Page _	of	
3		

## A4a. CERTIFICATE OF OOCYTE RECOVERY and IVM/IVF FOR TRANSGENIC EMBRYOS Micro Injection Recovery No. \_ Breed\_ Ear Tag Donor Name or Tattoo Owner Address Oocyte Recovery Date Yr. Mo. Day Signature \_ Firm Code Practitioner or Team Leader recovering Oocytes (Invitro Fert.) No. \_\_\_\_ Service Sire \_ Breeding Date\_ (Out of Culture-Zygote) Sire \_\_ of \_\_ I.D. Code \_ Freeze Date or Batch No. \_\_\_ \_\_\_\_\_ Sexed Semen X or Y \_ Recovery Date Details of the transgene introduced Date of Pronuclear (Micro genes, artificial chromosomes, retroviral vectors, etc.) Injection \_ Yr. Mo. Dav Details of DNA modification Sperm □\_ (Out of Culture-pre-transfer) Oocyte □ Recovery Date Use new Certificate for each bull used for IVF for one recovery Total Recovered Show use of more than one bull for one recovery as 1 of 3 etc. No. Cleaved/Degen. \_ Firm No. Transferred ET Code No. Frozen Signature Leader of the Embryo Production Team responsible for IVM/IVF B4. CERTIFICATE OF EMBRYO TRANSFER OF TRANSGENIC EMBRYOS (see reverse side for coding instructions) IF FROZEN Date of Freeze Date Embryo Transfer \_\_ Non-surgical \_\_\_\_ Other \_\_ Surgical \_\_\_ on straw if all trans. Mo. Day Practitioner I.D. at one time Straw No.'s One Embryo was transferred to each of the following recipients unless it is noted that more than one was transferred. RECIPIENT IDENTIFICATION **Embryo** Days Ear Tag, Registration Since Stage Transfer or Tattoo No. Code Estrus Code Code No. Date **Cell Line ID** Comments\* Firm Technician/Practitioner or Team Leader that transferred the Embryos

ET Code

\*Use comment column for any special notations and/or identify the location of the opposite half of a divided embryo. Pregnancy can be noted.

Phone (

## CONDITIONS FOR COMPLETING EMBRYO CERTIFICATES

A4a.Complete one or more Certificates of Oocyte Recovery and IVM/IVF for Transgenic Embryos (Micro Injection) for each recovery. Precede registration numbers of donor dam and donor sire(s) with the International Standards Organization (ISO) three letter country codes (cc). The leader of the embryo production team or practitioner responsible for recovering the oocytes and signing the certificate is attesting to the fact that the female donor was identified with her official certificate of identification (Registration) and that the information is true and correct.

The leader of the embryo production team responsible for IVM/IVF of transgenic embryos signing the certificate is attesting to the fact that the complete name and number of the bull is shown with respective bull's identification code and freeze date or batch number shown on the straw from which frozen semen was taken. A new certificate must be completed for each bull used for IVF for one recovery that accurately describes DNA modification of sperm and/or oocytes shown and that all information shown is true and correct to the extent not guarded by patent or intellectual property rights.

B4. Certificate of Embryo Transfer of Transgenic Embryos will be completed to the extent that is necessary and/or appropriate to identify each recipient into which an embryo is transferred. If frozen embryos are transferred, the Certificate of Embryo Production will be completed by the responsible practitioner or by transferring from the original Certificate of Embryo Production or by attaching a copy. The practitioner or embryo production team leader signing the Certificate of Embryo Transfer is attesting to the accuracy and completeness of the identification of the embryos being transferred and the identity of the recipients into which the embryos are being transferred.

One copy of a complete Certificate of Embryo Transfer of Transgenic Embryos, with Certificate of Embryo Production, will be submitted to the appropriate breed organization or recording agency as required by the respective organization, which may require the record before resulting animals can be registered or officially identified. One copy should be provided to the owner.

Should any embryo in a recipient as identified hereon change ownership, it is important that the requirements of the respective breed organization or recording agency responsible for recording the identification of the new owner be followed. This may be required before resulting animals can be registered or officially identified. This would normally be the responsibility of the owner of record.

**MANIPULATION OF EMBRYOS** 

January

JA

Use the following codes to describe the embryo, identify the breed, and identify the month in all dates.

**QUALITY OF EMBRYOS** 

STAGE OF DEVELOPMENT

STAGE OF DEVELOR WILL		OI LINDINIOS	MANI CLATION OF LINDIN	100	January	JA
No. Stage	Code 1. E	Excellent or Good	N - Not Manipulated		February	FE
1 Unfertilized	Code 2. F	-air	D - Divided		March	MR
2 2- to 12-cell	Code 3. F		F - Female by Biopsy		April	AP
3 Early Morula		Dead or degenerating	M - Male by Biopsy		May	MY
,	00de 4. L	bead of degenerating		2001	June	JN
	D ( ) I	TO M   T  :	U - Sex Undetermined by Bio	psy	July	JY
5 Early Blastocyst		TS Manual, Third	Use comment column to des	cribe	August	AU
6 Blastocyst		apter 9, for		CITIDE	September	SE
7 Expanded Blastoc	syst description	of codes.	other biopsies.		October	OC
8 Hatched Blastocys	•					NO
9 Expanded Hatche			SEXED SEMEN		November	
5 Expanded nationes	a Blastocyst		X - Female Y - Male		December	DE
BOVINE						
AN - Aberdeen Angus	BZ - Bonsmara	GS - Gascone	MR - Marchigiana		Rotbunte	
AB - Abondance	CP - Campine Red Pied	GV - Gelbvieh	ME - Maremmana		Salers	
AF - Afrikaner	CN - Canadienne	GI - Gir	MI - Meuse Rhine Issel		Santa Gertudis	
AK - Ankole AY - Ayrshire	CB - Charbray CH - Charolais	GR - Groninger GU - Guernsey	MO - Montbeliard		Senapol	
BA - Barzona	CA - Chianina	GZ - Guzera	MG - Murray Grey NE - Nelore		Shorthorn (milking) Shorthorn (beef - Sco	otch)
BE - Beefalo	DB - Danish Black & White	HC - Hays Converter	NG - Nguni		Shorthorn (polled)	JICH)
BF - Beef Friesian	DJ - Danish Jersey	HH - Hereford (horned)	NM - Normande		Shorthorn (Illawarra)	
BM - Beefmaster	RW - Danish Red & White	HP - Hereford (polled)	NR - Norwegian Red		Simbrah	
BB - Belgian Blue	DE - Devon	SH - Highland (Scotch	PA - Parthenais		Simmental	
BG - Belted Galloway	DR - Dexter	Highland)	PI - Piedmont		South Devon	
BD - Blonde D'Aquitaine	DZ - Drakensberger	HO - Holstein	PR - Pie Rouge	SX -	Sussex	
BX - Boran	FP - East Flemish Red Pied	HY - Hybrid (Alberta Hybrid)	PZ - Pinzgauer		Tarentaise	
BO - Braford	ER - Eringer	IB - Ibage	RA - Ranger		Tasmanian Grey	
BR - Brahman	FA - Flamand	IN - Indu Brasil	AR - Red Angus		Texas Longhorn	
BH - Brahmental	FL - Fleckvieh	JE - Jersey	RB - Red Brangus	TU -		
BL - Braler BN - Brangus	FR - Fribourg FB - Friesian (Belgian)	KB - Kobe (Wagyu) LU - Luing	RD - Red Dane (Red Danish, Danish Red)		Welsh Black West Flemish Red	
BU - Braunvieh	DF - Friesian (Dutch)	LM - Limousin	WW - Red Holstein		Crossbreds	
SB - Brown Swiss (beef)	GA - Galloway (beef)	LR - Lincoln Red	RP - Red Poll	/// -	Ciossbieds	
BS - Brown Swiss (dairy)	GD - Galloway (dairy)	MA - Maine-Anjou	RN - Romagnola			
CAPRINE		, , ,	3 3			
AL - Alpine	AG - Angora	CH - Cashmere	KR - Kalahari Reds	NILI	- Nubian	
TO - Toggenburg	SA - Saanen	BG - Boer	LN - La Mancha		- Savanna Goat	
EQUINE					oavanna ooat	
AS - American Saddlebred	CL - Clydesdale	MN - Morgan	QH - Quarter Horse	SF -	Suffolk Punch	
AP - Appaloosa	HA - Hackney (Horse)	PL - Palomino	SE - Shetland		Tennessee Walking	
AB - Arabian	HK - Hackney (Pony)	PE - Percheron	SI - Shire	TH -	Thoroughbred	
BL - Belgian	HU - Hunter	PN - Pinto	SN - Standardbred	WE -	Welsh	
PORCINE						
YO - Yorkshire	DU - Duroc	BK - Berkshire	PE - Pietrain		Large White (British)	
LA - Landrace	LC - Lacombe	SO - Spotted	TM - Tamworth	LB -	Large Black (British)	
HA - Hampshire	PC - Poland Chine	CW - Chester White	WS - Wessex Saddleback			
OVINE						
AN - Afrino	DM - Dohne Merino	IL - Ile de France	OX - Oxford	MM -	S. African Mutton Me Southdown	rino 🖇
BP - Blackhead Persian	DO - Dorset	LE - Leicester	SP - Persian (Speckled/Skilder)	<b>.</b>	000011001111	rõ
BC - Border Cheviot	DR - Dormer	LI - Lincoln	RA - Rambouillet		Suffolk	~
CO - Columbia	DP - Dorper	ME - Merino	RM - Romnelet		Van Rooy	3 18
CR - Corriedale DA - Damara	FN - Finnish Landrace HA - Hampshire	MT - Montadale NC - N. Country Cheviot	SB - Scottish Blackface SR - Shropshire	- ۵۷۷	White Dorper	IETS 18
DA - Dalliala	пл - папірэпіте	NO - N. Country Cheviot	on - oniopsilie			=