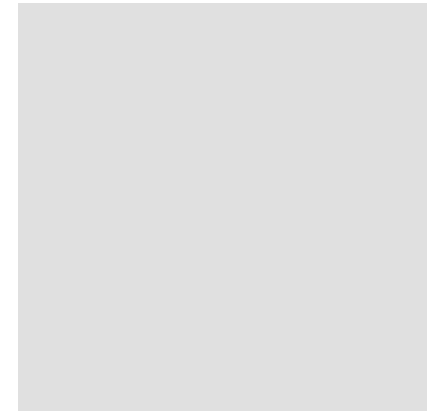




# **Jehle Umweltdienste**

## Environmental Services



Jehle Umweltdienste is an independent engineering company that provides services for environmental protection, health and safety.

Our core competencies are predominantly in the areas of contaminated sites, building contaminants/pollutants and environmentally friendly construction, fire safety, waste management for asbestos, chemicals and hazardous materials.

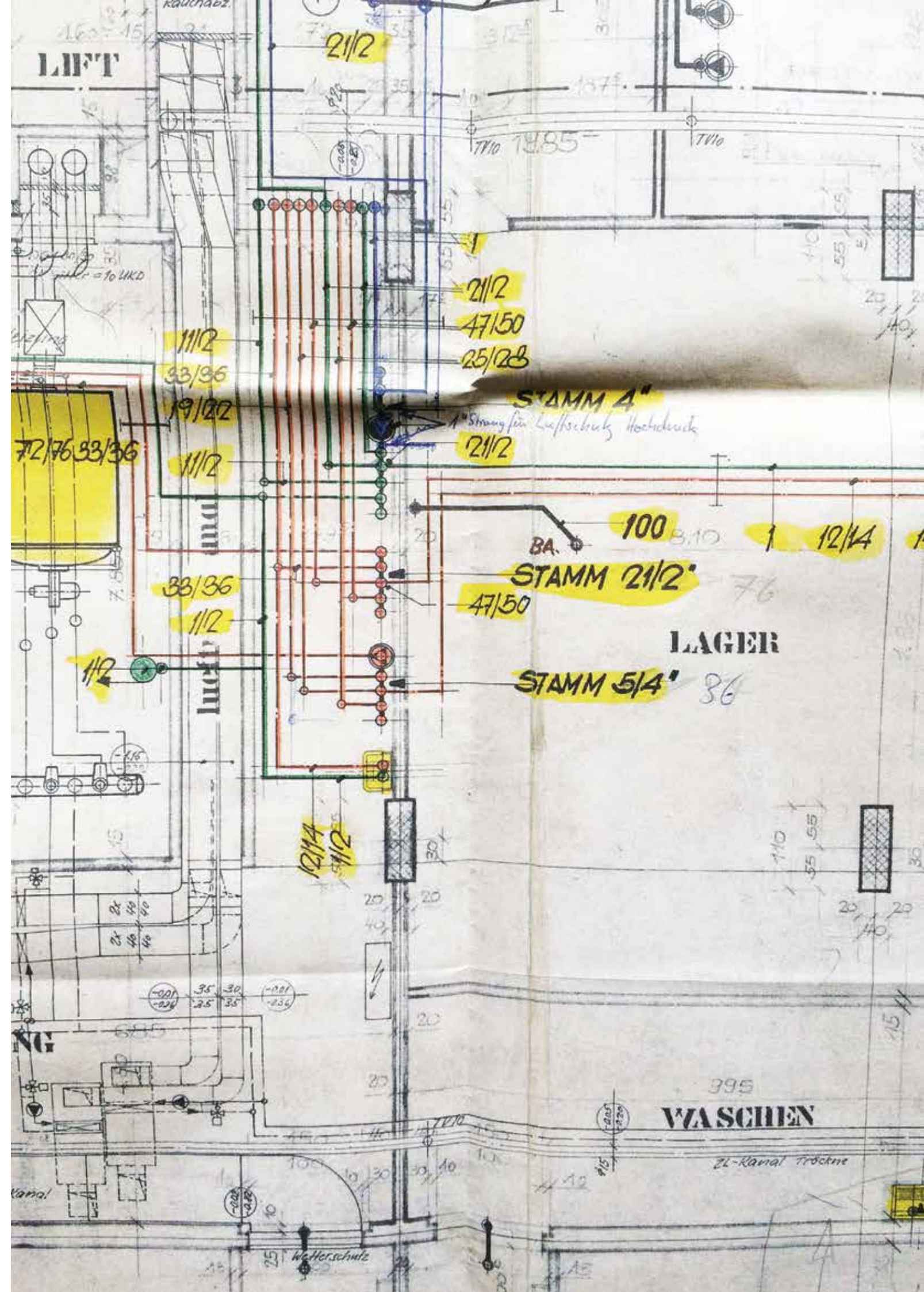
With three mobile laboratories and portable measuring devices, we are pioneers of on-site analysis in Switzerland. Our service provides customers with a fast, accurate and cost-effective analysis of heavy metals, asbestos and other pollutants.

We offer our customers individual, competent and holistic support - with safety for people and the environment as our top priority.



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# Building Contaminants

Hazardous materials present in the constitution of older buildings or sites may pose serious health risks.

Usually, toxic substances also need to be treated and disposed of in specific and regulated ways.

This kind of pollution may have been caused by the use of contaminated building materials, it may have pre-existed in facilities or be the cause of contamination.

This often means that even in the present state (without structural interventions), harmful emissions are taking place.

Pollution of buildings and sites in this manner is often a major economic factor.

We offer owners, investors, users and authorities specific and professional support to clarify and resolve contamination issues.



## Services

### Investigation:

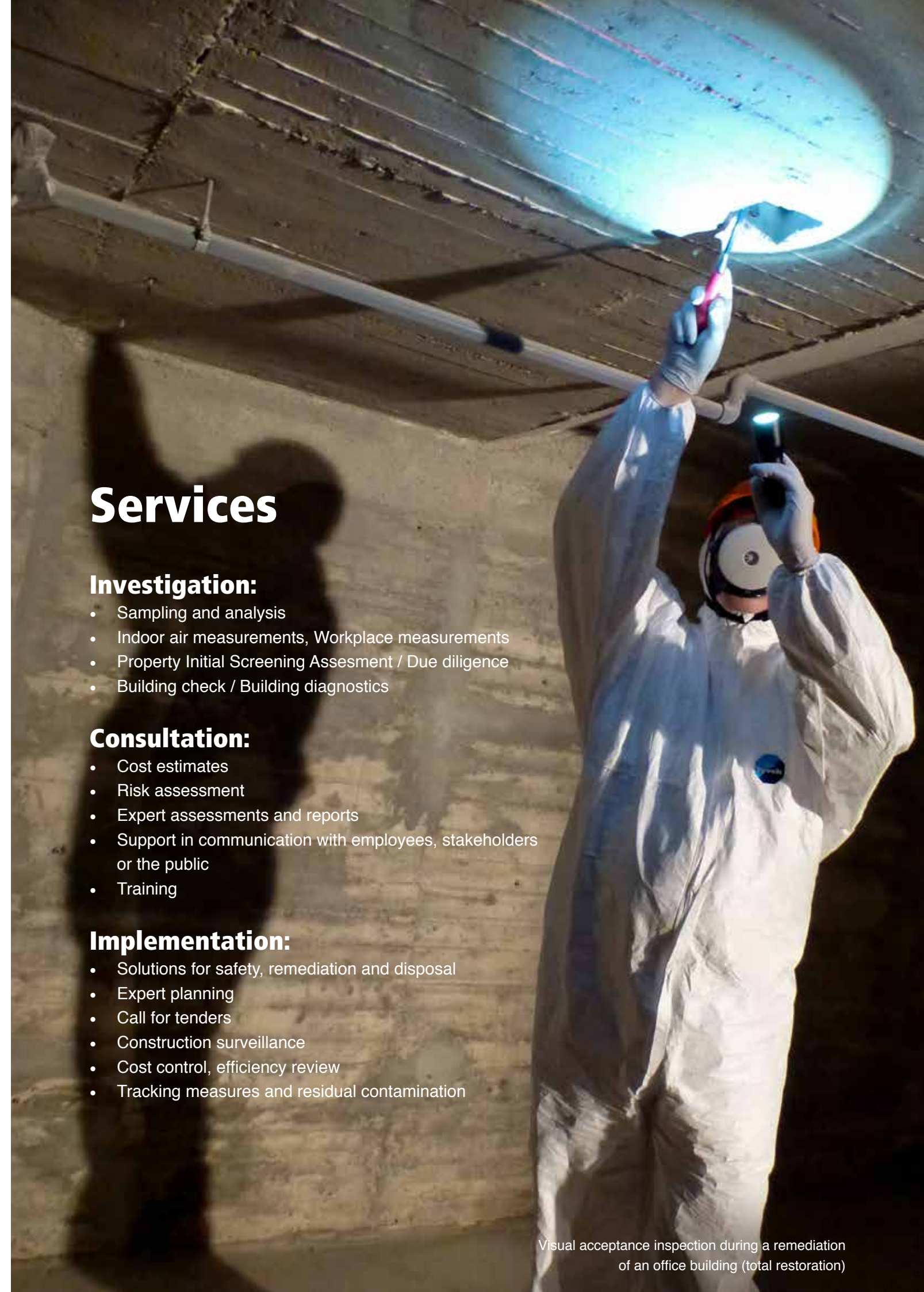
- Sampling and analysis
- Indoor air measurements, Workplace measurements
- Property Initial Screening Assessment / Due diligence
- Building check / Building diagnostics

### Consultation:

- Cost estimates
- Risk assessment
- Expert assessments and reports
- Support in communication with employees, stakeholders or the public
- Training

### Implementation:

- Solutions for safety, remediation and disposal
- Expert planning
- Call for tenders
- Construction surveillance
- Cost control, efficiency review
- Tracking measures and residual contamination



Visual acceptance inspection during a remediation of an office building (total restoration)



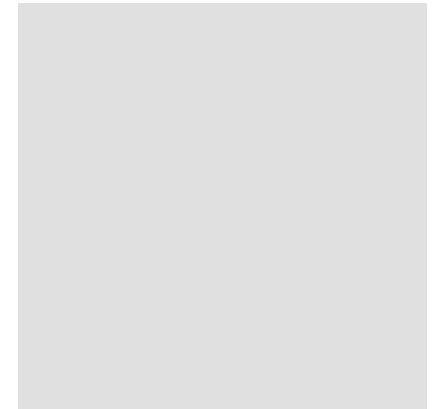


Dismantling of various heating vessels  
Triage of asbestos, PCBs and heavy metals

### Areas of Expertise:

Our main experience and core competencies lie in the areas of complex sites and large buildings, e.g.:

- Railway buildings
- Banking complexes
- Bridges
- Bunkers, army buildings
- Office buildings
- Commercial buildings
- Shopping centres
- Power plants, boiler houses
- High-rise buildings
- Industrial sites and chemical plants
- Schools
- Hospital buildings
- Housing estates







Remediation of a high-rise building, contaminated by sprayed asbestos

## Asbestos

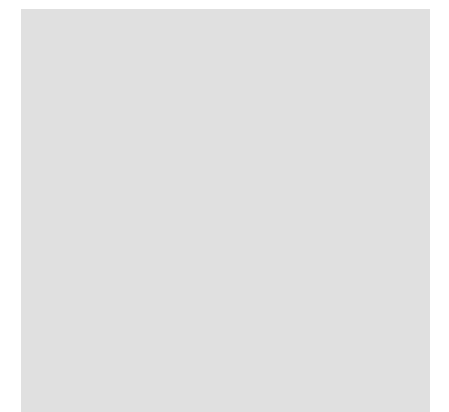
In civil engineering asbestos is a particularly widespread contaminant, which poses high risks for health. Asbestos contamination is increasingly common in buildings where construction was completed before 1991,

The fibres released during renovation or remediation of such buildings pose an enormous threat to human health.

The production, use and disposal of asbestos has been banned or regulated in a large number of countries worldwide since the early 1990s.

We offer our customers highly qualified, comprehensive and individual support.

From the investigation and consultation, to the setup of overall concepts and the technical site management - we accompany our customers to find sustainable, safe and holistic solutions.







## Asbestos Analysis

Since 2003, we have conducted asbestos analysis with our own instrumentation.

With thousands of analysed samples and over 20-years of professional experience of Clemens Jehle in the field of asbestos diagnostics, we have gained profound competence.

Thanks to our in-house analytics, we can provide quick results. This is especially useful in the case of damage or at large projects, where we can do on-site testing with our mobile laboratory.



# Contaminated Sites & Soil Protection



Contamination of soil and buildings often represents a significant economic factor, whether as a result of previous use due to the dumping of waste, or accidents.

National and international law makers stipulate with specific regulations that sites, which have been classified as subject to inspection, must undergo a professional preliminary investigation.

Based on results of such a study, an object or location can be classified as either in need of monitoring, in need of restoration or neither.

Jehle Umweltdienste is specialized in this kind of investigation. In accordance with the results, we develop a concept for the monitoring or remediation of the contaminated site. In this way, remediation and dismantling can be implemented efficiently and safely.

## Services

### Investigation:

- Historical investigations
- Technical pre-examinations
- In-detail inspections
- Inspections prior to remediation

### Consultation:

- Cost estimates
- Risk assessment
- Expert assessments and reports
- Support in communication with employees, stakeholders or the public

### Implementation:

- Solutions for safety, dismantling and disposal
- Expert planning
- Call for tenders
- Construction surveillance
- Monitoring of environmentally friendly construction
- Cost control, Proof of success
- Tracking measures and residual contamination



Restoration of a contaminated underground site





Dismantling of the fair in Basel, CH  
Investigation + construction surveillance

### Areas of Expertise:

Our main experience and core competencies lie in the industrial sector (contaminated industrial sites), with accident or disposal sites (eg. sites of obsolete pesticides, landfills, sites damaged by fire) and shooting ranges.





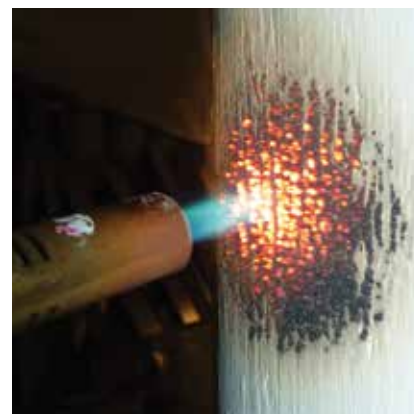
## Corrosion Protection



Old coatings for corrosion protection often contain large amounts of pollutants. Special protective measures must be observed for corrosion protection work in the open air, and there is a reporting obligation. We carry out the necessary investigations and plans, support the reporting procedure and check the remediation work.

## Fire Protection

A proper fire protection is essential for the safe use of buildings. We investigate fire protection coatings and components for permitted ingredients (test for asbestos, brominated flame retardants) and function.



Investigation of fire protection coatings in trade buildings



## Sampling

We carry out specific sampling for contaminated and polluted sites, in buildings and facilities, e.g. probing, core drilling, sampling of ground water and leachate.



## Indoor Air Measurement



We conduct steady state as-observed and post remediation indoor air measurements to check the interior air quality at workplaces and in living spaces.



Sampling of a pipe insulation in an industrial area



# Analytics

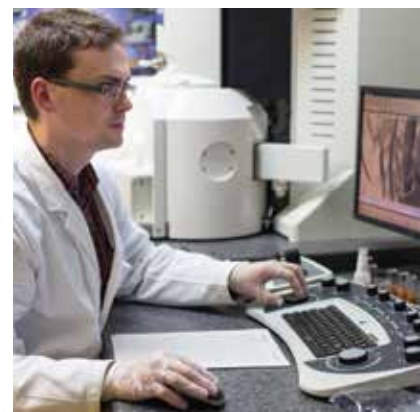
We have a wide range of sampling and measuring instrumentation for the investigation of buildings and contaminated sites, as well as indoor and outdoor air.

In our own laboratory your samples are analysed by highly qualified staff, according to the latest technical standards. This allows us to provide fast, accurate and reproducible results.

With our Scanning Electron Microscope (SEM), we can even investigate particles at the micro- and nanoscale.

Where possible or appropriate, we use methods of on-site analysis and our mobile laboratory.

For samples that we do not analyse ourselves, as well as for specific questions, we also work with a selection of professional service laboratories.



## Video:

[www.jehle-umweltdienste.ch/leistungen/rem](http://www.jehle-umweltdienste.ch/leistungen/rem)





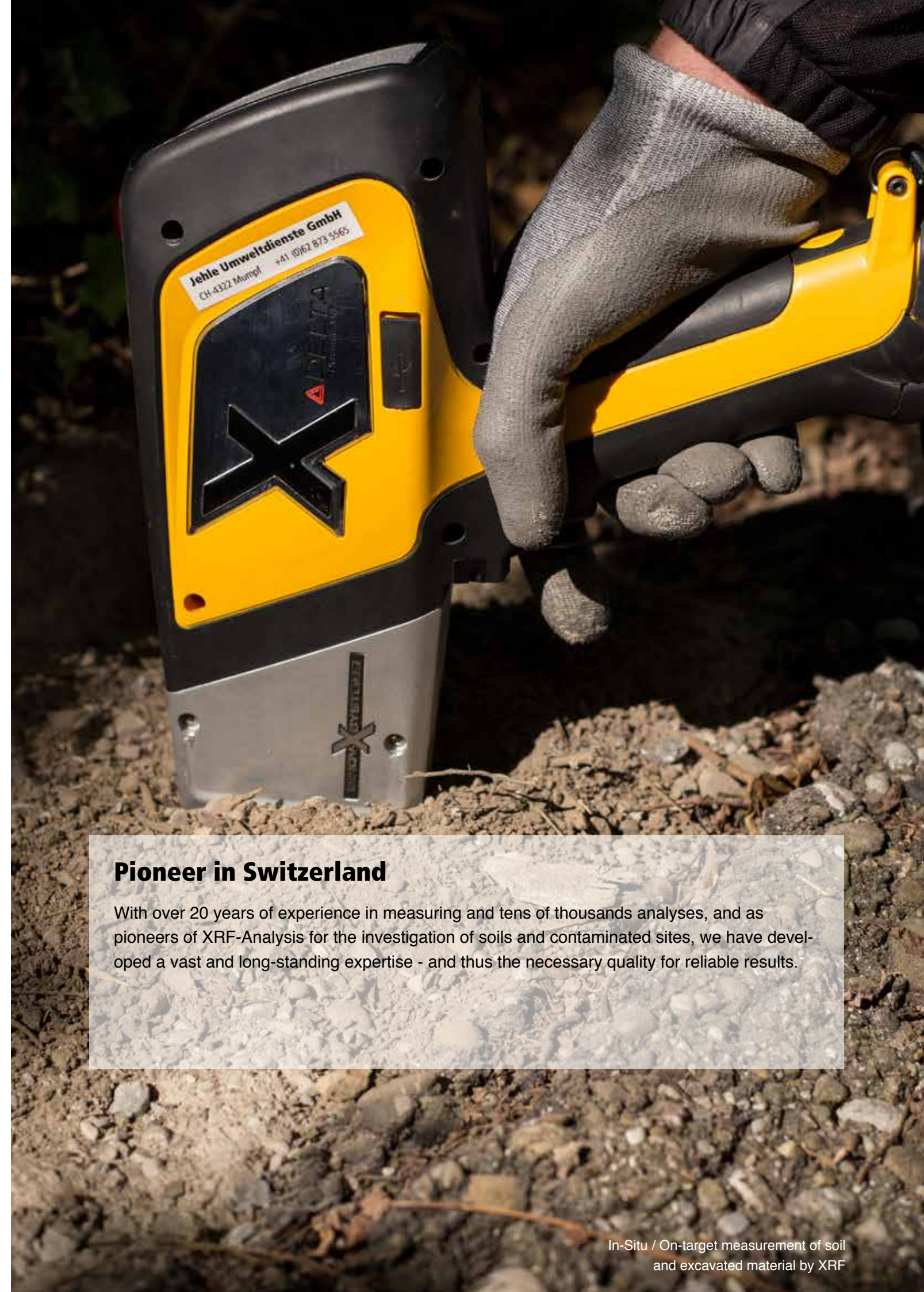
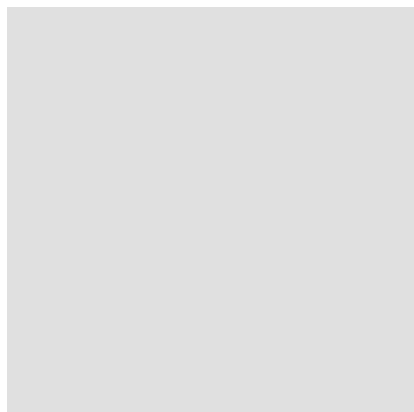
# On-site XRF Analysis



Since the founding of the company we have developed a special competence in field and on-site analysis.

In 2000, a portable XRF measuring device was introduced for field analysis of heavy metals. Jehle Umweltdienste was the first engineering company in Switzerland that used XRF for the investigation of soils and contaminated sites - a pioneering achievement which continues to enhance the success of site analysis.

Today we have three X-Ray Fluorescence (XRF) instruments for the fast and reliable analysis of heavy metals.



## Pioneer in Switzerland

With over 20 years of experience in measuring and tens of thousands analyses, and as pioneers of XRF-Analysis for the investigation of soils and contaminated sites, we have developed a vast and long-standing expertise - and thus the necessary quality for reliable results.



# LabMobil

As a pioneer in field analysis, Jehle Umweltdienste has developed three mobile laboratories. These are equipped with comprehensive, modular and modern equipment and thus enable complex and elaborate sampling, e.g. for the analysis of excavated material or building materials according to various regulations.

With the innovative LabMobil 3, Jehle Umweltdienste is setting a new benchmark in field analysis. After three years of development, various tests and several months of trial operation, the LabMobil 3 has been available since the beginning of 2015 for large field applications and on-site sampling.

It has much more space than our previous mobile labs, providing greater flexibility for fast and reliable analysis.

## Equipment

Mobile laboratories are versatile and include equipment such as a drying cabinet, jaw breaker, crushing mill, vibratory mill, ripple divider, screening equipment and various analyzers such as XRF, AFS, photometers, gas meters, microscopes etc. (Mobile laboratories are equipped depending on the measurement task).

## Benefit for Customers:

- Fast and reliable on-site triage and analysis
- Optimizing the proper disposal of construction waste and excavation material by reducing waiting times
- Cost optimization in the excavation and remediation of contaminated industrial sites or landfills
- Reduction of health risks for construction workers or third parties (dangerous loads are detected more quickly)

## Video:

[www.jehle-umweltdienste.ch/leistungen/labmobil](http://www.jehle-umweltdienste.ch/leistungen/labmobil)





# Database Solution

## For the Management of Contamination and Pollution in Buildings

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EG Süd	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
OG Nord	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DG, an Decke	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DG, an Decke	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

With the database software developed by Jehle Umweltdienste, research results can be recorded, processed, sorted and used for reporting and shared access.

With its detailed search form, the database locates precisely:

Objects, locations, components, samples, analysis results, photos

### Fields of Application and Target Groups

Using the database, a systematic pollutant inventory can be created and managed. It is suitable for all areas of real estate business and construction management and is particularly suited for:

- Construction managers and architects
- Facility managers
- Authorities

### Upgrade and Additional Features

On request it is possible to upgrade the license to a version with additional functions and extended rights.

### Always Efficient & Updated

Die benutzerfreundliche Oberfläche der Software bietet einfaches und unkompliziertes Arbeiten mittels eines PC's (Mac und Windows) und iO's basierten Tablett's und Phones.

Die Datenerfassung erfolgt durch von Jehle Umweltdienste qualifizierte Fachpersonen. Untersuchungsergebnisse werden laufend aktualisiert und periodisch den Kunden zur Verfügung gestellt.

### Your Benefit:

- Safe handling of pollutants
- Sharing information and planning efficiently
- Systematic inventory



# Trainings / Capacity Building

Since 15 years we have been conducting trainings and courses for interested specialists. Subjects include the safe handling of pollutants and the proper disposal of contaminated waste in Switzerland and abroad.

## Our Offers Include:

- Project specific instructions
- Introductory courses
- Courses for employees (specialising courses, practical trainings, industry-specific solutions)
- Courses for project supervisors, architects, construction managers, facility managers, security officers
- Courses for companies specialised in asbestos and pollutant remediation (professional and advanced training)
- Consulting and training of managers and stakeholders (regarding situation analysis, risk management, business plans, investment decisions, implementation regulations and execution)

## In the Fields of:

Asbestos / pollutants in buildings / heavy metals / pesticides

Contaminated sites / hazardous goods / disposal of waste, hazardous waste / worker protection and safety

We are glad to offer specific offers for companies, organizations and authorities on request

## Video:

[www.jehle-umweltdienste.ch/leistungen/schulung](http://www.jehle-umweltdienste.ch/leistungen/schulung)





# Philosophy

Health, environmental protection and safety thanks to innovation, quality and hearty professionalism

- this is our commitment.

## Company Profile



Jehle Umweltdienste was founded in 1999 as a private company by Clemens Jehle. The company headquarters are in 4323 Wallbach, Aargau, Switzerland.

Meanwhile, apart from the headquarters in Mumpf, Aargau, two branch offices were opened in Bern and Zurich.

### Innovativ Solutions

Our services are characterized by a sense of innovation and pragmatic solutions for the benefit of our customers.

Since our foundation we reinvest between 10 and 20% annually in the development of efficient methods and new technologies. In this way, we ensure that our customers always receive efficient and state-of-the-art solutions, quality and safety.

### Special Commitment

We have a special commitment for sustainable development and technical cooperation in developing and emerging countries in the area of clean production, contaminated sites, Persistent Organic Pollutents (POP) and pesticides.







## Office

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