

20000A231-02

RAPPORT DE FORAGE - Junex, Bécancour No. 1

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Énergie et Ressources
naturelles

Québec 

JUNEX *inc.*

JUNEX Bécancour no. 1

RAPPORT DE FORAGE



Junex inc.

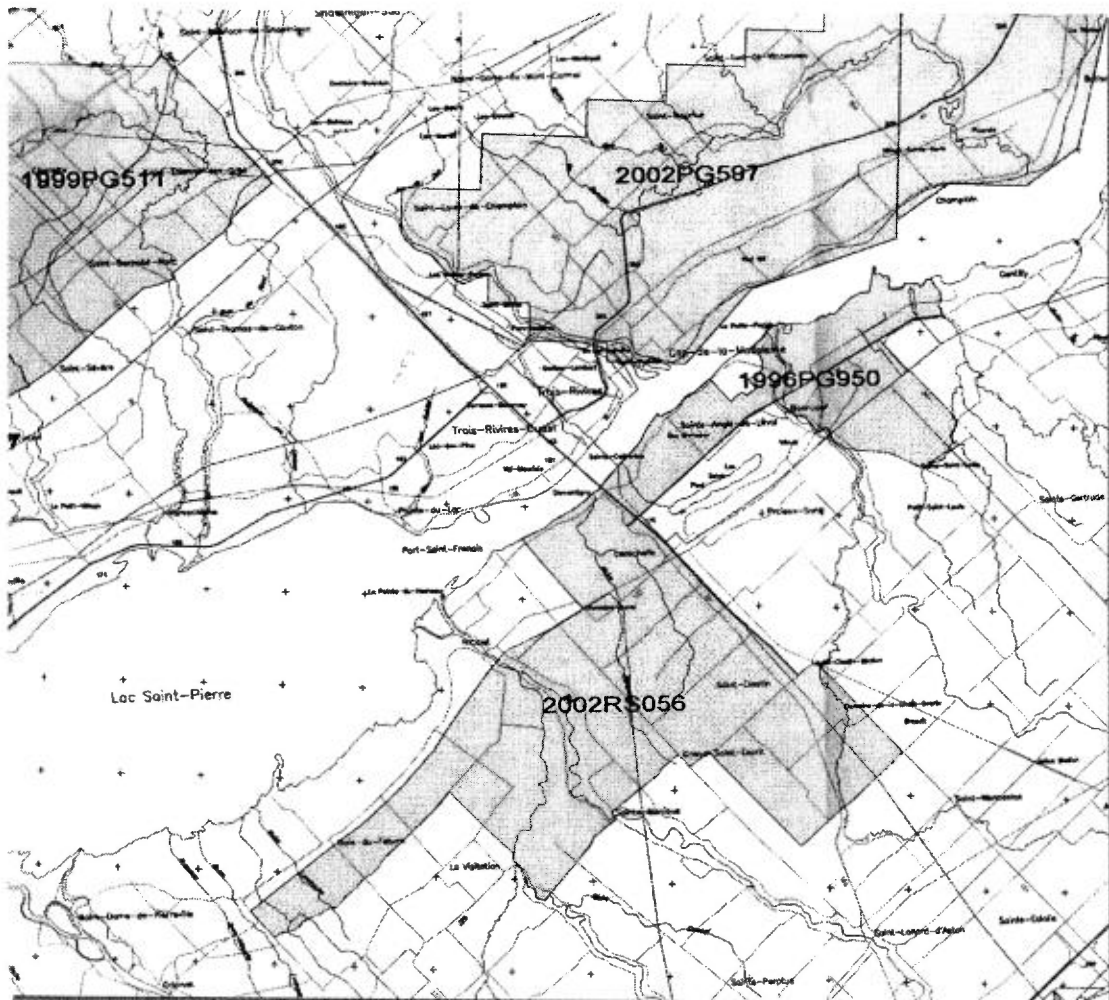
2000OA231-02

Date : Janvier 2002

JUNEX inc.

3075, Quatre-Bourgeois, bur. 103, Québec, G1W 4Y5
tél : 418-654-9661 web : www.junex.ca

Localisation du permis 1996PG950



En jaune, les permis d'exploration de JUNEX inc.

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Annexe 1 :

Rapports journaliers des travaux

Annexe 2 :

Relevé de déviation

Annexe 3 :

Descriptions des déblais de forage

Historique et nature du projet

Le rapport qui suit présente une mise à jour des travaux de forage effectués sur le puits JUNEX Bécancour no. 1. Ce puits est situé dans le parc industriel de Bécancour sur la rue Raoul-Duchesne et les travaux de forage ont débuté en novembre 2000. Un premier rapport sur l'avancement des travaux a été remis par JUNEX en août 2001. Les travaux sont actuellement suspendus suite à un arrêt temporaire. Cet arrêt temporaire a été engendré par l'effondrement de la partie inférieure du Groupe de Lorraine ayant pour effet de bloquer l'accès au fond du puits. Le trou a été nettoyé et un coffrage a été porté jusqu'au niveau des Calcaires de Trenton. La zone d'effondrement est la même que celle rencontrée dans le puits Intermont Bécancour no. 2 et elle est reliée à une zone de faille de chevauchement.

Le puits JUNEX Bécancour no. 1 est un puits dévié vers le sud-est avec un angle de déviation finale de 60 degrés. Actuellement, le forage est arrêté au *kick off point* à une profondeur de 850 mètres. Les cibles du forage sont les grainstones et les dolomies fracturés des formations de Deschambault et du contact Beauharnois-Theresa. Ces horizons ont révélé des porosités et des perméabilités intéressantes dans les forages antérieurs. Des essais aux tiges dans puits SOQUIP Petrofina Bécancour no. 1 et 2 ont révélés d'excellentes perméabilités pour ces zones. JUNEX considère que la proximité de ces cibles avec la *zone de faille normale de Bécancour* permettra de rencontrer des horizons très fracturés et plus perméables.

JUNEX entend poursuivre le forage du puits jusqu'à l'atteinte de l'objectif avant l'hiver 2002.

Résumé

- En novembre 2000, JUNEX inc a débuté le forage de JUNEX Bécancour no. 1. Le coffrage de surface a été installé.
- En juin 2001, JUNEX continue le forage du puits et atteint la profondeur de 850 mètres. Le kick-off point est atteint.
- Une série de test de positionnement du trou est effectuée à l'aide du ReflexIT, une première canadienne, les résultats sont concluant.
- En juillet 2002, une partie des murs du trou s'effondre forçant JUNEX à coffrer les 830 premiers mètres du forage.

Informations générales

Nom du puits : JUNEX Bécancour no.1

Foreuse : Barber

Opérateur : JUNEX inc.
3075, Quatre-Bourgeois
Québec, G1W 4Y5

Contracteur : Foragaz inc.
1205, Impériale
Québec, G3K 1Y7

Coordonnées : UTM_y 5 137 680 mN
UTM_x 699 172 mE Zone 18

Élévation : Niveau du sol : 7,52 m
Table de rotation : 9,5 m

Permis : 1996PG950

Profondeur totale : 1150 mkb (prévision)

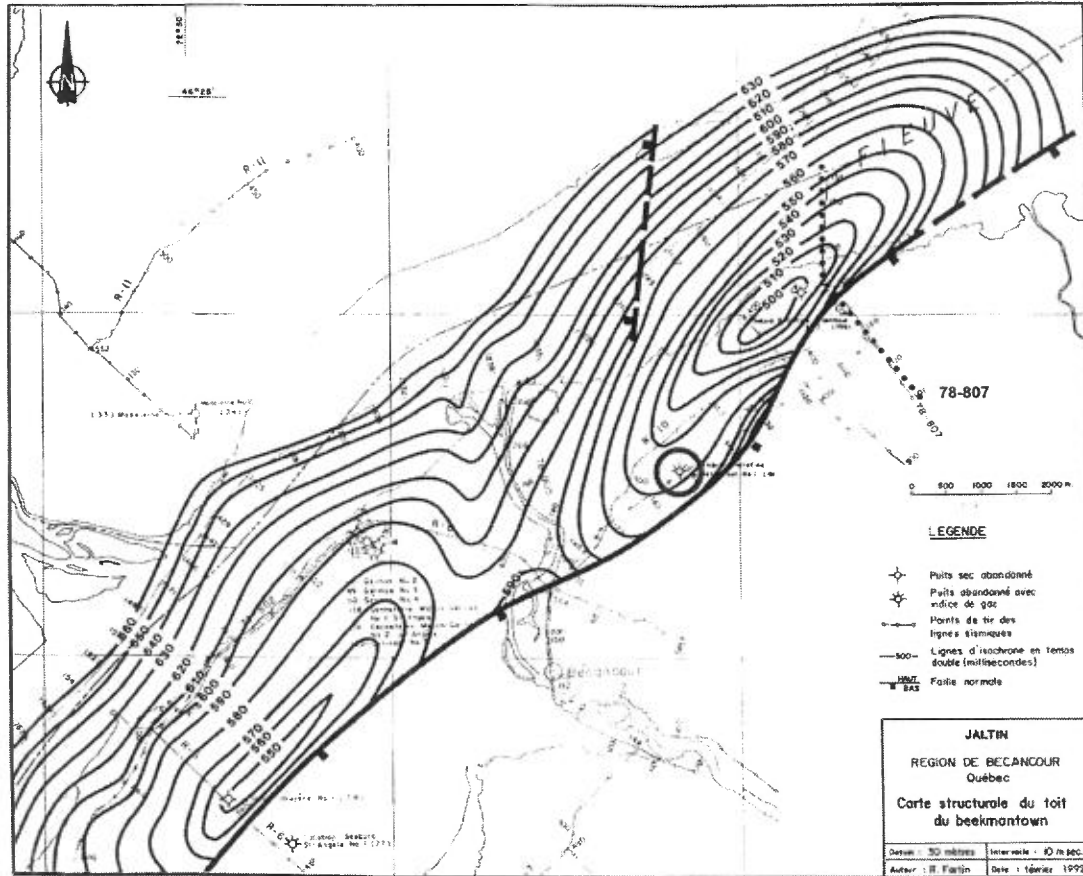
Début des travaux : 25 novembre 2000

Fin des travaux : 1^{er} octobre 2002 (prévision)

Toit de la fenêtre : 870 mkb (prévision)

Statut : Puits d'exploration en arrêt temporaire

Plan de localisation



SOQUIP Bécancour no. 1

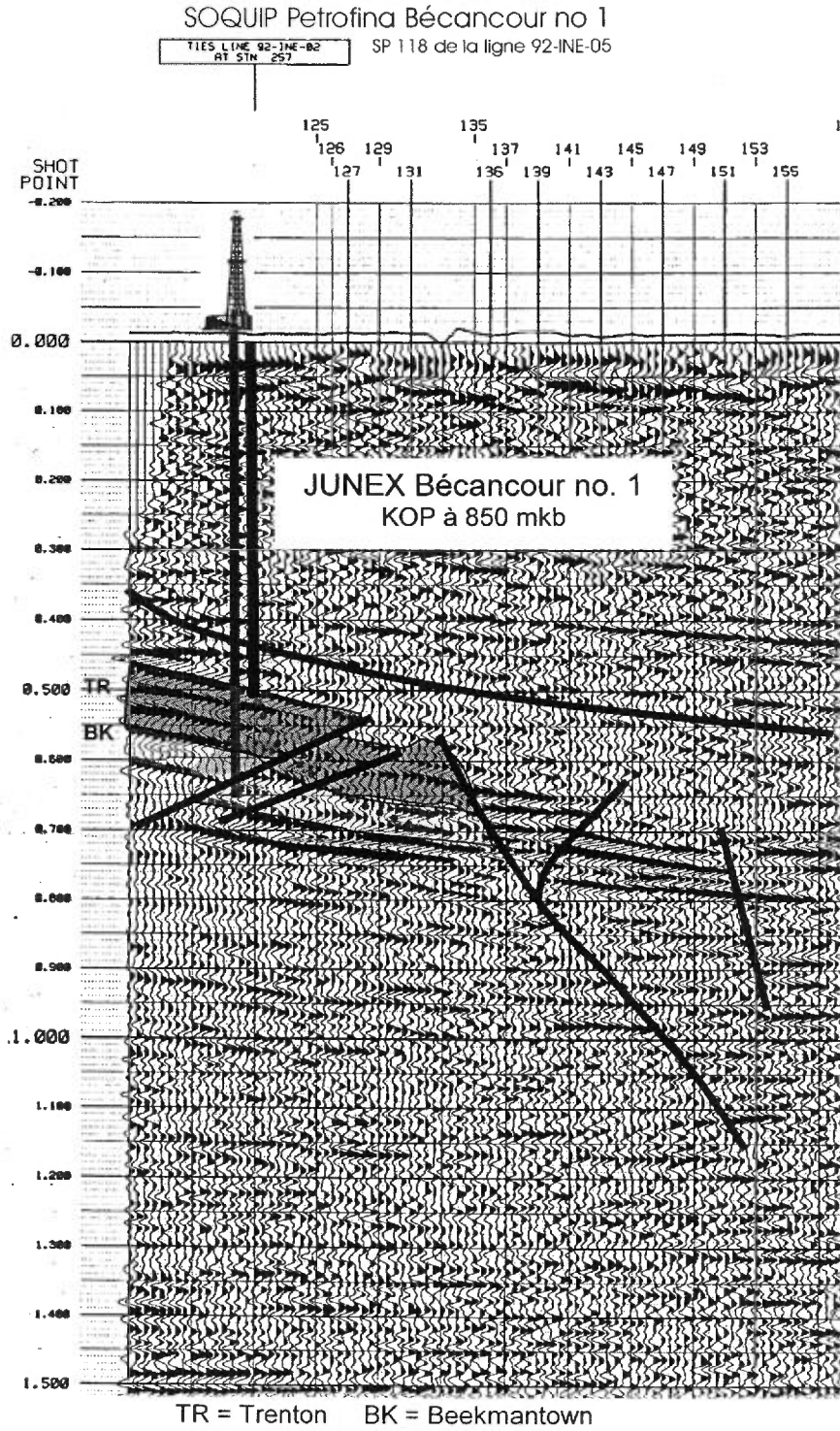


Site JUNEX (S) no. 2
Extraction de saumure



Site JUNEX Bécancour no. 1 et
Intermont Bécancour no. 1 et no. 2
Présence de gaz et de condensat

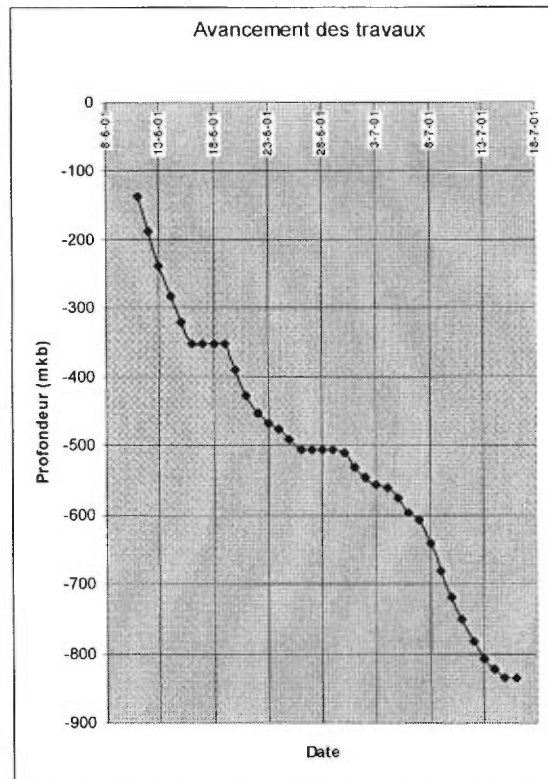
Profil sismique



Ingénierie

Description de l'état du puits

Au moment d'écrire ce rapport, la puits JUNEX Bécancour no. 1 est en arrêt temporaire. La profondeur du puits est de 858 mkb. Le tableau qui suit présente le taux d'avancement du forage.



Relevé directionnel

Un relevé directionnel a été effectué à l'aide d'un système ReflexIT (annexe 2).

Test d'évaluation du puits

Aucun test d'évaluation du puits n'a été effectué

Diagraphies

Aucune diagraphie n'a été prise.

Échantillonnage

Les seuls échantillons recueillis lors du forage sont des retailles et elles sont décrites à l'annexe 3.

Liste des trépan

Pour le forage des 858 premiers mètres 4 trépan ont été utilisés

	Trépan	Profondeur	Dimension
1	M44NG	130m – 351m	215,9 mm
2	M44NF	351m – 556m	215,9 mm
3	S-84F	556m – 608m	215,9 mm
4	SDGH	608m – 858m	215,9 mm
5	Mud Motor		

Ciment

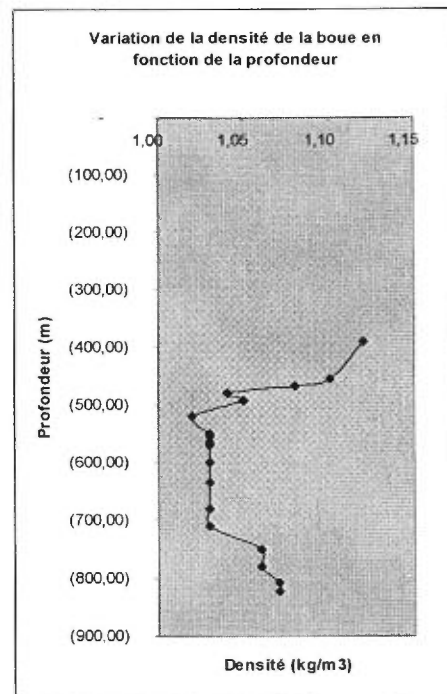
Le ciment utilisé pour le coffrage est de type Portland de classe G.

Lors des travaux de coffrage du puits, en août 2001, quatre-vingt (80) sacs de bentonite ont été utilisés pour solidifier les parois du trou. Chaque sac pesait 100 lbs. De plus, 25 lbs de Costic ont également été utilisées.

Boues utilisées

La boue utilisée pour cette première partie du forage est de l'eau. Le tableau suivant donne les variations de densité de la boue.

Profondeur (m)	Densité (kg/m ³)
389	1,12
455	1,10
467	1,08
480	1,04
492	1,05
520	1,02
550	1,03
556	1,03
565	1,03
570	1,03
600	1,03
636	1,03
681	1,03
710	1,03
750	1,06
780	1,06
807	1,07
822	1,07



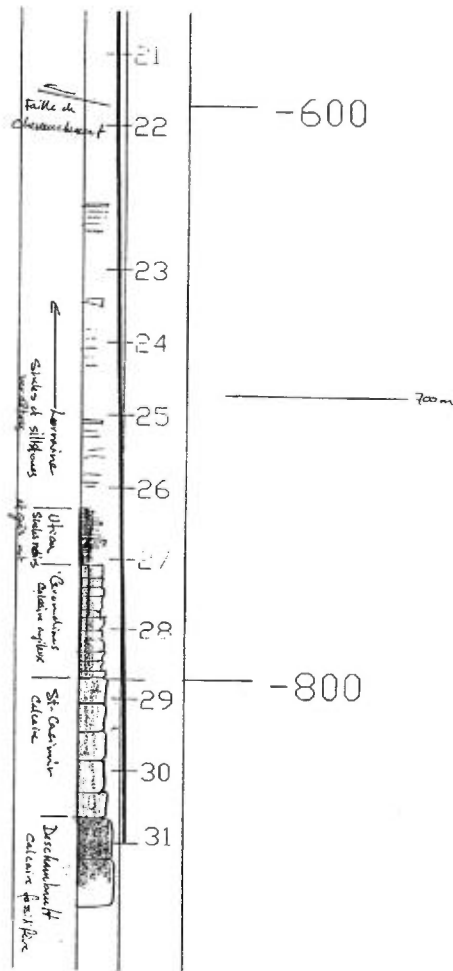
Procédure suivie pour l'arrêt du forage

La tête de puits a été enlevé et un plaque de métal de ½ pouce (12,5 mm) a été boulonnée sur la bride d'accouplement. Le puits est suspendu de façon temporaire.

Géologie du puits JUNEX Bécancour no. 1

Formation	Sommet (mkb)
Lorraine	+2
Utica	738
Neuille Mb Grondines	758
Neuille Mb St-Casimir	800
Deschambault	845

Colonne stratigraphique du forage



Annexe 1 :
Rapports journaliers des travaux



29 nov 00	Terminé la stabilisation Forage jusqu'à 55 m.	9
30 nov 00	Forage jusqu'à 110 m. en 8 1/2". Sorti le train de tiges et re-entré avec un trépan de 12 1/4". Alésage jusqu'à 20 m.	13
01 déc 00	Alésage en 12 1/4" jusqu'à 78 m.	11,5
03 déc 00	Alésage jusqu'à 103 m.	12
04 déc 00	Alésage jusqu'à 110 m. Circulation et sortie du trou. Mise en place du coffrage 9 5/8" (105 m)	12
05 déc 00	Préparatifs pour cimentation Cimentation et nettoyage.	10
06 déc 00	Mise en place du "casing bowl" de 9 5/8"	9
07 déc 00	Mise en place des BOP Commencé à entrer dans le trou avec l'assemblage de fond (BKA).	7
08 déc 00	Terminé la mise en place de la goulotte d'écoulement Test BOP. Forage du bouchon de ciment. Forage jusqu'à 130 m.	12,5
09 déc 00	Forage jusqu'à 150 m. Bris de la foreuse. Réparations pour le reste de la journée	3,5
10 déc 00	Décision d'arrêter le forage (BOP inopérant dû au froid) Démontage de la foreuse et des équipements. Foreuse libérée	10,5



ITEM 4 MATÉRIAUX

Medina Supply Inc No 113079
Coffrage 9 5/8" (346.5 pi)
avec transport

Béton Central No 767691-1

C.L.Baril No 100818
C.L.Baril No 100835.

Excavation Gentilly No 006208

Equipements de cimentation pour
coffrage 9 5/8" incluant:
3 centraliseurs, un sabot-guide
un bouchon de déplacement

"Casing bowl" usage de 9 5/8"

"Adapter flange" de 9 5/8" (3000psi)
à 7 1/16" (3000psi)

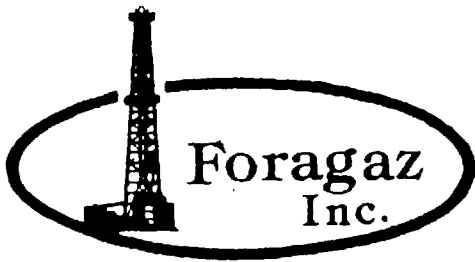
Trépan usagé de 8 1/2"

Trépan usagé de 12 1/4"

ITEM 5 AUTRES SERVICES

Brefer Inc No 12752
Usinage sur stabiliseurs 8 1/2"

Supervision de chantier incluant
véhicule + dépenses + cellulaire
600\$/jr * 10 jours



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____
 PUIITS: BECUNPOUR JUNEX
 DATE: 29 NOV
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COUT
Foreuse	_____	_____
Puits	_____	_____
	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

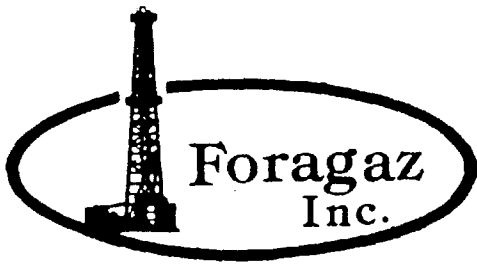
REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
Préparatifs																									
Mobilisation																									
Démobilisation																									
Installation																									
Forage																									
Attente																									
Repas																									
Essai																									
Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

REMARQUE: 5200 KPA Heures travaillées _____
7HRS DEPLACÉ TOOL HOUSE COUPÉ ARBRE
PLACE DRILL MONTE LE MAT PLACE PUIIT
VERIFIER SUB FINI 16HRS

Bertin Haley 8 Heures
 Signature du foreur
J DEROSIER 8 Heures
 Signature de l'assistant-foreur

J PLEBOUSSON



FORAGAZ INC.
 1205 Imperiale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE
 FORAGE ET DE COMPLETION

COMPAGNIE: BECHAMOUR JUVEX
 PUIITS: 27 NOV 2000
 DATE: BARBER
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : 20M
 Formation: _____

TREPAN:
 Dia. mm: 8 1/2
 Série: _____
 Poids: _____
 RPM: 70
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:	DESCRIPTION	COUT
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: EAU
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Préparatifs																								
Mobilisation																								
Démobilisation																								
Installation																								
Forage																								
Attente																								
Repas																								
Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

POIT EN CLOT 3800 KPA

Heures travaillées _____

REMARQUE:

7 HRS FINIR DE RIS UP PRIME PUMP
DRILL EN 8 1/2" 16 HRS BRISE HOSE HYDRAUL
FINI 17 HRS

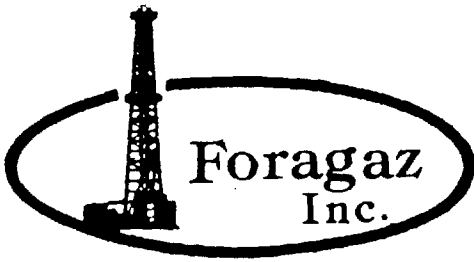
Barbara Held
 Signature du foreur

10
 Heures

J. DEBOISIER
 Signature de l'assistant-foreur

9
 Heures

J. PLESUESQUE
9 HRS



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: FORAGAZ
 PUIITS: BEEHCOUR JUNEX
 DATE: 28 NOV 2000
 FOREUSE: BARBER
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : 58 m.
 Formation: _____

TREPAN:
 Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COU:
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

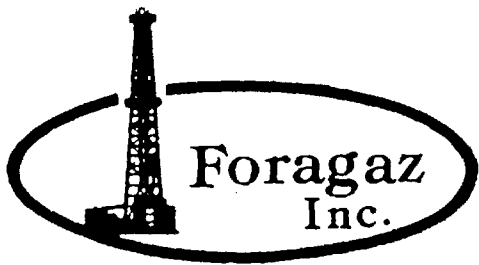
BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
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Mobilisation																									
Démobilisation																									
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Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

REMARQUE: PUIT EN CLOT 5500 KPA MATIN 5800 KPA SOIR
FAR REPARÉ HOSE HYDRAULIC SORTIR
COLLAR 6 1/4" POUR BATIR STAB TRAVAIL
APRES PELLE KUBOTA FINI 17 HRS

Barber Signature du foreur 9 Heures
J. D. ERASIER Signature de l'assistant-foreur 9 Heures
 JPLESUESBO 9 HRS



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: Foragaz inc
 PUIITS: gisement / Recouvrement
 DATE: 29 NOV 2000
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : 55M
 Avancement m : _____
 Formation: _____

TREPAN:

Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:

	Foreuse	DESCRIPTION	COUT
		_____	_____
		_____	_____
	Puits	_____	_____
		_____	_____

BOUE:

WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
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Démobilisation																									
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Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

7HRS SOUDÉ APRES STB DEBUT DIBL
13HRS A 17HRS

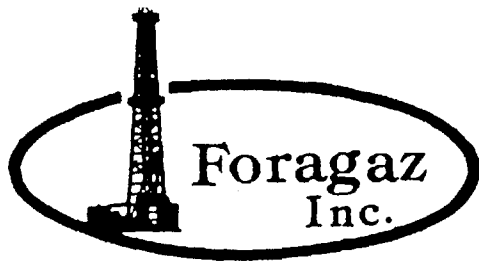
Brenton Hela
 Signature du foreur

9
 Heures

J DEBOSIER
 Signature de l'assistant-foreur

9
 Heures

JPLESOES900
9



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: FORAGAZ
 PUIITS: Auguste Beaucoum
 DATE: 30 NOV 2000
 FOREUSE: BARBER
 TEMPERATURE: _____

Profondeur m: 100
 Avancement m: _____
 Formation: _____

REHM 20M 12 1/4" DRILL

TREPAN:
 Dia. mm: 8 1/2
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COUT
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
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Démobilisation																									
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Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

7MRS DRILL JUSQUA 110M 14 1/2 MRS SORTIE
DU TROU DIFFICILE A SORTIR 3 PREMIER
COLLAR TRIP DRILL EN 12 1/4" 10M A 20MRS
20M FINI 20MRS

Barber
 Signature du foreur

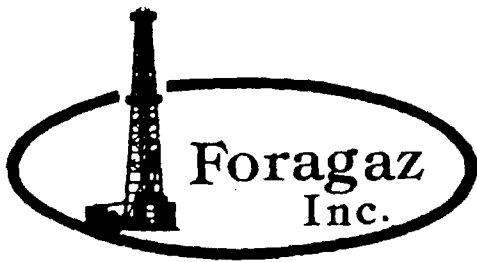
13
 Heures

JP LESUES

J DEROSIER
 Signature de l'assistant-foreur

13
 Heures

13 HR



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: FORAGAZ
 PUIITS: Boues Bécancon 1
 DATE: 31 DEC 2000
 FOREUSE: BARBER
 TEMPERATURE: _____

Profondeur m : 78
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: 12 1/4"
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COUT
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
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Démobilisation																								
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Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

REMARQUE: _____ Heures travaillées _____
7 HRS ALÈGE EN 12 1/4" DRILL ARRÊTE DRILL
78M 18 HRS DRAIN HOSE FINI 18 1/2 HRS

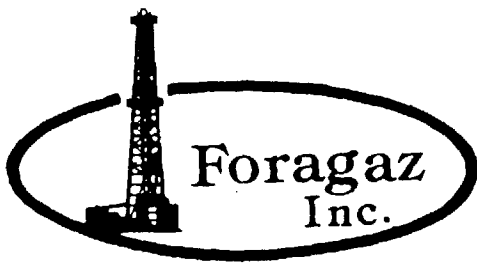
Barber Label
 Signature du foreur

11 1/2
 Heures

J DEBOSIER
 Signature de l'assistant-foreur

11 1/2
 Heures

J P LESUEGUE
11 1/2



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____
 PUIITS: J V NEX Beaumont
 DATE: 5 DEC 2000
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : 103 M
 Avancement m : 27 M
 Formation: _____

TREPAN:
 Dia. mm: 12 1/4
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:	DESCRIPTION	COU
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: EAU
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
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Essai																									
Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

7 1/2 HRS DBILL 12 1/4" FINI 19 1/2 HRS

J. Plesvesgu
 Signature du foreur

12
 Heures

J PLESVESGU

J. Debosier
 Signature de l'assistant-foreur

12
 Heures

12 HRS



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____

PUITS: JUPLEX Beaumont

DATE: 1 DEC 2000

FOREUSE: BARBIER

TEMPERATURE: _____

Profondeur m : 110 M
 Avancement m : _____
 Formation: _____

TREPAN:

Dia. mm: 12 1/4
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:

Foreuse	DESCRIPTION	COU'
_____	_____	_____
_____	_____	_____
Puits	_____	_____
_____	_____	_____
_____	_____	_____

BOUE:

WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
Préparatifs																									
Mobilisation																									
Démobilisation																									
Installation																									
Forage																									
Attente																									
Repas																									
Essai																									
Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

6 HRS FINIR DE DRILLÉ 110M 12 1/4
10 HRS SORTIR DU TRAV MUDI INSTALL
SALLEUR BENTRE CASSING 9 1/2 FINI
10 HRS

Barbier Michel
 Signature du foreur

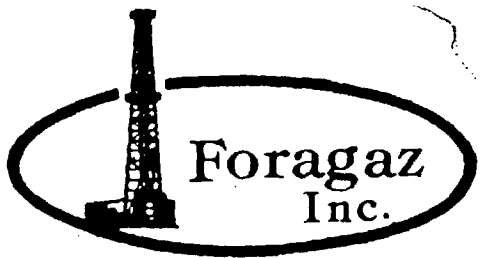
12
 Heures

J P LÉSUÉ

J DE ROSIER
 Signature de l'assistant-foreur

12
 Heures

12 HRS



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____
 PUIITS: JUNEA Beauport 1
 DATE: 5 DEC 2000
 FOREUSE: BARBER
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____ 9 5/8 CASSING

TREPAN:	MATERIAUX:	DESCRIPTION	COU
Dia. mm: _____	<u>105 M + 1.00 M</u>	Foreuse	_____
Série: _____	<u>K-B</u>	Puits	_____
Poids: _____			_____
RPM: _____			_____
Mètres forés: _____			_____
Cumulatif: _____			_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

RETOUR DE CIMENT SURFACE
 REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Préparatifs																								
Mobilisation																								
Démobilisation																								
Installation																								
Forage																								
Attente																								
Repas																								
Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

Heures travaillées _____

REMARQUE:

7HRS PRIME PUMP & REVUE CASSING
REUSE BAGUE 9 5/8 ~~12 1/2~~ 9 1/2 HRS ATTENTE POUR
CIMENT 12 1/2 HRS ARRIVE CIMENT 13 1/4 HRS
FINI LA VE PUMP FINI 12 HRS

Monty Lal
 Signature du foreur

10
 Heures

J DEROSIER
 Signature de l'assistant-foreur

10
 Heures

J P LESUEGUE
10 HRS



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____
 PUIITS: JONEX BECAN CORP
 DATE: 6 DEC 2000
 FOREUSE: BARBER
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COU'
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
Préparatifs																									
Mobilisation																									
Démobilisation																									
Installation																									
Forage																									
Attente																									
Repas																									
Essai																									
Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

7HRS TRAVAILLÉ CHASSINS BOWL
BERTRAND DOCTEUR FAIRE TRAVAILLE FLAD

Bertrand Docteur
 Signature du foreur

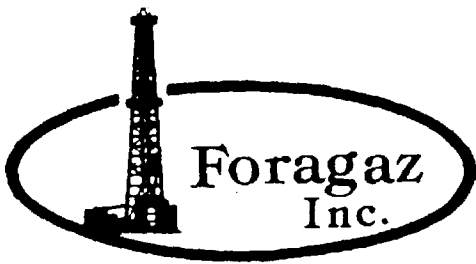
9
 Heures

JPLESUESQUE

J. DEROSIER
 Signature de l'assistant-foreur

9
 Heures

9 HR



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: JUNEX BEAUCOURT
 PUIITS: 7
 DATE: 7 DEC 2000
 FOREUSE: BIBBER
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____

TREPAN:

Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:

Foreuse	DESCRIPTION	COU'
_____	_____	_____
_____	_____	_____
Puits	_____	_____
_____	_____	_____

BOUE:

WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total	
Préparatifs																									
Mobilisation																									
Démobilisation																									
Installation																									
Forage																									
Attente																									
Repas																									
Essai																									
Diagraphie																									
Pose de coffrage																									
Cimentation																									
Développement																									
Entretien																									
Divers																									

Heures travaillées _____

REMARQUE:

6 HRS ALLÉ THEDFORD STB RAMASSÉ
FLANGE 12 HRS SITE SOUDÉ FLANGE
REACTEUR DANS LE TROU 5 COLLAR RIG UP
BOP FINI 19 HRS

Boston Hall
 Signature du foreur

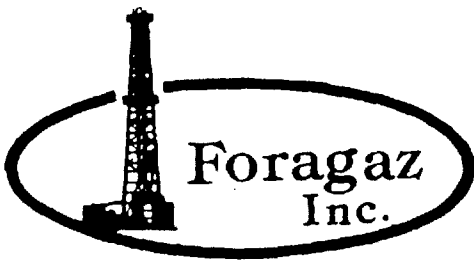
12
 Heures

J PLESUES

J DEPOSIER
 Signature de l'assistant-foreur

7
 Heures

7



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: _____
 Puits: JUNEX BERN COUR
 DATE: 8 DEC 2000
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : 130 M
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: 8 1/2
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:	DESCRIPTION	COU
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Préparatifs																								
Mobilisation																								
Démobilisation																								
Installation																								
Forage																								
Attente																								
Repas																								
Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

Heures travaillées _____

REMARQUE:

6 HRS FINIR FLOW NIPPLE PRIMÉ PUMP
RENTRE DANS LE TROU DEBUT DAILL 130M
DAILL CIMENT FORMATION 130M DRAINER
HOSE PUMP 12 1/2 HRS

Bouton Hala
 Signature du foreur

12 1/2
 Heures J PLESUESQUE

J DE ROSIER
 Signature de l'assistant-foreur

12 1/2
 Heures

12 1/2



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: FORAGAZ INC
 PUIITS: Fumer Becarion I
 DATE: 19 Decembre 2000
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

MATERIAUX:	DESCRIPTION	COU'
Foreuse	_____	_____
Puits	_____	_____
	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Préparatifs																								
Mobilisation																								
Démobilisation																								
Installation																								
Forage																								
Attente																								
Repas																								
Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

Heures travaillées _____

REMARQUE:

7HRS DEBUT DRILL 9HRS A 10 1/2HRS
BRIS BEARINGS DE LA TETE MLE TROIS
RIVIERE 2 FOIS FINI 18HRS

Bertin Abdul
 Signature du foreur

11
 Heures

J PLESDESQUE

J DEROSIER
 Signature de l'assistant-foreur

10
 Heures

10



FORAGAZ INC.
 1205 Impériale
 C.P. 8091 Val-Belair, Qc
 G3K 1Y7
 Tél: (418) 845-0938

RAPPORT JOURNALIER DE FORAGE ET DE COMPLETION

COMPAGNIE: FORAGAZ inc
 PUIITS: Jules Beaucœur 1
 DATE: 10 Décembre 2000
 FOREUSE: _____
 TEMPERATURE: _____

Profondeur m : _____
 Avancement m : _____
 Formation: _____

TREPAN:
 Dia. mm: _____
 Série: _____
 Poids: _____
 RPM: _____
 Mètres forés: _____
 Cumulatif: _____

<u>MATERIAUX:</u>	DESCRIPTION	COU'
Foreuse	_____	_____
	_____	_____
Puits	_____	_____
	_____	_____

BOUE:
 WT: _____
 VIS: _____
 PH: _____

REPARTITION DU TEMPS

HEURES:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Préparatifs																								
Mobilisation																								
Démobilisation																								
Installation																								
Forage																								
Attente																								
Repas																								
Essai																								
Diagraphie																								
Pose de coffrage																								
Cimentation																								
Développement																								
Entretien																								
Divers																								

Heures travaillées _____

REMARQUE:

7HRS START DRILL GELÉ DANS LES 13
8 1/2 HRS ARRETE FORAGE SORTI 2 COLLAR
RAMASSE BASSÉ MAT APPORTÉ DRILL ENA
FINI 19 1/2 HRS

*Tempo
 Fini*

Boutin Kull
 Signature du foreur

10 1/2 JPLES 0659
 Heures

J. DEROSIER
 Signature de l'assistant-foreur

10 1/2
 Heures

10 1/2



*payé chèque 0059
août 2001*

Client: Junex Inc.

Date: 2001/07/27

Projet: Travaux au puits Junex Bécancour No 1
pendant période du 1 juin 2001 au
15 juillet 2001.

Facture No 229 Re: Opérations de forage
TPS: R121192546
TVQ: 1003638461

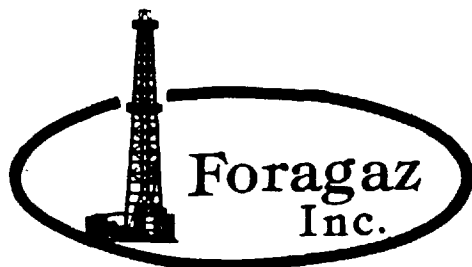
ITEM 1 MOBILISATION DE LA FOREUSE ET INSTALLATION
Montant forfaitaire

ITEM 2 FOREUSE EN OPÉRATION

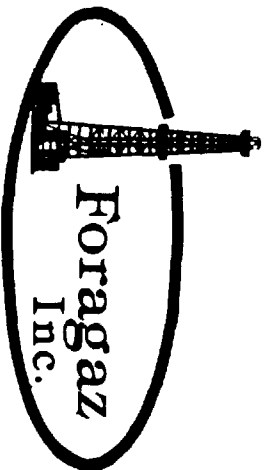
Date	Description des travaux	Heures Foreuse
11 juin 01	Début du forage	4,5
12 juin 01	Foré jusqu'à 188m	12
13 juin 01	Foré jusqu'à 239 m.	12
14 juin 01	Foré jusqu'à 283 m.	12
15 juin 01	Foré jusqu'à 321 m.	12
16 juin 01	Foré jusqu'à 351 m.	12
17 juin 01	Entretien sur tête de rotation	0
18 juin 01	Terminé entretien et sortir du trou	6
19 juin 01	Terminé entretien et rentré dans le trou avec un nouveau trépan.	6
20 juin 01	Foré jusqu'à 389 m.	12

FORAGAZ INC.

1205, Impériale, Val- Bélaire, Québec, Canada, C.P. 8091, G3K 1Y7, tél.:(418)845-0938



21 juin 01	Foré jusqu'à 428 m.	12
22 juin 01	Foré jusqu'à 453 m.	12
23 juin 01	Foré jusqu'à 467 m	12
24 juin 01	Foré jusqu'à 476 m.	8
25 juin 01	Foré jusqu'à 492 m.	11
26 juin 01	Foré jusqu'à 506 m.	12
27 juin 01	Foré jusqu'à 507 m Bris du système hydraulique	2
28 juin 01	Réparations	0
29 juin 01	Réparations	0
30 juin 01	Terminé réparations et foré jusqu'à 510 m.	2
1 juil. 01	Foré jusqu'à 532 m.	12
2 juil. 01	Foré jusqu'à 545 m.	8
3 juil. 01	Foré jusqu'à 556 m.	12
4 juil. 01	Foré jusqu'à 560m et sorti du trou pour changer de trépan.	12
5 juil. 01	Foré jusqu'à 576 m.	12
6 juil. 01	Foré jusqu'à 596 m.	12
7 juil, 01	Foré jusqu'à 608 m.	12
8 juil. 01	Foré jusqu'à 641 m.	12
9 juil. 01	Foré jusqu'à 681 m.	12
10 juil 01	Foré jusqu'à 719 m.	12
11 juil 01	Foré jusqu'à 750 m.	12
12 juil 01	Foré jusqu'à 781 m.	12



13	juil 01	Foré jusqu'à 807 m.	12
14	juil 01	Foré jusqu'à 822 m.	10
15	juil 01	Foré jusqu'à 834 m.	12

ITEM 3 SERVICES PAR FORAGAZ

- 1- Pelle Kubota Kh-28
- 3- Roulotte de chantier
- 4- Location et réparations de
3 stabiliseurs de 8 1/2"
- 5- Véhicule + cellulaire + essence;
- 6- Service de géologie de sonde
à temps partiel.

ITEM 4 AUTRES SERVICES

- 1- Alberta Instrument No 9108
- 2- Location Bécancour No 020678
- 3- Location Bécancour No 020643
- 4- H.M.Métal Inc. No 11676
- 5- Air Canada no 014-74177515

ITEM 5 MATÉRIAUX

- 1- Murphy's Bits No 7191
- 2- Murphy's Bits no 7235 et 7258
- 3- Wesburne No 5996459-01
- 4- Wesburne No 5996586-01
- 5- Wesburne No 5986373-01
- 6- H.M.Métal No 11646
- 7- Usinage NY-KA No 2458
- 8- Impact Oilfield No 10560
- 9- Weldco No 587174
- 10- Frank M. O'Dowd No 0187547-00
- 11- Papeterie
- 12- Leblanc Inc.No 1-561345
- 13- Hyco Canada No 10182

DAILY DRILLING REPORT REPORT No.

LEASE **BECANCOUR** WELL No. **#1** WELL NUMBER WATER DEPTH DATE **01.06.11**
 OPERATOR **JUNE X** CONTRACTOR **FORAGAZ** RIG No.
 SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

weight on bit (ton) = scanewton (daN)
 weight on bit (ton) will record decanewton
 linear mass = gr. m per metre (kg/m)
 viscosity = st (gr litre (s/L))
 plastic viscosity = millipascal second (mPa-s)
 gel strength = pascal (Pa)
 work completed by wire line = megajoule (MJ)
 inside diameter and outside diameter = millimetre (mm)
 pump pressure = kilopascal (kPa)

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) HS Signs Posted (if required)
 OPR. (1) Rig Site Health and Safety Meeting (one meeting/crew/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) (3) Mast Inspected Before Raising or Lowering
 R.M. Initial

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2	135	E	4 3/4	3 1/2 IE	1	1	BETHEM	DUPLEX	254

TIME DISTRIBUTION - HOURS		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	BIT No.	TIME	DENSITY kg/m ³
1	RIG UP AND TEAR DOWN			BHO	150.75		
2	DRILL ACTUAL	1 1/2	12	STB			
3	REAMING			D.C. ID			
4	CORING			STB			
5	CONDITION MUD & CIRCULATE			D.C. ID			
6	TRIPS			STB			
7	LUBRICATE RIG			D.C. ID			
8	REPAIR RIG			STB			
9	CUT OFF DRILLING LINE			D.C. ID			
10	DEVIATION SURVEY			STB			
11	WIRE LINE LOGS			D.C. ID			
12	RUN CASING & CEMENT			STB			
13	WAIT ON CEMENT			D.C. ID			
14	NIPPLE UP B.O.P.			STB			
15	TEST B.O.P.			D.C. ID			
16	DRILL STEM TEST			STB			
17	PLUG BACK			D.C. ID			
18	SQUEEZE CEMENT			STB			
19	FISHING			D.C. ID			
20	DIR. WORK			STB			
21	Rig up drill 10 1/2			D.C. ID			
22				STB			
23				D.C. ID			

COMPLETION		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
A.	PERF'RTN	BIT	BIT No.	TIME	DENSITY kg/m ³		
B.	T.B.G. TRIPS	.1	.23				
C.	TREATING	NB	1.10				
D.	SWABBING	STB	1.19				
E.	TESTING	D.C. ID	.18				
F.	ADDITION'L	STB					
G.		D.C. ID	6" OD	36.87			
TOTALS		STB	43/4	111.27			
DAY WORK TIME SUMMARY (OFFICE USE ONLY)		STANDS DP		37.66	COND. LB'S T/B/GAGE		
HRS. W/CONTR. D.P.		SINGLES DP			FLOW RATE m ³ /min		
HRS. W/OPR. D.P.		KELLY DOWN			PRESSURE DROP kPa		
HRS. W/ODP	4	TOTAL		188.9	(FORCE) WT. OF STRING		
HRS. STANDBY		TOTAL		188.90	REMARKS		
TOTAL DAY WORK		TOTAL			REMARKS		
No. OF DAYS FROM S.P.D.		TOTAL			REMARKS		
CUMULATIVE ROTATING HRS.		TOTAL			REMARKS		
TOTAL MUD COST		TOTAL			REMARKS		

LEGAL LAND DESCRIPTION		WIRE LINE RECORD	
OUTSIDE DIAMETER	INSIDE DIAMETER	REEL No.	No. LINES
9 3/8	ERW		
LAST CASING TUBING OR LINER		METRES SUPPLIED	
		METRES CUT OFF	
		PRESENT LENGTH	
		MEGAJOULES SINCE LAST CUT	
		CUMULATIVE MEGAJOULES	

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)	
FROM	TO	ROTARY RPM	(FORCE) WT ON BIT daN
130m	137.5		

DEVIATION RECORD	
DEPTH	DEV. DIRECTION

TIME LOG		ELAPSED TIME		CODE No.		BOILER HOURS	
FROM	TO						
17.30	19.00	1 1/2	2				

DEBITS OF OPERATIONS IN SEQUENCE AND REMARKS: **Debut Forage 14.30**

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)	
FROM	TO	ROTARY RPM	(FORCE) WT ON BIT daN
137.5	188.90		

DEVIATION RECORD	
DEPTH	DEV. DIRECTION

TIME LOG		ELAPSED TIME		CODE No.		BOILER HOURS	
FROM	TO						
17.00	19.00	12	2				

DEBITS OF OPERATIONS IN SEQUENCE AND REMARKS: **DEBIT**

DRILLING CREW PAYROLL DATA No. **06 11 57 12**
 DATE: Year Month Day
 WELL NAME & No. **BECANCOUR** PROVINCE **QUEBEC**
 COMPANY **FORAGAZ** CAMP **NONCAMP**
 RIG MANAGER **BERTHAUD HADEL** RIG No. **I**

FIRST TOUR 00:00 TO 12:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B-HABEL	12			
DERRICKMAN		J-DEBESIER	12			
MOTORMAN		J-P LESVEGUE	12			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

SECOND TOUR 12:00 TO 24:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B-HABEL	12			
DERRICKMAN		J-DEBESIER	12			
MOTORMAN		J-P LESVEGUE	12			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

DAILY DRILLING REPORT REPORT No.

pump-stroke length = millimetre (mm)
 weight of string = decanewton (daN)
 linear mass = kilogram per metre (kg/m)
 viscosity = second per litre (s/L)

ASE: **BÉCANCOUR** WELL No. **1** WELL NUMBER **1** WATER DEPTH **01 06 13** DATE **01 06 13**
 OPERATOR **JUNEX** CONTRACTOR **FORAGAZ** RIG No. **I**

SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]*
 SIGNATURE OF CONTRACTOR'S RIG MANAGER: *[Signature]*

SIZE	kg/m	GRADE	TOOL J.O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1 1/2	13.8	E	4 3/4	3/4 IF	1	1	BETLEHEM	DUPLIX	254

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
OPERATION	FIRST TOUR	SECOND TOUR	BIT 1 .23 m	BIT No. 1 I	TIME
UP AND FAR DOWN	12	12	HB 1.10	SIZE 8 3/4"	DENSITY kg/m ³
ACTUAL			STB RMR 1.19	MFG. 119	PRESSURE GRADIENT
SAMING			D.C. ID 1.18	TYPE	VISCOSITY
DRING			STB RMR 1.18	JETS mm	PV mPa.s
CONDITION MUD CIRCULATE			D.C. ID 1.18	TYPE	YD mPa.s
DRING			STB RMR 1.18	JETS mm	GEL STR. Pa
BRICATE RIG			D.C. ID 1.18	TYPE	WATER LOSS cm ³
SPAR RIG			STB RMR 1.18	JETS mm	pH
UT OFF			D.C. ID 1.18	TYPE	SOLIDS %
ILLING LINE			STB RMR 1.18	JETS mm	
EVATION SURVEY			D.C. ID 1.18	TYPE	
RE LINE LOGS			STB RMR 1.18	JETS mm	
UN CASING & CEMENT			D.C. ID 1.18	TYPE	
WIT ON			STB RMR 1.18	JETS mm	
PPLE UP B.O.P.			D.C. ID 1.18	TYPE	
ST B.O.P.			STB RMR 1.18	JETS mm	
ILL STEM TEST			D.C. ID 1.18	TYPE	
LUG BACK			STB RMR 1.18	JETS mm	
SQUEEZE CEMENT			D.C. ID 1.18	TYPE	
SHING			STB RMR 1.18	JETS mm	
RL WORK			D.C. ID 1.18	TYPE	

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
OPERATION	FIRST TOUR	SECOND TOUR	BIT 1 .23 m	BIT No. 1 I	TIME
UP AND FAR DOWN	12	12	HB 1.10	SIZE 8 3/4"	DENSITY kg/m ³
ACTUAL			STB RMR 1.19	MFG. 119	PRESSURE GRADIENT
SAMING			D.C. ID 1.18	TYPE	VISCOSITY
DRING			STB RMR 1.18	JETS mm	PV mPa.s
CONDITION MUD CIRCULATE			D.C. ID 1.18	TYPE	YD mPa.s
DRING			STB RMR 1.18	JETS mm	GEL STR. Pa
BRICATE RIG			D.C. ID 1.18	TYPE	WATER LOSS cm ³
SPAR RIG			STB RMR 1.18	JETS mm	pH
UT OFF			D.C. ID 1.18	TYPE	SOLIDS %
ILLING LINE			STB RMR 1.18	JETS mm	
EVATION SURVEY			D.C. ID 1.18	TYPE	
RE LINE LOGS			STB RMR 1.18	JETS mm	
UN CASING & CEMENT			D.C. ID 1.18	TYPE	
WIT ON			STB RMR 1.18	JETS mm	
PPLE UP B.O.P.			D.C. ID 1.18	TYPE	
ST B.O.P.			STB RMR 1.18	JETS mm	
ILL STEM TEST			D.C. ID 1.18	TYPE	
LUG BACK			STB RMR 1.18	JETS mm	
SQUEEZE CEMENT			D.C. ID 1.18	TYPE	
SHING			STB RMR 1.18	JETS mm	
RL WORK			D.C. ID 1.18	TYPE	

E.R.C.B. (1) Daily Walk Around Inspection Initial: _____ (2) Detailed Inspection-Wisely (using check list) Initial: _____ (3) H.S Signs Posted (if required) Initial: _____

F.M. (1) Rig Site Health and Safety Meeting (one meeting/crew/month) Initial: _____ (2) C.A.O.D.C. Rig Safety Inspection Check List (one/12 months) Initial: _____ (3) Most Inspected Before Raising or Lowering Initial: _____

OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GR. DE	N JOBS	TOTAL LENGTH	FRQ. TO CSG. HD.	SET AT	SIZE	No. LINES	METRES SLIPPED
938	838	ESW			11	109.35 m					

FROM	TO	DR. D R.M. R CORE. C	CORE No.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR SIZE	STROKES per min	PUMP No.	LINEAR SIZE	STROKES per min	METHOD RUN
188	239				65	10		5 1/2	10				

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

FROM	TO	ELAPSED TIME	CODE No.	DEALS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
7.00	19.00	12	2	DRILL	

FROM	TO	ELAPSED TIME	CODE No.	DEALS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
7.00	19.00	12	2	DRILL	

FROM	TO	ELAPSED TIME	CODE No.	DEALS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
7.00	19.00	12	2	DRILL	

FROM	TO	ELAPSED TIME	CODE No.	DEALS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
7.00	19.00	12	2	DRILL	

DRILLING CREW PAYROLL DATA No. _____
 DATE: **01 06 13 14** PROVINCE: **QUEBEC**
 WELL NAME & No.: **BÉCANCOUR** CAMP: **NONCAMP**
 COMPANY: **FORAGAZ**
 RIG MANAGER: **BERTHARD HABEL** RIG No.: **I**

FIRST TOUR 00:00 TO 12:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B-HABEL	12			
DERRICKMAN		J-DE ROSIER	12			
MOTORMAN		J-P LESUESSUE	12			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

SECOND TOUR 12:00 TO 24:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B-HABEL	12			
DERRICKMAN		J-DE ROSIER	12			
MOTORMAN		J-P LESUESSUE	12			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

DAILY DRILLING REPORT REPORT No.

LEASE BECANCOUR	WELL No. #1	WELL NUMBER	WATER DEPTH	DATE 2001 06 17 08
OPERATOR JUNEX	CONTRACTOR FORAGAZ INC		RIG No. 1	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>[Signature]</i>		

TIME DISTRIBUTION - HOURS		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
1. REG UP AND TEAR DOWN		1	BIT 1 23 m	BIT No. 1	SIZE 8 1/2"	DENSITY kg/m ³	TIME
2. DRILL ACTUAL		1	A.B.S. 1.0 m	MFG.		PRESSURE GRADIENT	
3. RAMMING		1	STB 1.9 m	D.C. ID X.O.OD .18 m	TYPE 1144116	VISCOSITY	
4. CORING		1	STB 1.9 m	JETS mm	OPEN	PV mPa.s Pa	FEAD
5. CONDITION MUD & CIRCULATE		4	D.C. ID 6" OD 36.87 m	SER No.		GEL STR. Pa	
6. TRIPS	\$ 36	12	STB 1.9 m	DEPTH OUT	251	WATER LOSS cm ³	
7. LUBRICATE RIG				DEPTH IN	0	PH	
8. REPAIR RIG	60 min			TOTAL METRES DRILLED		SOLIDS %	
9. CUT OFF DRILLING LINE				TOTAL HRS. RUN		MUD & CHEMICALS ADDED	
10. DEVIATION SURVEY				COND. 18% TB/GAGE		TYPE	AMT. kg
11. WIRE LINE LOGS				FL. RATE m/min		TYPE	AMT. kg
12. RUN CASING & CEMENT		21	SINGLES DP 200.22 m	FLOW RATE m/min		TYPE	AMT. kg
13. WAIT ON CEMENT				PRESSURE DROP kPa			
14. NIPPLE UP B.O.P.				TOTAL 351.06			
15. TEST B.O.P.				(FORCE) WT. OF STRING daN			
16. DRILL STEM TEST				REMARKS			
17. PLUG BACK							
18. SQUEEZE CEMENT							
19. FISHING							
20. DIR. WORK							
21. OUTLIS	1/2						
22.							
23.							

COMPLETION		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
A. PERF. TRIP		1	BIT 1 23 m	BIT No. 1	SIZE 8 1/2"	DENSITY kg/m ³	TIME
B. TBG TRIPS		1	A.B.S. 1.0 m	MFG.		PRESSURE GRADIENT	
C. TREATING		1	STB 1.9 m	D.C. ID X.O.OD .18 m	TYPE 1144116	VISCOSITY	
D. SWABBING		1	STB 1.9 m	JETS mm	OPEN	PV mPa.s Pa	FEAD
E. TESTING		4	D.C. ID 6" OD 36.87 m	SER No.		GEL STR. Pa	
F. ADDITIONAL		12	STB 1.9 m	DEPTH OUT	251	WATER LOSS cm ³	
G.				DEPTH IN	0	PH	
TOTALS	6 12			TOTAL METRES DRILLED		SOLIDS %	
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				TOTAL HRS. RUN		MUD & CHEMICALS ADDED	
HRS. W/CONTR. D.P.				COND. 18% TB/GAGE		TYPE	AMT. kg
HRS. W/OPR. D.P.				FL. RATE m/min		TYPE	AMT. kg
HRS. W/OP		21	SINGLES DP 200.22 m	PRESSURE DROP kPa			
HRS. STANDBY				TOTAL 200.22			
				(FORCE) WT. OF STRING daN			
TOTAL DAY WORK				REMARKS			
No. OF DAYS FROM SPUD							
CUMULATIVE ROTATING HRS.							
TOTAL MUD COST							

Metric expressions.

pump-stroke length = metre (m)
 weight of string = decanewton (daN)
 linear mass = kilogram per metre (kg/m)
 viscosity = centipoise (cP)
 flow rate = cubic metre per minute (m³/min)
 pressure gradient = kilopascal per metre (kPa/m)
 yield point = pascal (Pa)
 plastic viscosity = pascal (Pa)
 gel strength = pascal (Pa)
 work completed by wire line = megajoule (MJ)
 inside diameter and outside diameter = millimetre (mm)
 pump pressure = kilopascal (kPa)

E.H.C.B.	D.P.R.	R.M.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial	Initial
(2) Detailed Inspection-Weekly (using check list)	Initial	Initial	Initial
(3) H.S. Signs Posted (if required)	Initial	Initial	Initial
(1) Rig Site Health and Safety Meeting (one meeting/crew/month)	Initial	Initial	Initial
(2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month)	Initial	Initial	Initial
(3) Mast Inspected Before Raising or Lowering	Initial	Initial	Initial

LEGAL LAND DESCRIPTION		WIRE LINE RECORD	
LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	REEL No.
4" F80	4" F80	11 10/16"	1535
MAKE	No. JOINTS	TOTAL LENGTH	SIZE
F80	11	10/16"	No. LINES
RADE	SET AT	PRESENT LENGTH	METRES SLIPPED

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO												
351	351												

DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
DEPTH	DEV.	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
351	5 1/2"												

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO								
7:13:00	6:15	8							
BECANCOUR TETE ROTATION									

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO												
351	351												

DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
DEPTH	DEV.	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO								
7:00	18:00	6							
13:00	18:30	5 1/2"							
18:12	19:00	1/2							
TRAVAILLER APRES TETE ROTATION (CHANGEMENT) TRAVAILLER POUR BIT (ENLÈVEMENT B.O.P.) RANGER LES OUTILS									

DRILLING CREW PAYROLL DATA

No. **2001 06 17 08 18**

DATE **2001 06 17 08 18**

PROVINCE **QUEBEC**

WELL NAME & No. **BECANCOUR #1**

CAMP **NONCAMP**

COMPANY **FORAGAZ INC.**

RIG MANAGER **BERTRAND HABEL**

RIG No. **1**

CREW		SOC. INS. No.		NAME		HRS.		INJURIES	
DRILLER								YES	NO
DERRICKMAN				BERTRAND HABEL	4				
MOTORMAN				J. DESROSIERS	6				
FLOORMAN				S.P. DESROSIERS	6				
FLOORMAN									
FLOORMAN									
LEASEMAN									
CRANE SUPT.									
MECHANIC									
WELDER									
ROUSTABOUT									
ROUSTABOUT									
TRAINEE									
DERRICKMAN (2)									

CREW		SOC. INS. No.		NAME		HRS.		INJURIES	
DRILLER				B. HABEL	12				
DERRICKMAN				J. DESROSIERS	12				
MOTORMAN				S.P. DESROSIERS	12				
FLOORMAN									
FLOORMAN									
FLOORMAN									
LEASEMAN									
CRANE SUPT.									
MECHANIC									
WELDER									
ROUSTABOUT									
ROUSTABOUT									
TRAINEE									
DERRICKMAN (2)									

DAILY DRILLING REPORT REPORT No.

LEASE: **BECANCOUR** WELL No. **#1** WELL NUMBER **20016-190** WATER DEPTH **20016-190** DATE **2016-11-20**
 OPERATOR **SUNEX** CONTRACTOR **FORAGAZ INC.** RIG No. **1**
 SIGNATURE OF OPERATOR'S REPRESENTATIVE *[Signature]* SIGNATURE OF CONTRACTOR'S RIG MANAGER *[Signature]*

D.P. SIZE	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2	E	4 1/4	3 1/2	1	1	BATALEMAN	DUPLEX	251

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1. RIG UP AND TEAR DOWN		1	BIT 1 0.23	BIT No. 2	TIME
2. DRILL ACTUAL	12	1	STB RMA 0.85	SIZE 7 1/2	DENSITY kg/m ³
3. REAMING		1	D.C. ID 6 1/2 OD 9.20	TYPE #4410F	PRESSURE GRADIENT
4. CORING		1	STB T.B. 1.19	JETS mm OPEN	VISCOSITY
5. CONDITION MUD & CIRCULATE		1	D.C. ID 6 1/2 OD 9.32	SER No. 454972	GEL STR. Pa
6. TRIPS	5	1	STB RMA T.B. 1.19	DEPTH OUT	WATER LOSS cm ³
7. LUBRICATE RIG		2	6 1/2 18.35	DEPTH IN 351	pH
8. REPAIR RIG		1	X.O. 0.18	TOTAL METRES DRILLED	SOLIDS %
9. CUT OFF DRILLING LINE		12	4 3/4 11.09	TOTAL HRS. RUN	
10. DEVIATION SURVEY		25	SINGLES DP 200.25	COND. 18" T/B/GAGE	MUD & CHEMICALS ADDED
11. WIRE LINE LOGS				FLOW RATE m ³ /min	TYPE AMT. kg
12. RUN CASING & CEMENT				PRESSURE DROP kPa	
13. WAIT ON CEMENT				TOTAL 352.07	
14. NIPPLE UP B.O.P.					
15. TEST B.O.P.					
16. DRILL STEM TEST					
17. PLUG BACK					
18. SQUEEZE CEMENT					
19. FISHING					
20. DIR. WORK					
21. ATTENTE 7:30					
22.					
23.					

COMPLETION		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
A. PERFRITN		1	BIT 1 0.23	BIT No. 2	TIME
B. TBG TRIPS		1	STB RMA 0.85	SIZE 8 1/2	DENSITY kg/m ³
C. TREATING		1	D.C. ID 6 1/2 OD 9.20	TYPE #4410F	PRESSURE GRADIENT
D. SWABBING		1	STB T.B. 1.19	JETS mm OPEN	VISCOSITY
E. TESTING		1	D.C. ID 6 1/2 OD 9.32	SER No. 454972	GEL STR. Pa
F. ADDITNL		1	STB RMA T.B. 1.19	DEPTH OUT	WATER LOSS cm ³
G.		2	6 1/2 18.35	DEPTH IN 389	pH
TOTALS	12 1/2	1	X.O. 0.18	TOTAL METRES DRILLED 389	SOLIDS %
DAY WORK TIME SUMMARY (OFFICE USE ONLY)		12	4 3/4 11.09	TOTAL HRS. RUN 12 1/2	
HRS. W/CONTR. D.P.				COND. 18" T/B/GAGE	MUD & CHEMICALS ADDED
HRS. W/OPR. D.P.				FLOW RATE m ³ /min	TYPE AMT. kg
HRS. W/OOP				PRESSURE DROP kPa	
HRS. STANDBY		25	SINGLES DP 389.06	TOTAL 389.91	
TOTAL DAY WORK					
No. OF DAYS FROM SPUD					
CUMULATIVE ROTATING HRS.					
TOTAL MUD COST					

REMARKS: *A little bit of log coming-up all day.*

Metric expressions: mud density = kg/m³, pump-stroke length = m, weight of string = kN, weight on bit = kN, linear mass = kg/m, viscosity = stord, flow rate = cubic metres per minute (m³/min), pressure gradient = kilopascal per metre (kPa/m), yield point = pascal (Pa), plastic viscosity = kilopascal second (kPa·s), gel strength = pascal (Pa), work completed by wire line = megajoule (MJ), inside diameter and outside diameter = millimetre (mm), pump pressure = kilopascal (kPa).

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) H/S Signs Posted (if required)

OPR. Initial _____ R.M. Initial _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month) Initial _____ (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) Initial _____ (3) Mast Inspected Before Raising or Lowering Initial _____

LEGAL LAND DESCRIPTION		WIRE LINE RECORD	
LAST CASING TUBING OR LINER	OUTSIDE DIAMETER INSIDE DIAMETER MAKE kg/m GRADE No. JOINTS TOTAL LENGTH RKB TO CSG. HD. SET AT	SIZE No. LINES METRES SLIPPED	REEL No. METRES CUT OFF PRESENT LENGTH
4 1/2 IRW	11 109.50 25.35		

DRILLING CREW PAYROLL DATA No. **QUEBEC**
 DATE: **2016-11-20** PROVINCE **QUEBEC**
 WELL NAME & No. **BECANCOUR #1** CAMP **NONCAMP**
 COMPANY **FORAGAZ INC.**
 RIG MANAGER **BERNARD HABEL** RIG No. **1**

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO	DR. D FM. R CORE. G	CORE No.	FORM. (FORCED WT. ON BIT daN)	PUMP PRESS	LINEAR SIZE	STROKES per min	LINEAR SIZE	STROKES per min	SCL - S PAPER - P COMB - C			
351	351												

DEVIATION RECORD		DEPTH		DEV.		DIRECTION	
DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.

TIME LOG		ELAPSED TIME		CODE No.		DETAILED OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO	ELAPSED TIME	CODE No.	DETAILED OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS				
7:30	10:30	3:00	21	ATTENTE PIECE ROTATION TETE					
10:30	15:30	5:00	6	RENTREE DANS LE TROUS CALIPER MEURER, REMETTRE PLACE B.O.P.					
15:30	19:00	3:30	21	INSTALLER TIE ROTATION PRETE A FONCTIONNER					
19:00	19:30	0:30	21	CHARGER PELLE POUR GASPÉ					

FIRST TOUR 00:00 TO 12:00		INJURIES			
CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B-HABEL	12 1/2		
DERRICKMAN		S-DETRISIRTS	12		
MOTORMAN		S-P-LEVESQUE	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

METRES DRILLED		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO	DR. D FM. R CORE. G	CORE No.	FORM. (FORCED WT. ON BIT daN)	PUMP PRESS	LINEAR SIZE	STROKES per min	LINEAR SIZE	STROKES per min	SCL - S PAPER - P COMB - C			
351	389												

DEVIATION RECORD		DEPTH		DEV.		DIRECTION	
DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.
389m	541						

TIME LOG		ELAPSED TIME		CODE No.		DETAILED OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO	ELAPSED TIME	CODE No.	DETAILED OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS				
7:30	19:30	12	2	DRILL 351 TO 389					
				PUIT SUNEX GALT & STEPHANE & BERT FORNIERVILLE GASPÉ AVEC KUBOTA ET PETITE DRILL AVEC FARDIER					

SECOND TOUR 12:00 TO 24:00		INJURIES			
CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		S-DETRISIRTS	12		
DERRICKMAN		S-P-LEVESQUE	12		
MOTORMAN					
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE		B-HABEL	12		
DERRICKMAN (2)					

DAILY DRILLING REPORT REPORT No.

LEASE: **BECANCOUR** WELL No.: **7** WELL NUMBER: WATER DEPTH: DATE: **2001-06-22**

OPERATOR: **JUNEX** CONTRACTOR: **TORAGAZ INC.** RIG No.: **1**

SIGNATURE OF OPERATOR'S REPRESENTATIVE: **Stephane Galt** SIGNATURE OF CONTRACTOR'S RIG MANAGER: **B. Habel**

D.P. SIZE	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2"	B.S.B.	E	4 1/2"	3.5H	1	BITTLE HEAD	DUPLEX	254

Units expressions:

Flow rate = cubic metre per minute (m³/min)
 pressure gradient = kilopascal per metre (kPa/m)
 yield point = pascal (Pa)
 plastic viscosity = millipascal second (mPa·s)
 gel strength = pascal (Pa)
 work completed by wire line = megajoule (MJ)
 inside diameter and outside diameter = millimetre (mm)
 pump pressure = kilopascal (kPa)

send to centre to two decimal places.

Flow rate = cubic metre per minute (m³/min)
 pressure gradient = kilopascal per metre (kPa/m)
 yield point = pascal (Pa)
 plastic viscosity = millipascal second (mPa·s)
 gel strength = pascal (Pa)
 work completed by wire line = megajoule (MJ)
 inside diameter and outside diameter = millimetre (mm)
 pump pressure = kilopascal (kPa)

Legal Land Description: **OPR. R.M.**

(1) Daily Walk Around Inspection
 (2) Detailed Inspection-Weekly (using check list)
 (3) H/S Signs Posted (if required)

OPR. R.M. Initial: _____
 Initial: _____
 Initial: _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month)
 (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month)
 (3) Mast Inspected Before Raising or Lowering

DRILLING CREW PAYROLL DATA

No. _____

DATE: **2001-06-21 & 22** PROVINCE: **Quebec**

WELL NAME & No.: **BECANCOUR 7** CAMP: **NONCAMP**

COMPANY: **TORAGAZ INC.** RIG MANAGER: **BERTRAND HABEL** RIG No.: **1**

TIME DISTRIBUTION - HOURS		No. DRILLING ASSEMBLY (at end of hour)		BIT RECORD		MUD RECORD	
1. RIG UP AND TEAR DOWN		1	BIT 1 0.23 m	BIT No. 2	TIME 12:00	DENSITY 1.16	1.12
2. DRILL ACTUAL	12 10	1	STB 1.10 m	SIZE 8 1/2"	PRESSURE GRADIENT	50	54
3. REAMING	8 2	1	D.C. 9.20 m	TYPE 1144WF	VISCOSITY	1.19	1.19
4. COHING		1	STB 1.19 m	SETS mm	PH	1	1
5. CONDITION MUD & CIRCULATE		1	D.C. 9.32 m	SER No. 454922	WATER LOSS		
6. TRIPS		1	STB 1.19 m	DEPTH OUT	PH		
7. LUBRICATE RIG		2	6" 18.35	DEPTH IN	SOLIDS %		
8. REPAIR RIG		1	X.O. 0.18	TOTAL METRES DRILLED			
9. CUT OFF DRILLING LINE		1	X.O. 0.18	TOTAL HRS. RUN			
10. DEVIATION SURVEY		12	4 3/4" 111.19	COND. 1/8" TB/GAGE			
11. WIRE LINE LOSS		21	SINGLES DP	FLOW RATE			
12. RUN CASING & CEMENT			KELLY DOWN	PRESSURE DROP			
13. WAIT ON CEMENT			TOTAL				
14. NIPPLE UP B.O.P.							
15. TEST B.O.P.							
16. DRILL STEM TEST							
17. PLUG BACK							
18. SQUEEZE CEMENT							
19. FISHING							
20. DIR. WORK							
21.							
22.							
23.							

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER: **4 1/2" ERW**

WIRE LINE RECORD

SIZE: **11 10/32** REEL No.: **183**

METRES CUT OFF: _____ PRESENT LENGTH: _____

MEGAJOULES SINCE LAST CUT: _____

CUMULATIVE MEGAJOULES: _____

METRES DRILLED

FROM: **389** TO: **428** D.R.D. CORE No.: **2001-06-22** FORMATION: **FORMATION (SHOW CORE RECOVERY)**

ROTARY RPM: **65** (FORCE) WT ON BIT: **910** PUMP PRESS: **3750**

LINEAR STROKES: **50** LINEAR STROKES: **50**

DEVIATION RECORD

DEPTH: **289** DEV: **53**

DEPTH: **409** DEV: **62**

REMARKS: **DRILL**

REMARKS:

JUNEX GALT & STEPHANE & BERTRAND PARTIR DE CHEZ ADAMS 6.30 HRS MONTE SUR SITE PRESSION DU POIT ANNULEE 150 PSI 1100KPA INSTALLE DRILL DEBUT DU CAMPAGE AVEC SUCRE ROD MIDI PUMPE JUSQUA 18 HRS PAS DE LIQUIDE A LA SURFACE FERME POUR LA NUIT PAR STEPHANE & HABEL JUNEX

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		J. DESROSIERS	12	
DERRICKMAN		J.P. LAFRANCOISE	12	
MOTORMAN				
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE		B-HABEL	12	
DERRICKMAN (2)				

COMPLETION		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
A. PERF'RTN		1	BIT 1 0.23 m	BIT No. 2	TIME 12:00	DENSITY 1.12	1.12
B. TBG TRIPS		1	STB 1.10 m	SIZE 8 1/2"	PRESSURE GRADIENT	49	46
C. TREATING		1	D.C. 9.20 m	TYPE 1144WF	VISCOSITY	1.19	1.19
D. SWABBING		1	STB 1.19 m	SETS mm	PH	1	1
E. TESTING		1	D.C. 9.32 m	SER No. 454922	WATER LOSS		
F. ADDITNL		1	STB 1.19 m	DEPTH OUT	PH		
G.		2	6" 18.35	DEPTH IN	SOLIDS %		
TOTALS	12 12	1	X.O. 0.18	TOTAL METRES DRILLED			
HRS. WORKING D.P.		12	4 3/4" 111.09	TOTAL HRS. RUN			
HRS. WORKING D.P.			STANDS DP	COND. 1/8" TB/GAGE			
HRS. WORKING D.P.		32	SINGLES DP	FLOW RATE			
HRS. STANDBY			KELLY DOWN	PRESSURE DROP			
TOTAL DAY WORK			TOTAL				
No. OF DAYS FROM SPUD							
CUMULATIVE ROTATING HRS							
TOTAL MUD COST							

METRES DRILLED

FROM: **428** TO: **453** D.R.D. CORE No.: **2001-06-22** FORMATION: **FORMATION (SHOW CORE RECOVERY)**

ROTARY RPM: **60** (FORCE) WT ON BIT: **980** PUMP PRESS: **5250**

LINEAR STROKES: **50** LINEAR STROKES: **50**

DEVIATION RECORD

DEPTH: **428** DEV: **55**

DEPTH: **448** DEV: **45AS**

REMARKS: **Reaming 40m to clean the hole**

REMARKS:

JUNEX GALT & STEPHANE & BERTRAND 1200HRS PRESSION DU POIT 300KPA TELEPHONE 300HRS PUMPE LIQUIDE A INTERIEUR TUBING 15M DIFFICULTE A SORTIR PUMPE LIQUIDE L'INITIATIF 15HRS DIMER CEMENTE INTER CHARRE VOYABLE POUR RETOUR BECANCOUR FINI 22 HRS

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		J. DESROSIERS	12	
DERRICKMAN		J.P. LAFRANCOISE	12	
MOTORMAN				
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE		B-HABEL	15	
DERRICKMAN (2)				

DAILY DRILLING REPORT REPORT No.

LEASE: **BECAIROUR** WELL No. **1** WELL NUMBER: **200102624** DATE: **23/01/2006**

OPERATOR: **SUNEX** CONTRACTOR: **FORAGAZ INC.** RIG No.: **1**

SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S RIG MANAGER: *[Signature]*

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2"	13500	E	4 1/2"	3 1/2"	1	1	BETLEHEM	DUPLIX	2'4"

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)		BIT RECORD	MUD RECORD	
1. TIME UP AND TEAR DOWN			1	BIT 1 0.23 m	BIT No. 2	TIME 12:00	DENSITY 1.12
2. DRILL ACTUAL	8 5		1	STB RMR 1.10 m	SIZE 8 1/2"		PRESSURE GRADIENT
3. REAMING			1	D.C. ID 9.20 m	TYPE 114401F		VISCOSITY 49
4. CORING			1	STB RMR 1.19 m	JETS mm 2 DEVI		PV mPa.s YP Pa
5. CONDITION MUD & CIRCULATE	30		1	D.C. ID 9.32 m	SER No. 154922		GEL STR Pa
6. TRIPS			1	STB RMR 1.19 m	DEPTH OUT		WATER LOSS cm
7. LUBRICATE RIG			2	6" 18.35	DEPTH IN 467		pH
8. REPAIR RIG			1	X.O. 0.18	TOTAL METRES DRILLED 116		SOLIDS %
9. CUT OFF DRILLING LINE			12	4 1/4" 11.09	TOTAL HRS. RUN 42		MUD & CHEMICALS ADDED
10. DEVIATION SURVEY			33	SINGLES DP 2169	COND. 1/8" TYPAGE		TYPE AMT. kg
11. WIRE LINE LOSS				KELLY DOWN m	FLOW RATE m/min		TYPE AMT. kg
12. RUN CASING & CEMENT				TOTAL 467.87	PRESSURE DROP kPa		
13. WAIT ON CEMENT							
14. NIPPLE UP B.O.P.							
15. TEST B.O.P.							
16. DRILL STEM TEST							
17. PLUG BACK	4 20						
18. SQUEEZE CEMENT							
19. FISHING							
20. DIR. WORK							
21.							
22.							
23.							

COMPLETION		No.	DRILLING ASSEMBLY (at end of tour)		BIT RECORD	MUD RECORD	
A. PERFRTRN			1	BIT 1 0.23 m	BIT No. 2	TIME 2:00 6:00	DENSITY 1.10 1.08
B. TBG TRIPS			1	STB RMR 1.10 m	SIZE 8 1/2"		PRESSURE GRADIENT
C. TREATING			1	D.C. ID 9.20 m	TYPE 114401F		VISCOSITY 49 49
D. SWABBING			1	STB RMR 1.19 m	JETS mm 2 DEVI		PV mPa.s YP Pa
E. TESTING			1	D.C. ID 9.32 m	SER No. 154922		GEL STR Pa
F. ADDITNL			1	STB RMR 1.19 m	DEPTH OUT		WATER LOSS cm
G.			2	6" 18.35	DEPTH IN 476		pH
TOTALS	12 8		12	4 1/4" 11.09	TOTAL METRES DRILLED 125		SOLIDS %
DAY WORK TIME SUMMARY (OFFICE USE ONLY)			34	STANDS DP 32602	COND. 1/8" TYPAGE		TYPE AMT. kg
HRS. W/CONTR. D.P.			32	SINGLES DP 467.87	FLOW RATE m/min		TYPE AMT. kg
HRS. W/OPR. D.P.				KELLY DOWN m	PRESSURE DROP kPa		
HRS. W/ODP				TOTAL 466.87			
HRS. STANDBY							
TOTAL DAY WORK							
No. OF DAYS FROM SPUD							
CUMULATIVE ROTATING HRS.							
TOTAL MUO COST							

Units: $1 \text{ kg/m}^3 = 1000 \text{ g/m}^3$, $1 \text{ mm} = 1000 \mu\text{m}$, $1 \text{ Pa} = 1000 \text{ mPa}$, $1 \text{ MPa} = 1000000 \text{ Pa}$, $1 \text{ MJ} = 1000000 \text{ J}$, $1 \text{ mm} = 1000 \mu\text{m}$, $1 \text{ kPa} = 1000 \text{ Pa}$

E.S.C.S. (1) Daily Walk Around Inspection, (2) Detailed Inspection-Weekly (using check list), (3) H/S Signs Posted (if required)

LEGAL LAND DESCRIPTION: [Blank]

WIRE LINE RECORD: [Blank]

DRILLING CREW PAYROLL DATA: DATE 23/01/2006, PROVINCE QUEBEC, WELL NAME & No. BECAIROUR 1, COMPANY FORAGAZ INC., RIG MANAGER BERTRAND HUBERT, RIG No. 1

METRES DRILLED		DR. D	DR. R	CORE C	FORMATION	ROTARY RPM	(FORCE) WT ON BIT daN	PUMP PRESS	PUMP No. L	STROKES per min	PUMP No. S	STROKES per min	METHOD RUN
467	467				200102624	60	98	52	50				
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
TIME LOG		FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS					
7:00		12:00		5:00	2	DRILL							
12:00		19:00		7:00	17	TREPAN BOUENE SORTIR 6 JOINT ESSAIE JUSQUA 19HRS							
						TRANSPORT GASPE FORTIERVILLE							

METRES DRILLED		DR. D	DR. R	CORE C	FORMATION	ROTARY RPM	(FORCE) WT ON BIT daN	PUMP PRESS	PUMP No. L	STROKES per min	PUMP No. S	STROKES per min	METHOD RUN
467	476				200102624	60	98	52	50				
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
TIME LOG		FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS					
11:00		13:30		2:30	17	TRAVAILLE POUR DEBOUCHER BIT EUSSEI A 13.30HRS REMIRE 6 TISE							
13:30		14:00		30	5	1 ACULE REMIRE TISE AU FOND							
14:00		14:00		0	2	TRILL							

DAILY DRILLING REPORT REPORT No.

LEASE PECANPOUR	WELL No. 1	WELL NUMBER	WATER DEPTH	DATE 2004/06/26
OPERATOR SUNEX	CONTRACTOR FORAGAZ INC.		RIG No. 1	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>[Signature]</i>		

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2	13.86	E	4 1/2"	3 1/2"	1	7	ATLANTIC	DUPLIX	257

CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1	DRILL ACTUAL	10:12		1	BIT 1 0.23 m	BIT No. 2 SIZE 8 1/2"	TIME 10:11 DENSITY 49 49
2	REAMING			1	STB RMP 1.10 m	MFG. 1144NF	PRESSURE GRADIENT 1.08 1.09
3	CORING			1	D.C. ID 6 1/2 OD 9.20 m	TYPE JETS mm OPEN	VISCOSITY 1.04 1.08
4	CONDITION MUD & CIRCULATE			1	STB RMP 1.19 m	SER No. 4154 922	PV mPa.s 1740 1
5	TRIPS			1	D.C. ID 6 OD 9.32 m	DEPTH OUT 1.19 m	GEL STR. Pa 1 1 1
6	LUBRICATE RIG			1	STB RMP 1.19 m	DEPTH IN 472	WATER LOSS cm ³
7	REPAIR RIG			2	6 1/2 18.35	TOTAL METRES DRILLED 147	pH
8	CUT OFF DRILLING LINE			1	X.O. 0.18	TOTAL HRS. RUN 57	SOLIDS %
9	DEVIATION SURVEY	4:00		2	434 11.09	COND. 1/8" TB/GAGE	
10	WIRE LINE LOGS			36	SINGLES DP 245.92	FLOW RATE m/min	
11	RUN CASING & CEMENT				KELLY DOWN	PRESSURE DROP kPa	
12	WAIT ON CEMENT				TOTAL 446.77	(FORCE) WT. OF STRING daN	
13	TEST B.O.P.						
14	DRILL STEM TEST						
15	PLUG BACK						
16	SQUEEZE CEMENT						
17	FISHING						
18	DIR. WORK						
19							
20							
21							
22							
23							

COMPLETION	No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
A. PERFRTRN	1	BIT 1 0.23 m	BIT No. 2 SIZE 8 1/2"	TIME 10:11 DENSITY 28 28
B. TBG TRIPS	1	STB RMP 1.10 m	MFG. 1144NF	PRESSURE GRADIENT 1.04 1.08
C. TREATING	1	D.C. ID 6 1/2 OD 9.20 m	TYPE JETS mm OPEN	VISCOSITY 1.04 1.08
D. SWABBING	1	STB RMP 1.19 m	SER No. 4154 922	PV mPa.s 1740 1
E. TESTING	1	D.C. ID 6 1/2 OD 9.32 m	DEPTH OUT 1.19 m	GEL STR. Pa 1 1 1
F. ADDITVL	1	STB RMP 1.19 m	DEPTH IN 506	WATER LOSS cm ³
G.	2	6 1/2 18.35	TOTAL METRES DRILLED 155	pH
TOTALS	12	X.O. 0.18	TOTAL HRS. RUN 69	SOLIDS %
DAY WORK TIME SUMMARY (OFFICE USE ONLY)	12	434 11.09	COND. 1/8" TB/GAGE	
HRS. W/CONTR. D.P.		SINGLES DP 355.87	FLOW RATE m/min	
HRS. W/OPR. D.P.		KELLY DOWN	PRESSURE DROP kPa	
HRS. W/OP.		TOTAL 506.68	(FORCE) WT. OF STRING daN	
HRS. STANDBY				
TOTAL DAY WORK				

Metric expressions:
 mud density = kg/m³
 pump-stroke length = m
 weight of string = kg
 weight on bit = kN
 linear mass = kg/m
 viscosity = second

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

METRES DRILLED	DR. D. RM. R. CORE. C.	CORE No.
472 472		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION
	486 m	4°	

TIME LOG	ELAPSED TIME	CODE No.	DETA	DESCRIPTION
8:00 15:10	7:10	2		2 well
15:45 19:00	3:15	2		2 well

METRES DRILLED	DR. D. RM. R. CORE. C.	CORE No.
472 506		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETA	DESCRIPTION
7:00 19:00	12:00	2		2 well

Imperial expressions:
 mud density = lb/cu ft
 pump-stroke length = ft
 weight of string = lb
 weight on bit = lb
 linear mass = lb/ft
 viscosity = centipoise

WIRE LINE RECORD	REEL No.	No. LINES	METRES SUPPLIED

METRES DRILLED	DR. D. RM. R. CORE. C.	CORE No.
472 472		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETA	DESCRIPTION
8:00 15:10	7:10	2		2 well
15:45 19:00	3:15	2		2 well

METRES DRILLED	DR. D. RM. R. CORE. C.	CORE No.
472 506		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETA	DESCRIPTION
7:00 19:00	12:00	2		2 well

DRILLING CREW PAYROLL DATA

DATE **2004-06-25 & 26** PROVINCE **ALBERTA**

WELL NAME & No. **PECANPOUR #1** CAMP **NONCAMP**

COMPANY **FORAGAZ INC.**

RIG MANAGER **BERTHAUD HAZEL** RIG No. **2**

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		B-HAZEL	11	
DERRICKMAN		S-DISROSIK	11	
MOTORMAN		S-P-LUBISQUE	11	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		B-HAZEL	12	
DERRICKMAN		S-DISROSIK	12	
MOTORMAN		S-P-LUBISQUE	12	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

DAILY DRILLING REPORT REPORT No.

LEASE: BECANCOUR WELL No. 1 WELL NUMBER WATER DEPTH DATE 2001-06-28

OPERATOR: JUNEX CONTRACTOR: FORAGAZ INC. RIG No. 1

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Stephen... SIGNATURE OF CONTRACTOR'S RIG MANAGER: Bertrand Habel

D.P. SIZE 3 1/2" GRADE E TOOL JT. O.D. 4 1/4" TYPE THREAD 3/4" STRING No. 7 PUMP No. 7 PUMP MANUFACTURER RETLEHEM TYPE WUREFX STROKE LENGTH 254

Table with columns: No., DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for 1. BIT, 2. DRILL ACTUAL, 3. REAMING, 4. CORING, etc.

Table with columns: No., DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for 1. BIT, 2. DRILL ACTUAL, 3. REAMING, etc.

APPROVAL PENDING CAQDC 1977 JANUARY

Metric expressions: mass density, pump-stroke length, weight on bit, linear mass, viscosity, etc.

E.C.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (3) H.S. Signs Posted

Table with columns: LEGAL LAND DESCRIPTION, WIRE LINE RECORD, DRILLING CREW PAYROLL DATA

Table with columns: METRES DRILLED, DEVIATION RECORD

Table with columns: TIME LOG, METRES DRILLED, DEVIATION RECORD

Table with columns: METRES DRILLED, DEVIATION RECORD

APPROVAL PENDING CAQDC 1977 JANUARY

OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT No.

LEASE PENNSYLVANIA	WELL No. 1	WELL NUMBER	WATER DEPTH 201.66	DATE 2/24/80
OPERATOR SONEX	CONTRACTOR CRASBIZ INC.		RIG No. 1	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Steve A. ...</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>...</i>		

TIME DISTRIBUTION - HOURS	No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1. RIG UP AND TEAR DOWN				
2. DRILL ACTUAL	2	1 BIT 1 0.23m	BIT No. 2 SIZE 8 1/2"	DENSITY 1.07 PRESSURE GRADIENT
3. REAMING		1 STB 4 1/2 OD 1.10m	MFG.	VISCOSITY
4. CORING		1 D.C. ID 6" OD 4.20m	TYPE 1144141	PV mPa.s YP mPa.s
5. CONDITION MUD & CIRCULATE		1 STB 6 1/2 OD 1.19m	JETS mm	17.40
6. TRIPS		1 D.C. ID 6" OD 4.32m	SER No. 454922	
7. LUBRICATE RIG		1 STB 4 1/2 OD 1.19m	DEPTH OUT	
8. REPAIR RIG	10	2 6" 18.3"	DEPTH IN	
9. CUT OFF DRILLING LINE		1 X.O. 0.18	TOTAL METRES DRILLED	
10. DEVIATION SURVEY		12 4 7/8" 11.09	TOTAL HRS. RUN	
11. WIRE LINE LOGS			COND. 18" T/GAGE	
12. RUN CASING & CEMENT		STANDS DP	FLOW RATE m/min	
13. WAIT ON CEMENT		28 SINGLES DP 365.83	PRESSURE DROP kPa	
14. NIPPLE UP B.O.P.				
15. TEST B.O.P.		TOTAL 512.68		
16. DRILL STEM TEST		(FORCE) WT. OF STRING daN		
17. PLUG BACK		REMARKS		
18. SQUEEZE CEMENT				
19. FISHING				
20. DIR. WORK	4			
21.				
22.				
23.				

COMPLETION	No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
A. PERFRTRN				
B. TBG TRIPS				
C. TREATING				
D. SWABBING				
E. TESTING				
F. ADDITNL				
G.				
TOTALS	9	12		
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				
HRS. W/CONT'L D.P.				
HRS. W/OPR. D.P.				
HRS. W/O D.P.				
HRS. STANDBY				
TOTAL DAY WORK				
No. OF DAYS FROM SPUD				
CUMULATIVE ROTATING HRS.				
TOTAL MUD COST				

E.I.C.C.
 (1) Daily Walk Around Inspection
 (2) Detailed Inspection-Weekly (using check list)
 (3) H&S Signs Posted (if required)

OPR. Initial _____
 H.M. Initial _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month) Initial _____
 (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) Initial _____
 (3) Mast Inspected Before Raising or Lowering Initial _____

LEGAL LAND DESCRIPTION	WIRE LINE RECORD
LAST CASING TUBING OR LINER	REEL No.
OUTSIDE DIAMETER	SIZE
INSIDE DIAMETER	No. LINES
MAKE	METRES SLIPPED
kg/m	
CE	
No. JOINTS	
TOTAL LENGTH	
FKB. TO CSG. HD.	
SET AT	
	METRES CUT OFF
	PRESENT LENGTH
	MEGAJOULES SINCE LAST CUT
	CUMULATIVE MEGAJOULES

METRES DRILLED	FORMATION
FROM TO	DR. D RM. R CORE. C
200 200	200.6 FORMATION (SHOW CORE RECOVERY)
	ROTARY RPM
	(FORCE) WT. ON BIT daN
	PUMP PRESS
	LINE SIZE
	STROKES per min
	LINE SIZE
	STROKES per min
	METHOD RUN
	SOL. S. PAPER. P. COMB. C

DEVIATION RECORD								
DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	TAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
FROM TO				
7:16 9:21	21	21	21st & 2nd part King Repair fishing	

METRES DRILLED	FORMATION
FROM TO	DR. D RM. R CORE. C
500 510	500.6 FORMATION (SHOW CORE RECOVERY)
	ROTARY RPM
	(FORCE) WT. ON BIT daN
	PUMP PRESS
	LINE SIZE
	STROKES per min
	LINE SIZE
	STROKES per min
	METHOD RUN
	SOL. S. PAPER. P. COMB. C

DEVIATION RECORD								
DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	TAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
FROM TO				
7:16 11:00	10	8	2nd part King Repair fishing	
11:00 11:00	2	2		

DRILLING CREW PAYROLL DATA

DATE **2/24/80** PROVINCE **ON**

WELL NAME & No. **PENNSYLVANIA 1** CAMP **NONCAMP**

COMPANY **CRASBIZ INC.**

RIG MANAGER **...** RIG No. **1**

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		J. J. ...	9		
DERRICKMAN		S. P. ...	9		
MOTORMAN					
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINER		B. ...	16		
DERRICKMAN (2)					

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. ...	12		
DERRICKMAN		J. ...	12		
MOTORMAN		J. ...	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINER					
DERRICKMAN (2)					

DAILY DRILLING REPORT - REPORT No.

LEASE BRANCOOR	WELL No. 1	WELL NUMBER	WATER DEPTH 201 07 01 02	DATE 201 07 01 02
OPERATOR SONEX	CONTRACTOR FORAGAZ INC.	RIG No. 1		
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Steph. Hunt</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>Bruno Habel</i>		

TIME DISTRIBUTION - HOURS		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE	OPERATION	FIRST TOUR	SECOND TOUR	BIT No.	SIZE	TIME	DENSITY kg/m ³
1	RIG UP AND TEAR DOWN			1	0.23	15:00	1.02
2	DRILL ACTUAL	11:30	8	1	1.10		
3	REAMING			1	0.23		
4	CORING			1	1.10		
5	CONDITION MUD & CIRCULATE			1	1.19		
6	TRIPS			1	0.23		
7	LUBRICATE RIG			1	1.19		
8	REPAIR RIG			2	0.23		
9	CUT OFF DRILLING LINE			1	0.16		
10	DEVIATION SURVEY	30		1	11.09		
11	WIRE LINE LOGS						
12	RUN CASING & CEMENT			40	38.71		
13	WAIT ON CEMENT						
14	NIPPLE UP B.O.P.						
15	TEST R.O.P.						
16	DRILL STEM TEST						
17	PLUG BACK						
18	SQUEEZE CEMENT						
19	FISHING						
20	DIRL WORK						
21							
22							
23							

COMPLETION		No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE	OPERATION	FIRST TOUR	SECOND TOUR	BIT No.	SIZE	TIME	DENSITY kg/m ³
A	PERF. B.T.H.N.			1	0.23	11:00	1.02
B	TRO TRIPS			1	1.10		
C	TREATING			1	0.23		
D	SWABBING			1	1.10		
E	TESTING			1	1.19		
F	ADDITNL.			1	0.23		
G				1	1.19		
TOTALS		12:30	8	2	0.18		
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				12	11.09		
HRS. W/CONTR. D.P.				41	38.69		
HRS. W/OPR. D.P.							
HRS. W/OPR.							
HRS. STANDBY							
TOTAL DAY WORK							
No. OF DAYS FROM SPUD							
CUMULATIVE ROTATING HRS							
TOTAL MUD COST							

- F.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) H&S Signs Posted (if required)

LEGAL LAND DESCRIPTION	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GOE	No. JOINTS	TOTAL LENGTH	RIG. TO CSG. HD.	SET AT
	74	62	FRU			11	19.0		10.5

METRES DRILLED	DR. D	DR. R	DR. C	FORMATION	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR STROKES SIZE per min	LINEAR STROKES SIZE per min	METHOD RUN
510 532				01	72	74	50	54		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	27.0	4.4	74			

TIME LOG	FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
	7:00	15:00	8:00	2	Drill	
	15:00	15:30	30	10	Deviation Survey	
	17:30	19:00	3:30	2	Drill	

METRES DRILLED	DR. D	DR. R	DR. C	FORMATION	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR STROKES SIZE per min	LINEAR STROKES SIZE per min	METHOD RUN
532 545				2	70	74	50	54		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
	8:00	16:00	8:00	2	DRILL	

- O.P.R. (1) Rig Site Health and Safety Meeting (one meeting/crew/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) (3) Mast Inspected Before Raising or Lowering

WIRE LINE RECORD	REEL No.	SIZE	No. LINES	METRES SLIPPED

METRES DRILLED	DR. D	DR. R	DR. C	FORMATION	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR STROKES SIZE per min	LINEAR STROKES SIZE per min	METHOD RUN

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS

METRES DRILLED	DR. D	DR. R	DR. C	FORMATION	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR STROKES SIZE per min	LINEAR STROKES SIZE per min	METHOD RUN

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	FROM	TO	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS

DRILLING CREW PAYROLL DATA

DATE: 201 07 01 02

WELL NAME & No.: BRANCOOR 1

COMPANY: FORAGAZ INC.

RIG MANAGER: BRUNO HABEL

No. PROVINCE: ONTARIO

CAMP: NONCAMP

RIG No.: 1

FIRST TOUR 00:00 TO 12:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B. HABEL	12			
DERRICKMAN		S. DESROSIERS	12			
MOTORMAN		S. P. FUSQUE	12			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

SECOND TOUR 12:00 TO 24:00					INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
DRILLER		B. HABEL	8			
DERRICKMAN		J. DESROSIERS	8			
MOTORMAN		S. P. FUSQUE	8			
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASEMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

DAILY DRILLING REPORT REPORT No.

LEASE: **DECAPOUR** WELL No. **1** WELL NUMBER: **2001-07-038-01** WATER DEPTH: **2001** DATE: **07-03-01**

OPERATOR: **SONEX** CONTRACTOR: **FORPENT INC.** RIG No. **1**

SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S RIG MANAGER: *[Signature]*

D.P. SIZE	kg/m	GRADE	TOOL IT O.D.	TYPE/THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2"	19.26	E	4 1/4"	3 1/2"	1	1	DETTLEHARDT	DUPLEX	251

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1. RIG UP AND TEAR DOWN		2	BIT 2 0.23 m	BIT No. 2	TIME 9.00 16.00
2. DRILL ACTUAL	11:30 3:35	1	STB 4 1/2" ID 1.10 m	SIZE 2 1/2"	DENSITY 1.03 1.03
3. REAMING		1	D.C. ID 6" OD 4.20 m	TYPE M44 NPS	PRESSURE GRADIENT 27 27
4. CORING		1	STB 4 1/2" ID 1.19 m	JETS mm 10	VISCOSITY 27 27
5. CONDITION MUD & CIRCULATE	0.15	1	D.C. ID 6" OD 9.32 m	SER No. 454922/5780	PV mPa.s 1
6. TRIPS	7.00	1	STB 4 1/2" ID 1.19 m	DEPTH OUT 556	Y.P. mPa.s 1
7. LUBRICATE RIG		1	2 6" 18.30	DEPTH IN 456	GEL STR. Pa 1
8. REPAIR RIG		1	2 6" 18.30	DEPTH IN 456	WATER LOSS cm ³ 1
9. DRILLING LINE		1	2 6" 18.30	DEPTH IN 456	pH 1
10. DEVIATION SURVEY	3.00	12	2 6" 18.30	DEPTH IN 456	SOLIDS % 1
11. WIRE LINE LOGS		12	2 6" 18.30	DEPTH IN 456	
12. RUN CASING & CEMENT		12	2 6" 18.30	DEPTH IN 456	
13. WAIT ON CEMENT		12	2 6" 18.30	DEPTH IN 456	
14. NIPPLE UP B.O.P.		12	2 6" 18.30	DEPTH IN 456	
15. TEST B.O.P.		12	2 6" 18.30	DEPTH IN 456	
16. DRILL STEM TEST		12	2 6" 18.30	DEPTH IN 456	
17. PLUG BACK		12	2 6" 18.30	DEPTH IN 456	
18. SQUEEZE CEMENT		12	2 6" 18.30	DEPTH IN 456	
19. FISHING		12	2 6" 18.30	DEPTH IN 456	
20. DIR. WORK		12	2 6" 18.30	DEPTH IN 456	
21.		12	2 6" 18.30	DEPTH IN 456	
22.		12	2 6" 18.30	DEPTH IN 456	
23.		12	2 6" 18.30	DEPTH IN 456	

COMPLETION		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
A. PERFRTRN		2	BIT 2 0.23 m	BIT No. 2	TIME 16.00 18.00
B. TBG TRIPS		1	STB 4 1/2" ID 1.10 m	SIZE 2 1/2"	DENSITY 1.03 1.03
C. TREATING		1	D.C. ID 6" OD 4.20 m	TYPE M44 NPS-84	PRESSURE GRADIENT 27 27
D. SWABBING		1	STB 4 1/2" ID 1.19 m	JETS mm 10	VISCOSITY 27 27
E. TESTING		1	D.C. ID 6" OD 9.32 m	SER No. 454922/5780	PV mPa.s 1
F. ADDITVL		1	STB 4 1/2" ID 1.19 m	DEPTH OUT 556	Y.P. mPa.s 1
G.		1	2 6" 18.30	DEPTH IN 456	GEL STR. Pa 1
TOTALS	17.12	12	2 6" 18.30	DEPTH IN 456	WATER LOSS cm ³ 1
DAY WORK TIME SUMMARY (OFFICE USE ONLY)		12	2 6" 18.30	DEPTH IN 456	pH 1
HRS. W/CONTR. D.P.		12	2 6" 18.30	DEPTH IN 456	SOLIDS % 1
HRS. W/OPL. D.P.		12	2 6" 18.30	DEPTH IN 456	
HRS. W/OVP		12	2 6" 18.30	DEPTH IN 456	
HRS. STANDBY		12	2 6" 18.30	DEPTH IN 456	
TOTAL DAY WORK		12	2 6" 18.30	DEPTH IN 456	
No. OF DAYS FROM SPUD		12	2 6" 18.30	DEPTH IN 456	
CUMULATIVE ROTATING HRS.		12	2 6" 18.30	DEPTH IN 456	
TOTAL MUD COST		12	2 6" 18.30	DEPTH IN 456	

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

OUTSIDE DIAMETER

INSIDE DIAMETER

MAKE

kg/m

GRV. P/L

No. JOINTS

TOTAL LENGTH

RKS. TO CSQ. HD.

SET AT

METRES OUT OFF

PRESENT LENGTH

MEGAJOULES SINCE LAST CUT

CUMULATIVE MEGAJOULES

FROM	TO	DR. D RM. R CORE. C	CORE No.
315	556		

DEPTH	DEV.	DIRECTION
547	47	

TIME LOG	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7.00 9.00	2	2	Drill
9.00 9.30	30	10	Deviation Survey
9.30 11.00	77	2	Drill

FROM	TO	DR. D RM. R CORE. C	CORE No.
556	560		

DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7.00 8.00	100	8	REPARER MOTEUR SHUT-OFF
8.00 15.00	700	6	ENLEVE BOP P.O.O.H
15.00 15.13	013	5	CIRCULE
15.13 19.00	347	2	DRILL

FROM	TO	DR. D RM. R CORE. C	CORE No.

WIRE LINE RECORD

REEL No.

SIZE

No. LINES

METRES SLIPPED

WIRE LINE RECORD

REEL No.

SIZE

No. LINES

METRES SLIPPED

WIRE LINE RECORD

REEL No.

SIZE

No. LINES

METRES SLIPPED

FROM	TO	DR. D RM. R CORE. C	CORE No.

DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	DR. D RM. R CORE. C	CORE No.

DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	DR. D RM. R CORE. C	CORE No.

DRILLING CREW PAYROLL DATA

DATE: 2001-07-03

WELL NAME & No. DECAPOUR 1

COMPANY FORPENT INC.

RIG MANAGER BERTRAND HALBEK

PROVINCE QUEBEC

CAMP NONCAMP

RIG No. 1

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B-HABEL	12		
DERRICKMAN		J-DEROSSIER	12		
MOTORMAN		J-P LESVESQUE	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B-HABEL	12		
DERRICKMAN		J-DEROSSIER	12		
MOTORMAN		J-P LESVESQUE	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

OPERATOR: JUNEJA CONTRACTOR: FRANCIS INC RIG No. 7
SIGNATURE OF OPERATOR'S REPRESENTATIVE: SIGNATURE OF CONTRACTOR'S RIG MANAGER:
D.P. SIZE: 1 1/2 GRADE: E TOOL JT. O.D.: 4 3/4 TYPE THREAD: 3/11 1/2 STRING No.: 2 PUMP No.: 1 PUMP MANUFACTURER: BETHLEHEM TYPE: DUPLOX STROKE LENGTH: 257

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (3) H&S Signs Posted
JPR. R.M. (1) Rig Site Health and Safety Meeting (2) C.A.O.D.C. Rig Safety Inspection Check List (3) Mast Inspected Before Raising or Lowering

LEGAL LAND DESCRIPTION: WIRE LINE RECORD: DRILLING CREW PAYROLL DATA: DATE: 2001 07 05 PROVINCE: QUEBEC
WELL NAME & No.: COMPANY: FRANCIS INC RIG MANAGER: RIG No.: 7

TIME DISTRIBUTION - HOURS: DE OPERATION & TEAR DOWN, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, DEVIATION SURVEY, WIRE LINE LOGS, RUN CASING & CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, FISHING, DIR. WORK

METRES DRILLED: FROM 560 TO 576 FORMATION: 2001 07 05
DEVIATION RECORD: TIME LOG: FROM 19:45 TO 20:00 CODE No. 2 DETAILS: DRILL

COMPLETION: A. PERF'RTN, B. TBG TRIPS, C. TREATING, D. SWABBING, E. TESTING, F. ADDIT'L, G., ALS, DAY WORK TIME SUMMARY, W/CONTR. D.P., W/OFR. D.P., W/O DP, STANDBY, AL DAY WORK, OF DAYS, 3M SPUD, JULATIVE, (ATING HRS., AL MUD COST

METRES DRILLED: FROM 576 TO 576 FORMATION: 2001 07 06
DEVIATION RECORD: TIME LOG: FROM 20:30 TO 20:45 CODE No. 2 DETAILS: DRILL

DAILY DRILLING REPORT REPORT No.

SE WELL No. WELL NUMBER WATER DEPTH DATE

ERATOR CONTRACTOR RIG No.

NATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

SIZE	kg/m	GRADE	TOOL JT O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
130	E	934	2 1/2	2 1/2	1	BETHELEN	DUPLO	299	

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) H/S Signs Posted (if required)

O.P.R. Initial _____ (1) Rig Site Health and Safety Meeting (one meeting/crew/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) (3) Mast Inspected Before Raising or Lowering

R.M. Initial _____

LEGAL LAND DESCRIPTION WIRE LINE RECORD REEL No.

OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GRADE	No. JOINTS	TOTAL LENGTH	RKB. TO CSS. HD.	SET AT	SIZE	No. LINES	METRES SUPPLIED
130	110	2 1/2	11	1443	105						

LAST CASING TUBING OR LINER METRES CUT OFF PRESENT LENGTH

MEGAJOULES SINCE LAST CUT CUMULATIVE MEGAJOULES

DRILLING CREW PAYROLL DATA No.

DATE PROVINCE

WELL NAME & No. CAMP NONCAMP

COMPANY RIG MANAGER RIG No.

ME DISTRIBUTION - HOURS			No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
OPERATION	FIRST TOUR	SECOND TOUR	BIT	SIZE	BIT No.	TIME	DENSITY	TIME
UP AND DOWN			4	23	4	10.9	103	10.9
ILL ACTUAL			STB RMR 4" OD	110	MFG	7 1/2	28	28
AMING			D.C. ID 6" OD	112	TYPE	534	28	28
RING			STB RMR 7" OD	117	JETS	mm	1	1
DITION MUD CIRCULATE			D.C. ID 6" OD	112	SER No.	5182-664	1	1
PS			STB RMR 7" OD	117	DEPTH OUT	598	1	1
BRICATE RIG			STB RMR 7" OD	117	DEPTH IN	556	1	1
PAIR RIG					DEPTH IN	556	1	1
T OFF LING LINE					DEPTH IN	556	1	1
VIATION SURVEY					DEPTH IN	556	1	1
TE LINE LOGS					DEPTH IN	556	1	1
Y CASING & CEMENT					DEPTH IN	556	1	1
IT ON CEMENT					DEPTH IN	556	1	1
*PLE UP B.O.P.					DEPTH IN	556	1	1
ST B.O.P.					DEPTH IN	556	1	1
ILL STEM TEST					DEPTH IN	556	1	1
JG BACK					DEPTH IN	556	1	1
UEEZE CEMENT					DEPTH IN	556	1	1
RING					DEPTH IN	556	1	1
1. WORK					DEPTH IN	556	1	1

FIRST TOUR

METRES DRILLED		DR. D R.M.R. CORE. C	CORE No.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No.	LINEAR SIZE	STROKES per min	PUMP No.	LINEAR SIZE	STROKES per min	METHOD RUN
FROM	TO													
596	608			2001 07 07	65	140	50	50						

DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
604		3'								

TIME LOG		ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
FROM	TO				
12:00	12:12	12	2	DRILL	
12:12	12:28	16	6	DRILL	
12:28	12:40	12	2	DRILL	

FIRST TOUR 00:00 TO 12:00					INJURY
CREW	SOC. INS. No.	NAME	HRS.	YES	N
DRILLER		R. HADZEL	12		
DERRICKMAN		J. DESBOISIER	12		
MOTORMAN		J.P. LESBROS	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

No. DRILLING ASSEMBLY (at end of tour)			BIT RECORD		MUD RECORD	
OPERATION	FIRST TOUR	SECOND TOUR	BIT	SIZE	BIT No.	TIME
A. PERFRTN			4	23	4	10.9
B. TBG TRIPS			STB RMR 4" OD	110	MFG	7 1/2
C. TREATING			D.C. ID 6" OD	112	TYPE	534
D. SWABBING			STB RMR 7" OD	117	JETS	mm
E. TESTING			D.C. ID 6" OD	112	SER No.	5182-664
F. ADDITNL			STB RMR 7" OD	117	DEPTH OUT	598
G.			STB RMR 7" OD	117	DEPTH IN	556
H.					DEPTH IN	556
I.					DEPTH IN	556
J.					DEPTH IN	556
K.					DEPTH IN	556
L.					DEPTH IN	556
M.					DEPTH IN	556
N.					DEPTH IN	556
O.					DEPTH IN	556
P.					DEPTH IN	556
Q.					DEPTH IN	556
R.					DEPTH IN	556
S.					DEPTH IN	556
T.					DEPTH IN	556
U.					DEPTH IN	556
V.					DEPTH IN	556
W.					DEPTH IN	556
X.					DEPTH IN	556
Y.					DEPTH IN	556
Z.					DEPTH IN	556

SECOND TOUR

METRES DRILLED		DR. D R.M.R. CORE. C	CORE No.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No.	LINEAR SIZE	STROKES per min	PUMP No.	LINEAR SIZE	STROKES per min	METHOD RUN
FROM	TO													
608	620			2001 07 08	65	140	50	50						

DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
620										

TIME LOG		ELAPSED TIME	CODE No.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	BOILER HOURS
FROM	TO				
12:00	12:06	6	2	DRILL	
12:06	12:22	16	6	DRILL	
12:22	12:34	12	2	DRILL	

SECOND TOUR 12:00 TO 24:00					INJURY
CREW	SOC. INS. No.	NAME	HRS.	YES	YES
DRILLER		R. HADZEL	12		
DERRICKMAN		J. DESBOISIER	12		
MOTORMAN		J.P. LESBROS	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

DAILY DRILLING REPORT REPORT NO. _____

EASE WELL No. _____ WELL NUMBER _____ WATER DEPTH _____ DATE _____

OPERATOR _____ CONTRACTOR _____ RIG No. _____

SIGNATURE OF OPERATOR'S REPRESENTATIVE _____ SIGNATURE OF CONTRACTOR'S RIG MANAGER _____

D.P. SIZE	kg/m	GRADE	TOOL JO.D.	TYPE	THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	DRILLING ASSEMBLY (at end of hour)		BIT RECORD		MUD RECORD	
				BIT	SIZE	TIME	DENSITY	PRESSURE GRADIENT	VISCOSITY
1.	RIG UP AND TEAR DOWN								
2.	DRILL ACTUAL								
3.	CORING								
4.	CONDITION MUD & CIRCULATE								
5.	TRIPS								
6.	LUBRICATE RIG								
7.	REPAIR RIG								
8.	CUT OFF DRILLING LINE								
9.	DEVIATION SURVEY								
10.	WIRE LINE LOGS								
11.	RUN CASING & CEMENT								
12.	WAIT ON CEMENT								
13.	NIPPLE UP B.O.P.								
14.	TEST B.O.P.								
15.	DRILL STEM TEST								
16.	PLUG BACK								
17.	SQUEEZE CEMENT								
18.	FISHING								
19.	D.R. WORK								
20.									

No.	DRILLING ASSEMBLY (at end of hour)	BIT RECORD		MUD RECORD	
		BIT No.	SIZE	TIME	DENSITY
1.	A. PERP PTH				
2.	B. TRG TRIPS				
3.	C. TREATING				
4.	D. SWABBING				
5.	E. TESTING				
6.	F. ADDITNL				
7.	G.				
TOTALS					
DAILY WORK TIME SUMMARY (OFFICE USE ONLY)					
HRS. W/OINT. D.P.					
HRS. W/OPT. D.P.					
HRS. W/OOP					
HRS. STANDBY					
TOTAL DAY WORK					
REMARKS					

LEGAL LAND DESCRIPTION	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GRADE	No. JOINTS	TOTAL LENGTH	RIG TO CSG. HD.	SET AT	METRES SUPPLIED	
										PRESENT LENGTH	MEGAFOILES SINCE LAST CUT

METRES DRILLED FROM	DR. D. R.M.R. CORE No.	CORE No.	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	PUMP PRESS.	PUMP LNER SIZE	PUMP LNER SIZE	PUMP STROKES per min	PUMP No.	PUMP No.	PUMP No.	METHOD RUN

DEVIATION RECORD FROM	TO	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	BOILER HOURS

METRES DRILLED FROM	TO	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	PUMP PRESS.	PUMP LNER SIZE	PUMP LNER SIZE	PUMP STROKES per min	PUMP No.	PUMP No.	PUMP No.	METHOD RUN

DEVIATION RECORD FROM	TO	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	BOILER HOURS

METRES DRILLED FROM	TO	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	PUMP PRESS.	PUMP LNER SIZE	PUMP LNER SIZE	PUMP STROKES per min	PUMP No.	PUMP No.	PUMP No.	METHOD RUN

DRILLING CREW PAYROLL DATA

DATE Year _____ Month _____ Day _____ PROVINCE _____

WELL NAME & No. _____ CAMP _____ NONCAMP _____

COMPANY _____ RIG No. _____

Crew	SOC. INS. No.	NAME	HRS.	INJURIE								
					DRILLER	DETRICKMAN	MOTORMAN	FLOORMAN	FLOORMAN	LEASMAN	CRANE SUPT.	MECHANIC

Crew	SOC. INS. No.	NAME	HRS.	INJURIE								
					DRILLER	DETRICKMAN	MOTORMAN	FLOORMAN	FLOORMAN	LEASMAN	CRANE SUPT.	MECHANIC

WIRE LINE RECORD

REEL No. _____ METRES SUPPLIED _____

SIZE _____ PRESENT LENGTH _____

MEGAFOILES SINCE LAST CUT _____

CUMULATIVE METERS/FOILES _____

FORMATION (SHOW CORE RECOVERY)

FORMATION (SHOW CORE RECOVERY)

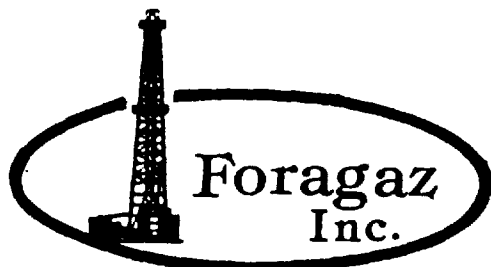
FORMATION (SHOW CORE RECOVERY)

FORMATION (SHOW CORE RECOVERY)

FORMATION (SHOW CORE RECOVERY)

FORMATION (SHOW CORE RECOVERY)

payé par avance
le 12-11-2001



CLIENT: Junex Inc.

DATE: 5 novembre 2001

PROJET: Travaux au puits Junex Bécancour N01, pendant la période du 16 juillet
au 10 septembre 2001.
Re: Opération de forage

FACTURE: No. 231

#TPS: R121192546
#TVQ: 1003638461

ITEM 1

Démobilisation de la foreuse à la fin du contrat,
du 7-au 10 septembre 2001, de Bécancour à Fortierville.
Montant forfaitaire

ITEM 2

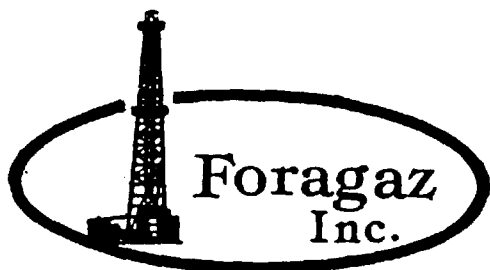
Foreuse en opération :

DATE	DESCRIPTION DES TRAVAUX	HEURES FOREUSE
Du 16 juillet au 1 août 01	Fabrication d'une nouvelle tête de rotation. Travail au puits Bécancour No 2	-----
2 août 01	Foré jusqu'à 843 m.	12
3 août 01	Foré jusqu'à 855 m.	12
4 août 01	Foré jusqu'à 858 m.	9
6 août 01	Démonté les BOP. Prise de levés orientés.	12
7 août 01	Terminé la prise de levés. Préparation du "mud motor"	12



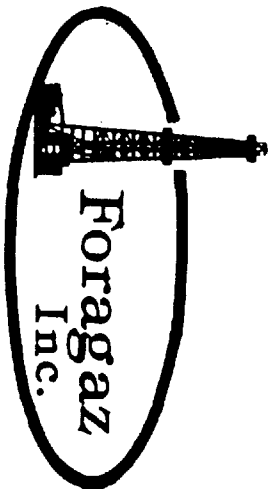
- 2 -

DATE	DESCRIPTION DES TRAVAUX	HEURES FOREUSE
8 août 01	Entré dans le trou et ressorti le "mud motor"	12
9 août 01	Terminé la sortie du trou et réparé le "mud motor"	12.5
10 août 01	Rentré au fond du trou. Train de tiges coincé.	13.5
11 août 01	Fabrication d'un marteau. Essai de tir pour décoincer l'outil.	12.5
12 août 01	Essai pour sortir le train de tiges. Infructueux.	5
13 août 01	Foreuse en attente.	-
14 août 01	Foreuse en attente.	-
15 août 01	Foreuse en attente.	-
16 août 01	Foreuse en attente.	-
17 août 01	Réception du coffrage de 5 1/2". Entré le coffrage jusqu'à 300 m.	12
18 août 01	Entré le coffrage à 775 m. Mélange de la boue et circulation.	12
19 août 01	Circulation et sortie du trou.	12
20 août 01	Terminé la sortie, 5 sections manquantes.	12
21 août 01	Terminé la mise à terre du coffrage. Installation d'un marteau pneumatique.	12.5
22 août 01	Terminé l'essai avec le marteau et attente de Computalog.	10.5
23 août 01	Attente de Computalog.	-
24 août 01	Effectué le "free point" à 769 m. : réussi.	10.5



- 3 -

DATE	DESCRIPTION DES TRAVAUX	HEURES FOREUSE	TOTAL
25 août 01	Entré dans le trou avec le "fishing tool".	12	
26 août 01	Ré-entré avec le "fishing tool". Rec : 1 section 5 1/2".	9	
27 août 01	Préparatifs pour entrer avec le coffrage de 7".	12	
28 août 01	Rentré avec l'assemblage jusqu'à 792,09 m.	12	
29 août 01	Nettoyage jusqu'au fond.	12	
30 août 01	Descendu au fond. 25 m de retombées. Circulation.	12	
31 août 01	Terminé la sortie du trou. Installation de l'outil de raccord. Récupéré l'assemblage, à l'exception du coffrage de 7". Arrêt des opérations jusqu'au 5 septembre.	12	
5 sept 01	Terminé la sortie du "mud motor". Rentré dans le trou et rencontré un effondrement à 668 m.	11	
6 sept 01	Circulation. Alésé de 668 m à 672 m. Ressorti le train de tiges du trou.	11.5	



- 4 -

ITEM 3

Service par Foragaz :

- 1 - Pelle Kubota Kh-28
1,5 mois * 3000 \$/mois
- 2 - Roulotte de chantier
1,5 mois * 450 \$/mois
- 3 - Location et réparation de 2 "fishing tools"
- 4 - Véhicule + cellulaire + essence
1,5 mois * 850 \$/mois
- 5 - Service de géologie de sonde, 1 500\$/mois
à temps partiel

Total item

ITEM 4

Autres services :

- 1 - Alberta Instrument #R9574
- 2- Marlex Energy #R12900
- 3 - Marlex Energy #R13210
- 4 - Location Bécancour #021217
- 5 - Location Bécancour #021368
- 6 - Location Bécancour #021441
- 7 - H.M. Métal #11887
- 8 - H.M. Métal #11977
- 9 - Hydrexcel #103231
- 10 - Hydrexcel #103289
- 11 - Reimer #597
- 12 - Frank M.O'Dowd #01-0188552-00
- 13 - United Parcel Services, 9 juillet 01

Total item

DAILY DRILLING REPORT REPORT No.

LEASE	WELL No.	WELL NUMBER	WATER DEPTH	DATE
OPERATOR		CONTRACTOR		
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S RIG MANAGER		
D.P. SIZE	GRADE	TOOL JT O.D.	TYPE THREAD	STRING No.
PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (Using check list) (3) H.S Signs Posted (if required)

OPR Initial _____ (1) Rig Site Health and Safety Meeting (one meeting/crew/month) Initial _____ (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) Initial _____ (3) Mast Inspected Before Raising or Lowering Initial _____

R.M. Initial _____

TIME DISTRIBUTION - HOURS				No.		DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	BIT No.	SIZE	TIME	DENSITY kg/m ³	PRESSURE GRADIENT	PV mPa	YP Pa
1	RIG UP AND TEAR DOWN			STB RMR OD	m	MFG.					
2	DRILL ACTUAL			D.C. ID OD	m	TYPE					
3	REAMING			STB RMR OD	m	JETS mm					
4	CORING			D.C. ID OD	m	SER No.					
5	CONDITION MUD & CIRCULATE			STB RMR OD	m	DEPTH OUT					
6	TRIPS			D.C. ID OD	m	DEPTH IN					
7	LUBRICATE RIG			STB RMR OD	m	TOTAL METRES DRILLED					
8	REPAIR RIG			STB RMR OD	m	TOTAL HRS. RUN					
9	CUT OFF DRILLING LINE			STB RMR OD	m	COND. 1/8" TB/GAGE					
10	DEVIATION SURVEY			STB RMR OD	m	FLOW RATE m ³ /min					
11	WIRE LINE LOGS			STB RMR OD	m	PRESSURE DROP kPa					
12	RUN CASING & CEMENT			STB RMR OD	m	DEPTH OUT					
13	WAIT ON CEMENT			STB RMR OD	m	DEPTH IN					
14	NIPPLE UP B.O.P.			STB RMR OD	m	TOTAL METRES DRILLED					
15	TEST B.O.P.			STB RMR OD	m	TOTAL HRS. RUN					
16	DRILL STEM TEST			STB RMR OD	m	COND. 1/8" TB/GAGE					
17	PLUG BACK			STB RMR OD	m	FLOW RATE m ³ /min					
18	SQUEEZE CEMENT			STB RMR OD	m	PRESSURE DROP kPa					
19	FISHING			STB RMR OD	m	DEPTH OUT					
20	DIR. WORK			STB RMR OD	m	DEPTH IN					
21				STB RMR OD	m	TOTAL METRES DRILLED					
22				STB RMR OD	m	TOTAL HRS. RUN					
23				STB RMR OD	m	COND. 1/8" TB/GAGE					

LEGAL LAND DESCRIPTION										WIRE LINE RECORD					DRILLING CREW PAYROLL DATA					
LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GRADE	No. JOINTS	TOTAL LENGTH	RIBS TO CSG. HD.	SET AT	SIZE	No. LINES	METRES SLIPPED	DATE	PROVINCE	WELL NAME & No.	CAMP	NONCAMP	COMPANY	RIG MANAGER	RIG No.
										METRES CUT OFF	PRESENT LENGTH									

METRES DRILLED		DR. D. R.M.R. CORE. C.	CORE No.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINE SIZE	STROKES per min	LINE SIZE	STROKES per min	METHOD RUN	FIRST TOUR 00:00 TO 12:00						
FROM	TO												CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
				2001 07 11									DRILLER						
													DERRICKMAN						
													MOTORMAN						
													FLOORMAN						
													FLOORMAN						
													FLOORMAN						
													LEASEMAN						
													CRANE SUPT.						
													MECHANIC						
													WELDER						
													ROUSTABOUT						
													ROUSTABOUT						
													TRAINEE						
													DERRICKMAN (2)						

COMPLETION				No.		DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
				BIT	BIT No.	SIZE	TIME	DENSITY kg/m ³	PRESSURE GRADIENT	PV mPa	YP Pa
A.	PERFRTN			STB RMR OD	m	MFG.					
B.	TBG TRIPS			D.C. ID OD	m	TYPE					
C.	TREATING			STB RMR OD	m	JETS mm					
D.	SWABBING			D.C. ID OD	m	SER No.					
E.	TESTING			STB RMR OD	m	DEPTH OUT					
F.	ADDIT'L			D.C. ID OD	m	DEPTH IN					
G.				STB RMR OD	m	TOTAL METRES DRILLED					
TOTALS				STB RMR OD	m	TOTAL HRS. RUN					
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				STB RMR OD	m	COND. 1/8" TB/GAGE					
HRS.	W/CONTR. D.P.			STB RMR OD	m	FLOW RATE m ³ /min					
HRS.	W/OPR. D.P.			STB RMR OD	m	PRESSURE DROP kPa					
HRS.	W/ODP			STB RMR OD	m	DEPTH OUT					
HRS.	STANDBY			STB RMR OD	m	DEPTH IN					
TOTAL DAY WORK				STB RMR OD	m	TOTAL METRES DRILLED					
No. OF DAYS FROM SPUD				STB RMR OD	m	TOTAL HRS. RUN					
CUMULATIVE ROTATING HRS.				STB RMR OD	m	COND. 1/8" TB/GAGE					
TOTAL MUD COST				STB RMR OD	m	FLOW RATE m ³ /min					

METRES DRILLED		DR. D. R.M.R. CORE. C.	CORE No.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINE SIZE	STROKES per min	LINE SIZE	STROKES per min	METHOD RUN	SECOND TOUR 12:00 TO 24:00						
FROM	TO												CREW	SOC. INS. No.	NAME	HRS.	YES	NO	
				2001 07 12									DRILLER						
													DERRICKMAN						
													MOTORMAN						
													FLOORMAN						
													FLOORMAN						
													FLOORMAN						
													LEASEMAN						
													CRANE SUPT.						
													MECHANIC						
													WELDER						
													ROUSTABOUT						
													ROUSTABOUT						
													TRAINEE						
													DERRICKMAN (2)						

LLING REPORT FORM

DAILY DRILLING REPORT REPORT No.

LEASE	WELL No.	WELL NUMBER	WATER DEPTH	DATE
OPERATOR		CONTRACTOR		Yr. Mo. Day RIG No.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S RIG MANAGER		

E.R.C.B. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (Lusing check list) (3) H.S Signs Posted (if required)

OPR. Initial _____ (1) Rig Site Health and Safety Meeting (one meeting/crew/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) (3) Mast Inspected Before Raising or Lowering

R.M. Initial _____

TIME DISTRIBUTION - HOURS				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD			MUD RECORD		
CODE	OPERATION	FIRST TOUR	SECOND TOUR	BIT	BIT No.	SIZE	DENSITY kg/m ³	TIME	TIME	DENSITY kg/m ³	TIME
1	RIG UP AND TEAR DOWN										
2	DRILL ACTUAL			STB RMR OD		MFG.	PRESSURE GRADIENT				
3	REAMING			D.C. ID		TYPE	VISCOSITY				
4	CORING			STB RMR OD		JETS mm	PV mPas YP Pa				
5	CONDITION MUD & CIRCULATE			D.C. ID		SER No.	GEL STR. Pa				
6	TRIPS			STB RMR OD		DEPTH OUT	WATER LOSS cm ³				
7	LUBRICATE RIG					DEPTH IN	pH				
8	REPAIR RIG					TOTAL METRES DRILLED	SOLIDS %				
9	CUT OFF DRILLING LINE					TOTAL HRS. RUN					
10	DEVIATION SURVEY					COND. 1/8" TB/GAGE					
11	WIRE LINE LOGS					FLOW RATE m ³ /min					
12	RUN CASING & CEMENT			STANDS DP		PRESSURE DROP MPa					
13	WAIT ON CEMENT			SINGLES DP							
14	NIPPLE UP B.O.P.			KELLY DOWN							
15	TEST B.O.P.			TOTAL							
16	DRILL STEM TEST			(FORCE) WT. OF STRING							
17	PLUG BACK			REMARKS							
18	SQUEEZE CEMENT										
19	FISHING										
20	DIR. WORK										
21											
22											
23											

LEGAL LAND DESCRIPTION										WIRE LINE RECORD			DRILLING CREW PAYROLL DATA								
LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m	GRADE	No. JOINTS	TOTAL LENGTH	RIGS. TO CSG. HO.	SET AT	SIZE	No. LINES	METRES SUPPLIED	DATE	PROVINCE	WELL NAME & No.	CAMP	NONCAMP	COMPANY	RIG MANAGER	RIG No.	

METRES DRILLED		D.F.L. D. R.M.R. CORE. C		CORE No.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		(FORCE) WT. ON BIT daN		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO																		

DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO								

FIRST TOUR 00:00 TO 12:00					INJURIE	
CREW	SOC. INS. No.	NAME	HRS.	YES	N	
DRILLER						
DERRICKMAN						
MOTORMAN						
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASERMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

COMPLETION				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD			MUD RECORD		
CODE	OPERATION	FIRST TOUR	SECOND TOUR	BIT	BIT No.	SIZE	DENSITY kg/m ³	TIME	TIME	DENSITY kg/m ³	TIME
A	PERF. TRIP										
B	T.B.G. TRIPS			STB RMR OD		MFG.	PRESSURE GRADIENT				
C	TREATING			D.C. ID		TYPE	VISCOSITY				
D	SWABBING			STB RMR OD		JETS mm	PV mPas YP Pa				
E	TESTING			D.C. ID		SER No.	GEL STR. Pa				
F	ADDITIONL			STB RMR OD		DEPTH OUT	WATER LOSS cm ³				
G						DEPTH IN	pH				
TOTALS						TOTAL METRES DRILLED	SOLIDS %				
DAY WORK TIME SUMMARY (OFFICE USE ONLY)						TOTAL HRS. RUN					
HRS. W/CONTR. D.P.						COND. 1/8" TB/GAGE					
HRS. W/OPR. D.P.						FLOW RATE m ³ /min					
HRS. W/ORDP						PRESSURE DROP MPa					
HRS. STANDBY											
TOTAL DAY WORK											
No. OF DAYS FROM START CUMULATIVE MOBILISING HRS.											
TOTAL MUD COST											

METRES DRILLED		D.F.L. D. R.M.R. CORE. C		CORE No.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		(FORCE) WT. ON BIT daN		PUMP PRESS		PUMP No.		PUMP No.		METHOD RUN	
FROM	TO																		

SECOND TOUR 12:00 TO 24:00					INJURIE	
CREW	SOC. INS. No.	NAME	HRS.	YES	N	
DRILLER						
DERRICKMAN						
MOTORMAN						
FLOORMAN						
FLOORMAN						
FLOORMAN						
LEASERMAN						
CRANE SUPT.						
MECHANIC						
WELDER						
ROUSTABOUT						
ROUSTABOUT						
TRAINEE						
DERRICKMAN (2)						

OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT No.

LEASE	WELL No.	WELL NUMBER	WATER DEPTH	DATE
OPERATOR		CONTRACTOR		Yr. Mo. Day RIG No.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S RIG MANAGER		

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	TIME	DENSITY kg/m ³
1.	RIG UP AND TEAR DOWN			STB RMR	OD	m	MFG.		PRESSURE GRADIENT
2.	DRILL ACTUAL			D.C. ID	OD	m	TYPE		VISCOSITY
3.	REAMING			STB RMR	OD	m	JETS mm		PV mPas YP Pa
4.	CORING			D.C. ID	OD	m	SER No.		GEL STR. Pa
5.	CONDITION MUD & CIRCULATE			STB RMR	OD	m	DEPTH OUT		WATER LOSS cm ³
6.	TRIPS			D.C. ID	OD	m	DEPTH IN		pH
7.	LUBRICATE RIG			STB RMR	OD	m	TOTAL METRES DRILLED		SOLIDS %
8.	REPAIR RIG			D.C. ID	OD	m	TOTAL HRS. RUN		
9.	CUT OFF DRILLING LINE			STB RMR	OD	m	COND. 10's TAGGAGE		MUD & CHEMICALS ADDED
10.	DEVIATION SURVEY			D.C. ID	OD	m	FLOW RATE m ³ /min		TYPE
11.	WIRE LINE LOSS			STB RMR	OD	m	KELLY DOWN		PRESSURE DROP kPa
12.	RUN CASING & CEMENT			D.C. ID	OD	m	TOTAL		
13.	WAIT ON CEMENT			STB RMR	OD	m	(FORCE) WT. OF STRING		dsN
14.	NIPPLE UP B.O.P.			D.C. ID	OD	m	REMARKS		
15.	NIPPLE UP B.O.P.			STB RMR	OD	m			
16.	DRILL STEM TEST			D.C. ID	OD	m			
17.	PLUG BACK			STB RMR	OD	m			
18.	SQUEEZE CEMENT			D.C. ID	OD	m			
19.	FISHING			STB RMR	OD	m			
20.	DIF. WORK			D.C. ID	OD	m			
21.				STB RMR	OD	m			
22.				D.C. ID	OD	m			
23.				STB RMR	OD	m			

COMPLETION				DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	TIME	DENSITY kg/m ³
A.	PERFRTN			STB RMR	OD	m	MFG.		PRESSURE GRADIENT
B.	TBG TRIPS			D.C. ID	OD	m	TYPE		VISCOSITY
C.	TREATING			STB RMR	OD	m	JETS mm		PV mPas YP Pa
D.	SWABBING			D.C. ID	OD	m	SER No.		GEL STR. Pa
E.	TESTING			STB RMR	OD	m	DEPTH OUT		WATER LOSS cm ³
F.	ADDITNL			D.C. ID	OD	m	DEPTH IN		pH
G.				STB RMR	OD	m	TOTAL METRES DRILLED		SOLIDS %
TOTALS				D.C. ID	OD	m	TOTAL HRS. RUN		
DAY WORK TIME SUMMARY (OFFICE USE ONLY)				STB RMR	OD	m	COND. 10's TAGGAGE		MUD & CHEMICALS ADDED
HRS. WCONTR. D.P.				D.C. ID	OD	m	FLOW RATE m ³ /min		TYPE
HRS. WOOPR. D.P.				STB RMR	OD	m	KELLY DOWN		PRESSURE DROP kPa
HRS. WOOP				D.C. ID	OD	m	TOTAL		
HRS. STANDBY				STB RMR	OD	m	(FORCE) WT. OF STRING		dsN
TOTAL DAY WORK				D.C. ID	OD	m	REMARKS		
No. OF DAYS FROM SPUD				STB RMR	OD	m			
CUMULATIVE ROTATING HRS.				D.C. ID	OD	m			
TOTAL MUD COST				STB RMR	OD	m			

E.R.C.B. (1) Daily Walk Around Inspection Initial _____ (2) Detailed Inspection-Weekly (using check list) Initial _____ (3) H.S. Signs Posted (if required) Initial _____

OPR. Initial _____

R.M. Initial _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month) Initial _____ (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month) Initial _____ (3) Mast Inspected Before Raising or Lowering Initial _____

LEGAL LAND DESCRIPTION										WIRE LINE RECORD			DRILLING CREW PAYROLL DATA		
LAST CASING TUBING OR LINER										REEL No.	No. LINES		METRES SLIPPED		
OUTSIDE DIAMETER										SIZE	METRES CUT OFF		DATE		
INSIDE DIAMETER										PRESENT LENGTH	Year Month Day				
MAKE										WELL NAME & No.					
GRADE										COMPANY					
No. JOINTS										RIG MANAGER					
TOTAL LENGTH										RIG No.					
RKB. TO CSG. HD.										PROVINCE					
SET AT										CAMP NONCAMP					
MEGAJOULES SINCE LAST CUT										No.					
CUMULATIVE MEGAJOULES															

METRES DRILLED		DR. D R.M. R CORE. C		CORE No.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		(FORCE) WT. ON BIT daN		PUMP PRESS		PUMP No. LINER SIZE		STROKES per min		PUMP No. LINER SIZE		STROKES per min		METHOD RUN SGL - S PAPER - P COMD - C	
FROM	TO																						

DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO								

METRES DRILLED		DR. D R.M. R CORE. C		CORE No.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		(FORCE) WT. ON BIT daN		PUMP PRESS		PUMP No. LINER SIZE		STROKES per min		PUMP No. LINER SIZE		STROKES per min		METHOD RUN SGL - S PAPER - P COMD - C	
FROM	TO																						

DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS		BOILER HOURS	
FROM	TO								

FIRST TOUR 00:00 TO 12:00					INJURIES		
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	YES	NO
DRILLER							
DERRICKMAN							
MOTORMAN							
FLOORMAN							
FLOORMAN							
FLOORMAN							
LEASEMAN							
CRANE SUPT.							
MECHANIC							
WELDER							
ROUSTABOUT							
ROUSTABOUT							
TRAINEE							
DERRICKMAN (2)							

SECOND TOUR 12:00 TO 24:00					INJURIES		
CREW	SOC. INS. No.	NAME	HRS.	YES	NO	YES	NO
DRILLER							
DERRICKMAN							
MOTORMAN							
FLOORMAN							
FLOORMAN							
FLOORMAN							
LEASEMAN							
CRANE SUPT.							
MECHANIC							
WELDER							
ROUSTABOUT							
ROUSTABOUT							
TRAINEE							
DERRICKMAN (2)							

DAILY DRILLING REPORT REPORT No.

LEASE BRANCOUR #1	WELL No. 1	WELL NUMBER	WATER DEPTH 2001-08-04	DATE 03
OPERATOR JUNEX		CONTRACTOR FORAGAZ INC.		RIG No. 1
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>[Signature]</i>		

D.P. SIZE	WGT	GRADE	TOOL JOINT	TYPE	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
3 1/2"	13.5	E	4.34"	3 1/2" I/A	1	1	BELLEHEM	DUPLEX	254

TIME DISTRIBUTION - HOURS		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1. RIG UP AND TEAR DOWN		1	BIT 1 0.23"	BIT No. 4 SIZE 8 1/8"	TIME DENSITY 1.19
2. DRILL ACTUAL	12 43	1	1 STB 110	MFG. 50611	PRESSURE GRADIENT
3. REAMING		1	D.C. 6 1/2" 9.20"	TYPE OPEN	VISCOSITY
4. CORING		1	STB 1.19	JETS mm	PV YP 1.50 / 1.50
5. CONDITION MUD & CIRCULATE		1	D.C. 6 1/2" 9.32"	SER No. 16165	GEL STR. Pa
6. TRIPS	3 30	1	STB 1.19	DEPTH OUT	WATER LOSS cc/ft
7. LUBRICATE RIG		2	STB 1.19	DEPTH IN 598	pH
8. REPAIR RIG		1	D.C. 6 1/2" 18.35"	DEPTH IN 598	SOLIDS %
9. CUT OFF DRILLING LINE		1	X.O. 0.18	TOTAL METRES DRILLED 257	
10. DEVIATION SURVEY		1	4 3/4" 111.09	TOTAL HRS. RUN 98.30	
11. WIRE LINE LOGS		1	STANDS DP 73.87	COND. WTS. TUBS/GAGE	MUD & CHEMICALS ADDED
12. RUN CASING & CEMENT		1	SINGLES DP 73.87	FLOW RATE (gpm)	TYPE AMT. kg
13. WAIT ON CEMENT		1	KELLY DOWN	PRESSURE DROP (kPa)	TYPE AMT. kg
14. NIPPLE UP B.O.P.		1	TOTAL 85.72		
15. TEST B.O.P.		1	(FORCE) WT. OF STRING		
16. DRILL STEM TEST		1	REMARKS		
17. PLUG BACK		1			
18. SQUEEZE CEMENT		1			
19. FISHING		1			
20. OIL WORK		1			
21.		1			
22.		1			
23.		1			

COMPLETION		No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
A. PERFORM		1	BIT 1 0.23"	BIT No. 4 SIZE 8 1/8"	TIME DENSITY 1.19
B. TSD TRIPS		1	STB 110	MFG. 50611	PRESSURE GRADIENT
C. TREATING		1	D.C. 6 1/2" 9.20"	TYPE OPEN	VISCOSITY
D. SWABING		1	STB 1.19	JETS mm	PV YP 1.50 / 1.50
E. TESTING		1	D.C. 6 1/2" 9.32"	SER No. 16165	GEL STR. Pa
F. ADDITIONAL		1	STB 1.19	DEPTH OUT	WATER LOSS cc/ft
G.		2	D.C. 6 1/2" 18.35"	DEPTH IN 598	pH
TOTALS	12 9	1	X.O. 0.18	TOTAL METRES DRILLED 260	SOLIDS %
(DAY WORK TIME SUMMARY (OFFICE USE ONLY))		1	4 3/4" 111.09	TOTAL HRS. RUN 103	
HRS. W/CONTROL D.P.		1	STANDS DP 73.24	COND. WTS. TUBS/GAGE	MUD & CHEMICALS ADDED
HRS. W/OPT. D.P.		1	SINGLES DP 73.24	FLOW RATE (gpm)	TYPE AMT. kg
HRS. W/OOP		1	KELLY DOWN	PRESSURE DROP (kPa)	TYPE AMT. kg
HRS. STANDBY		1	TOTAL 85.09		
TOTAL DAY WORK		1	(FORCE) WT. OF STRING		
No. OF DAYS FROM SPUD		1	REMARKS LOSE PIPE RAME A LITTLE BIT FOR SECURITY.		
CUMULATIVE ROTATING HRS.		1	Au debut (Bottom-up) 20 milles R.P.M.		
TOTAL MUD COST		1			

LEGEND
Metric expressions:
mud density = pump-stroke k weight on bit: linear mass = viscosity = sec

LEGAL LAND DESCRIPTION	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	WGT
LAST CASING TUBING OR LINER	9 5/8"	7 7/8"	FAU	

METRES DRILLED	DR. D. (M.M.)	DR. D. (IN.)	CORE No.
FROM 843	TO 855		

DEVIATION RECORD	DEPTH	DEV.

TIME LOG	ELAPSED TIME	CODE No.
FROM 0.00	TO 12.00	2

METRES DRILLED	DR. D. (M.M.)	DR. D. (IN.)	CORE No.
FROM 855	TO 858.20		

DEVIATION RECORD	DEPTH	DEV.

TIME LOG	ELAPSED TIME	CODE No.
FROM 7.00	TO 11.30	4.30
FROM 11.30	TO 12.30	1.00
FROM 12.30	TO 16.00	3.30

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
Drill Circulate 2 1/2" pipe down flow

All lengths expressed in metres to two decimal places
gram per cubic metre (kg/m³)
mm = millimetre (mm)
decanewton (daN)
icator will record decanewton gram per metre (kg/m)
3 per litre (s/L)

flow rate = cubic metre per minute (m³ / min)
pressure gradient = kilopascal per metre (kPa/m)
yield point = pascal (Pa)
plastic viscosity = millipascal second (mPa-s)
gel strength = pascal (Pa)
work completed by wire line = megajoule (MJ)
inside diameter and outside diameter = millimetre (mm)
pump pressure = kilopascal (kPa)

WIRE LINE RECORD	REEL No.	SIZE	NO. LINES	METRES SHIPPED
NO. JOINTS				
11				

FORMATION	ROTARY RPM	(FORCE) WT. ON BIT (daN)	PUMP PRESS.	LINER SIZE	STROKES per min	LINER SIZE	STROKES per min	METHOD RUN
FORMATION 2001-08-03	65	124						

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	(FORCE) WT. ON BIT (daN)	PUMP PRESS.	LINER SIZE	STROKES per min	LINER SIZE	STROKES per min	METHOD RUN
	65	112						

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG	ELAPSED TIME	CODE No.
FROM 7.00	TO 11.30	4.30
FROM 11.30	TO 12.30	1.00
FROM 12.30	TO 16.00	3.30

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
Drill Circulate 2 1/2" pipe down flow

DRILLING CREW PAYROLL DATA
DATE 2001-08-03-04
WELL NAME & No. BRANCOUR #1
COMPANY FORAGAZ INC.
RIG MANAGER BERTRAND HABEL RIG No. 1

FIRST TOUR 00:00 TO 12:00				INJ.
CREW	SOC. INS. No.	NAME	HRS.	YES
DRILLER		B. HABEL	12	
DERRICKMAN		J. DESROSIER	12	
MOTORMAN		J. PLEURSQUE	12	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

SECOND TOUR 12:00 TO 24:00				INJ.
CREW	SOC. INS. No.	NAME	HRS.	YES
DRILLER		B. HABEL	9	
DERRICKMAN		J. DESROSIER	9	
MOTORMAN		J. PLEURSQUE	9	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

No.

DAILY DRILLING REPORT REPORT No.

LEASE: BEAUCOUR #1, WELL No. 1, WELL NUMBER, WATER DEPTH: 2001-08-06, DATE: 06/07/01, OPERATOR: SUNEX, CONTRACTOR: FORAGAZ INC., SIGNATURE OF OPERATOR'S REPRESENTATIVE: Brenton Hall, SIGNATURE OF CONTRACTOR'S RIG MANAGER: Brenton Hall

TIME DISTRIBUTION - HOURS table with columns for CODE No., OPERATION, FIRST TOUR, SECOND TOUR. Includes rows for RIG UP AND TEAR DOWN, DRILL ACTUAL, REAMING, CORING, CONDITION MUD & CIRCULATE, TRIPS, LUBRICATE PIG, REPAIR PIG, CUT OFF DRILLING LINE, DEVIATION SURVEY, WIRE LINE LOSS, RUN CASING & CEMENT, WAIT ON CEMENT, NIPPLE UP & D.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, FISHING, O.A. WORK, and COMPLETION.

DRILLING ASSEMBLY, BIT RECORD, MUD RECORD table for the first tour. Includes columns for BIT No., SIZE, MFG., TYPE, JETS, WFT, D.C. ID, SER No., DEPTH OUT, DEPTH IN, TOTAL METRES DRILLED, SOLIDS %, and MUDDING & CHEMICALS ADDED.

COMPLETION table with columns A-FERTIN, TRIP TRIPS, TREATING, SWABBING, TESTING, ADDITVL, and TOTALS. Includes sub-sections for HRS. IN CONTR. D.P., HRS. WOPR. D.P., HRS. WOPR, HRS. STANDBY, and TOTAL MUD COST.

LEGEND: All lengths expressed in metres to two decimal places. Metric expressions: mud density = pump-stroke weight of string / linear mass = viscosity = sec.

E.C.C.B. (1) Daily Walk Around Inspection, (2) Detailed Inspection-Weekly (using check list), (3) H&S Signs Posted (if required).

LEGAL LAND DESCRIPTION table with columns for LAST CASING TUBING OR LINER, OUTSIDE DIAMETER, INSIDE DIAMETER, MAKE, kg/m.

METRES DRILLED table with columns FROM, TO, DR. D. IN. M., CORE C., CORE No.

DEVIATION RECORD table with columns DEPTH, DEV.

TIME LOG table with columns FROM, TO, ELAPSED TIME, CODE No. Includes handwritten entries: 7:00 9:00 2:00 6, 9:00 13:00 4:00 8, 13:00 19:00 6:00 10.

METRES DRILLED table for the second tour.

DEVIATION RECORD table for the second tour.

TIME LOG table for the second tour. Includes handwritten entries: 7:00 10:00 3:00 10, 10:00 13:00 3:00 8, 13:00 14:00 1:00 22, 14:00 19:00 5:00 2.

logram per cubic metre (kg/m³), gth = millimetre (mm), decanewton (daN), Scator will record decanewton gram per metre (kg/m), d per litre (s/L), flow rate = cubic metre per minute (m³/min), pressure gradient = kilopascal per metre (kPa/m), yield point = pascal (Pa), plastic viscosity = millipascal second (mPa+s), gel strength = pascal (Pa), work completed by wire line = megajoule (MJ), inside diameter and outside diameter = millimetre (mm), pump pressure = kilopascal (kPa).

WIRE LINE RECORD table with columns WIRE LINE RECORD, REEL No., METRES OUT OFF, PRESENT LENGTH, MEGAJOULES SINCE LAST CUT, CUMULATIVE MEGAJOULES.

FORMATION table with columns FORMATION, ROTARY RPM, FORCE/WT ON BIT, PUMP PRESS, LINER SIZE, STROKES per min, LINER SIZE, STROKES per min, METHOD RUN.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS: FINIR DESARTIR DU TROUS ENLEVER LES B.O.P. BEMANCHER (HEAD ROTARY) PREPARER POUR PRENDRE TEST DESCENDRE DANS LE TROU POUR PRENDRE LA POSITION D'ORIENTATION 2 FOIS A TOUT LE SOM. ET 1 FOIS A 200M. TOUT LES 50M. DERNIERE FOIS A 438 JUSQU'A 338 A TOUT LES 10 metre.

FORMATION table for the second tour.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS: DESCENDRE DANS le trou prendre test Remonter tête de rotation aller passer le Jack up. Preparer mud water.

DRILLING CREW PAYROLL DATA table with columns CREW, SOC. INS. No., NAME, HRS, YES. Includes handwritten entries for B. HABEL, J. DESROSIER, J-P LEVESQUE.

Table for the first tour (00:00 TO 12:00) showing crew details and hours.

Table for the second tour (12:00 TO 24:00) showing crew details and hours.

No.

DAILY DRILLING REPORT REPORT No.

LEASE BECANCOUR #1 WELL No. 4 WELL NUMBER 2001-08 DATE 2001-08-08 OPERATOR UNEX CONTRACTOR FORAGAZ INC. SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

Table with columns: D.P. SIZE, n/gm, GRADE, TOOL JT. O.D., TYPE, THREAD, STRING No., PUMP No., PUMP MANUFACTURER, TYPE, STROKE LENGTH

TIME DISTRIBUTION - HOURS table with columns: CODE No., OPERATION, FIRST TOUR, SECOND TOUR. Includes rows for 1. RIG UP AND TEAR DOWN, 2. DRILL ACTUAL, 3. REAMING, 4. CORING, 5. CONNECTION MUD & CIRCULATE, 6. TRIPS, 7. LUBRICATE RIG, 8. REPAIR RIG, 9. CUT OFF DRILLING LINE, 10. DEVIATION SURVEY, 11. WIRE LINE LOGS, 12. RUN CASING & CEMENT, 13. WAIT ON CEMENT, 14. RIPLE UP B.O.P., 15. TEST B.O.P., 16. DRILL STEAM TEST, 17. FLUID BACK, 18. SQUEEZE CEMENT, 19. FISHING, 20. DR. WORK, 21. MUD LOGS, 22. MUD LOGS

Table with columns: No., DRILLING ASSEMBLY (at end of tool), BIT RECORD, MUD RECORD. Includes rows for BIT No., SIZE, MFG., TYPE, JETS, SEP. No., DEPTH OUT, DEPTH IN, TOTAL METRES DRILLED, TOTAL HRS. RUN, COND. V/S TB/GAGE, FLOW RATE, PRESSURE DROP, (FORCE) WT. OF STRING, REMARKS

LEGEND Metric expressions: mud density = pump-stroke weight on bit: linear mass = viscosity = sec. E.C.C.S. (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) H+S Signs Posted (if required)

All lengths expressed in metres to two decimal places. mud density = gram per cubic metre (kg/m³) (g/l) = millimetre (mm) decanewton (daN) indicator will record decanewton (g/m) per litre (s/L) OPR, R.M. (1) Rig Site Health and Safety Meeting (one meeting/crew/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/ing/month) (3) Mast Inspected Before Raising or Lowering

LEGAL LAND DESCRIPTION table with columns: LAST CASING TUBING OR LINER, OUTSIDE DIAMETER, INSIDE DIAMETER, MAKE, kg/m

WIRE LINE RECORD table with columns: REEL No., METRES SLIPPED, METRES CUT OFF, PRESENT LENGTH, MEGAJOULES SINCE LAST CUT, CUMULATIVE MEGAJOULES

DRILLING CREW PAYROLL DATA No. DATE 2001-08-08 PROVINCE Quebec WELL NAME & No. BECANCOUR #1 CAMP NONCAMP COMPANY FORAGAZ INC. RIG MANAGER Bertrand HABEL RIG No. 4

METRES DRILLED table with columns: FROM, TO, ELAPSED TIME, CODE No.

FORMATION table with columns: ROTARY RPM, (FORCE) WT. ON BIT daN, PUMP PRESS, PUMP No., LINDER SIZE, STROKES per min, LINDER SIZE, STROKES per min, METHOD RUN

FIRST TOUR 00:00 TO 12:00 table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE

DEVIATION RECORD table with columns: DEPTH, DEV, DIRECTION

DEVIATION RECORD table with columns: DEPTH, DEV, DIRECTION

Table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE

TIME LOG table with columns: FROM, TO, ELAPSED TIME, CODE No.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS BOILER HOURS. Travailler apres mad moteur avec Jean-Jules. Descendre dans le trou. en plus mad moteur adroiter du trou.

Table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE

METRES DRILLED table with columns: FROM, TO, ELAPSED TIME, CODE No.

FORMATION table with columns: ROTARY RPM, (FORCE) WT. ON BIT daN, PUMP PRESS, PUMP No., LINDER SIZE, STROKES per min, LINDER SIZE, STROKES per min, METHOD RUN

SECOND TOUR 12:00 TO 24:00 table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE

DEVIATION RECORD table with columns: DEPTH, DEV, DIRECTION

DEVIATION RECORD table with columns: DEPTH, DEV, DIRECTION

Table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE

TIME LOG table with columns: FROM, TO, ELAPSED TIME, CODE No.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS BOILER HOURS. Romain "POWER TONG" Sortir du trou demander Mud Moteur.

Table with columns: CREW, SOC. INS. No., NAME, HRS., YES, NO. Includes names B. HABEL, J. DESROSIERS, J-P. LEVESQUE



APPROVED COPYRIGTH 1977 JANUARY

OFFICIAL DAILY DRILLING REPORT FORM



APPROVED COPYRIGTH 1977 JANUARY

No.

DAILY DRILLING REPORT REPORT No.

LEASE #1 BEAUCOUR
 WELL No. 1
 WELL NUMBER
 WATER DEPTH 200-08 DATE 2001-08-10
 OPERATOR JUNEX
 CONTRACTOR FORAGAZ INC.
 SIGNATURE OF OPERATOR'S REPRESENTATIVE
 SIGNATURE OF CONTRACTOR'S RIG MANAGER Bertrand Habel

D.P. SIZE	kg/m	GRADE	TOOL JT O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
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TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	BIT No.	SIZE	DENSITY kg/m ³	TIME	
1	RIG UP AND TEAR DOWN			STB RMR	OD	MFG.	PRESSURE GRADIENT		
2	DRILL ACTUAL			D.C. ID	OD	TYPE	VISCOSITY		
3	REAMING			STB RMR	OD	JETS mm	PV mPa.s	YP Pa	
4	CORING			D.C. ID	OD	SER No.	GEL STR. Pa		
5	CONDITION MUD & CIRCULATE	3		STB RMR	OD	DEPTH OUT	WATER LOSS cm ³		
6	TRIPS					DEPTH IN	pH		
7	LUBRICATE RIG					TOTAL METRES DRILLED	SOLIDS %		
8	REPAIR RIG					TOTAL HRS RUN			
9	CUT OFF DRILLING LINE					COND. 1/8" TB/GAGE			
10	DEVIATION SURVEY					FLOW RATE m ³ /min			
11	WIRE LINE LOGS					PRESSURE DROP kPa			
12	RUN CASING & CEMENT					TOTAL			
13	WAIT ON CEMENT					(FORCE) WT OF STRING daN			
14	NIPPLE UP B.O.P.					REMARKS			
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIRL WORK								
21	UNPLUG	3 1/2	12 1/2						
22									

COMPLETION				DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
				BIT	BIT No.	SIZE	DENSITY kg/m ³	TIME	
A	PERF RTN			STB RMR	OD	MFG.	PRESSURE GRADIENT		
B	TBG TRIPS			D.C. ID	OD	TYPE	VISCOSITY		
C	TREATING			STB RMR	OD	JETS mm	PV mPa.s	YP Pa	
D	SWABBING			D.C. ID	OD	SER No.	GEL STR. Pa		
E	TESTING			STB RMR	OD	DEPTH OUT	WATER LOSS cm ³		
F	ADDIT'L					DEPTH IN	pH		
G						TOTAL METRES DRILLED	SOLIDS %		
TOTALS		13 1/2	12 1/2			TOTAL HRS RUN			
DAY WORK TIME SUMMARY (OFFICE USE ONLY)						COND. 1/8" TB/GAGE			
HRS	W/CONTR. D.P.					FLOW RATE m ³ /min			
HRS	W/OPR. D.P.					PRESSURE DROP kPa			
HRS	W/OVD					TOTAL			
HRS	STANDBY					(FORCE) WT OF STRING daN			
TOTAL DAY WORK						REMARKS			
No. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									

LEGEND
 Metric expressions:
 mud density = g/cm³
 pump-stroke k weight on bit: linear mass = viscosity = sec
 gram per cubic metre (kg/m³)
 millimetre (mm)
 decanewton (daN)
 kilogram per metre (kg/m)
 per litre (g/L)
 cubic metre per minute (m³/min)
 kilopascal per metre (kPa/m)
 pascal (Pa)
 millipascal second (mPa.s)
 pascal (Pa)
 megajoule (MJ)
 millimetre (mm)
 kilopascal (kPa)

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m
-----------------------------	------------------	-----------------	------	------

WIRE LINE RECORD

SIZE	No. LINES	METRES SLIPPED
METRES CUT OFF	PRESENT LENGTH	
MEGAJOULES SINCE LAST CUT	CUMULATIVE MEGAJOULES	

METRES DRILLED

FROM	TO	DR. D RM R CORE C.	CORE No.

FORMATION 2001-08-10

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No. LINER SIZE	STROKES per min	PUMP No. LINER SIZE	STROKES per min	METHOD RUN
							SGL - S PARTEL - P COMD - C

DEVIATION RECORD

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DESCENDRE DANS LE TROUS ET FAIT TRAVAILLER MUD MOTEUR EN DESCENDANT. CIRCULATE ESSAYER DE DEPRENDRE LES ROOS DU TROUS.

FORMATION 2001-08-11

FABRIQUER UN MARTEAU POUR ESSAYER DE SORTIR DU TROU. ROSE PRIS DANS LE TROUS.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FABRIQUER UN MARTEAU POUR ESSAYER DE SORTIR DU TROU. ROSE PRIS DANS LE TROUS.

DRILLING CREW PAYROLL DATA

DATE 2001-08-10
 WELL NAME & No. BEAUCOUR #1
 COMPANY FORAGAZ INC.
 RIG MANAGER BERTRAND HABEL

No. PROVINCE QUEBEC
 CAMP NONCAMP
 RIG No. 1

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	13 1/2		
DERRICKMAN		J-DESROSIERES	13 1/2		
MOTORMAN		J-P-LEVESQUE	13 1/2		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B-HABEL	12 1/2		
DERRICKMAN		J-DESROSIERES	12 1/2		
MOTORMAN		J-P-LEVESQUE	12 1/2		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

No.

DAILY DRILLING REPORT REPORT No.

LEASE BEAUCOURT #1	WELL No. 1	WELL NUMBER	WATER DEPTH 2001-08	DATE 17/08
OPERATOR JUNEX	CONTRACTOR FORAGAZ INC.		RIG No. 1	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Bertando Habel</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>Bertando Habel</i>		

TIME DISTRIBUTION - HOURS				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	TIME
1	RIG UP AND 1. TEAR DOWN			STB RMR	00	m	MFG.	PRESSURE GRADIENT	
2	DRILL ACTUAL			D.C. ID	00	m	TYPE	VISCOSITY	
3	REAMING			STB RMR	00	m	JETS mm	PV mPa.s YP Pa	/ / / /
4	CORING			D.C. ID	00	m	SER No.	GEL STR. Pa	/ / / /
5	CONDITION MUD & CIRCULATE			STB RMR	00	m	DEPTH OUT	WATER LOSS cm ³	/ / / /
6	TRIPS						DEPTH IN	pH	
7	LUBRICATE RIG						TOTAL METRES DRILLED	SOLIDS %	
8	REPAIR RIG						TOTAL HRS. RUN		
9	CUT OFF DRILLING LINE			STANDS DP	m		COND. 1st/2nd TRIP/SAGGE	MUD & CHEMICALS ADDED	
10	DEVIATION SURVEY			SINGLES DP	m		FLOW RATE m ³ /min	TYPE	AMT. kg
11	WIRE LINE LOGS			KELLY DOWN	m		PRESSURE DROP kPa	TYPE	AMT. kg
12	RUN CASING & CEMENT			TOTAL	m				
13	WAIT ON CEMENT								
14	NIFFLE UP B.O.P.								
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIRL WORK								
21	WIPLOG	5							
22	BACK-UP								
23									

COMPLETION				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
		FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	TIME
A	PERF. RTN			STB RMR	00	m	MFG.	PRESSURE GRADIENT	
B	TBG TRIPS			D.C. ID	00	m	TYPE	VISCOSITY	
C	TREATING			STB RMR	00	m	JETS mm	PV mPa.s YP Pa	/ / / /
D	SWABBING			D.C. ID	00	m	SER No.	GEL STR. Pa	/ / / /
E	TESTING			STB RMR	00	m	DEPTH OUT	WATER LOSS cm ³	/ / / /
F	ADDIT'L						DEPTH IN	pH	
G							TOTAL METRES DRILLED	SOLIDS %	
	TOTALS	5					TOTAL HRS. RUN		
	DAY WORK TIME SUMMARY (OFFICE USE ONLY)			STANDS DP	m		COND. 1st/2nd TRIP/SAGGE	MUD & CHEMICALS ADDED	
	HRS. W/CONTR. D.P.			SINGLES DP	m		FLOW RATE m ³ /min	TYPE	AMT. kg
	HRS. W/OPR. D.P.			KELLY DOWN	m		PRESSURE DROP kPa	TYPE	AMT. kg
	HRS. W/OP			TOTAL	m				
	HRS. STANDBY								
	TOTAL DAY WORK								
	No. OF DAYS FROM SPUD								
	CUMULATIVE ROTATING HRS.								
	TOTAL MUD COST								

LES RODS ONT LEVER DE 1'PIEDS.

LEGEND
 Metric expressions:
 All lengths expressed in metres to two decimal places.
 mud density = gram per cubic metre (kg/m³)
 pump stroke length = millimetre (mm)
 weight of string = decanewton (daN)
 linear mass = gram per metre (kg/m)
 viscosity = sec per litre (s/L)

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m

METRES DRILLED

FROM	TO	DR. D RM. R CORE. C	CORE No.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7:00	13:00	5:00	21

METRES DRILLED

FROM	TO	DR. D RM. R CORE. C	CORE No.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7:00	17:00	10	22

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

ESSAYER DE SORTIR LES RODS DU TROU.

FINIR D'INSTALLER "JACK-UP" PREPARER POUR ST-BAR NABE

Bertando #2

OPR. (1) Daily Walk Around Inspection (2) Detailed Inspection Weekly (using check list) (3) H-S Signs Posted (if required)

R.M. (1) Rig Site Health and Safety Meeting (one meeting/crow/month) (2) C.A.O.D.C. Rig Safety Inspection Check List (one/mo/month) (3) Mast Inspected Before Raising or Lowering

WIRE LINE RECORD

MADE	No. JOINTS	TOTAL LENGTH	RKB TO CSG. NO.	SET AT

FORMATION

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No. LINER SIZE	STROKES per min	PUMP No. LINER SIZE	STROKES per min	METHOD RUN

BOILER HOURS

DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

BOILER HOURS

DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

METRES DRILLED

FROM	TO	DR. D RM. R CORE. C	CORE No.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FINIR D'INSTALLER "JACK-UP" PREPARER POUR ST-BAR NABE

Bertando #2

DRILLING CREW PAYROLL DATA

DATE: **2001-08-17 & 13** PROVINCE: **ON/BC**

WELL NAME & No.: **BEAUCOURT #1** CAMP: **NONCAMP**

COMPANY: **FORAGAZ INC.**

RIG MANAGER: **BERTANDO HABEL** RIG No.: **1**

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	5		
DERRICKMAN		J. DESROSIER	5		
MOTORMAN		J-P-LEVESQUE	5		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	10		
DERRICKMAN		J. DESROSIER	10		
MOTORMAN		J-P-LEVESQUE	10		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

No.

DAILY DRILLING REPORT REPORT No.

LEASE **ST-BARNABE #1** WELL No. **1** WELL NUMBER **2001-08 DAF 95**

OPERATOR **JONEX** CONTRACTOR **FORAGAZ INC** RIG No. **1**

SIGNATURE OF OPERATOR'S REPRESENTATIVE *[Signature]* SIGNATURE OF CONTRACTOR'S RIG MANAGER *[Signature]*

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGEND

Metric expressions:

All lengths ex:

mud density = gram per cubic metre (kg/m³)
 pump-strokes length = millimetre (mm)
 weight of string = decanewton (daN)
 linear mass = gram per metre (kg/m)
 viscosity = soc per litre (s/L)

flow rate = cubic metre per minute (m³ / min)
 pressure gradient = kilopascal per metre (kPa/m)
 yield point = pascal (Pa)
 plastic viscosity = millipascal second (mPa·s)
 gel strength = pascal (Pa)
 work completed by wire line = megajoule (MJ)
 inside diameter and outside diameter = millimetre (mm)
 pump pressure = kilopascal (kPa)

OPR. Initial _____ R.M. Initial _____
 Initial _____ Initial _____
 Initial _____ Initial _____

- (1) Rig Site Health and Safety Meeting (one meeting/crew/month)
- (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month)
- (3) Mast Inspected Before Raising or Lowering

R.M. Initial _____
 Initial _____
 Initial _____

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m

WIRE LINE RECORD

SIZE	No. LINES	METRES SUPPLIED
METRES CUT OFF	PRESENT LENGTH	

DRILLING CREW PAYROLL DATA

DATE **2001-08-14** PROVINCE **QUEBEC**

WELL NAME & No. **BÉARNICOUR #1** CAMP **NONCAMP**

COMPANY **FORAGAZ INC.**

RIG MANAGER **BÉTRAND HABEL** RIG No. **1**

TIME DISTRIBUTION - HOURS

CODE	OPERATION	FIRST TOUR	SECOND TOUR
1	RIG UP AND TEAR DOWN		
2	DRILL ACTUAL		
3	REAMING		
4	CORING		
5	CONDITION MUD & CIRCULATE		
6	TRIPS		
7	LUBRICATE RIG		
8	REPAIR RIG		
9	CUT OFF DRILLING LINE		
10	DEVIATION SURVEY		
11	WIRE LINE LOGS		
12	RUN CASING & CEMENT		
13	WAIT ON CEMENT		
14	NIPPLE UP B.O.P.		
15	TEST B.O.P.		
16	DRILL STEM TEST		
17	PLUG BACK		
18	SQUEEZE CEMENT		
19	FISHING		
20	DIR. WORK		
21	ST-BARNABE D ³⁰		
22			
23			

No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
	BIT	SIZE	DENSITY
	STB RMR 00	MFG.	PRESSURE GRADIENT
	D.C. ID 00	TYPE	VISCOSITY
	STB RMR 00	JETS mm	PV mPa·s YP Pa
	D.C. ID 00	SER No.	GEL STR. Pa
	STB RMR 00	DEPTH OUT	WATER LOSS cm ³
		DEPTH IN	pH
		TOTAL METRES DRILLED	SOLIDS %
		TOTAL HRS. RUN	
	STANDS DP	COND. 1st's T/B/GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FLOW RATE m ³ /min	TYPE AMT. kg
	KELLY DOWN	PRESSURE DROP kPa	TYPE AMT. kg
	TOTAL		
	(FORCE) WT. OF STRING daN		
	REMARKS APRIS 11" SUR LES TIGES.		

FIRST TOUR

SECOND TOUR

No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
	BIT	SIZE	DENSITY
	STB RMR 00	MFG.	PRESSURE GRADIENT
	D.C. ID 00	TYPE	VISCOSITY
	STB RMR 00	JETS mm	PV mPa·s YP Pa
	D.C. ID 00	SER No.	GEL STR. Pa
	STB RMR 11 00	DEPTH OUT	WATER LOSS cm ³
		DEPTH IN	pH
		TOTAL METRES DRILLED	SOLIDS %
		TOTAL HRS. RUN	
	STANDS DP	COND. 1st's T/B/GAGE	MUD & CHEMICALS ADDED
	SINGLES DP	FLOW RATE m ³ /min	TYPE AMT. kg
	KELLY DOWN	PRESSURE DROP kPa	TYPE AMT. kg
	TOTAL		
	(FORCE) WT. OF STRING daN		
	REMARKS		

COMPLETION	OPERATION	FIRST TOUR	SECOND TOUR
A	PERF'RTN		
B	TBG TRIPS		
C	TREATING		
D	SWABBING		
E	TESTING		
F	ADDFWL		
G			
TOTALS			
DAY WORK TIME SUMMARY (OFFICE USE ONLY)			
HRS. W/CONTR. O.P.			
HRS. W/OPR. D.P.			
HRS. W/OP			
HRS. STANDBY			
TOTAL DAY WORK			
No. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

METRES DRILLED

FROM	TO	ELAPSED TIME	CODE No.
7 ⁰⁰	19 ³⁰	12 ³⁰	21

DEVIATION RECORD

DEPTH	DEV.

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7 ⁰⁰	19 ³⁰	12 ³⁰	21

METRES DRILLED

FROM	TO	ELAPSED TIME	CODE No.

DEVIATION RECORD

DEPTH	DEV.

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

AMENER FOREUSE + TIGE + PELLE KUBATA AU SITE PREPARER SITE, INSTALLER FOREUSE, POUR CAROTER

METRES DRILLED

FROM	TO	ELAPSED TIME	CODE No.
0	55		

DEVIATION RECORD

DEPTH	DEV.

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7 ⁰⁰	19 ³⁰	12 ³⁰	21

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

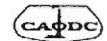
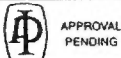
DRILLER O A 50 SANS "RECOVERY" ENSUITE DESCENDU "COR BARREL" ET COMMENCER A ROUER CAROTTE

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	12 ³⁰		
DERRICKMAN		J-DESROSIERS	12 ³⁰		
MOTORMAN		J-P-LEVESQUE	12 ³⁰		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	12 ³⁰		
DERRICKMAN		J-DESROSIERS	12 ³⁰		
MOTORMAN		J-P-LEVESQUE	12 ³⁰		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					



No.

DAILY DRILLING REPORT REPORT No.

LEASE BEAUCOUR ST-BARNABE #1 WELL No. WELL NUMBER WATER DEPTH DATE OPERATOR SUNEX CONTRACTOR FORAGAZ INC. SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

LEGEND All lengths expressed in metres to two decimal places. Metric expressions: mud density = pump-stroke weight of string weight on bit: linear mass = viscosity = sec program per cubic metre (kg/m³) ...

TIME DISTRIBUTION - HOURS TABLE with columns for RIG UP AND TEAR DOWN, DRILL ACTUAL, REAMING, CORING, etc.

COMPLETION TABLE with columns for B. TBG TRIPS, C. TREATING, D. SWABBING, E. TESTING, F. ADDIT'L, G.

LEGAL LAND DESCRIPTION TABLE with columns for OUTSIDE DIAMETER, INSIDE DIAMETER, MAKE, kg/m

METRES DRILLED TABLE with columns for FROM, TO, DR. D, CORE No.

DEVIATION RECORD TABLE with columns for DEPTH, DEV

TIME LOG TABLE with columns for FROM, TO, ELAPSED TIME, CODE No.

METRES DRILLED TABLE with columns for DR. D, CORE No.

DEVIATION RECORD TABLE with columns for DEPTH, DEV

TIME LOG TABLE with columns for FROM, TO, ELAPSED TIME, CODE No.

WIRE LINE RECORD TABLE with columns for SIZE, METRES CUT OFF, PRESENT LENGTH

FORMATION TABLE with columns for ROTARY RPM, (FORCE) WT ON BIT, PUMP PRESS, LINER SIZE, STROKES per min

DEVIATION RECORD TABLE with columns for DEPTH, DEV, DIRECTION

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS CAROTER JUSQU'A 60M FAUBITE CASER DANS LE TROUS A 30M

FORMATION TABLE with columns for ROTARY RPM, (FORCE) WT ON BIT, PUMP PRESS, LINER SIZE, STROKES per min

DEVIATION RECORD TABLE with columns for DEPTH, DEV, DIRECTION

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS DECHARGER CASSING ENLEVER MASSE, ENLEVER SLIP REPAIR HYDRAULIQUE HOSE ENLEVER B.O.P. RIG UP CASSING, RIG UP CASSING JUSQU'A 300M.

DRILLING CREW PAYROLL DATA TABLE with columns for CREW, SOC. INS. No., NAME, HRS, YES, NO

FIRST TOUR 00:00 TO 12:00 TABLE with crew names B. HABEL, J. DESROSIERS, J. P. LEBOUSQUE

SECOND TOUR 12:00 TO 24:00 TABLE with crew names B. HABEL, J. DESROSIERS, J. P. LEBOUSQUE

Table for crew details and accident information.

No.

DAILY DRILLING REPORT REPORT No.

LEASE BECANCOUR	WELL No. #1	WELL NUMBER	WATER DEPTH 2001-08-21	DATE 2001-08-21
OPERATOR JUNEX	CONTRACTOR FORAGAZ INC.		RIG No.	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>[Signature]</i>		

TIME DISTRIBUTION - HOURS				No. DRILLING ASSEMBLY (at end of hour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	TIME	DENSITY kg/m ³
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL			STB RMR	OD	m	MFG.		PRESSURE GRADIENT
3	REAMING			D.C. ID	OD	m	TYPE		VISCOSITY
4	CORING			STB RMR	OD	m	JETS mm		PV mPa.s
5	CONDITION MUD & CIRCULATE			D.C. ID	OD	m	SER No.		YP mPa.s
6	TRIPS			STB RMR	OD	m	DEPTH OUT		GEL STR. Pa
7	LUBRICATE RIG			STB RMR	OD	m	DEPTH IN		WATER LOSS cm ³
8	REPAIR RIG						DEPTH IN		pH
9	CUT OFF DRILLING LINE						TOTAL METRES DRILLED		SOLIDS %
10	DEVIATION SURVEY						TOTAL HRS. RUN		
11	WIRE LINE LOGS			STANDS DP	m		COND. 1/8" TB/GAGE		MUD & CHEMICALS ADDED
12	12 1/4" CASING & CEMENT	9:30	1:30	SINGLES DP	m		FLOW RATE m ³ /min		TYPE AMT. kg
13	WAIT ON CEMENT			KELLY DOWN	m		PRESSURE DROP kPa		TYPE AMT. kg
14	NIPPLE UP B.O.P.			TOTAL	m				
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIR WORK								
21	WATER G.M.	2							
22	ST-BARNABE	5:30							
23	MARTEAU								

COMPLETION				No. DRILLING ASSEMBLY (at end of hour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	TIME	DENSITY kg/m ³
A	PERF. TN								
B	T.B.G. TRIPS			STB RMR	OD	m	MFG.		PRESSURE GRADIENT
C	TREATING			D.C. ID	OD	m	TYPE		VISCOSITY
D	SWABBING			STB RMR	OD	m	JETS mm		PV mPa.s
E	TESTING			D.C. ID	OD	m	SER No.		YP mPa.s
F	ADDITNL.			STB RMR	OD	m	DEPTH OUT		GEL STR. Pa
G				STB RMR	OD	m	DEPTH IN		WATER LOSS cm ³
TOTALS		12:00	0:30				TOTAL METRES DRILLED		SOLIDS %
DAY WORK TIME SUMMARY (OFFICE USE ONLY)							TOTAL HRS. RUN		
HRS. W/CONTR. D.P.									
HRS. W/OPR. D.P.									
HRS. W/OPR.									
HRS. STANDBY									
TOTAL DAY WORK									
No. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									

LEGEND
Metric expressions: mud density = kg/m³, pump-stroke length = mm, weight of string on bit = kg/m, linear mass = kg/m, viscosity = sec.

E.R.C.B.
(1) Daily Walk Around Inspection
(2) Detailed Inspection-Weekly (using check list)
(3) H&S Signs Posted (if required)

LEGAL LAND DESCRIPTION		WIRE LINE RECORD	
LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE

METRES DRILLED		FORMATION	
FROM	TO	DATE	DESCRIPTION
7:00	8:00	2001-08-20	FINIR DESORTIR CASINGS 5 1/2" MANQUE 5 BARRES
8:00	10:00	2001-08-20	TRAVAILLER APRES MOTEUR G.M. RAMASSER AUTOUR DE LA DRILL RIG-UP LAY DOWN CASINGS.
10:00	11:30	2001-08-20	RIG-UP LAY DOWN CASINGS.
11:30	12:00	2001-08-20	S.D. S.P.L. RAMASSER STOCK POUR ST-BARNABE FISHING.
12:00	17:00	2001-08-20	ALLER FISHER H.D.
17:00	19:00	2001-08-20	LAY DOWN CASINGS

DEVIATION RECORD		DEVIATION RECORD	
DEPTH	DEV.	DEPTH	DEV.

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM	TO	TIME	TIME	NO.	NO.		
7:00	8:00	1:00	1:00	6			
8:00	10:00	2:00	2:00	21			
10:00	11:30	1:30	1:30	12			
11:30	12:00	30	30	22			
12:00	17:00	5:00	5:00	23			
17:00	19:00	2:00	2:00	12			

METRES DRILLED		FORMATION	
FROM	TO	DATE	DESCRIPTION
		2001-08-21	

DEVIATION RECORD		DEVIATION RECORD	
DEPTH	DEV.	DEPTH	DEV.

TIME LOG		ELAPSED TIME		CODE No.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM	TO	TIME	TIME	NO.	NO.		
7:00	8:30	1:30	1:30	12			
8:30	11:30	3:00	3:00	23			
11:30	19:30	8:00	8:00	23			

flow rate = cubic metre per minute (m³/min)
pressure gradient = kilopascal per metre (kPa/m)
yield point = pascal (Pa)
plastic viscosity = millipascal second (mPa.s)
gel strength = pascal (Pa)
work completed by wire line = megajoule (MJ)
inside diameter and outside diameter = millimetre (mm)
pump pressure = kilopascal (kPa)

OPR. Initial _____
R.M. Initial _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month)
(2) C.A.O.D.C. Rig Safety Inspection Check List (one/mg/month)
(3) Mast Inspected Before Raising or Lowering

WIRE LINE RECORD		DRILLING CREW PAYROLL DATA	
SIZE	No. LINES	DATE	PROVINCE
		2001-08-20 & 21	QUEBEC
METRES CUT OFF	PRESENT LENGTH	WELL NAME & No.	CAMP
		BECANCOUR #1	NONCAMP
		COMPANY	
		FORAGAZ INC.	
		RIG MANAGER	
		BERTRAND HUBEL	
		RIG No.	
		1	

FIRST TOUR 00:00 TO 12:00						INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO		
DRILLER		B. HABEL	12				
DERRICKMAN		J. DESROSIERS	12				
MOTORMAN		J. P. LEVESQUE	12				
FLOORMAN							
FLOORMAN							
LEASEMAN							
CRANE SUPT.							
MECHANIC							
WELDER							
ROUSTABOUT							
ROUSTABOUT							
TRAINEE							
DERRICKMAN (2)							

SECOND TOUR 12:00 TO 24:00						INJURIES	
CREW	SOC. INS. No.	NAME	HRS.	YES	NO		
DRILLER		B. HABEL	12 ³⁰				
DERRICKMAN		J. DESROSIERS	12 ³⁰				
MOTORMAN		J. P. LEVESQUE	12 ³⁰				
FLOORMAN							
FLOORMAN							
LEASEMAN							
CRANE SUPT.							
MECHANIC							
WELDER							
ROUSTABOUT							
ROUSTABOUT							
TRAINEE							
DERRICKMAN (2)							

No.

DAILY DRILLING REPORT REPORT No.

LEASE BECANOUR #1 ST-BARNAVE #3	WELL No.	WELL NUMBER	WATER DEPTH	DATE 2001-08-22
OPERATOR JUNEX	CONTRACTOR FORAGAZ INC.		RIG No.	1
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S RIG MANAGER Bertrand Habel		

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

TIME DISTRIBUTION - HOURS				No.		DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	TIME	PRESSURE GRADIENT	VISCOSITY
1	RIG UP AND TEAR DOWN			STB RMR	OD	m	MFG.				
2	DRILL ACTUAL			D.C. ID	OD	m	TYPE				
3	REAMING			STB RMR	OD	m	JETS mm	PV mPa.s	YP Pa		
4	CORING			D.C. ID	OD	m	SER No.	GEL STR. Pa			
5	CONDITION MUD & CIRCULATE			STB RMR	OD	m	DEPTH OUT	WATER LOSS cm ³			
6	TRIPS			D.C. ID	OD	m	DEPTH IN	pH			
7	LUBRICATE RIG			STB RMR	OD	m	TOTAL METRES DRILLED	SOLIDS %			
8	REPAIR RIG						TOTAL HRS. RUN				
9	CUT OFF DRILLING LINE						COND. 1/8" TB/GAGE				
10	DEVIATION SURVEY						FLOW RATE m ³ /min				
11	WIRE LINE LOGS						PRESSURE DROP MPa				
12	RUN CASING & CEMENT						TOTAL				
13	WAIT ON CEMENT						(FORCE) WT. OF STRING daN				
14	NIPPLE UP B.O.P						REMARKS				
15	TEST B.O.P						BERTRAND ALLER SHOP POUR RAMASSER "QUAR SHT"				
16	DRILL STEM TEST										
17	PLUG BACK										
18	SQUEEZE CEMENT										
19	FISHING										
20	DRIL WORK										
21	MARTEAU										
22	ST-BARNAVE										

COMPLETION				No.		DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	TIME	PRESSURE GRADIENT	VISCOSITY
A	PERF'RTN			STB RMR	OD	m	MFG.				
B	TBG TRIPS			D.C. ID	OD	m	TYPE				
C	TREATING			STB RMR	OD	m	JETS mm	PV mPa.s	YP Pa		
D	SWABBING			D.C. ID	OD	m	SER No.	GEL STR. Pa			
E	TESTING			STB RMR	OD	m	DEPTH OUT	WATER LOSS cm ³			
F	ADDITNL			D.C. ID	OD	m	DEPTH IN	pH			
G				STB RMR	OD	m	TOTAL METRES DRILLED	SOLIDS %			
	TOTALS						TOTAL HRS. RUN				
	DAY WORK TIME SUMMARY (OFFICE USE ONLY)						COND. 1/8" TB/GAGE				
	HRS. W/CONTR. D.P.						FLOW RATE m ³ /min				
	HRS. W/OPR. D.P.						PRESSURE DROP MPa				
	HRS. W/ODP						TOTAL				
	HRS. STANDBY						(FORCE) WT. OF STRING daN				
	TOTAL DAY WORK						REMARKS				
	No. OF DAYS FROM SPUD										
	CUMULATIVE DR. STRING HRS.										
	TOTAL MUD COST										

LEGEND

Metric expressions: mud density = kg/m³; pump-stroke kg weight of string on bit; linear mass = g per metre (g/m); viscosity = cP; g/cm per cubic metre (kg/m³); lit = millimetre (mm); decanewton (daN); factor will record decanewton (gram per metre (kg/m) 3 per litre (g/L)); flow rate = cubic metre per minute (m³ / min); pressure gradient = kilopascal per metre (kPa/m); yield point = pascal (Pa); plastic viscosity = millipascal second (mPa.s); gel strength = pascal (Pa); work completed by wire line = megajoule (MJ); inside diameter and outside diameter = millimetre (mm); pump pressure = kilopascal (kPa).

E.R.C.B. (1) Daily Walk Around Inspection; (2) Detailed Inspection-Weekly (using check list); (3) H/S Signs Posted (if required).

O.P.R. (1) Rig Site Health and Safety Meeting (one meeting/crew/month); (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month); (3) Most Inspected Before Raising or Lowering.

R.M. Initial; Final.

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m

WIRE LINE RECORD

REEL No.	SIZE	No LINES	METRES SLIPPED
METRES CUT OFF		PRESENT LENGTH	
MEGAJOULES SINCE LAST CUT			
CUMULATIVE MEGAJOULES			

DRILLING CREW PAYROLL DATA

DATE **2001-08-22 @ 23** PROVINCE **QUEBEC**

WELL NAME & No. **BECANOUR #1** CAMP **NONCAMP**

COMPANY **FORAGAZ INC.**

RIG MANAGER **B. HABEL** RIG No.

METRES DRILLED

FROM	TO	DR. D. RM. R. CORE. C.	CODE No.

FORMATION **2001-08-22**

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No. LINER SIZE	STROKES per min	PUMP No. LINER SIZE	STROKES per min	METHOD RUN

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		B. HABEL	13	
DERRICKMAN		S-DESROSIERS	13	
MOTORMAN		S-P-LEVESQUE	13	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

DEVIATION RECORD

DEPTH	DEV.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7:00	11:00	4	21
11:00	13:00	2	22
13:00	17:30	4:30	

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

ESSAYER DE DEPRENDRE LES RODS DU TROUS AVEC MARTEAU REPARER MARTEAU BERTRAND EST ALLER PORTER MARTEAU. TRAVAILLER AUTOUR DE LA DRILL

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

METRES DRILLED

FROM	TO	DR. D. RM. R. CORE. C.	CODE No.

FORMATION **2001-08-23**

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	PUMP No. LINER SIZE	STROKES per min	PUMP No. LINER SIZE	STROKES per min	METHOD RUN

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS.	INJURIES
DRILLER		B. HABEL	13	
DERRICKMAN		S-DESROSIERS	13	
MOTORMAN		S-P-LEVESQUE	13	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

DEVIATION RECORD

DEPTH	DEV.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

TIME LOG

FROM	TO	ELAPSED TIME	CODE No.
7:00	20:00	13:00	23

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

ALLER A ST-BARNAVE POUR "FISHER" I.E. RODS H.Q. UVEILLE PAS UENIR

No. OF DAYS SINCE LAST LOST TIME ACCIDENT

No.

DAILY DRILLING REPORT REPORT No.

LEASE **BEOANCOUR #1** WELL No. **2001-08-26-27** WATER DEPTH **2001-08-26-27** DATE **2001-08-26-27**

OPERATOR **SONEX** CONTRACTOR **FORAGAZ INC.** RIG No. **1**

SIGNATURE OF OPERATOR'S REPRESENTATIVE **Bertrand Habel** SIGNATURE OF CONTRACTOR'S RIG MANAGER **Bertrand Habel**

D.P. SIZE	kg/m	GRADE	TOOL JT. O.D.	TYPE THREAD	STRING No.	PUMP No.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

TIME DISTRIBUTION - HOURS				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	PRESSURE GRADIENT
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL			STB RMR	OO		MFG.		
3	REAMING			D.C. ID	OO		TYPE		
4	CORING			STB RMR	OO		JETS mm	PV mPa-s	YP Pa
5	CONDITION MUD & CIRCULATE			D.C. ID	OO		SER No.	GEL STR. Pa	
6	TRIPS			STB RMR	OO		DEPTH OUT	WATER LOSS cm ³	
7	LUBRICATE RIG						DEPTH IN	pH	
8	REPAIR RIG						TOTAL METRES DRILLED	SOLIDS %	
9	OUT OFF DRILLING LINE						TOTAL HRS RUN		
10	DEVIATION SURVEY						COND. 10% T/B GAGE		
11	WIRE LINE LOGS			STANDS DP	m				
12	RUN CASING & CEMENT		3:30	SINGLES DP	m				
13	WAIT ON CEMENT			KELLY DOWN	m				
14	NIPPLE UP B.O.P.								
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING		9:30						
20	DIR WORK								
21									
22									
23									

COMPLETION				No. DRILLING ASSEMBLY (at end of tour)		BIT RECORD		MUD RECORD	
CODE No.	OPERATION	FIRST TOUR	SECOND TOUR	BIT	m	BIT No.	SIZE	DENSITY kg/m ³	PRESSURE GRADIENT
A	PERF'RTN								
B	T.B.G TRIPS			STB RMR	OO		MFG.		
C	TREATING			D.C. ID	OO		TYPE		
D	SWABBING			STB RMR	OO		JETS mm	PV mPa-s	YP Pa
E	TESTING			D.C. ID	OO		SER No.	GEL STR. Pa	
F	ADDTNL			STB RMR	OO		DEPTH OUT	WATER LOSS cm ³	
G							DEPTH IN	pH	
TOTALS			9:12				TOTAL METRES DRILLED	SOLIDS %	
DAY WORK TIME SUMMARY (OFFICE USE ONLY)							TOTAL HRS. RUN		
HRS W/CNTR. D.P.							COND. 10% T/B GAGE		
HRS W/OPR. D.P.									
HRS W/ODP									
HRS STANDBY									
TOTAL DAY WORK									
No. OF DAYS FROM SPUD									
CUMULATIVE STATING HRS.									
TOTAL MUD COST									

LEGEND

Metric expressions: mud density = kg/m³, pump-stroke length = mm, weight of string = decanewton (daN), weight on bit = decanewton (daN), linear mass = g/m, viscosity = sec.

E.R.C.B. (1) Daily Walk Around Inspection, (2) Detailed Inspection-Weekly (using check list), (3) H/S Signs Posted (if required).

OPR. (1) Rig Site Health and Safety Meeting (one meeting/crew/month), (2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month), (3) Mast Inspected Before Raising or Lowering.

All lengths expressed in metres to two decimal places.

flow rate = cubic metre per minute (m³/min), pressure gradient = kilopascal per metre (kPa/m), yield point = pascal (Pa), plastic viscosity = millipascal second (mPa-s), gel strength = pascal (Pa), work completed by wire line = megajoule (MJ), inside diameter and outside diameter = millimetre (mm), pump pressure = kilopascal (kPa).

R.M. Initial _____ (1) _____ (2) _____ (3) _____

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	OUTSIDE DIAMETER	INSIDE DIAMETER	MAKE	kg/m

WIRE LINE RECORD

REEL No.	NO. LINES	METRES SUPPLIED

METRES CUT OFF _____ PRESENT LENGTH _____

MEGAJOULES SINCE LAST CUT _____

CUMULATIVE MEGAJOULES _____

DRILLING CREW PAYROLL DATA

DATE **2001-08-26-27** PROVINCE **QUEBEC**

WELL NAME & No. **BEOANCOUR #1** CAMP **NONCAMP**

COMPANY **FORAGAZ INC.**

RIG MANAGER **BERTRAND HABEL** RIG No. **1**

METRES DRILLED

FROM	TO	DR. D. RM. R. CORE. C.	CODE No.

FORMATION **2001-08-26**

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR SIZE	STROKES per min	LINEAR SIZE	STROKES per min	METHOD RUN

REDUCED PUMP SPEED _____

FIRST TOUR 00:00 TO 12:00

CREW	SOC. INS. No.	NAME	HRS	INJURIES
DRILLER		B-HABEL	9	
DERRICKMAN		J-DESROSIERS	9	
MOTORMAN		J-P-LEVESQUE	9	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

No. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT _____

DEVIATION RECORD

TIME LOG	ELAPSED TIME	CODE No.
7:00	16:00	9 19

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

BOILER HOURS _____

R ENTRER DANS LE TROUS FAUCON
ALLER "FISHER" RESORT LES DO
TROU AVEC SEULEMENT CASINGS
DE 8.70M ROSTE 3 CASINGS
AU FOND

METRES DRILLED

FROM	TO	DR. D. RM. R. CORE. C.	CODE No.

FORMATION **2001-08-27**

ROTARY RPM	(FORCE) WT. ON BIT daN	PUMP PRESS	LINEAR SIZE	STROKES per min	LINEAR SIZE	STROKES per min	METHOD RUN

REDUCED PUMP SPEED _____

SECOND TOUR 12:00 TO 24:00

CREW	SOC. INS. No.	NAME	HRS	INJURIES
DRILLER		J-DESROSIERS	12	
DERRICKMAN		B-HABEL	12	
MOTORMAN		J-P-LEVESQUE	12	
FLOORMAN				
FLOORMAN				
FLOORMAN				
LEASEMAN				
CRANE SUPT.				
MECHANIC				
WELDER				
ROUSTABOUT				
ROUSTABOUT				
TRAINEE				
DERRICKMAN (2)				

No. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT _____

DEVIATION RECORD

TIME LOG	ELAPSED TIME	CODE No.
7:00	15:30	8:30 19
15:30	19:00	3:30 12

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

BOILER HOURS _____

ALLER FAIRE MACHINER "SHOE CASING"
IL POINTE DU LAC CHANGER CASING
AVEC FARDIER, SOLDER STAB. APRES
CASING. "BOEFER" SHOE. SOLDER SHOE
APRES CASING. PREPARER ELEVATEUR
ET POWER TONG. PRES A DESCENDRE CASING
DESCENDRE 5 CASING 7" SOLDER
4 PLACE DE 1" EN BAS ET EN HAUT
DE LA BAGUE.

No.

DAILY DRILLING REPORT REPORT No.

LEASE BEAUCOUR #1 WELL No. 1 WELL NUMBER 2001-08-28/29 WATER DEPTH DATE OPERATOR JINEX CONTRACTOR FORAGAZ INC. SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

LEGEND Metric expressions: mud density = pump-stroke kg weight of string weight on bit: linear mass = viscosity = sec

All lengths expressed in metres to two decimal places. flow rate = cubic metre per minute (m³ / min) pressure gradient = kilopascal per metre (kPa/m)

TIME DISTRIBUTION - HOURS table with columns for CODE No., OPERATION, FIRST TOUR, SECOND TOUR, No., DRILLING ASSEMBLY, BIT RECORD, MUD RECORD.

METRES DRILLED table with columns for FROM, TO, ELAPSED TIME, CODE No., METRES DRILLED.

FORMATION table with columns for FORMATION, ROTARY RPM, (FORCE) WT ON BIT, PUMP PRESS, LINER SIZE, STROKES per min.

DRILLING CREW PAYROLL DATA table with columns for CREW, SOC. INS. No., NAME, HRS, YES, NO.

COMPLETION table with columns for A PERFORATION, B TBG TRIPS, C TREATING, D SKABBING, E TESTING, F ADDITVL, G, TOTALS, DAY WORK TIME SUMMARY, HRS. WCONTR. D.P., HRS. WOOPN. D.P., HRS. WOOP, HRS. STANDBY, TOTAL DAY WORK, No. OF DAYS FROM SPUD, CUMULATIVE ROTATING HRS., TOTAL ASUD COST.

METRES DRILLED table with columns for FROM, TO, ELAPSED TIME, CODE No., METRES DRILLED.

FORMATION table with columns for FORMATION, ROTARY RPM, (FORCE) WT ON BIT, PUMP PRESS, LINER SIZE, STROKES per min.

DRILLING CREW PAYROLL DATA table with columns for CREW, SOC. INS. No., NAME, HRS, YES, NO.

No.

DAILY DRILLING REPORT REPORT No.

LEASE BECANCOUR #1	WELL No. 1	WELL NUMBER	WATER DEPTH 280'	BATHY 200'
OPERATOR JUNEX	CONTRACTOR FORAGAZ INC.		RIG No. 1	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S RIG MANAGER <i>[Signature]</i>		

LEGEND
Metric expressions:
mud density = pump-stroke / weight of string / linear mass = viscosity = sec
gram per cubic metre (kg/m³)
th = millimetre (mm)
decaneutron (daN)
icator will record decaneutron
gram per metre (kg/m)
d per litre (s/L)

E.R.C.B.
(1) Daily Walk Around Inspection
(2) Detailed Inspection-Weekly (using check list)
(3) H/S Signs Posted (if required)

All lengths expressed in metres to two decimal places.
flow rate = cubic metre per minute (m³ / min)
pressure gradient = kilopascal per metre (kPa/m)
yield point = pascal (Pa)
plastic viscosity = millipascal second (mPa*s)
gel strength = pascal (Pa)
work completed by wire line = megajoule (MJ)
inside diameter and outside diameter = millimetre (mm)
pump pressure = kilopascal (kPa)

OPR. Initial _____ R.M. Initial _____
Initial _____ Initial _____
Initial _____ Initial _____

(1) Rig Site Health and Safety Meeting (one meeting/crew/month)
(2) C.A.O.D.C. Rig Safety Inspection Check List (one/rig/month)
(3) Mast Inspected Before Raising or Lowering

TIME DISTRIBUTION - HOURS	
CODE No.	OPERATION
1	RIG UP AND TEAR DOWN
2	DRILL ACTUAL
3	REAMING
4	CORING
5	CONDITION MUD & CIRCULATE
6	TRIPS
7	LUBRICATE RIG
8	REPAIR RIG
9	CUT OFF DRILLING LINE
10	DEVIATION SURVEY
11	WIRE LINE LOGS
12	RUN CASING & CEMENT
13	WAIT ON CEMENT
14	RIFFLE UP B.O.P.
15	TEST B.O.P.
16	DRILL STEM TEST
17	PLUG BACK
18	SQUEEZE CEMENT
19	FISHING
20	DR. WORK
21	
22	
23	

No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1	STB RWH OD	SIZE MFG	DENSITY kgm ³
2	D.C. ID OD	TYPE	PRESSURE GRADIENT
3	STB RWH OD	JETS mm	VISCOSITY
4	D.C. ID OD	SER No.	PV mPa*s
5	STB RWH OD	DEPTH OUT	GEL STR Pa
6	STB RWH OD	DEPTH IN	WATER LOSS cm ³
7		DEPTH IN	pH
8		TOTAL METRES DRILLED	SOLIDS %
9		TOTAL HRS. RUN	
10	STANDS DP	COND. VES. TB/GAGE	MUD & CHEMICALS ADDED
11	SINGLES DP	FLOW RATE	TYPE AMT. kg TYPE AMT. kg
12	KELLY DOWN	PRESSURE DROP kPa	
13	TOTAL		
14	(FORCE) WT. OF STRING daN		
15	REMARKS	BENTONITE 9 SACS DE 100LBS	

METRES DRILLED		DEVIATION RECORD	
FROM	TO	DEPTH	DEV.
7.00	9.00	2.00	3
9.00	15.00	6.00	5
15.00	19.00	4.00	6

WIRE LINE RECORD

SIZE	REEL No.	NO. LINES	METRES SLIPPED

FORMATION
2001-08-30
REDESCENDRE LES 8 TIGES AU FOND
114 AVAIT 25M. de "FIL"
CIRCULER
RECONDITIONNER LA BENTONITE
SORTIR DU TROUS DIFFICULTE A PARTIR DU FOND POUR 60M.
Trier 30 Pipes

DRILLING CREW PAYROLL DATA				No.	
DATE 2001-08-30				PROVINCE QUEBEC	
WELL NAME & No. BECANCOUR #1				CAMP NONCAMP	
COMPANY FORAGAZ INC.				RIG MANAGER BETTICHAUD HABEL	
RIG No. 1					
FIRST TOUR 00:00 TO 12:00					
CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	12		
DERRICKMAN		J. DESROSIERS	12		
MOTORMAN		J.-P. LEFEBVRE	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					
No. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT					

COMPLETION	
A	PERFECT
B	TRIP TRIPS
C	TREATING
D	SWABBING
E	TESTING
F	ADDITIONAL
G	
TOTALS 12/12	
DAY WORK TIME SUMMARY (OFFICE USE ONLY)	
HRS. W/CENTR. D.P.	
HRS. W/OFF. D.P.	
HRS. W/OFF.	
HRS. STANDBY	
TOTAL DAY WORK	
No. OF DAYS FROM START	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

No.	DRILLING ASSEMBLY (at end of tour)	BIT RECORD	MUD RECORD
1	STB RWH OD	SIZE MFG	DENSITY kgm ³
2	D.C. ID OD	TYPE	PRESSURE GRADIENT
3	STB RWH OD	JETS mm	VISCOSITY
4	D.C. ID OD	SER No.	PV mPa*s
5	STB RWH OD	DEPTH OUT	GEL STR Pa
6	STB RWH OD	DEPTH IN	WATER LOSS cm ³
7		DEPTH IN	pH
8		TOTAL METRES DRILLED	SOLIDS %
9		TOTAL HRS. RUN	
10	STANDS DP	COND. VES. TB/GAGE	MUD & CHEMICALS ADDED
11	SINGLES DP	FLOW RATE	TYPE AMT. kg TYPE AMT. kg
12	KELLY DOWN	PRESSURE DROP kPa	
13	TOTAL		
14	(FORCE) WT. OF STRING daN		
15	REMARKS		

METRES DRILLED		DEVIATION RECORD	
FROM	TO	DEPTH	DEV.
7.00	9.30	2.30	6
9.30	13.30	4.00	6
13.30	19.00	5.30	6

FORMATION
2001-08-31

Finis de sortir du trou, préparer "fishing couplage"
redescendre dans le trou avec les 6 "cads" manœuvre plus manelle et mud mater.
sortir du trou jusqu'à 5 pipes du mud mater.
Echapper 72m de 7" dans le trou.

SECOND TOUR 12:00 TO 24:00				No.	
DATE 2001-08-31				PROVINCE QUEBEC	
WELL NAME & No. BECANCOUR #1				CAMP NONCAMP	
COMPANY FORAGAZ INC.				RIG MANAGER BETTICHAUD HABEL	
RIG No. 1					
CREW	SOC. INS. No.	NAME	HRS.	YES	NO
DRILLER		B. HABEL	12		
DERRICKMAN		J. DESROSIERS	12		
MOTORMAN		J.-P. LEFEBVRE	12		
FLOORMAN					
FLOORMAN					
FLOORMAN					
LEASEMAN					
CRANE SUPT.					
MECHANIC					
WELDER					
ROUSTABOUT					
ROUSTABOUT					
TRAINEE					
DERRICKMAN (2)					
No. OF DAYS _____ SINCE LAST LOST TIME ACCIDENT					

OFFICIAL DAILY DRILLING REPORT FORM

No.

DAILY DRILLING REPORT REPORT No.

LEASE ST-BARNABE OPERATOR JONEX WELL No. 4 WATER DEPTH 2009-09-04 DATE 04-05 CONTRACTOR FORAGAZ INC. SIGNATURE OF OPERATOR'S REPRESENTATIVE SIGNATURE OF CONTRACTOR'S RIG MANAGER

TIME DISTRIBUTION - HOURS table with columns for operation, first/second tour, and hours.

COMPLETION table with columns for operation, bit record, mud record, and remarks.

LEGEND Metric expressions: mud density = pump-stroke weight of string linear mass viscosity = sec

LEGAL LAND DESCRIPTION table with columns for outside/inside diameter, make, length.

METRES DRILLED table with columns for from/to, elapsed time, code.

DEVIATION RECORD table with columns for depth, deviation.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS section with handwritten notes.

METRES DRILLED table for the second tour.

DEVIATION RECORD table for the second tour.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS section for the second tour.

flow rate = cubic metre per minute (m³/min) pressure gradient = kilopascal per metre (kPa/m) yield point = pascal (Pa)

WIRE LINE RECORD table with columns for size, reel no., metres slipped.

METRES DRILLED table for the first tour.

DEVIATION RECORD table for the first tour.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS section for the first tour.

METRES DRILLED table for the second tour.

DEVIATION RECORD table for the second tour.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS section for the second tour.

DRILLING CREW PAYROLL DATA form with fields for date, well name, company, rig manager.

FIRST TOUR 00:00 TO 12:00 payroll table with columns for crew, soc. ins. no., name, hrs.

SECOND TOUR 12:00 TO 24:00 payroll table with columns for crew, soc. ins. no., name, hrs.

OFFICIAL DAILY DRILLING REPORT FORM

DRILLING REPORT REPORT NO. WELL No. 11 WATER DEPTH DATE 2011-01-06 RIG No. OPERATOR BERANEUR JONEX CONTRACTOR FORGARD INC SIGNATURE OF CONTRACTOR'S RIG MANAGER BERTHIAUX

DRILLING CREW PAYROLL DATA DATE 2011-01-06 PROVINCE QC WELL NAME & No. BERANEUR 11 CAMP NONCAMP COMPANY FORGARD INC RIG MANAGER BERTHIAUX

WIRE LINE RECORD table with columns: NO. JOINTS, TOTAL LENGTH, SET AT, REEL No., METRES SUPPLIED, METRES OUT OFF, MEGAPASCALS, etc.

METRES DRILLED table with columns: FROM, TO, DR. D, CORE No., CORE C, CORE No., DEPTH, DEV, ELAPSED TIME, etc.

LEGAL LAND DESCRIPTION: (1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (using check list) (3) HAS Signs Posted (if required)

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS: FORMATION 9-6 BOILER HOURS... REANER DANS LE TROUS... CIRCULAIT... TRAVAILLER DE 6684 A 6720... L'AY DONT PIPE, ET CACH...

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS: FORMATION 9-6 BOILER HOURS... HAWANER AUTOUR DE LA... drill arriver au voyage... a la shop!

TIME DISTRIBUTION - HOURS table with columns: OPERATOR, FIRST TOUR, SECOND TOUR, etc.

MUD RECORD table with columns: TIME, DENSITY, PRESSURE GRADIENT, VISCOSITY, etc.

BIT RECORD table with columns: No., DRILLING ASSEMBLY, BIT No., SIZE, MFG, etc.

COMPLETION table with columns: A. FEET/FT, B. TBG TRIPS, C. TREATING, D. SWABBING, etc.

Annexe 2 : Relevé de déviation

JUNEX inc.

Positionnement du forage JUNEX Bécancour no. 1
Basses-Terres du Saint-Laurent, centre du Québec

Utilisation du système ReflexIT en première canadienne

Jean-Sébastien Marcil
Géologue, JUNEX inc.



Permis : 1996PG950
Date : Août 2001

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Résumé

- **JUNEX inc.** a entrepris le forage *JUNEX Bécancour no.1* en décembre 2000. En juillet 2001, après avoir atteint une profondeur de 858 mètres par rapport à la table de rotation, une déviation oblique du forage en direction du sud-est (N135) a été entreprise. Dans le but de bien positionner et de bien orienter la tête du forage, JUNEX et Foragaz ont utilisé, en première canadienne, le système ReflexIT. Ce système a permis d'arpenter le puits avec succès de façon rapide et précise. La méthodologie d'utilisation de cet appareil est assez simple et les résultats ont été validés par la complétion de plusieurs essais avant de débiter les travaux de déviation.

1. Introduction

Au cours de l'été 2001, *JUNEX inc* a réalisé le puits JUNEX Bécancour no. 1. Ce forage d'une longueur de 1500 mètres est un forage orienté obliquement vers le sud. Il a pour but de tester le potentiel en gaz naturel d'une zone perméable située à proximité d'une faille.

Les travaux de forage sont réalisés par Foragaz inc. sous la supervision de l'ingénieur de forage Jean-Yves Lavoie. Foragaz utilise une foreuse hydraulique de type *Barber*, spécialement équipée et modifiée pour le forage de puits pétroliers et gaziers. La déviation se fera au moyen d'un moteur de fond activé par la boue de type *Computalog 3 3/8" Lobe 5/6* acquis par Foragaz. Bien que la réalisation d'un forage dévié représente un défi technique en soi, la détermination de la position et l'orientation de ce genre forage sont des étapes cruciales pour réussir cette entreprise. Dans le but de bien positionner le forage et ainsi d'atteindre avec succès la cible, JUNEX et Foragaz ont utilisé le système ReflexIT. Ce système n'a jamais été utilisé au Canada et JUNEX est une des premières compagnies au monde à l'utiliser. Le rapport qui suit présente les résultats de ces travaux de positionnement et déviation.

a) Localisation

Le Bloc Bécancour est couvert par le permis 1996PG950 et il est la propriété de *JUNEX inc*. Il est situé en bordure du fleuve Saint-Laurent au sud-est de la ville de Trois-Rivières. La rivière Bécancour divise le bloc en deux parties. Le forage *JUNEX Bécancour no.1* est localisé sur le bloc Est. Le forage est situé sur le même site de forage que celui de SOQUIP-Pétrofina Bécancour no. 1 mais à 40 mètres au sud-est.

b) Objectifs

Le forage dévié est équipé d'un système *ReflexIT* qui permettra d'établir la position exacte de la tête de forage tout au long de l'avancé des travaux.. En arpentant adéquatement le trou de forage, il devient plus facile d'atteindre la cible. La méthode doit être précise et efficace car une déviation sur un forage profond pour engendrer un déplacement de plusieurs dizaines de mètres. Une déviation de 1 degré sur 1000 mètres correspond à un déplacement horizontal de 17,5 mètres. Lorsque que le forage est oblique est que la cible est sub-horizontale, une tel déviation est suffisante pour manquer complètement la cible.

2. Résultats

Le programme de forage, présenté à l'annexe 1, consiste d'abord à forer un puits vertical jusqu'à une profondeur de 850 mètres, suivi d'une partie déviée jusqu'à 1200 mètres (TVD). Cette partie déviée orientée N180 aura une longueur de 650 mètres et atteindre une inclinaison maximal (*maximal drift*) de 60 degrés.

a) Méthodologie d'utilisation de ReflexIT

Il existe plusieurs façon d'utiliser le ReflexIT. Il est possible de l'utiliser en prenant des mesures continues ou en prenant des mesures coordonnées dans le temps. La méthode utilisée par JUNEX consistait à porter la sonde au fond du puits à 850 mètres et de prendre une mesure à tous les 25 mètres. La sonde agissant de façon indépendante, elle prend des mesures de façon continue. À tous les 25 mètres, le StoreIT enregistre l'heure à laquelle une mesure à été prise. Lorsque que la sonde revient à la surface le StoreIT se synchronise avec le SensIT pour obtenir la correspondance temps-profondeur. Dans un dernier temps, le système recalibre et corrige toutes les mesures prises lors de la remontée de la sonde.

Les valeurs d'azimuth sont toujours mesurées par rapport au nord magnétique. Il faut donc les corriger avant de les mettre en carte. La déclinaison magnétique à Bécancour est positive de 21 degrés (il faut additionner 21 degrés aux mesures prises par ReflexIT).

b) Relevé des déviations

Lors du forage de la partie verticale du trou, plusieurs mesures de déviation ont été prises à l'aide d'un GoDevil. Cet appareil ne fournit que des mesures d'inclinaison du puits, la direction du trou doit donc être estimée en fonction des déviations mesurées sur les puits localisés à proximité.

Tableau 1 : Relevé des mesures de déviation prises avec le GoDevil

Station	Profondeur (mkb)	Déviation (dir/incli)	
1	0	0	0,00
2	351	305	5,50
3	370	305	5,75
4	390	305	5,00
5	409	305	6,00
6	428	305	5,75
7	448	305	4,75
8	467	305	5,00
9	486	305	4,10
10	506	305	4,35
11	527	305	4,50
12	547	305	4,50
13	567	305	3,50
14	586	305	3,50
15	604	305	3,00
16	633	305	2,25
17	652	305	2,00
18	671	305	1,75
19	690	305	2,00

* Les chiffres en couleur indiquent les stations pouvant être comparées entre les deux tests

En utilisant *Wellpath3*, un logiciel servant à calculer des trajectoires de forage, on calcule un déplacement de 40 mètres vers le nord-ouest. Ce calcul de déviation est peu précis puisqu'on n'a pas de mesures de direction exacte, toutefois, elle permet d'évaluer la distance maximale de déviation du puits si le puits avait toujours dévié dans la même

direction préférentielle. L'utilisation de ReflexIT permettra donc d'avoir une mesure plus exacte et devrait indiquer des inclinaisons similaires.

Quatre essais ont été effectués avec le système ReflexIT dans le but de bien évaluer la précision de l'appareil. Les deux premiers essais avaient pour but de vérifier si les données recueillies par l'appareil étaient reproductibles et cohérentes. Le résultat de ces deux essais étant symétriques, nous en avons conclu que l'appareil fonctionnait adéquatement. Le troisième essai avait pour but de déterminer les paramètres à utiliser pour obtenir les bons graphiques. Le quatrième essai avait pour but de comparer les données recueillies dans la zone ayant connu la plus importante déviation selon le GoDevil.

Le test de déviation a donc été effectué au cinquième essai. Les mesures ont été prises à tous les 25 mètres. Le résultat des

Tableau 2 : Relevé des mesures de déviation prises avec le ReflexIT

Station	Profondeur (mkb)	Déviation (dir/incli)	
1	8	0	0
2	100	0	0
3	133	64,28	0,96
4	157,99	66,05	1
5	182,99	56,55	1,44
6	207,98	61,19	1,45
7	232,97	64,16	1,56
8	257,96	65,39	2,1
9	282,93	69,54	2,81
10	307,89	74,02	4,14
11	332,8	79,88	5,28
12	357,7	79,59	5,21
13	382,6	78,75	5,03
14	407,5	79,59	4,9
15	432,42	80,75	4,67
16	457,34	82,86	4,43
17	482,26	82,22	4,42
18	507,19	82,92	4,67
19	532,12	81,17	3,64
20	557,08	73,45	2,77
21	582,06	61,01	2,25
22	607,04	83,16	2,01
23	657,01	98,49	1,73
24	682	109,51	1,28
25	706,99	134,47	1,76
26	731,99	168,19	1,02
27	756,98	193,71	2,23
28	781,95	213,29	2,73
29	806,92	231,86	2,99
30	831,89	233,17	3,22
31	856,85	238,39	3,17

Le calcul de la déviation montre que le forage a subi trois déviations majeures reliées à des événements géologiques :

- Déviation vers N75 sur une longueur de 600 mètres pour un déplacement horizontal de 30 mètres

- Rotation du forage de 155 degrés dans le sens horaire sur une longueur de 200 mètres amenant un déplacement horizontal de 3 m vers le sud
- Déviation vers N230 sur une longueur de 50 mètres pour un déplacement horizontal de 5 mètres

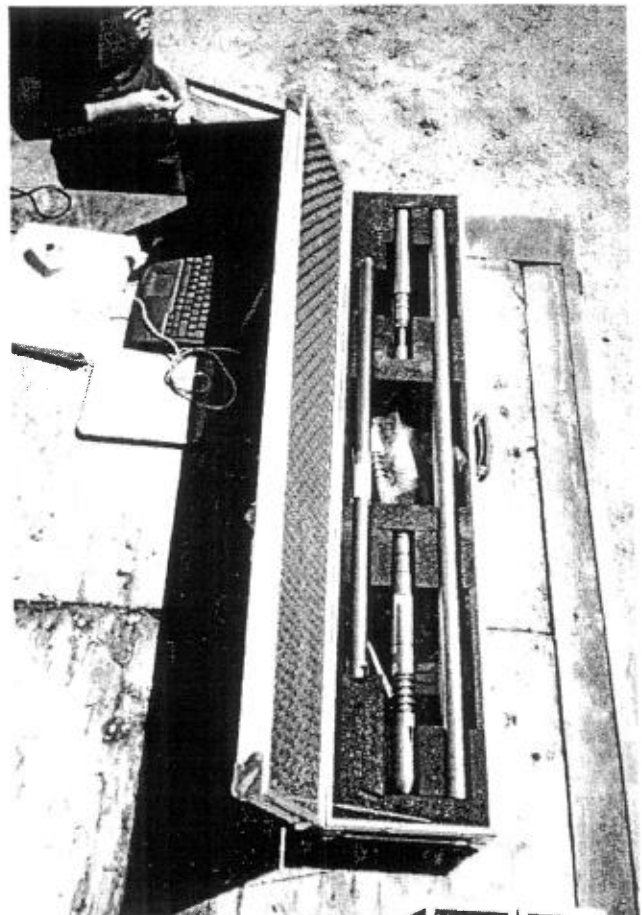
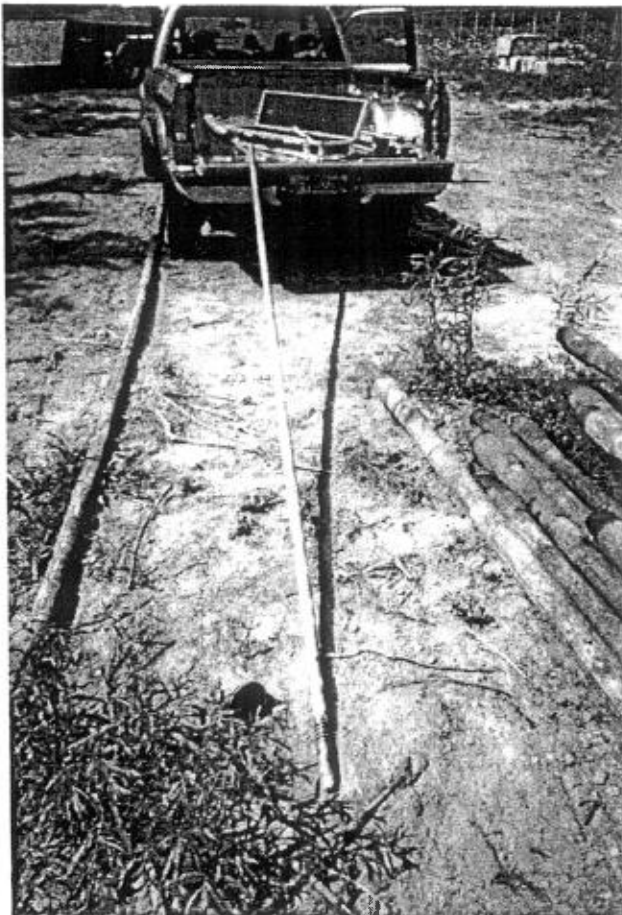
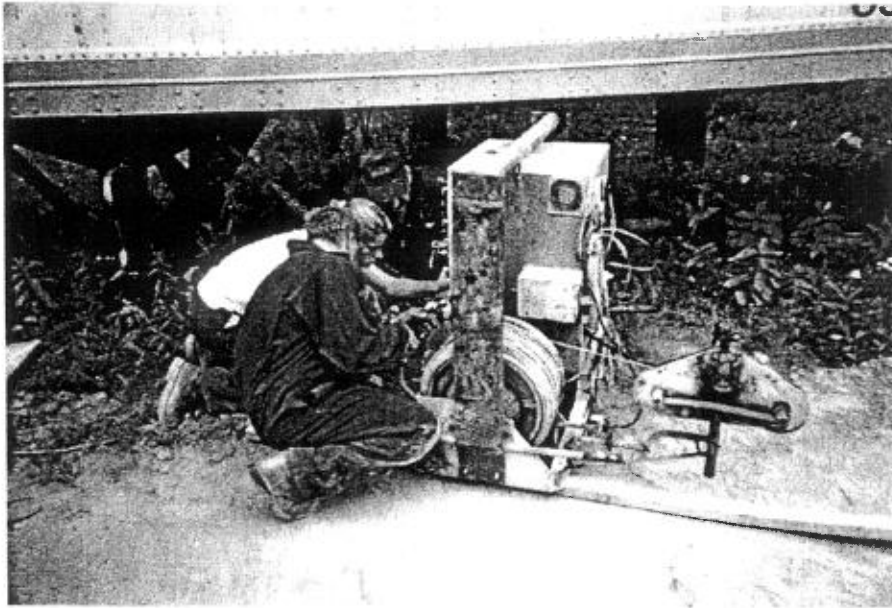
La résultante de ces déviations donne un déplacement horizontal de 26 mètres vers l'est et une profondeur vraie (TVD) de 856,85 mètres. À partir de ce point plusieurs mesures ont été prises tout au long du forage dévié pour déterminer si le forage conservait la bonne orientation vers le sud.

Les événements géologiques reliés à ces déviations sont des failles (présence de stries sur les retailles de forages) et l'interprétation des lignes sismiques indique que ces failles ont un pendage faible et une vergence vers le nord. Ces failles sont des chevauchements au front du bassin d'avant-pays.

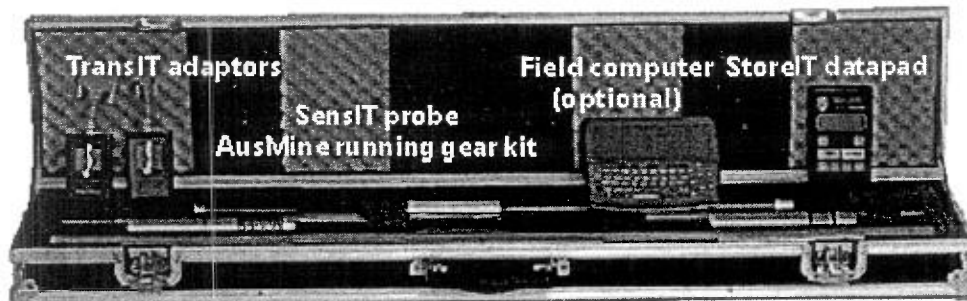
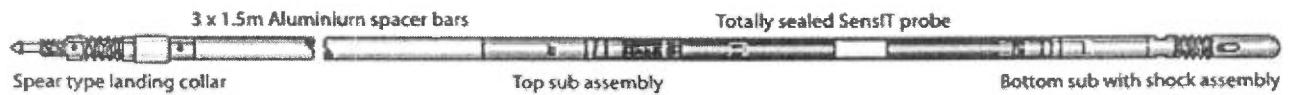
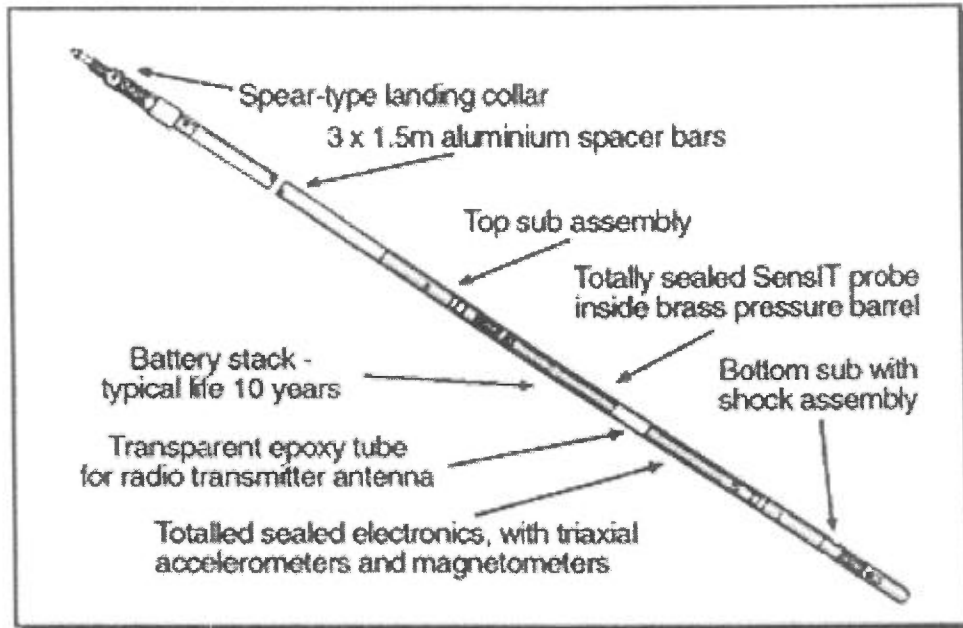
3. Recommandations

La facilité d'utilisation et la précision du système ReflexIT rend cet outil très efficace lors des travaux de forage. Je recommande donc de poursuivre l'utilisation du système ReflexIT pour positionner les forages et mesurer les taux de déviation.

Photographies de terrain prises lors de l'utilisation du ReflexIT



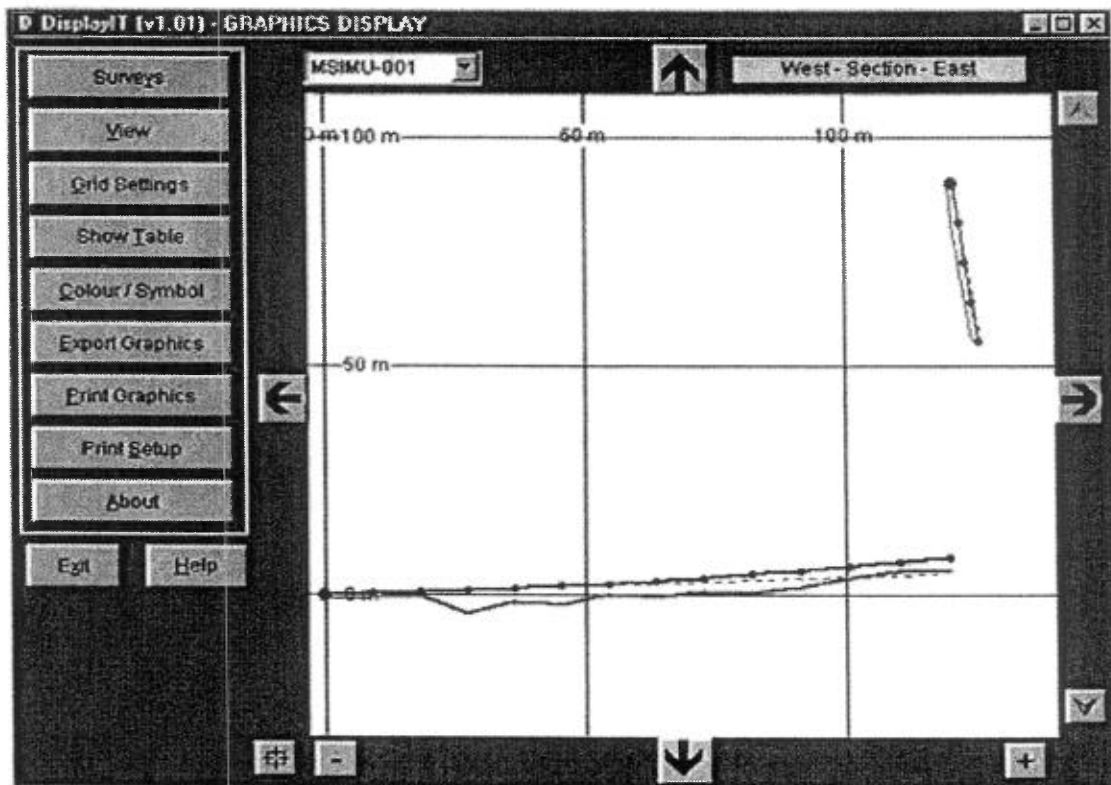
Éléments du système ReflexIT



Data Table

MSIMU-001

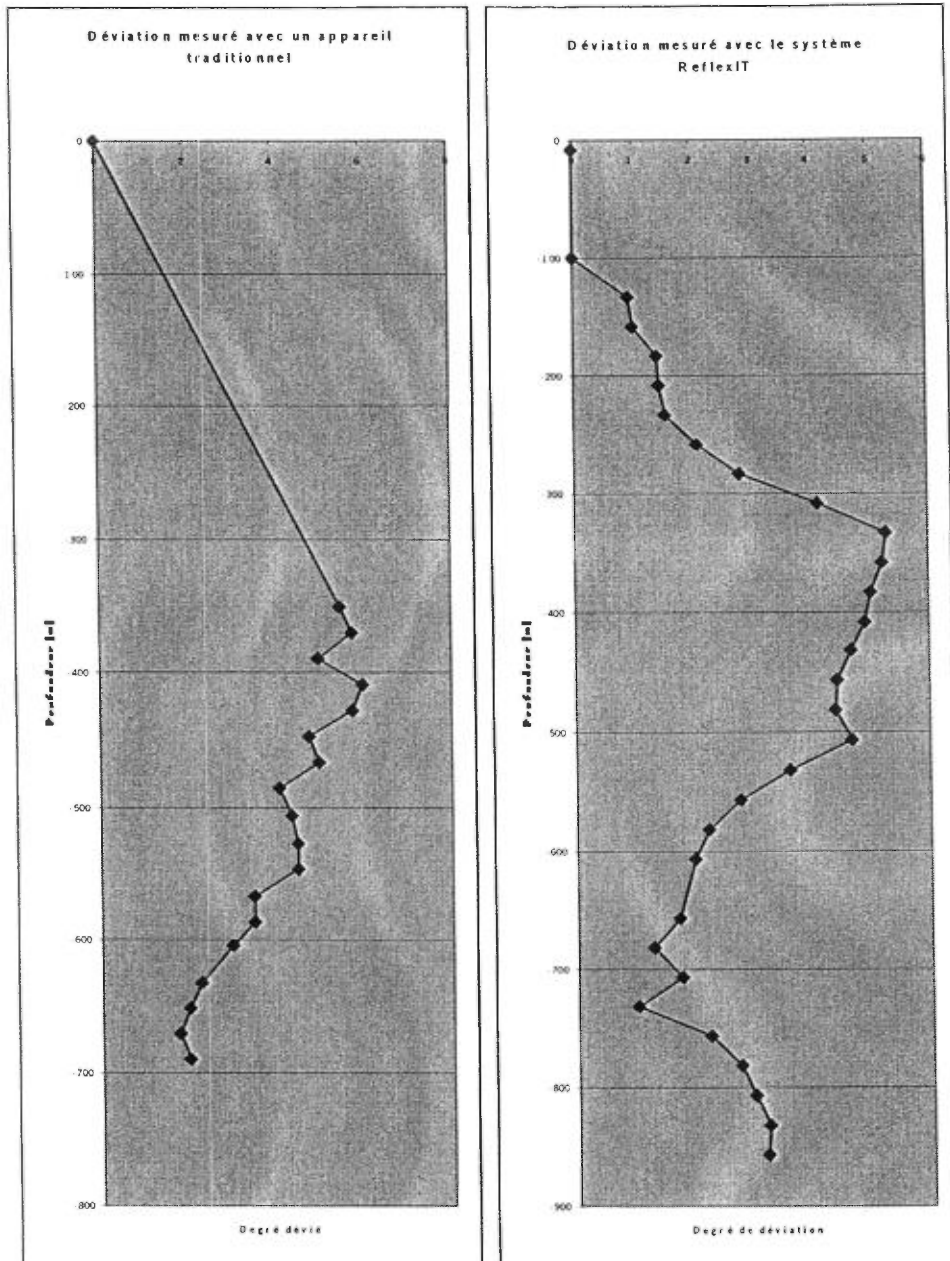
Station	Dip	Azimuth	Easting	Northing	Elevation
Metres	Degrees	Degrees	Metres	Metres	Metres
0,0	2,0	64,1	0,00	0,00	0,00
10,0	2,0	64,1	8,99	4,37	0,34
20,0	2,0	64,1	17,98	8,74	0,69
30,0	2,0	65,6	27,02	12,99	1,03
40,0	2,5	65,2	36,11	17,14	1,43
50,0	3,0	66,2	45,21	21,26	1,91
60,0	3,4	65,7	54,33	25,33	2,47
70,0	3,8	66,6	63,45	29,37	3,10
80,0	4,1	67,2	72,63	33,26	3,78
90,0	4,4	68,3	81,86	37,05	4,54
100,0	4,7	69,2	91,15	40,67	5,33
110,0	5,3	69,2	100,46	44,21	6,20
120,0	5,6	68,8	109,75	47,78	7,15
130,0	6,1	69,2	119,04	51,35	8,17



Logiciels MeasureIT et DisplayIT

Comparaison de la déviation en fonction de la profondeur

Mesures prises avec deux appareils différents



Annexe 3 : Descriptions des déblais de forage

Description des retailles
Junex Bécancour no.1

9m	shale (100%) gris foncé, moyennement calcaireux (50%). Granulométrie des flocons : 1 à 5mm.
18m	shale (50%) et si
405 m	Shale gris foncé avec quelques présences de siltstone. Granulométrie des flocons varie entre 0.5mm (70%) et 2 mm(30%)
410m	Shale entremêlé de siltstone, environ moitié moitié. Granulométrie des particules varie entre 0.5mm (70%) et plus (30%). On remarque la présence de particules allant jusqu'à 5mm ($\pm 3\%$) gris foncé.
415m	shale et siltstone (50/50) gris foncé. Granulométrie des flocons : 1mm(80%)j et 3mm et moins(20%)
420m	shale ($\pm 75\%$) et siltstone (25%) gris foncé. Granulométrie légèrement plus grossière : 2-3 mm uniforme. Flocon très anguleux.
425m	shale (75%) et siltstone (25%) gris foncé. Granulométrie environ 1m, quelques grains à 2mm (5%). Flocon sub-anguleux.
430m	shale (80%) et siltstone (20%), gris foncé. Présence de particules couleur rouille(1%), granulométrie des flocons : 1mm.
435m	shale (90%) et siltstone (10%), gris foncé, présence de particules couleur rouille(1%), granulométrie uniforme (1%).
440m	shale (95%) et siltstone (5%), gris foncé, granulométrie légèrement étalée : 1mm(50%), 2mm(30%), 3mm(20%). Flocon anguleux.
445m	shale (90%) et siltstone (10%), gris foncé. Granulométrie presque uniforme :2mm. Flocon anguleux.

- 450m shale (90%) et siltstone (10%), gris foncé. Granulométrie uniforme : 1mm. Flocon anguleux.
- 455m shale (85%) et siltstone (15%), gris foncé. Granulométrie étalée : 0.5mm à 3mm. Flocon anguleux.
- 460m shale (80%) et siltstone (20%), gris foncé. Présence de quelques particules couleur rouille. Granulométrie étalée : 0.5mm à 3mm. Légèrement calcaireux.
- 465m shale (75%) et siltstone (25%), gris foncé, présence de quelques particules couleur rouille (1%). Granulométrie étalée : 0.5mm à 2mm.
- 470m shale (90%) et siltstone (10%), gris foncé. Légèrement calcaireux. Granulométrie variable : 1mm (50%), 3mm (50%).
- 475m shale (85%) et siltstone (15%), gris foncé, présence de quelques particules rouillées (1%). Légèrement calcaireux, granulométrie variable : 0.5mm à 3mm.
- 480m shale (75%) et siltstone (25%), gris foncé. Présence de quelques particules couleur rouille (1%). Légèrement calcaireux. Granulométrie variable : 0.5mm à 3mm.
- 485m shale (70%) et siltstone (30%), gris foncé. Fracture visible dans des retailles. Granulométrie variable : 0.5mm à 3mm.
- 490m shale (70%) et siltstone (30%), gris foncé, présences de quelques particules rouillées (1%), calcite de fracture, granulométrie variable : 0.5mm à 3mm.
- 495m shale (70%) et siltstone (30%), gris foncé. Calcite de fracture. Granulométrie : 2-3mm.
- 500m shale (75%) et siltstone (25%), gris foncé. Calcite de fracture. Granulométrie variable : 0.5mm à 3mm.
- 505m shale (75%) et siltstone (25%), gris foncé. Granulométrie variable : 0.5mm à 2mm.

- 510m siltstone (60%) et shale (40%). Shale gris foncé uniforme. Siltstone gris à beige pâle, parsementé de grains de mica. Pyrite rouillée (1%). Traces de calcite de fracture. Granulométrie des flocons : 1-2mm. Légèrement calcaireux.
- 515m siltstone (90%) et shale (10%). Shale gris foncé uniforme. Siltstone gris foncé-brun à beige pâle, parsementé de grains de mica. Retaille de shale en flocon anguleux tandis que siltstone est plus arrondi. Légère réaction à l'acide. pyrite rouillée : 0.7%.
- 520m siltstone (85%) et shale (15%). Shale gris foncé. Siltstone gris foncé à beige pâle, avec présence de grains de mica. Retaille de shale anguleuses ; siltstone arrondies. Légèrement calcaireux. Quelques grains de pyrite rouillées (très peu).
- 525m siltstone (75%) et shale (25%). Shale gris foncé, siltstone gris foncé à beige pâle, parsementé de grains de mica. Fragment anguleux de shale et arrondi de siltstone. Granulométrie : 1-2mm (flocons). Légèrement calcaireux. Très peu de pyrite rouillées.
- 530m siltstone (75%) et shale (25%). Shale gris foncé uniforme, siltstone gris foncé à beige pâle, parsementé de grains de mica. Flocons de shale anguleux ; fragments de siltstone arrondi. Légère réaction à l'acide. Pyrite rouillée : 1%. Granulométrie des flocons : 1 à 3mm.
- 535m siltstone (50%) et shale (50%). Shale gris foncé uniforme, siltstone gris foncé à beige pâle, parsementé de grains de mica. Flocon anguleux de shale et arrondi de siltstone. Granulométrie des flocons : 1-2mm. Pyrite rouillée : 1%. Légèrement calcaireux.
- 540m siltstone (70%) et shale (30%). Shale gris foncé uniforme. Siltstone gris foncé à beige pâle, parsementé de grains de mica. Flocon de shale anguleux et arrondi de siltstone. Granulométrie des flocons : 1 à 3mm. Pyrite rouillée : 1%. Légèrement calcaireux.
- 545m siltstone (90%) et shale (10%). Shale gris foncé uniforme. Siltstone gris foncé à beige pâle, avec grains visibles de mica. Granulométrie des flocons : 1mm. Flocons de shale

- anguleux ; de siltstone, arrondi. Très peu de grains de pyrite rouillée. Légèrement calcaireux.
- 550m siltstone (80%) et shale (20%). Shale gris foncé uniforme. Siltstone gris foncé à beige pâle où se mêle le mica. Flocon anguleux de shale ; arrondi de siltstone. Granulométrie des flocons : 1-2mm. Pyrite rouillée 1%. Légèrement calcaireux.
- 555m siltstone (80%) et shale (20%). Shale gris foncé uniforme. Siltstone gris foncé à beige pâle où s'entremêle des grains de mica. Flocons de shale anguleux ; siltstone : arrondi. Granulométrie des flocons : 1-3mm. Pyrite rouillée : 1%. Légèrement calcaireux.
- 560m siltstone (50%) et shale (50%). Shale gris foncé à moyen. Siltstone gris foncé à beige pâle, entremêlé de mica. Flocon de shale très anguleux ; arrondi de siltstone. Granulométrie des flocons : 1mm à quelques 2mm. Pyrite rouille : 2%. Calcite de fracture. Légèrement calcaireux.
- 565m siltstone (75%) et shale (25%). Shale gris foncé à moyen. Siltstone gris foncé à beige pâle, entremêlé de grains de mica. Granulométrie des flocons : 2mm. Quelques grains de pyrite rouillée. Légèrement calcaireux.
- 570m siltstone (75%) et shale (25%). Shale gris foncé. Siltstone gris foncé à beige pâle, entremêlé de grains de mica. Granulométrie des flocons : 1mm à 2mm. Quelques grains de pyrite rouillés. Légère réaction à l'acide.
- 575m siltstone (85%) et shale (15%). Shale gris foncé. Siltstone gris foncé à beige très pâle, entremêlé de grains de mica. Granulométrie des flocons : 1-2mm. Rares grains de pyrite rouillés. Légèrement calcaireux.
- 580m siltstone (75%) et shale (25%). Shale gris foncé et siltstone gris foncé à beige pâle : grains mica. Granulométrie des flocons : 1mm. Quelques grains de pyrite rouillés. Légèrement calcaireux.
- 585m shale (20%) et siltstone (80%). Shale gris foncé. Siltstone gris foncé à beige pâle tacheté de grains de mica. Pyrite rouillée

- 1%. Légèrement calcaireux. Granulométrie des flocons : 1mm.
- 590m siltstone (85%) et shale (15%). Shale gris foncé. Siltstone gris foncé à beige pâle, tacheté de mica. Granulométrie des flocons : 1mm. Légèrement calcaireux. Pyrite rouillée : 1%. Trace de calcite de fracture.
- 595m siltstone (85%) et shale (15%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Très peu de pyrite rouillée. Calcite de fracture abondante : 0.8%. Légèrement calcaireux.
- 600m siltstone (80%) et shale (20%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1-2mm. Flocon de shale plus gros et anguleux versus grains arrondis de siltstone. Pyrite rouillée : 1%. Calcite de fracture en gros grains : 0.5%. Légèrement calcaireux.
- 605m siltstone (85%) et shale (15%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Flocon de shale grossier et anguleux. Calcite de fracture : contact visible sur flocon (0.7%). Rares grains de pyrite rouillés. Légèrement calcaireux.
- 610m siltstone (80%) et shale (20%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Flocon de shale anguleux. Traces de calcite de fracture. Peu pyrite rouillée. Légèrement calcaireux.
- 615m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Flocon shale anguleux. Calcite de fracture : 0.5%. Pas pyrite rouillée. Légèrement calcaireux.
- 620m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à beige pâle. Granulométrie des flocons : 1-2mm. Flocon shale anguleux : pas pyrite rouillée. Légèrement calcaireux. Pas de trace de calcite de fracture.
- 625m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à beige pâle. Granulométrie des flocons : 2mm. Trace de calcite de fracture. Pas pyrite.

- 630m siltstone (70%) et shale (30%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Traces de calcite de fracture (en gros grains). Pas pyrite. Légèrement calcaireux.
- 635m siltstone (60%) et shale (40%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 1mm. Traces de calcite de fracture. Pas pyrite. Légèrement calcaireux.
- 640m siltstone (75%) et shale (25%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 2mm. Rare pyrite rouillée. Pas calcite fracture visible. Légèrement calcaireux.
- 645m siltstone (75%) et shale (25%). Shale gris foncé. Siltstone gris foncé à beige pâle. Granulométrie des flocons : 2mm. Pas pyrite rouillé. Pas calcite de fracture visible. Légèrement calcaireux.
- 650m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à beige pâle. Granulométrie des flocons : 2mm. Pas pyrite rouillé. Pas calcite fracture visible. Légèrement calcaireux.
- 655m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Quelques grains de pyrite rouillé. Pas calcite de fracture. Légèrement calcaireux.
- 660m siltstone (75%) et shale (25%). Shale gris foncé et siltstone gris foncé à pâle. granulométrie des flocons : 1mm. Rare grains de pyrite rouillé. Légèrement calcaireux.
- 665m siltstone (75%) et shale (25%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Légèrement calcaireux. Pas pyrite ni calcite de fracture visible.
- 670m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 1 à 2mm. Peu de pyrite. Pas de calcite de fracture. Légèrement calcaireux.

- 675m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 0.5mm. légèrement calcaireux.
- 680m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 0.5mm. légèrement calcaireux.
- 685m siltstone (70%) et shale (30%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 0.5mm. légèrement calcaireux. Quelques rares grains de pyrite rouillés.
- 690m siltstone (50%) et shale (50%). Shale gris foncé, paillette anguleuse. Siltstone gris foncé à pâle, débris arrondis et granuleux. Granulométrie des flocons : 0.5mm. Quelques rares grains de pyrite rouillée. Légèrement calcaireux.
- 695m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 0.5mm. quelques grains de pyrite rouillé. Légèrement calcaireux.
- 700m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 0.5mm. quelques grains pyrites rouillés. Légèrement calcaireux.
- 705m siltstone (60%) et shale (40%). Shale gris foncé et siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Traces de calcite de fracture. Quelques grains de pyrite rouillés. Légèrement calcaireux. Note : présence de quelques grains plus foncé de shale (environ 10%).
- 710m siltstone (40%) et shale (60%). Shale gris foncé à noir et siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Quelques grains de pyrite rouillés. Très légère réaction à l'acide. Note : grains plus foncé de shale : environ 40%.
- 715m siltstone (40%) et shale (60%). Shale gris foncé à noir et siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Quelques grains pyrite rouillé. Traces de calcite de fracture impure (pas transparente). Très légère réaction à l'acide.

- 720m shale (70%) et siltstone (30%). Shale noir à gris foncé, siltstone gris foncé à pâle. Granulométrie des flocons : 1mm. Quelques grains pyrite rouillés. Quelques morceaux de casing. Légèrement calcaireux.
- 725m shale (70%) et siltstone (30%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. Quelques grains pyrite rouillés avec morceau de casing. Légèrement calcaireux.
- 730m shale (75%) et siltstone (25%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 1 à 0.5mm. quelques grains de pyrite rouillés et morceaux de casing. Légèrement calcaireux.
- 735m shale (65%) et siltstone (35%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. traces de calcite de fracture. Quelques grains rouillés de pyrite et casing. Note : toujours de plus en plus de grains de shale très foncé.
- 740m shale (70%) et siltstone (30%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 1 à 0.5mm. Quelques grains rouillés de pyrite et casing. Présences de stries (peu). Légèrement calcaireux.
- 745m shale (75%) et siltstone (25%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. traces de calcite de fracture. Quelques grains rouillés de pyrite et casing. Légèrement calcaireux. Présence de flocon plus grossier : 3-4mm.
- 750m shale (90%) et siltstone (10%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. traces de calcite de fracture. Présence de morceau (0.5mm) de quartz. Quelques grains rouillés : pyrite et casing. Légèrement calcaireux.
- 755m shale (95%) et siltstone (5%). Shale noir à gris foncé. Siltstone gris moyen à pâle. Granulométrie des flocons : 2-3mm. Traces de calcite de fracture. Flocon très anguleux. Légèrement calcaireux.

760m

shale (95%) et siltstone (5%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. présence de gros flocons anguleux de 2mm. Traces de calcite de fracture. Présence de grains de quartz. Légèrement calcaireux. Grains rouillés.

765m

shale (95%) et siltstone (5%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. Quelques gros flocons anguleux : 4.5mm. traces de calcite de fracture. Légèrement calcaireux. Quelques grains plus siliceux.

770m

shale (95%) et siltstone (5%). Shale noir à gris foncé. Siltstone gris foncé. Granulométrie des flocons : 0.5mm. Quelques gros flocons anguleux : 4.5mm. traces de calcite de fracture. Légèrement calcaireux. Quelques grains plus siliceux.

775m

shale (95%) et siltstone (5%). Shale noir à gris foncé. Siltstone gris moyen. Granulométrie des flocons : 2-3mm. Plusieurs gros flocons anguleux de 5mm. Importante présence de stries et présence de calcite de fracture. Légèrement calcaireux.

JUNEX inc.

3075, ch. Des Quatre-Bourgeois
Bureau 103,
Québec, (Québec), G1W 4Y5

Nom du puit: JUNEX Bécancour no. 1
Élévation:
Niveau du sol: 7,5 mètres
Table de rotation: 9,5 mètres
Région: Bécancour
Permis: 1996PG950
Coord. UTM: 5 137 680 mN / 699 172 mE Zone 18

Géologue: Jean-Sébastien Marcil, ing. stag.
Date:
Début: 25 novembre 2000
Fin: 1er octobre 2002 (prévision)
Contracteur: Foragaz inc

Date	Profondeur	Stratigraphie	Taux Avancement (min-mètre) 20	Arpentage du puit			Déviation	DST	Gaz total (%) 3 64	Indices	Lithologie %	porosité	Cal/Dol (%) 50	Carottes	Remarques
				X	Y	Z									
	5														
	10														shale gris pâle calcaireux
	15														shale gris pâle et traces de grès gris moyen, réaction à l'acide
	20														shale gris pâle et traces de grès gris moyen, réaction à l'acide

21j								gaz				présence de grès à grains fins gris, particules calcaireuses
21j								gaz				
21j								gaz				
21j	405							gaz				shale gris foncé avec qlqs présence de siltstone
21j								gaz				
21j								gaz				
21j						6		gaz				
21j	410							gaz				shale entremêlé de siltstone
21j								gaz				
21j								gaz				
21j								gaz				
21j	415							gaz				shale et siltstone gris foncé
21j								gaz				
21j								gaz				
21j								gaz				
21j	420							gaz				shale et siltstone gris foncé, flocon très anguleux
21j								gaz				
21j								gaz				
21j								gaz				
21j	425							gaz				shale et siltstone gris foncé, flocon sub-anguleux
21j								gaz				
21j								gaz				
22j						5.75		gaz				
22j								gaz				
22j	430							gaz				shale et siltstone gris foncé, présence de pyrite rouillé
22j								gaz				
22j								gaz				
22j								gaz				
22j	435							gaz				shale et siltstone gris foncé, présence de pyrite rouillé 1%
22j								gaz				
22j								gaz				
22j								gaz				
22j	440							gaz				shale et siltstone gris foncé, flocon anguleux
22j								gaz				
22j								gaz				
22j								gaz				

25j					4.1		gaz			veine de calcite visible dans les retailles
25j							gaz			
25j							gaz			
25j	490						gaz			shale et siltstone gris foncé, présence de pyrite rouillée calcite de fracture
25j							gaz			
25j							gaz			
26j							gaz			
26j	495						gaz			shale et siltstone gris foncé calcite de fracture
26j							gaz			
26j							gaz			
26j							gaz			
26j	500						gaz			shale et siltstone gris foncé calcite de fracture
26j							gaz			
26j							gaz			
26j							gaz			
26j	505						gaz			shale et siltstone gris foncé
27j					4.35		gaz			
30j							gaz			
30j							gaz			
30j							gaz			
30j	510						gaz			siltstone et shale gris foncé à beige pâle, mica ds siltstone pyrite rouillée 1%, calcite de fracture légère réaction à l'acide
1jl							gaz			
1jl							gaz			
1jl							gaz			
1jl	515						gaz			siltstone et shale gris foncé à beige pâle, mica ds siltstone pyrite rouillée 0.7%, légère réaction à l'acide
1jl							gaz			
1jl							gaz			
1jl	520						gaz			siltstone et shale gris foncé à beige pâle, mica ds siltstone peu pyrite rouillée, légère réaction à l'acide
1jl							gaz			
1jl							gaz			
1jl							gaz			
1jl	525						gaz			siltstone et shale gris foncé à beige pâle. Mica ds siltstone, peu pyrite rouillée, légère réaction
1jl					4.5		gaz			
1jl							gaz			

5jl	570								gaz		siltstone et shale gris foncé
5jl									gaz		beige pâle. Mica ds siltstone
5jl									gaz		peu pyrite rouillé, légère réaction
5jl									gaz		à l'acide, légère odeur de pétrole
5jl									gaz		sous acide
5jl	575								gaz		siltstone et shale girs foncé à
5jl									gaz		beige très pâle. Mica ds siltstone
6jl									gaz		peu pyrite rouillé, légère réaction
6jl									gaz		à l'acide.
6jl	580								gaz		siltstone et shale gris foncé à
6jl									gaz		beige pâle, grains mica ds siltstone
6jl									gaz		peu pyrite rouillé, légère réaction
6jl									gaz		à l'acide
6jl	585								gaz		siltstone et shale gris foncé à
6jl						3.5			gaz		beige pâle, mica ds siltstone,
6jl									gaz		pyrite rouillé 1%, légère réaction
6jl									gaz		à l'acide.
6jl	590								gaz		siltstone et shale gris foncé à
6jl									gaz		beige pâle, pyrite rouillée1%,
6jl									gaz		légère réaction à l'acide,
6jl									gaz		traces de calcite de fracture
6jl	595								gaz		siltstone et shale gris foncé à
6jl									gaz		beige pâle, peu pyrite rouillée,
7jl									gaz		calcite de fracture abondante0.8%
7jl									gaz		légère réaction à l'acide
7jl	600								gaz		siltstone et shale gris foncé à
7jl									gaz		beige pâle, flocon de shale
7jl									gaz		anguleux, pyrite rouillé 1%,
7jl									gaz		clacite de fracture 0.5%, légère
7jl						3			gaz		réaction à l'acide.
7jl	605								gaz		siltstone et shale gris foncé à
7jl									gaz		beige pâle, flocon de shale
7jl									gaz		ahguleux, c ontact visible calcite
7jl									gaz		de fracture, légère réaction à l
8jl									gaz		l'acide
8jl	610								gaz		siltstone et shale gris foncé à
8jl									gaz		beige pâle, flocon de shale anguleux

	840																<p>trace py, veines de calcite (>5%), blanche, fossile, stries</p>
	845																<p>calcaire brun et shale gris moyen trace py, veine calcites</p>
	850																<p>calcaire brun et shale gris moyen paroi de géode de calcite visible, calcite idiomorphe, fragment de calcite blanche</p>
	855																
	860																

