

# Hatfield-1207: Identify claypan surfaces to be avoided

Identify claypan surfaces to be avoided

## Challenge

|                                                                                                                                            |                                                                                                                         |                                 |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------|
| Challenge ID:                                                                                                                              | HCP-1207                                                                                                                | Originator:                     | Onshore: Hatfield                 |
| Title:                                                                                                                                     | Identify claypan surfaces to be avoided.                                                                                |                                 |                                   |
| Theme:                                                                                                                                     | ON 1.2: Seismic Planning - Identification of adverse terrain for trafficability                                         |                                 |                                   |
| Consortium Lead:                                                                                                                           | RPS Group                                                                                                               | Interviewed Company:            | RPS Group                         |
| Geography:                                                                                                                                 | ON.REG.00 - Generic onshore                                                                                             |                                 |                                   |
| Challenge Description                                                                                                                      |                                                                                                                         |                                 |                                   |
| What is not possible / not adequately addressed at present?                                                                                |                                                                                                                         |                                 |                                   |
| Claypan could be a travel hazard as vehicle may slide or get stuck when wet.                                                               |                                                                                                                         |                                 |                                   |
| What effect does this challenge have on operations?                                                                                        |                                                                                                                         |                                 |                                   |
| Areas of claypan could affect how equipment and personnel are moved around the work area and also the choice of survey equipment utilised. |                                                                                                                         |                                 |                                   |
| Thematic information requirements:                                                                                                         | Ortho base images<br>Terrain information<br>Topographic information<br>Lithology, structural geology, surficial geology |                                 |                                   |
| What do you currently do to address this challenge?                                                                                        |                                                                                                                         |                                 |                                   |
| How is this challenge conventionally addressed?                                                                                            |                                                                                                                         |                                 |                                   |
| Optical satellite imagery, Surficial geology maps                                                                                          |                                                                                                                         |                                 |                                   |
| What kind of solutions do you envisage could address this challenge?                                                                       |                                                                                                                         |                                 |                                   |
| Accurate identification of claypan from optical satellite images.                                                                          |                                                                                                                         |                                 |                                   |
| What is your view on the capability of technology to meet this need?                                                                       |                                                                                                                         |                                 |                                   |
| Are you currently using EO tech? If not, why not?                                                                                          |                                                                                                                         |                                 |                                   |
| None.                                                                                                                                      |                                                                                                                         |                                 |                                   |
| Challenge Classification                                                                                                                   |                                                                                                                         |                                 |                                   |
| Impact on Lifecycle (0=none, 4=high):                                                                                                      |                                                                                                                         | Climate / Topography / Urgency: |                                   |
| Pre-license:                                                                                                                               | 2                                                                                                                       | Climate class:                  | Generic climate                   |
| Exploration:                                                                                                                               | 3                                                                                                                       | Topographic class:              | Not specific                      |
| Development:                                                                                                                               | 2                                                                                                                       | Seasonal variations:            | Any season                        |
| Production:                                                                                                                                | 2                                                                                                                       | Impact area:                    | Health and Safety, Cost reduction |
| Decommissioning:                                                                                                                           | 1                                                                                                                       | Technology urgency:             | 3 - Immediately (0-2 years)       |
| Challenge Information Requirements                                                                                                         |                                                                                                                         |                                 |                                   |
| Update frequency:                                                                                                                          | Snapshot                                                                                                                |                                 |                                   |
| Data currently used:                                                                                                                       | High resolution imagery                                                                                                 |                                 |                                   |
| Spatial resolution:                                                                                                                        | Basin                                                                                                                   |                                 |                                   |
| Thematic accuracy:                                                                                                                         | Not specific                                                                                                            |                                 |                                   |
| Required formats:                                                                                                                          | Not Specific                                                                                                            |                                 |                                   |
| Timeliness (Vintage):                                                                                                                      | Reference data                                                                                                          |                                 |                                   |
| Geographic extents:                                                                                                                        | Basin                                                                                                                   |                                 |                                   |

|                     |      |
|---------------------|------|
| Existing standards: | None |
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## Relevant products

### Content by label

There is no content with the specified labels