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Boren naar aardwarmte

Wat kunt u verwachten?



In opdracht van Aardwarmte Den Haag v.o.f.

Veiligheidseisen op boorlocatie



VERBODEN TOEGANG
 VOOR ONBEVOEGDEN
 ART.461.WETB.V.STRAFR.

Fire alarm: (intermittent signal)
 Evacuation alarm: (continuous signal)

GENERAL

- On arrival, report to the security guard;
- Parking only on designated locations and always in the escape direction;
- The use of PPE is applicable (Antistatic and fire-resistant coveralls, gloves, safety boots, helmet and safety glasses);
- Do not wear any clothing or jewellery that can get caught by moving parts of machinery
- Jewellery (rings) are not allowed on location. Watches, necklaces, piercing are discouraged;
- Carrying and the use of mobile phones (non Ex Proof is prohibited)
- Smoking only at the smokers container;
- Trespassing of barriered off locations (no go areas) is prohibited;
- The use of cameras is prohibited;
- Be alert for unforeseen movements of vehicles and/or parts of the installation;
- Always report all unsafe acts / situations, incidents and/or accidents;
- Do not endanger yourself or others;
- Always keep one hand to the hand rail;
- Do not climb on piping and handrails
- Address anyone in case of unsafe behaviour (I Card);
- In case of emergency, leave the location and proceed to the muster point;

VISITORS (and section General)

- Always follow promptly the instructions of the guides;
- The use of PPE is applicable (Antistatic and fire-resistant coveralls, gloves, safety boots, helmet and safety glasses);
- Admittance to parts of the location will be restricted when safety rules cannot be held (e.g. no or insufficient PPE);
- Be alert on tripping hazards watch out for loose cables.
- Use cable crossings and stairs;
- Always keep one hand to the hand rail;
- Gratings are open mesh and are at height and can be danger to anyone with fear of heights;
- Avoid locations with excessive noise levels.



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Vorbereiden locatie

- Afzetten
- Verharden
- Geluidswal plaatsen
- Aanrij route aangeven





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Opbouwen boortoren

- Aanvoer met trucks





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De verschillende onderdelen

- Drillers cabin
- Toren
- Pipe handler
- Mud tanks
- Kantoren
- (Generatoren)



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Hoe ziet een boring er uit?

- Doorsnee boorschema
- Benodigdheden
- Ondergrondse activiteiten
- Bovengrondse activiteiten



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Doorsnee Boorschema

- ca. half jaar voorbereiden
- 4 dagen opbouwen toren
- ca. 4 weken per put boren (2x)
- 4 dagen afbouwen toren

- Na boren: Plaatsing infrastructuur



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Benodigdheden

- Boorbuizen
- Boorvloeistof
- Personeel
- Elektriciteit en water
- Etc.



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Ondergrondse activiteiten

- Boren
- Cementeren
- Meten

Hole size	Casing/TOC/Formation	AH m	TVD m
	surface		
	16" conductor, driven	40	40
casing drilled	9 5/8" casing		
	Base Tertiary	750	750
	TOC 7"		
	9 5/8" casing shoe	850	850
	Early Cretaceous	1000	1000
8 1/2"			
	Fault	1940	1940
	7" casing shoe	2000	2000
	Top Triassic	2090	2090
	Top Upper Bunter	2175	2175
6"	5" liner		
	Lower Bunter Shale = TD	2550	2550



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Bovengrondse Activiteiten

- Invoeren buizen en boorvloeistof
- Laden en lossen vrachtwagens
- Reinigen boorvloeistof
- Analyseren boorgruis



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Impact op de omgeving

- Aan- en afrijden transport
- Dag en nacht
- Licht en geluid