü
Fugro Project Manager-Supervisor	Ali Serdar Uysal
Data Reporting	Name
Fugro Supervision	Ali Serdar Uysal
Fugro Project Engineer	Berk Süer

1.4 Project Datums

The project geodetic parameters are summarized below.

- Datum: WGS-84

USK-2000 and SK-42 rectangular coordinate system used through the coordinate transformation service using transformation fields and the Baltic altitude system.

1.5 Report Organization

This report consists of eight main sections. Figures and appendices follow the text sections of the report, while several tables are embedded within the text. An outline of the contents of each section is as follows:

- Main Text:
 - Section 1.0 Introduction
 - Section 2.0 Site Investigation Program
 - Section 3.0 Equipment and Procedures
 - Section 4.0 In Situ Testing Program
 - Section 5.0 Laboratory Testing Program
 - Section 6.0 Preliminary Exploration Logs
 - Section 7.0 Limitations
 - Section 8.0 References
- Appendices:
 - Appendix A Borehole Logs
 - Appendix B Core Photographs
 - Appendix C Trial Pit Logs

- Appendix D Trial Pit Photos
- Appendix E Lugeon Test Results
- Appendix F Laboratory Test Results
- Appendix G Project Area Photographs from Trial Pits

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