

Hatfield-2505: Identify geophysical properties of the subsurface

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Challenge

Challenge ID:	HCP-2505	Originator:	Onshore: Hatfield
Title:	Identify geophysical properties of the subsurface.		
Theme:	ON 2.5: Surface Geology Mapping - Engineering geological evaluation		
Consortium Lead:	Arup	Interviewed Company:	Arup
Geography:	ON.REG.00 - Generic onshore		
Challenge Description			
What is not possible / not adequately addressed at present?			
Identify geophysical properties to inform geological modelling and geotechnical evaluations.			
What effect does this challenge have on operations?			
Surface geophysical and airborne geophysical are expensive and have health and safety concerns.			
Thematic information requirements:	Lithology, structural geology, surficial geology		
What do you currently do to address this challenge?			
How is this challenge conventionally addressed?			
Surface and down-hole geophysics, but not always possible due to site / location constraints			
What kind of solutions do you envisage could address this challenge?			
Spaceborne geophysics to complement airborne and ground based geophysical surveys.			
What is your view on the capability of technology to meet this need?			
Are you currently using EO tech? If not, why not?			
EO can complement ground based and airborne techniques and provide wider geographic coverage at lower cost.			
High resolution DEMs required for modelling and terrain correction during geophysical processing.			
Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	1	Climate class:	Generic climate
Exploration:	3	Topographic class:	Not specific
Development:	3	Seasonal variations:	Any season
Production:	2	Impact area:	Health and Safety, Cost reduction
Decommissioning:	0	Technology urgency:	2 - Short term (2-5 years)
Challenge Information Requirements			
Update frequency:	Snapshot		
Data currently used:	Airborne and ground-based geophysics		
Spatial resolution:	Regional to License		
Thematic accuracy:	Not specific		
Required formats:	Not Specific		
Timeliness (Vintage):	Reference data		
Geographic extents:	License		

Existing standards:	None
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Relevant products

Content by label

There is no content with the specified labels