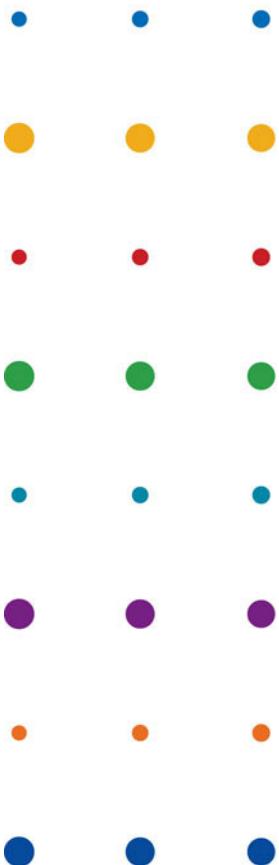


# QRA puttenlocatie Bergermeer Gas Storage



Ten behoeve van MER en  
vergunningaanvraag

TAQA Energy BV

Okttober 2008  
final

# **QRA puttenlocatie Bergermeer Gas Storage**

## **Ten behoeve van MER en vergunningaanvraag**

dossier : A6167-04-001

registratienummer : MD-MV20080961/BGS-UR-5016 final

versie : final

TAQA Energy BV

Okttober 2008  
final

INHOUD	BLAD
1 ALGEMEEN	3
2 INLEIDING	4
3 BESCHRIJVING VAN DE INRICHTING	5
3.1 Voorkeurslocatie en alternatieven	5
3.2 Puttenlocatie	5
3.3 Maatregelen genomen ter reductie van het extern risico	6
4 BELEID MET BETrekking tot EXTERNE VEILIGHEID	9
4.1 Mijnbouwinstallatie en het Bevi	9
4.2 Besluit algemene regels milieu mijnbouw	9
4.3 Drie risicomaten voor het externe veiligheidsbeleid Bevi	10
4.4 Normering Plaatsgebonden Risico (PR)	10
4.5 Groepsrisico (GR)	11
5 SUBSELECTIE	13
6 KWANTITATIEVE RISICOANALYSE	14
6.1 Algemene modelleringsaspecten	14
6.1.1 Operationele fasen	14
6.1.2 Gasuitstroming	14
6.1.3 Gevaarlijke stoffen	15
6.2 Risicomodellering voorkeursalternatief BGM specifieke installatieonderdelen	15
6.2.1 Pijpleiding	15
6.2.2 De headers	16
6.2.3 De flowleidingen	17
6.2.4 De putten	18
6.3 Risicomodellering alternatief Bergerweg Noord	20
6.4 Risicomodellering boringen BGM Voorkeurslocatie	20
6.4.1 Algemeen	20
6.4.2 QRA modellering	21
7 MODELLERINGSPARAMETERS	23
7.1 Gebruikte programmatuur	23
7.2 Ontstekingskansen	23
7.3 Ruwheidslengte	23
7.4 Meteorologie	23
7.5 Bevolkingsgegevens	24
8 RESULTATEN EN CONCLUSIES	25
8.1 Voorkeurslocatie BGM	25
8.1.1 Invloedsgebied	25
8.1.2 Plaatsgebonden Risico	25
8.1.3 Groepsrisico	26
8.2 Alternatief Bergerweg Noord	27
8.2.1 Invloedsgebied	27

8.2.2	Plaatsgebonden risico	27
8.2.3	Groepsrisico	27
8.3	Boringen in de drie opeenvolgende jaren	27
8.3.1	Invloedsgebied	27
8.3.2	Plaatsgebonden risico boringen	27
8.3.3	Groepsrisico boringen	28
9	REFERENTIES	29
10	COLOFON	30

**Bijlagen**

1	Plaatsgebonden Risicocontouren
2	Groepsrisico, Fn-curves
3	Technische notitie QRA-Methodiek
4	Bevolkingsgegevens tbv QRA's BGS project
5	Overzichtstekening
6	Onderbouwing niet geselecteerde installatiedelen
7	Risk ranking report

**Tabellen**

Tabel 6-1:	Faalscenario's en bijbehorende kansen voor ondergrondse leidingen langer dan 50 m .....	15
Tabel 6-2:	Procescondities pijpleiding .....	15
Tabel 6-3:	Faalscenario's en bijbehorende kansen voor ondergrondse leidingen langer dan 50 m .....	16
Tabel 6-4:	Procescondities headers .....	17
Tabel 6-5:	Faalscenario's en bijbehorende kansen voor ondergrondse leidingen korter dan 50 meter .....	17
Tabel 6-6:	Procescondities flowleidingen.....	18
Tabel 6-7:	Procescondities putten .....	19
Tabel 6-8:	Faalscenario's en bijbehorende kansen voor blow out .....	19
Tabel 6-9:	Lekverdeling en uitstroomrichting blow out.....	20
Tabel 6-10:	Boor- en injectieschema .....	21
Tabel 6-11:	Gemodelleerde equipment in opeenvolgende boorjaren .....	21
Tabel 6-12:	Scenario's en faalkansen blowout tijdens boren.....	22
Tabel 6-13:	Lekverdeling en uitstroomrichting blow out.....	22
Tabel 8-1:	Top drie maatgevende scenario's.....	26
Bijlage 4		
Tabel B4-10-1	uitzonderingen op bestemmingsplannen BKZ.....	6
Tabel B4-10-2.	Geprojecteerde bestemmingen Westrand Alkmaar/Bergen.....	8

**Figuren**

Figuur 3-1:	Schematische weergave van gasinjectie op BGM.....	5
Figuur 3-2:	Schematische weergave van gasproductie op BGM .....	5
Figuur 3-3:	Plattegrond met de installatiedelen welke van belang zijn voor de QRA .....	6
Figuur 3-4:	Alternatieve locaties puttenterrein .....	8
Figuur 4-1:	Oriënterende waarde voor het groepsrisico volgens Bevi .....	12
Figuur 8-1:	Risk Ranking Points .....	25

## 1 ALGEMEEN

Dit rapport is opgesteld conform het format dat daarvoor in het besluit externe veiligheid inrichtingen verplicht is gesteld. Daar waar onnodige dubbelingen optreden met de documenten waarbij dit rapport als bijlage zal dienen, wordt verwezen naar deze documenten.

### Administratieve gegevens

Naam inrichting : Bergermeer  
Adres inrichting : Bergerweg tegenover 141, Bergen  
Rechtspersoon inrichting : TAQA Energy B.V.

Naam en functie leidinggevende : Dhr. P.J.G. van der Sman  
Projectleider Vergunningen Bergermeer Gas Storage

### Reden voor het opstellen van de QRA

Onderliggende QRA rapportage maakt deel uit van het MER voor het Bergermeer Gas Storage Project.

### Methodiek

Voor de QRA van mijnbouwinstallaties is op dit moment nog geen officiële QRA methodiek vastgesteld. De methodiek van de handleiding risicoberekeningen BeviBEVI, v3.0 voor BRZO-inrichtingen (Module C hoofdstuk 3) komt het dichtst bij een toepasbare methodiek. Echter vanwege een aantal specifieke procestechnische redenen is de methodiek niet één op één toepasbaar. Er is overleg geweest met het Centrum voor Externe Veiligheid (CEV/RIVM), waarin de uitgangspunten voor deze methodiek zijn besproken. Op basis van dit overleg is een aangepaste methodiek opgesteld, welke aan dit rapport is toegevoegd in bijlage 3. Deze memo gaat in op de methodiek die voor beide QRA's is gebruikt, dus zowel die van de puttenlocatie als die van de gasbehandelings- en compressieinstallaties.

De uitgangspunten voor deze methodiek zijn om zo dicht mogelijk bij de bestaande rekenregels uit de handleiding risicoberekeningen voor BRZO bedrijven te blijven. Daar waar wordt afgeweken is dit gedaan om de ongewenste gebeurtenissen zo goed mogelijk te modelleren.

De modellering van de scenario's is uitgevoerd met behulp van het rekenpakket Safeti<sup>NL</sup>, versie 6.53.1.

### Peildatum

De QRA berekeningen zijn voltooid op 24 oktober 2008. De definitieve uitgave van de rapportage en daarmee de peildatum is 24 oktober 2008.

## 2 INLEIDING

Bergermeer Gas Storage is een project van de Bergermeer Partnergroep bestaande uit TAQA Energy B.V., Petro-Canada Netherlands B.V., Dyas B.V. en Energie Beheer Nederland B.V. TAQA Energy B.V. heeft in het project de leidende rol voor de realisatie van het project en zal ook daarna als operator de installaties gaan bedrijven.

TAQA Energy B.V. is één van de Nederlandse aardgasproducenten en houdt zich in Noord-Holland en op het Nederlands deel van de Noordzee bezig met de opsporing en winning van aardgas. TAQA Energy heeft recent de Nederlandse olie- en gaswinningactiviteiten van BP Nederland Energie B.V. overgenomen inclusief de Nederlandse staf, die sinds de jaren zeventig in Nederland actief is. TAQA Energy B.V. is een dochter van TAQA Europe B.V. Voor meer informatie zie [www.gasopslagbergermeer.nl](http://www.gasopslagbergermeer.nl).

Het Bergermeer Gas Storage project omvat de volgende onderdelen:

- Het geschikt maken van de bestaande bovengrondse Bergermeer (BGM) puttenlocatie;
- Het boren van nieuwe aardgasputten naar het aardgasreservoir op de BGM locatie;
- Het bouwen van een nieuwe behandelings- en compressie-installatie op het industrieterrein Boekelermeer Zuid 2;
- Het leggen van leidingen tussen de puttenlocatie en de behandelings- en compressie-installatie (circa 8 km) en tussen de behandelings- en compressie-installatie en het gastransportnet (4 respectievelijk 6 km), alsmede tussen de behandelings- en compressie-installatie en de bestaande PiekGasInstallatie (PGI) van TAQA ;
- Het aardgasveld initieel weer op druk brengen door injectie van aardgas uit het gasnet;
- Het daadwerkelijk opereren van de installaties, bestaande uit het leveren van gas tijdens piekuren en het weer op druk brengen van het veld tijdens daluren.

Deze rapportage beschrijft de kwantitatieve risicoanalyse (QRA) van de te realiseren puttenlocatie.

Algemene kenmerken van de inrichting zijn opgenomen in hoofdstuk 1. Een korte beschrijving van het project en de opbouw van dit rapport is in hoofdstuk 2. Hoofdstuk 3 bevat de beschrijving van de inrichting en een beschrijving van de alternatieve locaties. Het beleid met betrekking tot externe veiligheid en de beoordeling van het plaatsgebonden risico en groepsrisico is toegelicht in hoofdstuk 4. In hoofdstuk 5 van deze rapportage is de subselectie weergegeven. Deze subselectie bevat de selectie van installatielijstjes die bepalend zijn voor het externe risico.

De uitwerking van de scenario's voor de geselecteerde installatielijstjes is opgenomen in hoofdstuk 6. In dit hoofdstuk staan de frequenties voor de verschillende scenario's en de wijze waarop dit in Safeti<sup>NL</sup> is gemodelleerd. In hoofdstuk 7 is informatie met betrekking tot belangrijke modelleringsparameters als meteorologie, ontstekingskansen, ruwheidslengte en bevolkingsgegevens opgenomen.

De resultaten van de modelleren van de scenario's in het Safeti<sup>NL</sup> programma zijn opgenomen in hoofdstuk 8. Naast het plaatsgebonden risico en het groepsrisico is in dit hoofdstuk ook informatie opgenomen over effectafstanden van de maatgevende scenario's en het invloedsgebied. PR contouren en Fn curves zijn opgenomen in de bijlagen.

## 3 BESCHRIJVING VAN DE INRICHTING

### 3.1 Voorkeurslocatie en alternatieven

De voorkeurslocatie voor het puttenterrein van het Bergermeer Gas Storage project is gelegen aan de aan de Bergerweg tegenover nr. 141 in Bergen. In figuur 3-4 is een plattegrond opgenomen met alle locaties van de alternatieven voor het project. De voorkeurslocatie van het puttenterrein wordt aangeduid met BGM Voorkeur. Voor een volledige beschrijving van de inrichting wordt verwezen naar de MER. In dit rapport zal alleen de beschrijving voor zover die van belang is voor de QRA worden gegeven.

Naast het voorkeursalternatief **BGM Voorkeur** voor het puttenterrein op de bestaande Bergermeerlocatie zijn in de MER twee alternatieve locaties opgenomen:

- Eén locatie bevindt zich ten noorden van de Bergerweg (**Bergerweg Noord**, zie figuur 3.4).
- Een locatie is gecombineerd met het gasbehandelings- en compressiealternatief op het MOB-terrein (**MOB Bergen**, zie figuur 3.4). Dit alternatief wordt beschreven in het QRA-rapport voor de gasbehandeling en compressie (ref: MD-MV20080893/BGS-UR-5017final), dat tevens onderdeel uitmaakt van het MER.

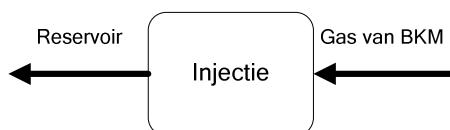
Naast het eerste alternatief wordt in dit rapport inzicht gegeven in de risico's ten gevolge van boren tijdens de drie opeenvolgende jaren waarin geboord wordt.

### 3.2 Puttenlocatie

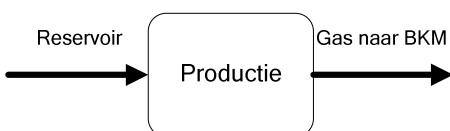
Voor de algemene beschrijving van het proces wordt verwezen naar het MER. In de beschrijving van de modellering in hoofdstuk 6 is een korte beschrijving van de te modelleren installatieonderdelen gegeven. Daarnaast is in bijlage 5 van de rapportage een algemene overzichtstekening opgenomen.

Proces:

De inrichting wordt gebruikt voor het tijdelijk opslaan van aardgas. Hiertoe wordt gas geïnjecteerd in het gasreservoir en na verloop van tijd wordt dit gas weer teruggevonden. Deze twee operaties geven een ander risicoprofiel en zullen in deze QRA afzonderlijk worden beschouwd en worden aangeduid met "Injectie" en "Productie". In onderstaande figuren is het proces van de injectie- en productiefase, vereenvoudigd, schematisch weergegeven.



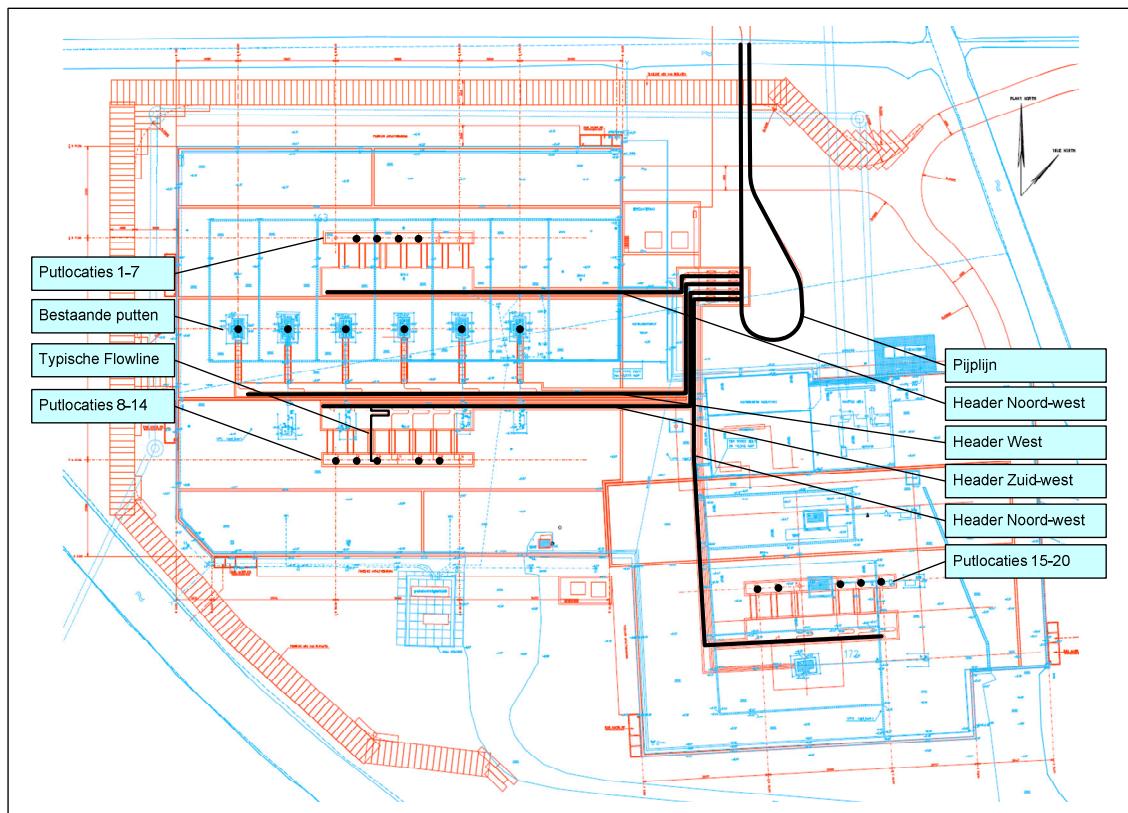
Figuur 3-1: Schematische weergave van gasinjectie op BGM



Figuur 3-2: Schematische weergave van gasproductie op BGM

**Installatiedelen:**

De installatiedelen welke van belang zijn voor de QRA zijn in onderstaande plattegrond aangegeven.



**Figuur 3-3: Plattegrond met de installatiedelen welke van belang zijn voor de QRA**

De volgende installatiedelen zijn op het terrein aanwezig en relevant voor de QRA:

- 1 Pijpleiding
- 4 Headers (Noord-west, Zuid-west, West, Oost)
- 20 Flowlines (een per put)
- 20 Putten (14 nieuwe en 6 bestaande)

Naast de 14 nieuwe putten is er nog ruimte voor 6 putten. Deze zullen binnen dit project niet worden geboord (zijn in de toekomst wel voorzien) en worden ook niet meegenomen in deze QRA.

### 3.3 Maatregelen genomen ter reductie van het extern risico

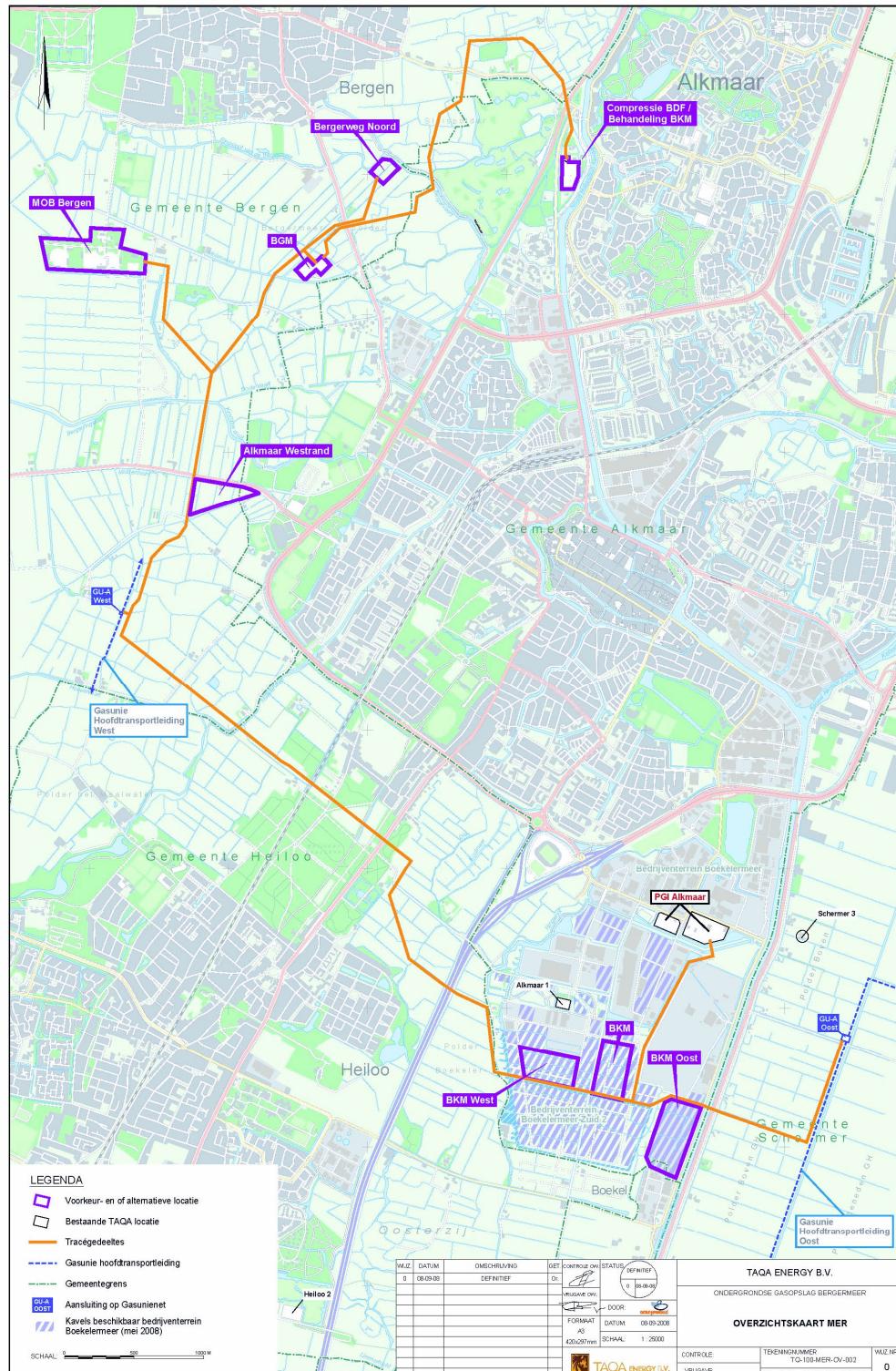
Het ontwerp voor de gasbehandeling en compressie-installatie is gedreven door extreme veiligheidsaspecten. In een vroeg stadium van het ontwerp van de installatie is voor de belangrijkste installatiedelen een risicoanalyse uitgevoerd. De resultaten van deze analyse zijn gebruikt om het ontwerp van de installatie verder te verbeteren ten aanzien van externe veiligheid. De ervaringen voor de gasbehandeling en compressielocatie zijn meegenomen in het ontwerp voor de puttenlocatie.

In het ontwerp zijn de volgende maatregelen voor de Bergermeerlocatie reeds geïmplementeerd:

- Uit berekeningen is gebleken dat ondergrondse leidingen beduidend kleinere effectafstanden geven dan bovengrondse leidingen (verdiepte liggende leidingen kunnen geen horizontale jet fires veroorzaken, de effecten komen daardoor minder ver dan bovengrondse leidingen waarbij een uitstroming wel tot horizontale jet fires kan leiden). Daarom zijn gasvoerende leidingen zijn zoveel mogelijk verdiept in zandgevulde leidinggooten gelegd;
- Bij het ontwerp van het leidingsysteem is afweging gemaakt tussen een ontwerp met meer leidingen met kleinere diameter om zodoende de effectstanden terug te brengen en het gebruik van kleiner aantal leidingen met grotere diameter om zodoende de faalfrequentie terug te brengen. Een voorbeeld van deze afweging is het ontwerp van de pijpleiding, in het oorspronkelijke ontwerp werden twee leidingen voorzien, een van 30" en een van 40". Beide leidingen konden op hoge druk bedreven worden. In het huidige ontwerp zijn er twee leidingen van 30" voorzien. Hiermee is de maximale effectafstand gereduceerd terwijl de faalkans gelijk is gebleven, zodat het risico op grote afstand is gereduceerd;
- In het ontwerp is het aantal appendages (kleppen, flenzen, en dergelijke) zo klein mogelijk gehouden om zodoende de kans op lekkage te verkleinen. Voor ondergrondse leidingen met een grote lengte (>50m), de zogenaamde inter-unit leidingen, is dit vertaald in een lagere faalkans. Hierbij is de faalkans voor ondergrondse leidingen in een leidingstraat gebruikt. Dit is afgestemd met het Centrum voor Externe Veiligheid van het RIVM;
- Waar mogelijk zijn de leidingen tussen installatielijnen kort gehouden om zodoende de faalkans terug te brengen;
- De locatie van installatielijnen met een grote bijdrage aan het extern risico zijn zoveel mogelijk centraal op het inrichtingsterrein geplaatst;
- Het systeem is uitgelegd voor een druk hoger dan maximale operationele druk. Hiermee zit er meer speling in het ontwerp, waardoor het minder waarschijnlijk is dat een incident zal leiden tot een lek, en een uitstroming van gevaarlijke stoffen. In de kwantitatieve risicoanalyse is geen hier geen rekening mee gehouden. Er zijn dus geen lagere faalkansen gehanteerd vanwege de verzuwde ontwerpeisen;
- In het ontwerp van de systemen zijn veelvoorkomende faalmechanismen geanalyseerd en aanpassingen gemaakt om deze faalkansen terug te dringen. Hierbij kan gedacht worden aan:
  - Corrosie;
  - Erosie;
  - Trillingen;
  - Hoge temperaturen;
  - Hoge drukken;

Maatregelen zijn onder andere, materiaalselectie, corrosie-inhibitor, trillingsdempers, lay-out;

- Er is ontworpen conform alle geldende wetgeving, normen en standaard en "good engineering practice". Voorbeelden met betrekking tot veiligheid zijn:
  - Zonering op basis van de ATEX wetgeving. Door explosieveilig (EX) materieel toe te passen in de gezoneerde ruimtes wordt de ontstekingskans teruggebracht;
  - Veiligheidssystemen met een hoog betrouwbaarheidsniveau. De beveiligingssystemen voor de gasbehandeling- en compressie-inrichting zijn uitgelegd voor SIL niveau 3.



Figuur 3-4: Alternatieve locaties puttenterrein

## 4 BELEID MET BETREKKING TOT EXTERNE VEILIGHEID

### 4.1 Mijnbouwinstallatie en het Bevi

Mijnbouwinstallaties vallen formeel nog niet onder het Besluit externe veiligheid inrichtingen (Bevi). Er zijn echter wel aanwijzingen dat dit binnen onafzienbare tijd gaat gebeuren. Voorlopige deadline is om de BEVI-aanwijzing op 1 januari 2009 in te laten gaan. Op dat tijdstip zal er nog geen formeel vastgestelde rekenmethodiek beschikbaar zijn. Er kan dan dus nog geen formele toetsing aan de normen uit het Bevi BEVI plaatsvinden.

Ondanks dat mijnbouwinstallaties formeel nog niet onder het Bevi vallen is toch besloten om een risicoanalyse uit te voeren die zo dicht mogelijk tegen de rekenmethodiek van het BEVI aan ligt en de resultaten te toetsen aan de normen uit het Bevi. Dit om mogelijke toekomstige knelpunten in een vroeg stadium te identificeren. De harde normen uit het Bevi hebben geen juridische status, maar kunnen wel dienen als richtwaarden. Ze zullen dan ook als zodanig in deze rapportage worden gebruikt.

Aangezien de rekenmethodiek niet vastligt, is de uitkomst van de QRA niet per definitie houdbaar naar de toekomst toe. Om toch enige zekerheid te krijgen over de gebruikte methodiek is er overleg geweest met het Centrum voor Externe Veiligheid van het RIVM over de rekenmethodiek voor mijnbouwinstallaties. In dit overleg is getracht om vooruit te kijken naar wat de toekomstige methodiek wordt voor mijnbouwinstallaties. De methodiek voor BRZO-bedrijven was hierbij het vertrekpunt. Daarnaast is overleg geweest met de NOGEPA (Branchevereniging Nederlandse Olie en Gas Exploratie en Productie Associatie) werkgroep die de toekomstige methodiek binnen het Bevi voorbereid. Op basis van deze gesprekken, waaronder ook met het RIVM, is de technische notitie die in bijlage 3 is toegevoegd, opgesteld.

### 4.2 Besluit algemene regels milieu mijnbouw

Het wettelijk kader voor het uitvoeren van een exploratie- of productieboring naar olie of gas is neergelegd in de Mijnbouwwet die in januari 2003 van kracht is geworden.

De geluidvoorschriften (en andere milieuvoorschriften) zijn voor “gebruikelijke” boorsituaties beschreven in het Besluit van 3 april 2008, houdende regels betreffende het milieu met betrekking tot mobiele installaties en onderzeese installaties (Besluit algemene regels milieu mijnbouw, verder aangeduid met amvb Mijnbouw). Deze algemene regels zijn gebaseerd op een combinatie van de systematiek van de Mijnwet en de Wet milieubeheer.

Voor het aspect externe veiligheid is in het besluit het volgende opgenomen:

#### **Artikel 44**

De uitvoerder berekent het plaatsgebonden risico voorafgaand aan de boring, overeenkomstig het Besluit externe veiligheid inrichtingen.

#### **Artikel 45**

Het boren en het afwerken van de put zijn niet toegestaan indien zich een kwetsbare bestemming, zoals gedefinieerd in het Besluit externe veiligheid inrichtingen, binnen de contour van  $10^{-6}$ /jaar van de volgens artikel 44 berekende waarde van het plaatsgebonden risico bevindt.

Het besluit is niet van toepassing verklaard op activiteiten waarop een MER plicht rust. Voorts wordt voor de duur van een boring uitgegaan van een periode van 2 à 3 maanden. Voor het Bergermeerpofje is desalniettemin tevens getoetst aan het Besluit.

#### **4.3 Drie risicomaten voor het externe veiligheidsbeleid Bevi**

- Plaatsgebonden risico (PR): risico op een plaats buiten een inrichting, uitgedrukt als de kans per jaar dat een persoon die onafgebroken en onbeschermd op die plaats zou verblijven, overlijdt als rechtstreeks gevolg van een ongewoon voorval binnen die inrichting waarbij een gevaarlijke stof, gevaarlijke afvalstof of bestrijdingsmiddel betrokken is. Door middel van iso-risicocontouren, waarbij punten met gelijk risico worden verbonden tot een contour, worden deze risico's op een kaart inzichtelijk gemaakt. Voorheen werd het PR ook wel individueel risico (IR) genoemd;
- Groepsrisico (GR): cumulatieve kansen per jaar dat ten minste 10, 100 of 1000 personen overlijden als rechtstreeks gevolg van hun aanwezigheid in het invloedsgebied van een inrichting en een ongewoon voorval binnen die inrichting waarbij een gevaarlijke stof, gevaarlijke afvalstof of bestrijdingsmiddel betrokken is. Aan de hand van de feitelijke aanwezigheid van mensen kan de kans op een incident met meerdere doden inzichtelijk worden gemaakt. Hiervoor wordt de zogeheten fN-curve berekend waarin de kans op een aantal dodelijke slachtoffers wordt uitgezet tegen het aantal dodelijk getroffenen.
- Invloedsgebied: Het invloedsgebied kent geen eenduidige definitie. De juridische definitie is het gebied waarin het groepsrisico moet worden verantwoord. De technische definitie is het 1% letaliteit effect gebied (ofwel het gebied waarin het nog aannemelijk is dat mensen dodelijk getroffen kunnen worden).

#### **4.4 Normering Plaatsgebonden Risico (PR)**

Het plaatsgebonden risico (PR) is een maat voor het overlijdensrisico op een bepaalde plaats. Het is hierbij niet van belang of er op deze plaats daadwerkelijk een persoon aanwezig is. Bij het PR gaat het om de kans per jaar dat een gemiddelde persoon op een bepaalde plaats in de omgeving van een inrichting komt te overlijden als gevolg van een incident met gevaarlijke stoffen in deze inrichting, ervan uitgaande dat deze persoon ombeschermd en permanent op deze plaats aanwezig is.

Bij de beoordeling van het PR wordt onderscheid gemaakt tussen kwetsbare en beperkt kwetsbare objecten. Onder de kwetsbare objecten vallen in eerste instantie objecten waar mensen doorgaans dag en nacht verblijven. Daarnaast verdienen mensen die vanwege hun fysische of psychische gesteldheid een bijzondere bescherming, hierbij moet gedacht worden aan kinderen, ouderen en (psychisch) zieken. Dit maakt scholen, bejaardenhuizen en ziekenhuizen dus ook tot kwetsbare objecten. Daarnaast kunnen objecten vanwege de hoge infrastructurele waarde onder de kwetsbare objecten vallen. Hierbij moet gedacht worden aan bijvoorbeeld telecommunicatiecentrales. In meer algemene zin is het onderscheid tussen kwetsbare en beperkt kwetsbare objecten gebaseerd op het aantal en de verblijftijd van groepen mensen en de aanwezigheid van adequate vluchtwegen.

Voor (geprojecteerd<sup>1</sup>) kwetsbare en beperkt kwetsbare objecten gelden in het Bevi de volgende grenswaarden met betrekking tot nieuwe situaties:

**(Geprojecteerd) kwetsbare objecten:**

- PR hoger dan  $10^{-5}$  per jaar: niet toegestaan
- PR tussen  $10^{-5}$  en  $10^{-6}$  per jaar: niet toegestaan
- PR lager dan  $10^{-6}$  per jaar: toegestaan

**(Geprojecteerd) beperkt kwetsbare objecten:**

- PR hoger dan  $10^{-5}$  per jaar: in beginsel niet toegestaan
- PR tussen  $10^{-5}$  en  $10^{-6}$  per jaar: in beginsel niet toegestaan
- PR lager dan  $10^{-6}$  per jaar: toegestaan

## 4.5 Groepsrisico (GR)

Het Groepsrisico kent in het Bevi geen strikte normering. Er geldt wel een oriënterende waarde, die recht doet aan de risicoaversie (hoe groter de ramp, hoe lager het acceptabele risico).

De oriënterende waarde is te beschouwen als een soort thermometer. Deze waarde geeft een eerste inzicht in het niveau van het risico. Om het groepsrisico te beoordelen moet het bevoegd gezag daarnaast aangeven hoe:

- De bevolkingsdichtheid in het invloedsgebied van de inrichting (begrensd door 1% letaliteit) wordt beoordeeld en hoe deze eventueel wijzigt in de toekomst;
- Mogelijke maatregelen van invloed zijn op het groepsrisico en op welke wijze deze zijn meegenomen in het onderzoek;
- Rekening is gehouden met aspecten als rampenbestrijding, zelfredzaamheid van omwonenden en beheersbaarheid bij een eventuele calamiteit.

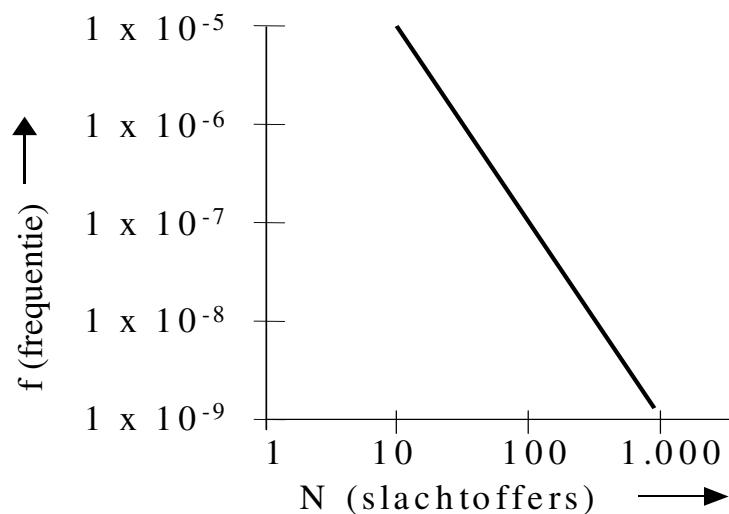
Dit is de zogenaamde verantwoordingsplicht van het groepsrisico. Dit is nieuw sinds het Bevil.

Het kan dus voorkomen dat de oriënterende waarde wordt overschreden, maar dat een vergunning wel kan worden verleend. Wel moet dan door het bevoegd gezag invulling worden gegeven aan de verantwoordingsplicht. Bij overschrijding van de oriënterende waarde zal de weging van de andere verantwoordingsaspecten zwaarder zijn.

In de onderstaande figuur is de oriënterende waarde weergegeven.

---

<sup>1</sup> Geprojecteerde objecten zijn objecten die gepland zijn geplaatst of gerealiseerd te worden.



**Figuur 4-1: Oriënterende waarde voor het groepsrisico volgens Bevi**

## 5 SUBSELECTIE

Voor deze QRA voor het puttenterrein is geen subselectie conform handleiding risicoberekeningen BEVI v3.0 uitgevoerd. In plaats daarvan worden een aantal systemen uitgesloten, waarvan op basis van hun karakteristieken mag worden verwacht dat ze geen bijdrage leveren aan de risico's voor de externe veiligheid. Het niet opnemen van deze installatieonderdelen is indien noodzakelijk onderbouwd op basis van effectberekeningen.

Het betreft hier o.a de volgende installatieliedelen:

- Diesel;
- Drains;
- Leidingen met een kleine diameter ;
- Methanol opslag en verlading.

NB: Leidingen met een diameter kleiner dan 10" zijn nog niet in het (FEED)ontwerp meegenomen. De risico's van deze leidingen kunnen daarom niet worden berekend.

De volgende installatieonderdelen zijn verder uitgewerkt in de QRA. In het volgende hoofdstuk wordt de wijze van modellering per installatieonderdeel toegelicht:

1. De pijpleiding (voor zover op locatie);
2. De headers;
3. De flowleidingen;
4. De putten.

De methanolopslag en verlading is niet meegenomen in deze QRA omdat de risico's hiervan niet relevant zijn voor de PR-contouren en het groepsrisico. Dit wordt nader toegelicht in bijlage 6.

## 6 KWANTITATIEVE RISICOANALYSE

Dit hoofdstuk beschrijft de wijze van modellering van de in hoofdstuk 6 geselecteerde installatieonderdelen. In paragraaf 7.1 zijn enkele algemene modelleringsaspecten opgenomen. In paragraaf 7.2 wordt de modellering voor de voorkeurslocatie beschreven. In paragraaf 7.3 is aangegeven hoe de modellering van het alternatief aan de Bergerweg is gemodelleerd. Ten slot is de QRA voor boringen voor de achtereenvolgende jaren waarin wordt geboord opgenomen in paragraaf 7.4.

Voor het uitvoeren van een QRA voor een mijnbouwinstallatie is nog geen methodiek vastgesteld. De uitgevoerde risicoanalyse is gebaseerd aan de hand van de technische notitie welke aan dit rapport is toegevoegd in bijlage 3. De technische notitie sluit zoveel mogelijk aan bij de Handleiding Risicoberekeningen Bevi (module C, hoofdstuk 3).

### 6.1 Algemene modelleringsaspecten

#### 6.1.1 Operationele fasen

Voor de modellering van de QRA voor het puttenterrein wordt onderscheid gemaakt tussen twee operationele fasen; gasinjectie en gasproductie. In deze QRA wordt er voor de risicoberekeningen vanuitgegaan dat er gedurende een jaar worden twee volledige cycli worden gedraaid. Dit is een worst case aannname. Dit houdt in twee maal 103 dagen gasinjectie en twee maal 75 dagen gasproductie. In Safeti<sup>NL</sup> zijn deze twee operationele fasen met bijbehorende tijdsduur gemodelleerd door de frequenties voor de specifieke scenario's met de bijbehorende tijdsfractie van de operationele fase te vermenigvuldigen.

Gedurende de gasinjectiefase en de productiefase zal de druk in het reservoir veranderen. Voor de operationele fasen zijn de volgende cases te onderscheiden:

##### *Injectie*

- Maximale injectie bij lage reservoirdruk
- Intermediaire injectie bij intermediaire reservoirdruk
- Minimale injectie bij hoge reservoirdruk

##### *Productie*

- Maximale productie bij hoge reservoirdruk
- Intermediaire productie bij intermediaire reservoirdruk
- Minimale productie bij lage reservoirdruk

Voor de modellering van de QRA is uitgegaan van de cases waarbij de druk in het systeem het hoogst is. Voor de injectiefase is dat de case voor minimale injectie bij hoge reservoirdruk. Voor de productiefase is dat de case voor maximale productie bij hoge reservoirdruk. Dit is een conservatieve aanname. Bij de uitwerking van de modellering is per installatiedeel de geldende druk en temperatuur gegeven.

#### 6.1.2 Gasuitstroming

Bij falen van een hoge druk gassysteem neemt de druk binnen enkele seconden zeer sterk af, waardoor ook de uitstrooming sterk terugloopt. Het is dus niet realistisch om voor de faalscenario's van de installatie het initiële uitstroomdebiet als basis te gebruiken voor de effectberekeningen. Om het effect van de snel

dalende druk en uitstroming mee te nemen is de uitstroming van gas gemiddeld over de eerste 20 seconden.

### 6.1.3 Gevaarlijke stoffen

De brandbare stof in de installatieonderdelen is GTS gas, een mengsel van gasvormige koolwaterstoffen met als belangrijkste component methaan. In de modellering in Safeti<sup>NL</sup> is er voor gekozen om methaan te gebruiken als modelstof omdat methaan maatgevend is voor het risico. In de volgende paragrafen zal dan ook consequent methaan worden genoemd als brandbare stof in deze installatieliedelen.

## 6.2 Risicomodellering voorkeursalternatief BGM specifieke installatieonderdelen

### 6.2.1 Pijpleiding

De pijpleiding komt van de gasbehandeling- en compressie locatie BKM. In feite is het een hele grote ringleiding van twee maal 8,3 km lengte. De leiding ligt geheel ondergronds.

De pijpleiding is beschouwd als een interunit leiding. Hiervoor worden de scenario's van transportleidingen in een leidingstraat gehanteerd.

Nr.	Scenario	Frequentie
1	Breuk van de leiding	$7 \times 10^{-9}$ /jaar /meter
2	Lek met een effectieve diameter van 20mm	$6,3 \times 10^{-8}$ /jaar /meter

Tabel 6-1: Faalscenario's en bijbehorende kansen voor ondergrondse leidingen langer dan 50 m

Bij leidingbreuk of lekkage van een ondergrondse leiding zal het gas verticaal uitstromen. Voor de modellering is aangenomen dat gas aangevoerd van beide zijden van de breuk als één stroom vrij zal komen. Het uitstroomdebiet is bepaald door eenzijdige uitstroming in Safeti<sup>NL</sup> te berekenen, het berekende debiet te verdubbelen en deze gasuitstroming als user defined source in Safeti<sup>NL</sup> in te voeren. Het uitstroomdebiet is bepaald met het long pipeline model.

De pijpleiding is in Safeti<sup>NL</sup> ingevoerd als route, met een faalfrequentie gelijk aan de som van frequenties van bovenstaande faalscenario's. Elke route is gekoppeld aan twee specifieke scenario's, waarbij beide scenario met een waarschijnlijkheidsfactor worden vermenigvuldigd (0,1 voor breuk en 0,9 voor lek) om tot de juiste faalfrequenties te komen.

Afhankelijk van de lengte van de route wordt een aantal punten gekozen (op een maximaal interval van 50 meter) waarop de faalscenario's doorgerekend worden. Op deze wijze wordt recht gedaan aan de mogelijkheid van falen van pijpleiding op elk willekeurig punt van de route.

In de onderstaande tabel zijn de relevante procesparameters opgegeven voor de injectie en productie fasen:

	Diameter	Druk	Temperatuur
	[inch]	[barg]	[C]
Injectie	30	125	60
Productie	30	75	65

Tabel 6-2: Procescondities pijpleiding

Voor de leidingstrekkingen tussen de inrichtingen is door Gasunie een QRA opgesteld met het voor gasleidingen toegestane model PIPESAFE (door de overheid goedgekeurd software pakket voor het uitvoeren van risicoberekeningen van aardgastransport). Dit rapport vormt als achtergronddocument onderdeel van het MER. Gasunie gaat in haar QRA's voor pijpleidingen uit van de ontwerpdruk, in dit geval 160 bar. Voor de QRA voor inrichtingen, in dit geval de puttenlocatie, wordt de actuele, operationele druk gebruikt (conform de Handleiding Risicoberekeningen) van 125 bar bij injectie.

## 6.2.2 De headers

Vanaf de pijpleiding takken vier headers af naar de verschillende putten. In figuur 4.3 is de locatie van deze headers weergegeven. De headers zijn langer dan 50 meter, lopen ondergronds en zijn net als de pijpleiding gemodelleerd als inter-unit leidingen.

Hiervoor worden de scenario's van transportleidingen in een leidingstraat gehanteerd.

Nr.	Scenario	Frequentie
1	Breuk van de leiding	$7 \times 10^{-9}$ /jaar /meter
2	Lek met een effectieve diameter van 20mm	$6,3 \times 10^{-8}$ /jaar /meter

Tabel 6-3: Faalscenario's en bijbehorende kansen voor ondergrondse leidingen langer dan 50 m

De modellering is voor deze headers nagenoeg hetzelfde als voor de pijpleiding. Bij leidingbreuk of lekkage van een ondergrondse leiding zal het gas verticaal uitstromen. Voor de modellering van een leidingbreuk is aangenomen dat gas aangevoerd van beide zijden van de breuk als één stroom vrij zal komen. In tegenstelling tot de modellering voor de pijpleiding is de uitstroming bij breuk verschillend voor de twee verschillende zijden van de breuk. Aan de ene zijde van de breuk is de header gekoppeld aan de pijpleiding, aan de andere zijde is de pijpleiding gekoppeld aan de gasputten. Deze twee zijden worden afzonderlijk beschouwd en de twee debieten worden bij elkaar opgeteld.

Uitstroming vanuit de zijde die is aangesloten op de pijpleiding:

Het uitstroomdebiet is bepaald door eenzijdige uitstroming in Safeti<sup>NL</sup> te berekenen. Hiervoor is het long pipeline model gebruikt met lengte en lengte tot breuk gelijk aan 8,3 km.

Uitstroming vanuit de zijde die is aangesloten op de putten:

Het uitstroomdebiet is bepaald door per put de maximale uitstroming tijdens een blow out te berekenen (voor de fase die wordt onderzocht; productie of injectie). De uitstromingen van de verschillende putten is opgeteld<sup>2</sup>. Zie voor de berekening van het blow out debiet bij de modellering van de putten.

De pijpleiding is in Safeti<sup>NL</sup> ingevoerd als route, op eenzelfde wijze als voor de pijpleiding.

In de onderstaande tabel zijn de relevante procesparameters opgegeven voor de injectie en productie fasen:

	Diameter	Druk	Temperatuur
	[inch]	[barg]	[C]

<sup>2</sup> Feitelijk is dit een worst case inschatting, omdat deze situatie niet voor de gehele header geldt. Wanneer er een breuk is op een locatie tussen twee gasputten, kan vanuit een zijde maximaal de hoeveelheid van de achterliggende putten uitstromen, wat minder is dan van alle putten samen, terwijl de uitstroming vanuit de pijpleiding het maximum is vanuit de andere zijde

Injectie	30	125	60
Productie	30	75	65

**Tabel 6-4: Procescondities headers**

### 6.2.3 De flowleidingen

Iedere put is met zijn eigen flowleiding aangesloten op een header. De flowleidingen lopen ondergronds en zijn kleiner dan 50 meter. Voor ondergrondse leidingen korter dan 50 meter gelden de volgende faalscenario's en bijbehorende frequenties:

Nr.	Scenario	Frequentie
1	Breuk van de leiding	$5 \times 10^{-7}$ /jaar /meter
2	Lek met een effectieve diameter van 10% van de diameter	$1,5 \times 10^{-6}$ /jaar /meter

**Tabel 6-5: Faalscenario's en bijbehorende kansen voor ondergrondse leidingen korter dan 50 meter**

Bij leidingbreuk of lekkage van een ondergrondse leiding zal het gas verticaal uitstromen. Voor de modellering is aangenomen dat gas aangevoerd van beide zijden van de breuk als één stroom vrij zal komen. Het uitstroomdebiet voor breuk is bepaald op een vergelijkbare wijze als de uitstroming voor de headers.

Uitstroming vanuit de zijde die is aangesloten op de header:

Het uitstroomdebiet is bepaald door eenzijdige uitstroming in Safeti<sup>NL</sup> te berekenen. Hiervoor is het line rupture model gebruikt met een lengte van 10 m.

Uitstroming vanuit de zijde die is aangesloten op de put:

Tijdens injectie is de druk in het leidingsysteem gelijk aan de injectiedruk. Voor het uitstroomdebiet is het blow out debiet genomen van de betreffende put (zie de modellering van de putten).

Tijdens productie wordt het gas direct na het puttenhoofd gereduceerd tot ca. 75 barg. In dit geval is het uitstroomdebiet berekend met het model line rupture en een druk van 75barg.

De beide uitstromingen zijn bij elkaar opgeteld en als user defined source ingevuld in Safeti<sup>NL</sup>.

De flowleidingen zijn in Safeti<sup>NL</sup> ingevoerd als route, met een faalfrequentie gelijk aan de som van frequenties van bovenstaande faalscenario's. Elke route is gekoppeld aan twee specifieke scenario's, waarbij beide scenario met een waarschijnlijkheidsfactor worden vermenigvuldigd (0,25 voor breuk en 0,75 voor lek) om tot de juiste faalfrequenties te komen.

Afhankelijk van de lengte van de route wordt een aantal punten gekozen (op een maximaal interval van 50 meter) waarop de faalscenario's doorgerekend worden. Op deze wijze wordt recht gedaan aan de mogelijkheid van falen van pijpleiding op elk willekeurig punt van de route.

In de onderstaande tabel zijn de relevante procesparameters opgegeven voor de injectie en productie fasen:

	Diameter	Druk	Temperatuur
	[inch]	[barg]	[C]
Injectie	12	125	60
Productie	12	75	65

**Tabel 6-6: Procescondities flowleidingen**

## 6.2.4 De putten

Vanaf de flowleiding wordt via het zogenaamde puttenhoofd (well head) en een lange ondergrondse leiding (de tubing) gas geïnjecteerd in het reservoir. Voor een gedetailleerde beschrijving van de werking van een put wordt verwezen naar het MER.

Op de BGM zijn een 6-tal bestaande putten en zullen voor het BGS project 14 nieuwe putten worden bijgeboord. Daarnaast is er nog ruimte voor 6 additionele putten waarvoor de putkelders wel worden aangelegd, maar die inde toekomst zullen worden geboord. In de huidige QRA zijn deze 6 putten niet meegenomen.

### **Blow out:**

Een ongewenste gebeurtenis bij een put, waarbij gas op een ongecontroleerde wijze uit de put stroomt wordt een blow out genoemd. NB: Het gas hoeft hierbij niet buiten de installatie te treden, het kan ook weglekken in de annulus (secondary containment) of in de flowleiding. Voor deze QRA wordt er van uitgegaan dat het gas altijd buiten de installatie treedt, dit is dus een worst case aannname.

### **Tubing blow out versus casing blowout:**

Wanneer tijdens een blow out het gas via de productietubing naar buiten treedt wordt van een tubing blow out gesproken. Komt het gas via de casing naar buiten, dan hebben we het over een casing blow out.

### **Full bore versus lekkage:**

Wanneer het lek ter grootte is van de diameter van de leiding dan wordt over een full bore rupture (guillotine breuk) gesproken, een kleiner gat wordt aangeduid met lekkage.

### **Uitstroomrichting:**

Bij een full bore rupture is altijd sprake van een vertikale uitstroming. Bij een lekkage is het mogelijk dat de uitstroming horizontaal zal zijn. Voor BGM geldt dat alle well heads onder het maaiveld in putkelders zijn ondergebracht. De uitstroming is daarom in alle gevallen als verticaal gemodelleerd.

Blow outs kunnen voorkomen tijdens normale injectie en productieactiviteiten, maar hebben een verhoogde kans op optreden tijdens werkzaamheden. Voor de putten is een algemene inschatting gemaakt van de hoeveelheid werkzaamheden die verwacht worden tijdens de komende 30 jaar.

In de onderstaande tabel zijn een aantal eigenschappen gegeven die voor de QRA van belang zijn. Voor een aantal putten is geen data ingevuld omdat deze nog niet geboord zullen worden. Er is echter al wel ruimte (putkelders) voor gereserveerd op het terrein:

Putnr			Productie		Injectie		Verwachte werkzaamheden			
	Tubing	Casing	Druk	Temp	Druk	Temp	Workover	Wireline	Snubbing	Coiled tubing
	[inch]	[inch]	[barg]	[C]	[barg]	[C]	[#/jaar]	[#/jaar]	[#/jaar]	[#/jaar]

Putnr			Productie		Injectie		Verwachte werkzaamheden			
			Tubing	Casing	Druk	Temp	Druk	Temp	Workover	Wireline
			[inch]	[inch]	[barg]	[C]	[barg]	[C]	[#/jaar]	[#/jaar]
Put 1	-	-	-	-	-	-	-	-	-	-
Put 2	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 3	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 4	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 5	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 6	-	-	-	-	-	-	-	-	-	-
Put 7	-	-	-	-	-	-	-	-	-	-
Put 8	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 9	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 10	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 11	-	-	-	-	-	-	-	-	-	-
Put 12	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 13	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 14	-	-	-	-	-	-	-	-	-	-
Put 15	6,625	12,347	130	65	130	60	0.005	0.2	0	0
Put 16	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 17	-	-	-	-	-	-	-	-	-	-
Put 18	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 19	8,681	12,347	130	65	130	60	0.005	0.2	0	0
Put 20	8,681	12,347	130	65	130	60	0.005	0.2	0	0
BGM 1	4,778	6,276	130	65	130	60	0.005	0.2	0.1	0
BGM 2	4,778	6,276	130	65	130	60	0.005	0.2	0.1	0
BGM 5	4,408	6,184	130	65	130	60	0.005	0.2	0.1	0
BGM 6a	4,408	6,184	130	65	130	60	0.005	0.2	0.1	0
BGM 7	4,778	6,276	130	65	130	60	0.005	0.2	0.1	0
BGM 8	4,778	8,535	130	65	130	60	0.005	0.2	0.1	0

**Tabel 6-7: Procescondities putten**

De full bore blow outdebieten zijn berekend met het long pipeline model in Safeti<sup>NL</sup>. Voor de lengte tot breuk en de lengte van de leiding is eenzelfde afstand aangehouden van 3 km (hierdoor wordt een eenzijdige uitstroming berekend). Het gat is gemodelleerd met het gatmodel.

Voor blow out gelden de volgende scenario's en bijbehorende frequenties:

Nr.	Scenario	Type	Frequentie
1	Injectie / productie blowout	Tubing blowout	$4,0 \times 10^{-5}$ /jaar
2	Workover blowout	Casing blowout	$9,8 \times 10^{-4}$ /operation
3	Wireline blowout	Tubing blowout	$2,92 \times 10^{-5}$ /operation
4	Coiled tubing blowout	Tubing blowout	$4,8 \times 10^{-4}$ /operation
5	Snubbing blowout	Tubing blowout	$6,9 \times 10^{-4}$ /operation

**Tabel 6-8: Faalscenario's en bijbehorende kansen voor blowout**

De verdeling over gatgrootte en richting is in de onderstaande tabel gegeven:

Gatgrootte \ Richting	Vertikaal	Horizontaal	Totaal
-----------------------	-----------	-------------	--------

<b>Full bore</b>	40%	0%	40%
<b>Lek</b>	10%	50% *	60%
<b>Totaal</b>	50%	50%	100%

**Tabel 6-9: Lekverdeling en uitstroomrichting blowout**

\* In afwijking van de bovenstaande tabel geldt voor BGM dat vanwege de putkelders alle uitstromingen verticaal zijn gemodelleerd.

### 6.3 Risicomodellering alternatief Bergerweg Noord

De risicomodellering voor het alternatief Bergerweg Noord is identiek aan die van het voorkeursalternatief BGM. Het enige verschil is de locatie en het feit dat er niet uit kan worden gegaan van 6 bestaande putten, dus extra bijgeboord moeten worden.

### 6.4 Risicomodellering boringen BGM Voorkeurslocatie

In deze paragraaf worden de risico's ten gevolge van boren en gelijktijdige injectie beschreven.

#### 6.4.1 Algemeen

Bij de start van de werkzaamheden is er een gasveld op lage druk (ca 9 barg) en zijn er 6 bestaande gasputten. In drie achtereenvolgende jaren worden er steeds een aantal gasputten bijgeboord en wordt er "cushion gas" in het veld geïnjecteerd om het op druk te brengen. Het injecteren gebeurd via de putten die het jaar daarvoor zijn geboord.

Het boorschema en injectieschema is in onderstaande tabel weergegeven:

Putnr	Jaar 1		Jaar 2		Jaar 3	
	Boren	Injectie	Boren	Injectie	Boren	Injectie
Put 1						
Put 2		X			X	
Put 3	X				X	
Put 4	X				X	
Put 5	X				X	
Put 6						
Put 7						
Put 8				X		
Put 9				X		
Put 10				X		
Put 11						
Put 12				X		
Put 13				X		
Put 14						
Put 15	X		X		X	

Putnr	Jaar 1		Jaar 2		Jaar 3	
	Boren	Injectie	Boren	Injectie	Boren	Injectie
Put 16	X			X		X
Put 17						
Put 18	X			X		X
Put 19	X			X		X
Put 20	X			X		X
BGM 1		X		X		X
BGM 2		X		X		X
BGM 5		X		X		X
BGM 6a		X		X		X
BGM 7		X		X		X
BGM 8		X		X		X

**Tabel 6-10: Boor- en injectieschema**

Tijdens jaar 1 wordt er met 60 barg geïnjecteerd vanuit het GasUnie netwerk (free flow). Vanaf jaar 2 wordt er via de compressie op BKM geïnjecteerd en is de injectiedruk ca. 125 barg.

Bij de start van de injectie in jaar 1 is het veld op ca 9 barg. Na een jaar injectie is de druk in het reservoir opgelopen tot ca. 35 barg. Aan het eind van jaar twee zal de druk 65 barg bedragen om uiteindelijk na 3 jaar te zijn opgelopen tot 88 barg.

#### 6.4.2 QRA modellering

De modellering is grotendeels gelijk aan die van de voorkeurslocatie in paragraaf 6.2. Echter in tegenstelling tot de modellering van de normale operatie QRA die is beschreven in paragraaf 6.2 wordt voor de boringen QRA aangenomen dat er geen productiefase is. Er is dus alleen een injectiefase. Verder is in de opeenvolgende jaren dat er geboord wordt nog niet alle equipment aanwezig en/of in gebruik.

In de onderstaande tabel is beschreven welke equipment wordt meegenomen in de QRA:

	Jaar 1	Jaar 2	Jaar 3
Pijpleiding	X	X	X
Header West	X	X	X
Header Oost	-	X	X
Header Noordwest	-	-	X
Header Zuidwest	-	-	-
Putten BGM 1, 2, 5, 6a, 7 en 8	X	X	X
Putten 15, 16, 18, 19 en 20	Boren	X	X
Putten 2, 3, 4 en 5	-	Boren	X
Putten 8, 9, 10, 12 en 13	-	-	Boren

**Tabel 6-11: Gemodelleerde equipment in opeenvolgende boorjaren**

Voor boren gelden andere blow out scenario's en frequenties dan voor injectie en/of productie. In de onderstaande tabel zijn de scenario's voor boren opgegeven:

Nr.	Scenario	Type	Frequentie
-----	----------	------	------------

1	Drilling blowout	Casing blowout	$6,78 \times 10^{-4}$ /operation
2	Completion blowout	Casing blowout	$6,0 \times 10^{-4}$ /operation

**Tabel 6-12: Scenario's en faalkansen blowout tijdens boren**

De verdeling over gatgrootte en richting is gelijk aan die voor normal operation en is in de onderstaande tabel gegeven:

Gatgrootte \ Richting	Vertikaal	Horizontaal	Totaal
<b>Full bore</b>	40%	0%	40%
<b>Lek</b>	10%	50% *	60%
<b>Totaal</b>	50%	50%	100%

**Tabel 6-13: Lekverdeling en uitstroomrichting blow out**

\* In afwijking van de bovenstaande tabel geldt voor BGM dat vanwege de putkelders alle uitstromingen verticaal zijn gemodelleerd.

## 7 MODELLERINGSPARAMETERS

### 7.1 Gebruikte programmatuur

De vervolgsenario's, uitstroming, plasvorming en verdamping, dispersie etc. zijn gemodelleerd met behulp van het softwarepakket Safeti<sup>NL</sup> (versie 6.53.1). Ook het plaatsgebonden en het groepsrisico en de bijbehorende contouren en grafieken zijn met behulp van deze software berekend en/of gemaakt.

### 7.2 Ontstekingskansen

Voor alle scenario's is de stofspecifieke ontstekingskans gebruikt zoals gegeven in Safeti<sup>NL</sup>. Er zijn naast de gemodelleerde bevolking geen specifieke ontstekingsbronnen gemodelleerd.

### 7.3 Ruwheidslengte

De standaard ruwheidslengte is aangehouden.

### 7.4 Meteorologie

Voor het modelleren van de meteorologische omstandigheden voor deze inrichting is gebruik gemaakt van de in Safeti<sup>NL</sup> beschikbare meteorologische data van vliegveld Schiphol.

## 7.5 Bevolkingsgegevens

De bevolkingsgegevens zijn geïnventariseerd binnen de invloedsgebieden van de inrichtingen. Hiertoe is in eerste instantie een inschatting gemaakt van de maximale 1% letaliteit effectafstand. Vervolgens is onderzocht welke gemeenten binnen deze effectafstand liggen. Deze gemeenten (Alkmaar, Schermer, Heiloo en Bergen) zijn benaderd met de vraag om bevolkingsgegevens aan te leveren in het kader van Bevi. Hierbij zaten zowel de actuele bevolkingsgegevens als de bevolkingsgegevens ten gevolge van geprojecteerde bestemmingen. Ook de kwetsbare bestemmingen zijn specifiek onderzocht. In bijlage 4 wordt uitgelegd hoe dit proces in zijn werk is gegaan. De ontvangen bevolkingsgegevens (zie bijlage 4) zijn verwerkt tot een invoer in Safeti<sup>NL</sup>.

## 8 RESULTATEN EN CONCLUSIES

### 8.1 Voorkeurslocatie BGM

#### 8.1.1 Invloedsgebied

Het invloedsgebied van het voorkeursalternatief van BGM wordt bepaald door de afstand waarop de LOC scenario's nog 1% letaliteit tot gevolg hebben. Deze afstand ligt op ca. 450 meter van de inrichtingsgrens en wordt bepaald door het "full bore rupture" van de headers en de pipeline.

#### 8.1.2 Plaatsgebonden Risico

In bijlage 1 worden de iso-risicocontouren die het plaatsgebonden risico (PR) weergeven gepresenteerd. Uit deze figuur is af te leiden dat de  $10^{-6}$  PR-contour – de grenswaarde met betrekking tot het PR – in zijn geheel net buiten de inrichtingsgrens ligt. Binnen de  $10^{-6}$  PR-contour bevinden zich geen (beperkt) kwetsbare objecten.

Aan de voorwaarden van het besluit algemene regels mijnbouw wordt voldaan

#### *Maatgevende scenario's*

Met behulp van "risk ranking points" kan in Safeti<sup>NL</sup> bepaald worden welke specifieke scenario's (zoals beschreven in hoofdstuk 6) op een geselecteerde locatie maatgevend zijn voor het PR. Voor deze analyse zijn zes punten gekozen. Vier op de hoekpunten van de inrichting en twee op dichtbijzijnde objecten. De "risk ranking points" zijn weergegeven in Figuur 8.1.



Figuur 8-1: Risk Ranking Points

De risk ranking punten zijn de rode punten. De vier punten op de hoeken van de site zijn gemakkelijk te herkennen. Daarnaast ligt er een punt ca. 150 meter ten oosten van de inrichting en een punt ca 200 meter ten zuidwesten van de inrichting.

Uit deze risk ranking van het plaatsgebonden risico komen de volgende scenario's naar voren als maatgevend (per risk ranking punt zijn de 3 belangrijkste gegeven:

Punt	Scenario	Bijdrage aan risico (%)
Dichtstbijzijnde huis ten oosten van de inrichting	1. 30" headers Oost	30.67%
	2. Pijpleiding	20.09%
	3. 30" headers West	17.87%
Dichtstbijzijnde huis ten zuidwesten van de inrichting	1. 30" headers West	39.64%
	2. 30" headers Noord-West	25.93%
	3. 30" headers Zuid-West	18.92%
Hoekpunt Noord	1. Pijpleiding	13.61%
	2. 30" headers West	10.25%
	3. 30" headers Oost	10.08%
Hoekpunt Oost	1. Well 20 tubing blowout	11.29%
	2. Well 19 tubing blowout	8.77%
	3. Flowline well 20	7.00%
Hoekpunt Zuid	1. Well 9 tubing blowout	6.66%
	2. Well 10 tubing blowout	5.08%
	3. Flowline well 8	4.87%
Hoekpunt West	1. Flowline well 2	5.85%
	2. Flowline well 3	5.51%
	3. 30" headers West	5.39%

Tabel 8-1: Top drie maatgevende scenario's

Voor een volledig overzicht van de bijdrage van de verschillende scenario's op het risico wordt verwezen naar het "risk ranking report" in bijlage 7.

### 8.1.3 Groepsrisico

Uit de Fn-curve in bijlage 2 is direct af te leiden dat de oriëntatiewaarde, zoals beschreven in paragraaf 4.5, niet wordt overschreden.

## **8.2 Alternatief Bergerweg Noord**

### **8.2.1 Invloedsgebied**

De afstand van de terreingrens tot aan het invloedsgebied is gelijk aan dat van BGM, namelijk ca. 450 m.

### **8.2.2 Plaatsgebonden risico**

In bijlage 1 is het plaatsgebonden van Bergerweg Noord opgenomen. Binnen de  $10^{-6}$  PR-contour bevinden zich geen (beperkt) kwetsbare objecten. Er wordt voldaan aan het besluit algemene regels milieu mijnbouw.

Voor het alternatief Bergermeer Noord is geen risk ranking uitgevoerd. De risk ranking voor de alternatieve locatie is exact gelijk aan de risk ranking voor de voorkeurslocatie indien de punten op dezelfde relatieve afstanden liggen, waar hier van uit wordt gegaan. Gezien de identieke modellering zal de relatieve bijdrage van de scenario's aan het PR ook identiek zijn op gelijke afstanden. De risico's ten aanzien van de 6 extra putten zijn vergelijkbaar met de risico's in het 3<sup>e</sup> jaar boren op de voorkeurslocatie (zie paragraaf 8.3, waarbij de belangrijkste contouren zullen zijn geцentreerd rond de boorlocatie van de additionele putten).

### **8.2.3 Groepsrisico**

Uit de Fn-curve in bijlage 2 is direct af te leiden dat de oriëntatiewaarde, zoals beschreven in paragraaf 4.5, niet wordt overschreden.

## **8.3 Boringen in de drie opeenvolgende jaren**

### **8.3.1 Invloedsgebied**

De afstand van de terreingrens tot aan het invloedsgebied is voor jaar 1 ca. 310 m. In de twee daarop volgende jaren is het invloedsgebied ca. 450 m. Het verschil wordt verklaard door de hogere injectiedruk in jaar 2 en 3.

### **8.3.2 Plaatsgebonden risico boringen**

In bijlage 1 is het plaatsgebonden risico van de boringen jaar 1, 2 en 3 opgenomen. Voor alle drie de jaren geldt dat binnen de  $10^{-6}$  PR-contour zich geen (beperkt) kwetsbare objecten bevinden. Er wordt voldaan aan het besluit algemene regels mijnbouw milieu.

Voor het alternatief Boringen is geen risk ranking uitgevoerd. De risk ranking zal exact gelijk zijn aan de risk ranking voor de voorkeurslocatie indien de punten op dezelfde relatieve afstanden liggen.

Voor het alternatief op de Bergerweg Noord moet vanwege de niet reeds bestaande putten uitgegaan worden van 4 boorjaren en 20 nieuwe putten: 6 nieuwe putten in jaar 1, 5 in jaar 2, 4 in jaar 3 en 5 in jaar 4.

In jaar 1 zullen er alleen putten worden geboord, maar kan nog niet worden geinjecteerd. De risico's zullen kleiner zijn dan in jaar 1 boringen op BGM Voorkeur.

Jaar 2 zal vergelijkbaar zijn met jaar 1 op BGM Voorkeur

Jaar 3 zal vergelijkbaar zijn met jaar 2 op BGM Voorkeur

Jaar 4 zal vergelijkbaar zijn met jaar 3 op BGM voorkeur. De maximale risicoafstand wordt bereikt in het laatste boorjaar (bij een hoge reservoir druk). De  $10^{-6}$  contour is dan gelegen op circa 100 meter van de terreingrens. Uitgegaan wordt van de situatie waarbij de boringen het dichtst bij de woning (op 100 meter afstand aan de westzijde) het eerst worden uitgevoerd omdat op dat moment de reservoirdruk nog laag is en de  $10^{-6}$  contour dus geen 100 meter buiten de inrichting zal treden. In dat geval wordt voldaan aan de Bevi grenswaarde en het Besluit algemene regels milieu mijnbouw.

### 8.3.3 Groepsrisico boringen

Het groepsrisico voor de boringen jaar 1, 2 en 3 wordt weergeven in de Fn-curve in bijlage 2. Hieruit is af te leiden dat de oriëntatiewaarde, zoals beschreven in paragraaf 4.5, niet wordt overschreden.

In jaar 1 en 3 is een curve te zien. In jaar 2 niet. Dit verschil wordt verklaard door de locatie waarop de boringen worden verricht. Boren heeft een hogere faalfrequentie dan normale bedrijfsvoering (injectie of productie). Ook is bij boren kans op een casing blow out, wat een groter uitstroomdebit heeft dan een tubing blow out, die bij normale bedrijfsvoering wordt gemodelleerd. Door de boringen van de Oostelijke putten als eerste uit te voeren (in het eerste jaar) worden de risico's beperkt, omdat hierbij de afstand tot bevolking het kleinst is, terwijl in het eerste jaar de gasdruk in het reservoir nog niet zo hoog is.

Voor het alternatief Bergerweg Noord zal de oriënterende waarde van het groepsrisico niet worden overschreden.

## 9 REFERENTIES

1. Handleiding Risicoberekeningen Bevi v3.0, 01-01-2008
2. Concept versie 1.4 "Modellering gascilinders uit de Handleiding Risicoberekeningen Bevi"
3. Publicatie Gevaarlijke Stoffen 1 (PGS 1, "het groene boek"), deel 6: Aanwezigheidsgegevens
4. S3b methodiek, Systematiek voor indeling van stoffen ten behoeve van risicoberekeningen bij het vervoer van gevaarlijke stoffen, AVIV Enschede

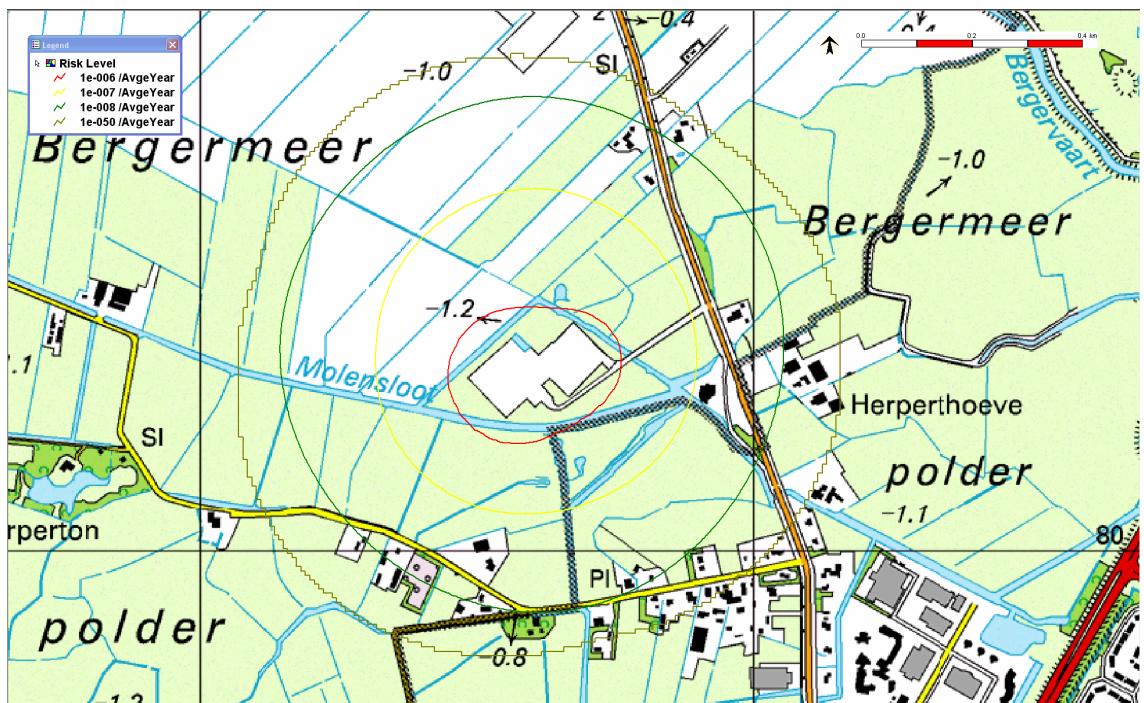
## 10 COLOFON

---

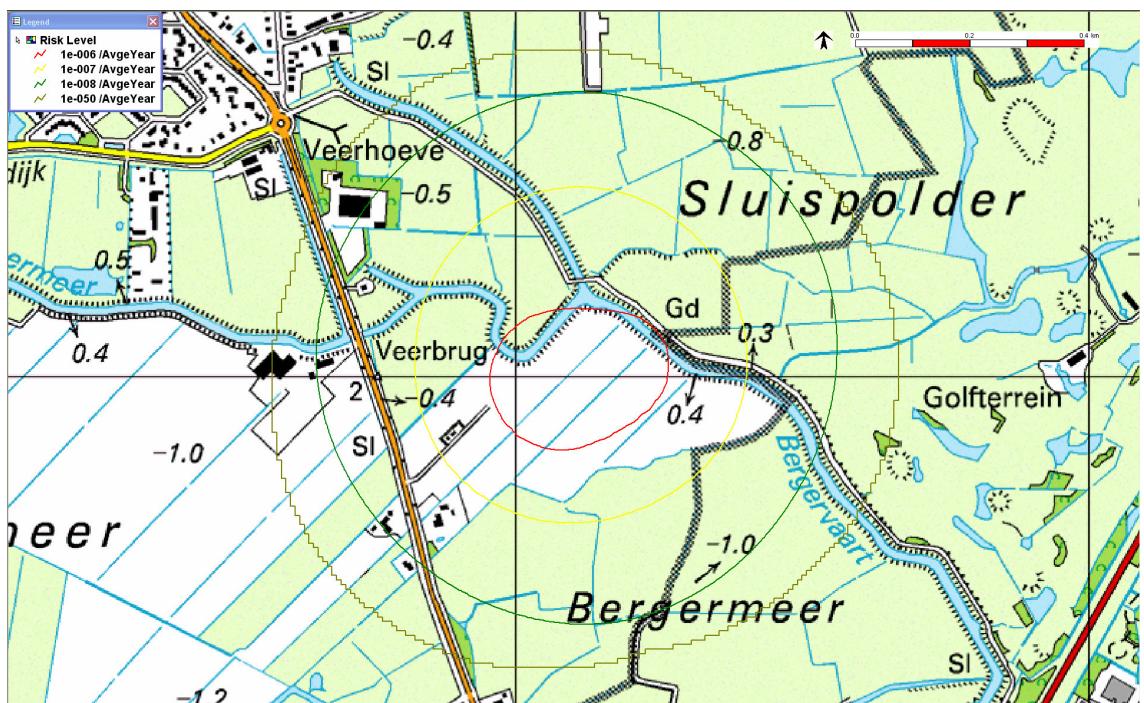
Opdrachtgever	:	TAQA Energy BV
Project	:	QRA puttenlocatie Bergermeer Gas Storage
Dossier	:	A6167-04-001
Omvang rapport	:	30 pagina's
Auteur	:	Annemarie Vermeer
Bijdrage	:	Peter Winkelman, Sander Albertsma
Interne controle	:	Peter Winkelman, Hanneke de Vries
Projectleider	:	Hanneke de Vries
Projectmanager	:	Lodewijk Meijlink
Datum	:	30 oktober 2008
Naam/Paraaf	:	Ir. L.H.H.M. Meijlink

---

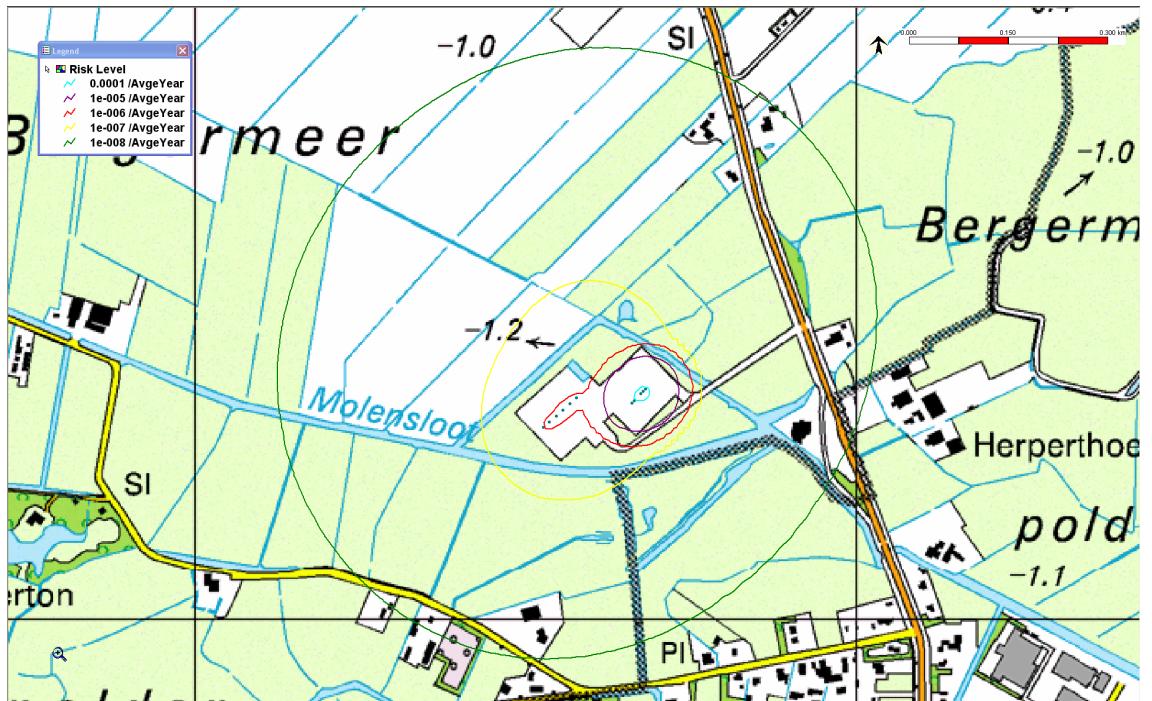
## BIJLAGE 1 Plaatsgebonden Risicocontouren



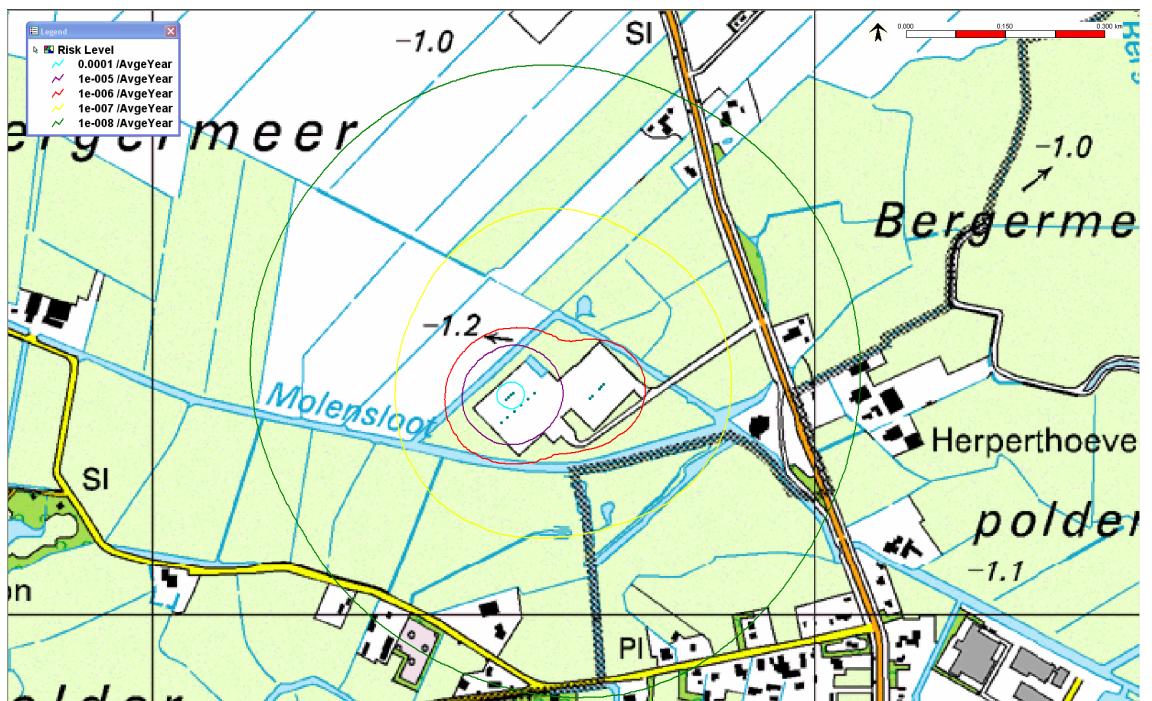
Figuur B1-1: PR-contouren BGM voorkeurslocatie



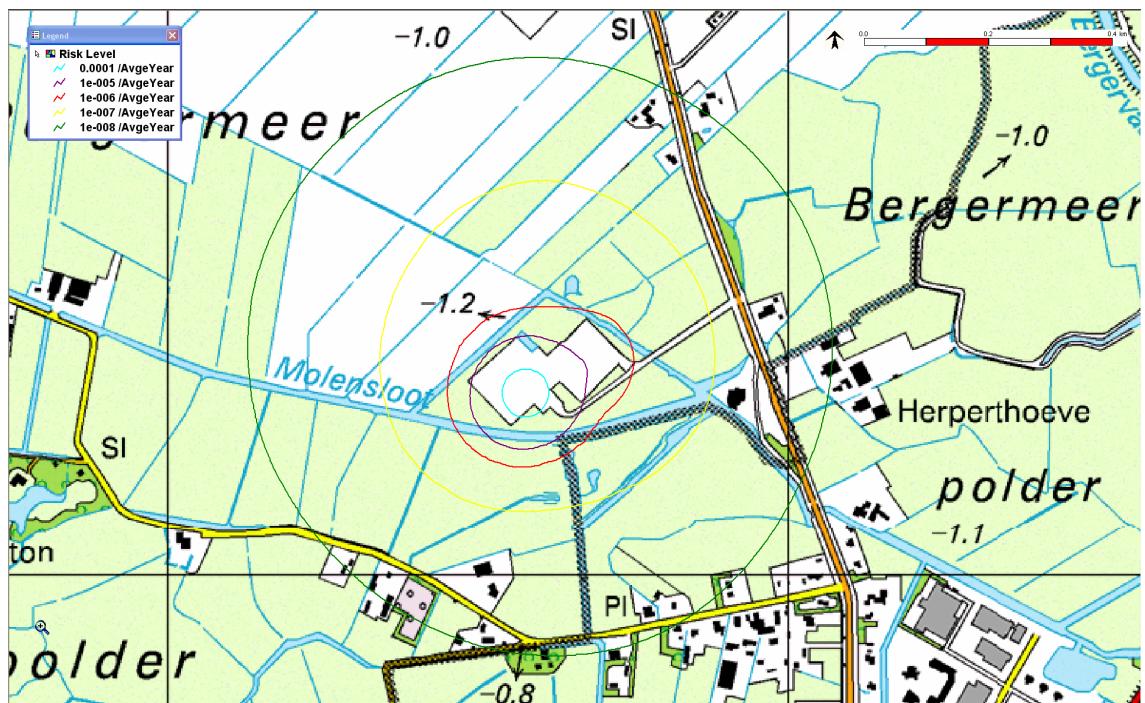
Figuur B1-2: PR contouren Alternatief Bergerweg Noord



Figuur B1-3: PR-contouren Alternatief Boring jaar 1

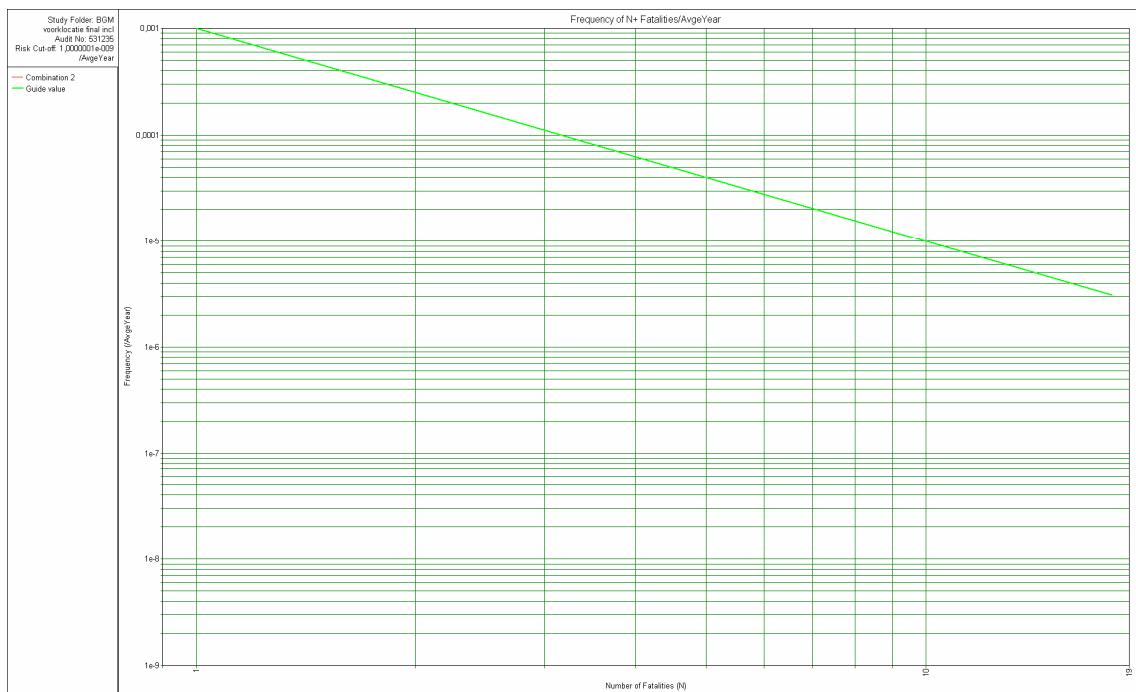


Figuur B1-4: PR-contouren Alternatief Boring jaar 2

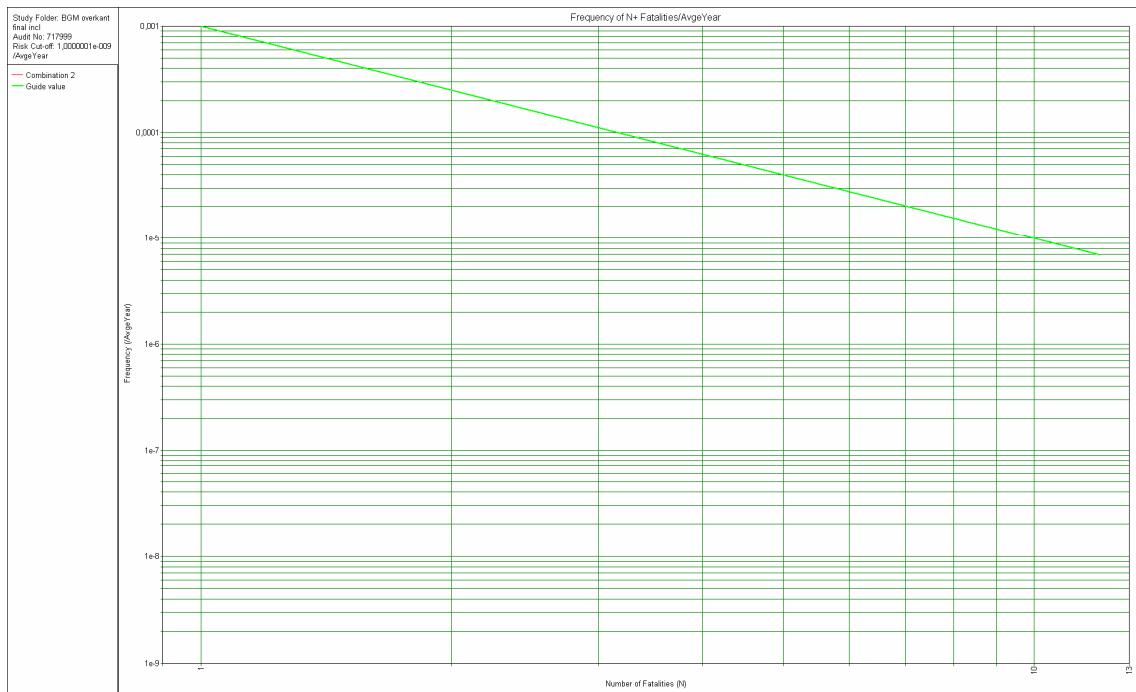


Figuur B1-5: PR-contouren Alternatief Boring jaar 3

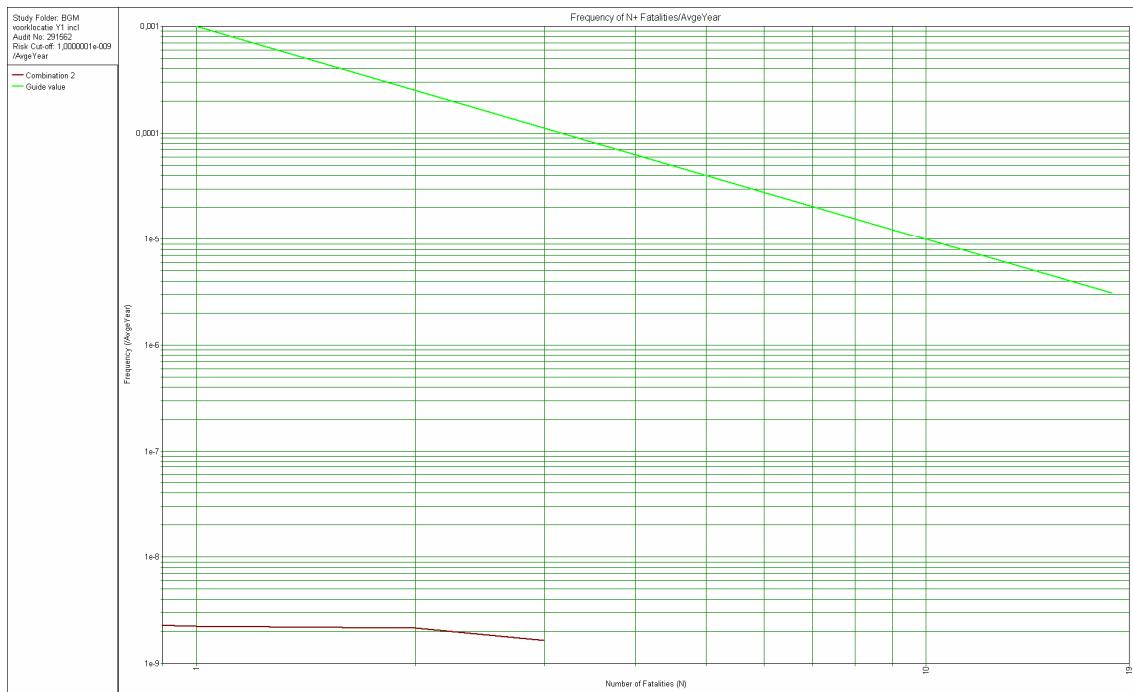
## BIJLAGE 2 Groepsrisico, Fn-curves



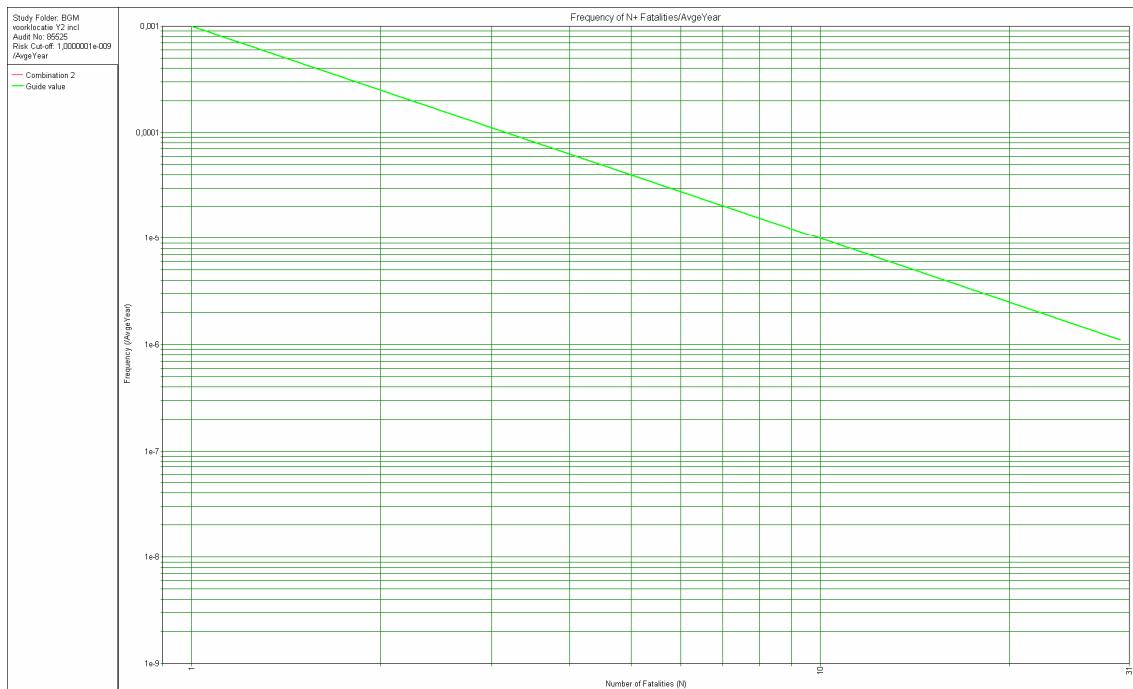
Figuur B2-1: f-N curve BGM Voorkeurslocatie



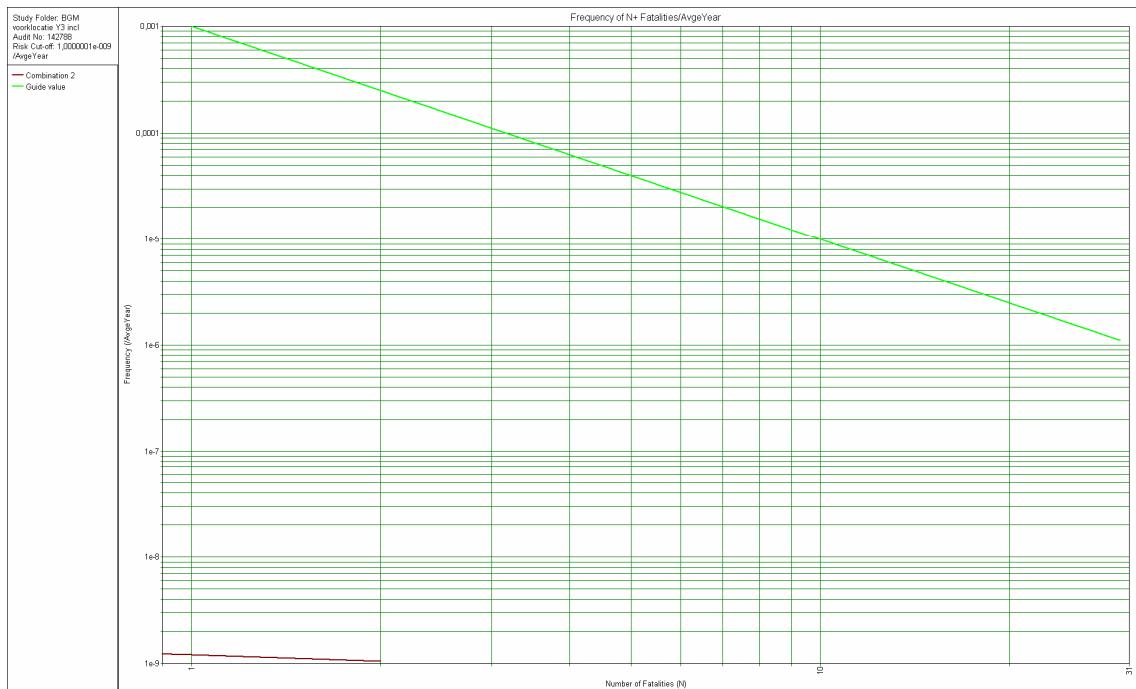
Figuur B2-2: f-N curve alternatief Bergerweg Noord



**Figuur B2-3: f-N curve alternatief Boring jaar 1**



**Figuur B2-4: f-N curve alternatief Boring jaar 2**



**Figuur B2-5: f-N curve alternatief Boring jaar 3**

## **BIJLAGE 3      Technische notitie QRA-Methodiek**

### **MEMO**

Aan : TAQA/RIVM  
Van : Peter Winkelman  
Kopie : Sander Albertsma, Annemarie Vermeer  
Dossier : A6167-01-001  
Project : Bergermeer Gas Storage  
Betreft : Modellering Gascompressie en behandeling Bergermeer Gas Storage project

Ons kenmerk : -  
Datum : 8 oktober 2008  
Status : definitief

In deze technical note wordt de QRA methodiek voor het Taqa project "Ondergrondse gasopslag Bergermeer" besproken.

Op het moment van schrijven vallen mijnbouwinstallaties formeel nog niet onder de Bevi wetgeving. Voor de QRA is dan ook formeel nog geen directe noodzaak om de handleiding risicoberekeningen te hanteren. Ook is de normering uit het Bevi nog niet van toepassing. Echter de verwachting is dat per januari 2009 mijnbouwinstallaties formeel zullen worden aangewezen als Bevi-inrichtingen. Het is dan ook zinvol om in de QRA-modellering alvast rekening te houden met mogelijke toekomstige verplichtingen, vanwege de bedrijfszekerheid naar de toekomst.

Voor de modellering wordt zoveel mogelijk aansluiting gezocht met de handleiding risicoberekeningen. Met name de modellering zoals deze voor BRZO-bedrijven is voorgeschreven is hierbij van belang. Vanwege het specifieke karakter van mijnbouwinstallaties is voor een aantal modelleringsaspecten er voor gekozen om af te wijken van de modellering zoals deze voor BRZO-bedrijven geldt. De verwachting is dat deze afwijkende modellering in de module die specifiek voor mijnbouwinstallaties zal worden opgesteld zal worden opgenomen.

Hieronder zijn de uitgangspunten voor de modellering opgeschreven, voor zover ze betrekking hebben op de QRA's voor het project betreffende de ondergrondse gasopslag te bergermeer. Voor de MER en de Wm-vergunningaanvraag wordt dezelfde methodiek gehanteerd.

1. Er wordt geen subselectie conform handleiding risicoberekeningen Bevi v3.0 uitgevoerd. In plaats daarvan worden een aantal systemen uitgesloten, waarvan op basis van hun karakteristieken mag worden verwacht dat ze geen bijdrage leveren aan de risico's voor de externe veiligheid. Middels een beperkt aantal effectberekeningen zal dit worden onderbouwd. Het betreft hier o.a de volgende installatiedelen:
  - a. Lage druk (aard)gas systemen, zoals Fuel gas, Offgas, Blanket gas, Vent/flare systemen
  - b. Lage druk condensaat systemen (behalve opslag en verlading)
  - c. Diesel
  - d. Drains

2. Leidingen met een diameter kleiner dan 10" zijn nog niet in het (FEED)ontwerp meegenomen. De risico's van deze leidingen kunnen daarom niet worden berekend. Verwacht wordt dat dit geen effect heeft op de risicoberekeningen. Dit dient met een berekening te worden aangetoond
3. De effecten zullen doorgaans worden bepaald gedurende de eerste 20 seconden. ESD-systemen en procesregelingen reageren te traag om de uitstroming substantieel te beïnvloeden gedurende deze fase en worden daarom niet meegenomen in de QRA-berekeningen.
4. Hoge druk (aard)gas uitstroming is sterk drukafhankelijk. De druk daalt bij grote lekkages zeer sterk over de eerste seconden. Safeti<sup>NL</sup> kan deze dynamische uitstroming niet goed modelleren, de uitstroming wordt daarom gemiddeld over de eerste 20 seconden.
5. Uitstroming in een systeem kan nooit groter zijn dan uitstroming uit een aanleverend systeem. Alle scenario's worden hierop gecontroleerd. Is de uitstroming groter dan wordt dit onderzocht op waarschijnlijkheid. Eventueel wordt een user defined source gebruikt om de uitstroming te modelleren. Wanneer een afwijkende modellering wordt gekozen dient dit goed onderbouwd te worden in de rapportage. Wanneer de totale uitstroming van beide zijden minder is dan 110% van de grootste uitstroming dan mag de kleinste uitstroming worden verwaarloosd.
6. Overal is nalevering mogelijk. Falen van een installatieeldeel (zoals een vat of een warmtewisselaar) zal resulteren in het vrijkommen van de ingesloten hoeveelheid, en worden gevolgd door nalevering. De nalevering is bij instantaan falen over het algemeen overheersend, hierdoor kan instantaan falen vaak worden gemodelleerd als het falen van de aan- en afvoerdeeling. Het weglaten van de initiële uitstroming dient te worden onderbouwd met een berekening. Dit is in ieder geval zo voor de slug catcher.
7. Het scenario uitstroming in 10 minuten is niet zinvol voor hoge druk gassystemen. Het gat voor 10 minuten uitstroming is vaak kleiner dan het lek scenario. Daarom wordt dit scenario als instantaan falen gemodelleerd (de frequentie van het 10 minuten scenario wordt bij de frequentie van het instantaan falen scenario opgeteld).

Deze aanname is zeer conservatief. Een andere wijze van uitleggen van het 10 minuten scenario is namelijk dat het begint als een redelijk klein lek, dat gedurende 10 minuten escaleert tot instantaan falen. Mede gelet op de SIL classificatie van het gehele plant-design (SIL3) zou kunnen worden argumenteerd dat het initiele kleine lek gedetecteerd wordt en dat actie kan worden ondernomen (ESD, etc.) voor de calamiteit kan escaleren tot een catastrofaal falen. Echter omdat de methodiek voor mijnbouwinstallaties nog niet is vastgesteld en vanwege de bedrijfszekerheid naar de toekomst wordt er voor gekozen om het scenario toch conservatief als instantaan falen te modelleren.

8. De modellering is op basis van de maximale vergunde procescondities (temperaturen, drukken, flows). Voor de opslagtanks wordt uitgegaan van de maximale opslagcapaciteit zoals in de vergunning is opgenomen. Voor de productie en injectieduur wordt uitgegaan van een continue cyclus van injectie en productie.
9. De volgende Installatieonderdelen zijn gemodelleerd:
  - Drukvat
  - Atmosferisch vat
  - Fin fan cooler

- Compressor
- Leidingen
- Gasputten

**Drukvaten (Slug catcher / Adsorber / Coalescer / Filter Separator / KO-vessel):**

1	Instantaan vrijkomen van de gehele inhoud	$1 \times 10^{-6}$
2	Continu vrijkomen van de inhoud uit een gat met een effectieve diameter van 10 mm	$1 \times 10^{-5}$

**Atmosferisch vat enkelwandig:**

1	Instantaan vrijkomen van de gehele inhoud	$5 \times 10^{-6}$
2	Vrijkomen van de gehele inhoud in 10 min. in een continue en constante Stroom	$5 \times 10^{-6}$
2	Continu vrijkomen van de inhoud uit een gat met een effectieve diameter van 10 mm	$1 \times 10^{-4}$

**Fin fan cooler:**

Gemodelleerd als een pijpenwarmtewisselaar, waarbij de gevaarlijke stof zich binnen de pijpen bevindt en waarbij de mantel een ontwerpdruk heeft die lager is dan de maximaal optredende druk van de gevaarlijke stof in de pijpleiding.

1	Breuk van 10 pijpen tegelijkertijd	$1 \times 10^{-5}$
2	Breuk van 1 pijp	$1 \times 10^{-3}$

Het scenario lek met een effectieve diameter van 10% van een pijp is verwaarloosd.

**Compressor:**

Gemodelleerd als een centrifugaal compressor met pakking.

1	Catastrofaal falen	$1 \times 10^{-4}$
2	Lek (10% van de diameter)	$4,4 \times 10^{-3}$

Catastrofaal falen is gemodelleerd als een leidingbreuk van de toeverleiding van de compressor.

**Electrical heater:**

De electrical heater is gemodelleerd als een drukvat.

**Procesleidingen:**

1	Breuk van de leiding	$1 \times 10^{-7} /jaar /meter$
2	Lek met een effectieve diameter van 10% van de nominale diameter, maximaal 50mm	$5 \times 10^{-7} /jaar /meter$

**Interunit leidingen (leidingen groter dan 50 meter, zonder appendages, etc.)**

Voor interunit leidingen worden de scenario's van transportleidingen in een leidingstraat gehanteerd.

1	Breuk van de leiding	$7 \times 10^{-9} /jaar /meter$
2	Lek met een effectieve diameter van 20mm	$6,3 \times 10^{-8} /jaar /meter$

Voor zowel proces en interunit leidingen (>50m) geldt dat deze zowel boven als ondergronds kunnen liggen. De modellering van een leidingbreuk is voor beide situaties verschillend.

- **Bovengrondse leidingbreuk:** Bij een leidingbreuk (of gat ter grootte van tenminste de diameter van de leiding) zal een leiding geheel doorscheuren. Er ontstaan feitelijk twee uitstroommonden. Deze beide uitstromingen worden als twee onafhankelijke horizontale scenario's gemodelleerd, met beide de frequentie van het initiele scenario. Dit is een afwijking van de methodiek in de handleiding voor BRZO-bedrijven.
- **Ondergrondse leidingbreuk:** Bij een leidingbreuk (of gat ter grootte van tenminste de diameter van de leiding) zal de uitstroming verticaal gericht worden. Er treedt impulsverlies op ten gevolge van het botsen van de uitstromingen, het afbuigen van de horizontale uitstroming naar verticaal en het vormen van de krater. De twee uitstroomdebieten kunnen echter niet als onafhankelijke gebeurtenissen worden gemodelleerd. Vanwege de tekortkomingen in het huidige Safeti<sup>NL</sup> model wordt er voor gekozen om een scenario te modelleren met een effectieve leidingdiameter zodat de uitstroming gelijk is aan de totale uitstroming vanuit beide zijden van de leidingbreuk.

#### **Gasputten (Blow out):**

Productie / Injectie

1	Productie / Injectie blowout	$4 \times 10^{-5}$ /year
2	Drilling	$6 \times 10^{-4}$ / well
3	Completion	$6,78 \times 10^{-4}$ /operation
4	Workover	$9,8 \times 10^{-4}$ /operation
5	Wireline	$2,92 \times 10^{-5}$ /operation
6	Coiled tubing	$4,8 \times 10^{-4}$ /operation
7	Snubbing	$6,9 \times 10^{-4}$ /operation

Verdeling horizontaal / vertikaal: 10 / 90 (engineering judgement)

Verdeling Full bore / restricted: 40 / 60 (Scandpower )

Aangenomen wordt dat alle full bore releases verticaal zijn. De lekkages worden vervolgens zo verdeeld dat de totale verhouding verticaal/horizontaal 10 / 90 is. Dit komt op:

40% van alle incidenten is fullbore vertикаal

10% van alle incidenten is lek horizontaal

50% van alle incidenten is lek vertикаal

Indien er tijdens Drilling, completion of een Coiled tubing operation een blowout plaatsvindt dan worden de effecten berekend op basis van de diameter van de casing (casing blow out). In alle overige gevallen worden de effecten gebaseerd op de tubing diameter (tubing blowout).

Voor Taqa geldt dat de putten in putkelders zitten en dat alle uitstroming verticaal wordt gemodelleerd.

#### **Specifieke modellering voor compressorgebouw:**

Indien de muren dusdanig ontworpen zijn dat deze intact blijven bij catastrofaal falen van de compressor (kunnen de impuls van de discharge aan) wordt uitstroming op dezelfde wijze gemodelleerd als ondergrondse uitstroming. Dat wil zeggen dat bij tweezijdige uitstroming beide uitstromingen worden opgeteld en dat de richting verticaal is. Daarnaast dient de ontstekingskans voor uitstromingen in compressorgebouwen handmatig op 1 gezet te worden. De kans op vertraagde ontsteking van een grote gaswolk wordt nihil geacht, gezien de aanwezige detectiesystemen (SIL3). Een concentratie lager dan LEL wordt vrijwel direct gedetecteerd. Er is dan nog geen sprake van een grote wolk.

## **BIJLAGE 4      Bevolkingsgegevens tbv QRA's BGS project**

Deze memo beschrijft de populatiegegevens als gebruikt voor de kwantitatieve risicoanalyse (QRA) voor het project ondergrondse gasopslag Bergermeer van Taqa.

Voor het MER zijn een aantal locatiealternatieven onderzocht voor zowel de compressie- en behandelingslocatie als voor de puttenlocatie. Het invloedsgebied van de onderzochte locaties ligt over een viertal gemeentes;

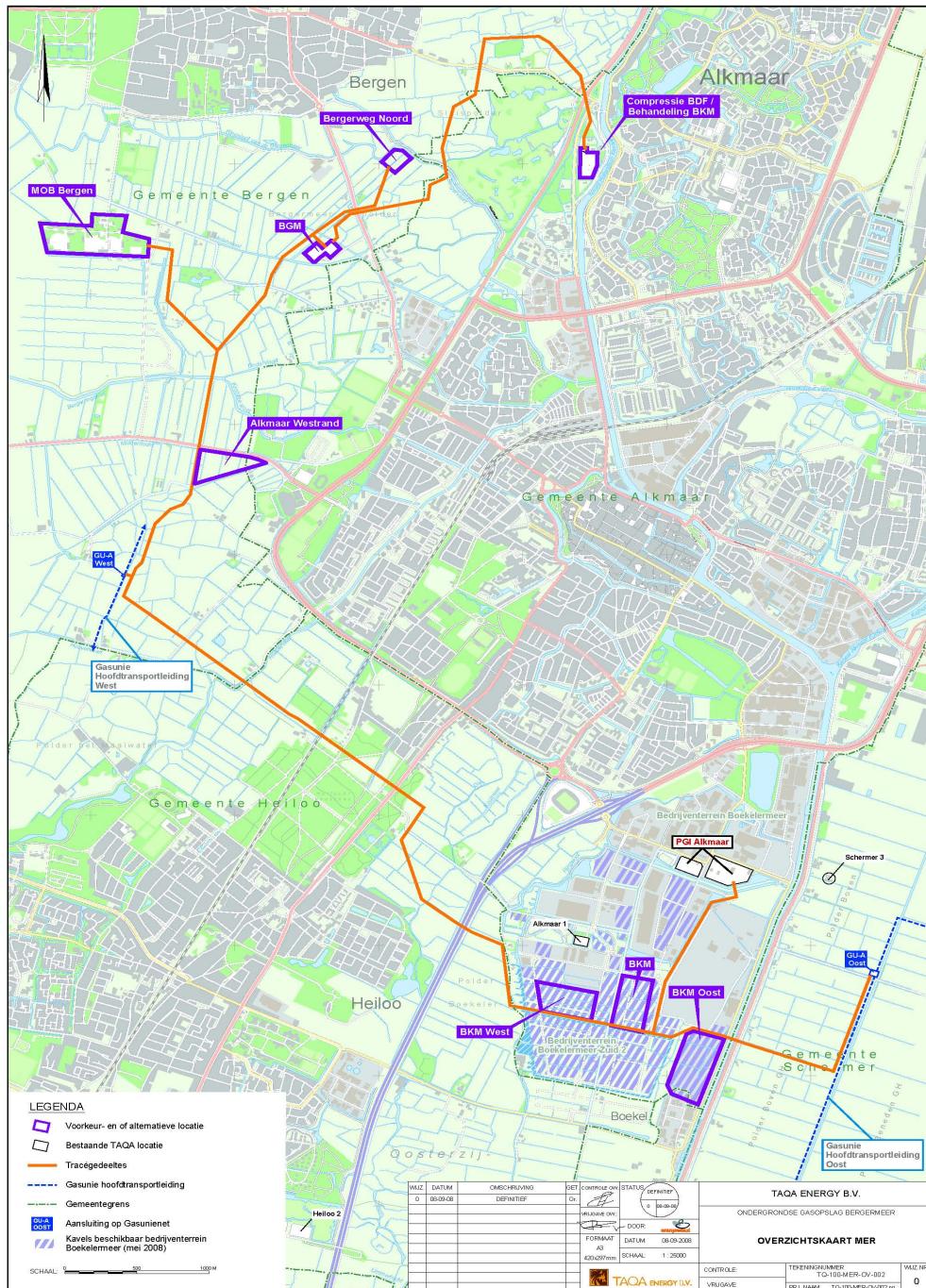
- Schermer
- Alkmaar
- Bergen
- Heiloo

De betreffende gemeentes zijn benaderd om populatiegegevens aan te leveren, opgedeeld in woonruimtes, arbeidsplaatsen en kwetsbare objecten als scholen, ziekenhuizen etc. Deze gegevens zijn uitgebreid met geprojecteerde bestemmingen. In onderstaande hoofdstukken is per gemeente weergegeven hoe deze gegevens zijn aangeleverd en hoe deze vervolgens geïnterpreteerd zijn. De gegevens zijn opgevraagd binnen een straal van 1500 meter om de volgende locaties;

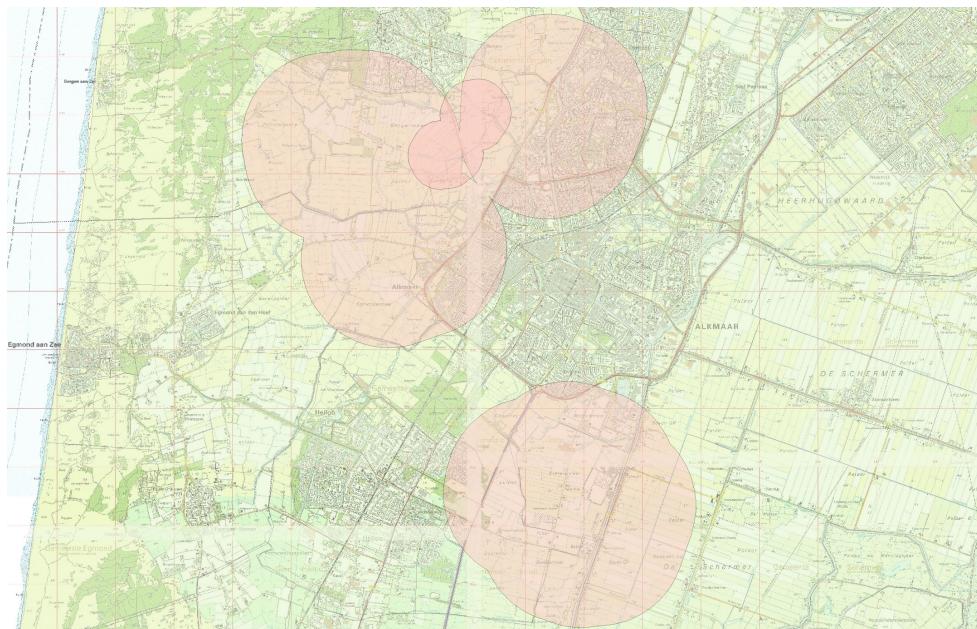
- BKM-Oost
- BKM-West
- BKM
- Almaar Westrand,
- MOB Bergen
- Compressie BDF/Behandeling BKM

Om de locaties BGM en Bergerweg Noord zijn de populatiegegevens opgevraagd binnen een straal van 500 meter. De genoemde afstanden zijn gebaseerd op de ingeschatte effectafstanden van de locaties.

De locaties zijn weergegeven in afbeelding B4-1. In afbeelding B4-2 zijn de effectafstanden opgenomen rond de locaties.



Afbeelding B4-1. Locatie installaties



**Afbeelding B4-2. Invloedsgebieden locaties**

#### **Wonen, werken en evenementen algemeen**

Voor woningen is aangenomen dat 50% van het totale aantal bewoners zich gedurende een meteorologische dag bevindt. 's nachts is deze aanwezigheid 100% van het aantal bewoners. Voor werknemers is aangenomen dat deze zich gedurende een meteorologische dag op de locatie bevinden. Voor een aantal locaties is hierop een uitzondering gemaakt, bijvoorbeeld voor verzorgingstehuizen is de aanwezigheid voor de fractie dag als nacht 100% gesteld. Daarnaast zijn er een aantal locaties waar evenementen plaatsvinden, hierbij valt te denken aan een terrein waar popconcerten worden georganiseerd, een voetbalstadion en een ijsbaan. Typisch aan deze locaties is dat er geen continue aanwezigheid is, maar incidenteel wel een zeer grote aanwezigheid. Voor ieder evenement is door de gemeente een opgave gedaan van verwachte bevolkingsaantallen. Ieder evenement is afzonderlijk beoordeeld.

Om de invoer in Safeti-NL niet nodeloos ingewikkeld te maken is voor de evenementen getracht om deze in een runrow te kunnen invoeren. Hierbij is de worst-case aanname gedaan dat alle evenementen overdag plaats vinden (overdag geeft voor brandbare effecten de grootste effectafstanden, namelijk bij harde wind (D9)). Een gemiddelde van 1 evenement van 3 uur per week is aangehouden per object.

De verhouding dag / nacht / evenement is hierdoor: 0,4197 / 0,5626 / 0,0178

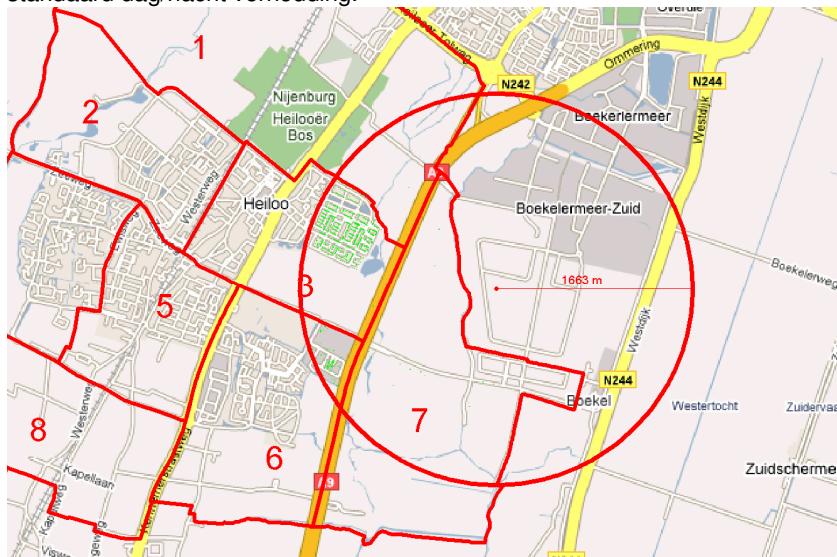
## **BEVOLKINGSGEGEVENS RELEVANT VOOR VOORKEURSLOCATIE BKM, BKM WEST EN BKM OOST**

### **Boekelermeer**

Aan de zuidzijde van Alkmaar liggen de installatielocaties BKM-west, BKM en BKM Oost.

### **Gemeente Heiloo**

Van de gemeente Heiloo is kaartmateriaal verkregen van het betreffende gebied met hierop aangegeven de locaties van woningen en het totale aantal inwoners binnen het betreffende gebied. In dit gebied valt een woonwijk aan de oostrand van de gemeente en een aantal losse woningen. Ten zuiden van deze woonwijk ligt een industriegebied. Het aantal bewoners is gedeeld door het aantal adreslocaties, gemiddeld 2,38 inwoners per adres. De adreslocaties als verkregen zijn overgenomen en voorzien van de standaard dag/nacht verhouding.



**Afbeelding B4-3. Adreslocaties gemeente Heiloo**

De woonwijk is als vlak ingevoerd, de overige woningen zijn per adres ingetekend. In de woonwijk bevinden zich tevens een brandweerkazerne en een school, het aantal leerlingen en mogelijke aantal aanwezigen in de kazerne zijn bij de bevolking van de woonwijk toegevoegd.

Voor het industrieterrein ten zuiden van de woonwijk is aangenomen dat zich hier 50 werknemers per hectare bevinden, welke zich hier overdag begeven. Het industrieterrein is als vlak ingetekend. Voor het bestemmingsplan BKZ III is gerekend met de norm 40 personen per ha (zie afbeelding B4-4).

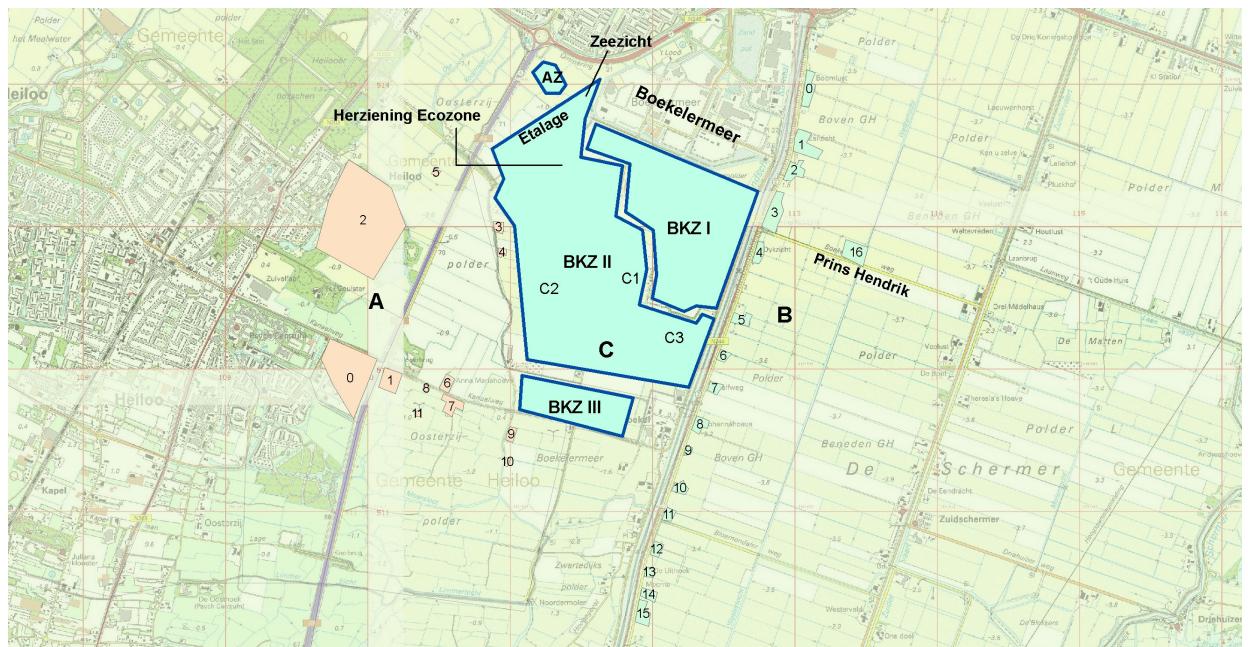
### **Gemeente Schermer**

Van de gemeente Schermer is het aantal inwoners bekend binnen de aangegeven zonering aan de Westdijk. Het aantal bewoners is gedeeld over het aantal adreslocaties en als zodanig gebruikt in de berekeningen. Het gemiddeld aantal inwoners per adres is 6. De woningen zijn weergegeven in de lichtblauwe vlakken 0 t/m 15 in afbeelding B4-4. Tevens bevindt zich binnen de aangegeven zonering een camping/Bed and Breakfast ('slapen bij Prins Hendrik'). Hiervoor is uitgegaan van een volle bezetting van de 8 kamers en voor de camping 5 standplaatsen. Per kamer/standplaats is aangenomen dat zich hier 2,4 personen bevinden met ook hiervoor 50% overdag en 100% aanwezigheid 's nachts.

## Gemeente Alkmaar

Van de gemeente Alkmaar zijn de populatiegegevens aangeleverd op wijkniveau met hierbij kaartmateriaal van de betreffende gebieden, opgesplitst in woningen, arbeidsplaatsen en scholen. De Wijken zijn ingetekend op de door de gemeente aangeleverde kaart van Alkmaar. Het aantal leerlingen aanwezig in scholen zijn bij de fractie aanwezigheid overdag opgeteld.

Ten zuiden van het huidige industriegebied Boekelermeer liggen enkele geprojecteerde bestemmingen. De geprojecteerde bestemmingen zijn weergegeven in afbeelding B4-4. In de berekeningen is het huidige aantal personen, als verkregen van de gemeente Alkmaar, meegenomen in de berekeningen. Voor de leegstaande kavels is in de berekeningen de norm van 40 personen per hectare gehanteerd<sup>3</sup>.



Afbeelding B4-4. Ligging Boekelermeer Zuid I, II en III

De lichtroze vlakken (A) in afbeelding B4-4 geven de locaties weer van de verkregen populatiegegevens als verkregen van de gemeente Heiloo. De lichtblauwe vlakken (B) aan de overzijde van het kanaal geven de bevolking weer als verkregen van de gemeente Schermer. De lichtgroene vlakken (C) zijn door de gemeente Alkmaar aangeleverd. Hierbij is onderscheid gemaakt tussen BKZ I, BKZ II en BKZ III. Met C1,

<sup>3</sup> In het bestemmingsplan Boekelermeer Zuid I , II en III (BKZI , BKZII en BKZIII) is een norm opgenomen van 40 personen per netto hectare grond. Dit betekent dat bij berekeningen van het aantal personen in de toekomstige situatie van deze norm moet worden uitgegaan.

C2 en C3 zijn de locaties van de alternatieven aangegeven (C1 = het voorkeursalternatief BKM, C2 = BKM West, C3 = BKM Oost).

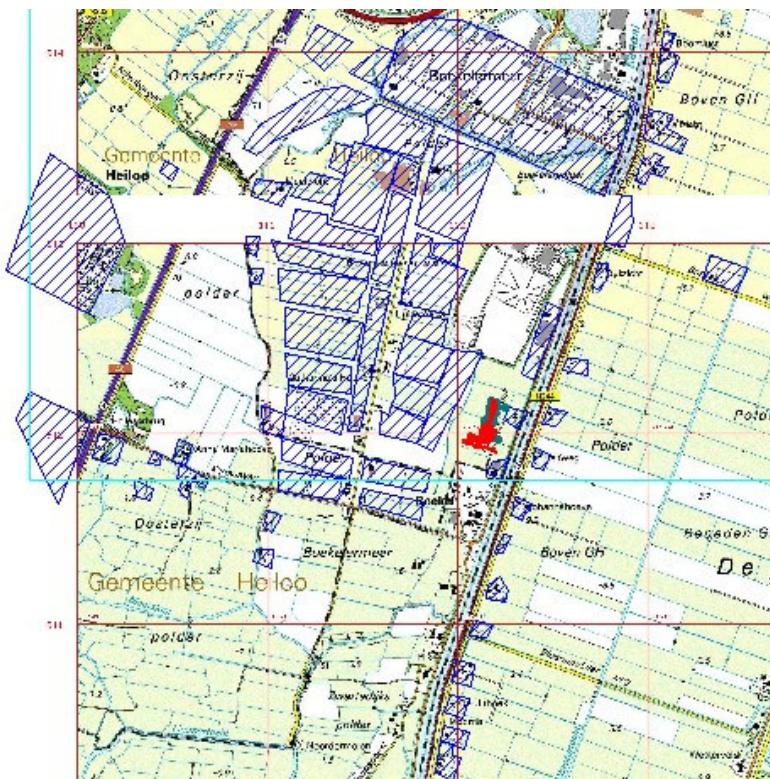
Voor het industriegebied BKZ I, II en III is in de bestemmingsplannen een norm van 40 personen per ha opgenomen. Voor zover bestaande bebouwing gebiedsvisies/geprojecteerde bestemmingen overlappen zijn de bestaande gegevens gebruikt. Daar waar nog geen bestaande bebouwing is is uitgegaan van 40 personen per hectare. Uitzonderingen in het bestemmingsplan op de 40 personen/ha norm zijn weergegeven in tabel B4-1.

Ontwikkeling	Oppervlakte m <sup>2</sup> b.v.o.	Personen
Herziening Ecozone	30.000	1400
Etalage	100.000	3600
Zeezicht	60.000	2800
AZ-stadion		Uitbreiding naar 30.000

**Tabel B4-10-1 uitzonderingen op bestemmingsplannen BKZ**

Voor het AZ-stadion is aangenomen dat het maximale aantal bezoekers een maal per week gedurende 3 uur aanwezig is.

De invoer in Safeti<sup>NL</sup> voor BKM-Oost is weergegeven in afbeelding B4-5.



**Afbeelding B4-5. Populatiebestand Safeti<sup>NL</sup>**

## **BEVOLKINGSGEGEVENS RELEVANT VOOR VOORKEURSLOCATIE BGM, ALKMAAR WESTRAND, MOB BERGEN, BERGERWEG NOORD, COMPRESSIE BDF/BEHANDELING BKM**

Aan de westzijde van Alkmaar bevinden zich de volgende (alternatieve) locaties;

- MOB Bergen
- Compressie BDF/Behandeling BKM
- Alkmaar Westrand
- BGM
- Bergerweg Noord

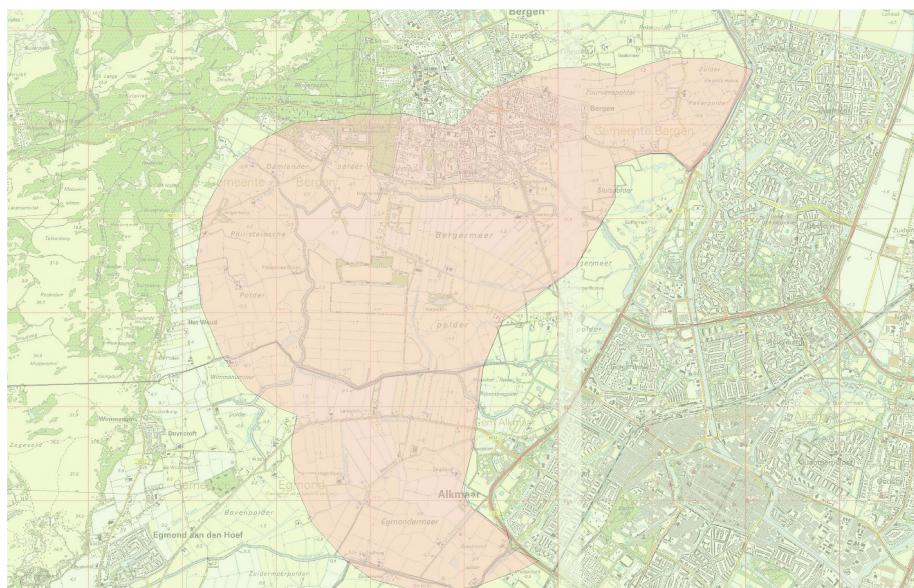
De locaties zijn weergegeven in afbeelding B4-1.

### **Gemeente Bergen**

De populatiegegevens van de gemeente Bergen zijn in overleg met gemeente Bergen opgevraagd bij de firma Bridgis ([www.bridgis.nl](http://www.bridgis.nl)). De opgevraagde gegevens zijn opgedeeld in drie categorieën, te weten; arbeid, wonen en gemengd. Het gebied zoals deze is opgevraagd is weergegeven in afbeelding B4-6, aangegeven door de roze zonering.

Een gemengd adres heeft zowel een arbeids- als een woonfunctie. De aanwezigheid voor de gemengde adressen is overdag 100% gesteld en 's nachts 2,4 personen. Deze gegevens zijn als zodanig per adreslocatie gebruikt.

De gebruikte gegevens zijn aangevuld met kwetsbare objecten als verkregen van de gemeente. De kwetsbare objecten betreffen scholen en een verzorgingstehuis. Voor scholen is de aanwezigheid overdag op 100% gesteld en is het maximale aantal aanwezigen binnen de scholen gebruikt. 's Nachts is de aanwezigheid voor scholen op 0% gesteld. Voor het verzorgingstehuis is het maximale aantal aanwezigen zowel overdag als 's nachts 100% gesteld.

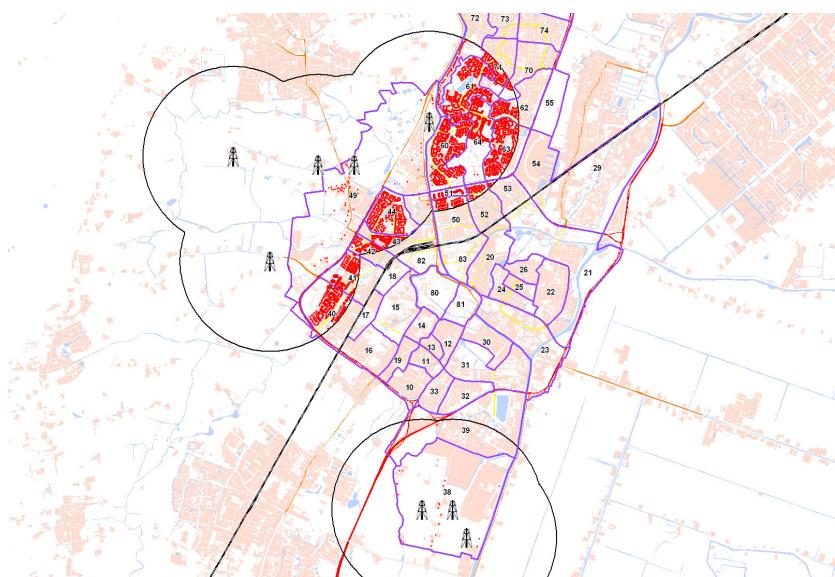


**Afbeelding B4-6. Zonering opgevraagde Bridgis gegevens**

De populatiegegevens van Bridgis worden geleverd met XY-coördinaten en zijn, na aanpassingen voor dag-nachtverhouding, rechtstreeks geïmporteerd in Safeti<sup>NL</sup>.

## Gemeente Alkmaar

Van de gemeente Alkmaar zijn de populatiegegevens aangeleverd op wijkniveau met hierbij kaartmateriaal van de betreffende gebieden, opgesplitst in woningen, arbeidsplaatsen en scholen. Bevolkingsvlakken conform de aangegeven wijken zijn ingetekend in Safeti<sup>NL</sup>, hieraan zijn de verkregen populatiecijfers toegekend. Het aantal leerlingen aanwezig in scholen zijn bij de fractie aanwezigheid overdag voor de ingetekende wijken opgeteld. Arbeidslocaties zijn als adrespunten ingetekend.



**Afbeelding B4-7. Locaties bewoonde adressen**

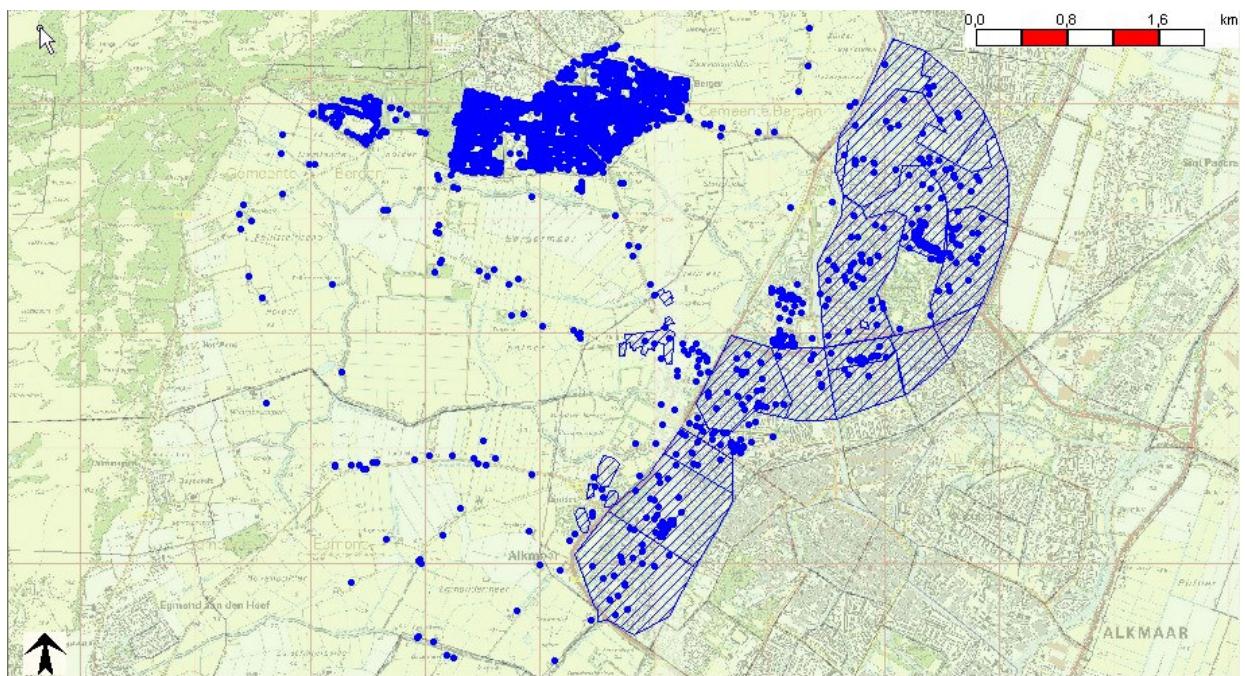
In het gebied aan de westzijde staan een aantal geprojecteerde bestemmingen binnen de invloedsgebieden van de installaties. De geprojecteerde bestemmingen zijn weergegeven in tabel B4-2.

Ontwikkeling	Oppervlakte m <sup>2</sup> b.v.o.	Personen
De Alk	3000	240
Uitbreiding De Meent	15400	6000
Wielerstadion		3000
Evenemententerrein		7500
Viaanse molen fase II	2000	90
Muiderwaard	4885	326 + woningen
De Mare	6700	467 + woningen

**Tabel B4-10-2. Geprojecteerde bestemmingen Weststrand Alkmaar/Bergen**

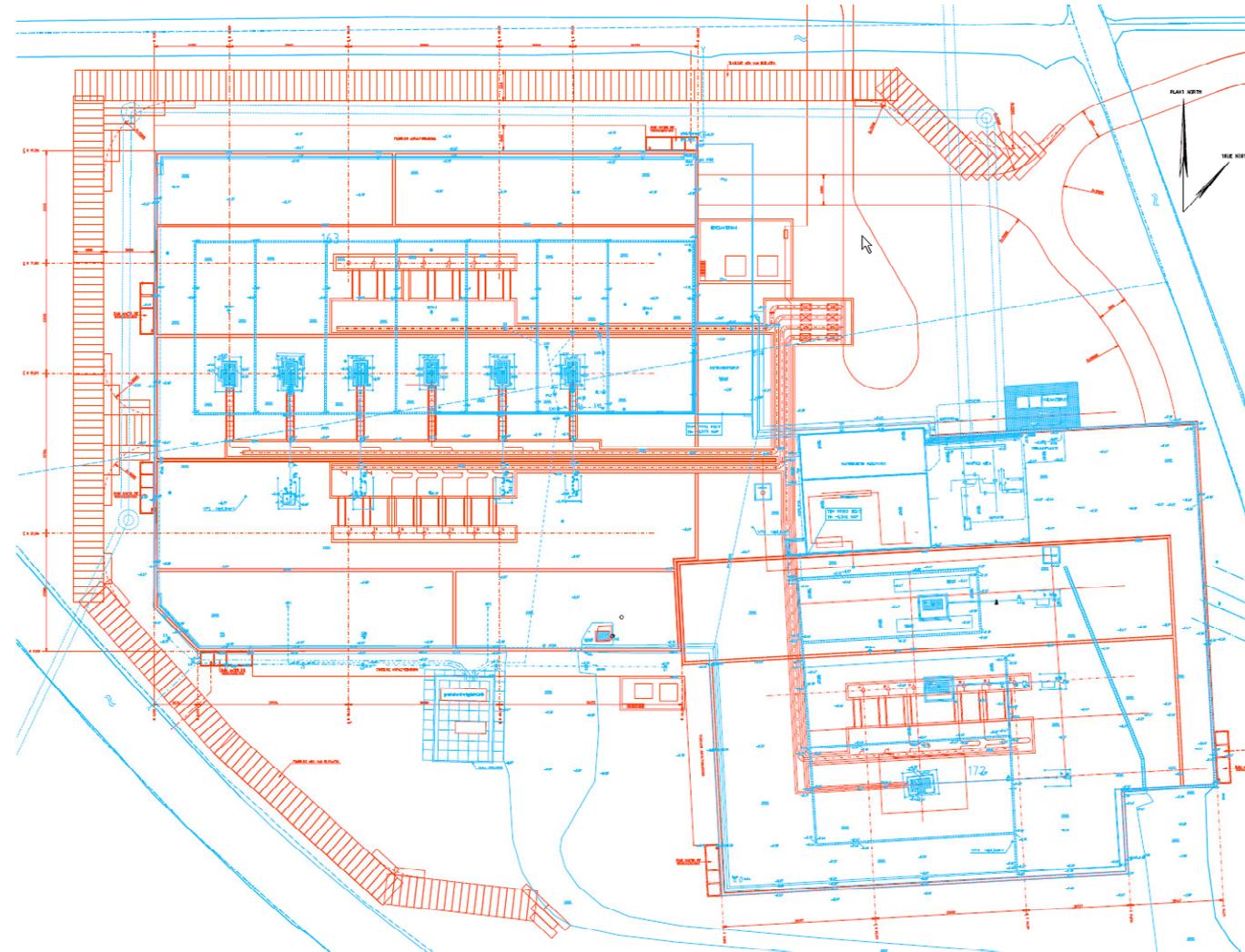
De bestemmingsplannen Muiderwaard en de Mare beschrijven de bouw van woningen, winkels en horeca. Voor de winkels en horeca is gesteld dat zich 1 persoon per 15m<sup>2</sup> b.v.o. bevindt (personeel en bezoekers). Per toegevoegde woning is 2,4 persoon gerekend. Deze personen zijn toegevoegd aan de bevolkingsvlakken in Safeti<sup>NL</sup>.

De invoer in Safeti-NL is weergegeven in afbeelding B4-8.



Afbeelding B4-8. Invoer Safeti<sup>NL</sup> Alkmaar Weststrand.

**BIJLAGE 5      Overzichtstekening**



TAQA Energy BV/QRA putterlocatie Bergermeer Gas Storage  
MD-MV20080961/MD-MV20080961/BGS-UR-5016 final

## **BIJLAGE 6        Onderbouwing niet geselecteerde installatiedelen**

Zoals aangegeven in hoofdstuk 5 zijn bepaalde installatiedelen op voorhand niet geselecteerd voor de QRA. In onderstaande secties wordt onderbouwd waarom deze scenario's niet zijn meegenomen.

### **Methanol**

De methanol opslag en verlading is niet meegenomen in de QRA berekeningen omdat de risico's niet/nauwelijks worden beïnvloed door deze installaties en activiteiten.

Ten eerste is de hoeveelheid methanol die wordt opgeslagen zeer klein: Maximaal 10 m<sup>3</sup>. Methanol wordt opgeslagen in daarvoor bestemde methanol containers van 10 m<sup>3</sup>. De maximale effectafstand voor een (late) pool fire is ca. 50 m terwijl de maximale effectafstand voor een flash fire ca. 4 m is. De effectafstanden komen daardoor nauwelijks buiten de terreingrens.

Ten tweede is het aantal methanol verladingen tijdens normale bedrijfsvoering zeer gering. Er wordt alleen methanol geïnjecteerd tijdens het opstarten van de putten, om hydraatvorming te voorkomen.

**BIJLAGE 7      Risk ranking report**

 **BGM voorklocatie final incl**

### **Individual Risk Ranking Point Criteria**

Results from the following Run Rows make up this report:

Individual - Dag  
Individual - Nacht  
Societal - Dag  
Societal - Nacht  
Societal - Evenementen

This report does not include results for risk ranking points which have zero risk associated with them, or which have been explicitly excluded by the program user.  
All coordinates in this report are absolute, not relative to the Location Offset.

Risk Ranking Point Set: Default Risk Ranking Point Set

Sorting method: By Risk  
Sort criterion: By Frequency per year

Analysis of risk by weathers and directions:  
Separate Analysis performed? No

Analysis of risk by model and location:  
Separate Analysis performed? No

Analysis of risk for selected Risk Ranking Points:  
Selected Points analysed? No

Indoor / Outdoor Individual Risk : Outdoor

### **Individual Risk Ranking Point Results**

**Column:** 1

**Risk Ranking Point:** RRP closest house East (109900,518297 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	2.13115E-009	2.29	5.13615E-002
Study\Route\30inch headers East\FB inj header East	109,681.58	518,326.03	2.05829E-009	2.21	4.96054E-002
Study\Route\30inch headers East\FB inj header East	109,674.26	518,318.91	1.99975E-009	2.15	4.81947E-002
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	1.89963E-009	2.04	4.57816E-002
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	1.79580E-009	1.93	4.32793E-002
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	1.64095E-009	1.76	3.95474E-002
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	1.47818E-009	1.59	3.56247E-002
Study\Route\30inch headers East\FB inj header East	109,638.29	518,333.87	1.26660E-009	1.36	3.05255E-002
Study\Route\30inch headers East\FB inj header East	109,631.15	518,341.19	1.15728E-009	1.24	2.78908E-002
Study\Route\30inch headers East\FB inj header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,624.01	518,348.52	1.04996E-009	1.13	2.53043E-002
Study\Route\30inch headers East\FB prod header East	109,688.91	518,333.14	1.04528E-009	1.12	3.46459E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	1.00255E-009	1.08	2.43430E-002
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	9.80313E-010	1.05	3.24926E-002
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	9.76951E-010	1.05	2.35448E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	9.69674E-010	1.04	2.35448E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	9.25057E-010	0.99	2.49095E-002
Study\Route\30inch headers South west\FB inj header South West	109,618.58	518,344.34	9.24335E-010	0.99	2.33192E-002
Study\Route\30inch headers South west\FB inj header South West	109,619.14	518,350.96	9.23271E-010	0.99	2.32924E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	9.22948E-010	0.99	2.48527E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	9.19911E-010	0.99	2.23365E-002
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	9.15915E-010	0.98	3.03581E-002
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	8.90999E-010	0.96	2.14734E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	8.89954E-010	0.96	2.16091E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	8.85992E-010	0.95	2.93663E-002
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	8.84608E-010	0.95	2.13193E-002
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	8.81031E-010	0.95	2.37240E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	8.71770E-010	0.94	2.34746E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	8.67524E-010	0.93	2.10645E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	8.59561E-010	0.92	2.16851E-002
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	8.58545E-010	0.92	2.09093E-002
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	8.46679E-010	0.91	2.13601E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	8.34009E-010	0.90	2.02507E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	8.33697E-010	0.90	2.02431E-002
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	8.26251E-010	0.89	2.22489E-002
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	8.18998E-010	0.88	2.71457E-002
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	8.18482E-010	0.88	1.99336E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	8.17357E-010	0.88	1.99062E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	8.12098E-010	0.87	1.97187E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	7.99183E-010	0.86	2.15200E-002
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	7.64161E-010	0.82	1.86107E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	7.60226E-010	0.82	1.84592E-002
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	7.59258E-010	0.82	1.91547E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	7.58435E-010	0.81	2.04228E-002
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	7.57146E-010	0.81	1.91014E-002
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	7.54534E-010	0.81	2.50091E-002
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	7.52960E-010	0.81	1.89958E-002
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	7.48856E-010	0.80	2.01648E-002
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	7.41594E-010	0.80	1.87090E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	7.35137E-010	0.79	1.79038E-002
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	7.29883E-010	0.78	1.96539E-002
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	7.10219E-010	0.76	2.35403E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	7.03440E-010	0.76	1.89419E-002
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	7.00782E-010	0.75	1.76794E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	6.96734E-010	0.75	1.69175E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	6.56990E-010	0.71	1.60006E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	6.54167E-010	0.70	1.76151E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	6.42471E-010	0.69	1.56000E-002
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	6.40306E-010	0.69	1.72419E-002
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	6.35462E-010	0.68	2.10625E-002
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	6.33900E-010	0.68	1.59921E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	6.21497E-010	0.67	1.67354E-002
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	5.99451E-010	0.64	1.45993E-002
Study\Route\30inch headers East\FB prod header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB inj pipeline	109,631.15	518,341.19	5.87068E-010	0.63	1.94584E-002
Study\Route\30inch headers South west\FB inj header South West	109,585.48	518,408.37	5.81792E-010	0.62	1.56662E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,574.89	518,304.95	5.75968E-010	0.62	1.45306E-002
Study\Route\30inch headers North west\FB inj header North West	109,561.03	518,296.44	5.61313E-010	0.60	1.36293E-002
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	5.47871E-010	0.59	1.81592E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	5.29676E-010	0.57	1.42629E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	5.26381E-010	0.57	1.27811E-002
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	5.26124E-010	0.56	1.28134E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	5.20377E-010	0.56	1.73774E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	5.18980E-010	0.56	1.26014E-002
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	5.03854E-010	0.54	1.74818E-002
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	5.03614E-010	0.54	1.74735E-002
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	5.03503E-010	0.54	1.27024E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	5.01131E-010	0.54	1.66100E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	4.96978E-010	0.53	1.65960E-002
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	4.94044E-010	0.53	1.20321E-002
Study\Route\30inch pipeline\FB prod pipeline	109,625.54	518,371.79	4.91703E-010	0.53	1.82094E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,607.20	518,338.45	4.91261E-010	0.53	1.64051E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	4.86080E-010	0.52	1.30889E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	4.85133E-010	0.52	1.30634E-002
Study\Route\30inch pipeline\FB prod pipeline	109,628.18	518,376.76	4.79563E-010	0.51	1.77598E-002
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	4.78898E-010	0.51	1.58731E-002
Study\Route\30inch headers East\FB prod header East	109,609.98	518,370.38	4.76940E-010	0.51	1.58082E-002
Study\Route\30inch headers South west\FB prod header South West	109,611.30	518,337.78	4.76075E-010	0.51	1.65180E-002
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	4.75603E-010	0.51	1.65016E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	4.68678E-010	0.50	1.56509E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	4.68046E-010	0.50	1.56298E-002
Study\Route\30inch pipeline\FB prod pipeline	109,624.54	518,383.46	4.55607E-010	0.49	1.68726E-002
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	4.53015E-010	0.49	1.57179E-002
Study\Route\30inch pipeline\FB prod pipeline	109,619.74	518,370.14	4.52092E-010	0.49	1.67424E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	4.50084E-010	0.48	1.13548E-002
Study\Route\30inch pipeline\FB prod pipeline	109,613.59	518,374.31	4.46472E-010	0.48	1.65343E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	4.46176E-010	0.48	1.48995E-002
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	4.42677E-010	0.48	1.48272E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	4.41698E-010	0.47	1.47500E-002
Study\Route\30inch headers North west\FB prod header North west	109,600.96	518,367.46	4.40608E-010	0.47	1.47579E-002
Study\Route\30inch headers North west\FB prod header North west	109,598.33	518,362.54	4.38375E-010	0.47	1.46831E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	4.32964E-010	0.46	1.44583E-002
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	4.31210E-010	0.46	1.49613E-002
Study\Route\30inch headers South west\FB prod header South West	109,604.02	518,331.21	4.28961E-010	0.46	1.48833E-002
Study\Route\30inch headers South west\FB prod header South West	109,596.74	518,324.65	4.22651E-010	0.45	1.46644E-002
Study\Route\30inch pipeline\FB prod pipeline	109,617.07	518,388.81	4.11836E-010	0.44	1.52516E-002
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	4.06105E-010	0.44	1.50394E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	4.03876E-010	0.43	1.49569E-002
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	3.96751E-010	0.43	1.46930E-002
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	3.94033E-010	0.42	1.45924E-002
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	3.87186E-010	0.42	1.29686E-002
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	3.83446E-010	0.41	1.28433E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	3.83171E-010	0.41	1.27955E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	3.79940E-010	0.41	1.26877E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	3.76325E-010	0.40	1.30570E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	3.67836E-010	0.39	1.27625E-002
Study\Route\30inch headers North west\FB prod header North west					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,574.96	518,341.35	3.60018E-010	0.39	1.20586E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	3.55994E-010	0.38	1.18880E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	3.55242E-010	0.38	1.18986E-002
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	3.46914E-010	0.37	1.20366E-002
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	3.42348E-010	0.37	1.18781E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	3.36350E-010	0.36	1.24561E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	3.35124E-010	0.36	1.24108E-002
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	3.32453E-010	0.36	1.23118E-002
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	3.15115E-010	0.34	1.09333E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	3.13226E-010	0.34	1.04598E-002
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	3.12804E-010	0.34	1.04772E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	3.12804E-010	0.34	1.04772E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	3.11858E-010	0.33	1.04141E-002
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	3.11233E-010	0.33	1.15260E-002
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	3.07855E-010	0.33	1.14009E-002
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	3.04371E-010	0.33	1.12719E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	2.95062E-010	0.32	9.85324E-003
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	2.95010E-010	0.32	9.88121E-003
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	2.83973E-010	0.30	1.05165E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	2.71941E-010	0.29	1.12631E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	2.71941E-010	0.29	1.12631E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	2.70382E-010	0.29	1.11985E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.27	518,333.21	2.56712E-010	0.28	1.06323E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	2.56712E-010	0.28	1.06323E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	2.48861E-010	0.27	1.03072E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,685.44	518,331.67	2.28835E-010	0.25	9.47772E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.86	518,332.00	2.25231E-010	0.24	9.32849E-004

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.82	518,329.65	2.25231E-010	0.24	9.32849E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	2.15695E-010	0.23	8.93351E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	1.88836E-010	0.20	7.82107E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	1.56839E-010	0.17	6.49584E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	1.42871E-010	0.15	5.91736E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.38	518,321.63	1.36513E-010	0.15	5.65400E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	1.36513E-010	0.15	5.65400E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.96	518,321.29	1.36513E-010	0.15	5.65400E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	1.33799E-010	0.14	5.54161E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	1.23213E-010	0.13	5.10314E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	9.91297E-011	0.11	4.10569E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	5.57145E-011	0.06	2.30755E-004
TOTAL			9.31351E-008		

## Risk Ranking Point: RRP closest house South West (109356,518004 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	5.97241E-010	3.33	1.45017E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	5.30887E-010	2.96	1.28906E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	4.97705E-010	2.78	1.20849E-002
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	4.66746E-010	2.61	1.13673E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	4.35617E-010	2.43	1.05773E-002
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	4.31988E-010	2.41	1.05208E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	4.25731E-010	2.38	1.03372E-002
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	3.92173E-010	2.19	9.55111E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	3.57135E-010	1.99	8.67166E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	3.51963E-010	1.96	1.17534E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	3.30933E-010	1.85	1.10511E-002
Study\Route\30inch headers North west\FB inj header North West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house South West (109356,518004 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB inj header South West	109,567.18	518,334.29	3.29880E-010	1.84	8.03401E-003
Study\Route\30inch headers North west\FB prod header North west	109,560.32	518,291.82	3.19585E-010	1.78	8.06253E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,560.32	518,291.82	3.18511E-010	1.78	1.10511E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	3.11608E-010	1.74	1.04058E-002
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	3.10671E-010	1.73	1.04058E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	2.97050E-010	1.66	7.21271E-003
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	2.92059E-010	1.63	9.78238E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	2.91755E-010	1.63	9.74281E-003
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	2.80804E-010	1.57	9.74281E-003
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	2.80804E-010	1.57	9.74281E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	2.73087E-010	1.52	9.11942E-003
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	2.72266E-010	1.52	9.11942E-003
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	2.71279E-010	1.51	6.60682E-003
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	2.66286E-010	1.49	6.48523E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.58759E-010	1.44	6.28298E-003
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	2.58526E-010	1.44	6.52213E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	2.50466E-010	1.40	8.36402E-003
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	2.41065E-010	1.35	8.36402E-003
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	2.41065E-010	1.35	8.36402E-003
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	2.31756E-010	1.29	7.76255E-003
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	2.31756E-010	1.29	7.76255E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	2.08746E-010	1.17	6.97084E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	2.08746E-010	1.17	6.97084E-003
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	2.07238E-010	1.16	5.04715E-003
Study\Route\30inch headers South west\FB prod header South West	109,596.74	518,324.65	2.00911E-010	1.12	6.97084E-003
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	2.00150E-010	1.12	5.04942E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	1.98916E-010	1.11	4.82990E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house South West (109356,518004 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	1.91448E-010	1.07	6.41244E-003
Study\Route\30inch headers South west\FB prod header South West	109,604.02	518,331.21	1.77046E-010	0.99	6.14282E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,607.20	518,338.45	1.67229E-010	0.93	5.58442E-003
Study\Route\30inch headers South west\FB prod header South West	109,611.30	518,337.78	1.60952E-010	0.90	5.58442E-003
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	1.50686E-010	0.84	5.04715E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	1.48742E-010	0.83	3.61162E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	1.44635E-010	0.81	4.82990E-003
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	1.42021E-010	0.79	4.70729E-003
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	1.39206E-010	0.78	4.82990E-003
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	1.29511E-010	0.72	4.29264E-003
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	1.29185E-010	0.72	3.11339E-003
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	1.29185E-010	0.72	3.11339E-003
Study\Route\30inch headers East\FB inj header East	109,638.29	518,333.87	1.29185E-010	0.72	3.11339E-003
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	1.29185E-010	0.72	3.11339E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	1.28546E-010	0.72	4.29264E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	1.28546E-010	0.72	4.29264E-003
Study\Route\30inch headers North west\FB prod header North west	109,598.33	518,362.54	1.28159E-010	0.72	4.29264E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	1.27485E-010	0.71	3.09549E-003
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	1.27102E-010	0.71	3.09549E-003
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	1.25174E-010	0.70	4.14889E-003
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	1.25174E-010	0.70	4.14889E-003
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	1.25174E-010	0.70	4.14889E-003
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	1.23721E-010	0.69	4.29264E-003
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	1.23721E-010	0.69	4.29264E-003
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	1.13939E-010	0.64	3.77650E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	1.13090E-010	0.63	3.77650E-003
Study\Route\30inch headers North west\FB prod header North west					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house South West (109356,518004 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,600.96	518,367.46	1.12750E-010	0.63	3.77650E-003
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	1.11013E-010	0.62	2.67544E-003
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	1.10142E-010	0.61	3.65066E-003
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	1.08964E-010	0.61	3.61162E-003
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	1.08964E-010	0.61	3.61162E-003
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	1.08845E-010	0.61	3.77650E-003
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	1.07769E-010	0.60	2.59726E-003
Study\Route\30inch headers East\FB inj header East	109,631.15	518,341.19	1.07769E-010	0.60	2.59726E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	1.06998E-010	0.60	2.59805E-003
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	1.06677E-010	0.60	2.59805E-003
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	1.01404E-010	0.57	2.55823E-003
Study\Route\30inch headers East\FB prod header East	109,609.98	518,370.38	9.33921E-011	0.52	3.09549E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	9.26964E-011	0.52	3.09549E-003
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	9.24178E-011	0.52	3.09549E-003
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	8.92170E-011	0.50	3.09549E-003
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	8.71281E-011	0.49	2.09981E-003
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	8.71281E-011	0.49	2.09981E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	8.64791E-011	0.48	2.09981E-003
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	8.07191E-011	0.45	2.67544E-003
Study\Route\30inch pipeline\FB prod pipeline	109,613.59	518,374.31	7.01543E-011	0.39	2.59805E-003
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	5.67007E-011	0.32	2.09981E-003
Study\Route\30inch pipeline\FB prod pipeline	109,625.54	518,371.79	5.67007E-011	0.32	2.09981E-003
Study\Route\30inch pipeline\FB prod pipeline	109,619.74	518,370.14	5.67007E-011	0.32	2.09981E-003
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	5.37527E-011	0.30	1.78164E-003
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	4.37732E-011	0.24	1.62107E-003
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	3.26730E-011	0.18	1.20999E-003
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	3.26730E-011	0.18	1.20999E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house South West (109356,518004 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	3.20345E-011	0.18	7.72041E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	3.17959E-011	0.18	7.72041E-004
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	3.17003E-011	0.18	7.72041E-004
Study\Route\30inch pipeline\FB prod pipeline	109,628.18	518,376.76	2.17493E-011	0.12	8.05450E-004
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	2.08472E-011	0.12	7.72041E-004
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	2.08472E-011	0.12	7.72041E-004
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	1.09121E-011	0.06	2.75292E-004
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	8.61153E-012	0.05	2.17253E-004
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	3.91987E-012	0.02	9.88910E-005
TOTAL			1.79159E-008		

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Slot 20\SL20 FBVTBO	109,683.51	518,346.26	2.08076E-007	11.29	1.13085E-002
Study\Slot 19\SL19 FBVTBO	109,680.10	518,342.85	1.61712E-007	8.77	8.78872E-003
Study\Slot 18\SL18 FBVTBO	109,676.63	518,339.38	1.01001E-007	5.48	5.48916E-003
Study\Slot 20\SL20 FBVCBO	109,683.51	518,346.26	7.04919E-008	3.82	3.58191E-002
Study\Slot 19\SL19 FBVCBO	109,680.10	518,342.85	6.64223E-008	3.60	3.37512E-002
Study\Slot 18\SL18 FBVCBO	109,676.63	518,339.38	6.08716E-008	3.30	3.09307E-002
Study\Slot 16\SL16 FBVTBO	109,666.18	518,328.94	5.55842E-008	3.02	3.02088E-003
Study\Slot 16\SL16 FBVCBO	109,666.18	518,328.94	3.91821E-008	2.13	1.99096E-002
Study\Slot 15\SL15 FBVCBO	109,662.81	518,325.25	3.67672E-008	1.99	1.86825E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	1.61324E-008	0.88	6.68162E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	1.61324E-008	0.88	6.68162E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	1.61210E-008	0.87	6.67690E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	1.60883E-008	0.87	6.66333E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	1.60883E-008	0.87	6.66333E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,688.27	518,333.21	1.60256E-008		0.87	6.63738E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,686.36	518,341.50	1.57327E-008		0.85	6.51608E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,685.44	518,331.67	1.51570E-008		0.82	6.27762E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.86	518,332.00	1.50525E-008		0.82	6.23433E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.82	518,329.65	1.49604E-008		0.81	6.19622E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	1.48812E-008		0.81	6.16341E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	1.48518E-008		0.81	6.15124E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	1.41252E-008		0.77	5.85030E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	1.40241E-008		0.76	5.80843E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	1.37360E-008		0.75	5.68911E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.96	518,321.29	1.34145E-008		0.73	5.55593E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.38	518,321.63	1.33772E-008		0.73	5.54047E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	1.33109E-008		0.72	5.51304E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	1.28967E-008		0.70	5.34148E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	1.25283E-008		0.68	5.18889E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,671.52	518,317.63	1.24312E-008		0.67	5.14869E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	1.23115E-008		0.67	5.09909E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.89	518,315.61	1.21471E-008		0.66	5.03103E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	1.15563E-008		0.63	4.78630E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,662.19	518,324.81	1.15096E-008		0.62	4.76698E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,692.32	518,338.61	1.03984E-008		0.56	5.91411E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.74	518,338.94	1.03396E-008		0.56	5.88066E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.70	518,336.58	1.03131E-008		0.56	5.86561E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.90	518,335.24	9.86628E-009		0.54	5.61146E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.32	518,335.57	9.82193E-009		0.53	5.58624E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.27	518,333.21	9.78144E-009		0.53	5.56321E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,686.36	518,341.50	9.64722E-009		0.52	5.48687E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,685.44	518,331.67	9.56678E-009	0.52	5.44112E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.86	518,332.00	9.51866E-009	0.52	5.41375E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.82	518,329.65	9.49667E-009	0.52	5.40124E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,682.94	518,338.13	9.39823E-009	0.51	5.34526E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,682.99	518,345.78	9.36744E-009	0.51	5.32774E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,679.48	518,334.57	9.08478E-009	0.49	5.16698E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,679.57	518,342.42	9.07171E-009	0.49	5.15954E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,676.11	518,338.85	8.66612E-009	0.47	4.92887E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.96	518,321.29	8.25627E-009	0.45	4.69577E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	8.18114E-009	0.44	4.65303E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.33	518,319.27	8.03589E-009	0.44	4.57042E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,669.00	518,324.19	7.56285E-009	0.41	4.30138E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,671.52	518,317.63	7.18088E-009	0.39	4.08413E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,665.63	518,328.47	7.13121E-009	0.39	4.05588E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	7.09974E-009	0.39	4.03798E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.89	518,315.61	7.04461E-009	0.38	4.00663E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,665.56	518,320.53	6.65625E-009	0.36	3.78575E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,662.19	518,324.81	6.37792E-009	0.35	3.62745E-002
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	5.10220E-009	0.28	1.22965E-001
Study\Route\30inch headers East\FB inj header East	109,674.26	518,318.91	5.02335E-009	0.27	1.21064E-001
Study\Route\30inch headers East\FB inj header East	109,681.58	518,326.03	5.01592E-009	0.27	1.20885E-001
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	4.96742E-009	0.27	1.19716E-001
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	4.88856E-009	0.27	1.17816E-001
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	4.87511E-009	0.26	1.17492E-001
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	4.83125E-009	0.26	1.16434E-001
Study\Route\30inch headers East\FB inj header East	109,638.29	518,333.87	4.79063E-009	0.26	1.15456E-001
Study\Route\30inch headers East\FB inj header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,631.15	518,341.19	4.51572E-009	0.24	1.08830E-001
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	4.42350E-009	0.24	1.06608E-001
	109,616.88	518,355.84	4.28706E-009	0.23	1.03319E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	4.24753E-009	0.23	1.03135E-001
	109,614.90	518,345.45	4.21869E-009	0.23	1.02435E-001
Study\Route\30inch headers South west\FB inj header South West	109,618.58	518,344.34	4.17050E-009	0.23	1.05214E-001
	109,619.14	518,350.96	4.16483E-009	0.23	1.05071E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	4.12665E-009	0.22	1.00200E-001
	109,609.74	518,363.16	4.11694E-009	0.22	9.92195E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	4.10753E-009	0.22	9.97358E-002
	109,609.98	518,370.38	4.07899E-009	0.22	9.83050E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	4.06779E-009	0.22	1.02623E-001
	109,612.96	518,357.64	4.04832E-009	0.22	1.02131E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	4.00501E-009	0.22	9.72463E-002
	109,606.34	518,372.37	3.98632E-009	0.22	9.67925E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	3.97712E-009	0.22	9.65692E-002
	109,604.63	518,373.41	3.93798E-009	0.21	9.59070E-002
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	3.92328E-009	0.21	9.89769E-002
	109,607.99	518,371.54	3.91069E-009	0.21	9.86593E-002
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	3.89486E-009	0.21	9.48568E-002
	109,606.78	518,364.32	3.88196E-009	0.21	9.79345E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	3.87610E-009	0.21	1.04374E-001
	109,625.54	518,371.79	3.87266E-009	0.21	1.04281E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	3.87200E-009	0.21	9.40168E-002
	109,598.33	518,362.54	3.86796E-009	0.21	9.42018E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	3.81865E-009	0.21	1.02827E-001
	109,624.54	518,383.46	3.81150E-009	0.21	1.02634E-001

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	3.79929E-009	0.21	9.25294E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	3.79165E-009	0.21	9.20658E-002
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	3.75975E-009	0.20	9.48514E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	3.72333E-009	0.20	9.06793E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	3.69013E-009	0.20	9.93660E-002
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	3.67655E-009	0.20	9.27524E-002
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	3.65564E-009	0.20	9.84374E-002
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	3.61349E-009	0.20	9.11615E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	3.56525E-009	0.19	9.60032E-002
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	3.52051E-009	0.19	9.47987E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	3.45973E-009	0.19	8.42596E-002
Study\Route\30inch headers East\FB prod header East	109,688.91	518,333.14	3.44904E-009	0.19	1.14319E-001
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	3.43959E-009	0.19	1.14005E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	3.43078E-009	0.19	8.33034E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	3.41849E-009	0.19	9.20514E-002
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	3.40692E-009	0.18	1.12923E-001
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	3.40473E-009	0.18	9.16808E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	3.39516E-009	0.18	1.12533E-001
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	3.39457E-009	0.18	8.56386E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	3.35572E-009	0.18	9.03611E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	3.31807E-009	0.18	9.10594E-003
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	3.30736E-009	0.18	8.90589E-002
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	3.25460E-009	0.18	1.07874E-001
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	3.23421E-009	0.18	8.87581E-003
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	3.16974E-009	0.17	7.71970E-002
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	3.14415E-009	0.17	1.04213E-001
Study\Route\30inch headers Old wells\FB inj header old wells					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB inj pipeline	109,568.72	518,303.44	3.11768E-009	0.17	7.57009E-002
Study\Route\30inch headers East\FB prod header East	109,588.25	518,402.40	3.10325E-009	0.17	8.35628E-002
Study\Route\30inch headers South west\FB inj header South West	109,645.43	518,326.54	3.08103E-009	0.17	1.02121E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,567.60	518,298.38	3.07159E-009	0.17	7.74904E-002
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	2.97724E-009	0.16	9.86807E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	2.95805E-009	0.16	7.96528E-002
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	2.87913E-009	0.16	7.01195E-002
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	2.87891E-009	0.16	9.54216E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	2.84716E-009	0.15	6.91325E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	2.82852E-009	0.15	7.61649E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	2.82506E-009	0.15	7.75294E-003
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	2.72827E-009	0.15	9.04287E-002
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	2.72552E-009	0.15	6.63782E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	2.69109E-009	0.15	6.78912E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	2.66165E-009	0.14	6.46279E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	2.63708E-009	0.14	7.23707E-003
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	2.57895E-009	0.14	6.94448E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	2.56983E-009	0.14	8.51771E-002
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	2.54059E-009	0.14	6.18745E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	2.53424E-009	0.14	8.46280E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	2.53239E-009	0.14	8.45663E-002
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	2.53161E-009	0.14	8.78372E-002
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	2.51624E-009	0.14	8.73038E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	2.50897E-009	0.14	6.75602E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	2.48534E-009	0.13	6.03470E-002
Study\Route\30inch pipeline\FB prod pipeline	109,628.18	518,376.76	2.42214E-009	0.13	8.96997E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,580.26	518,314.77	2.41702E-009	0.13	6.63315E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,610.23	518,358.55	2.41072E-009		0.13	8.05030E-002
Study\Route\30inch headers East\FB prod header East						
	109,609.74	518,363.16	2.40685E-009		0.13	7.97753E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,625.54	518,371.79	2.39892E-009		0.13	8.88401E-002
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,607.20	518,338.45	2.38642E-009		0.13	7.96917E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,611.30	518,337.78	2.37926E-009		0.13	8.25511E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,612.96	518,357.64	2.37267E-009		0.13	8.23225E-002
Study\Route\30inch headers East\FB prod header East						
	109,609.98	518,370.38	2.36679E-009		0.13	7.84475E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,624.54	518,383.46	2.29192E-009		0.12	8.48774E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,619.74	518,370.14	2.28334E-009		0.12	8.45598E-002
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,604.54	518,364.95	2.23458E-009		0.12	7.46211E-002
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,606.34	518,372.37	2.21995E-009		0.12	7.41326E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,604.02	518,331.21	2.21063E-009		0.12	7.67003E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,606.78	518,364.32	2.20569E-009		0.12	7.65289E-002
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,599.51	518,331.45	2.20077E-009		0.12	7.34920E-002
Study\Route\30inch headers North west\FB prod header North west						
	109,604.63	518,373.41	2.18983E-009		0.12	7.33472E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,607.99	518,371.54	2.18893E-009		0.12	7.59474E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,613.59	518,374.31	2.16723E-009		0.12	8.02597E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,617.07	518,388.81	2.14927E-009		0.12	7.95945E-002
Study\Route\30inch headers North west\FB prod header North west						
	109,600.96	518,367.46	2.14378E-009		0.12	7.18049E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13						
	109,584.92	518,297.12	2.13211E-009		0.12	8.53880E-003
Study\Route\30inch headers North west\FB prod header North west						
	109,598.33	518,362.54	2.12248E-009		0.12	7.10914E-002
Study\Route\30inch headers South west\FB prod header South West						
	109,596.74	518,324.65	2.04876E-009		0.11	7.10841E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7						
	109,574.01	518,318.91	2.02595E-009		0.11	5.55991E-003
Study\Route\30inch headers Old wells\FB prod header old wells						
	109,591.81	518,324.45	1.98639E-009		0.11	6.63333E-002
Study\Route\30inch pipeline\FB prod pipeline						
	109,607.26	518,381.33	1.98248E-009		0.11	7.34179E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13						
	109,580.68	518,300.62	1.97586E-009		0.11	7.91305E-003
Study\Route\30inch pipeline\FB prod pipeline						

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /Avge Year			
	109,609.07	518,391.41	1.93537E-009		0.10	7.16733E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	1.93368E-009		0.10	7.74414E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.20	518,306.91	1.91584E-009		0.10	7.67270E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.53	518,306.25	1.91584E-009		0.10	7.67270E-003
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	1.90349E-009		0.10	6.37565E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	1.87495E-009		0.10	6.26116E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	1.85829E-009		0.10	6.44755E-002
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	1.82248E-009		0.10	6.10431E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,571.94	518,306.52	1.79911E-009		0.10	4.93739E-003
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	1.79639E-009		0.10	6.65262E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,576.10	518,306.13	1.78747E-009		0.10	7.15858E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	1.76820E-009		0.10	7.08140E-003
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	1.75168E-009		0.10	6.48705E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	1.74113E-009		0.09	6.04104E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	1.73671E-009		0.09	6.95528E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,570.15	518,305.67	1.73479E-009		0.09	4.76087E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	1.72646E-009		0.09	6.91425E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	1.71950E-009		0.09	5.74207E-002
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	1.71001E-009		0.09	5.72759E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	1.61934E-009		0.09	5.99694E-002
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	1.61167E-009		0.09	5.59187E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	1.58713E-009		0.09	5.30004E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	1.58708E-009		0.09	5.87749E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	1.53936E-009		0.08	5.15601E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	1.53342E-009		0.08	6.14115E-003
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	1.49991E-009		0.08	5.20411E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	1.48739E-009		0.08	4.98193E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,574.57	518,287.10	1.48189E-009		0.08	5.93476E-003
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	1.46945E-009		0.08	5.44187E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	1.44177E-009		0.08	4.81463E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	1.43823E-009		0.08	3.94700E-003
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	1.42245E-009		0.08	4.76442E-002
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	1.39232E-009		0.08	5.15620E-002
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	1.38086E-009		0.07	4.79105E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	1.36883E-009		0.07	4.57104E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,570.34	518,290.61	1.36466E-009		0.07	5.46527E-003
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	1.33444E-009		0.07	4.94189E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,568.18	518,296.23	1.30750E-009		0.07	5.23638E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,567.85	518,296.89	1.30446E-009		0.07	5.22419E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,570.96	518,283.82	1.29865E-009		0.07	5.20091E-003
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	1.27534E-009		0.07	4.27168E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	1.26213E-009		0.07	5.05464E-003
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	1.25457E-009		0.07	4.64610E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	1.25373E-009		0.07	4.18668E-002
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	1.25103E-009		0.07	4.63299E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,566.72	518,287.33	1.22865E-009		0.07	4.92059E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.19902E-009		0.07	4.80193E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	1.19902E-009		0.07	4.80193E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,561.35	518,297.40	1.10361E-009		0.06	3.02871E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	1.09910E-009		0.06	4.40175E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,559.55	518,296.55	8.37391E-010		0.05	2.29809E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,567.27	518,280.63	8.24301E-010		0.04	3.30122E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	7.28153E-010		0.04	2.95346E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8						

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,592.10	518,324.99	7.27575E-010	0.04	2.74193E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.77	518,328.18	7.25916E-010	0.04	2.94439E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.47	518,325.73	6.77802E-010	0.04	2.74923E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,563.03	518,284.14	5.98429E-010	0.03	2.39663E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,553.30	518,300.68	5.77063E-010	0.03	1.58366E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,551.54	518,288.07	5.33978E-010	0.03	1.46542E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,549.74	518,287.22	5.06374E-010	0.03	1.38967E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	4.95219E-010	0.03	1.98329E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	4.90416E-010	0.03	2.69707E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.55	518,290.43	4.73070E-010	0.03	1.89458E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	4.72069E-010	0.03	1.77904E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,543.48	518,291.36	4.49636E-010	0.02	1.23396E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,558.45	518,289.64	4.19883E-010	0.02	1.68157E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.52	518,324.44	4.12858E-010	0.02	1.67459E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.19	518,324.77	4.12858E-010	0.02	1.67459E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	4.10205E-010	0.02	1.66383E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,551.73	518,330.83	4.05887E-010	0.02	1.64632E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.73	518,320.79	3.84276E-010	0.02	1.55866E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,542.42	518,280.11	3.83601E-010	0.02	1.05274E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	3.81352E-010	0.02	1.54680E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	3.79992E-010	0.02	1.54129E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.09	518,318.68	3.79776E-010	0.02	1.54041E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,584.05	518,328.28	3.76715E-010	0.02	1.41969E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,547.89	518,334.22	3.76491E-010	0.02	1.52708E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	3.55589E-010	0.02	1.44231E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,544.30	518,330.80	3.50013E-010	0.02	1.41969E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,540.63	518,279.27	3.49696E-010	0.02	9.59688E-004

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,544.35	518,323.77	3.46180E-010	0.02	1.40414E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.43	518,318.00	3.46180E-010	0.02	1.40414E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
	109,582.06	518,315.62	3.45426E-010	0.02	1.30177E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.12	518,315.55	3.44573E-010	0.02	1.39762E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
	109,580.26	518,314.77	3.19104E-010	0.02	1.20258E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,540.51	518,327.16	3.12603E-010	0.02	1.26795E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,540.38	518,320.65	3.08959E-010	0.02	1.25317E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,580.68	518,300.62	2.97079E-010	0.02	1.63381E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,578.53	518,306.25	2.93505E-010	0.02	1.61415E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,581.61	518,293.80	2.93126E-010	0.02	1.61207E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,578.20	518,306.91	2.87962E-010	0.02	1.58366E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,576.10	518,306.13	2.76178E-010	0.01	1.51886E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,577.37	518,297.31	2.74074E-010	0.01	1.50729E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,536.54	518,324.03	2.73421E-010	0.01	1.10902E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,575.22	518,302.94	2.68157E-010	0.01	1.47475E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,574.89	518,303.60	2.66427E-010	0.01	1.46523E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,534.37	518,283.40	2.56167E-010	0.01	7.03013E-004
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,572.79	518,302.81	2.55355E-010	0.01	1.40434E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
	109,574.01	518,318.91	2.41956E-010	0.01	9.11835E-004
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,574.57	518,287.10	2.38694E-010	0.01	1.31272E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,570.34	518,290.61	2.13369E-010	0.01	1.17344E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,568.18	518,296.23	2.10307E-010	0.01	1.15660E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,567.85	518,296.89	2.07285E-010	0.01	1.13998E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,570.96	518,283.82	2.06184E-010	0.01	1.13392E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,565.76	518,296.11	1.91611E-010	0.01	1.05377E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,566.72	518,287.33	1.80873E-010	0.01	9.94724E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,571.94	518,306.52	1.73677E-010	0.01	6.54516E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	1.68903E-010	0.01	9.28891E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	1.68903E-010	0.01	9.28891E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	1.63835E-010	0.01	6.17429E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	1.27831E-010	0.01	7.03013E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	1.06548E-010	0.01	5.85970E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	1.02875E-010	0.01	3.87694E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	8.97080E-011	0.00	4.99666E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	8.97080E-011	0.00	4.99666E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	8.54226E-011	0.00	4.75796E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	7.96685E-011	0.00	4.38142E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	7.96685E-011	0.00	4.38142E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	7.43567E-011	0.00	4.08929E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	5.73241E-011	0.00	3.19290E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	5.73241E-011	0.00	3.19290E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	5.51808E-011	0.00	3.07353E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	4.84428E-011	0.00	2.66414E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	4.55026E-011	0.00	2.53446E-004
TOTAL			1.84353E-006		

Risk Ranking Point: RRP North wellsite (109624,518440 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	7.78753E-009	0.80	2.13717E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	7.63778E-009	0.79	2.09607E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	7.55301E-009	0.78	2.07281E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	6.61588E-009	0.68	2.74012E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	6.41903E-009	0.66	2.65859E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	6.26311E-009	0.65	1.71882E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	6.23987E-009	0.64	2.58439E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	6.14348E-009	0.63	1.68599E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,580.26	518,314.77	5.97700E-009	0.62	1.64030E-002
Study\Slot 20\SL20 FBVCBO	109,683.51	518,346.26	5.87489E-009	0.61	2.98521E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	5.68619E-009	0.59	2.35507E-002
Study\Slot 19\SL19 FBVCBO	109,680.10	518,342.85	5.66938E-009	0.59	2.88078E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	5.61275E-009	0.58	2.32465E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	5.58017E-009	0.58	2.31116E-002
Study\Slot 18\SL18 FBVCBO	109,676.63	518,339.38	5.49718E-009	0.57	2.79328E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	5.44075E-009	0.56	2.25342E-002
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	5.14951E-009	0.53	1.24105E-001
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	5.07869E-009	0.52	1.22398E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	5.07503E-009	0.52	1.23228E-001
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	5.06117E-009	0.52	1.23262E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	5.04931E-009	0.52	1.22603E-001
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	5.04245E-009	0.52	1.22806E-001
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	5.00513E-009	0.52	1.26270E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	5.00059E-009	0.52	1.21420E-001
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	4.98068E-009	0.51	1.25653E-001
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	4.96353E-009	0.51	1.19623E-001
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	4.96326E-009	0.51	1.20877E-001
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	4.95144E-009	0.51	1.19331E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	4.92046E-009	0.51	1.19474E-001
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	4.91778E-009	0.51	1.19770E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	4.90749E-009	0.51	1.19160E-001
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	4.90639E-009	0.51	2.03210E-002
Study\Route\30inch headers North west\FB inj header North West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,582.75	518,348.42	4.90163E-009	0.51	1.19376E-001
Study\Route\30inch headers South west\FB inj header South West	109,631.15	518,341.19	4.89780E-009	0.51	1.18038E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,612.96	518,357.64	4.88709E-009	0.50	1.23292E-001
Study\Route\30inch headers East\FB inj header East	109,607.20	518,338.45	4.85034E-009	0.50	1.17772E-001
Study\Route\30inch headers South west\FB inj header South West	109,619.14	518,350.96	4.84709E-009	0.50	1.22283E-001
Study\Route\30inch headers South west\FB inj header South West	109,638.29	518,333.87	4.81966E-009	0.50	1.16155E-001
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	4.75238E-009	0.49	1.30422E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	4.74973E-009	0.49	1.96721E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	4.74531E-009	0.49	1.19715E-001
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	4.70956E-009	0.49	1.26817E-001
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	4.69949E-009	0.49	1.26546E-001
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	4.67243E-009	0.48	1.25817E-001
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	4.66858E-009	0.48	1.25713E-001
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	4.66820E-009	0.48	1.13691E-001
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	4.66044E-009	0.48	1.25494E-001
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	4.65545E-009	0.48	1.25360E-001
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	4.65052E-009	0.48	1.25227E-001
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	4.64971E-009	0.48	1.25205E-001
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,571.94	518,306.52	4.64167E-009	0.48	1.27384E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	4.64135E-009	0.48	1.24980E-001
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	4.63597E-009	0.48	1.24835E-001
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	4.63143E-009	0.48	1.91822E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	4.62334E-009	0.48	1.24495E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	4.60787E-009	0.48	1.11884E-001
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	4.60486E-009	0.48	1.10978E-001
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	4.59745E-009	0.47	1.23798E-001

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB inj pipeline					
109,581.91	518,409.42	4.59199E-009	0.47	1.23651E-001	
Study\Route\30inch pipeline\FB inj pipeline					
109,613.59	518,374.31	4.58358E-009	0.47	1.23424E-001	
Study\Route\30inch pipeline\FB inj pipeline					
109,625.54	518,371.79	4.57507E-009	0.47	1.23195E-001	
Study\Route\30inch pipeline\FB inj pipeline					
109,619.74	518,370.14	4.56698E-009	0.47	1.22977E-001	
Study\Route\30inch pipeline\FB inj pipeline					
109,575.57	518,416.45	4.56053E-009	0.47	1.22804E-001	
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
109,669.00	518,324.19	4.55209E-009	0.47	1.88536E-002	
Study\Route\30inch headers South west\FB inj header South West					
109,604.02	518,331.21	4.53045E-009	0.47	1.14295E-001	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,684.86	518,332.00	4.52325E-009	0.47	1.87341E-002	
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
109,570.15	518,305.67	4.52100E-009	0.47	1.24072E-002	
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
109,688.90	518,335.24	4.50550E-009	0.47	1.86606E-002	
Study\Route\30inch headers East\FB inj header East					
109,652.57	518,319.22	4.47807E-009	0.46	1.07923E-001	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,685.44	518,331.67	4.46947E-009	0.46	1.85114E-002	
Study\Route\30inch headers Old wells\FB inj header old wells					
109,591.81	518,324.45	4.45905E-009	0.46	1.08271E-001	
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
109,691.70	518,336.58	4.44083E-009	0.46	1.83928E-002	
Study\Route\30inch headers North west\FB inj header North West					
109,567.18	518,334.29	4.42978E-009	0.46	1.07884E-001	
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,547.89	518,334.22	4.41955E-009	0.46	1.79261E-002	
Study\Route\30inch headers East\FB inj header East					
109,688.91	518,333.14	4.40734E-009	0.46	1.06218E-001	
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,556.77	518,328.18	4.40548E-009	0.46	1.78691E-002	
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,557.11	518,327.85	4.39904E-009	0.45	1.78430E-002	
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
109,662.19	518,324.81	4.39517E-009	0.45	1.82037E-002	
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
109,688.27	518,333.21	4.38396E-009	0.45	1.81572E-002	
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,551.73	518,330.83	4.36393E-009	0.45	1.77005E-002	
Study\Route\30inch headers South west\FB inj header South West					
109,596.74	518,324.65	4.36062E-009	0.45	1.10010E-001	
Study\Route\30inch headers Old wells\FB inj header old wells					
109,584.11	518,317.44	4.35982E-009	0.45	1.05862E-001	
Study\Route\30inch headers East\FB inj header East					
109,681.58	518,326.03	4.33821E-009	0.45	1.04552E-001	
Study\Route\30inch headers North west\FB inj header North West					
109,559.39	518,327.23	4.33610E-009	0.45	1.05603E-001	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,684.82	518,329.65	4.30349E-009	0.44	1.78239E-002
Study\Route\30inch headers East\FB inj header East					
	109,674.26	518,318.91	4.30161E-009	0.44	1.03670E-001
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.38	518,321.63	4.29014E-009	0.44	1.77686E-002
Study\Route\30inch headers East\FB inj header East					
	109,659.70	518,311.89	4.27864E-009	0.44	1.03117E-001
Study\Route\30inch headers South west\FB inj header South West					
	109,589.45	518,318.08	4.26412E-009	0.44	1.07576E-001
Study\Route\30inch headers East\FB inj header East					
	109,666.94	518,311.79	4.22217E-009	0.44	1.01756E-001
Study\Slot 16\SL16 FBVCBO					
	109,666.18	518,328.94	4.21743E-009	0.44	2.14300E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.96	518,321.29	4.20636E-009	0.43	1.74216E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,576.42	518,310.44	4.18038E-009	0.43	1.01505E-001
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,556.47	518,325.73	4.17125E-009	0.43	1.69190E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.33	518,319.27	4.12236E-009	0.43	1.70737E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,551.60	518,320.17	4.12075E-009	0.43	1.00358E-001
Study\Route\30inch headers South west\FB inj header South West					
	109,582.17	518,311.52	4.11336E-009	0.42	1.03772E-001
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
	109,578.20	518,306.91	4.01149E-009	0.41	1.60655E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,544.30	518,330.80	4.01137E-009	0.41	1.62705E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,548.14	518,327.42	4.00121E-009	0.41	1.62293E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,553.19	518,324.77	3.98269E-009	0.41	1.61542E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,553.52	518,324.44	3.96302E-009	0.41	1.60744E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,568.72	518,303.44	3.92625E-009	0.41	9.53339E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
	109,578.53	518,306.25	3.92155E-009	0.41	1.57053E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,665.56	518,320.53	3.90832E-009	0.40	1.61872E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,543.81	518,313.11	3.89960E-009	0.40	9.49722E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,574.89	518,304.95	3.87540E-009	0.40	9.77691E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,561.03	518,296.44	3.85873E-009	0.40	9.36946E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
	109,576.10	518,306.13	3.82746E-009	0.40	1.53285E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,552.88	518,322.32	3.82533E-009	0.40	1.55159E-002
Study\Slot 15\SL15 FBVCBO					
	109,662.81	518,325.25	3.71840E-009	0.38	1.88943E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB inj header South West					
109,567.60    518,298.38    3.70488E-009	109,567.60	518,298.38	3.70488E-009	0.38	9.34670E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
109,540.51    518,327.16    3.67719E-009	109,540.51	518,327.16	3.67719E-009	0.38	1.49150E-002
Study\Route\30inch headers South west\FB inj header South West					
109,560.32    518,291.82    3.64183E-009	109,560.32	518,291.82	3.64183E-009	0.38	9.18765E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,574.89    518,303.60    3.62270E-009	109,574.89	518,303.60	3.62270E-009	0.37	1.45085E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,575.22    518,302.94    3.61033E-009	109,575.22	518,302.94	3.61033E-009	0.37	1.44589E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
109,549.40    518,321.13    3.58288E-009	109,549.40	518,321.13	3.58288E-009	0.37	1.45325E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
109,549.73    518,320.79    3.57435E-009	109,549.73	518,320.79	3.57435E-009	0.37	1.44979E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
109,544.35    518,323.77    3.53356E-009	109,544.35	518,323.77	3.53356E-009	0.36	1.43325E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
109,553.33    518,289.44    3.53284E-009	109,553.33	518,289.44	3.53284E-009	0.36	8.57814E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
109,580.68    518,300.62    3.52708E-009	109,580.68	518,300.62	3.52708E-009	0.36	1.41255E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
109,670.94    518,317.96    3.52595E-009	109,670.94	518,317.96	3.52595E-009	0.36	1.46035E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
109,671.52    518,317.63    3.52069E-009	109,671.52	518,317.63	3.52069E-009	0.36	1.45818E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,572.79    518,302.81    3.49610E-009	109,572.79	518,302.81	3.49610E-009	0.36	1.40014E-002
Study\Route\30inch headers East\FB prod header East					
109,609.98    518,370.38    3.43060E-009	109,609.98	518,370.38	3.43060E-009	0.35	1.13708E-001
Study\Route\30inch headers East\FB prod header East					
109,609.74    518,363.16    3.41887E-009	109,609.74	518,363.16	3.41887E-009	0.35	1.13319E-001
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
109,670.89    518,315.61    3.40418E-009	109,670.89	518,315.61	3.40418E-009	0.35	1.40992E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
109,606.34    518,372.37    3.39260E-009	109,606.34	518,372.37	3.39260E-009	0.35	1.13292E-001
Study\Route\30inch headers North west\FB prod header North west					
109,604.63    518,373.41    3.38421E-009	109,604.63	518,373.41	3.38421E-009	0.35	1.13352E-001
Study\Route\30inch headers Old wells\FB prod header old wells					
109,604.54    518,364.95    3.38336E-009	109,604.54	518,364.95	3.38336E-009	0.35	1.12983E-001
Study\Route\30inch headers East\FB prod header East					
109,616.88    518,355.84    3.38066E-009	109,616.88	518,355.84	3.38066E-009	0.35	1.12052E-001
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
109,549.09    518,318.68    3.37741E-009	109,549.09	518,318.68	3.37741E-009	0.35	1.36991E-002
Study\Route\30inch headers North west\FB prod header North west					
109,600.96    518,367.46    3.37662E-009	109,600.96	518,367.46	3.37662E-009	0.35	1.13098E-001
Study\Route\30inch headers Old wells\FB prod header old wells					
109,610.23    518,358.55    3.37660E-009	109,610.23	518,358.55	3.37660E-009	0.35	1.12758E-001
Study\Route\30inch headers North west\FB prod header North west					
109,598.33    518,362.54    3.32920E-009	109,598.33	518,362.54	3.32920E-009	0.34	1.11510E-001
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
109,584.92    518,297.12    3.32636E-009	109,584.92	518,297.12	3.32636E-009	0.34	1.33216E-002
Study\Route\30inch headers South west\FB prod header South West					
109,607.99    518,371.54    3.26420E-009	109,607.99	518,371.54	3.26420E-009	0.34	1.13255E-001
Study\Route\30inch headers South west\FB prod header South West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	3.25433E-009	0.34	1.12913E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,612.96	518,357.64	3.24311E-009	0.33	1.12523E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	3.23796E-009	0.33	1.08128E-001
Study\Route\30inch pipeline\FB prod pipeline	109,545.63	518,282.44	3.20194E-009	0.33	7.77469E-002
Study\Route\30inch pipeline East\FB prod header East	109,624.01	518,348.52	3.19966E-009	0.33	1.06053E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,536.54	518,324.03	3.17839E-009	0.33	1.28919E-002
Study\Route\30inch pipeline\FB prod pipeline	109,617.07	518,388.81	3.17321E-009	0.33	1.17514E-001
Study\Route\30inch pipeline\FB prod pipeline	109,624.54	518,383.46	3.16774E-009	0.33	1.17312E-001
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	3.16198E-009	0.33	1.26633E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	3.15744E-009	0.33	1.16930E-001
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	3.14718E-009	0.33	1.05413E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	3.13756E-009	0.32	1.27263E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.43	518,318.00	3.13756E-009	0.32	1.27263E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	3.13741E-009	0.32	1.16189E-001
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	3.13570E-009	0.32	1.16125E-001
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,561.35	518,297.40	3.13506E-009	0.32	8.60371E-003
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	3.13332E-009	0.32	1.16037E-001
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	3.13134E-009	0.32	1.15964E-001
Study\Route\30inch pipeline\FB prod pipeline	109,628.18	518,376.76	3.12257E-009	0.32	1.15639E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	3.12027E-009	0.32	1.04198E-001
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	3.11498E-009	0.32	1.08078E-001
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	3.11479E-009	0.32	1.15351E-001
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	3.11345E-009	0.32	1.15302E-001
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	3.11176E-009	0.32	1.15239E-001
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	3.11092E-009	0.32	1.15208E-001
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	3.10924E-009	0.32	1.15145E-001
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	3.10685E-009	0.32	1.02977E-001

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB prod pipeline					
	109,594.58	518,395.38	3.10194E-009	0.32	1.14875E-001
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,553.30	518,300.68	3.09343E-009	0.32	8.48945E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,613.59	518,374.31	3.08533E-009	0.32	1.14260E-001
Study\Route\30inch pipeline\FB prod pipeline					
	109,625.54	518,371.79	3.08264E-009	0.32	1.14160E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,540.38	518,320.65	3.08197E-009	0.32	1.25008E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,619.74	518,370.14	3.07795E-009	0.32	1.13987E-001
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,607.20	518,338.45	3.04783E-009	0.31	1.01779E-001
Study\Route\30inch headers South west\FB prod header South West					
	109,618.58	518,344.34	3.02505E-009	0.31	1.04958E-001
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,584.05	518,328.28	3.02392E-009	0.31	1.13959E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,559.55	518,296.55	3.02281E-009	0.31	8.29566E-003
Study\Route\30inch headers North west\FB prod header North west					
	109,582.75	518,348.42	3.00866E-009	0.31	1.00773E-001
Study\Route\30inch headers East\FB prod header East					
	109,638.29	518,333.87	2.99809E-009	0.31	9.93718E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
	109,581.61	518,293.80	2.94053E-009	0.30	1.17764E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,599.51	518,331.45	2.91929E-009	0.30	9.74863E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,611.30	518,337.78	2.91289E-009	0.30	1.01066E-001
Study\Route\30inch headers North west\FB prod header North west					
	109,574.96	518,341.35	2.91055E-009	0.30	9.74874E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,592.10	518,324.99	2.85466E-009	0.29	1.07581E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
	109,567.85	518,296.89	2.84968E-009	0.29	1.14126E-002
Study\Route\30inch headers East\FB prod header East					
	109,645.43	518,326.54	2.83742E-009	0.29	9.40464E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.12	518,315.55	2.83490E-009	0.29	1.14986E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,604.02	518,331.21	2.81957E-009	0.29	9.78281E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
	109,568.18	518,296.23	2.75612E-009	0.28	1.10379E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,591.81	518,324.45	2.72585E-009	0.28	9.10265E-002
Study\Route\30inch headers North west\FB prod header North west					
	109,567.18	518,334.29	2.70452E-009	0.28	9.05864E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,590.30	518,324.14	2.67712E-009	0.28	1.00890E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,596.74	518,324.65	2.66748E-009	0.28	9.25513E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB prod header East	109,565.76	518,296.11	2.63217E-009	0.27	1.05415E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,652.57	518,319.22	2.58355E-009	0.27	8.56321E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,682.99	518,345.78	2.55934E-009	0.26	1.45563E-002
Study\Route\30inch headers East\FB prod header East	109,584.11	518,317.44	2.55604E-009	0.26	8.53558E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	2.54402E-009	0.26	8.52106E-002
Study\Route\30inch headers East\FB prod header East	109,688.91	518,333.14	2.52709E-009	0.26	8.37605E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,679.57	518,342.42	2.49561E-009	0.26	1.41938E-002
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	2.48634E-009	0.26	8.24099E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	2.48192E-009	0.26	8.61131E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,676.11	518,338.85	2.41656E-009	0.25	1.37442E-002
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	2.41096E-009	0.25	7.99116E-002
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	2.40869E-009	0.25	7.98361E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	2.33733E-009	0.24	8.10964E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	2.33386E-009	0.24	7.73560E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	2.31689E-009	0.24	7.73700E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	2.30413E-009	0.24	9.22774E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	2.29178E-009	0.24	9.17826E-003
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	2.26700E-009	0.23	7.59319E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,570.34	518,290.61	2.25034E-009	0.23	9.01232E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	2.23806E-009	0.23	8.96313E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,574.57	518,287.10	2.19565E-009	0.23	8.79329E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,686.36	518,341.50	2.17897E-009	0.23	1.23929E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,665.63	518,328.47	2.17218E-009	0.22	1.23543E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,682.94	518,338.13	2.13992E-009	0.22	1.21708E-002
Study\Slot 5\SL5 FBVCBO	109,547.09	518,333.40	2.13986E-009	0.22	1.08733E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,566.72	518,287.33	2.11666E-009	0.22	8.47695E-003
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	2.11396E-009	0.22	7.33464E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,568.72	518,303.44	2.0998E-009	0.22	7.01230E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,679.48	518,334.57	2.09002E-009	0.22	1.18870E-002
Study\Route\30inch headers North west\FB prod header North west					
	109,543.81	518,313.11	2.03222E-009	0.21	6.80683E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,570.96	518,283.82	2.02067E-009	0.21	8.09252E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,551.54	518,288.07	1.96796E-009	0.20	5.40076E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,543.48	518,291.36	1.95765E-009	0.20	5.37247E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,567.60	518,298.38	1.91475E-009	0.20	6.64345E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,691.74	518,338.94	1.91147E-009	0.20	1.08715E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,549.74	518,287.22	1.88420E-009	0.19	5.17089E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,669.00	518,324.19	1.87732E-009	0.19	1.06773E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,561.03	518,296.44	1.87625E-009	0.19	6.26551E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.32	518,335.57	1.87205E-009	0.19	1.06473E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,692.32	518,338.61	1.87059E-009	0.19	1.06390E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
	109,574.01	518,318.91	1.85414E-009	0.19	6.98749E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.90	518,335.24	1.82918E-009	0.19	1.04035E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,662.19	518,324.81	1.82030E-009	0.19	1.03530E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,691.70	518,336.58	1.81808E-009	0.19	1.03404E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
	109,582.06	518,315.62	1.80790E-009	0.19	6.81326E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,560.55	518,290.43	1.78764E-009	0.18	7.15926E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,684.86	518,332.00	1.78591E-009	0.18	1.01574E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,685.44	518,331.67	1.77481E-009	0.18	1.00943E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.27	518,333.21	1.76845E-009	0.18	1.00581E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,560.88	518,289.77	1.74183E-009	0.18	6.97581E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,560.32	518,291.82	1.73081E-009	0.18	6.00525E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,553.33	518,289.44	1.72495E-009	0.18	5.76027E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,684.82	518,329.65	1.71969E-009	0.18	9.78074E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,558.45	518,289.64	1.67255E-009	0.17	6.69833E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,580.26	518,314.77	1.66077E-009	0.17	6.25876E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	1.59761E-009	0.17	9.08640E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.96	518,321.29	1.56452E-009	0.16	8.89822E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	1.56180E-009	0.16	8.69909E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	1.55374E-009	0.16	8.65419E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	1.54525E-009	0.16	8.60691E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	1.53601E-009	0.16	8.55547E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	1.51801E-009	0.16	5.06922E-002
Study\Slot 4\SL4 FBVCBO	109,543.38	518,330.08	1.50281E-009	0.16	7.63620E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,542.42	518,280.11	1.46364E-009	0.15	4.01673E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	1.45623E-009	0.15	8.11105E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,665.56	518,320.53	1.44433E-009	0.15	8.21462E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.33	518,319.27	1.42519E-009	0.15	8.10579E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,534.37	518,283.40	1.42461E-009	0.15	3.90964E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,544.30	518,330.80	1.38352E-009	0.14	7.70609E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	1.37638E-009	0.14	7.66634E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	1.36952E-009	0.14	7.62812E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,548.14	518,327.42	1.34528E-009	0.14	7.49311E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,563.03	518,284.14	1.34020E-009	0.14	5.36730E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,540.63	518,279.27	1.32444E-009	0.14	3.63473E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.20	518,306.91	1.30597E-009	0.13	7.18224E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,567.27	518,280.63	1.30283E-009	0.13	5.21768E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.53	518,306.25	1.27456E-009	0.13	7.00950E-003
Study\Slot 3\SL3 FBVCBO	109,539.74	518,326.69	1.27011E-009	0.13	6.45381E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	1.25374E-009	0.13	6.98325E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,576.10	518,306.13	1.23659E-009	0.13	6.80069E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	1.21233E-009	0.13	6.89514E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,671.52	518,317.63	1.18918E-009	0.12	6.76348E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.89	518,315.61	1.14331E-009	0.12	6.50262E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	1.07895E-009	0.11	4.06614E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	1.06069E-009	0.11	3.99730E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,540.51	518,327.16	1.01348E-009	0.10	5.64498E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,544.35	518,323.77	1.00615E-009	0.10	5.60415E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	1.00448E-009	0.10	5.59484E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	1.00399E-009	0.10	5.59214E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	9.95955E-010	0.10	5.47732E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	9.86367E-010	0.10	3.71722E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	9.58859E-010	0.10	5.27330E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	9.53871E-010	0.10	5.24587E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	9.47876E-010	0.10	5.27959E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	9.36438E-010	0.10	5.15000E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,536.54	518,324.03	9.03386E-010	0.09	5.03178E-003
Study\Slot 2\SL2 FBVCBO	109,536.09	518,323.62	8.83847E-010	0.09	4.49109E-004
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	8.83351E-010	0.09	4.85804E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.76	518,317.67	8.77253E-010	0.09	4.88623E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.43	518,318.00	8.77253E-010	0.09	4.88623E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,540.38	518,320.65	8.71822E-010	0.09	4.85598E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	8.54576E-010	0.09	4.69979E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.12	518,315.55	8.16810E-010	0.08	4.54956E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	7.60825E-010	0.08	4.18421E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,581.61	518,293.80	7.59984E-010	0.08	4.17958E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,568.18	518,296.23	7.57955E-010	0.08	4.16842E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,565.76	518,296.11	7.12322E-010	0.07	3.91746E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	6.35139E-010	0.07	3.49299E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	6.16054E-010	0.06	3.38803E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	6.12560E-010	0.06	3.36881E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	5.93777E-010	0.06	3.26551E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	5.38647E-010	0.06	2.96232E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,566.72	518,287.33	4.55676E-010	0.05	2.50602E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	4.11081E-010	0.04	1.54920E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,553.30	518,300.68	4.09735E-010	0.04	1.54413E-003
Study\Slot 13\SL13 FBVCBO	109,585.99	518,297.45	4.09455E-010	0.04	2.08057E-004
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	4.01199E-010	0.04	1.51196E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	2.92988E-010	0.03	1.61131E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	2.82933E-010	0.03	1.55601E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	2.80841E-010	0.03	1.54450E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	2.77906E-010	0.03	1.52836E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,551.54	518,288.07	2.75445E-010	0.03	1.03804E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	2.68317E-010	0.03	1.01118E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	2.52412E-010	0.03	1.38815E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	2.39687E-010	0.02	1.31817E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,549.74	518,287.22	2.32130E-010	0.02	8.74805E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,542.42	518,280.11	1.10915E-010	0.01	4.17993E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	1.05243E-010	0.01	3.96618E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,540.63	518,279.27	9.06259E-011	0.01	3.41532E-004
TOTAL			9.68221E-007		

Risk Ranking Point: RRP South wellsite (109558,518231 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Slot 9\SL9 FBVTBO	109,571.56	518,284.20	1.60882E-007	6.66	8.74356E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Slot 10\SL10 FBVTBO					
	109,575.26	518,287.48	1.22773E-007	5.08	6.67247E-003
Study\Slot 8\SL8 FBVCBO					
	109,567.69	518,281.01	7.25785E-008	3.00	3.68793E-002
Study\Slot 9\SL9 FBVCBO					
	109,571.56	518,284.20	6.22700E-008	2.58	3.16413E-002
Study\Slot 10\SL10 FBVCBO					
	109,575.26	518,287.48	5.57835E-008	2.31	2.83453E-002
Study\Slot 12\SL12 FBVTBO					
	109,582.34	518,294.25	5.03571E-008	2.08	2.73680E-003
Study\Slot 12\SL12 FBVCBO					
	109,582.34	518,294.25	4.35681E-008	1.80	2.21383E-002
Study\Slot 13\SL13 FBVTBO					
	109,585.99	518,297.45	3.88617E-008	1.61	2.11205E-003
Study\Slot 13\SL13 FBVCBO					
	109,585.99	518,297.45	3.78529E-008	1.57	1.92342E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,540.63	518,279.27	2.35837E-008	0.98	6.47220E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,542.42	518,280.11	2.34930E-008	0.97	6.44731E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,534.37	518,283.40	2.12541E-008	0.88	5.83288E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,549.74	518,287.22	2.10650E-008	0.87	5.78097E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,551.54	518,288.07	2.08397E-008	0.86	5.71915E-002
Study\Slot 8\SL8 FBVTBO					
	109,567.69	518,281.01	1.98294E-008	0.82	1.07768E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,543.48	518,291.36	1.97667E-008	0.82	5.42467E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,559.55	518,296.55	1.87441E-008	0.78	5.14402E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,561.35	518,297.40	1.86011E-008	0.77	5.10478E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,553.30	518,300.68	1.80014E-008	0.74	4.94022E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,570.15	518,305.67	1.67309E-008	0.69	4.59155E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,571.94	518,306.52	1.65281E-008	0.68	4.53588E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,567.27	518,280.63	1.62395E-008	0.67	6.50372E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,570.96	518,283.82	1.62008E-008	0.67	6.48822E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,563.89	518,309.80	1.61657E-008	0.67	4.43644E-002
Study\Slot 2\SL2 FBVCBO					
	109,536.09	518,323.62	1.52933E-008	0.63	7.77098E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,563.03	518,284.14	1.52377E-008	0.63	6.10250E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,566.72	518,287.33	1.50791E-008	0.62	6.03896E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.57	518,287.10	1.45369E-008	0.60	5.82184E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,580.26	518,314.77	1.41687E-008	0.59	3.88838E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,570.34	518,290.61	1.39735E-008	0.58	5.59621E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,562.14	518,292.83	1.38317E-008	0.57	5.53940E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.37191E-008	0.57	5.49431E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	1.37577E-008	0.57	5.50980E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	1.36394E-008	0.56	5.46240E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,540.63	518,279.27	1.35236E-008	0.56	5.09651E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,542.42	518,280.11	1.34889E-008	0.56	5.08341E-002
Study\Slot 3\SL3 FBVCBO	109,539.74	518,326.69	1.34109E-008	0.55	6.81447E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	1.32698E-008	0.55	5.31438E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	1.32346E-008	0.55	3.63204E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,568.18	518,296.23	1.32053E-008	0.55	5.28854E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,567.85	518,296.89	1.31156E-008	0.54	5.25263E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	1.29220E-008	0.53	5.17507E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	1.27614E-008	0.53	5.11077E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	1.27140E-008	0.53	3.48916E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,549.74	518,287.22	1.25679E-008	0.52	4.73632E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	1.25389E-008	0.52	4.72541E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	1.25102E-008	0.52	5.01018E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,551.54	518,288.07	1.24708E-008	0.52	4.69975E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	1.23735E-008	0.51	4.95542E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	1.23581E-008	0.51	4.94925E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	1.22661E-008	0.51	4.91242E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	1.22372E-008	0.51	4.90085E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,576.10	518,306.13	1.18460E-008	0.49	4.74416E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.53	518,306.25	1.17544E-008	0.49	4.70746E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.20	518,306.91	1.16625E-008	0.48	4.67066E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	1.16307E-008	0.48	4.38315E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	1.08517E-008	0.45	4.08956E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	1.06368E-008	0.44	4.00858E-002
Study\Slot 4\SL4 FBVCBO	109,543.38	518,330.08	1.05207E-008	0.44	5.34587E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	1.02451E-008	0.42	2.81162E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.12	518,315.55	1.01396E-008	0.42	4.11271E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	1.00016E-008	0.41	2.74479E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	9.93351E-009	0.41	2.72610E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	9.50080E-009	0.39	5.22502E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	9.46975E-009	0.39	3.84103E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,553.30	518,300.68	9.45725E-009	0.39	3.56405E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	9.29330E-009	0.38	5.11091E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.43	518,318.00	9.28505E-009	0.38	3.76611E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.09	518,318.68	9.25536E-009	0.38	3.75407E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	9.23573E-009	0.38	5.07925E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,566.72	518,287.33	9.13998E-009	0.38	5.02659E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	8.96414E-009	0.37	4.92988E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	8.75044E-009	0.36	4.81236E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	8.74785E-009	0.36	4.81094E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	8.72065E-009	0.36	4.79598E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	8.68353E-009	0.36	4.77556E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	8.67413E-009	0.36	4.77039E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	8.64764E-009	0.36	4.75582E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,549.73	518,320.79	8.61892E-009	0.36	3.49592E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	8.60931E-009	0.36	3.49202E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	8.56819E-009	0.35	4.71213E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,540.38	518,320.65	8.55275E-009	0.35	3.46908E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	8.29934E-009	0.34	3.36629E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,565.76	518,296.11	8.29162E-009	0.34	4.56003E-002
Study\Slot 5\SL5 FBVCBO	109,547.09	518,333.40	8.23574E-009	0.34	4.18483E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,568.18	518,296.23	8.23343E-009	0.34	4.52802E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	8.14800E-009	0.34	4.48104E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,581.61	518,293.80	8.06489E-009	0.33	4.43533E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,544.35	518,323.77	8.05945E-009	0.33	3.26899E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.52	518,324.44	7.97553E-009	0.33	3.23496E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	7.95595E-009	0.33	4.37542E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.19	518,324.77	7.90585E-009	0.33	3.20669E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,536.54	518,324.03	7.89534E-009	0.33	3.20243E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	7.82817E-009	0.32	2.95012E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.47	518,325.73	7.80981E-009	0.32	3.16774E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	7.68090E-009	0.32	2.89462E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	7.51001E-009	0.31	3.04614E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,540.51	518,327.16	7.49864E-009	0.31	3.04152E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	7.45010E-009	0.31	3.02184E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.77	518,328.18	7.42104E-009	0.31	3.01005E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	7.41211E-009	0.31	4.07633E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	7.41110E-009	0.31	2.79294E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	7.19430E-009	0.30	3.95655E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	7.14579E-009	0.30	3.92987E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	7.07249E-009	0.29	3.88956E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,551.73    518,330.83    7.04258E-009				0.29	2.85654E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
109,544.30    518,330.80    6.95562E-009				0.29	2.82127E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
109,574.89    518,303.60    6.91309E-009				0.29	3.80190E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
109,547.89    518,334.22    6.54602E-009				0.27	2.65513E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
109,580.26    518,314.77    6.15207E-009				0.25	2.31846E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
109,576.10    518,306.13    6.10820E-009				0.25	3.35924E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
109,582.06    518,315.62    5.99573E-009				0.25	2.25955E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
109,578.53    518,306.25    5.97458E-009				0.25	3.28576E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
109,578.20    518,306.91    5.87892E-009				0.24	3.23315E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
109,574.01    518,318.91    5.74670E-009				0.24	2.16570E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
109,545.63    518,282.44    5.05009E-009				0.21	1.22622E-001
Study\Route\30inch headers Old wells\FB inj header old wells					
109,553.33    518,289.44    5.03416E-009				0.21	1.22235E-001
Study\Route\30inch headers Old wells\FB inj header old wells					
109,561.03    518,296.44    4.94820E-009				0.20	1.20148E-001
Study\Route\30inch headers Old wells\FB inj header old wells					
109,568.72    518,303.44    4.90678E-009				0.20	1.19142E-001
Study\Route\30inch headers South west\FB inj header South West					
109,560.32    518,291.82    4.90646E-009				0.20	1.23781E-001
Study\Route\30inch headers South west\FB inj header South West					
109,567.60    518,298.38    4.86725E-009				0.20	1.22791E-001
Study\Route\30inch headers North west\FB inj header North West					
109,543.81    518,313.11    4.85899E-009				0.20	1.18338E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
109,545.12    518,315.55    4.84869E-009				0.20	2.70068E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
109,576.42    518,310.44    4.82584E-009				0.20	1.17177E-001
Study\Route\30inch headers North west\FB inj header North West					
109,551.60    518,320.17    4.81326E-009				0.20	1.17224E-001
Study\Route\30inch headers South west\FB inj header South West					
109,574.89    518,304.95    4.80625E-009				0.20	1.21253E-001
Study\Route\30inch headers North west\FB inj header North West					
109,559.39    518,327.23    4.79069E-009				0.20	1.16674E-001
Study\Route\30inch headers Old wells\FB inj header old wells					
109,584.11    518,317.44    4.78764E-009				0.20	1.16250E-001
Study\Route\30inch headers North west\FB inj header North West					
109,567.18    518,334.29    4.73679E-009				0.20	1.15361E-001
Study\Route\30inch headers Old wells\FB inj header old wells					
109,591.81    518,324.45    4.73243E-009				0.20	1.14909E-001
Study\Route\30inch headers South west\FB inj header South West					
109,582.17    518,311.52    4.72034E-009				0.20	1.19085E-001
Study\Route\30inch headers South west\FB inj header South West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	4.67227E-009	0.19	1.17873E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,596.74	518,324.65	4.62077E-009	0.19	1.16573E-001
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.76	518,317.67	4.59658E-009	0.19	2.56026E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,545.43	518,318.00	4.55836E-009	0.19	2.53897E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	4.55446E-009	0.19	1.10588E-001
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	4.47925E-009	0.19	2.49490E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	4.43993E-009	0.18	1.08132E-001
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	4.31263E-009	0.18	1.08799E-001
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	4.26404E-009	0.18	2.37504E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	4.22787E-009	0.17	1.02967E-001
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	4.21566E-009	0.17	2.34808E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	4.21499E-009	0.17	1.02345E-001
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	4.13705E-009	0.17	2.30430E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,540.38	518,320.65	4.12285E-009	0.17	2.29639E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	4.09369E-009	0.17	1.54275E-002
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	4.06939E-009	0.17	9.91074E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	4.06409E-009	0.17	1.02529E-001
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	4.04529E-009	0.17	9.74927E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	4.04161E-009	0.17	9.81351E-002
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	4.03646E-009	0.17	9.72799E-002
Study\Route\30inch headers East\FB inj header East	109,638.29	518,333.87	3.99983E-009	0.17	9.63971E-002
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	3.99104E-009	0.17	9.61854E-002
Study\Route\30inch headers East\FB inj header East	109,631.15	518,341.19	3.98993E-009	0.17	9.61585E-002
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	3.96722E-009	0.16	9.56111E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	3.94933E-009	0.16	9.58943E-002
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	3.92726E-009	0.16	9.56460E-002
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	3.92059E-009	0.16	9.44874E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East					
	109,616.88	518,355.84	3.91770E-009	0.16	9.44178E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,610.23	518,358.55	3.91706E-009	0.16	9.51109E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3					
	109,544.35	518,323.77	3.91706E-009	0.16	2.18177E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,618.58	518,344.34	3.91332E-009	0.16	9.87257E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,553.52	518,324.44	3.90595E-009	0.16	2.17558E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,553.19	518,324.77	3.90473E-009	0.16	2.17490E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,592.10	518,324.99	3.87758E-009	0.16	1.46130E-002
Study\Route\30inch headers East\FB inj header East					
	109,609.74	518,363.16	3.86908E-009	0.16	9.32460E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5					
	109,556.47	518,325.73	3.81168E-009	0.16	2.12307E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,604.54	518,364.95	3.80569E-009	0.16	9.24066E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
	109,536.54	518,324.03	3.80367E-009	0.16	2.11861E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,619.14	518,350.96	3.79941E-009	0.16	9.58520E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,600.96	518,367.46	3.77654E-009	0.16	9.19753E-002
Study\Route\30inch headers East\FB inj header East					
	109,609.98	518,370.38	3.76773E-009	0.16	9.08033E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,612.96	518,357.64	3.76235E-009	0.16	9.49170E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,606.34	518,372.37	3.73846E-009	0.15	9.07741E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,604.63	518,373.41	3.72619E-009	0.15	9.07489E-002
Study\Route\30inch headers East\FB inj header East					
	109,674.26	518,318.91	3.71028E-009	0.15	8.94188E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,584.05	518,328.28	3.69531E-009	0.15	1.39261E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,606.78	518,364.32	3.69111E-009	0.15	9.31197E-002
Study\Route\30inch headers East\FB inj header East					
	109,681.58	518,326.03	3.66311E-009	0.15	8.82820E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,607.99	518,371.54	3.59826E-009	0.15	9.07772E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,548.14	518,327.42	3.56258E-009	0.15	1.98433E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5					
	109,557.11	518,327.85	3.55758E-009	0.15	1.98154E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5					
	109,556.77	518,328.18	3.51870E-009	0.15	1.95989E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3					
	109,540.51	518,327.16	3.48836E-009	0.14	1.94299E-002
Study\Route\30inch headers Old wells\FB prod header old wells					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	3.43988E-009	0.14	1.14871E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	3.43771E-009	0.14	1.14798E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	3.37234E-009	0.14	1.12615E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	3.33880E-009	0.14	1.11495E-001
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	3.33798E-009	0.14	8.98835E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	3.32848E-009	0.14	8.96275E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	3.31251E-009	0.14	8.91976E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	3.30876E-009	0.14	1.10492E-001
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	3.30495E-009	0.14	1.10698E-001
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	3.29554E-009	0.14	8.87407E-002
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	3.27003E-009	0.14	1.13458E-001
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	3.21900E-009	0.13	1.11687E-001
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	3.21326E-009	0.13	7.74406E-002
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	3.19248E-009	0.13	1.10767E-001
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	3.13366E-009	0.13	8.43815E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	3.12678E-009	0.13	1.08487E-001
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	3.11478E-009	0.13	1.04328E-001
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	3.09175E-009	0.13	1.72208E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,544.30	518,330.80	3.07821E-009	0.13	1.71454E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	3.06686E-009	0.13	8.25828E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	3.03501E-009	0.13	1.01351E-001
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	2.98447E-009	0.12	8.03643E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	2.97789E-009	0.12	9.97428E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	2.87952E-009	0.12	9.61582E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	2.86784E-009	0.12	9.60567E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	2.86304E-009	0.12	1.59469E-002
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	2.86161E-009	0.12	7.70561E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	2.86120E-009	0.12	9.92725E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	2.84772E-009	0.12	7.66820E-002
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	2.84002E-009	0.12	7.64747E-002
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	2.82553E-009	0.12	7.60846E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	2.75196E-009	0.11	9.18986E-002
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	2.73266E-009	0.11	9.15290E-002
Study\Route\30inch headers South west\FB prod header South West	109,596.74	518,324.65	2.72872E-009	0.11	9.46760E-002
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	2.66138E-009	0.11	7.16644E-002
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	2.64836E-009	0.11	8.87054E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	2.64082E-009	0.11	7.11106E-002
Study\Route\30inch headers South west\FB prod header South West	109,604.02	518,331.21	2.62825E-009	0.11	9.11902E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,607.20	518,338.45	2.62227E-009	0.11	8.75675E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	2.49898E-009	0.10	6.72913E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	2.48808E-009	0.10	1.03050E-002
Study\Route\30inch headers South west\FB prod header South West	109,611.30	518,337.78	2.48580E-009	0.10	8.62478E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	2.47361E-009	0.10	6.66082E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	2.43926E-009	0.10	1.01028E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	2.40393E-009	0.10	8.02763E-002
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	2.40128E-009	0.10	8.04295E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	2.40087E-009	0.10	9.94379E-003
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	2.36850E-009	0.10	7.85040E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	2.36441E-009	0.10	6.36675E-002
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	2.35207E-009	0.10	7.79597E-002
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	2.35192E-009	0.10	7.79545E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	2.35113E-009	0.10	9.73775E-003
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	2.35056E-009	0.10	6.32946E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,662.19	518,324.81	2.34422E-009	0.10	9.70915E-003
Study\Route\30inch headers East\FB prod header East	109,674.38	518,321.63	2.33392E-009	0.10	9.66648E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,638.29	518,333.87	2.31085E-009	0.10	7.65931E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,674.96	518,321.29	2.30815E-009	0.10	9.55977E-003
Study\Route\30inch headers South west\FB prod header South West	109,670.89	518,315.61	2.30627E-009	0.10	9.55197E-003
Study\Route\30inch headers East\FB prod header East	109,618.58	518,344.34	2.29483E-009	0.09	7.96219E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,631.15	518,341.19	2.24587E-009	0.09	7.44396E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	2.22821E-009	0.09	9.22865E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,671.52	518,317.63	2.20429E-009	0.09	9.12960E-003
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	2.17874E-009	0.09	7.22145E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	2.16784E-009	0.09	7.23924E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	2.14687E-009	0.09	7.11582E-002
Study\Route\30inch headers North west\FB prod header North west	109,598.33	518,362.54	2.07740E-009	0.09	6.95814E-002
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	2.06212E-009	0.09	7.15477E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	2.05173E-009	0.08	6.85150E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	2.02223E-009	0.08	6.70270E-002
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	1.94913E-009	0.08	6.46039E-002
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	1.94884E-009	0.08	6.76172E-002
Study\Route\30inch headers North west\FB prod header North west	109,600.96	518,367.46	1.93733E-009	0.08	6.48899E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	1.93610E-009	0.08	6.46536E-002
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	1.89951E-009	0.08	6.29594E-002
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	1.86754E-009	0.08	6.47965E-002
Study\Route\30inch headers East\FB prod header East	109,609.98	518,370.38	1.79219E-009	0.07	5.94022E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	1.75179E-009	0.07	5.84991E-002
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	1.72475E-009	0.07	5.77695E-002
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	1.71059E-009	0.07	5.93508E-002
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	1.64966E-009	0.07	5.46780E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,676.11	518,338.85	1.52726E-009	0.06	6.32549E-003
Study\Route\30inch headers East\FB prod header East					
	109,688.91	518,333.14	1.51862E-009	0.06	5.03348E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,679.48	518,334.57	1.51730E-009	0.06	6.28427E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,613.59	518,374.31	1.50906E-009	0.06	5.58856E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,619.74	518,370.14	1.50679E-009	0.06	5.58015E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.82	518,329.65	1.49454E-009	0.06	6.19000E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.86	518,332.00	1.47143E-009	0.06	6.09428E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,685.44	518,331.67	1.46093E-009	0.06	6.05080E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,625.54	518,371.79	1.45404E-009	0.06	5.38481E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,607.26	518,381.33	1.43976E-009	0.06	5.33189E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,600.92	518,388.35	1.40880E-009	0.06	5.21725E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,628.18	518,376.76	1.39523E-009	0.06	5.16701E-002
Study\BGM-1\BGM1 FBVCBO					
	109,529.60	518,288.69	1.37385E-009	0.06	6.98093E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,682.94	518,338.13	1.35887E-009	0.06	5.62810E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,601.07	518,394.00	1.34555E-009	0.06	4.98300E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,624.54	518,383.46	1.33525E-009	0.06	4.94486E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,594.58	518,395.38	1.32944E-009	0.06	4.92335E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,679.57	518,342.42	1.32922E-009	0.06	5.50528E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,617.07	518,388.81	1.32799E-009	0.05	4.91799E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,609.07	518,391.41	1.30959E-009	0.05	4.84985E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.27	518,333.21	1.29877E-009	0.05	5.37918E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,593.20	518,399.65	1.28816E-009	0.05	4.77048E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,588.25	518,402.40	1.25090E-009	0.05	4.63249E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,581.91	518,409.42	1.23400E-009	0.05	4.56990E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.32	518,335.57	1.22284E-009	0.05	5.06467E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.90	518,335.24	1.21752E-009	0.05	5.04263E-003
Study\Route\30inch pipeline\FB prod pipeline					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,585.48	518,408.37	1.20849E-009	0.05	4.47542E-002
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	1.16843E-009	0.05	4.32710E-002
	109,577.76	518,417.09	1.16208E-009	0.05	4.30355E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	1.12880E-009	0.05	4.67520E-003
	109,682.99	518,345.78	1.11587E-009	0.05	4.62165E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	1.09223E-009	0.05	4.52371E-003
	109,691.74	518,338.94	1.01760E-009	0.04	4.21462E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	9.93076E-010	0.04	4.11306E-003
Study\BGM-2\BGM2 FBVCBO	109,538.42	518,296.59	7.24667E-010	0.03	3.68225E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,665.56	518,320.53	6.49559E-010	0.03	3.69437E-003
	109,669.00	518,324.19	6.37455E-010	0.03	3.62553E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,662.19	518,324.81	6.35337E-010	0.03	3.61349E-003
	109,665.63	518,328.47	6.12580E-010	0.03	3.48406E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.33	518,319.27	5.90463E-010	0.02	3.35826E-003
	109,670.89	518,315.61	5.76913E-010	0.02	3.28120E-003
Study\Slot 15\SL15 FBVCBO	109,662.81	518,325.25	5.55887E-010	0.02	2.82463E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	5.45478E-010	0.02	3.10241E-003
	109,674.96	518,321.29	5.41525E-010	0.02	3.07993E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	5.39863E-010	0.02	3.07048E-003
	109,671.52	518,317.63	5.33665E-010	0.02	3.03522E-003
Study\Slot 16\SL16 FBVCBO	109,666.18	518,328.94	3.77751E-010	0.02	1.91947E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,679.48	518,334.57	3.34170E-010	0.01	1.90060E-003
	109,676.11	518,338.85	3.33442E-010	0.01	1.89646E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.82	518,329.65	3.18169E-010	0.01	1.80959E-003
	109,684.86	518,332.00	2.84582E-010	0.01	1.61857E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,685.44	518,331.67	2.81773E-010	0.01	1.60259E-003
	109,682.94	518,338.13	1.93466E-010	0.01	1.10034E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,679.57	518,342.42	1.76560E-010	0.01	1.00419E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.27	518,333.21	1.65743E-010	0.01	9.42667E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.90	518,335.24	1.58248E-010	0.01	9.00035E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,688.32	518,335.57	1.58248E-010	0.01	9.00035E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,686.36	518,341.50	1.50934E-010	0.01	8.58439E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,682.99	518,345.78	1.49363E-010	0.01	8.49506E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,691.70	518,336.58	1.44694E-010	0.01	8.22946E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,691.74	518,338.94	1.41227E-010	0.01	8.03232E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,692.32	518,338.61	1.41227E-010	0.01	8.03232E-004
Study\BGM-5\BGM5 FBVCBO					
	109,548.85	518,305.67	1.10217E-010	0.00	5.60046E-005
TOTAL					
			2.41676E-006		

Risk Ranking Point: RRP West wellsite (109482,518313 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Slot 2\SL2 FBVCBO					
	109,536.09	518,323.62	6.02028E-008	3.30	3.05909E-002
Study\Slot 3\SL3 FBVCBO					
	109,539.74	518,326.69	5.36377E-008	2.94	2.72549E-002
Study\Slot 4\SL4 FBVCBO					
	109,543.38	518,330.08	4.87973E-008	2.67	2.47954E-002
Study\Slot 5\SL5 FBVCBO					
	109,547.09	518,333.40	4.27163E-008	2.34	2.17054E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,534.37	518,283.40	2.02011E-008	1.11	5.54388E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,543.48	518,291.36	1.88833E-008	1.03	5.18225E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,540.63	518,279.27	1.87689E-008	1.03	5.15085E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,542.42	518,280.11	1.84475E-008	1.01	5.06264E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,549.74	518,287.22	1.75012E-008	0.96	4.80294E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,553.30	518,300.68	1.74188E-008	0.95	4.78034E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,551.54	518,288.07	1.70702E-008	0.94	4.68467E-002
Study\Slot 8\SL8 FBVCBO					
	109,567.69	518,281.01	1.63758E-008	0.90	8.32104E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,559.55	518,296.55	1.59286E-008	0.87	4.37137E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,561.35	518,297.40	1.58851E-008	0.87	4.35944E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	1.54469E-008	0.85	4.23916E-002
Study\Slot 9\SL9 FBVCBO	109,571.56	518,284.20	1.44702E-008	0.79	7.35276E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,536.54	518,324.03	1.41157E-008	0.77	5.72547E-002
Study\Slot 2\SL2 FBVTBO	109,536.09	518,323.62	1.34784E-008	0.74	7.32521E-004
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,540.38	518,320.65	1.33287E-008	0.73	5.40627E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,540.51	518,327.16	1.30593E-008	0.72	5.29698E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,570.15	518,305.67	1.30197E-008	0.71	3.57305E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.12	518,315.55	1.27454E-008	0.70	5.16965E-002
Study\Slot 10\SL10 FBVCBO	109,575.26	518,287.48	1.27155E-008	0.70	6.46114E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.43	518,318.00	1.26523E-008	0.69	5.13190E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,544.35	518,323.77	1.26410E-008	0.69	5.12730E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	1.26354E-008	0.69	5.12506E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,571.94	518,306.52	1.24686E-008	0.68	3.42183E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,544.30	518,330.80	1.24671E-008	0.68	5.05678E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.09	518,318.68	1.22169E-008	0.67	4.95530E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	1.21800E-008	0.67	4.94034E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	1.21748E-008	0.67	4.93823E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.73	518,320.79	1.21478E-008	0.67	4.92726E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,547.89	518,334.22	1.19791E-008	0.66	4.85882E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	1.18381E-008	0.65	4.46131E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	1.18073E-008	0.65	3.24034E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	1.17909E-008	0.65	4.78249E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.19	518,324.77	1.17104E-008	0.64	4.74986E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,551.73	518,330.83	1.17053E-008	0.64	4.74779E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.52	518,324.44	1.16704E-008	0.64	4.73363E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.47	518,325.73	1.12481E-008	0.62	4.56235E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.77	518,328.18	1.11239E-008	0.61	4.51198E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	1.10831E-008	0.61	4.49540E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	1.09642E-008	0.60	4.39101E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	1.09276E-008	0.60	4.37638E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	1.09276E-008	0.60	4.37638E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.09117E-008	0.60	4.37000E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,558.45	518,289.64	1.08941E-008	0.60	4.36294E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.55	518,290.43	1.06956E-008	0.59	4.28346E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	1.06449E-008	0.58	4.01164E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	1.05369E-008	0.58	4.21990E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,580.26	518,314.77	1.03696E-008	0.57	2.84579E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,567.85	518,296.89	1.03379E-008	0.57	4.14019E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,568.18	518,296.23	1.02876E-008	0.56	4.12007E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,566.72	518,287.33	1.01735E-008	0.56	4.07434E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,540.63	518,279.27	1.00711E-008	0.55	3.79538E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	9.96064E-009	0.55	2.73355E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,563.03	518,284.14	9.78660E-009	0.54	3.91940E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,542.42	518,280.11	9.69125E-009	0.53	3.65224E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,570.34	518,290.61	9.64393E-009	0.53	3.86227E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	9.48293E-009	0.52	3.79779E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	9.38457E-009	0.51	2.57545E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,570.96	518,283.82	8.98308E-009	0.49	3.59760E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	8.91261E-009	0.49	3.56938E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	8.84112E-009	0.48	3.54075E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,536.54	518,324.03	8.74786E-009	0.48	4.87248E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,549.74	518,287.22	8.71760E-009	0.48	3.28531E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,576.10	518,306.13	8.67246E-009	0.48	3.47321E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,553.30	518,300.68	8.57914E-009	0.47	3.23313E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,540.38	518,320.65	8.47078E-009	0.46	4.71815E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,567.27	518,280.63	8.46998E-009	0.46	3.39211E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,574.57	518,287.10	8.43302E-009	0.46	3.37731E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,551.54	518,288.07	8.37758E-009	0.46	3.15717E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	8.34685E-009	0.46	3.34280E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,540.51	518,327.16	8.33395E-009	0.46	4.64194E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.20	518,306.91	8.27870E-009	0.45	3.31551E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.53	518,306.25	8.24792E-009	0.45	3.30318E-002
Study\Slot 12\SL12 FBVCBO	109,582.34	518,294.25	8.21910E-009	0.45	4.17637E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.12	518,315.55	8.08752E-009	0.44	4.50468E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,544.35	518,323.77	8.08500E-009	0.44	4.50328E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	8.05971E-009	0.44	2.21187E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.43	518,318.00	8.02393E-009	0.44	4.46926E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.76	518,317.67	7.98008E-009	0.44	4.44484E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	7.94662E-009	0.44	2.18083E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	7.77948E-009	0.43	3.11558E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,544.30	518,330.80	7.76830E-009	0.43	4.32688E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	7.50169E-009	0.41	3.00433E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	7.42959E-009	0.41	4.13822E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	7.28689E-009	0.40	2.74613E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	7.26767E-009	0.40	4.04803E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,548.14	518,327.42	7.24127E-009	0.40	4.03332E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	7.13345E-009	0.39	3.97327E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	7.06170E-009	0.39	2.82812E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	7.00535E-009	0.38	2.64003E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	6.89163E-009	0.38	3.83858E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	6.73086E-009	0.37	2.53659E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	6.54428E-009	0.36	3.64511E-002
Study\Slot 13\SL13 FBVCBO	109,585.99	518,297.45	6.52970E-009	0.36	3.31794E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	6.36631E-009	0.35	3.54598E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	6.32577E-009	0.35	3.52340E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	6.28797E-009	0.34	3.50235E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	5.80028E-009	0.32	2.18589E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	5.72853E-009	0.31	3.19074E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	5.62913E-009	0.31	3.13538E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	5.56818E-009	0.31	3.10143E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	5.54310E-009	0.30	2.08897E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	5.46125E-009	0.30	3.00345E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	5.42463E-009	0.30	2.98331E-002
Study\BGM-1\BGM1 FBVCBO	109,529.60	518,288.69	5.36129E-009	0.29	2.72423E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	5.22998E-009	0.29	2.87626E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	5.16721E-009	0.28	2.84174E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	5.15957E-009	0.28	2.83754E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	5.14614E-009	0.28	2.83015E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,565.76	518,296.11	5.06069E-009	0.28	2.78316E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,574.01	518,318.91	5.04165E-009	0.28	1.89999E-002
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	4.94755E-009	0.27	1.20495E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	4.94262E-009	0.27	1.20013E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	4.90807E-009	0.27	1.19174E-001
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	4.89251E-009	0.27	1.19154E-001
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	4.88317E-009	0.27	2.68553E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.18	518,296.23	4.83424E-009	0.26	2.65862E-002
Study\Route\30inch headers North west\FB inj header North West	109,561.03	518,296.44	4.82533E-009	0.26	1.17165E-001
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,559.39	518,327.23	4.82448E-009	0.26	1.17497E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,566.72	518,287.33	4.78559E-009	0.26	2.63187E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	4.77563E-009	0.26	1.15958E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	4.76165E-009	0.26	1.15618E-001
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	4.74721E-009	0.26	1.19763E-001
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	4.74042E-009	0.26	1.15450E-001
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	4.73041E-009	0.26	2.60152E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	4.72185E-009	0.26	1.14998E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	4.71695E-009	0.26	1.14533E-001
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	4.69985E-009	0.26	1.18568E-001
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	4.65506E-009	0.26	1.17438E-001
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	4.60971E-009	0.25	1.16294E-001
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	4.60586E-009	0.25	1.12173E-001
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	4.50734E-009	0.25	1.13712E-001
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	4.49467E-009	0.25	2.47187E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	4.42993E-009	0.24	1.07564E-001
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	4.39646E-009	0.24	2.41786E-002
Study\Slot 3\SL3 FBVTBO	109,539.74	518,326.69	4.31282E-009	0.24	2.34392E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	4.25161E-009	0.23	2.33820E-002
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	4.23528E-009	0.23	1.03148E-001
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	4.21200E-009	0.23	1.02272E-001
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	4.20963E-009	0.23	2.31511E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	4.19229E-009	0.23	2.30558E-002
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	4.18871E-009	0.23	1.05673E-001
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	4.18286E-009	0.23	2.30039E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,576.10	518,306.13	4.08901E-009	0.22	2.24877E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	4.08058E-009	0.22	9.90812E-002
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	4.05038E-009	0.22	9.86443E-002
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	4.01430E-009	0.22	1.01273E-001
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	3.99995E-009	0.22	9.74163E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	3.99478E-009	0.22	2.19695E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	3.95433E-009	0.22	9.60157E-002
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	3.93261E-009	0.22	9.47772E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	3.92228E-009	0.21	9.52376E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	3.91977E-009	0.21	2.15570E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	3.91526E-009	0.21	9.50671E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.20	518,306.91	3.90893E-009	0.21	2.14974E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.53	518,306.25	3.89829E-009	0.21	2.14389E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,580.26	518,314.77	3.89516E-009	0.21	1.46793E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	3.88320E-009	0.21	9.42886E-002
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	3.87865E-009	0.21	9.44622E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	3.87764E-009	0.21	9.41535E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	3.87181E-009	0.21	9.76783E-002
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	3.84826E-009	0.21	9.27443E-002
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	3.82368E-009	0.21	9.21518E-002
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	3.78403E-009	0.21	9.54640E-002
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	3.75582E-009	0.21	9.05164E-002
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	3.74256E-009	0.21	9.44177E-002
Study\Route\30inch headers South west\FB inj header South West	109,618.58	518,344.34	3.73004E-009	0.20	9.41018E-002
Study\Route\30inch headers East\FB inj header East	109,631.15	518,341.19	3.72857E-009	0.20	8.98596E-002
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	3.71687E-009	0.20	9.37695E-002
Study\Route\30inch headers East\FB inj header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,638.29	518,333.87	3.70743E-009	0.20	8.93501E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	3.67342E-009	0.20	2.02022E-002
Study\Route\30inch headers South west\FB inj header South West	109,619.14	518,350.96	3.67333E-009	0.20	9.26711E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,582.06	518,315.62	3.65204E-009	0.20	1.37631E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	3.45908E-009	0.19	9.31444E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	3.45038E-009	0.19	9.29100E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	3.43794E-009	0.19	9.25752E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	3.42291E-009	0.19	9.21704E-002
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	3.41836E-009	0.19	9.20480E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	3.41148E-009	0.19	9.18628E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	3.40855E-009	0.19	9.17837E-002
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	3.40163E-009	0.19	8.19803E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	3.39343E-009	0.19	9.13765E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	3.37213E-009	0.18	9.08030E-002
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	3.36890E-009	0.18	1.12840E-001
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	3.36061E-009	0.18	9.04929E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	3.34504E-009	0.18	9.00737E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	3.33015E-009	0.18	8.96725E-002
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	3.32737E-009	0.18	1.11449E-001
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	3.31993E-009	0.18	8.93974E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	3.31299E-009	0.18	1.10633E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	3.30761E-009	0.18	1.10454E-001
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,581.61	518,293.80	3.30187E-009	0.18	1.81588E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	3.30125E-009	0.18	8.88944E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	3.29760E-009	0.18	8.87962E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	3.29429E-009	0.18	1.10341E-001
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	3.29058E-009	0.18	8.86072E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	3.27754E-009	0.18	1.09450E-001
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,584.05	518,328.28	3.26424E-009	0.18	1.23016E-002
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	3.26210E-009	0.18	8.78403E-002
Study\BGM-2\BGM2 FBVCBO	109,538.42	518,296.59	3.18563E-009	0.17	1.61871E-003
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	3.17851E-009	0.17	1.10282E-001
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	3.13274E-009	0.17	7.55001E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	3.11340E-009	0.17	1.03968E-001
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	3.08324E-009	0.17	1.03272E-001
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	3.03759E-009	0.17	1.05393E-001
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	2.95407E-009	0.16	9.86478E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	2.92634E-009	0.16	1.60936E-002
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	2.88587E-009	0.16	6.95503E-002
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	2.87261E-009	0.16	9.62166E-002
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	2.86744E-009	0.16	9.94890E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	2.83876E-009	0.16	9.47969E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	2.76653E-009	0.15	9.59879E-002
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	2.76386E-009	0.15	9.25741E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	2.75339E-009	0.15	9.19461E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	2.74768E-009	0.15	1.03549E-002
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	2.68560E-009	0.15	6.47239E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	2.67708E-009	0.15	9.28844E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,592.10	518,324.99	2.60550E-009	0.14	9.81908E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	2.60411E-009	0.14	8.69613E-002
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	2.59905E-009	0.14	8.70537E-002
Study\Route\30inch headers South west\FB prod header South West	109,596.74	518,324.65	2.57392E-009	0.14	8.93050E-002
Study\Route\30inch headers East\FB inj header East	109,674.26	518,318.91	2.52687E-009	0.14	6.08983E-002
Study\Slot 4\SL4 FBVTBO					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells	109,543.38	518,330.08	2.46604E-009	0.14	1.34024E-004
Study\Route\30inch headers North west\FB prod header North west	109,607.20	518,338.45	2.45628E-009	0.13	8.20247E-002
Study\Route\30inch headers South west\FB prod header South West	109,598.33	518,362.54	2.42652E-009	0.13	8.12752E-002
Study\Route\30inch headers East\FB inj header East	109,604.02	518,331.21	2.42329E-009	0.13	8.40787E-002
Study\Route\30inch headers North west\FB prod header North west	109,600.96	518,367.46	2.31062E-009	0.13	7.73929E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	2.22057E-009	0.12	7.41534E-002
Study\Route\30inch headers South west\FB prod header South West	109,611.30	518,337.78	2.20539E-009	0.12	7.65184E-002
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	2.16409E-009	0.12	5.21553E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	2.13169E-009	0.12	7.11851E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	2.12716E-009	0.12	7.10339E-002
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	2.11444E-009	0.12	7.00834E-002
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	2.09527E-009	0.11	7.01800E-002
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	2.08886E-009	0.11	7.24753E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	2.06613E-009	0.11	6.89961E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	2.05737E-009	0.11	6.87035E-002
Study\Route\30inch headers East\FB prod header East	109,609.98	518,370.38	2.01466E-009	0.11	6.67760E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	2.00582E-009	0.11	6.64831E-002
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	1.98886E-009	0.11	6.90058E-002
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	1.98019E-009	0.11	6.87048E-002
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	1.96536E-009	0.11	6.81905E-002
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	1.94208E-009	0.11	6.43705E-002
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	1.93076E-009	0.11	6.69901E-002
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	1.81297E-009	0.10	6.71402E-002
Study\Slot 5\SL5 FBVTBO	109,547.09	518,333.40	1.80741E-009	0.10	9.82288E-005
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	1.80619E-009	0.10	6.68893E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	1.79839E-009	0.10	6.66005E-002

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	1.79427E-009	0.10	5.94711E-002
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	1.78335E-009	0.10	6.60434E-002
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	1.77886E-009	0.10	6.58771E-002
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	1.77801E-009	0.10	6.58457E-002
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	1.77037E-009	0.10	6.55627E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	1.76268E-009	0.10	6.52779E-002
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	1.75929E-009	0.10	6.51522E-002
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	1.74675E-009	0.10	6.46881E-002
Study\Route\30inch pipeline\FB prod pipeline	109,613.59	518,374.31	1.73817E-009	0.10	6.43702E-002
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	1.71104E-009	0.09	5.67127E-002
Study\Route\30inch pipeline\FB prod pipeline	109,619.74	518,370.14	1.67185E-009	0.09	6.19143E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	1.63600E-009	0.09	6.05866E-002
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	1.62938E-009	0.09	5.40058E-002
Study\Route\30inch pipeline\FB prod pipeline	109,625.54	518,371.79	1.55270E-009	0.09	5.75015E-002
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	1.54008E-009	0.08	5.10459E-002
Study\Route\30inch pipeline\FB prod pipeline	109,617.07	518,388.81	1.52460E-009	0.08	5.64611E-002
Study\Route\30inch pipeline\FB prod pipeline	109,624.54	518,383.46	1.49977E-009	0.08	5.55413E-002
Study\Route\30inch pipeline\FB prod pipeline	109,628.18	518,376.76	1.46510E-009	0.08	5.42574E-002
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	1.43476E-009	0.08	4.75552E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	1.35207E-009	0.07	4.48145E-002
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	1.24803E-009	0.07	4.13661E-002
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	1.13551E-009	0.06	3.76365E-002
Study\Route\30inch headers East\FB prod header East	109,688.91	518,333.14	1.04917E-009	0.06	3.47749E-002
Study\Slot 9\SL9 FBVTBO	109,571.56	518,284.20	8.75565E-010	0.05	4.75850E-005
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	6.18706E-010	0.03	2.56252E-003
Study\BGM-5\BGM5 FBVCBO	109,548.85	518,305.67	6.08861E-010	0.03	3.09381E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,669.00	518,324.19	5.56594E-010	0.03	2.30526E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,662.19	518,324.81	5.11352E-010	0.03	2.11788E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	4.42020E-010	0.02	1.83073E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.38	518,321.63	4.36171E-010	0.02	1.80650E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	4.31809E-010	0.02	1.78844E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.96	518,321.29	4.15430E-010	0.02	1.72060E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	3.35440E-010	0.02	1.38930E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	2.44494E-010	0.01	1.01263E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.89	518,315.61	2.44494E-010	0.01	1.01263E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,671.52	518,317.63	2.37974E-010	0.01	9.85626E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	2.37264E-010	0.01	9.82684E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	2.28704E-010	0.01	9.47231E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	2.13123E-010	0.01	8.82699E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.82	518,329.65	2.06649E-010	0.01	8.55887E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.86	518,332.00	2.06649E-010	0.01	8.55887E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	2.05356E-010	0.01	8.50531E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,685.44	518,331.67	2.02243E-010	0.01	8.37636E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	1.91286E-010	0.01	7.92258E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	1.86300E-010	0.01	7.71606E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.27	518,333.21	1.86300E-010	0.01	7.71606E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	1.83653E-010	0.01	7.60641E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	1.65349E-010	0.01	6.84833E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	1.65349E-010	0.01	6.84833E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	1.63578E-010	0.01	6.77498E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,665.63	518,328.47	6.81313E-011	0.00	3.87498E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,662.19	518,324.81	4.58360E-011	0.00	2.60693E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,669.00	518,324.19	4.58360E-011	0.00	2.60693E-004

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvegYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,665.56	518,320.53	3.93650E-011	0.00	2.23889E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,674.38	518,321.63	3.34004E-011	0.00	1.89965E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,674.33	518,319.27	3.15684E-011	0.00	1.79546E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,674.96	518,321.29	3.07615E-011	0.00	1.74956E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,676.11	518,338.85	2.56731E-011	0.00	1.46016E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,670.89	518,315.61	2.19383E-011	0.00	1.24774E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,670.94	518,317.96	2.19383E-011	0.00	1.24774E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,671.52	518,317.63	1.88424E-011	0.00	1.07166E-004
TOTAL					
			1.82459E-006		

Column: 2

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvegYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East					
	109,688.91	518,333.14	9.20203E-010	3.78	2.21772E-002
Study\Route\30inch headers East\FB inj header East					
	109,681.58	518,326.03	8.89523E-010	3.65	2.14378E-002
Study\Route\30inch headers East\FB inj header East					
	109,674.26	518,318.91	8.55557E-010	3.51	2.06192E-002
Study\Route\30inch headers East\FB inj header East					
	109,666.94	518,311.79	8.21543E-010	3.37	1.97994E-002
Study\Route\30inch headers East\FB inj header East					
	109,659.70	518,311.89	7.50142E-010	3.08	1.80786E-002
Study\Route\30inch headers East\FB inj header East					
	109,652.57	518,319.22	6.68097E-010	2.74	1.61014E-002
Study\Route\30inch headers East\FB inj header East					
	109,645.43	518,326.54	5.75605E-010	2.36	1.38723E-002
Study\Route\30inch headers East\FB inj header East					
	109,638.29	518,333.87	4.45547E-010	1.83	1.07378E-002
Study\Route\30inch headers East\FB inj header East					
	109,631.15	518,341.19	3.94475E-010	1.62	9.50697E-003
Study\Route\30inch headers East\FB prod header East					
	109,688.91	518,333.14	3.76990E-010	1.55	1.24954E-002
Study\Route\30inch headers East\FB inj header East					
	109,624.01	518,348.52	3.56014E-010	1.46	8.58004E-003
Study\Route\30inch headers East\FB prod header East					
	109,681.58	518,326.03	3.23102E-010	1.33	1.07092E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,618.58	518,344.34	3.19817E-010	1.31	8.06837E-003
Study\Route\30inch headers South west\FB inj header South West					
	109,619.14	518,350.96	3.18758E-010	1.31	8.04166E-003
Study\Route\30inch headers Old wells\FB inj header old wells					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,614.90	518,345.45	3.15140E-010	1.29	7.65197E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,616.88	518,355.84	3.09649E-010	1.27	7.46265E-003
Study\Route\30inch pipeline\FB inj pipeline	109,615.91	518,352.15	3.07343E-010	1.26	7.46265E-003
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	2.99589E-010	1.23	8.06718E-003
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	2.97858E-010	1.22	8.02057E-003
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	2.86952E-010	1.18	7.23924E-003
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	2.77254E-010	1.14	9.18962E-003
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	2.76144E-010	1.13	7.43586E-003
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	2.74201E-010	1.13	7.38354E-003
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	2.63831E-010	1.08	6.65595E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	2.61505E-010	1.07	1.08308E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	2.61505E-010	1.07	1.08308E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	2.59955E-010	1.07	1.07667E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	2.59928E-010	1.07	6.31135E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	2.55769E-010	1.05	6.21037E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.27	518,333.21	2.46290E-010	1.01	1.02007E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	2.46290E-010	1.01	1.02007E-003
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	2.43198E-010	1.00	5.86114E-003
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	2.42103E-010	0.99	8.02452E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	2.39027E-010	0.98	9.89988E-004
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	2.38203E-010	0.98	5.74077E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.36620E-010	0.97	5.74542E-003
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.34538E-010	0.96	5.91695E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	2.27036E-010	0.93	5.51270E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	2.26799E-010	0.93	5.50695E-003
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	2.24331E-010	0.92	5.65945E-003
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	2.21315E-010	0.91	5.95947E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	2.20055E-010	0.90	5.35931E-003
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	2.19920E-010	0.90	5.54818E-003
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	2.19637E-010	0.90	5.91428E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,685.44	518,331.67	2.19385E-010	0.90	9.08635E-004
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	2.18574E-010	0.90	5.51420E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.82	518,329.65	2.15802E-010	0.89	8.93796E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.86	518,332.00	2.15802E-010	0.89	8.93796E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	2.15049E-010	0.88	5.22164E-003
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	2.14036E-010	0.88	5.21271E-003
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	2.12730E-010	0.87	5.18089E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	2.04778E-010	0.84	8.48135E-004
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	2.04490E-010	0.84	5.15891E-003
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	1.99656E-010	0.82	5.37623E-003
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	1.98578E-010	0.81	6.58187E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	1.94959E-010	0.80	4.73383E-003
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	1.92373E-010	0.79	4.68512E-003
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	1.90178E-010	0.78	5.12103E-003
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	1.83065E-010	0.75	4.61839E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	1.76710E-010	0.73	7.31887E-004
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	1.75697E-010	0.72	4.73109E-003
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	1.71535E-010	0.70	4.61900E-003
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	1.64919E-010	0.68	4.01650E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	1.60131E-010	0.66	3.88816E-003
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	1.57368E-010	0.65	5.21598E-003
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	1.50512E-010	0.62	3.79714E-003
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	1.47282E-010	0.60	3.96595E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,682.99	518,345.78	1.44639E-010	0.59	5.99058E-004
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	1.38267E-010	0.57	4.58287E-003
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	1.37784E-010	0.57	3.35564E-003
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	1.34451E-010	0.55	3.62042E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	1.28935E-010	0.53	3.13070E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	1.28018E-010	0.53	5.30215E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.38	518,321.63	1.22320E-010	0.50	5.06617E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.96	518,321.29	1.22320E-010	0.50	5.06617E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	1.22320E-010	0.50	5.06617E-004
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	1.21927E-010	0.50	3.07600E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	1.19290E-010	0.49	4.94066E-004
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	1.16083E-010	0.48	3.12582E-003
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	1.13120E-010	0.46	3.74937E-003
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	1.10643E-010	0.45	2.69463E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	1.09472E-010	0.45	4.53406E-004
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	9.89311E-011	0.41	2.66397E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	8.65282E-011	0.36	3.58377E-004
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	8.52785E-011	0.35	2.82656E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	8.10853E-011	0.33	1.96885E-003
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	7.89179E-011	0.32	2.12506E-003
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	7.61349E-011	0.31	1.92074E-003
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	7.56185E-011	0.31	1.84164E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	7.26849E-011	0.30	1.76487E-003
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	7.00030E-011	0.29	1.70488E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	6.59362E-011	0.27	1.60101E-003
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	6.34635E-011	0.26	1.70891E-003
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	6.31012E-011	0.26	1.53679E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB inj pipeline					
	109,575.57	518,416.45	6.26193E-011	0.26	1.68618E-003
Study\Route\30inch headers East\FB prod header East					
	109,624.01	518,348.52	5.18765E-011	0.21	1.71945E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,618.58	518,344.34	4.63954E-011	0.19	1.60974E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,619.14	518,350.96	4.62388E-011	0.19	1.60431E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,614.90	518,345.45	4.57629E-011	0.19	1.52820E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,665.63	518,328.47	4.55455E-011	0.19	1.88637E-004
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,615.91	518,352.15	4.54555E-011	0.19	1.51793E-003
Study\Route\30inch headers East\FB prod header East					
	109,616.88	518,355.84	4.47392E-011	0.18	1.48289E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,628.18	518,376.76	4.44460E-011	0.18	1.64598E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,625.54	518,371.79	4.31213E-011	0.18	1.59692E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,611.30	518,337.78	4.20775E-011	0.17	1.45993E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,607.20	518,338.45	4.07083E-011	0.17	1.35941E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,619.74	518,370.14	3.98617E-011	0.16	1.47621E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,612.96	518,357.64	3.98437E-011	0.16	1.38242E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,624.54	518,383.46	3.98333E-011	0.16	1.47516E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,610.23	518,358.55	3.94015E-011	0.16	1.31577E-003
Study\Route\30inch headers East\FB prod header East					
	109,609.74	518,363.16	3.83642E-011	0.16	1.27159E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,604.02	518,331.21	3.74015E-011	0.15	1.29769E-003
Study\Route\30inch headers East\FB prod header East					
	109,609.98	518,370.38	3.65965E-011	0.15	1.21299E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,599.51	518,331.45	3.52961E-011	0.14	1.17867E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,613.59	518,374.31	3.48308E-011	0.14	1.28990E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,617.07	518,388.81	3.35686E-011	0.14	1.24316E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,606.78	518,364.32	3.34270E-011	0.14	1.15979E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,604.54	518,364.95	3.29817E-011	0.14	1.10139E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,607.99	518,371.54	3.24193E-011	0.13	1.12482E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,606.34	518,372.37	3.17688E-011	0.13	1.06088E-003
Study\Route\30inch headers South west\FB prod header South West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB prod header North west	109,596.74	518,324.65	3.15204E-011	0.13	1.09364E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.63	518,373.41	3.08120E-011	0.13	1.03203E-003
Study\Route\30inch headers South west\FB prod header South West	109,600.96	518,367.46	2.86767E-011	0.12	9.60512E-004
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	2.81438E-011	0.12	1.04226E-003
Study\Route\30inch headers North west\FB prod header North west	109,591.81	518,324.45	2.65065E-011	0.11	8.85155E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,598.33	518,362.54	2.64564E-011	0.11	8.86145E-004
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	2.58546E-011	0.11	9.57483E-004
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	2.50959E-011	0.10	8.70731E-004
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	1.86383E-011	0.08	6.90238E-004
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	1.82630E-011	0.07	6.11710E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	1.75107E-011	0.07	5.84750E-004
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	1.60708E-011	0.07	5.57594E-004
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	1.57463E-011	0.06	5.83136E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	1.45796E-011	0.06	4.86869E-004
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	1.43518E-011	0.06	4.80706E-004
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	1.34607E-011	0.06	4.67033E-004
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	1.17323E-011	0.05	4.34487E-004
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	1.08999E-011	0.04	3.65087E-004
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	1.05136E-011	0.04	3.89355E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	9.69166E-012	0.04	3.23642E-004
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	9.10141E-012	0.04	3.15784E-004
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	8.07080E-012	0.03	2.98889E-004
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	6.47005E-012	0.03	2.16711E-004
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	5.75018E-012	0.02	2.12948E-004
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	2.88734E-012	0.01	1.06928E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	7.06424E-013	0.00	2.35902E-005
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	2.08092E-013	0.00	7.21998E-006

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP closest house East (109900,518297 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
TOTAL			2.43705E-008		
Risk Ranking Point:	RRP closest house South West (109356,518004 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	5.69551E-011	13.11	1.38294E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	4.39087E-011	10.11	1.06615E-003
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	3.77750E-011	8.70	9.52991E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	3.70692E-011	8.54	9.00085E-004
Study\Route\30inch headers North west\FB inj header North West	109,543.81	518,313.11	3.44125E-011	7.92	8.38095E-004
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	3.24190E-011	7.46	8.17869E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	2.98751E-011	6.88	7.25402E-004
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	2.65225E-011	6.11	6.45938E-004
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	2.60282E-011	5.99	6.56641E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	2.11581E-011	4.87	5.13743E-004
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	1.54202E-011	3.55	3.89021E-004
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	1.49265E-011	3.44	3.63526E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	9.76684E-012	2.25	2.37150E-004
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	8.49244E-012	1.96	2.06828E-004
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	8.43441E-012	1.94	2.12784E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	7.73107E-012	1.78	1.87719E-004
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	6.56533E-012	1.51	1.65631E-004
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	6.01976E-012	1.39	1.46607E-004
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	4.28011E-012	0.99	1.03926E-004
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.85717E-012	0.66	7.20809E-005
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	2.13616E-012	0.49	5.20249E-005
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	1.55792E-012	0.36	5.20249E-005
TOTAL			4.34311E-010		

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Slot 20\SL20 FBVTBO					
	109,683.51	518,346.26	1.90394E-007	12.34	1.03475E-002
Study\Slot 19\SL19 FBVTBO					
	109,680.10	518,342.85	1.47105E-007	9.54	7.99484E-003
Study\Slot 18\SL18 FBVTBO					
	109,676.63	518,339.38	9.16096E-008	5.94	4.97878E-003
Study\Slot 20\SL20 FBVCBO					
	109,683.51	518,346.26	6.47245E-008	4.20	3.28885E-002
Study\Slot 19\SL19 FBVCBO					
	109,680.10	518,342.85	6.11589E-008	3.97	3.10767E-002
Study\Slot 18\SL18 FBVCBO					
	109,676.63	518,339.38	5.61216E-008	3.64	2.85171E-002
Study\Slot 16\SL16 FBVTBO					
	109,666.18	518,328.94	5.06698E-008	3.29	2.75379E-003
Study\Slot 16\SL16 FBVCBO					
	109,666.18	518,328.94	3.56604E-008	2.31	1.81201E-002
Study\Slot 15\SL15 FBVCBO					
	109,662.81	518,325.25	3.34924E-008	2.17	1.70185E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,692.32	518,338.61	1.49759E-008	0.97	6.20260E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,691.74	518,338.94	1.49759E-008	0.97	6.20260E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,691.70	518,336.58	1.49656E-008	0.97	6.19837E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.32	518,335.57	1.49360E-008	0.97	6.18609E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.90	518,335.24	1.49360E-008	0.97	6.18609E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.27	518,333.21	1.48745E-008	0.96	6.16062E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,686.36	518,341.50	1.46269E-008	0.95	6.05806E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,685.44	518,331.67	1.41128E-008	0.92	5.84516E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.86	518,332.00	1.40322E-008	0.91	5.81176E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.82	518,329.65	1.39505E-008	0.90	5.77792E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,682.99	518,345.78	1.38850E-008	0.90	5.75079E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,682.94	518,338.13	1.38450E-008	0.90	5.73424E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,679.57	518,342.42	1.31861E-008	0.85	5.46132E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,679.48	518,334.57	1.30956E-008	0.85	5.42385E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,676.11	518,338.85	1.28594E-008	0.83	5.32601E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.96	518,321.29	1.25727E-008	0.82	5.20728E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.38	518,321.63	1.25356E-008	0.81	5.19193E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	1.24815E-008		0.81	5.16951E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	1.21006E-008		0.78	5.01173E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	1.17562E-008		0.76	4.86911E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,671.52	518,317.63	1.16346E-008		0.75	4.81874E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	1.15180E-008		0.75	4.77044E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.89	518,315.61	1.13375E-008		0.74	4.69569E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	1.06819E-008		0.69	4.42416E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,662.19	518,324.81	1.06400E-008		0.69	4.40680E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,692.32	518,338.61	9.63859E-009		0.62	5.48196E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.74	518,338.94	9.59392E-009		0.62	5.45655E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.70	518,336.58	9.56649E-009		0.62	5.44096E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.90	518,335.24	9.17536E-009		0.59	5.21850E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.32	518,335.57	9.14335E-009		0.59	5.20029E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.27	518,333.21	9.10960E-009		0.59	5.18110E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,686.36	518,341.50	8.99422E-009		0.58	5.11547E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,685.44	518,331.67	8.92613E-009		0.58	5.07675E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.86	518,332.00	8.88236E-009		0.58	5.05185E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.82	518,329.65	8.86470E-009		0.57	5.04181E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,682.94	518,338.13	8.76876E-009		0.57	4.98724E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,682.99	518,345.78	8.73414E-009		0.57	4.96755E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,679.48	518,334.57	8.48265E-009		0.55	4.82452E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,679.57	518,342.42	8.46712E-009		0.55	4.81568E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,676.11	518,338.85	8.06842E-009		0.52	4.58892E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.96	518,321.29	7.59561E-009		0.49	4.32002E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	7.52763E-009		0.49	4.28135E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.33	518,319.27	7.42343E-009		0.48	4.22209E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,669.00	518,324.19	7.00012E-009		0.45	3.98133E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15						
	109,671.52	518,317.63	6.63831E-009		0.43	3.77555E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16						
	109,665.63	518,328.47	6.60655E-009		0.43	3.75748E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15						
	109,670.94	518,317.96	6.56238E-009		0.43	3.73236E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15						
	109,670.89	518,315.61	6.50952E-009		0.42	3.70230E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15						
	109,665.56	518,320.53	6.14089E-009		0.40	3.49264E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15						
	109,662.19	518,324.81	5.92058E-009		0.38	3.36734E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8						
	109,592.10	518,324.99	3.11491E-009		0.20	8.54841E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8						
	109,590.30	518,324.14	3.04039E-009		0.20	8.34390E-003
Study\Route\30inch headers East\FB inj header East						
	109,688.91	518,333.14	2.88236E-009		0.19	6.94658E-002
Study\Route\30inch headers East\FB inj header East						
	109,681.58	518,326.03	2.85466E-009		0.19	6.87981E-002
Study\Route\30inch headers East\FB inj header East						
	109,674.26	518,318.91	2.83386E-009		0.18	6.82969E-002
Study\Route\30inch headers East\FB inj header East						
	109,666.94	518,311.79	2.80553E-009		0.18	6.76142E-002
Study\Route\30inch headers East\FB inj header East						
	109,659.70	518,311.89	2.75572E-009		0.18	6.64138E-002
Study\Route\30inch headers East\FB inj header East						
	109,652.57	518,319.22	2.75118E-009		0.18	6.63043E-002
Study\Route\30inch headers East\FB inj header East						
	109,645.43	518,326.54	2.74332E-009		0.18	6.61148E-002
Study\Route\30inch headers East\FB inj header East						
	109,638.29	518,333.87	2.72335E-009		0.18	6.56336E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8						
	109,584.05	518,328.28	2.67792E-009		0.17	7.34914E-003
Study\Route\30inch headers East\FB inj header East						
	109,631.15	518,341.19	2.51859E-009		0.16	6.06988E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7						
	109,582.06	518,315.62	2.49762E-009		0.16	6.85434E-003
Study\Route\30inch headers East\FB inj header East						
	109,624.01	518,348.52	2.41715E-009		0.16	5.82540E-002
Study\Route\30inch headers East\FB inj header East						
	109,616.88	518,355.84	2.33949E-009		0.15	5.63824E-002
Study\Route\30inch headers Old wells\FB inj header old wells						
	109,615.91	518,352.15	2.31565E-009		0.15	5.62266E-002
Study\Route\30inch headers Old wells\FB inj header old wells						
	109,614.90	518,345.45	2.31343E-009		0.15	5.61729E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7						
	109,580.26	518,314.77	2.27234E-009		0.15	6.23609E-003
Study\Route\30inch headers South west\FB inj header South West						
	109,618.58	518,344.34	2.26203E-009		0.15	5.70667E-002
Study\Route\30inch headers South west\FB inj header South West						
	109,619.14	518,350.96	2.25600E-009		0.15	5.69147E-002
Study\Route\30inch headers Old wells\FB inj header old wells						

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /Avge Year			
Study\Route\30inch headers East\FB inj header East	109,610.23	518,358.55	2.22756E-009	0.14	5.40877E-002	
Study\Route\30inch headers Old wells\FB inj header old wells	109,609.74	518,363.16	2.22264E-009	0.14	5.35664E-002	
Study\Route\30inch headers East\FB inj header East	109,607.20	518,338.45	2.20483E-009	0.14	5.35358E-002	
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	2.19413E-009	0.14	5.53537E-002	
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	2.19288E-009	0.14	5.53222E-002	
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	2.14712E-009	0.14	5.78167E-002	
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	2.13688E-009	0.14	5.75408E-002	
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	2.12156E-009	0.14	5.15140E-002	
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	2.11555E-009	0.14	5.13679E-002	
Study\Route\30inch headers East\FB prod header East	109,688.91	518,333.14	2.09247E-009	0.14	6.93551E-002	
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	2.08937E-009	0.14	5.62616E-002	
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	2.08857E-009	0.14	5.62401E-002	
Study\Route\30inch headers East\FB prod header East	109,681.58	518,326.03	2.07415E-009	0.13	6.87478E-002	
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.07310E-009	0.13	5.23005E-002	
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	2.07207E-009	0.13	5.22744E-002	
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	2.07205E-009	0.13	5.22738E-002	
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	2.07017E-009	0.13	5.04177E-002	
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.04791E-009	0.13	4.97255E-002	
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	2.01082E-009	0.13	4.89723E-002	
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	2.00619E-009	0.13	8.03451E-003	
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	2.00560E-009	0.13	5.40059E-002	
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	1.97872E-009	0.13	4.81905E-002	
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	1.97489E-009	0.13	5.31789E-002	
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	1.97119E-009	0.13	6.53353E-002	
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	1.96002E-009	0.13	4.75916E-002	
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	1.94687E-009	0.13	6.45292E-002	

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	1.93357E-009	0.13	4.70908E-002
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	1.91894E-009	0.12	4.84112E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	1.89664E-009	0.12	4.60528E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	1.87697E-009	0.12	5.05421E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	1.87623E-009	0.12	4.56943E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	1.87146E-009	0.12	7.49496E-003
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	1.85077E-009	0.12	4.66914E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	1.84843E-009	0.12	5.07274E-003
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	1.83406E-009	0.12	4.93868E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	1.83114E-009	0.12	7.33348E-003
Study\Route\30inch headers East\FB prod header East	109,659.70	518,311.89	1.82235E-009	0.12	6.04020E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.53	518,306.25	1.81622E-009	0.12	7.27373E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.20	518,306.91	1.81622E-009	0.12	7.27373E-003
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	1.79176E-009	0.12	4.52028E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	1.78468E-009	0.12	4.34649E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	1.77588E-009	0.12	4.31205E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	1.75415E-009	0.11	4.72349E-002
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	1.73888E-009	0.11	4.68237E-002
Study\Route\30inch headers East\FB prod header East	109,652.57	518,319.22	1.73310E-009	0.11	5.74439E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,576.10	518,306.13	1.69330E-009	0.11	6.78145E-003
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	1.69085E-009	0.11	5.60435E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	1.68555E-009	0.11	4.53877E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	1.67019E-009	0.11	6.68889E-003
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	1.66798E-009	0.11	4.49145E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,571.94	518,306.52	1.64028E-009	0.11	4.50150E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	1.63804E-009	0.11	6.56012E-003
Study\Route\30inch headers South west\FB inj header South West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,574.89	518,304.95	1.63150E-009	0.11	4.11598E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	1.62785E-009	0.11	6.51932E-003
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	1.62564E-009	0.11	5.38819E-002
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	1.62270E-009	0.11	3.95199E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	1.62017E-009	0.11	4.36271E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	1.59051E-009	0.10	3.86195E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,570.15	518,305.67	1.57858E-009	0.10	4.33217E-003
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	1.54486E-009	0.10	5.12044E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	1.53729E-009	0.10	4.13955E-002
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	1.48678E-009	0.10	3.75086E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	1.46894E-009	0.10	3.95550E-002
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	1.43764E-009	0.09	3.50129E-002
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	1.41487E-009	0.09	4.68960E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	1.41086E-009	0.09	5.65029E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	1.40209E-009	0.09	3.40444E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	1.36379E-009	0.09	4.52031E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,614.90	518,345.45	1.35485E-009	0.09	4.52437E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	1.35364E-009	0.09	4.52031E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,574.57	518,287.10	1.34889E-009	0.09	5.40213E-003
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	1.33730E-009	0.09	3.25690E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	1.33564E-009	0.09	3.36956E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	1.33324E-009	0.09	3.59007E-002
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	1.31628E-009	0.09	4.56698E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	1.31430E-009	0.09	3.60689E-003
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	1.31284E-009	0.09	4.55505E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	1.29980E-009	0.08	4.34054E-002
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	1.28963E-009	0.08	4.27449E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /Avge Year			
Study\Route\30inch headers Old wells\FB inj header old wells						
109,553.33	518,289.44	1.28858E-009		0.08	3.12882E-002	
Study\Route\30inch pipeline\FB inj pipeline						
109,575.57	518,416.45	1.28810E-009		0.08	3.46854E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,612.96	518,357.64	1.27967E-009		0.08	4.43996E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,607.20	518,338.45	1.27594E-009		0.08	4.26084E-002	
Study\Route\30inch headers East\FB prod header East						
109,609.98	518,370.38	1.27507E-009		0.08	4.22621E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,611.30	518,337.78	1.27225E-009		0.08	4.41421E-002	
Study\Route\30inch pipeline\FB prod pipeline						
109,628.18	518,376.76	1.24274E-009		0.08	4.60227E-002	
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10						
109,570.34	518,290.61	1.24070E-009		0.08	4.96882E-003	
Study\Route\30inch pipeline\FB prod pipeline						
109,625.54	518,371.79	1.23623E-009		0.08	4.57819E-002	
Study\Route\30inch headers North west\FB inj header North West						
109,543.81	518,313.11	1.22043E-009		0.08	2.97229E-002	
Study\Route\30inch pipeline\FB prod pipeline						
109,619.74	518,370.14	1.21511E-009		0.08	4.49994E-002	
Study\Route\30inch pipeline\FB prod pipeline						
109,624.54	518,383.46	1.20990E-009		0.08	4.48065E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,604.54	518,364.95	1.19185E-009		0.08	3.98006E-002	
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10						
109,568.18	518,296.23	1.19148E-009		0.08	4.77172E-003	
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10						
109,567.85	518,296.89	1.18790E-009		0.08	4.75737E-003	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,606.34	518,372.37	1.18480E-009		0.08	3.95650E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,606.78	518,364.32	1.17989E-009		0.08	4.09376E-002	
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9						
109,570.96	518,283.82	1.17901E-009		0.08	4.72178E-003	
Study\Route\30inch headers South west\FB prod header South West						
109,607.99	518,371.54	1.17330E-009		0.08	4.07089E-002	
Study\Route\30inch pipeline\FB prod pipeline						
109,613.59	518,374.31	1.17088E-009		0.08	4.33617E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,604.02	518,331.21	1.16376E-009		0.08	4.03779E-002	
Study\Route\30inch headers Old wells\FB inj header old wells						
109,545.63	518,282.44	1.16338E-009		0.08	2.82483E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,604.63	518,373.41	1.16013E-009		0.08	3.88580E-002	
Study\Route\30inch pipeline\FB prod pipeline						
109,617.07	518,388.81	1.15587E-009		0.07	4.28059E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,599.51	518,331.45	1.15062E-009		0.07	3.84235E-002	
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10						
109,565.76	518,296.11	1.14680E-009		0.07	4.59278E-003	
Study\Route\30inch headers North west\FB prod header North west						

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,600.96	518,367.46	1.12581E-009	0.07	3.77084E-002
Study\Route\30inch headers North west\FB prod header North west	109,566.72	518,287.33	1.11595E-009	0.07	4.46924E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,598.33	518,362.54	1.10779E-009	0.07	3.71048E-002
Study\Route\30inch headers South west\FB prod header South West	109,564.24	518,293.62	1.09251E-009	0.07	4.37535E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.09251E-009	0.07	4.37535E-003
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	1.05388E-009	0.07	3.90288E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	1.03136E-009	0.07	3.81947E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,561.35	518,297.40	1.02141E-009	0.07	2.80310E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	1.00576E-009	0.07	3.35861E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	1.00381E-009	0.07	4.02013E-003
Study\Route\30inch headers North west\FB prod header North west	109,590.54	518,355.48	9.56972E-010	0.06	3.20533E-002
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	9.27609E-010	0.06	3.43524E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	9.04380E-010	0.06	3.13785E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	8.88425E-010	0.06	2.96679E-002
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	8.85414E-010	0.06	3.27898E-002
Study\Route\30inch headers North west\FB prod header North west	109,582.75	518,348.42	8.73007E-010	0.06	2.92409E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	8.25827E-010	0.05	2.86530E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	7.93054E-010	0.05	2.93694E-002
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	7.92139E-010	0.05	2.65323E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	7.85540E-010	0.05	2.62322E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,559.55	518,296.55	7.74318E-010	0.05	2.12500E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,567.27	518,280.63	7.64094E-010	0.05	3.06009E-003
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	7.61552E-010	0.05	2.82028E-002
Study\Route\30inch headers South west\FB prod header South West	109,574.89	518,304.95	7.28258E-010	0.05	2.52677E-002
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	6.98689E-010	0.05	2.58748E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	6.60846E-010	0.04	2.68046E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,568.72	518,303.44	6.59103E-010	0.04	2.20100E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,556.77	518,328.18	6.58622E-010	0.04	2.67144E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,592.10	518,324.99	6.58180E-010	0.04	2.48041E-003
Study\Route\30inch headers North west\FB prod header North west					
	109,567.18	518,334.29	6.57045E-010	0.04	2.20074E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,585.48	518,408.37	6.45355E-010	0.04	2.38996E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,567.60	518,298.38	6.26715E-010	0.04	2.17446E-002
Study\Route\30inch headers North west\FB prod header North west					
	109,559.39	518,327.23	6.18421E-010	0.04	2.07137E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,556.47	518,325.73	6.12910E-010	0.04	2.48602E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,561.03	518,296.44	6.08229E-010	0.04	2.03111E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,581.91	518,409.42	5.87324E-010	0.04	2.17506E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,560.32	518,291.82	5.77663E-010	0.04	2.00427E-002
Study\Route\30inch headers North west\FB prod header North west					
	109,551.60	518,320.17	5.76303E-010	0.04	1.93030E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,563.03	518,284.14	5.60760E-010	0.04	2.24577E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,553.30	518,300.68	5.48667E-010	0.04	1.50573E-003
Study\Route\30inch pipeline\FB prod pipeline					
	109,577.76	518,417.09	5.45337E-010	0.04	2.01956E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,575.57	518,416.45	5.42429E-010	0.04	2.00879E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,553.33	518,289.44	5.36620E-010	0.03	1.79198E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,551.54	518,288.07	5.09753E-010	0.03	1.39894E-003
Study\Route\30inch headers North west\FB prod header North west					
	109,543.81	518,313.11	4.99442E-010	0.03	1.67285E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,549.74	518,287.22	4.84255E-010	0.03	1.32897E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,545.63	518,282.44	4.72176E-010	0.03	1.57678E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,560.88	518,289.77	4.60324E-010	0.03	1.84354E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,584.92	518,297.12	4.52345E-010	0.03	2.48770E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,560.55	518,290.43	4.40457E-010	0.03	1.76397E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,590.30	518,324.14	4.34717E-010	0.03	1.63827E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,543.48	518,291.36	4.31484E-010	0.03	1.18414E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,558.45	518,289.64	3.98738E-010	0.03	1.59689E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.19	518,324.77	3.90721E-010	0.03	1.58480E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.52	518,324.44	3.90721E-010	0.03	1.58480E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	3.88642E-010	0.03	1.57637E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,551.73	518,330.83	3.83713E-010	0.02	1.55638E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,542.42	518,280.11	3.67907E-010	0.02	1.00967E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.73	518,320.79	3.64969E-010	0.02	1.48035E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	3.62574E-010	0.02	1.47064E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.09	518,318.68	3.61006E-010	0.02	1.46428E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	3.60693E-010	0.02	1.46301E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,584.05	518,328.28	3.59079E-010	0.02	1.35322E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,547.89	518,334.22	3.56554E-010	0.02	1.44622E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	3.38965E-010	0.02	1.37488E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,544.30	518,330.80	3.33627E-010	0.02	1.35322E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,540.63	518,279.27	3.32735E-010	0.02	9.13143E-004
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,582.06	518,315.62	3.31459E-010	0.02	1.24913E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,544.35	518,323.77	3.30943E-010	0.02	1.34234E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.43	518,318.00	3.30943E-010	0.02	1.34234E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.12	518,315.55	3.29346E-010	0.02	1.33586E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,580.26	518,314.77	3.07436E-010	0.02	1.15860E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,540.51	518,327.16	3.00575E-010	0.02	1.21916E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,540.38	518,320.65	2.97684E-010	0.02	1.20744E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	2.82357E-010	0.02	1.55284E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.53	518,306.25	2.79360E-010	0.02	1.53636E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,581.61	518,293.80	2.79279E-010	0.02	1.53591E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.20	518,306.91	2.73792E-010	0.02	1.50573E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,536.54	518,324.03	2.64414E-010	0.02	1.07249E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,576.10	518,306.13	2.63367E-010	0.02	1.44840E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	2.61924E-010	0.02	1.44047E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	2.56059E-010	0.02	1.40821E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	2.54339E-010	0.02	1.39875E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	2.44082E-010	0.02	1.34234E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,574.01	518,318.91	2.31029E-010	0.01	8.70656E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,534.37	518,283.40	2.30078E-010	0.01	6.31413E-004
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	2.28496E-010	0.01	1.25663E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	2.05145E-010	0.01	1.12821E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,568.18	518,296.23	2.01821E-010	0.01	1.10993E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	1.99333E-010	0.01	1.09625E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	1.97727E-010	0.01	1.08741E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,565.76	518,296.11	1.83842E-010	0.01	1.01105E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,566.72	518,287.33	1.73062E-010	0.01	9.51768E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	1.61288E-010	0.01	8.87015E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	1.61288E-010	0.01	8.87015E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	1.56229E-010	0.01	5.88765E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	1.46444E-010	0.01	5.51888E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	1.14812E-010	0.01	6.31413E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	9.55314E-011	0.01	5.25381E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	9.11095E-011	0.01	3.43355E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	8.01131E-011	0.01	4.46223E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	8.01131E-011	0.01	4.46223E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	7.62022E-011	0.00	4.24440E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	7.22529E-011	0.00	3.97359E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	7.22529E-011	0.00	3.97359E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP East wellsite (109742,518342 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,560.55	518,290.43	6.69712E-011	0.00	3.68312E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	4.92258E-011	0.00	2.74183E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	4.92258E-011	0.00	2.74183E-004
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	4.77580E-011	0.00	2.66008E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	4.31330E-011	0.00	2.37213E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	3.85108E-011	0.00	2.14502E-004
TOTAL			1.54230E-006		

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	7.12161E-009	1.02	1.95442E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	6.99326E-009	1.00	1.91920E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	6.91263E-009	0.99	1.89707E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	5.95805E-009	0.85	2.46767E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,679.57	518,342.42	5.80303E-009	0.83	2.40346E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	5.75415E-009	0.82	1.57914E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,676.11	518,338.85	5.65414E-009	0.81	2.34180E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	5.63791E-009	0.81	1.54724E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,580.26	518,314.77	5.48936E-009	0.79	1.50647E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	5.13462E-009	0.74	2.12662E-002
Study\Slot 20\SL20 FBVCBO	109,683.51	518,346.26	5.10644E-009	0.73	2.59474E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,682.94	518,338.13	5.06736E-009	0.73	2.09877E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	5.05933E-009	0.72	2.09544E-002
Study\Slot 19\SL19 FBVCBO	109,680.10	518,342.85	4.92915E-009	0.71	2.50465E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,679.48	518,334.57	4.91945E-009	0.70	2.03751E-002
Study\Slot 18\SL18 FBVCBO	109,676.63	518,339.38	4.78913E-009	0.69	2.43350E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	4.39853E-009	0.63	1.82176E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	4.37257E-009	0.63	1.19999E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,571.94	518,306.52	4.26534E-009	0.61	1.17056E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,692.32	518,338.61	4.25605E-009	0.61	1.76274E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.32	518,335.57	4.17778E-009	0.60	1.73033E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,570.15	518,305.67	4.14379E-009	0.59	1.13720E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,669.00	518,324.19	4.12890E-009	0.59	1.71008E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.86	518,332.00	4.08429E-009	0.59	1.69161E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.90	518,335.24	4.06676E-009	0.58	1.68435E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,547.89	518,334.22	4.05959E-009	0.58	1.64661E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,556.77	518,328.18	4.05204E-009	0.58	1.64355E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,557.11	518,327.85	4.04564E-009	0.58	1.64095E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,685.44	518,331.67	4.03270E-009	0.58	1.67024E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,551.73	518,330.83	4.02140E-009	0.58	1.63112E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20					
	109,691.70	518,336.58	4.01152E-009	0.57	1.66147E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,662.19	518,324.81	3.98623E-009	0.57	1.65099E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,688.27	518,333.21	3.95752E-009	0.57	1.63910E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,684.82	518,329.65	3.88979E-009	0.56	1.61105E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.38	518,321.63	3.88562E-009	0.56	1.60932E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5					
	109,556.47	518,325.73	3.85380E-009	0.55	1.56314E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.96	518,321.29	3.81126E-009	0.55	1.57852E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.33	518,319.27	3.74290E-009	0.54	1.55021E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,544.30	518,330.80	3.72317E-009	0.53	1.51015E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,548.14	518,327.42	3.71243E-009	0.53	1.50580E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
	109,578.20	518,306.91	3.69566E-009	0.53	1.48006E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,553.19	518,324.77	3.68560E-009	0.53	1.49491E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,553.52	518,324.44	3.67083E-009	0.53	1.48893E-002
Study\Slot 16\SL16 FBVCBO					
	109,666.18	518,328.94	3.60908E-009	0.52	1.83388E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,578.53	518,306.25	3.60719E-009	0.52	1.44463E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	3.56038E-009	0.51	1.47462E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	3.55141E-009	0.51	1.44049E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,576.10	518,306.13	3.52480E-009	0.51	1.41163E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,540.51	518,327.16	3.41847E-009	0.49	1.38657E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	3.33518E-009	0.48	1.33570E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	3.32736E-009	0.48	1.33256E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	3.32223E-009	0.48	1.34753E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.73	518,320.79	3.31541E-009	0.48	1.34476E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,544.35	518,323.77	3.27874E-009	0.47	1.32989E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	3.24368E-009	0.46	1.29905E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	3.22139E-009	0.46	1.29013E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	3.21008E-009	0.46	1.32953E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,671.52	518,317.63	3.20445E-009	0.46	1.32720E-002
Study\Slot 15\SL15 FBVCBO	109,662.81	518,325.25	3.16034E-009	0.45	1.60587E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.09	518,318.68	3.12328E-009	0.45	1.26683E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.89	518,315.61	3.09354E-009	0.44	1.28126E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	3.05743E-009	0.44	1.22446E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,536.54	518,324.03	2.93634E-009	0.42	1.19101E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	2.90526E-009	0.42	1.16352E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	2.88844E-009	0.41	1.17158E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.43	518,318.00	2.88844E-009	0.41	1.17158E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,561.35	518,297.40	2.87983E-009	0.41	7.90325E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,553.30	518,300.68	2.85653E-009	0.41	7.83931E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,540.38	518,320.65	2.84119E-009	0.41	1.15242E-002
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	2.83145E-009	0.41	6.82389E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	2.81427E-009	0.40	6.83338E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West					
	109,604.63	518,373.41	2.80720E-009	0.40	6.83677E-002
Study\Route\30inch headers East\FB inj header East					
	109,609.74	518,363.16	2.80651E-009	0.40	6.76378E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,600.96	518,367.46	2.79104E-009	0.40	6.79740E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,604.54	518,364.95	2.79023E-009	0.40	6.77500E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,559.55	518,296.55	2.78199E-009	0.40	7.63476E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,584.05	518,328.28	2.76330E-009	0.40	1.04138E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,598.33	518,362.54	2.75468E-009	0.39	6.70885E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,610.23	518,358.55	2.74707E-009	0.39	6.67020E-002
Study\Route\30inch headers East\FB inj header East					
	109,616.88	518,355.84	2.73966E-009	0.39	6.60267E-002
Study\Route\30inch headers East\FB inj header East					
	109,624.01	518,348.52	2.72694E-009	0.39	6.57201E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,615.91	518,352.15	2.71462E-009	0.39	6.59141E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,590.54	518,355.48	2.71053E-009	0.39	6.60132E-002
Study\Route\30inch headers East\FB inj header East					
	109,631.15	518,341.19	2.70891E-009	0.39	6.52855E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,607.99	518,371.54	2.70864E-009	0.39	6.83338E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,614.90	518,345.45	2.70451E-009	0.39	6.56688E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,582.75	518,348.42	2.69739E-009	0.39	6.56932E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
	109,581.61	518,293.80	2.69684E-009	0.39	1.08005E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,607.20	518,338.45	2.68852E-009	0.39	6.52804E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,606.78	518,364.32	2.68516E-009	0.38	6.77415E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,612.96	518,357.64	2.63905E-009	0.38	6.65783E-002
Study\Route\30inch headers East\FB inj header East					
	109,638.29	518,333.87	2.63460E-009	0.38	6.34946E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,619.14	518,350.96	2.60988E-009	0.37	6.58422E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8					
	109,592.10	518,324.99	2.60903E-009	0.37	9.83238E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
	109,567.85	518,296.89	2.60759E-009	0.37	1.04431E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.12	518,315.55	2.60154E-009	0.37	1.05521E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,618.58	518,344.34	2.60016E-009	0.37	6.55970E-002
Study\Route\30inch pipeline\FB inj pipeline					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB inj header South West	109,585.48	518,408.37	2.58545E-009	0.37	6.96198E-002
Study\Route\30inch pipeline\FB inj pipeline	109,611.30	518,337.78	2.58545E-009	0.37	6.52259E-002
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	2.58511E-009	0.37	6.96104E-002
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	2.58454E-009	0.37	6.95952E-002
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	2.58417E-009	0.37	6.95852E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	2.58400E-009	0.37	6.95807E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	2.58399E-009	0.37	6.95803E-002
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	2.58396E-009	0.37	6.95796E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	2.58380E-009	0.37	6.95752E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	2.58229E-009	0.37	6.95347E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	2.58195E-009	0.37	6.95255E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	2.58059E-009	0.37	6.94890E-002
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	2.57861E-009	0.37	6.94354E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	2.56549E-009	0.37	6.90822E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	2.55346E-009	0.37	6.87584E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	2.54718E-009	0.36	6.85893E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	2.53938E-009	0.36	6.83793E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	2.53453E-009	0.36	6.82485E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,568.18	518,296.23	2.52980E-009	0.36	1.01315E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	2.52873E-009	0.36	6.15855E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.50940E-009	0.36	6.09312E-002
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	2.46834E-009	0.35	5.94877E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	2.45105E-009	0.35	9.23702E-003
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.42728E-009	0.35	6.12357E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	2.40708E-009	0.34	9.64004E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	2.37675E-009	0.34	5.77102E-002
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	2.37387E-009	0.34	5.78141E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East					
	109,652.57	518,319.22	2.34220E-009	0.34	5.64478E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,682.99	518,345.78	2.31200E-009	0.33	1.31495E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,596.74	518,324.65	2.31020E-009	0.33	5.82820E-002
Study\Route\30inch headers East\FB inj header East					
	109,688.91	518,333.14	2.30831E-009	0.33	5.56309E-002
Study\Route\30inch headers North west\FB inj header North West					
	109,559.39	518,327.23	2.28895E-009	0.33	5.57460E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,584.11	518,317.44	2.28833E-009	0.33	5.55633E-002
Study\Route\30inch headers East\FB inj header East					
	109,681.58	518,326.03	2.27259E-009	0.33	5.47700E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
	109,679.57	518,342.42	2.25761E-009	0.32	1.28402E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,589.45	518,318.08	2.22510E-009	0.32	5.61351E-002
Study\Route\30inch headers East\FB inj header East					
	109,674.26	518,318.91	2.22193E-009	0.32	5.35492E-002
Study\Route\30inch headers East\FB inj header East					
	109,659.70	518,311.89	2.18915E-009	0.31	5.27593E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18					
	109,676.11	518,338.85	2.18845E-009	0.31	1.24468E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,576.42	518,310.44	2.15211E-009	0.31	5.22557E-002
Study\Route\30inch headers East\FB inj header East					
	109,666.94	518,311.79	2.14931E-009	0.31	5.17990E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,564.24	518,293.62	2.12290E-009	0.30	8.50195E-003
Study\Route\30inch headers North west\FB inj header North West					
	109,551.60	518,320.17	2.12123E-009	0.30	5.16611E-002
Study\Route\30inch headers South west\FB inj header South West					
	109,582.17	518,311.52	2.11341E-009	0.30	5.33174E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,564.57	518,292.96	2.10746E-009	0.30	8.44009E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
	109,570.34	518,290.61	2.07244E-009	0.30	8.29986E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,562.14	518,292.83	2.05859E-009	0.29	8.24436E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
	109,574.57	518,287.10	2.01441E-009	0.29	8.06745E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
	109,686.36	518,341.50	1.96291E-009	0.28	1.11641E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
	109,568.72	518,303.44	1.95449E-009	0.28	4.74573E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
	109,566.72	518,287.33	1.94858E-009	0.28	7.80382E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,665.63	518,328.47	1.94794E-009	0.28	1.10790E-002
Study\Slot 5\SL5 FBVCBO					
	109,547.09	518,333.40	1.94652E-009	0.28	9.89084E-004
Study\Route\30inch headers East\FB prod header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers North west\FB inj header North West	109,609.98	518,370.38	1.94634E-009	0.28	6.45115E-002
Study\Route\30inch headers East\FB prod header East	109,543.81	518,313.11	1.94472E-009	0.28	4.73623E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,609.74	518,363.16	1.93666E-009	0.28	6.41908E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	1.93243E-009	0.28	6.45311E-002
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	1.92841E-009	0.28	6.45912E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	1.92512E-009	0.28	6.42871E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,682.94	518,338.13	1.92489E-009	0.28	1.09479E-002
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	1.92383E-009	0.28	4.85347E-002
Study\Route\30inch headers North west\FB prod header North west	109,600.96	518,367.46	1.92209E-009	0.28	6.43793E-002
Study\Route\30inch headers North west\FB prod header North west	109,598.33	518,362.54	1.91539E-009	0.27	6.41549E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	1.90638E-009	0.27	6.36614E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	1.89353E-009	0.27	6.27613E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	1.88242E-009	0.27	4.57073E-002
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,679.48	518,334.57	1.87701E-009	0.27	1.06755E-002
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	1.85933E-009	0.27	6.45115E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,570.96	518,283.82	1.85689E-009	0.27	7.43661E-003
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	1.85084E-009	0.27	6.42170E-002
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	1.84563E-009	0.26	4.65617E-002
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	1.82828E-009	0.26	6.34344E-002
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	1.81633E-009	0.26	6.72647E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	1.81487E-009	0.26	6.72108E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	1.81337E-009	0.26	6.71552E-002
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	1.81305E-009	0.26	6.71431E-002
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	1.81302E-009	0.26	6.71420E-002
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	1.81282E-009	0.26	6.71347E-002
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	1.81250E-009	0.26	6.71230E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	1.81035E-009	0.26	6.70433E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB prod pipeline					
109,617.07    518,388.81    1.80958E-009	109,617.07	518,388.81	1.80958E-009	0.26	6.70147E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,575.57    518,416.45    1.80918E-009	109,575.57	518,416.45	1.80918E-009	0.26	6.70000E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
109,615.91    518,352.15    1.80273E-009	109,615.91	518,352.15	1.80273E-009	0.26	6.01999E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,600.92    518,388.35    1.80137E-009	109,600.92	518,388.35	1.80137E-009	0.26	6.67108E-002
Study\Route\30inch headers Old wells\FB inj header old wells					
109,553.33    518,289.44    1.79991E-009	109,553.33	518,289.44	1.79991E-009	0.26	4.37038E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
109,551.54    518,288.07    1.79832E-009	109,551.54	518,288.07	1.79832E-009	0.26	4.93523E-003
Study\Route\30inch pipeline\FB prod pipeline					
109,624.54    518,383.46    1.79679E-009	109,624.54	518,383.46	1.79679E-009	0.26	6.65411E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,607.26    518,381.33    1.79227E-009	109,607.26	518,381.33	1.79227E-009	0.26	6.63736E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
109,543.48    518,291.36    1.78807E-009	109,543.48	518,291.36	1.78807E-009	0.26	4.90710E-003
Study\Route\30inch headers South west\FB inj header South West					
109,560.32    518,291.82    1.78429E-009	109,560.32	518,291.82	1.78429E-009	0.26	4.50142E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,628.18    518,376.76    1.77489E-009	109,628.18	518,376.76	1.77489E-009	0.25	6.57301E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,613.59    518,374.31    1.75520E-009	109,613.59	518,374.31	1.75520E-009	0.25	6.50007E-002
Study\Route\30inch headers East\FB prod header East					
109,624.01    518,348.52    1.75190E-009	109,624.01	518,348.52	1.75190E-009	0.25	5.80667E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,619.74    518,370.14    1.74057E-009	109,619.74	518,370.14	1.74057E-009	0.25	6.44589E-002
Study\Route\30inch pipeline\FB prod pipeline					
109,625.54    518,371.79    1.73978E-009	109,625.54	518,371.79	1.73978E-009	0.25	6.44299E-002
Study\Route\30inch headers North west\FB prod header North west					
109,590.54    518,355.48    1.72982E-009	109,590.54	518,355.48	1.72982E-009	0.25	5.79394E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
109,549.74    518,287.22    1.71502E-009	109,549.74	518,287.22	1.71502E-009	0.25	4.70661E-003
Study\Route\30inch headers South west\FB prod header South West					
109,619.14    518,350.96    1.70567E-009	109,619.14	518,350.96	1.70567E-009	0.24	5.91803E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
109,574.01    518,318.91    1.69902E-009	109,574.01	518,318.91	1.69902E-009	0.24	6.40290E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
109,614.90    518,345.45    1.69512E-009	109,614.90	518,345.45	1.69512E-009	0.24	5.66065E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
109,691.74    518,338.94    1.69352E-009	109,691.74	518,338.94	1.69352E-009	0.24	9.63193E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
109,669.00    518,324.19    1.66578E-009	109,669.00	518,324.19	1.66578E-009	0.24	9.47415E-003
Study\Route\30inch headers East\FB prod header East					
109,631.15    518,341.19    1.66085E-009	109,631.15	518,341.19	1.66085E-009	0.24	5.50489E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20					
109,692.32    518,338.61    1.65589E-009	109,692.32	518,338.61	1.65589E-009	0.24	9.41787E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19					
109,688.32    518,335.57    1.65548E-009	109,688.32	518,335.57	1.65548E-009	0.24	9.41557E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					
109,582.06    518,315.62    1.65188E-009	109,582.06	518,315.62	1.65188E-009	0.24	6.22527E-003
Study\Route\30inch headers North west\FB prod header North west					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,582.75	518,348.42	1.64547E-009	0.24	5.51142E-002
Study\Route\30inch headers South west\FB prod header South West	109,560.55	518,290.43	1.63722E-009	0.23	6.55686E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,618.58	518,344.34	1.62216E-009	0.23	5.62826E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,688.90	518,335.24	1.61739E-009	0.23	9.19892E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,662.19	518,324.81	1.61009E-009	0.23	9.15739E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,607.20	518,338.45	1.60507E-009	0.23	5.35995E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	1.59661E-009	0.23	3.87676E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	1.59235E-009	0.23	6.37714E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.86	518,332.00	1.57649E-009	0.23	8.96631E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,685.44	518,331.67	1.56038E-009	0.22	8.87467E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.27	518,333.21	1.55406E-009	0.22	8.83872E-003
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	1.55359E-009	0.22	5.14938E-002
Study\Route\30inch headers South west\FB prod header South West	109,611.30	518,337.78	1.54604E-009	0.22	5.36416E-002
Study\Route\30inch headers North west\FB prod header North west	109,574.96	518,341.35	1.54487E-009	0.22	5.17447E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,558.45	518,289.64	1.51964E-009	0.22	6.08598E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	1.51550E-009	0.22	5.06082E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,580.26	518,314.77	1.50592E-009	0.22	5.67518E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.82	518,329.65	1.50502E-009	0.22	8.55983E-003
Study\Route\30inch headers South west\FB prod header South West	109,604.02	518,331.21	1.46680E-009	0.21	5.08924E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	1.45093E-009	0.21	8.08154E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	1.43772E-009	0.21	8.00800E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	1.42976E-009	0.20	7.96364E-003
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	1.42454E-009	0.20	7.93456E-003
Study\Route\30inch headers East\FB prod header East	109,645.43	518,326.54	1.40428E-009	0.20	4.65450E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	1.40031E-009	0.20	7.96429E-003
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	1.37349E-009	0.20	4.60043E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,674.96	518,321.29	1.36741E-009	0.20	7.77718E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,591.81	518,324.45	1.36347E-009	0.20	4.55315E-002
Study\Slot 4\SL4 FBVCBO					
	109,543.38	518,330.08	1.35076E-009	0.19	6.86360E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5					
	109,556.47	518,325.73	1.35055E-009	0.19	7.52244E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,542.42	518,280.11	1.34925E-009	0.19	3.70280E-003
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,584.11	518,317.44	1.32484E-009	0.19	4.42415E-002
Study\Route\30inch headers North west\FB prod header North west					
	109,559.39	518,327.23	1.32397E-009	0.19	4.43458E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,596.74	518,324.65	1.31991E-009	0.19	4.57959E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,534.37	518,283.40	1.31711E-009	0.19	3.61461E-003
Study\Route\30inch headers East\FB prod header East					
	109,688.91	518,333.14	1.30610E-009	0.19	4.32907E-002
Study\Route\30inch headers East\FB prod header East					
	109,652.57	518,319.22	1.30381E-009	0.19	4.32148E-002
Study\Route\30inch headers East\FB prod header East					
	109,681.58	518,326.03	1.30279E-009	0.19	4.31811E-002
Study\Route\30inch headers South west\FB prod header South West					
	109,589.45	518,318.08	1.28526E-009	0.18	4.45935E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
	109,665.56	518,320.53	1.28261E-009	0.18	7.29484E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,544.30	518,330.80	1.28257E-009	0.18	7.14380E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,553.19	518,324.77	1.27150E-009	0.18	7.08214E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,553.52	518,324.44	1.26467E-009	0.18	7.04413E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
	109,674.33	518,319.27	1.25680E-009	0.18	7.14807E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4					
	109,548.14	518,327.42	1.24512E-009	0.18	6.93521E-003
Study\Route\30inch headers East\FB prod header East					
	109,674.26	518,318.91	1.24096E-009	0.18	4.11316E-002
Study\Route\30inch headers East\FB prod header East					
	109,659.70	518,311.89	1.23299E-009	0.18	4.08677E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,540.63	518,279.27	1.22013E-009	0.17	3.34847E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
	109,563.03	518,284.14	1.21761E-009	0.17	4.87636E-003
Study\Route\30inch headers South west\FB prod header South West					
	109,582.17	518,311.52	1.20209E-009	0.17	4.17079E-002
Study\Route\30inch headers Old wells\FB prod header old wells					
	109,576.42	518,310.44	1.20092E-009	0.17	4.01032E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13					
	109,578.20	518,306.91	1.19188E-009	0.17	6.55479E-003
Study\Route\30inch headers East\FB prod header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,666.94	518,311.79	1.18903E-009	0.17	3.94105E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.27	518,280.63	1.18754E-009	0.17	4.75594E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,551.60	518,320.17	1.18239E-009	0.17	3.96036E-002
Study\Route\Slot 3\SL3 FBVCBO	109,578.53	518,306.25	1.16718E-009	0.17	6.41898E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,539.74	518,326.69	1.16317E-009	0.17	5.91039E-004
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,552.88	518,322.32	1.14945E-009	0.16	6.40233E-003
Study\Route\30inch headers South west\FB prod header South West	109,576.10	518,306.13	1.12806E-009	0.16	6.20381E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	1.07204E-009	0.15	6.09727E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	1.06316E-009	0.15	3.55028E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,671.52	518,317.63	1.05355E-009	0.15	5.99206E-003
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	1.01614E-009	0.15	3.40350E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.89	518,315.61	1.01280E-009	0.15	5.76031E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	9.85822E-010	0.14	3.71516E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	9.74794E-010	0.14	3.67360E-003
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	9.23661E-010	0.13	3.20475E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,540.51	518,327.16	9.22510E-010	0.13	5.13830E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,544.35	518,323.77	9.15129E-010	0.13	5.09719E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	9.10408E-010	0.13	5.07090E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	9.09925E-010	0.13	5.06821E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	9.06885E-010	0.13	3.02843E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	9.02920E-010	0.13	3.40274E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	9.00466E-010	0.13	4.95217E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	8.71754E-010	0.12	4.79426E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	8.65934E-010	0.12	4.76225E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	8.63477E-010	0.12	4.80949E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	8.52726E-010	0.12	4.68962E-003

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	8.29852E-010	0.12	2.87927E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,536.54	518,324.03	8.24833E-010	0.12	4.59425E-003
Study\Slot 2\SL2 FBVCBO	109,536.09	518,323.62	8.11898E-010	0.12	4.12550E-004
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	8.05658E-010	0.12	2.69040E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.76	518,317.67	8.04470E-010	0.12	4.48083E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.43	518,318.00	8.04470E-010	0.12	4.48083E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	8.01855E-010	0.11	4.40985E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,540.38	518,320.65	7.99564E-010	0.11	4.45350E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	7.77051E-010	0.11	4.27344E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.12	518,315.55	7.51195E-010	0.11	4.18409E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	6.95870E-010	0.10	3.82698E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,568.18	518,296.23	6.93016E-010	0.10	3.81128E-003
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,581.61	518,293.80	6.89095E-010	0.10	3.78972E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,565.76	518,296.11	6.52048E-010	0.09	3.58598E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	6.37058E-010	0.09	2.12738E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	5.81139E-010	0.08	3.19601E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	5.63259E-010	0.08	3.09768E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	5.60140E-010	0.08	3.08052E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	5.44327E-010	0.08	2.99356E-003
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	4.88062E-010	0.07	2.68412E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,566.72	518,287.33	4.14359E-010	0.06	2.27879E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	3.81132E-010	0.05	1.43633E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,553.30	518,300.68	3.79401E-010	0.05	1.42981E-003
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	3.71196E-010	0.05	1.39889E-003
Study\Slot 13\SL13 FBVCBO	109,585.99	518,297.45	3.62869E-010	0.05	1.84384E-004
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	2.72203E-010	0.04	1.49699E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
 SAFETI NL

Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP North wellsite (109624,518440 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	2.62407E-010	0.04	1.44312E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	2.59845E-010	0.04	1.42904E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	2.57329E-010	0.04	1.41520E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,551.54	518,288.07	2.52963E-010	0.04	9.53315E-004
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	2.47316E-010	0.04	9.32032E-004
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	2.34004E-010	0.03	1.28692E-003
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	2.21545E-010	0.03	1.21840E-003
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,549.74	518,287.22	2.11714E-010	0.03	7.97863E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,542.42	518,280.11	1.00870E-010	0.01	3.80137E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	9.57822E-011	0.01	3.60964E-004
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,540.63	518,279.27	8.16627E-011	0.01	3.07754E-004
TOTAL			6.97911E-007		

## Risk Ranking Point: RRP South wellsite (109558,518231 m)

Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Slot 9\SL9 FBVTBO	109,571.56	518,284.20	1.37970E-007	6.83	7.49839E-003
Study\Slot 10\SL10 FBVTBO	109,575.26	518,287.48	1.04966E-007	5.20	5.70466E-003
Study\Slot 8\SL8 FBVCBO	109,567.69	518,281.01	6.53376E-008	3.24	3.32000E-002
Study\Slot 9\SL9 FBVCBO	109,571.56	518,284.20	5.56906E-008	2.76	2.82981E-002
Study\Slot 10\SL10 FBVCBO	109,575.26	518,287.48	4.95534E-008	2.45	2.51796E-002
Study\Slot 12\SL12 FBVTBO	109,582.34	518,294.25	4.19862E-008	2.08	2.28186E-003
Study\Slot 12\SL12 FBVCBO	109,582.34	518,294.25	3.86341E-008	1.91	1.96312E-002
Study\Slot 13\SL13 FBVCBO	109,585.99	518,297.45	3.34458E-008	1.66	1.69948E-002
Study\Slot 13\SL13 FBVTBO	109,585.99	518,297.45	3.19913E-008	1.58	1.73866E-003
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,540.63	518,279.27	2.18547E-008	1.08	5.99770E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,542.42	518,280.11	2.17716E-008	1.08	5.97489E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1	109,534.37	518,283.40	1.98200E-008	0.98	5.43931E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,549.74	518,287.22	1.96396E-008	0.97	5.38980E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,551.54	518,288.07	1.94314E-008	0.96	5.33265E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2	109,543.48	518,291.36	1.84043E-008	0.91	5.05079E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,559.55	518,296.55	1.73137E-008	0.86	4.75148E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,561.35	518,297.40	1.72003E-008	0.85	4.72035E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5	109,553.30	518,300.68	1.66269E-008	0.82	4.56299E-002
Study\Slot 8\SL8 FBVTBO	109,567.69	518,281.01	1.65875E-008	0.82	9.01497E-004
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,570.15	518,305.67	1.53774E-008	0.76	4.22010E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,571.94	518,306.52	1.51887E-008	0.75	4.16831E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,567.27	518,280.63	1.50481E-008	0.75	6.02657E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,570.96	518,283.82	1.50207E-008	0.74	6.01557E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a	109,563.89	518,309.80	1.48977E-008	0.74	4.08845E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,563.03	518,284.14	1.41204E-008	0.70	5.65504E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,566.72	518,287.33	1.40045E-008	0.69	5.60863E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,574.57	518,287.10	1.34795E-008	0.67	5.39836E-002
Study\Slot 2\SL2 FBVCBO	109,536.09	518,323.62	1.33515E-008	0.66	6.78432E-003
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,580.26	518,314.77	1.30540E-008	0.65	3.58246E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,570.34	518,290.61	1.29697E-008	0.64	5.19420E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	1.28707E-008	0.64	5.15456E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,558.45	518,289.64	1.28519E-008	0.64	5.14701E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	1.27789E-008	0.63	5.11776E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.27554E-008	0.63	5.10838E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.55	518,290.43	1.27314E-008	0.63	5.09874E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	1.26778E-008	0.63	5.07728E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,540.63	518,279.27	1.25052E-008	0.62	4.71271E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,542.42	518,280.11	1.24601E-008	0.62	4.69569E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	1.22917E-008	0.61	4.92268E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,568.18	518,296.23	1.22238E-008	0.61	4.89548E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,582.06	518,315.62	1.21763E-008	0.60	3.34159E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,567.85	518,296.89	1.21348E-008	0.60	4.85984E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	1.19449E-008	0.59	4.78379E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,577.37	518,297.31	1.18010E-008	0.58	4.72613E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	1.17218E-008	0.58	3.21687E-002
Study\Slot 3\SL3 FBVCBO	109,539.74	518,326.69	1.16442E-008	0.58	5.91679E-003
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	1.15611E-008	0.57	4.63007E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,549.74	518,287.22	1.15097E-008	0.57	4.33755E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	1.14837E-008	0.57	4.32776E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,572.79	518,302.81	1.14429E-008	0.57	4.58272E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	1.14255E-008	0.57	4.57576E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,551.54	518,288.07	1.14187E-008	0.57	4.30325E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,575.22	518,302.94	1.13403E-008	0.56	4.54166E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,574.89	518,303.60	1.13092E-008	0.56	4.52918E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,576.10	518,306.13	1.09415E-008	0.54	4.38193E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.53	518,306.25	1.08495E-008	0.54	4.34509E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,578.20	518,306.91	1.07562E-008	0.53	4.30770E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	1.06439E-008	0.53	4.01126E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	9.96063E-009	0.49	3.75376E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	9.76503E-009	0.48	3.68004E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.12	518,315.55	9.41540E-009	0.47	3.81898E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	9.30677E-009	0.46	2.55410E-002
Study\Slot 4\SL4 FBVCBO	109,543.38	518,330.08	9.14664E-009	0.45	4.64768E-003
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	9.06973E-009	0.45	2.48905E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,584.05	518,328.28	9.00021E-009	0.45	2.46997E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2	109,545.76	518,317.67	8.78395E-009	0.44	3.56286E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					
	109,567.27	518,280.63	8.73033E-009	0.43	4.80130E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5					
	109,553.30	518,300.68	8.71107E-009	0.43	3.28285E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.43	518,318.00	8.61919E-009	0.43	3.49603E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,549.09	518,318.68	8.57909E-009	0.42	3.47976E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,570.96	518,283.82	8.54418E-009	0.42	4.69893E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					
	109,563.03	518,284.14	8.48990E-009	0.42	4.66907E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,566.72	518,287.33	8.40502E-009	0.42	4.62239E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,574.57	518,287.10	8.24034E-009	0.41	4.53183E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,570.34	518,290.61	8.04525E-009	0.40	4.42454E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					
	109,560.88	518,289.77	8.04437E-009	0.40	4.42405E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					
	109,558.45	518,289.64	8.02070E-009	0.40	4.41103E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,549.73	518,320.79	8.01452E-009	0.40	3.25077E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,549.40	518,321.13	8.00493E-009	0.40	3.24688E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8					
	109,560.55	518,290.43	7.97998E-009	0.40	4.38864E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,562.14	518,292.83	7.96760E-009	0.39	4.38183E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,540.38	518,320.65	7.95392E-009	0.39	3.22619E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,564.57	518,292.96	7.94918E-009	0.39	4.37170E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9					
	109,564.24	518,293.62	7.86439E-009	0.39	4.32507E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,552.88	518,322.32	7.70657E-009	0.38	3.12586E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,565.76	518,296.11	7.59101E-009	0.38	4.17472E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,568.18	518,296.23	7.54018E-009	0.37	4.14677E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,544.35	518,323.77	7.46858E-009	0.37	3.02933E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10					
	109,567.85	518,296.89	7.46210E-009	0.37	4.10383E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12					
	109,581.61	518,293.80	7.38870E-009	0.37	4.06346E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,553.52	518,324.44	7.37588E-009	0.37	2.99173E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,536.54	518,324.03	7.31317E-009	0.36	2.96630E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,553.19	518,324.77	7.30290E-009	0.36	2.96213E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,577.37	518,297.31	7.29812E-009	0.36	4.01365E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,556.47	518,325.73	7.20039E-009	0.36	2.92055E-002
Study\Slot 5\SL5 FBVCBO	109,547.09	518,333.40	7.19499E-009	0.36	3.65599E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	7.07623E-009	0.35	2.66675E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	6.94953E-009	0.34	2.61900E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,540.51	518,327.16	6.90651E-009	0.34	2.80135E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	6.90583E-009	0.34	2.80107E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	6.82188E-009	0.34	2.76702E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	6.79436E-009	0.34	3.73660E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,556.77	518,328.18	6.79261E-009	0.34	2.75515E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	6.70128E-009	0.33	2.52544E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	6.61459E-009	0.33	3.63773E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	6.54849E-009	0.32	3.60138E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	6.49532E-009	0.32	3.57214E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,551.73	518,330.83	6.43289E-009	0.32	2.60924E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,544.30	518,330.80	6.37117E-009	0.32	2.58421E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	6.34012E-009	0.31	3.48679E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,547.89	518,334.22	5.99024E-009	0.30	2.42970E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,576.10	518,306.13	5.58576E-009	0.28	3.07192E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,580.26	518,314.77	5.54919E-009	0.27	2.09127E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.53	518,306.25	5.45175E-009	0.27	2.99822E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,582.06	518,315.62	5.40103E-009	0.27	2.03543E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.20	518,306.91	5.37377E-009	0.27	2.95534E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,574.01	518,318.91	5.19135E-009	0.26	1.95641E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.12	518,315.55	4.42309E-009	0.22	2.46362E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.76	518,317.67	4.18288E-009	0.21	2.32983E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,545.43	518,318.00	4.14747E-009	0.21	2.31011E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	4.07568E-009	0.20	2.27012E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	3.85521E-009	0.19	2.14732E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	3.80946E-009	0.19	2.12184E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	3.74097E-009	0.19	2.08369E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,540.38	518,320.65	3.72678E-009	0.18	2.07578E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	3.65628E-009	0.18	1.37791E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,544.35	518,323.77	3.53369E-009	0.18	1.96824E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	3.52722E-009	0.17	1.96463E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	3.52505E-009	0.17	1.96342E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,592.10	518,324.99	3.45308E-009	0.17	1.30133E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	3.43604E-009	0.17	1.91384E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2	109,536.54	518,324.03	3.42095E-009	0.17	1.90544E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,584.05	518,328.28	3.29556E-009	0.16	1.24196E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	3.19526E-009	0.16	1.77973E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,548.14	518,327.42	3.19335E-009	0.16	1.77867E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	3.16203E-009	0.16	1.76123E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,540.51	518,327.16	3.13553E-009	0.16	1.74647E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	2.83977E-009	0.14	6.89528E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	2.82390E-009	0.14	6.85676E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	2.80778E-009	0.14	1.56391E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,544.30	518,330.80	2.80055E-009	0.14	1.55988E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	2.77908E-009	0.14	6.74794E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	2.74401E-009	0.14	6.66278E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	2.70295E-009	0.13	6.56307E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	2.69918E-009	0.13	6.80951E-002
Study\Route\30inch headers North west\FB inj header North West					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB inj header old wells	109,543.81	518,313.11	2.69072E-009	0.13	6.55307E-002
Study\Route\30inch headers North west\FB inj header North West	109,584.11	518,317.44	2.67708E-009	0.13	6.50027E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,551.60	518,320.17	2.67570E-009	0.13	6.51650E-002
Study\Route\30inch headers North west\FB inj header North West	109,591.81	518,324.45	2.66523E-009	0.13	6.47148E-002
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	2.65984E-009	0.13	6.71027E-002
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	2.64778E-009	0.13	6.44849E-002
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	2.63219E-009	0.13	6.64051E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	2.60103E-009	0.13	1.44875E-002
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	2.58414E-009	0.13	6.51929E-002
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	2.57355E-009	0.13	6.49257E-002
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	2.56143E-009	0.13	6.46200E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.49440E-009	0.12	6.05670E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	2.38808E-009	0.12	5.81602E-002
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.30686E-009	0.11	5.81976E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	2.22287E-009	0.11	5.39739E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	2.22053E-009	0.11	5.40795E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,669.00	518,324.19	2.14269E-009	0.11	8.87448E-003
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	2.11877E-009	0.10	5.34525E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	2.11197E-009	0.10	5.12812E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,665.63	518,328.47	2.11041E-009	0.10	8.74076E-003
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	2.10943E-009	0.10	5.13737E-002
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	2.10134E-009	0.10	5.06428E-002
Study\Route\30inch headers East\FB inj header East	109,652.57	518,319.22	2.09717E-009	0.10	5.05423E-002
Study\Route\30inch headers East\FB inj header East	109,638.29	518,333.87	2.09241E-009	0.10	5.04278E-002
Study\Route\30inch headers East\FB inj header East	109,659.70	518,311.89	2.08435E-009	0.10	5.02335E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.33	518,319.27	2.06754E-009	0.10	8.56321E-003

# Individual Risk Ranking Report

Unique Audit Number: 469,164  

**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,631.15	518,341.19	2.06689E-009	0.10	4.98127E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,662.19	518,324.81	2.02784E-009	0.10	8.39879E-003
Study\Route\30inch headers East\FB inj header East	109,624.01	518,348.52	2.02612E-009	0.10	4.88301E-002
Study\Route\30inch headers South west\FB inj header South West	109,618.58	518,344.34	2.02546E-009	0.10	5.10986E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,665.56	518,320.53	2.02429E-009	0.10	8.38406E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	2.02275E-009	0.10	4.91148E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.38	518,321.63	2.01433E-009	0.10	8.34283E-003
Study\Route\30inch headers East\FB inj header East	109,666.94	518,311.79	2.00891E-009	0.10	4.84154E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16	109,674.96	518,321.29	1.99458E-009	0.10	8.26104E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.89	518,315.61	1.98038E-009	0.10	8.20223E-003
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	1.97803E-009	0.10	4.76711E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	1.97612E-009	0.10	6.59901E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	1.97280E-009	0.10	4.79018E-002
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	1.97043E-009	0.10	4.79886E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	1.95068E-009	0.10	6.51407E-002
Study\Route\30inch headers South west\FB inj header South West	109,619.14	518,350.96	1.94416E-009	0.10	4.90475E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	1.92016E-009	0.10	6.41214E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,670.94	518,317.96	1.91699E-009	0.09	7.93968E-003
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	1.91044E-009	0.09	4.60423E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	1.90362E-009	0.09	6.35693E-002
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15	109,671.52	518,317.63	1.89761E-009	0.09	7.85938E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	1.89218E-009	0.09	6.31870E-002
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	1.89202E-009	0.09	4.77320E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	1.89056E-009	0.09	4.59050E-002
Study\Route\30inch headers South west\FB prod header South West	109,560.32	518,291.82	1.87120E-009	0.09	6.49233E-002
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	1.86840E-009	0.09	4.55037E-002
Study\Route\30inch headers North west\FB prod header North west					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,543.81	518,313.11	1.85437E-009	0.09	6.21111E-002
Study\Route\30inch headers South west\FB prod header South West	109,609.98	518,370.38	1.84167E-009	0.09	4.43849E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,567.60	518,298.38	1.83625E-009	0.09	6.37108E-002
Study\Route\30inch headers South west\FB prod header South West	109,674.26	518,318.91	1.83443E-009	0.09	4.42103E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.89	518,304.95	1.82778E-009	0.09	6.34169E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,606.34	518,372.37	1.82567E-009	0.09	4.43295E-002
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	1.81940E-009	0.09	4.59000E-002
Study\Route\30inch headers North west\FB prod header North west	109,604.63	518,373.41	1.81849E-009	0.09	4.42881E-002
Study\Route\30inch headers East\FB inj header East	109,681.58	518,326.03	1.77487E-009	0.09	4.27749E-002
Study\Route\30inch headers South west\FB prod header South West	109,582.17	518,311.52	1.76669E-009	0.09	6.12973E-002
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	1.75776E-009	0.09	4.43449E-002
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	1.69030E-009	0.08	5.66158E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,584.11	518,317.44	1.63726E-009	0.08	5.46743E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	1.62900E-009	0.08	4.38649E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	1.60646E-009	0.08	4.32579E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	1.59724E-009	0.08	4.30097E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	1.59693E-009	0.08	4.30013E-002
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	1.59162E-009	0.08	3.83586E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	1.58226E-009	0.08	5.29971E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	1.54915E-009	0.08	4.17147E-002
Study\Route\30inch headers South west\FB prod header South West	109,589.45	518,318.08	1.53359E-009	0.08	5.32098E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,591.81	518,324.45	1.52478E-009	0.08	5.09181E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	1.52457E-009	0.08	4.10530E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	1.48405E-009	0.07	4.97076E-002
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	1.45021E-009	0.07	3.90505E-002
Study\Route\30inch headers South west\FB prod header South West	109,596.74	518,324.65	1.44350E-009	0.07	5.00838E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,599.51	518,331.45	1.42036E-009	0.07	4.74314E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  
**SAFETI NL**  


Study Folder: BGM voorklocatie final incl

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB inj pipeline					
109,609.07	518,391.41	1.40463E-009	0.07	3.78232E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,594.58	518,395.38	1.40395E-009	0.07	3.78048E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,601.07	518,394.00	1.39614E-009	0.07	3.75946E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,617.07	518,388.81	1.39126E-009	0.07	3.74631E-002	
Study\Route\30inch headers North west\FB prod header North west					
109,574.96	518,341.35	1.38416E-009	0.07	4.63616E-002	
Study\Route\30inch headers South west\FB prod header South West					
109,604.02	518,331.21	1.34812E-009	0.07	4.67746E-002	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,676.11	518,338.85	1.34664E-009	0.07	5.57741E-003	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,679.48	518,334.57	1.33674E-009	0.07	5.53643E-003	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,684.82	518,329.65	1.31874E-009	0.07	5.46187E-003	
Study\Route\30inch pipeline\FB inj pipeline					
109,593.20	518,399.65	1.29763E-009	0.06	3.49419E-002	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,684.86	518,332.00	1.29576E-009	0.06	5.36670E-003	
Study\Route\30inch headers Old wells\FB prod header old wells					
109,607.20	518,338.45	1.29507E-009	0.06	4.32473E-002	
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
109,685.44	518,331.67	1.28887E-009	0.06	5.33814E-003	
Study\Route\30inch headers North west\FB prod header North west					
109,582.75	518,348.42	1.28684E-009	0.06	4.31021E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,588.25	518,402.40	1.26573E-009	0.06	3.40830E-002	
Study\Route\30inch headers Old wells\FB prod header old wells					
109,614.90	518,345.45	1.26030E-009	0.06	4.20862E-002	
Study\Route\30inch headers North west\FB prod header North west					
109,590.54	518,355.48	1.24457E-009	0.06	4.16862E-002	
Study\Route\30inch headers South west\FB prod header South West					
109,611.30	518,337.78	1.24020E-009	0.06	4.30303E-002	
Study\Route\30inch headers East\FB prod header East					
109,652.57	518,319.22	1.22209E-009	0.06	4.05061E-002	
Study\Route\30inch headers East\FB prod header East					
109,645.43	518,326.54	1.21786E-009	0.06	4.03659E-002	
Study\Route\30inch headers East\FB prod header East					
109,659.70	518,311.89	1.19894E-009	0.06	3.97388E-002	
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
109,682.94	518,338.13	1.19718E-009	0.06	4.95842E-003	
Study\Route\30inch headers South west\FB prod header South West					
109,618.58	518,344.34	1.19424E-009	0.06	4.14355E-002	
Study\Route\30inch headers East\FB prod header East					
109,638.29	518,333.87	1.19085E-009	0.06	3.94709E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,585.48	518,408.37	1.17663E-009	0.06	3.16836E-002	
Study\Route\30inch pipeline\FB inj pipeline					
109,581.91	518,409.42	1.17322E-009	0.06	3.15920E-002	
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,679.57	518,342.42	1.16770E-009	0.06	4.83631E-003
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	1.15657E-009	0.06	3.83346E-002
Study\BGM-1\BGM1 FBVCBO	109,529.60	518,288.69	1.15492E-009	0.06	5.86847E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.27	518,333.21	1.14302E-009	0.06	4.73411E-003
Study\Route\30inch headers Old wells\FB prod header old wells	109,615.91	518,352.15	1.11314E-009	0.06	3.71721E-002
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	1.11211E-009	0.06	3.68609E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	1.09390E-009	0.05	2.94561E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	1.07964E-009	0.05	2.90719E-002
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	1.07723E-009	0.05	4.46162E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	1.07356E-009	0.05	4.44639E-003
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	1.06891E-009	0.05	3.70869E-002
Study\Route\30inch headers East\FB prod header East	109,666.94	518,311.79	1.05447E-009	0.05	3.49505E-002
Study\Route\30inch headers North west\FB prod header North west	109,598.33	518,362.54	1.02589E-009	0.05	3.43618E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,610.23	518,358.55	1.01475E-009	0.05	3.38862E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	1.01425E-009	0.05	3.36174E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	1.00062E-009	0.05	4.14432E-003
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	9.88272E-010	0.05	4.09316E-003
Study\Route\30inch headers South west\FB prod header South West	109,612.96	518,357.64	9.71400E-010	0.05	3.37038E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	9.66436E-010	0.05	4.00272E-003
Study\Route\30inch headers East\FB prod header East	109,609.74	518,363.16	9.55396E-010	0.05	3.16667E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,604.54	518,364.95	9.49232E-010	0.05	3.16985E-002
Study\Route\30inch headers North west\FB prod header North west	109,600.96	518,367.46	9.35224E-010	0.05	3.13248E-002
Study\Route\30inch headers South west\FB prod header South West	109,606.78	518,364.32	9.16317E-010	0.05	3.17927E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	8.99947E-010	0.04	3.72734E-003
Study\Route\30inch headers East\FB prod header East	109,674.26	518,318.91	8.87759E-010	0.04	2.94248E-002
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	8.74305E-010	0.04	3.62114E-003
Study\Route\30inch headers East\FB prod header East	109,609.98	518,370.38	8.45514E-010	0.04	2.80246E-002

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers Old wells\FB prod header old wells					
109,606.34    518,372.37    8.30668E-010	0.04	2.77392E-002			
Study\Route\30inch headers North west\FB prod header North west					
109,604.63    518,373.41    8.25766E-010	0.04	2.76586E-002			
Study\Route\30inch headers South west\FB prod header South West					
109,607.99    518,371.54    8.06257E-010	0.04	2.79740E-002			
Study\Route\30inch headers East\FB prod header East					
109,681.58    518,326.03    7.41790E-010	0.04	2.45867E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,619.74    518,370.14    7.09030E-010	0.04	2.62577E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,613.59    518,374.31    7.00059E-010	0.03	2.59255E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,625.54    518,371.79    6.76155E-010	0.03	2.50402E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,607.26    518,381.33    6.65827E-010	0.03	2.46578E-002			
Study\Route\30inch headers East\FB prod header East					
109,688.91    518,333.14    6.51614E-010	0.03	2.15978E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,628.18    518,376.76    6.35115E-010	0.03	2.35204E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,600.92    518,388.35    6.19614E-010	0.03	2.29464E-002			
Study\BGM-2\BGM2 FBVCBO					
109,538.42    518,296.59    6.17963E-010	0.03	3.14005E-004			
Study\Route\30inch pipeline\FB prod pipeline					
109,624.54    518,383.46    5.91044E-010	0.03	2.18883E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,617.07    518,388.81    5.71304E-010	0.03	2.11573E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,601.07    518,394.00    5.70852E-010	0.03	2.11405E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,594.58    518,395.38    5.69613E-010	0.03	2.10947E-002			
Study\Route\30inch pipeline\FB prod pipeline					
109,609.07    518,391.41    5.67790E-010	0.03	2.10272E-002			
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
109,665.56    518,320.53    5.63442E-010	0.03	3.20458E-003			
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
109,669.00    518,324.19    5.49292E-010	0.03	3.12410E-003			
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
109,662.19    518,324.81    5.47934E-010	0.03	3.11638E-003			
Study\Route\30inch pipeline\FB prod pipeline					
109,593.20    518,399.65    5.30394E-010	0.03	1.96422E-002			
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
109,665.63    518,328.47    5.20745E-010	0.03	2.96174E-003			
Study\Route\30inch pipeline\FB prod pipeline					
109,588.25    518,402.40    5.10560E-010	0.03	1.89077E-002			
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16					
109,674.33    518,319.27    5.00703E-010	0.02	2.84775E-003			
Study\Route\30inch pipeline\FB prod pipeline					
109,585.48    518,408.37    4.89762E-010	0.02	1.81375E-002			
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15					
109,670.89    518,315.61    4.84383E-010	0.02	2.75494E-003			
Study\Route\30inch pipeline\FB prod pipeline					

# Individual Risk Ranking Report

Study Folder: BGM voorklocatie final incl

Unique Audit Number: 469,164  
  


Risk Ranking Point:	RRP South wellsite (109558,518231 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,581.91	518,409.42	4.83242E-010	0.02	1.78961E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	4.53476E-010	0.02	2.57915E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.96	518,321.29	4.48835E-010	0.02	2.55275E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	4.47182E-010	0.02	2.54336E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,671.52	518,317.63	4.42039E-010	0.02	2.51410E-003
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	4.40224E-010	0.02	1.63030E-002
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	4.34634E-010	0.02	1.60959E-002
Study\Slot 15\SL15 FBVCBO	109,662.81	518,325.25	4.20181E-010	0.02	2.13507E-004
Study\Slot 16\SL16 FBVCBO	109,666.18	518,328.94	2.91568E-010	0.01	1.48155E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,676.11	518,338.85	2.73193E-010	0.01	1.55379E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,679.48	518,334.57	2.72896E-010	0.01	1.55210E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.82	518,329.65	2.60253E-010	0.01	1.48019E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,684.86	518,332.00	2.33554E-010	0.01	1.32834E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,685.44	518,331.67	2.31659E-010	0.01	1.31756E-003
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,682.94	518,338.13	1.57332E-010	0.01	8.94829E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,679.57	518,342.42	1.48172E-010	0.01	8.42733E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.27	518,333.21	1.41046E-010	0.01	8.02203E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.32	518,335.57	1.35312E-010	0.01	7.69590E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB prod well 19	109,688.90	518,335.24	1.35312E-010	0.01	7.69590E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,686.36	518,341.50	1.29030E-010	0.01	7.33859E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,682.99	518,345.78	1.27668E-010	0.01	7.26112E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.70	518,336.58	1.23596E-010	0.01	7.02953E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,692.32	518,338.61	1.20349E-010	0.01	6.84486E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB prod well 20	109,691.74	518,338.94	1.20349E-010	0.01	6.84486E-004
Study\BGM-5\BGM5 FBVCBO	109,548.85	518,305.67	8.52630E-011	0.00	4.33247E-005
TOTAL			2.01902E-006		

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Slot 2\SL2 FBVCBO					
	109,536.09	518,323.62	5.29044E-008	3.57	2.68823E-002
Study\Slot 3\SL3 FBVCBO					
	109,539.74	518,326.69	4.69828E-008	3.17	2.38734E-002
Study\Slot 4\SL4 FBVCBO					
	109,543.38	518,330.08	4.27758E-008	2.89	2.17356E-002
Study\Slot 5\SL5 FBVCBO					
	109,547.09	518,333.40	3.73653E-008	2.52	1.89864E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,534.37	518,283.40	1.86563E-008	1.26	5.11995E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,543.48	518,291.36	1.73844E-008	1.17	4.77088E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,540.63	518,279.27	1.72597E-008	1.17	4.73667E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB inj well BGM 1					
	109,542.42	518,280.11	1.69486E-008	1.14	4.65129E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,549.74	518,287.22	1.60340E-008	1.08	4.40029E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,553.30	518,300.68	1.59799E-008	1.08	4.38543E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB inj well BGM 2					
	109,551.54	518,288.07	1.55993E-008	1.05	4.28099E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,559.55	518,296.55	1.46025E-008	0.99	4.00744E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB inj well BGM 5					
	109,561.35	518,297.40	1.45735E-008	0.98	3.99947E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,563.89	518,309.80	1.41501E-008	0.96	3.88329E-002
Study\Slot 8\SL8 FBVCBO					
	109,567.69	518,281.01	1.39268E-008	0.94	7.07662E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,536.54	518,324.03	1.29697E-008	0.88	5.26064E-002
Study\Slot 9\SL9 FBVCBO					
	109,571.56	518,284.20	1.22742E-008	0.83	6.23687E-003
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,540.38	518,320.65	1.22392E-008	0.83	4.96434E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,540.51	518,327.16	1.19995E-008	0.81	4.86714E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,570.15	518,305.67	1.18262E-008	0.80	3.24551E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.12	518,315.55	1.17185E-008	0.79	4.75315E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.43	518,318.00	1.16304E-008	0.79	4.71740E-002
Study\Route\12 inch flowline 6,625 inch well 2\FB inj well 2					
	109,545.76	518,317.67	1.16162E-008	0.78	4.71166E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					
	109,544.35	518,323.77	1.16073E-008	0.78	4.70805E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4					
	109,544.30	518,330.80	1.14427E-008	0.77	4.64127E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB inj well BGM 6a					
	109,571.94	518,306.52	1.12592E-008	0.76	3.08992E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
	109,549.09	518,318.68	1.12278E-008	0.76	4.55411E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.40	518,321.13	1.11913E-008	0.76	4.53928E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,548.14	518,327.42	1.11885E-008	0.76	4.53816E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB inj well 3	109,549.73	518,320.79	1.11584E-008	0.75	4.52596E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,547.89	518,334.22	1.10232E-008	0.74	4.47111E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,552.88	518,322.32	1.08498E-008	0.73	4.40080E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,551.73	518,330.83	1.07828E-008	0.73	4.37361E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.19	518,324.77	1.07770E-008	0.73	4.37127E-002
Study\Slot 10\SL10 FBVCBO	109,575.26	518,287.48	1.07769E-008	0.73	5.47605E-003
Study\Route\12 inch flowline 6,625 inch well 4\FB inj well 4	109,553.52	518,324.44	1.07466E-008	0.73	4.35893E-002
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1	109,534.37	518,283.40	1.07390E-008	0.73	4.04709E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7	109,574.01	518,318.91	1.06134E-008	0.72	2.91268E-002
Study\Slot 2\SL2 FBVTBO	109,536.09	518,323.62	1.05117E-008	0.71	5.71289E-004
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.47	518,325.73	1.03200E-008	0.70	4.18590E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,556.77	518,328.18	1.01987E-008	0.69	4.13671E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB inj well 5	109,557.11	518,327.85	1.01581E-008	0.69	4.12023E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,562.14	518,292.83	1.00686E-008	0.68	4.03234E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.24	518,293.62	1.00368E-008	0.68	4.01962E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,565.76	518,296.11	1.00368E-008	0.68	4.01962E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,564.57	518,292.96	1.00210E-008	0.68	4.01329E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,558.45	518,289.64	9.99687E-009	0.67	4.00361E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.55	518,290.43	9.80410E-009	0.66	3.92641E-002
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2	109,543.48	518,291.36	9.71889E-009	0.66	3.66266E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8	109,560.88	518,289.77	9.67200E-009	0.65	3.87351E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,567.85	518,296.89	9.53246E-009	0.64	3.81762E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10	109,568.18	518,296.23	9.48652E-009	0.64	3.79923E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9	109,566.72	518,287.33	9.37785E-009	0.63	3.75570E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7					
109,580.26    518,314.77   9.28866E-009	0.63	2.54913E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1					
109,540.63    518,279.27   9.18289E-009	0.62	3.46066E-002			
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
109,563.03    518,284.14   9.00303E-009	0.61	3.60560E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB inj well BGM 7					
109,582.06    518,315.62   8.91176E-009	0.60	2.44570E-002			
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
109,570.34    518,290.61   8.87514E-009	0.60	3.55438E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 1\FB prod well BGM 1					
109,542.42    518,280.11   8.80719E-009	0.59	3.31907E-002			
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,572.79    518,302.81   8.70691E-009	0.59	3.48700E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8					
109,584.05    518,328.28   8.36687E-009	0.56	2.29616E-002			
Study\Route\12 inch flowline 8,681 inch well 9\FB inj well 9					
109,570.96    518,283.82   8.20264E-009	0.55	3.28505E-002			
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,574.89    518,303.60   8.11270E-009	0.55	3.24903E-002			
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,575.22    518,302.94   8.02764E-009	0.54	3.21496E-002			
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
109,536.54    518,324.03   7.99698E-009	0.54	4.45425E-002			
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
109,576.10    518,306.13   7.85246E-009	0.53	3.14481E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2					
109,549.74    518,287.22   7.82514E-009	0.53	2.94898E-002			
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
109,540.38    518,320.65   7.75701E-009	0.52	4.32059E-002			
Study\Route\12 inch flowline 6,625 inch well 8\FB inj well 8					
109,567.27    518,280.63   7.68581E-009	0.52	3.07806E-002			
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5					
109,553.30    518,300.68   7.65350E-009	0.52	2.88429E-002			
Study\Route\12 inch flowline 8,681 inch well 10\FB inj well 10					
109,574.57    518,287.10   7.63621E-009	0.52	3.05820E-002			
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3					
109,540.51    518,327.16   7.63460E-009	0.52	4.25241E-002			
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12					
109,577.37    518,297.31   7.53545E-009	0.51	3.01785E-002			
Study\Route\12 inch flowline 4,778 inch well BGM 2\FB prod well BGM 2					
109,551.54    518,288.07   7.48761E-009	0.51	2.82178E-002			
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
109,578.20    518,306.91   7.46080E-009	0.50	2.98795E-002			
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13					
109,578.53    518,306.25   7.43019E-009	0.50	2.97569E-002			
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3					
109,544.35    518,323.77   7.38978E-009	0.50	4.11604E-002			
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
109,545.12    518,315.55   7.38505E-009	0.50	4.11341E-002			
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					
109,545.43    518,318.00   7.31988E-009	0.49	4.07711E-002			
Study\Route\12 inch flowline 6,625 inch well 2\FB prod well 2					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
	109,545.76	518,317.67	7.2783E-009	0.49	4.05397E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,590.30	518,324.14	7.25441E-009	0.49	1.99086E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB inj well BGM 8	109,592.10	518,324.99	7.15439E-009	0.48	1.96342E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,544.30	518,330.80	7.10088E-009	0.48	3.95513E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,580.68	518,300.62	7.00604E-009	0.47	2.80582E-002
Study\Slot 12\SL12 FBVCBO	109,582.34	518,294.25	6.82403E-009	0.46	3.46749E-003
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.09	518,318.68	6.77781E-009	0.46	3.77518E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB inj well 12	109,581.61	518,293.80	6.76235E-009	0.46	2.70823E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.40	518,321.13	6.63874E-009	0.45	3.69772E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,548.14	518,327.42	6.60878E-009	0.45	3.68103E-002
Study\Route\12 inch flowline 6,625 inch well 3\FB prod well 3	109,549.73	518,320.79	6.51724E-009	0.44	3.63005E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,559.55	518,296.55	6.50789E-009	0.44	2.45256E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB inj well 13	109,584.92	518,297.12	6.36468E-009	0.43	2.54897E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,547.89	518,334.22	6.28461E-009	0.42	3.50047E-002
Study\Route\12 inch flowline 4,408inch well BGM 5\FB prod well BGM 5	109,561.35	518,297.40	6.25704E-009	0.42	2.35802E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,563.89	518,309.80	5.97706E-009	0.40	2.25251E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,552.88	518,322.32	5.97020E-009	0.40	3.32535E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,551.73	518,330.83	5.76954E-009	0.39	3.21359E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.19	518,324.77	5.72249E-009	0.39	3.18738E-002
Study\Route\12 inch flowline 6,625 inch well 4\FB prod well 4	109,553.52	518,324.44	5.68755E-009	0.38	3.16792E-002
Study\Slot 13\SL13 FBVCBO	109,585.99	518,297.45	5.34608E-009	0.36	2.71650E-003
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,570.15	518,305.67	5.15268E-009	0.35	1.94184E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.47	518,325.73	5.12460E-009	0.35	2.85436E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,556.77	518,328.18	5.03110E-009	0.34	2.80228E-002
Study\Route\12 inch flowline 6,625 inch well 5\FB prod well 5	109,557.11	518,327.85	4.97723E-009	0.34	2.77227E-002
Study\Route\12 inch flowline 4,408inch well BGM 6a\FB prod well BGM 6a	109,571.94	518,306.52	4.93007E-009	0.33	1.85794E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,562.14	518,292.83	4.88423E-009	0.33	2.68611E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,558.45	518,289.64	4.84538E-009	0.33	2.66475E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.24	518,293.62	4.68217E-009	0.32	2.57499E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,564.57	518,292.96	4.62884E-009	0.31	2.54566E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.55	518,290.43	4.62314E-009	0.31	2.54252E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,560.88	518,289.77	4.60979E-009	0.31	2.53518E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,565.76	518,296.11	4.53193E-009	0.31	2.49236E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,574.01	518,318.91	4.50770E-009	0.30	1.69877E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,567.85	518,296.89	4.37666E-009	0.30	2.40697E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,568.18	518,296.23	4.33362E-009	0.29	2.38330E-002
Study\BGM-1\BGM1 FBVCBO	109,529.60	518,288.69	4.31033E-009	0.29	2.19021E-003
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,566.72	518,287.33	4.29377E-009	0.29	2.36139E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,563.03	518,284.14	4.24313E-009	0.29	2.33353E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,570.34	518,290.61	4.02120E-009	0.27	2.21148E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,572.79	518,302.81	3.92052E-009	0.26	2.15612E-002
Study\Route\12 inch flowline 8,681 inch well 9\FB prod well 9	109,570.96	518,283.82	3.79150E-009	0.26	2.08516E-002
Study\Route\12 inch flowline 6,625 inch well 8\FB prod well 8	109,567.27	518,280.63	3.75416E-009	0.25	2.06463E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,574.89	518,303.60	3.72648E-009	0.25	2.04940E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,575.22	518,302.94	3.72053E-009	0.25	2.04613E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,576.10	518,306.13	3.64130E-009	0.25	2.00255E-002
Study\Route\12 inch flowline 8,681 inch well 10\FB prod well 10	109,574.57	518,287.10	3.55599E-009	0.24	1.95564E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.20	518,306.91	3.49875E-009	0.24	1.92416E-002
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,577.37	518,297.31	3.49782E-009	0.24	1.92365E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,578.53	518,306.25	3.48817E-009	0.24	1.91834E-002
Study\Slot 3\SL3 FBVTBO	109,539.74	518,326.69	3.45908E-009	0.23	1.87993E-004
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7	109,580.26	518,314.77	3.44200E-009	0.23	1.29715E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,580.68	518,300.62	3.26753E-009	0.22	1.79700E-002
Study\Route\12 inch flowline 4,778 inch well BGM 7\FB prod well BGM 7					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\12 inch flowline 8,681 inch well 12\FB prod well 12	109,582.06	518,315.62	3.19315E-009	0.22	1.20337E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,581.61	518,293.80	2.92970E-009	0.20	1.61121E-002
Study\Route\30inch headers North west\FB inj header North West	109,584.05	518,328.28	2.80713E-009	0.19	1.05790E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,543.81	518,313.11	2.77420E-009	0.19	6.75638E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,545.63	518,282.44	2.76638E-009	0.19	6.71710E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,553.33	518,289.44	2.74048E-009	0.19	6.65419E-002
Study\Route\30inch headers North west\FB inj header North West	109,551.60	518,320.17	2.73350E-009	0.18	6.65726E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,561.03	518,296.44	2.70627E-009	0.18	6.57115E-002
Study\Route\30inch headers North west\FB inj header North West	109,559.39	518,327.23	2.70390E-009	0.18	6.58519E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,568.72	518,303.44	2.66796E-009	0.18	6.47813E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,576.42	518,310.44	2.66016E-009	0.18	6.45919E-002
Study\Route\30inch headers North west\FB inj header North West	109,567.18	518,334.29	2.65640E-009	0.18	6.46950E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,584.11	518,317.44	2.65230E-009	0.18	6.44010E-002
Study\Route\30inch headers North west\FB inj header North West	109,574.96	518,341.35	2.64973E-009	0.18	6.45326E-002
Study\Route\12 inch flowline 8,681 inch well 13\FB prod well 13	109,584.92	518,297.12	2.60930E-009	0.18	1.43500E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	2.60150E-009	0.18	6.56309E-002
Study\Route\30inch headers South west\FB inj header South West	109,567.60	518,298.38	2.56891E-009	0.17	6.48088E-002
Study\Route\30inch headers South west\FB inj header South West	109,574.89	518,304.95	2.56211E-009	0.17	6.46372E-002
Study\Route\30inch headers North west\FB inj header North West	109,582.75	518,348.42	2.55902E-009	0.17	6.23232E-002
Study\Route\30inch headers South west\FB inj header South West	109,582.17	518,311.52	2.55494E-009	0.17	6.44564E-002
Study\Route\BGM-2\BGM2 FBVCBO	109,538.42	518,296.59	2.48326E-009	0.17	1.26182E-003
Study\Route\30inch headers South west\FB inj header South West	109,589.45	518,318.08	2.45065E-009	0.17	6.18253E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,591.81	518,324.45	2.40575E-009	0.16	5.84145E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,590.30	518,324.14	2.33434E-009	0.16	8.79717E-003
Study\Route\30inch headers North west\FB inj header North West	109,590.54	518,355.48	2.22107E-009	0.15	5.40928E-002
Study\Route\12 inch flowline 4,778 inch well BGM 8\FB prod well BGM 8	109,592.10	518,324.99	2.20640E-009	0.15	8.31503E-003
Study\Route\30inch headers Old wells\FB inj header old wells	109,599.51	518,331.45	2.20582E-009	0.15	5.35598E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /AvgeYear	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB inj header South West	109,596.74	518,324.65	2.19071E-009	0.15	5.52675E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,607.20	518,338.45	2.09067E-009	0.14	5.07639E-002
Study\Route\30inch headers North west\FB inj header North West	109,598.33	518,362.54	2.08953E-009	0.14	5.08892E-002
Study\Route\30inch headers South west\FB inj header South West	109,604.02	518,331.21	2.05977E-009	0.14	5.19641E-002
Study\Route\30inch headers North west\FB inj header North West	109,600.96	518,367.46	2.04656E-009	0.14	4.98428E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,604.54	518,364.95	2.01200E-009	0.14	4.88536E-002
Study\Route\30inch headers East\FB inj header East	109,609.74	518,363.16	1.97696E-009	0.13	4.76454E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,610.23	518,358.55	1.97324E-009	0.13	4.79125E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,614.90	518,345.45	1.96695E-009	0.13	4.77598E-002
Study\Route\30inch headers North west\FB inj header North West	109,604.63	518,373.41	1.95978E-009	0.13	4.77291E-002
Study\Route\30inch headers South west\FB inj header South West	109,611.30	518,337.78	1.95837E-009	0.13	4.94059E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,606.34	518,372.37	1.95282E-009	0.13	4.74167E-002
Study\Route\30inch headers East\FB inj header East	109,609.98	518,370.38	1.93549E-009	0.13	4.66458E-002
Study\Route\30inch headers Old wells\FB inj header old wells	109,615.91	518,352.15	1.93004E-009	0.13	4.68635E-002
Study\Route\30inch headers North west\FB prod header North west	109,543.81	518,313.11	1.92460E-009	0.13	6.44633E-002
Study\Route\30inch headers South west\FB inj header South West	109,606.78	518,364.32	1.91424E-009	0.13	4.82927E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,545.63	518,282.44	1.89923E-009	0.13	6.34225E-002
Study\Route\30inch headers East\FB inj header East	109,616.88	518,355.84	1.89664E-009	0.13	4.57096E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,553.33	518,289.44	1.89291E-009	0.13	6.32115E-002
Study\Route\30inch headers North west\FB prod header North west	109,551.60	518,320.17	1.88815E-009	0.13	6.32426E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,561.03	518,296.44	1.88666E-009	0.13	6.30027E-002
Study\Route\30inch headers North west\FB prod header North west	109,559.39	518,327.23	1.88207E-009	0.13	6.30391E-002
Study\Route\30inch headers South west\FB inj header South West	109,612.96	518,357.64	1.87422E-009	0.13	4.72829E-002
Study\Route\30inch headers South west\FB inj header South West	109,607.99	518,371.54	1.86514E-009	0.13	4.70540E-002
Study\Slot 4\SL4 FBVTBO	109,543.38	518,330.08	1.85469E-009	0.13	1.00798E-004
Study\Route\30inch headers South west\FB inj header South West	109,618.58	518,344.34	1.84928E-009	0.12	4.66538E-002
Study\Route\30inch headers East\FB inj header East					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers South west\FB prod header South West	109,624.01	518,348.52	1.82469E-009	0.12	4.39755E-002
Study\Route\30inch headers South west\FB inj header South West	109,560.32	518,291.82	1.81565E-009	0.12	6.29961E-002
Study\Route\30inch headers East\FB inj header East	109,619.14	518,350.96	1.79530E-009	0.12	4.52920E-002
Study\Route\30inch pipeline\FB inj pipeline	109,631.15	518,341.19	1.79402E-009	0.12	4.32365E-002
Study\Route\30inch pipeline\FB inj pipeline	109,638.29	518,333.87	1.76453E-009	0.12	4.25258E-002
Study\Route\30inch pipeline\FB inj pipeline	109,588.25	518,402.40	1.75311E-009	0.12	4.72070E-002
Study\Route\30inch pipeline\FB inj pipeline	109,581.91	518,409.42	1.75166E-009	0.12	4.71677E-002
Study\Route\30inch pipeline\FB inj pipeline	109,575.57	518,416.45	1.74530E-009	0.12	4.69965E-002
Study\Route\30inch pipeline\FB inj pipeline	109,594.58	518,395.38	1.74213E-009	0.12	4.69112E-002
Study\Route\30inch pipeline\FB inj pipeline	109,585.48	518,408.37	1.72501E-009	0.12	4.64503E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,568.72	518,303.44	1.72415E-009	0.12	5.75760E-002
Study\Route\30inch pipeline\FB inj pipeline	109,600.92	518,388.35	1.72264E-009	0.12	4.63864E-002
Study\Route\30inch pipeline\FB inj pipeline	109,593.20	518,399.65	1.71680E-009	0.12	4.62292E-002
Study\Route\30inch pipeline\FB inj pipeline	109,577.76	518,417.09	1.70820E-009	0.12	4.59976E-002
Study\Route\30inch pipeline\FB inj pipeline	109,607.26	518,381.33	1.68003E-009	0.11	4.52391E-002
Study\Route\30inch headers North west\FB prod header North west	109,567.18	518,334.29	1.67979E-009	0.11	5.62636E-002
Study\Route\30inch headers South west\FB prod header South West	109,567.60	518,298.38	1.67748E-009	0.11	5.82021E-002
Study\Route\30inch pipeline\FB inj pipeline	109,601.07	518,394.00	1.64650E-009	0.11	4.43362E-002
Study\Route\30inch headers East\FB inj header East	109,645.43	518,326.54	1.64237E-009	0.11	3.95816E-002
Study\Route\30inch pipeline\FB inj pipeline	109,613.59	518,374.31	1.63826E-009	0.11	4.41142E-002
Study\Route\30inch pipeline\FB inj pipeline	109,609.07	518,391.41	1.62805E-009	0.11	4.38395E-002
Study\Route\30inch pipeline\FB inj pipeline	109,619.74	518,370.14	1.62345E-009	0.11	4.37154E-002
Study\Route\30inch pipeline\FB inj pipeline	109,617.07	518,388.81	1.58755E-009	0.11	4.27489E-002
Study\Route\30inch pipeline\FB inj pipeline	109,625.54	518,371.79	1.58455E-009	0.11	4.26681E-002
Study\Route\30inch pipeline\FB inj pipeline	109,628.18	518,376.76	1.58200E-009	0.11	4.25993E-002
Study\Route\30inch pipeline\FB inj pipeline	109,624.54	518,383.46	1.58174E-009	0.11	4.25924E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,576.42	518,310.44	1.57765E-009	0.11	5.26838E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /Avge Year			
Study\Route\30inch headers South west\FB prod header South West						
109,574.89	518,304.95	1.54070E-009		0.10	5.34562E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,574.96	518,341.35	1.51620E-009		0.10	5.07844E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,584.11	518,317.44	1.46731E-009		0.10	4.89992E-002	
Study\Route\30inch headers East\FB inj header East						
109,652.57	518,319.22	1.46538E-009		0.10	3.53161E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,582.17	518,311.52	1.44851E-009		0.10	5.02577E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,582.75	518,348.42	1.41306E-009		0.10	4.73296E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,591.81	518,324.45	1.38913E-009		0.09	4.63884E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,589.45	518,318.08	1.36040E-009		0.09	4.72007E-002	
Study\Route\30inch headers East\FB inj header East						
109,659.70	518,311.89	1.32536E-009		0.09	3.19416E-002	
Study\Slot 5\SL5 FBVTBO						
109,547.09	518,333.40	1.31496E-009		0.09	7.14655E-005	
Study\Route\30inch headers North west\FB prod header North west						
109,590.54	518,355.48	1.28651E-009		0.09	4.30911E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,599.51	518,331.45	1.27147E-009		0.09	4.24593E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,596.74	518,324.65	1.26145E-009		0.09	4.37673E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,598.33	518,362.54	1.24884E-009		0.08	4.18293E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,607.20	518,338.45	1.24132E-009		0.08	4.14523E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,604.02	518,331.21	1.20547E-009		0.08	4.18253E-002	
Study\Route\30inch headers East\FB inj header East						
109,666.94	518,311.79	1.19689E-009		0.08	2.88454E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,600.96	518,367.46	1.15029E-009		0.08	3.85285E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,604.54	518,364.95	1.11543E-009		0.08	3.72486E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,611.30	518,337.78	1.10351E-009		0.07	3.82875E-002	
Study\Route\30inch headers East\FB inj header East						
109,674.26	518,318.91	1.08133E-009		0.07	2.60603E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,610.23	518,358.55	1.03203E-009		0.07	3.44633E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						
109,614.90	518,345.45	1.02591E-009		0.07	3.42589E-002	
Study\Route\30inch headers South west\FB prod header South West						
109,606.78	518,364.32	1.02367E-009		0.07	3.55173E-002	
Study\Route\30inch headers East\FB prod header East						
109,609.74	518,363.16	1.01170E-009		0.07	3.35329E-002	
Study\Route\30inch headers North west\FB prod header North west						
109,604.63	518,373.41	1.01113E-009		0.07	3.38673E-002	
Study\Route\30inch headers Old wells\FB prod header old wells						

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch headers East\FB inj header East	109,606.34	518,372.37	9.94295E-010	0.07	3.32033E-002
Study\Route\30inch headers Old wells\FB prod header old wells	109,681.58	518,326.03	9.79177E-010	0.07	2.35985E-002
Study\Route\30inch headers East\FB prod header East	109,615.91	518,352.15	9.70367E-010	0.07	3.24043E-002
Study\Route\30inch headers South west\FB prod header South West	109,609.98	518,370.38	9.60169E-010	0.06	3.18249E-002
Study\Route\30inch headers East\FB prod header East	109,616.88	518,355.84	9.42818E-010	0.06	3.12498E-002
Study\Route\30inch headers South west\FB prod header South West	109,607.99	518,371.54	9.34931E-010	0.06	3.24385E-002
Study\Route\30inch headers South west\FB prod header South West	109,618.58	518,344.34	9.30126E-010	0.06	3.22718E-002
Study\Route\30inch headers South west\FB prod header South West	109,619.14	518,350.96	9.00135E-010	0.06	3.12312E-002
Study\Route\30inch headers East\FB inj header East	109,688.91	518,333.14	8.88212E-010	0.06	2.14062E-002
Study\Route\30inch pipeline\FB prod pipeline	109,581.91	518,409.42	8.79807E-010	0.06	3.25822E-002
Study\Route\30inch pipeline\FB prod pipeline	109,588.25	518,402.40	8.78629E-010	0.06	3.25386E-002
Study\Route\30inch headers East\FB prod header East	109,624.01	518,348.52	8.73703E-010	0.06	2.89589E-002
Study\Route\30inch pipeline\FB prod pipeline	109,575.57	518,416.45	8.71997E-010	0.06	3.22930E-002
Study\Route\30inch pipeline\FB prod pipeline	109,594.58	518,395.38	8.71528E-010	0.06	3.22756E-002
Study\Route\30inch pipeline\FB prod pipeline	109,585.48	518,408.37	8.53568E-010	0.06	3.16104E-002
Study\Route\30inch pipeline\FB prod pipeline	109,600.92	518,388.35	8.47440E-010	0.06	3.13835E-002
Study\Route\30inch pipeline\FB prod pipeline	109,593.20	518,399.65	8.43643E-010	0.06	3.12429E-002
Study\Route\30inch pipeline\FB prod pipeline	109,577.76	518,417.09	8.42434E-010	0.06	3.11981E-002
Study\Route\30inch pipeline\FB prod pipeline	109,607.26	518,381.33	8.31800E-010	0.06	3.08043E-002
Study\Route\30inch pipeline\FB prod pipeline	109,601.07	518,394.00	8.13623E-010	0.05	3.01311E-002
Study\Route\30inch pipeline\FB prod pipeline	109,613.59	518,374.31	8.02609E-010	0.05	2.97233E-002
Study\Route\30inch headers East\FB prod header East	109,631.15	518,341.19	7.84490E-010	0.05	2.60020E-002
Study\Route\30inch pipeline\FB prod pipeline	109,619.74	518,370.14	7.40494E-010	0.05	2.74230E-002
Study\Route\30inch pipeline\FB prod pipeline	109,609.07	518,391.41	7.35819E-010	0.05	2.72498E-002
Study\Route\30inch headers East\FB prod header East	109,638.29	518,333.87	7.22535E-010	0.05	2.39485E-002
Study\Route\30inch pipeline\FB prod pipeline	109,617.07	518,388.81	6.66111E-010	0.04	2.46683E-002

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				
Model Name	East m	North m	Risk /Avge Year	Pct. Risk	Risk / Outcome
Study\Route\30inch pipeline\FB prod pipeline					
	109,625.54	518,371.79	6.63353E-010	0.04	2.45661E-002
Study\Route\30inch headers East\FB prod header East					
	109,645.43	518,326.54	6.56453E-010	0.04	2.17582E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,624.54	518,383.46	6.33191E-010	0.04	2.34492E-002
Study\Route\30inch pipeline\FB prod pipeline					
	109,628.18	518,376.76	6.27912E-010	0.04	2.32537E-002
Study\Route\30inch headers East\FB prod header East					
	109,652.57	518,319.22	6.03538E-010	0.04	2.00043E-002
Study\Slot 9\SL9 FBVTBO					
	109,571.56	518,284.20	5.87752E-010	0.04	3.19430E-005
Study\Route\30inch headers East\FB prod header East					
	109,659.70	518,311.89	5.23944E-010	0.04	1.73662E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,665.63	518,328.47	5.09127E-010	0.03	2.10867E-003
Study\Route\30inch headers East\FB prod header East					
	109,666.94	518,311.79	4.68273E-010	0.03	1.55209E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,669.00	518,324.19	4.56722E-010	0.03	1.89162E-003
Study\BGM-5\BGM5 FBVCBO					
	109,548.85	518,305.67	4.44407E-010	0.03	2.25817E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,662.19	518,324.81	4.14249E-010	0.03	1.71571E-003
Study\Route\30inch headers East\FB prod header East					
	109,674.26	518,318.91	4.10194E-010	0.03	1.35959E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.33	518,319.27	3.59600E-010	0.02	1.48937E-003
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.38	518,321.63	3.54378E-010	0.02	1.46774E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,665.56	518,320.53	3.50041E-010	0.02	1.44978E-003
Study\Route\30inch headers East\FB prod header East					
	109,681.58	518,326.03	3.40074E-010	0.02	1.12718E-002
Study\Route\12 inch flowline 8,681 inch well 16\FB inj well 16					
	109,674.96	518,321.29	3.34587E-010	0.02	1.38577E-003
Study\Route\30inch headers East\FB prod header East					
	109,688.91	518,333.14	2.83694E-010	0.02	9.40305E-003
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,676.11	518,338.85	2.70791E-010	0.02	1.12155E-003
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,670.94	518,317.96	2.05623E-010	0.01	8.51635E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,670.89	518,315.61	2.05623E-010	0.01	8.51635E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB inj well 15					
	109,671.52	518,317.63	1.99297E-010	0.01	8.25437E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					
	109,679.48	518,334.57	1.98291E-010	0.01	8.21269E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,679.57	518,342.42	1.90169E-010	0.01	7.87631E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19					
	109,682.94	518,338.13	1.77965E-010	0.01	7.37083E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18					

# Individual Risk Ranking Report

Unique Audit Number: 469,164  
  


Study Folder: BGM voorklocatie final incl

SAFETI NL

Risk Ranking Point:	RRP West wellsite (109482,518313 m)				Pct. Risk	Risk / Outcome
Model Name	East m	North m	Risk /AvgeYear			
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.82	518,329.65	1.72621E-010		0.01	7.14950E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,684.86	518,332.00	1.72621E-010		0.01	7.14950E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,682.99	518,345.78	1.71455E-010		0.01	7.10119E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB inj well 18	109,685.44	518,331.67	1.69452E-010		0.01	7.01826E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,686.36	518,341.50	1.61052E-010		0.01	6.67037E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.32	518,335.57	1.56813E-010		0.01	6.49478E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.27	518,333.21	1.56813E-010		0.01	6.49478E-004
Study\Route\12 inch flowline 8,681 inch well 19\FB inj well 19	109,688.90	518,335.24	1.54181E-010		0.01	6.38575E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.74	518,338.94	1.39984E-010		0.01	5.79777E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,691.70	518,336.58	1.39984E-010		0.01	5.79777E-004
Study\Route\12 inch flowline 8,681 inch well 20\FB inj well 20	109,692.32	518,338.61	1.37998E-010		0.01	5.71553E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,665.63	518,328.47	5.28252E-011		0.00	3.00444E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,662.19	518,324.81	3.47075E-011		0.00	1.97399E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,669.00	518,324.19	3.47075E-011		0.00	1.97399E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,665.56	518,320.53	2.91116E-011		0.00	1.65573E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.38	518,321.63	2.41803E-011		0.00	1.37526E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.33	518,319.27	2.33950E-011		0.00	1.33059E-004
Study\Route\12 inch flowline 8,681 inch well 16\FB prod well 16	109,674.96	518,321.29	2.25895E-011		0.00	1.28478E-004
Study\Route\12 inch flowline 8,681 inch well 18\FB prod well 18	109,676.11	518,338.85	1.78006E-011		0.00	1.01241E-004
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.89	518,315.61	1.50556E-011		0.00	8.56292E-005
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,670.94	518,317.96	1.50556E-011		0.00	8.56292E-005
Study\Route\12 inch flowline 6,625 inch well 15\FB prod well 15	109,671.52	518,317.63	1.30896E-011		0.00	7.44472E-005
TOTAL			1.48115E-006			