DIAMOND

AREA: ACHAPI LAKE **REPORT NO:** 20

WORK PERFORMED FOR: Northern Dynasty Explorations Ltd.

RECORDED HOLDER: SAME AS ABOVE (**xx**)

: OTHER

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
Pa 816708	M-89-01	319.7m	June/89	(1)
Pa 816710	M-89-02	216.1m	June-July/89	(1)
Pa 816699	M-89-03	258.8m	June-July/89	(1)
Pa 816706	M-89-04	197.8m	July/89	(1)
	M-89-05	179.5m	July/89	(1)
	M-89-06	118.6m	July/88	(1)
	M-89-07	94.2m	Aug/89	(1)

7 DDH / 1384.7 m

NOTES: (1) #W8903.169, filed Nov/89

Diamond Drill Record

COLLAR:	
NORTH	3+85N
EAST	2+30E
ELEVATION	
LOGGED BY	D. ELSBY
DATE LOGGED	
MAP REFERENCE NO.	NTS. 52 P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
COLLAR	175°	-70°
60.7m		-70°
121.6m		-71°
182.6m		-71°
243.5m		-66°
307.5m		-65°
METHOD: TEST TUBE ACID ETCH		

COMPANY NAME: NORTHERN DYNASTY EXPLORATIONS Ltd.
PROPERTY NAME: MISENKOW RIVER
DRILLING CONTRACTOR: LANGLEY DRILLING / BRAMPTON ONTARIO
ASSAYER: ACME ANALYTICAL LABS / VANCOUVER, B.C.
PURPOSE OF HOLE: TEST FOR EXTENSION OF MINERALIZATION BELOW HOLE M-88-7

HOLE NO. M-89-01
CLAIM NAME Pa 816708
COMMENCED 25 JUNE, 1989
FINISHED 29 JUNE, 1989
PROJECT NO. MIS EOH 319.7m

FROM m	TO m	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	WIDTH	NO.	ASSAYS Au ppb
0	1.2		CASING/OVERBURDEN					
1.2	166.3		GABBRO : f.u G (Mpφ, px)					
			Generally dark to light green and white, mottled texture					
			Moderately coarse, 1 to 10mm pyroxene and olivine (?) crystals within a					
			light green to white groundmass of feldspar (labradorite ?)					
			Typically non-magnetic and overall moderately calcareous					
			Numerous fractures and VEIN SYSTEMS (1mm to 6cm) filled with milky					
			quartz and white carbonate (≤5%)					
			39.4 - 42.8 : Foliated LIMONITE-HEMATITE STAINED FAULT ZONE	39.4	41.2		7610	32
			DOWN HOLE CONTACT GRADATIONAL AND WEAKLY foliated over 2.5m, becomes increasingly	41.2	42.8		7611	20
			fine-grained near down-hole CONTACT ~ poss. CHILLED MARGIN					
			Typically weakly to unfoliated with some strongly foliated sections					
			AT: 52.7 - 55.6m (60° to C.A.); 110.6 - 111.5 (55° to C.A.)					
			Alteration: OVERALL LARGELY UNALTERED, random, minor bleaching					
			Abundant small fractures filled with serpentine (?) - poss. ALTERATION OF OLIVINE					
			with minor hematite - limonite stained sections; 153.6 - 159.4, strong seep of [illegible] (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb FA	ASSAYS Ag oz/ton FA
1.2	1663		CONT'D					AA	
			MINERALIZATION: Minor pyrrhotite, pyrite, hematite, and chalcopyrite occur in random blebs and stringers throughout						
			24.33m - HEMATITE BLEBS AND STRINGERS MIXED WITH PYRITE WISPS AND STRINGERS						
			52.7-55.6: <<1% PYRRHOTITE IN STRINGERS CONCENTRATED ALONG FOLIATION						
	7-8% PF	→	116.0-117.5: 8% PYRRHOTITE IN BLEBS AND SMALL STRINGERS, some qtz±cc veining	116.0	117.5		7612	50	
1663	1820		METAGREYWACKE (?) Sf	166.3	168.2		7613	24	
			Variably greenish-grey to grey-brown mottled and banded (layered)	168.2	170.3		7614	12	
			unit consisting of 1 to 15mm wispy layers of chlorite and biotite intercalated within	170.3	172.2		7615	93	
			a fine-grained quartzo-feldspathic matrix. Generally fine-grained massive -	172.2	173.4		7616	970	
			indistinct texture near top of section becoming well layered (and more foliated)	173.4	175.8		7617	1020	.028
			and biotite-chlorite rich near the base of the section. Generally non-	175.8	177.9		7618	30	/
			magnetic with minor magnetic zones containing pyrrhotite.	177.9	180.5		7619	120	
			Moderately to poorly calcareous, <2% 1-6mm white calcareous veins	180.5	1820		7620	1000	.022

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS						
166.3	182.0		CONT'D											
			Unit becomes well foliated near middle of section @ 168.5m (35° to C.A.)											
			due to compositional layering and becomes more poorly foliate near base											
			of section due to more massive chloritic composition (35° to C.A.)											
			Biotite layering becomes very prominent - 40-50% @ 177.5m - 179.5m.											
			Downhole contact appears diffuse and gradational over 0.3m											
			172.2 - 173.4 : Prominent quartz-veining (10-20 cm wide)											
			169.2m - minor pink subhedral garnets											
			Alteration : Minor fractures possibly filled with sericite, up to											
			1% carbonate filled fractures, minor quartz veining throughout, mostly x-cut foliation											
			173.4 - 179.5 : Blotchy bands and wisps of biotite, conformable to layering/foliation											
			looks like potassic alteration features - poss 20% sericite intermixed											
			Mineralization: <<1% to trace pyrrhotite as small clots and blebs throughout											

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb.
182.0	184.9		MAGNETITE IRON FORMATION : RMmt	182.0	183.5		7621	510
			Overall dark greenish-grey to black UNIT CONSISTING OF	183.5	184.9		7622	22
			1 to 10mm WISPY layers of 30 to 40% magnetite AND grey siliceous/chloritic host					
			Unit is strongly magnetic throughout due to presence of magnetite and					
			more minor pyrrhotite ; unit appears NON-CALCAREOUS					
			Compositional layers show minor folding near base of section					
			Prominent wispy layering and foliation throughout @ 45° to C.A.					
			182.6m - Poss. SECOND FOLIATION (S$_1$?) @ 18° to C.A.					
			ALTERATION : UNIT appears SILICIFIED throughout					
			182.0-184.4 - Magnetite alteration to pyrrhotite (?)					
			MINERALIZATION :					
			182.0-184.4m : 1-3% Pyrrhotite AND <1% Pyrite in wisps, stringers AND					
			blebs - concentrated primarily along main foliation / layering (S$_1$(?))					
			182-184.9					

Diamond Drill Record

COLLAR:		HOLE SURVEY		
NORTH		FOOTAGE	AZIMUTH	DIP
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE NO.		METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	WIDTH	NO.	ASSAYS Au ppb.
184.9	185.6		METAGREYWACKE(?) Chlorite-Biotite Schist (BRECCIA ZONE?)	184.9	185.6		7623	240
			Similar to 166.2-183.0 except layering appears more contorted,					
			disrupted and folded (approx. 45° to c.a.)					
			Minor pyrite and pyrrhotite occur as blebs and stringers throughout					
			Overall higher percentage of chlorite to biotite compared to					
			previous section.					
185.6	274.5		Quartz-eye Sericite Schist : iSsqAfe	185.6	188.6		7624	18
			Grey-greenish-white to darker grey translucent unit	188.6	191.6		7625	39
			Mostly medium to fine-grained 1 to 5mm layers of mixed quartz, sericite	191.6	194.5		7626	6
			and chlorite with intervals containing flattened 1 to 3mm blue, quartz-	194.5	197.5		7627	7
			eyes (AUGEN)	197.5	198.9		7628	3
			Generally non-magnetic and poorly to non-calcareous	198.9	201.9		7629	4
			Unit is well foliated throughout with small 1-3cm intrafolial isoclines	201.9	204.8		7630	1
			- probable F_1 folding ~ main foliation is probably S_1 (poss. $S_1 \parallel S_2$) -	204.8	206.1		7631	1
			Note- most quartz-augen are aligned along the main foliation	206.1	208.4		7632	5

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME ______

PROPERTY NAME ______

DRILLING CONTRACTOR ______

ASSAYER ______

PURPOSE OF HOLE ______

HOLE NO. M-89-01

CLAIM NAME ______

COMMENCED ______

FINISHED ______

PROJECT NO. ______

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
				208.4	210.1		7633	13
185.7	274.5		CONT'D	210.1	211.9		7634	5
			Foliation near top of section @ 45° to C.A. AND VARIES FROM 40°-50°	211.9	214.9		7635	12
			throughout rest of section; 232.9- 35° to C.A.	214.9	217.4		7636	3
			195.6m - 198.7 - Poss. METAGREYWACKE - APPEARS largely UNALTERED - assemblage	217.4	218.8		7637	2
			of mixed chloritic and quartzo-feldspathics, mostly fine to medium	218.8	221.4		7638	49
			GRAINED - up hole contact is gradational over 15cm, down hole contact	221.4	222.9		7639.	16
			gradational over 5cm	222.9	224.7		7640	7
			- 197.9m: 3cm hematitic gouge zone	224.7	226.1		7641	55
			- 198.2m: 10cm hematitic gouge zone.	226.1	227.9		7642	13
			206.6m - 208.4m: Poss. 10-15% metachert horizon; poss. quartz-veining(?)	227.9	230.3		7643	200
			223.2-224: BROKEN CORE	230.3	232.2		7644	136
			244.4-244.8: SMALL FAULT GOUGE ZONE	232.2	235.1		7645	7
			ALTERATION: ENTIRE UNIT APPEARS to be AN ALTERATION ZONE -	235.1	237.8		7646	1
			INTERMITTENT silicification throughout with prominent bands (conformable)	237.8	240.7		7647	25
			and fracture-fillings of pink to ORANGE-RED fe-carbonate (?)	240.7	242.2		7648	16
			208.4 - 211.9: 30-40% ORANGE-red fe-carbonate ALTERATION - concentrated within	242.2	244.0		7649	3
			layers parallel to main foliation.	244.0	245.4		7650	2
			223.6 - 226.0 - 5-7% ORANGE-RED fe-carbonate ALTERATION	245.4	248.1		7651	1

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
				248.1	250.9		7652	4
185.7	274.5		CONT'D	250.9	253.8		7653	1
			227.9 – 228.5 : 30% 1-3cm wide qtz vein	253.8	256.8		7654	1
			231.2 – 232.8 : 10% 1-5cm wide qtz veins, 20% orange-red fe-carbonate alteration parallel	256.8	259.8		7655	4
			to foliation	259.8	261.1		7656	16
				261.1	262.1		7657	7
				262.1	263.5		7658	6
				263.5	265.9		7659	6
				265.9	267.1		7660	6
				267.1	269.2		7661	7
			MINERALIZATION : NIL	269.2	271.5		7662	34
				271.5	273.2		7663	163
				273.2	274.5		7664	8
			ADDITIONAL :					
			228.5 – 232.0m : strong crenulation cleavage					
			226.5 – 236.9 : core becomes darker grey in color ~ poss biotite, potassic					
		1 FII	ALTERATION (?) ~ AND small increase in chlorite content – up to 10%					
			ORANGE-RED fe-carbonate ALTERATIONS in layers conformable to foliation					
			242.1 – 260.2 : core is darker grey in color – poss. increased biotite content					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS							
185.7	274.5														
			242.1m-260.9m: CORE BECOMES DARKER GREY IN color, silica AND chlorite												
			enrichment but not silicified <1% ORANGE-RED Fe-carbonate disseminated conformable												
			to layering												
			-260.4-260.8: mottled grey-black brecciated core - FAULT ZONE												
			260.9-269.4: CORE is highly fractured and broken (brecciated) / POSS CRENULATION CLVG OF STRINGERS, @ 25° to C.A.												
			- CONTAINS chlorite along some fracture surfaces - other fractures												
			contain greyish mineral (silica ?) / ALSO - CORE HAS A SANDY texture throughout												
	ALT	*	- approx 25-30% pervasive ORANGE-PINK Fe-carb alteration												
			269.4-271.4: core 90% broken and INUNDATED with sericite and chlorite												
			concentrated along fracture surfaces - looks like a possible												
			fault zone.												
			274.5m: DOWNHOLE CONTACT SHARP @ 40° to C.A.												

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
274.5	276.8		GRUNERITE-SERICITE METACHERT (?)	274.5	276.8		7665	21
			GREENISH-GREY to dark grey banded unit with 1 to 15mm bands of 25% light green grunerite (?) and sericite interlayered with 1 to 10 mm bands of dark-grey to black siliceous material near top (uphole) section gradually becoming more homogeneous near the middle and toward the base. Approximately 5% 5 to 8cm quartz layers - possible quartz-veins or metachert bands. Overall, unit is distinctly banded as compared to previous lithology (135.7-274.5)					
			Some dark grey-white siliceous (?) layers are openly to moderately folded within top 80 cm of unit.					
			Unit is generally NON-MAGNETIC and NON-CALCAREOUS					
			Foliation / compositional layering @ 40° to C.A.					
			DOWNHOLE CONTACT IS SHARP @ 65° to C.A.					
			MINERALIZATION: NIL					
			Alteration: Entire unit appears sericite altered; possible grunerite may be meta-alteration of magnetite (?)					
			Approx. 1 to 2% pink-brown potassic alteration throughout (poss. Fe-carbonate)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au #6
276.8	282.0		Quartz-eye Sericite Schist	276.8	278.3		7666	2
			Similar to 185.7-274.5m	278.3	279.8		7667	1
			Unit contains alternations of light-green-grey sericite-quartz layers and	279.8	282.0		7668	1
			mottled darker-grey silicious horizons.					
			Generally non-calcareous and non-magnetic					
			Foliation oriented @ 50° to c.a.					
			NOTE: 1-2mm qtz-eyes (augen) are not as distinct as in sections within					
			185.7-274.5 - they appear to be partially assimilated(?) or not as					
			prominently developed					
			Mineralization: NONE					
			Alteration: Entire unit appears to be a sericitic-silicic alteration					
			zone					
			- <1% orange-pink fe-carbonate alteration - disseminated throughout					
			unit parallel to compositional layering / primary foliation					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
282.0	284.4		PYRITE-PYRRHOTITE-CHLORITE-METACHERT Mostly greenish-grey to dark grey unit composed of alternations of green chloritic bands, 1 to 20cm metachert layers, and diffuse anastomosing layers of mixed dark-grey-green and white chloritic (sericitic) and siliceous material. Unit also contains random sections of 1-1% flattened blue quartz-eyes. Pyrite and pyrrhotite occur as clots, blebs and stringers often aligned along compositional layering/primary foliation (S_1). Generally NON-calcareous and locally magnetic due to pyrrhotite. Foliation aligned @ 45° to C.A. Alteration: up to 15 to 25% light brownish potassic (?) alteration within 10-20 cm of unit. Flattened blue quartz-eyes are distributed throughout unit along with 1 to 2% sericite. Appears that the mixed metachert horizon has experienced some sericite-silicic alteration observed up-hole. - Possible pyrrhotite alteration of magnetite Mineralization: 1-2% Pyrite as blebs, clots and stringers aligned along foliation <1% Py as clots and anastomosing stringers	282.0	284.4		7669	5

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
284.4	288.2		Chlorite Schist AND Pyrrhotite-chlorite-sericite Metachert	284.4	285.9		7670	4
			Dark-green to light grey layered and foliated unit composed of anastomosing	285.9	288.2		7671	84
			layers of dark to olive-green chlorite and light-grey-white homogeneous					
			assemblages of sericite and siliceous material (quartz-feldspathic ?)					
			Both pyrrhotite and pyrite occur throughout the section as massive clots,					
			blebs and stringers often aligned along the main foliation / compositional					
			layering. Up to 10% irregular metachert masses (blebs) occur throughout					
			the section, commonly aligned along the foliation - only minor sulphide					
			association with the metachert.					
			Alteration : 286.0m 10cm wide unit of mixed sericite and/or ferroan sericite with					
			1% possible chromium micas. Sericite present in <2% quantities throughout					
			- <<1 % flattened blue quartz-eyes.					
			Possible Pyrrhotite alteration of magnetite					
			Mineralization : pyrrhotite ≤1% as clots and anastomosing stringers					
			pyrite <1% as clots and stringers					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb ASSAYS
288.2	292.3		Chlorite-Sericite-Pyrrhotite Metachert Breccia Zone.	288.2	289.8		7672	29
			Generally light grey-green to darker grey banded unit composed of	289.8	291.0		7673	44
			alternations of sericite (5-10%), chlorite, quartz-feldspathics (?),	291.0	292.3		7674	22
			and metachert fragments. Up to 5% flattened blue quartz-eyes					
			throughout. Both pyrite and pyrrhotite occur as blebs, clots, and stringers					
			often oriented subparallel to the main foliation.					
			288.9-289.6: Metachert breccia zone composed of 1 to 9 cm clasts of					
			metachert supported in a matrix of chlorite, sericite, and quartz-feldspathics.					
			291.7-292.1m: As above with 5% Pyrrhotite and 1% pyrite as stringers					
			surrounding, outlining metachert clast					
			Alteration: 5-10% sericite throughout } may be sericitic-silicic alteration observed in upper alteration zone					
			2-5% blue quartz-eyes }					
			Trace orange-red Fe-carbonate alteration					
			Possible pyrrhotite alteration of magnetite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb ASSAYS
282.2	292.3		CONT'D					
			MINERALIZATION: 1-2% Pyrrhotite as blebs clots and stringers					
			<1% pyrite as small clots and stringers in areas with pyrrhotite					
			trace - blebs of arsenopyrite					
292.3	294.9		Chlorite-Sericite-Quartz-Feldspathic Schist	292.3	293.6	[illegible]	7675	7
			Dark olive-green to light grey diffusely layered assemblages composed	293.6	294.9		7676	29
			of 10-40 cm horizons of chlorite interlayered with quartz-feldspathic					
			and sericitic material. Mixed clasts of possible metachert ~					
			probable continuation of more intense breccia zone described above.					
			Alteration: 1-5% sericite throughout } may be part of sericitic-siliceous					
			1% blue quartz-eyes } ALTERATION ENCOUNTERED UP-HOLE					
			MINERALIZATION: Pyrrhotite: 1-2% as clots and stringers					
			Pyrite: 1% as clots and stringers					
			Arsenopyrite: trace as clots and leases					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au PPB	Au FA. oz/ton
294.9	297.3		Chlorite Schist and Pyrrhotite-Pyrite-Chlorite-Sericite Metachert	294.9	296.2		7677	1050	.031
			Similar to 289.9-288.2m with 3-5% metachert bands	296.2	297.3		7678	600	
			Minor potassic alteration as tan-brown 1-2cm bands						
			pyrrhotite: 1-2% as stringers, clots and blebs oriented primarily along compositional layering/foliation						
			pyrite: <1% as above and in association with pyrrhotite						
			arsenopyrite: <1% as blebs and subhedral cubes in association with pyrrhotite						
			ALSO: 1-2% blue quartz-eyes concentrated in 10-20cm bands- eyes are flattened mostly parallel to the foliation						
297.3	299.9		Chlorite-Sericite Quartz-feldspathic Schist	297.3	299.9		7679	131	
			Similar to 292.3-294.9						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb	A_u ASSAYS FA oz/t						
299.9	302.2		PYRRHOTITE - CHLORITE IRON FORMATION BRECCIA	299.9	302.2	2.3	7680	1160	6028						
			Dark olive-green to light green-grey assemblage consisting of 50% irregular layers and lenses of chlorite schist and metachert. Some sections are composed of well foliated and layered assemblages of fine-grained chlorite, possibly sericite and quartzo-feldspathics. Metachert comprises up to 20% of section and occurs as irregular sometimes anastomosing masses - may be deformed breccia clasts. Overall, non-calcareous and locally magnetic due to pyrrhotite													
			Alteration: Possible pyrrhotite alteration of magnetite Possible 1-2% sericite -No blue quartz-eyes observed												
			Mineralization: Pyrrhotite: 1-3% as irregular clots and stringers most prominent in breccia sections in association with metachert Pyrite: 1% as clots, masses and stringers often outlining metachert clasts.												

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb	Au A. ASSAYS F.A. oz/ton
302.2	305.2		- GRUNERITE-pyrrhotite-IRON FORMATION and Chlorite Schist	302.2	303.7		7681	1600	.075
			Dark olive-green to light-green-grey assemblage comprising 20% irregular bands	303.7	305.2		7682	700	
			and layers of chlorite, metachert, grunerite, sericite and quartzo-feldspathics.						
		15-20%	Metachert occurs as both diffuse layers (centimetre) and as blotchy patches						
			throughout.						
			Alteration: Possible pyrrhotite alteration of magnetite						
			Grunerite - as thin layers in metachert horizons - possible alteration						
			of magnetite - also as lens blotches in metachert						
			Mineralization: Pyrrhotite: 3-4% as patches, blebs and stringers concentrated						
			largely in metachert occurrences/10% VARIABLE THROUGHOUT 1-2% up to						
			Pyrite: ≤ 1% as dots and small stringers often associated						
			(intergrown) with pyrrhotite						
			Arsenopyrite: trace as small lenses and blebs throughout						

Diamond Drill Record

COLLAR	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
305.2	309.6		Chlorite Schist AND Metachert	305.2	307.4		7683	32
			Mostly dark olive-green chloride schist with 10-15% light grey	307.4	309.6		7684	61
			bands (1 to 10cm) of quartzo-feldspathic material and sericite (:)					
			Occasional 1 to 5mm bands of grunerite (:) - a light greenish					
			grey mineral as wispy bands and layers in chlorite matrix.					
			Metachert layers and blebs, up to 10%, occur randomly throughout					
			section. Minor concentration of 1 to 5mm flattened and subhedral					
			pink garnets occur in bands @ 305.2m AND 305.5m; 306.2m					
			Note small breccia clast of chlorite schist containing pyrrhotite					
			and arsenopyrite.					
			Foliation @ approximately 45° to c.a.					
			Both up and down-hole contacts are somewhat gradational over 5cm.					
			Alteration: Possible grunerite alteration of magnetite					
			Possible pyrrhotite alteration of magnetite					
			Mineralization: pyrrhotite: <1% as clots and stringers parallel to main foliation					
			pyrite: <<1% as clots					
			arsenopyrite: trace as clots and lenses in association with pyrrhotite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. N-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb	Au FA oz/t
309.6	310.1		PYRRHOTITE-GRUNERITE IRON FORMATION	309.6	310.1	0.5	7685	3810	.096
			Generally dark olive-green to white assemblage of 40% chlorite and 60% metachert. Top 60% of section is composed of irregular masses of metachert containing 8% 1-3mm wisps and blebs of chlorite and 5% patches and stringers of grunerite. Remainder of section comprises chlorite schist containing 5% metachert which contains 25-30% grunerite as foliation conformable 1-2mm ragged bands. Downhole contact gradational over 5 cm.						
			Non-calcareous and locally magnetic due to pyrrhotite						
			Alteration: Probable grunerite alteration of magnetite						
			Possible pyrrhotite alteration of magnetite						
			Mineralization: Pyrrhotite: ≤1% as clots and stringers						
			Pyrite: <<1% as clots						
			Arsenopyrite <<1% as clots and knots bordering metachert bands and patches						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME: NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME: MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR: LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER: ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE:

HOLE NO: M-89-01
CLAIM NAME:
COMMENCED:
FINISHED:
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au g/T FA	ASSAYS Au oz/ton Fa
310.1	315.8		Chlorite Schist and Basalt	310.1	311.5	1.4	7686	71	
			Mostly dark olive-green fine grained well foliated chlorite schist and	311.5	313.1		7687	11	
			pearly foliated green basalt (?) with 5 to 10% diffuse light grey bands	313.1	315.8		7688	1	
			of quartzo-feldspathic and possibly sericitic material. Overall very						
			homogeneous with <1% white carbonate bands conformable to						
			the main foliation. Some minor quartz-veins - trace.						
			Alteration: NONE						
			Mineralization - pyrite - trace as small clots						
315.8	365		Pyrrhotite - Pyrite - Greenerite Iron Formation	315.8	316.5	0.9	7689	5930	.208
			Dark olive green to light green-grey to white chert-like fragments of chlorite-grunerite						
			and minor quartzo-feldspathic and metachert. Metachert occurs as 25% white						
			irregular bands, mostly conformable to the main foliation. Both up and down-hole						
			contacts are gradational over 10cm. Granite occurs as ragged bands						
			within both metachert and chloritic sections.						
			Largely non-calcareous and locally magnetic due to pyrrhotite						
			Foliation @ 45° to c.a.						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
315.8	316.5		CONT'D					
			Some evidence of crenulation cleavage nearly parallel with core axis in some chloritic sections.					
			Alteration: Probable alteration of magnetite to graniite and possibly pyrrhotite					
			Mineralized Zone: PYRRHOTITE: 3-4% as clots and stringers pyrite: 1% as irregular clots in association with pyrrhotite					
316.5	319.7		BASALT	316.5	318.1		7690	77
			Dark to medium olive-green, homogeneous fine grained unit with poor foliation. Up to 2% 1-5mm carbonate veins throughout. Approximately 1 to 2% white quartz veins conformable to the main foliation (metachert?) Up to 10% light green-grey diffuse bands of more quartz-feldspathic-carbonate rich material.	318.1	319.7		7691	6
			Poor foliation @ 50° to c.a.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-01
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
316.5	319.7		Cont'd					
			Alteration: Possible carbonate alteration					
			Mineralization: pyrite: Trace as small clots					
			pyrrhotite: trace as small clots					
319.7			E.O.H.					
			Notes: 2 Feet Casing left in hole					

Dawn C. Ellis

Diamond Drill Record

PAGE 1 OF

COLLAR:	
NORTH	3+33N
EAST	6+95E
ELEVATION	
LOGGED BY	D. ELSBY
DATE LOGGED	
MAP REFERENCE NO.	NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
COLLAR	140°	-48.5
60.7		-47°
121.6		-45°
182.5		-90

METHOD: ACID DIP TURE

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE TEST FOR MINERALIZATION ADJACENT TO LEGHORN CREEK LINEAR

HOLE NO. M-89-02
CLAIM NAME P# 816710
COMMENCED 30 JUNE 1989
FINISHED 02 JULY 1989
PROJECT NO. MIS EOH 216.1m.

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
0.0	6.39		OVERBURDEN / CASING					
6.4	12.4		Quartz-eye Sericite Schist / Metachert Breccia	6.4	8.3		7692	3
			Light red-pink-grey to light greenish grey unit composed of	8.3	10.9		7693	136
			a somewhat homogeneous assemblage of sericite, quartz and orange-pink	10.9	12.4		7694	7
			fe-carbonate. Unit is well foliated and exhibits strong 1-3mm partings					
			along the foliation, a feature diagnostic of strong S_2 shearing. Flattened					
			quartz-eyes (augen) occur sporadically throughout unit, preferentially					
			elongate parallel to the dominant S_2(?) foliation.					
			6.39-7.39m: Possible metachert breccia zone ~ 30% quartz clasts and					
			lithic-bands intercalated with ragged 1-3mm chloritic layers. Strong					
			tan-brown potassic alteration (?) throughout. Possible 2-3% grunerite-					
			sericite (?) ragged bands intercalated with metachert clasts.					
			Downhole contact is sharp @ 65° to c.a.					
			Downhole contact of entire unit is sharp @					
			75° to c.a.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
6.39	12.4		CONTINUED:					
			ALTERATION: Strong orange-pink fe-carbonate staining throughout ~ possible 25%, mostly concentrated along dominant foliation					
			Sericite and quartz plus quartz-eyes (augen) may be alteration features, similar to the many other quartz-sericite zones observed in previous drilling ~ a pervasive sericitic-silicic alteration zone.					
			6.39 - 7.39m: Strong 8 to 10% tan-brown potassic alteration within metachert breccia.					
			MINERALIZATION: NIL					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
12.4	50.9		Chlorite Schist + Basalt (?) Sc + fBc	12.4	14.6		7695	7
			Dark olive-green to medium grey fine-grained homogeneous assemblage of fine-grained chlorite schist and fine-grained foliated chloritic basalt. Unit contains 6-8% 1-5 mm white carbonate veins throughout, mostly oriented parallel to the main foliation. The lithology is moderately to well foliated throughout with the foliation oriented at 45° to C.A. near the top of the section and at 60° to C.A. near the down hole contact.	14.6	16.8		7696	2
				16.8	19.8		7697	8
				47.8	49.4		7698	5
				49.4	50.9		7699	2
			47.8-48.3 : Minor folding of S_1 (?) foliation and patchy tan-brown potassic (?) alteration. Section well foliated with dark-green wispy 1-2mm chloritic bands and 3-10mm layers of laricite - presence of 3rd foliation oriented subparallel to the C.A. - Minor (<1%) bluish irregular quartz layers and lenses.					
			Alteration: 47.8-48.3: Approximately 5 to 8% brown-patchy biotite (?) - possible potassic alteration - consists mostly of irregular 1-3 mm bands oriented primarily parallel to the main foliation.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
12.4	50.9		CONT'D:					
			ALTERATION: CONT'D					
			- <<1% non-carbonate / hematite along felsic compositional layering / main foliation					
			- ENTIRE UNIT (12.4 - 50.9m) contains 6-8% white carbonate veins, commonly fill fractures and concentrated along the main foliation					
			MINERALIZATION: PYRITE: trace as ensoidal blebs commonly associated with carbonate veins and stringers					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
50.9	57.1		Chlorite-Sericite Schist and Metachert	50.9	52.8		7700	3
			Light green-grey and blue-grey to grey-brown assemblage consisting of	52.8	55.0		7701	3
			5 to 8mm wide chlorite-sericite bands intercalated with 25-30% brown-tan	55.0	57.1		7702	3
			layers and lenses of biotite (?) and 2 to 3% metachert lenses. Occasional					
			1-3% blue 1-3mm quartz-eyes (augen) occur throughout the section.					
			Overall, the lensoid texture resembles a deformed (sheared/flattened)					
			breccia					
			Non-calcareous and non-magnetic					
			ALTERATION: 25 to 30% layers and patchy lensoid sections of tan-					
			brown biotite ± potassic alteration (?) - alteration patches					
			have well-defined boundaries - may be altered breccia clasts					
			MINERALIZATION: Nil					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
57.1	58.2		METASEDIMENT	57.1	58.2		7703	164
			Mostly grey to translucent grey cavity foliate unit composed of 97% massive, fractured metachert with up to 1-3% wispy 1-3mm anastomosing chloritic layers and pyrite concentrated along fracture surfaces.					
			Non-calcareous and non-magnetic					
			Foliation oriented at 55° to C.A.					
			ALTERATION: Possible <<1% grunerite as thin wisps and stringers oriented parallel to the main foliation ~ possible alteration of magnetite					
			MINERALIZATION: PYRITE: <1% as stringers and blebs concentrated along fracture surfaces					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
[illegible]	61.5		Chlorite-Sericite Schist and Metachert plus Magnetite-Grunerite	58.2	60.2		7704	42
			Iron Formation	60.2	61.5		7705	2
			Grey-green and translucent white to dark-grey-black unit composed of 50% fine to medium grained homogeneous chlorite-sericite schist, 25% gray, translucent metachert with 10 to 15% green 2-5cm foliate chloritic bands and patches (intercalations) -59.7-60.1m: unit is composed of silicified and folded magnetite (1 to 5mm bands) with 2-5% green-grey grunerite concentrated along the edges of magnetite bands as wisps and stringers.					
			Alteration: Possible 15 to 20% sericite alteration with chloritic schist -59.7-60.1m: 2-3% grunerite as alteration of magnetite 2-5% red-brown iron-carbonate alteration concentrated along grain foliation and fracture surfaces.					
			Mineralization: 59.7-60.1m: Pyrite: ≤1% as blebs and stringers along fractures.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
61.5	66.1		PYRITE - METACHERT	61.5	63.0		7706	22
			Gray-white to siliceous grey fairly homogeneous unit comprising	63.0	64.2		7707	32
			approximately 75% metachert. Up to 2-3% patchy-diffuse chloritic	64.2	65.3		7708	74
			bands occur randomly throughout unit. Pyrite, accompanied by minor	65.3	66.1		7709	150
			sericite occur sporadically along fine fractures throughout this horizon.					
			UNIT 1 is silicified, NON-CALCAREOUS, NON-MAGNETIC, and poorly					
			foliated.					
			ALTERATION: Possible ≤ 1% sericite alteration concentrated along 0.5 to					
			1mm wide random fractures					
			Hematite: trace in small clots					
			MINERALIZATION: Pyrite: 1% as small clots and stringers concentrated					
			along small fractures (some oriented - possible 52)					
			Arsenopyrite: trace as sub-hedral crystals assoc. with pyrite					
			Tourmaline: trace (?) as small 1-2mm bands containing					
			pyrite.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
66.1	69.4		MAGNETITE - GRUNERITE - (PYRITE) IRON FORMATION	66.1	67.8		7710	210
			Generally dark-grey to black unit consisting of 70% 1-5mm folded magnetite layers interbedded with 5% metachert. Approximately 20% assemblage of grunerite, chlorite and sericite occur as layers, layers, and fine stringers interfolded and interlayered with magnetite and metachert.	67.8	69.4		7711	120
			Pyrite and minor pyrrhotite occur randomly throughout the unit as fine stringers and blebs along the main foliation, folded within the main foliation/layering and as clots and stringers along various fractures.					
			Unit is non-calcareous and highly magnetic.					
			66.1 - 67.2 : Very broken, fractured and brecciated section containing up to 15% metachert and 5% iron carbonate along fractures - possible transition zone with above unit.					
			ALTERATION : Possible 5-8% grunerite as fine wisps and stringers associated with alteration of magnetite					
			Up to 3-5% sericite alteration					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
66.1	69.4		ALTERATION: cont'd					
			- <<1% mustard iron-carbonate as clots and stringers concentrated along foliation surfaces					
			- <<1% white calcareous bands concentrated along the main foliation					
			MINERALIZATION: Pyrite: ≤1% as clots and stringers mainly concentrated along main compositional layering / foliation					
			Arsenopyrite: <<1% as small clots and euhedral crystals, often associated with pyrite					
			NOTES: Some fractures within the unit have a regular parting and may be axial-planar to some minor fold structures & hence may be S_2 - most mineralization could be S_2 based on this geometry.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
69.4	71.0		Chlorite - Magnetite - Metachert Breccia	69.4	71.0		7712	250
			Medium light-grey to green-green highly fractured and brecciated unit composed of angular clasts of metachert, chlorite and magnetite. White to cream-colored carbonate forms a large portion of matrix. Overall unit is highly calcareous and only selectively magnetic due magnetite clasts.					
			69.5m: Small stockwork zone, 1 cm wide, of metachert clasts supported in cream colored carbonate (small breccia pipe).					
			ALTERATION: Possible carbonate alteration, breccia stockwork / pipe or carbonate altered fault zone.					
			MINERALIZATION: PYRITE: ≤1% as clots and stringers concentrated along small fractures (looks to be late fracture and brecciation)					

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	WIDTH m	NO.	ASSAYS Au ppb
71.0	75.2		Magnetite-Grunerite-Pyrite Iron Formation	71.0	72.4		7713	200
			Generally dark grey to grey-green unit composed of 60% 1-5mm	72.4	73.8		7714	550
			magnetite-rich [illegible] layers with 20% blue-grey and yellow olive green	73.8	75.2		7715	470
			[illegible] non-magnetic grunerite(?); 5% 1-3mm grey translucent					
			metachert layers; 5% green fine-grained chlorite and 8-10% pyrite in					
			anastomosing stringer zones with lesser amounts of pyrrhotite and arsenopyrite.					
			Overall, unit appears highly folded showing moderately tight to isoclinal					
			fold forms which fold compositional layering / S_1(?) ~ may be F_1 folds					
			also. Note pyrite is dominant sulphide species and occurs as stringers					
			often interfolded with compositional layers (more gold colored) and as late					
			fracture fillings which cut the layering at a high angle (more white-					
			silver color).					
			Unit is non-calcareous and highly magnetic.					
			Foliation, fold limbs & minor folds average approximately 70° to C.A.					
			Alteration: Up to 20% grunerite(?), iron-amphibole as fine grained					
			and diffuse masses which are interfolded with magnetite and					
			metachert layers ~ probable alteration of magnetite					

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au						
71.0	75.2		ALTERATION: cont'd											
			Minor pyrrhotite, ≤1%, often intergrown with magnetite, pyrrhotite											
			alteration of magnetite.											
			MINERALIZATION: Pyrite: Two possible phases –											
			1) 1% to 10% pyrite as anastomosing stringers concentrated along and											
			often folded with compositional banding ~ pyrite is more gold colored											
			2) <1% as <1mm fillings of late fractures; note more silver											
			colored											
			ARSENOPYRITE: <<1% as small elongate lenses and											
			subhedral crystal forms											
			CHALCOPYRITE – trace as small blebs											

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
75.2	95.0		Quartz-eye Sericite Schist	75.2	76.3		7716	10
			Light grey to grey-green assemblage of interwoven, homogeneous quartz and sericite with 5-7% 1-2mm blue quartz augen oriented parallel to compositional	76.3	78.1		7717	7
				78.1	81.1		7718	7
			layering. Unit is well foliated and contains varying percentages of red-pink	81.1	84.1		7719	1
			iron-carbonate.	84.1	87.1		7720	4
			Overall unit is strongly silicified, non-calcareous and non-magnetic	87.1	89.6		7721	1
			Foliation is oriented at 60-65° to c.a. -	89.6	92.6		7722	2
			Near up-hole contact zone, strong 1-5mm cleavage partings occur throughout	92.6	95.0		7723	10
			and are oriented subparallel to the primary foliation, may be S_2					
			91.3-95.0: Strong 2-5mm partings containing sericite - probable S_2					
			75.2-76.0: Up-hole transition zone characterized by a folded					
			fairly homogeneous mixture of chlorite, iron-amphibole, sericite, metachert					
			and calcareous material - appears to be an altered and folded transition					
			unit.					
			76.0-82.1m: Unit is darker-grey-green in color due to higher percentage					
			of chlorite, chlorite content ranges from approximately 40%					
			within a meter of the transition zone to less than 5% at					
			82.1m - gradual decrease in chlorite down hole from contact zone.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
75.2	95.0		CONT'D					
			93.6-95.0: Prominent, highly foliated layer of chlorite and dark-grey to black siliceous material - possible transitional zone into underlying chloritic unit.					
			ALTERATION: Prominent silicification and recrystallization of entire unit - similar to other drill holes - part of regional-property alteration/deformation zone. Quartz-augen contained throughout unit - possibly associated with alteration					
			- IRON-CARBONATE: variably 5-10% brick-red to pinkish diffuse layers concentrated along compositional layering /SI (?)					
			MINERALIZATION: NIL					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
95.0	97.3		Chlorite Schist and Chlorite-(magnetite) Metachert Breccia	95.0	97.3		7724	5
			Dark olive-green to light green-grey unit composed of 80% massive medium to fine-grained chlorite schist with up to 20% intercalations of 1-2cm light grey metachert clasts and 1% magnetite bands containing pyrrhotite. Uphole contact is gradational over 30 cm, downhole contact is sharp at 80° to C.A. Unit contains 5-8% white and cream colored carbonate veins. Unit is moderately calcareous and only locally magnetic.					
			96.8m: magnetite bands containing numerous pink-tan subhedral garnets and 1% pyrrhotite and lesser pyrite.					
			Alteration: Pyrrhotite: <<1% as alteration of magnetite, characterized by small clots centered in magnetite occurrences					
			Mineralization: <<1% pyrrhotite (as above) pyrite: trace					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
97.3	143.7		Foliated Basalt and Chlorite Schist	97.3	98.4		7725	4
			Dark to light green to olive unit consisting mainly of fine grained	98.4	99.9		7726	4
			homogeneous layers of moderately foliated basalt interlayered with random	99.9	101.8		7727	43
			bands of chlorite schist. Numerous white carbonate veins and occasional	101.8	103.3		7728	32
			white quartz veins occur throughout and are commonly oriented subparallel to	103.3	104.8		7729	7
			the main foliation.	104.8	106.3		7730	12
			Lithology is moderately calcareous and largely non-magnetic.	106.3	107.7		7731	29
			Occasional zones of light-brown potassic alteration appear sporadically throughout	107.7	109.1		7732	10
			the section.	116.2	119.5		7733	790
			Uphole contact is sharp at 70° to c.a., downhole contact appears					
			gradational over 1.5 metres	123.5	126.3		7734	9
			97.3 - 98.2 m : Ltgrey to blue grey horizon composed of homogeneous chloritic					
			and quartzo-feldspathic material (poss. sericite also)	131.9	134.9		7735	5
			101.1 - 107.6 : Approximately 70% green foliated basalt / chlorite schist,	134.9	136.6		7736	2
			15% grey-blue homogeneous quartzo-feldspathic material (poss. sericite	136.6	139.6		7737	6
			also) and 10-15% white translucent 1-15 cm qtz veins (poss. some	139.6	142.5		7738	5
			metachert also). Qtz veins primarily occur within the light grey-blue	142.5	143.7		7739	2
			sections - may reflect favorable horizons for quartz-veining or					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
97.3	143.7		CONT'D					
			may be an alteration feature associated with quartz-veining.					
			118.7-119.4: Strong breccia/fragmental zone composed of angular 1-5mm					
			clasts of chlorite and quartzo-feldspathic schist supported in a fine grained					
			matrix of the same with approximately 20% pink tan iron carbonate					
			alteration.					
			132.8-134.5: Lt. to dark grey highly sheared zone consisting of chlorite and					
			quartzo-feldspathic(?). Strong carbonate alteration, probably associated					
			with shear fabric. Two fabrics visible, 1) S_1 as very fine <<1mm foliation					
			AND 2) S_2 as 1-3mm partings which crenulate S_1. At 132.8, zone begins					
			as an anastomosing composition of cream-colored carbonate veins which					
			cross-cut and are folded along with layering - complex anastomosing zone. Overall,					
			zone appears to be an S_2 shear zone.					
			134.5-143.7: Unit develops strong compositional banding and prominent					
			brown-tan potassic alteration and iron-carbonate alteration. Two fabrics					
			visible - S_1 as fine laminar foliation with S_2 oriented subparallel to compositional					
			layering. Note - most alteration appears to be along S_2.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
97.3	143.7		CONT'D					
			ALTERATION: Overall, entire unit contains secondary white carbonate veins which may be oriented along S_2 ~ approximately 5-8%					
			134.5-143.7: Approximately 8 to 10% tan-brown potassic(?) alteration as patches and layers oriented subparallel to compositional layering / main foliation					
			MINERALIZATION: pyrite: 1-2% in quartz veins 101.1-107.6m					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
143.7	153.6		Chlorite Schist and Quartzo-feldspathic - Sericite - Chlorite Schist (breccia)	143.7	145.1		7740	2
			Light to dark green and green-grey assemblage of interfolded layers and	145.1	148.1		7741	3
			anastomosing networks of chlorite schist, (50%) quartzo-feldspathic material (?) (30%), and sericite. (10%)	148.1	151.1		7742	72
			This unit is distinctive from the previous unit due to the highly folded and	151.1	152.3		7743	52
			anastomosing nature of the compositional layering and the presence of sericite	152.3	153.6		7744	5
			and breccia textures throughout. Some translucent silica clasts, may be					
			metachert (?).					
			Note presence of 5-10% light-tan-brown patchy areas, probable potassic					
			alteration.					
			Generally non-calcareous and non-magnetic					
			Foliation is oriented at 60° to C.A.					
			Up-hole contact is moderately sharp at 70° to C.A.; Down-hole contact is					
			gradational over 1.5 metres					
			ALTERATION: Approximately 10% sericite alteration as anastomosing					
			networks throughout the section - mostly concentrated diffusely along					
			main compositional layering					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
143.7	153.6		ALTERATION: CONT'D					
			Light-brown to tan patchy diffuse zones of potassic alteration(?)					
			distributed throughout ~ approximately 5 to 8%					
			149.3: STRONG BRECCIATION ZONE ~ approximately 30 cm WIDE					
			MINERALIZATION: PYRITE: TRACE AS small clots and stringers					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
153.6	216.1		Chlorite Schist and Foliated Basalt	153.6	155.1		7745	5
			Mostly as in 97.3-143.7m					
			Very homogeneous light to dark green unit with 1-2% 1-8mm white,	198.6	200.8		7746	14
			clear and blue deformed vesicles. Lithology contains approximately 5% 1-9mm	200.8	202.3		7747	4
			white carbonate veins, predominantly oriented subparallel to the main foliation.	202.3	204.3		7748	3
			Random minor folding of compositional layers / S_1 (?) throughout.	204.3	207.2		7749	17
			202.5 - 203.8m: Green-grey fault gouge ~ probable Leghorn fault zone.					
			Trace to <<1% magnetite throughout unit and often concentrated around vesicles					
			Alteration: Approximately 5% 1-9mm white carbonate veins					
			199.9 - 202.1: Approximately 5-8% brick-red iron-carbonate alteration in patches		NOTE: From 210.1 - 216.1 ~ unit becomes moderately foliated (S_2)			
			oriented subparallel to compositional layering / S_1 (?).		of 1-5% amphibolitic sericite stringers			
			202.5-203.8: Probable Leghorn fault zone with 3 to 5% light brown		- also 8-10% blue-grey quartzo-feldspathic material			
			potassic alteration - fault zone is highly calcareous					
			Mineralization: Pyrite: Trace as fine stringers and clots predominantely					
			aligned along main foliation / layering (S_1?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-02
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
216.1			E.O.H.					
			Notes: No casing left					

Dawn C. Ellis

Diamond Drill Record

COLLAR:
~~NORTH~~ 0+04S
~~EAST~~ 8+82W
ELEVATION
LOGGED BY D. ELSBY
DATE LOGGED
MAP REFERENCE NO. NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
collar	185°	-59°
199/60.7m		-59.5
399/121.6		-55
599/182.5		-49.5
829/252.6		-45°

METHOD: ACID DIP TUBE

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE TEST INTERSECTION OF MAIN IRON FORMATION HORIZON AND NORTHERN ALTERATION ZONE

HOLE NO. M-89-03
CLAIM NAME 816699
COMMENCED 30 JUN 1989
FINISHED 8 JUL 1989
PROJECT NO. MIS EOH 258.8m.

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	WIDTH m	NO.	ASSAYS Au ppb
0	13.8		OVERBURDEN: (SMALL DEPRESSION BETWEEN ESKERS)					
			0-3.0m: SAND + CLAY					
			3.0-10.6m: GRAVEL					
			10.6-13.8: BOULDER TILL (12.1m - Black Return water, possible sulphide boulders)					
13.8	48.3		Chlorite-Biotite-Garnet Schist	13.8	15.9		7750	24
			Dark to light green and brown-grey banded unit consisting of chloritic	15.9	18.9		7751	44
			layers intercalated with 20% light to dark grey-brown diffuse biotitic	18.9	21.1		7752	28
			layers averaging ≤ 5mm. Up to 3% garnetiferous sections hosting ≤ 10%	21.1	24.1		7753	14
			pink subhedral garnets typically averaging 1 to 5mm throughout.	24.1	26.8		7754	11
			Typically non-calcareous and non-magnetic.	26.8	28.9		7755	71
			Foliation averages 47° to C.A. from 13.8 to 27m and averages 20 to 30° to C.A	28.9	30.3		7756	59
			from 27-42m. From 42-48m foliation averages 43° to C.A.	30.3	32.5		7757	37
			From 27-42m, two foliations visible: early cleavage appears subparallel	32.5	34.5		7758	25
			to compositional banding and oriented at 20-30° to C.A; LATE cleavage	34.5	37.0		7759	17
			cuts the earlier foliation at 38° to C.A.	37.0	39.6		7760	16
			Down-hole contact gradational over 50cm.	39.6	42.3		7761	115
				42.3	45.3		7762	8

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
13.8	48.3		CONT'D :					
			- 28.5-28.7m; 29.5-29.9m : BROKEN CORE	45.3	48.3		7763	21
			ALTERATION : Minor bleaching toward base of unit					
			17.1-17.6 : HIGHLY silicified ZONE CENTERED AROUND BIOTITIC FRACTURE					
			MINERALIZATION : PYRITE / PYRRHOTITE : <<1% mostly disseminated and locally associated with quartz veins // CHALCOPYRITE : TRACE					
			Quartz veins : 13.8-15.9 : 4%					
			15.9-21.1 : 2%					
			21.1-26.8 : 9% quartz veins ≤ 25 cm, ragged boundaries					
			26.8-34.5 : 35% qv ranging 1cm to 1.2m - generally white with ragged contacts, crudely parallel to main foliation / compositional layering					
			34.5-48.3 : 5% ranging from 1cm to 30cm					
			NOTE: MINOR CREAM-colored carbonate within quartz-veins					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52 P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
48.3	50.1		Transitional Zone: Chlorite-Garnet Schist and Pyrite Iron Formation (40%) plus Quartz-Sericite Schist	48.3	50.1		7764	12
			Dark green chlorite schist bands (≤ 10cm) intercalated with 40% folded pyrite-iron formation (up to 25cm) and light-grey quartz-sericite schist bands (up to 10cm).					
			Typically non-magnetic and non-calcareous					
			Foliation averages 50-55 to C.A (main, well developed transposed foliation) - second weaker foliation at 25° to C.A.					
			- Iron Formation exhibits generally minor disharmonic folding -					
			- garnetiferous sections - ≤1 7mm clotty aggregates - show some flattening					
			Alteration: 10% bleached sericite schist sections					
			Mineralization: pyrite: 15% crude clotty and disseminated folded bands (parallel and cross-cutting relationships to foliation) within iron-formation sections - also: local mesh textures					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
48.3	50.1		Mineralization: cont'd					
			pyrite: cont'd					
			- ≤ 4% in chlorite schist, disseminated and fracture fillings					
			magnetite: 49.9m; 2cm band of 2% disseminated magnetite					
50.1	54.3		Sericite - Quartz - Chlorite Schist	50.1	52.3		7765	3
			Light-grey to medium green-grey unit consisting of ≤1-4mm bands of	52.3	54.3		7766	5
			sericite, quartzo-feldspathic (?) material and diffuse chloritic bands.					
			Unit relatively homogeneous and locally contains up to 5% blue					
			lenticular quartz-eyes.					
			Main foliation appears sub-parallel to mineral layering and averages					
			50-60° to C.A.					
			Uphole contact is gradational over 20 cm. Downhole contact appears					
			gradational over 30 cm.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
50.1	54.3		CONT'D					
			ALTERATION: Sericitization (?) throughout ~ small sericite / silicic alteration zone					
			50.2m: Small clots of yellow-green iron-amphibole(?) adjacent to small quartz vein					
			Mineralization: Pyrite: <<1% throughout as small clots and stringers concentrated primarily along main foliation / compositional layering / 50.2m: 5cm layer of 25-30% pyrite clots and stringers					
			quartz veins: 54.2-54.3 ~ white 10cm quartz-vein					
54.3	58.4		Pyrite-Magnetite-Pyrrhotite-Iron Formation.	54.3	56.1		7767	3
			Variably banded iron-formation with alternations of olive-green	56.1	57.3		7768	15
			chlorite schist, light grey sericite-schist and minor dark-grey black	57.3	58.4		7769	5
			magnetite sections. Iron-formation varies from small well banded					
			magnetite-rich sections to crudely banded wispy and disseminated					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52 P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
54.3	58.4		CONT'D :					
			sulphide sections.					
			- 57.3 - 58.0 plus other minor sections - quartz-augen sericite chlorite schist					
			interbands ; typically non-calcareous , non-magnetic with sharp contacts					
			oriented subparallel to main foliation / comp. layering ~ possible dike.					
			Accounts for approximately 15% of section.					
			- Chlorite Schist : approximately 15%, interbanded and intergrown with					
			iron-formation and sulphides , local discreet bands up to 20 cm.					
			- Iron formation : typically non-calcareous , and magnetic (aggregate-porphyritic)					
			Foliation / Compositional banding : 45° to C.A. throughout					
			Down hole contact highly gradational					
			ALTERATION : Possible sericitic alteration in quartz-augen sericite schist					
			sections					
			- Sulphidization and grunerite alteration of magnetite					
			- IRON amphibole (pale yellow) : typically <1% as fine rims					
			on magnetite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
54.3	58.4		Mineralization: Sulphides occur mostly within iron-formations PYRITE: Typically 3%, varies <1 to 15%; occurs as clots wisps, disseminations and stringers/veinlets magnetite: typically 1% as disseminated and locally up to 15-20% as bands PYRRHOTITE: typically <1%, locally to 10% increasing downhole as clots, wisps, disseminations - generally sulphides appear highly intergrown with magnetite.					
58.4	59.6		PYRRHOTITE-PYRITE IRON FORMATION Crudely banded white to grey metachert and 35% interbanded olive green-chlorite schist. Highly intergrown sulphides throughout. Typically non-calcareous and magnetic (pyrrhotite) throughout. Foliation/compositional banding 45° to C.A near top of unit to 60° to C.A near base of unit	58.4	59.6		7770	23

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
58.4	59.6		CONT'D					
			Downhole contact gradational over 4cm					
			Alteration: Probable sulphidization of magnetite					
			Mineralization: Sulphides: 15% overall; 11% pyrrhotite, 4% pyrite; <1% disseminated magnetite					
			- all sulphides occur as clots, disseminations and crude "mesh texture" (?)					
59.6	61.0		Magnetite - Pyrite Iron-Formation	59.6	61.0		7771	22
			Distinctly banded black to grey magnetite iron formation					
			Bands typically ≤ 5mm					
			Non-calcareous and typically magnetic					
			Foliation / compositional banding at 55° to c.a.					
			60.5 - 61.0: Sericite - chlorite schist; distinctly banded, soft, light green, non-calcareous, non-magnetic - both contacts gradational over 1cm.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
59.6	61.0		CONT'D					
			Alteration: Probable sulphidization of magnetite					
			- 60.5 - 61.0 : Sericite bleaching of chlorite schist (?)					
			Mineralization: Magnetite 20% as diffuse-disseminated bands					
			Pyrite : 6%, disseminated & finely inter-disseminated with					
			magnetite bands, and folded clots					
			60.5 - 61.0 : pyrite : TRACE, disseminated					
61.0	65.4		Pyrrhotite - Magnetite - Pyrite Iron-Formation	61.0	62.6		7772	17
			Crudely interbanded light grey metachert, sulphides and dark green	62.6	63.8		7773	8
			chlorite schist, similar to 54.3 - 58.4m.	63.8	65.4		7774	23
			Common sections of rounded metachert breccia clasts in chlorite schist					
			Non-calcareous, magnetic (pyrrhotite, magnetite)					
			Foliation / compositional banding : varies from 60° near uphole contact to					
			45° near down-hole contact.					
			Local dishormonic folding throughout					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
61.0	65.4		CONT'D					
			Downhole contact gradational over 6 cm					
			Alteration: Probable sulphidization of magnetite					
			Locally: 2% grossrite replacement of magnetite					
			Mineralization: pyrrhotite: 8% as clots, disseminations, wisps and stringers					
			magnetite: typically 5% with local sections up to 10% as crude bands and disseminations					
			pyrite: typically 1% as clots, disseminations, wisps					
			arsenopyrite: trace as disseminations					
			- Generally, sulphides are folded with compositional layering / foliation (?) and cross-cut foliation (random)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
65.4	76.0		Quartz-Augen-Sericite Schist	65.4	67.7		7775	4
			Typically medium to light grey homogeneous unit composed of interbanded	67.7	70.0		7776	4
			1-3mm layers of sericite, quartz and minor chlorite. Prominent 15 to 20% clear	70.0	73.0		7777	7
			to blue lenticular quartz-augen oriented subparallel to compositional layers (C:) / main	73.0	76.0		7778	4
			foliation throughout. Random broad pink-orange iron-carbonate dissemination throughout.					
			Typically non-calcareous and non-magnetic					
			Foliation / banding averages 40-50° to C.A. throughout					
			occasional 1-2cm dk green diffuse chlorite bands					
			Alteration: Sericitization throughout unit					
			IRON-CARBONATE: 70.0 - 73.0 and randomly throughout,					
			6-8% pink-orange iron-carbonate as dissemination and fine					
			layers oriented subparallel to foliation / layering.					
			Mineralization: Nil					
			PHOTO: 71.9m - #30-34 - DETAIL OF FE-CARB & QTZ-AUGEN					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
76.0	77.8		METASEDIMENTS	76.0	77.8		7779	37
			Mostly massive homogeneous light grey to light-grey green metasediment containing 5% ≤2cm bands and crosscutting fracture fillings variably filled with iron-amphibole(?) - chlorite and black tourmaline.					
			Generally non-calcareous and locally magnetic (pyrrhotite).					
			Foliation generally poor and where measurable at 40 to 60° to C.A.					
			ALTERATION: Iron-amphibole (?) possible alteration of magnetite					
			MINERALIZATION: Tourmaline-quartz veinlets - 2%					
			pyrrhotite: ≤ 1% as dots, fracture fillings and veinlets					
			pyrite: <<1% - associated with pyrrhotite, locally vuggy, small crystal-lined vugs					
			arsenopyrite: TRACE, in veinlets with pyrite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
77.8	80.6		Banded - Siliceous - Iron Formation	77.8	79.5		7780	125
			Light to medium-grey, variably banded magnetite iron-formation typically	79.5	80.6		7781	50
			containing 40% 1-5mm bands of black magnetite and up to 10% finely					
			interbanded chlorite ± garnet schists. Typically regular banded, conformable					
			layering.					
			Overall non-calcareous and magnetic (magnetite).					
			Foliation / compositional banding at 40° to C.A.					
			Down-hole contact is sharp, conformable at 22° to C.A.					
			Alteration: Minor local sulphidization of magnetite					
			<< 1% iron-amphibole as alteration of magnetite (rims)					
			Mineralization: Magnetite: 40% dominantly banded					
			Pyrrhotite: < 1% as fine disseminated bands and					
			local clots					
			pyrite: TRACE, associated with pyrrhotite					
			chalcopyrite: TRACE, associated with pyrrhotite					

Diamond Drill Record

COLLAR:
NORTH
EAST
ELEVATION
LOGGED BY
DATE LOGGED
MAP REFERENCE NO. NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP

METHOD:

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	WIDTH m	NO.	ASSAYS Au ppb AA	Au oz/ton FA
80.6	84.1		Chlorite-Garnet Schist and Metachert (25%)						
			Dark green chlorite schist with ≤ 15% sulphides & dark pink garnets, generally being inhomogeneously interbedded with light grey metachert (sometimes anastomosing textures) bands typically 1-3 cm wide. Some sections exhibit metachert as rounded possibly sheared breccia clasts in chlorite schist.						
			Typically non-calcareous and magnetic (pyrrhotite, magnetite)						
			Foliation/Compositional layering variable at 0 to 45° to c.A.						
			Downhole contact: 1cm chlorite-healed breccia zone at 55° to c.A.; local foliation at 25° to c.A.						
			Alteration: Local sulphidation of magnetite (pyrrhotite)						
			Trace to minor yellow iron-amphibole (?) - alteration of magnetite (?)						
			Mineralization: 80.6-81.4: pyrrhotite; 12% as ragged clots in chlorite schist	80.6	81.4	0.8	7782	3210	.085
			magnetite: 4% as minor local bands and locally disseminated in chlorite schist						
			PYRITE <1% in late fractures						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb A.A	ASSAYS Au oz/ton FA
80.6	82.1		MINERALIZATION : cont'd						
			80.6 - 81.4 cont'd						
			chalcopyrite : <1% associated with pyrrhotite						
			81.4 - 82.1 : magnetite : disseminated ~3% in chlorite schist	81.4	82.1	0.7	7783	1470	.041
			pyrrhotite : <1% ~ disseminated						
			82.1 - 84.1 : PYRITE : 3% overall, predominantly on late fractures	82.1	84.1		7784	210	
			(post-pyrrhotite)						
			pyrrhotite : 2%, predominantly disseminated throughout						
			chalcopyrite : trace associated with pyrrhotite						
			arsenopyrite : trace associated with pyrite						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
64.1	89.6		Quartz-Augen Sericite Schist	84.1	85.0		7785	10
			Similar to section 65.4-76.0m	85.0	86.2		7786	6
			Homogeneous unit varies from light green to light grey to light	86.2	87.9		7787	1
			orange. Typically 15% diffuse to well defined ≤2mm quartz-augen,	87.9	89.6		7788	1
			flattened and preferentially aligned along main foliation.					
			86.2-87.9: 5% parallel to sharp chlorite schist bands ≤3cm.					
			Typically non-calcareous and non-magnetic					
			Foliation varies 30° to C.A. vehicle to 45° to C.A. down hole.					
			Down hole contact sharp, parallel to foliation					
			NOTE: ENTIRE UNIT IS NOT highly siliceous					
			ALTERATION: Probable quartz-sericite alteration					
			85.0-86.2: IRON-carbonate 2% orange-pink, disseminated					
			MINERALIZATION: PYRITE: TRACE ON fracture surface					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
89.6	92.7		Chlorite Schist and Metachert	89.6	92.7		7789	2
			Typically dark green medium to fine grained garnetiferous chlorite schist with 20% intercalated light gray metachert bands and clasts. Garnets range from ≤2mm as subhedral and flattened masses, often occurring in layers.					
			Typically non-calcareous, magnetic (magnetite)					
			Foliation highly variable 30 to 55° to C.A.					
			Downhole contact is sharp and folded / faulted at approximately 35° to C.A.					
			Alteration: local grunerite alteration of magnetite in chert bands					
			Mineralization: magnetite: varies ≤1% upto 6 disseminated to ≤3% disseminated and banded downhole, predominantly in chlorite schist					
			pyrrhotite: 92.2 - 92.7 - : 7% clotty and disseminated in chlorite schist					
			pyrite: ≤1% disseminated and clotty					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb. AA	ASSAYS Au oz/ton FA
92.7	105.2		Magnetite - Grunerite Iron Formation	92.7	94.6		7790	16	
			Typically very well banded black magnetite in light grey metachert. Banding	94.6	96.2		7791	20	
			varies from 0.1 to 10cm with variable folding throughout.	96.2	98.6		7792	1000	.029
			Mem - calcareous, magnetic (magnetite, pyrrhotite)	98.6	100.1		7793	9	
			- Minor interbanded chlorite schist near top of unit	100.1	101.6		7794	8	
			Foliation highly variable / folded, typical range 25-45° to c.A.	101.6	103.9		7795	1	
			In general two foliations are visible: - earliest appears sub-parallel to	103.9	105.2		7796	5	
			compositional layering (D_x?) and is cut at a high angle by a second						
			crenulation fabric which appears axial planar to minor folds, whose axes						
			trend subparallel to the c.A.						
			Downhole contact appears highly gradational.						
			ALTERATION: Grunerite: graphic replacement of magnetite along edges						
			and often throughout magnetite bands ~ often feathered along						
			second cleavage described above						
			- PHOTO: 20-27 - @ 101.0m ~ grunerite replacement						
			28-29 - @ 96.9m ~ interference pattern in magnetite layer						

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
92.7	105.2		CONT'D					
			Mineralization is magnetite: Typically 30%, predominantly as well defined bands					
			pyrrhotite: typically ≤1% throughout, locally 20% as					
			blebby disseminations and wispy bands					
			pyrite: typically <<1%, locally 1% as disseminations					
			associated with pyrrhotite and in cross-cutting fractures					
			Arsenopyrite: trace throughout associated with pyrrhotite					

Diamond Drill Record

COLLAR:
NORTH
EAST
ELEVATION
LOGGED BY
DATE LOGGED
MAP REFERENCE NO. NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP

METHOD:

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au					
105.2	110.8		Magnetite - Pyrrhotite - Grunerite Iron Formation										
			Ragged bands and wisps of sulphide and black magnetite interbedded										
			with dark grey matrix. Banding and foliation appears highly variable										
			from 0° to 65° to c.a.										
			Non-calcareous and magnetic (magnetite, pyrrhotite)										
			In general, compositional banding/sulphidization is highly folded and										
			irregular from previous section which may suggest unit has entered a highly										
			folded region ~ possibly a fold nose (due to the prominent change in layer										
			orientations). Generally structure is highly contorted, no regular structural										
			control visible as compared to unit above.										
			Down-hole contact is highly gradational										
			ALTERATION: Grunerite: 0-10% as alteration of magnetite ~ generally										
			highly variable percentage increasing downhole										
			Pyrrhotite and pyrite as alteration of magnetite, both										
			highly intergrown with each other. Pyrite, as well as being										
			highly intergrown with pyrrhotite, cross-cuts pyrrhotite										

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
105.2	110.8		CONT'D					
			Mineralization:					
			105.2 - 106.4: pyrrhotite: 7% as bands and wisps highly intergrown with magnetite	105.2	106.4		7797	17
			magnetite: 3% as diffuse - disseminated bands					
			pyrite: typically <1%, locally 1%, as dissemination and clots					
			ARSENOPYRITE: as above					
			106.4 - 107.8: magnetite: 3% as above	106.4	107.8		7798	18
			pyrite: typically 3%, locally 10% as clots and crude bands					
			pyrrhotite: 4% as clots and crude bands					
			ARSENOPYRITE: TRACE clots associated with pyrrhotite					
			107.8 - 110.0: pyrite: 7% crude folded bands intergrown with pyrrhotite and magnetite	107.8	109.0		7799	9
				109.0	110.0		7800	22
			pyrrhotite: typically <1%, locally 10% as above					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
102	110.8		MINERALIZATION cont'd					
			107.2-110.0 cont'd: magnetite: 2% in crude granoblastic bands					
			110.0-110.8: magnetite: 5% in crude folded bands	110.0	110.8		7801	17
			pyrite: 4% as clots and crude bands					
			pyrrhotite: 2%, local clotty sections					
			chalcopyrite: trace as veinlets					
110.8	113.8		Magnetite - Gunnerite - Iron Formation	110.8	112.1		7802	1
			Diffuse magnetite bands in dark grey metachert with intercalations of	112.1	113.8		7803	3
			irregular sulphide bands.					
			Banding is folded / variable from 0° to 55° to C.A. (main foliation also)					
			Non-calcareous, magnetic (magnetite, pyrrhotite)					
			Downhole contact sharp across 3cm chlorite garnet schist band at					
			40° to C.A. (contact folded, sinuous)					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
110.8	113.8		CONT'D					
			Alteration: Granerite 2% as alteration of magnetite					
			pyrrhotite, pyrite as alteration of magnetite					
			Mineralization: magnetite: 8% predominantly in bands					
			pyrrhotite: typically 3%, locally 10% as clotty sections					
			pyrite: typically <1%, locally 1% disseminated					
			@ 112.5, 5cm clot, vuggy appearance due to late corrosion					
113.8	115.7		METACHERT	113.8	115.7		7804	1
			Light green to dark olive-green, massive to poorly banded, moderately					
			homogeneous metachert containing 10% crude bands of chlorite schist.					
			Non-calcareous, locally magnetic (pyrrhotite)					
			Foliation / Compositional banding at 45-55° to c.a.					
			Downhole contact gradational over 10 cm.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
113.8	115.7		CONT'D					
			ALTERATION: Possible iron-amphibole alteration of magnetite (?)					
			Mineralization: pyrite: <1% mainly concentrated on fractures parallel and cross-cutting the main foliation. pyrrhotite: <1%, as above magnetite: trace, disseminated					
115.7	121.5		Chlorite Schist and Pyrrhotite Iron Formation	115.7	117.0		7805	48
			Dark green chlorite schist (50%) interealated with crudely sulphide-grunerite banded iron-formation.	117.0	118.3		7806	26
				118.3	119.3		7807	59
			Chlorite schist; locally ≤10% pink ≤3mm subhedral aggregates	119.3	120.4		7808	14
			-In general chlorite schist dominates up-hole section of unit and iron formation dominates down-hole	120.4	121.5		7809	162
			Non-calcareous, locally magnetic (pyrrhotite)					
			Foliation/compositional banding typically 30° to c.a.					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
115.7	121.5		CONT'D					
			Down-hole contact gradational over 50cm.					
			Alteration: Grunerite: 1% as alteration of magnetite					
			Pyrrhotite / Pyrite ~ probable alteration of magnetite					
			Mineralization: pyrrhotite: 115.7-118.3m: 12% ragged bands locally intergrown with garnets					
			118.3-121.5m: typically 1%, locally 10% as clots and ragged bands					
			pyrite: typically <1%, locally 8% toward down-hole contact, as corroded fractures and intergrown clots with magnetite					
			magnetite: typically <1% locally 10%, crude bands and disseminations					
			quartz-veins: 118.7-119.3: 65% bone-white quartz veins, crudely parallel to main foliation / compositional layering.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
121.5	128.2		Magnetite - Grunerite - Sulphide Iron Formation	121.5	122.9		7810	10
			Diffusely banded magnetite-grunerite with abundant clotty sulphides	122.9	125.0		7811	11
			contained within a dark-grey metachert matrix.	125.0	126.5		7812	460
			Foliation / compositional banding, typically 35° to c.a., locally	126.5	128.2		7813	108
			highly variable and folded (poss. S_3)					
			Non-calcareous, magnetic (magnetite, pyrrhotite)					
			Down hole contact gradational over 1cm.					
			Note: up to 4% intercalated (irregular) chlorite-garnet schist approaching					
			down-hole contact, minor-light green-metachert bands also-					
			Alteration: Grunerite: typically 5% intergrown with magnetite (alteration)					
			pyrite / pyrrhotite: mutually intergrown with magnetite					
			Mineralization: Magnetite: typically 10% disseminated and discreet bands					
			PYRITE: 122.9-126.5: typically 7%, locally 25-30%					
			-ELSEWHERE: ≤2%					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
121.5	128.2		MINERALIZATION CONT'D:					
			PYRRHOTITE: 121.5-123.4: average 3% as clots and ragged bands					
			ELSEWHERE: < 1%					
128.2	130.8		Sulphide-Magnetite Iron Formation	128.2	129.4		7814	120
			Diffuse, contorted, folded and brecciated sulphide and magnetite bands	129.4	130.8		7815	38
			and masses intercalated with light-grey metachert lenses, clasts, and bands.					
			Approximately 5% ≤2cm chlorite schist bands throughout					
			Non-calcareous, magnetic (magnetite, pyrrhotite)					
			Foliation/compositional layering variable ~ 0° to 35° to c.a.					
			Down hole contact is highly gradational					
			ALTERATION: Grunerite; typically 1% ~ alter magnetite					
			pyrrhotite/pyrite, possibly alter magnetite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
128.2	130.8		CONT'D					
			Mineralization: 128.2-129.4: pyrrhotite: typically 20% in clots, masses and crude bands, some brecciation					
			magnetite: typically 3% disseminated					
			pyrite: 2%, mainly clotty in late cross-cutting veins					
			129.4-130.8:					
			pyrite: typically 3% as clots and crude bands and cross-cutting veins					
			magnetite: typically <1%; locally 5% in disseminated crude bands					
			pyrrhotite: <1% as disseminations and clots					
130.8	134.5		Pyrite Iron Formation	130.8	132.4		7816	119
			Large irregular ≤10cm clots of pyrite in light grey metachert.	132.4	134.5		7817	510
			Approximately 15% intercalated chlorite schist bands ≤20cm wide throughout.					
			Non-calcareous and locally magnetic (magnetite, pyrrhotite)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
130.8	134.5		cont'd					
			Foliation / compositional layering typically 30-40° and quite variable					
			Down-hole contact sharp at ± 35° to C.A., subparallel to foliation					
			ALTERATION: Hematite after pyrite					
			Mineralization: 130.8-132.4:					
			pyrite: Average 4%, locally 10% as clots, fracture-fills, vuggy (corroded clots)					
			132.4-134.5:					
			pyrite: 15% overall, locally 30% as above					
			magnetite: <1% disseminations					
			Hematite: ≤ 2% - earth-red, intergrown with pyrite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
134.5	136.1		METACHERT	134.5	136.1		7818	13
			Similar to 113.8 - 115.7					
			Hosts 3% chlorite schist bands and 10% sericite-chlorite bands					
			averaging ≤5cm					
			Foliation highly variable from 0-65° to c.a.					
			Non-calcareous and non-magnetic					
			Down-hole contact sharp at 60° to c.a.					
			ALTERATION: Possible sericitization in schist bands					
			Mineralization: pyrite: << 1% disseminated and in late cross-cutting fractures					
			pyrrhotite: trace, as above					
			magnetite: trace, disseminated					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
136.1	136.5		Magnetite - Iron Formation	136.1	136.5		7819	13
			Similar to 92.7-105.2					
			Foliation / compositional banding at 55° to c.a.					
			Down hole contact sharp at 55° to c.a. in chlorite schist					
			Alteration: Grunerite: 10% alter magnetite, intergrown and rimming magnetite					
			Mineralization: magnetite: 30% as distinct bands and minor disseminations					
			Hematite: 2% - replacing magnetite adjacent to late pyrite fracture					
			pyrite: <<1% as late cross-cutting fracture filling and disseminated					
136.5	137.9		Pyritic Metachert	136.5	137.9		7820	480
			Light grey metachert with variable sulphide content, with 15%					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
136.5	137.9		CONT'D					
			Typically Non-calcareous, locally magnetic (pyrrhotite)					
			Foliation / compositional banding at 45° to c.A.					
			Downhole contact sharp but irregular and ragged					
			ALTERATION: NIL (?)					
			MINERALIZATION: PYRITE: average 5%, varies from <1% to 12% increasing					
			downhole; vuggy (corroded), brass-yellow and white as clots					
			and ragged bands.					
			pyrrhotite: <1% disseminated					
			HEMATITE: trace, intergrown with pyrite					
137.9	140.1		Chlorite-Sulphide Schist	137.9	138.6		7821	7
			Homogeneous dark-green moderately well foliated chlorite schist with abundant	138.6	140.1		7822	19
			clotty sulphides intergrown throughout.					
			Foliation / compositional layering varies from 45° to c.A. up hole to 35° to c.A.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
137.9	140.1		CONT'D					
			downhole.					
(*)		>	138.1 - 138.6 : Quartz-augen sericite schist, similar to 143.6 -					
			- sharp contacts parallel to foliation					
			138.8 - 139.4 : 50% ≤ 3cm interbands and rounded breccia clasts of metachert					
			Downhole contact sharp at 50° to c.A.					
			Alteration : 138.1 - 138.6 ~ probable sericite, silicic alteration zone					
			Mineralization : pyrrhotite : average 5% as ragged clots both parallel to					
			and cross-cutting foliation ; locally intergrown with pyrite					
			pyrite : average 2% as above, locally intergrown with					
			pyrrhotite, increasing % downhole					
140.1	143.6		Sulphidic Metachert	140.1	141.5		7823	109
			Light green to light grey poorly to well banded metachert with 5%	141.5	142.6		7824	420
			intercalated chlorite schist bands ≤ 1mm - 2cm. Variable clots and crude	142.6	143.6		7825	78
			sulphide bands throughout.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
140.1	143.6		CONT'D					
			Foliation / compositional banding varies 45-55° to C.A.					
			Downhole contact gradational over 10 cm.					
			140.7-140.9 : Minor unit of light gray quartz-augen sericite-chlorite schist.					
			Sharp uphole contact at 50° with gradational downhole contact perpendicular					
			to foliation & contains disseminated 10% chloritized biotite.					
			ALTERATION : 140.7-140.9 : probable sericitic alteration, minor chloritization					
			Granite : locally 2% alter magnetite					
			Mineralization : pyrite : average 3%, locally 15% increases toward both contacts					
			as clots and ragged bands both parallel to and cross-cuts foliation					
			pyrrhotite : average 1%, locally 8% as ragged folded bands					
			and clots					
			magnetite : 141.5 - 142.6 : averages 10% as ragged diffuse bands					
			typically ≤ .5cm ; elsewhere ≤ 1% disseminated					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
143.6	182.4		Quartz-Augen Sericite Schist	143.6	145.1		7826	280
			Generally light grey, green-grey to orange-pink homogeneous sericite-quartz	145.1	146.6		7827	40
			schist containing 6% clear and blue 1-3mm flattened quartz-augen. Augen	146.6	147.8		7828	42
			appear preferentially aligned along main foliation/parting. Random intercalations	147.8	150.0		7829	48
			≤1% of chlorite schist parallel to main foliation/compositional layering.	150.0	152.9		7830	19
			Typically non-calcareous and non-magnetic	152.9	153.8		7831	93
			Foliation/compositional layering typically ranges from 40-50° to C.A.	153.8	154.2		7832	90
			153.6-154.1m; 158.5-159.3, 179.8-180.2; BENLEN CORE, chloride on fracture surfaces	154.2	157.2		7833	4
			160.1-160.5: layer of strongly sheared chlorite-sericite-biotite-metachert	157.2	159.8		7834	4
			- In general, foliation fabric has 1-4mm partings amongst a well developed	159.8	160.9		7835	9
			finely spaced foliation, may be S_2 zone which has transposed S_1	160.9	163.9		7836	10
			into parallelism	163.9	166.5		7837	52
			Down hole contact gradational over several metres.	166.5	168.9		7838	30
			151.0, 153.0; strong S_2 crenulations	168.9	171.3		7839	9
			150.0-150.2: 10% light grey metachert (?) clasts	171.3	173.6		7840	2
				173.6	175.9		7841	2
			ALTERATION: Probable sericite alteration throughout, possibly a	175.9	177.6		7842	14
			sericitic, silicic ALTERATION ZONE	177.6	179.1		7843	14

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
143.6	182.4		ALTERATION CONT'D	179.1	180.5		7844	230
			Iron Carbonate: Typically ≤ 1% throughout, locally 2% increasing down hole	180.5	182.4		7845	7
			178.3 - 179.0m: 45% iron-carbonate as diffuse bands and disseminations parallel to main foliation / compositional layering					
			Mineralization: pyrite: 160.1 - 160.5: 1% as clots and fracture fillings in chlorite-sericite-metachert					
			quartz-veining: 147.0 - 147.2: possible quartz veining, 1-5cm layers and possible breccia clasts - may also be metachert					
182.4	197.3		Sericite-Chlorite Schist	182.4	183.9		7846	2
			Generally light green-grey moderately homogeneous well foliated	183.9	186.9		7847	6
			sericite-chlorite schist with occasional garnetiferous chlorite schist bands	186.9	189.9		7848	4
			ranging from 1cm to 1m. Garnets comprise pink elongate masses subparallel	189.9	192.1		7949	7
			in orientation to the main foliation.	192.1	193.5		7950	8

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
182.4	197.3		CONT'D :					
			Chlorite schist accounts for approximately 30% of unit.	193.5	195.6		7951	3
			Typically non-calcareous and non-magnetic	195.6	197.3		7952	1
			Foliation / compositional layering at 45-50° to C.A. throughout.					
			192.1 - 193.9 : Chlorite ± garnet schist, approximately 70% of section					
			193.5 - 197.3 : 1% intercalated metachert bands and clasts, 1-3cm wide					
			Downhole contact gradational over 1 metre					
			ALTERATION : Possible sericite alteration zone ~ possible altered chlorite schist (± metachert) unit - portion of main sericitic, silicic alteration zone.					
			Mineralization : pyrrhotite : << 1% as clots and disseminations in chlorite schist - metachert horizons					
			pyrite : trace as small late fracture fillings					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
197.3	217.3		Quartz-Augen, Quartz-Iron-Amphibole Schist	197.3	200.1		7853	1
			Generally light grey to tan-grey moderately homogeneous well foliated	200.1	203.1		7854	2
			quartz-iron-amphibole schist containing ≤1% ≤2mm quartz-augen, flattened	203.1	206.1		7855	2
			and oriented subparallel to the main foliation / compositional layering.	206.1	207.5		7856	1
			Unit appears highly silicified.	207.5	209.0		7857	1
			Typically non-calcareous and non-magnetic.	209.0	210.0		7858	1
			Foliation typically at 45-50° to c.a. throughout.	210.0	213.5		7859	2
			Downhole contact sharp at 60° to c.a.	213.5	215.6		7860	1
			210.1-215.6: Approximately 10% dark-grey to black siliceous material	215.6	217.3		7861	1
			ALTERATION: Iron-Amphibole: yellow tan as ragged bands ~30%					
			-possible alteration of magnetite (?) - possible altered					
			and sheared magnetitic metachert (?)					
			Sericite: <1% ~ sericitization as part of probable sporadic-					
			silicic alteration zones					
			MINERALIZATION: NIL (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
217.3	219.7		Biotite-Carbonate-Feldspar Schist	217.3	219.7		7862	1
			Dark grey to black homogeneous biotite-carbonate-feldspar schist containing clots of pyrite. Probably represents third geophysical conductor/mag response on detailed compilation drill-section.					
			Typically calcareous and non-magnetic.					
			Foliation typically at 40° to C.A.					
			Down hole contact sharp at 40° to c.A.					
			Unit may represent an altered mafic dike?					
			Alteration: Carbonate: probable calcite (rhombohedrons visible w/hand lens) approximately 40%; alteration of pyroxene (metamorphic?)					
			Mineralization: pyrite: ≤ 1% as small sub-rounded clots which overgrow the main foliation					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
219.7	248.9		Quartz-(Iron-Amphibole)-Sericite Schist	219.7	222.7		7863	9
			Similar to 197.3-217.3	222.7	225.6		7864	7
			Generally homogeneous light-grey-tan to grey well foliated schist	225.6	228.5		7865	4
			containing varying percentages of quartz, possible yellow-green iron-amphibole	228.5	230.0		7866	2
			sericite and carbonate. Some sections contain up to 10% biotite	230.0	231.3		7867	5
			Typically non-calcareous and non-magnetic.	231.3	234.3		7868	3
			Foliation / compositional Layering typically at 40-45° to c.a.	234.3	237.2		7869	5
			Downhole contact sharp at 60° to c.a.	237.2	239.8		7870	2
			Note: Sub-rounded quartz-augen distributed randomly throughout, < 1%	239.8	242.5		7871	4
				242.5	245.4		7872	1
				245.4	246.6		7873	2
			ALTERATION: Sericite: probable sericitization as part of layer	246.6	248.9		7874	2
			silicic-sericitic alteration zone					
			Biotite: 230.0-234.8: approximately 10-12% biotite					
			as diffuse ragged layers and fracture-fillings and as					
			prominent rims around irregular carbonate masses.					
			~ probable potassic alteration (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
219.7	248.9		ALTERATION cont'd:					
			Carbonate: up to 5% as interstitial to late fracture					
			filling veinlets. Also occurs as ±2cm clotty					
			patches surrounded by biotite.					
			~ possible alteration of...					
			IRON Amphibole: approximately 20-25% throughout as ragged					
			bands, some anastomosing textures - possible					
			alteration of magnetite? ~ possibly an altered magnetite					
			iron-formation?					
			MINERALIZATION: NIL (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
248.9	258.8		Chlorite-Quartz Schist and Chlorite-Biotite-(Garnet) Schist.	248.9	251.3		7875	3
			Generally medium to dark green-grey well foliated chlorite-quartz schist	251.3	252.7		7876	12
			intercalated with very homogeneous, fine grained grey-brown chlorite-biotite-garnet	252.7	254.3		7877	5
			schist. Garnets occur mostly as minor (<1%) subhedral masses concentrated	254.3	256.6		7878	2
			along compositional layers.	256.6	258.8		7879	2
			Typically locally calcareous and non-magnetic.					
			Foliation is generally oriented at 60° to C.A.					
			252.2-253.9m: medium-to light green-grey chlorite-sericite schist -					
			appears more highly sheared than surrounding schists - contains					
			40% wisps and sheared chlorite bands intercalated with light					
			grey sericite and quartz with minor (<<1%) meteorite clasts (?)					
			Alteration: Sericite as part of minor sericite-silicic alteration zone (?)					
			Biotite - possible potassic alteration, though more probable					
			to be a compositional/metamorphic feature					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-03
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
248.9	258.8		ALTERATION CONT'D					
			Carbonate: Typically ± 1% 1-3mm white carbonate veinlets throughout. Most are oriented subparallel to compositional layering / main foliation. Some carbonate veinlets are folded with axial planes subparallel to compositional layering / main foliation.					
			MINERALIZATION: PYRITE: TRACE AS SMALL CLOTS					
			CHALCOPYRITE: TRACE AS SMALL CLOTS.					
	258.8		END OF HOLE					
			NOTES: CASING PULLED					

Dawn C. Ralf

Diamond Drill Record

PAGE 1 OF

COLLAR:	HOLE SURVEY		
NORTH 2+75N	FOOTAGE	AZIMUTH	DIP
~~EAST~~ 1487 WEST	collar	168°	-76
ELEVATION	199'/60.7m		-76.5
LOGGED BY D. ELSBY	399'/121.6m		-77°
DATE LOGGED	649'/197.8m		-67.5
MAP REFERENCE NO. NTS 52P/4	METHOD: ACID DIP TUBE		

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE TEST DEPTH EXTENSION OF MINERALIZATION INTERSECTED IN M-88-12

HOLE NO. M-89-4
CLAIM NAME 816706
COMMENCED 9 JUL 89
FINISHED 14 JUL 89.
PROJECT NO. MIS EOH 197.8m

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
0.0	3.9		OVERBURDEN: FEW GRANITOID AND BASALT COBBLES RECOVERED; CASING DRIVEN TO 6.7m THROUGH BROKEN CORE ZONES (HEAVED OUTCROP?);					
3.9	8.2		DIORITE: LIGHT GREY, MEDIUM GRAINED, HOMOGENOUS WITH 15% 1-3mm DISSEMINATED CHLORITIZED PYROXENE (?); TYPICALLY NON-MAGNETIC; SLIGHTLY CALCAREOUS THROUGHOUT; MODERATELY TO POORLY FOLIATED AT 30° TO C.A.; DOWNHOLE CONTACT SHARP AT 50° TO C.A. PARALLEL TO LOCAL FOLIATION; THIS UNIT IS PROBABLY A DIKE WITHIN THE GABBRO; LOCAL BLUE QUARTZ EYES NEAR DOWNHOLE CONTACT; ALTERATION: NIL MINERALIZATION: PYRITE/PYRRHOTITE - TRACE - DISSEMINATED					
			NOTE: 20 cm OF THIS DIORITE ALSO OCCURS IN A BROKEN SECTION OF CORE AT THE TOP OF DDH-M-88-12;					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
8.2	82.9		GABBRO: Typically 60% coarse grained (3-10mm crystals of med. green pyroxene(?) mottled with white to blue feldspar; Homogenous; locally calcareous (alteration of feldspar and in small veinlets; locally magnetic (magnetite, pyrrhotite); typically massive, locally poorly foliated at 55° to C.A.; gradational sections of gabbroic schist at 53.9-55.2m and 78.1-80.8m foliated at 45° to C.A.; Downhole contact sharp at 35° to C.A. - marked by 40cm zone of brecciation(?) and 1.5cm chilled contact; 56.7-57.5m: Basalt - ragged sharp contacts with surrounding gabbro; Alteration: Local bleaching and silicification near downhole contact Mineralization: Magnetite: <1% - locally disseminated Pyrite/Pyrrhotite: <<1% - disseminated White Carbonate ± Quartz Veinlets - ≤4%					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
82.9	85.7		Chlorite-Garnet Schist and Basalt	84.7	85.7		7880	1
			Typically dark green to green-grey homogeneous fine-grained chlorite schist and basalt containing ≤ 3mm pink subhedral garnets concentrated in bands subparallel to compositional layering / foliation. Unit is well foliated throughout. Generally non-calcareous and locally magnetic. Foliation typically at 45° to c.a. Drill hole contact sharp at 70° to c.a.					
			Alteration: Sericite ~ <1% as part of probable sericitic alteration					
			Biotite: <1% possible potassic alteration, more probably a result of original composition and metamorphism					
			Mineralization: Pyrrhotite: <1% as small clots and ragged bands					
			Pyrite: <<1% as small clots, often associated with pyrrhotite					
			Chalcopyrite: trace, as clotty masses intergrown with pyrrhotite.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
85.7	88.0		METACHERT	85.7	86.7		7881	2
			Generally light-grey metachert containing 15% interbanded chlorite-biotite-quartz-feldspathic schist. Chlorite schist bands are typically well foliated and parallel / compositional layering.	86.7	88.0		7882	2
			Typically locally calcareous and non-magnetic					
			Foliation typically 50° to c.a.					
			Downhole contact gradational / intercalated over 2cm.					
			Alteration: Carbonate: <1% calcareous (calcite) veinlets, typically ≤ 2mm, generally random, some cross-cutting stockwork					
			Mineralization: pyrite: trace, disseminated					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
88.0	92.7		Sericite - Quartzo-Feldspathic Schist	88.0	89.0		7883	1
			Light grey to brown-grey very homogeneous and well foliated schist	89.0	90.8		7884	4
			composed of ≤2mm intercalations (layers) of sericite and quartzo-feldspathic	90.8	92.7		7885	1
			material. Interstitial chlorite, 7%, throughout.					
			Generally non-calcareous and non-magnetic.					
			Foliation / compositional layering typically at 50° to c.a.					
			Downhole contact sharp at 50° to c.a.					
			ALTERATION: Sericite: approximately 15-20%, possible sericitic					
			alteration as part of larger sericitic - silicic alteration					
			zone.					
			Biotite (?) - light tan to dark-brown diffuse patches					
			and bands throughout unit ~ possible 8% ~ probable					
			potassic alteration.					
			Mineralization: Pyrite ≤1% as small clots and ragged bands, often					
			aligned along the main foliation / compositional layering					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppd
88.0	92.7		Mineralization cont'd:					
			Pyrrhotite: <1% as ragged bands					
			Chalcopyrite: TRACE, associated with pyrrhotite					
92.7	94.5		METACHERT	92.7	93.6		7886	1
			Light grey to white homogeneous metachert containing 10%	93.6	94.5		7887	4
			intercalated ≤5mm wispy and diffuse bands of dark green					
			medium to fine-grained chlorite. The unit also contains numerous					
			carbonate-filled fractures.					
			Generally locally calcareous and non-magnetic.					
			Typically moderately foliated variably at 30 to 50° to c.a.					
			Downhole contact diffuse, gradational over 10 cm.					
			ALTERATION: Carbonate: 3% as ≤2mm veinlets concentrated along					
			fractures					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
92.7	94.5		ALTERATION (CONT'D)					
			Iron Amphibole / Grunerite (?): ≤ 1% as patchy disseminations and diffuse wisps throughout unit ~ probable alteration of magnetite (?)					
			Mineralization: Barite: ≤ 1% as clots, ragged bands and disseminations					
			pyrrhotite: ≤ 1% as clots and ragged bands					
			chalcopyrite: trace; as small clots associated with pyrite					
94.5	96.9		Chlorite - Schist	94.5	96.9		7888	3
			Typically dark olive green well foliated homogeneous fine grained chlorite schist. Minor garnetiferous sections containing 1% ≤ 2mm pink garnets and garnet masses aligned the main foliation.					
			Foliation typically at 50° to C.A.					
			Typically locally calcareous and locally magnetic (magnetite - pyrrhotite)					
			Downhole contact gradational over 1cm at 30° to C.A.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
94.5	96.9		CONT'D					
			96.4-96.6 : Minor unit of chlorite-magnetite-pyrite schist					
			-up to 3% wispy banded magnetite intercalated with chlorite.					
			Pyrite averages ≤ 2% as ragged bands and disseminations					
			Alteration : Carbonate : <1% as ≤2mm fracture fillings and small patches					
			Pyrrhotite as possible alteration of magnetite					
			Mineralization : Pyrrhotite <<1% as minor clots and ragged bands					
			Pyrite <<1% as minor clots, ragged bands and disseminations.					
			Magnetite : 96.4-96.6 ≤ 3% as ragged, wispy bands					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
96.9	99.3		Sericite-Chlorite-Quartz-Feldspathic Schist	96.9	98.1		7889	1
			Similar to 88.0-92.7.	98.1	99.3		7890	1
			Note: minor ≤2mm blue quartz-augen and possible trace metachert bands and clasts.					
			Typically non-calcareous and non-magnetic.					
			Foliation at 40° to c.A.					
			Downhole contact - broken core ~ possible conformable contact					
			Alteration: As in 88.0-92.7					
			Mineralization: pyrite: trace as ≤5mm clots which overgrow the main foliation / compositional layering					
99.3	99.8		Magnetite-Iron-Formation	99.3	99.8		7891	4
			Typically dark-grey to black ≤6mm diffuse, wispy bands of magnetite in light-grey metachert. Up to 2% interbanded ≤1cm chloritic layers oriented parallel to the main foliation / compositional layering.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
99.3	99.8		CONT'D					
			Generally non-calcareous and magnetic (magnetite, pyrrhotite)					
			Foliation / compositional layering at 45° to c.a.					
			Down hole contact sharp @ 55° to c.a.					
			Alteration: Garnerite: <1% as fine fracture-fillings ~ probable replacement of magnetite					
			pyrite/pyrrhotite ~ probable alteration of magnetite					
			Mineralization: Magnetite: 30% as diffuse, zoned bands					
			Pyrite: ≤ 3% as clots and zoned bands					
			pyrrhotite: <<1% as small clots associated with pyrite					
99.8	110.0		Chlorite - Garnet Magnetite Schist	99.8	101.3		7892	1
			Generally dark olive green, well foliated, homogeneous compositionally	101.3	102.9		7893	10
			banded chlorite schist containing 3% ≤2mm pink subhedral to anhedral	102.9	104.4		7894	1
			garnets aligned parallel to compositional layering. Up to 2% finely	104.4	107.2		7895	1

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
99.3	110.0		CONT'D	107.2	108.3		7896	4
			disseminated ≤ 0.5mm magnetite crystals.	108.3	110.0		7897	8
			Generally non-calcareous and locally magnetic (magnetite).					
			Foliation / compositional layering typically at 60° to C.A.					
			Drillhole contact is sharp at 75° to C.A.					
			Alteration: Possible minor silicification throughout <1%.					
			Carbonate: <<1% as minor white (calcite) patches locally					
			Mineralization: Magnetite: typically 1% throughout, locally 3% as fine					
			disseminated ≤ 0.5mm cubes.					
			Pyrite: <1% as clots and ragged bands subparallel to					
			the main foliation / compositional layering.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
110.0	111.3		Magnetite - Iron Formation:	110.0	111.3		7898	9
			Dark-grey to black wispy ragged bands of fine grained magnetite in light-grey homogeneous metachert.					
			Generally non-calcareous and magnetic (magnetite)					
			Foliation variable at 45-55° to c.A.					
			Down hole contact sharp at 45° to c.A.					
			Note: <1% minor interstitial chlorite schist-intercalations					
			Alteration: Gossanite: 5% as diffuse ≤2mm bands and as wisps concentrated along magnetite layer boundaries - probable alteration of magnetite					
			Mineralization: Magnetite: 45-50% as ≤ 3cm ragged bands and wisps oriented subparallel to the main foliation / compositional layering					
			Pyrite: ≤1% as ragged bands, clots and 1mm cubes as fracture-fillings and as crude layers oriented subparallel to main foliation / compositional layering.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
111.3	144.8		Chlorite Schist + Chlorite-Biotite Schist	111.3	113.0		7899	4
			Light to dark olive green chlorite schist intercalated with green- and grey-brown	113.0	114.6		7900	370
			homogeneous chlorite-biotite schist. Unit is typically medium to fine-grained	114.6	116.0		7901	2
			and well foliated throughout	116.0	119.0		7902	20
			Unit is typically non-calcareous and non-magnetic	119.0	121.9		7903	5
			Foliation varies from 60° to c.a. uphole to 50° to c.a downhole.	121.9	123.8		7904	5
			Downhole contact sharp at 60° to c.a.	123.8	125.1		7905	1
			Note: Throughout unit, random, occasional sections of fine-grained chlorite schist	125.1	128.1		7906	3
			containing coarse, 1-3mm green hornblende crystals, random occurrences.	128.1	129.6		7907	3
			Note: 2cm coarse garnet unit along down-hole contact	129.6	132.6		7908	1
			129.1-129.3: light grey metachert sub-unit	132.6	135.4		7909	6
			140.9-141.0: possible magnetite, pyrite iron-formation	135.4	138.4		7910	29
			Alteration: Carbonate: 1% occasional ≤2mm white carbonate bands	138.4	139.4		7911	4
			occur randomly along fractures throughout unit	139.4	140.5		7912	3
			K-feldspar / BIOTITE: <<1% to trace occurrences of light-tan.	140.5	141.4		7913	2
			brown potassic alteration - mostly in irregular patches and	141.4	142.7		7914	4
			bands.	142.7	143.4		7915	3
				143.4	144.9		7916	4

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52 P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
111.3	144.8		CONT'D:					
			Mineralization: pyrite: trace as small ≤ 3mm clots throughout					
			pyrrhotite: trace as small ≤ 2mm clots					
			magnetite: <1% to trace as fine disseminations, locally up to 2% as crude-wispy layers.					
			quartz-veins: 122.6-122.8; 126.1 - White quartz veining, contains thin wisps of chlorite and sericite-grunerite (?)					
			chalcopyrite: trace, small clots in minor quartz veins					
			ADDITIONAL: BROKEN CORE: 144.2-144.9 - possible fault structure.					
144.8	145.5		Grunerite - Magnetite - Iron Formation	144.9	145.5		7917	12
			Dark grey to black ragged-wispy-banded magnetite intercalated with diffuse bands of green-grey grunerite and light-grey metachert. Abundant white carbonate bands as interstitial material and veinlets throughout					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
144.8	1455		CONT'D					
			Generally calcareous and magnetic (magnetite, pyrrhotite)					
			Foliation / compositional layering typically at 60° to c.a.					
			Down-hole contact sharp at 50° to c.a.					
			Alteration: Grunerite: 20% as light green-grey wisps ≤ 2cm bands, conformable and probably represents alteration of magnetite.					
			Pyrrhotite as probable alteration of magnetite					
			Mineralization: Magnetite: 25% as blocky ragged and diffuse bands					
			Pyrrhotite: <<1% as fine blebs and disseminations subparallel to compositional layering / main foliation					
			Pyrite: <<1% as fine fracture-fillings					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
145.5	153.2		Quartz - Sericite - Chlorite Schist	145.5	146.6		7918	1
			Variably light grey to dark green-grey quartz-sericite schist with 8%	146.6	147.8		7919	4
			intercalations of olive-green chloritic bands throughout. Chlorite-biotite	147.8	149.1		7920	4
			schist bands occur as 4% intercalations throughout. Overall, up to 1% ≤ 2mm	149.1	150.5		7921	3
			blue highly flattened quartz-eyes in random sections.	150.5	153.2		7922	3
			Generally locally calcareous and non-magnetic.					
			Foliation / compositional layering is variable at 10-50° throughout					
			Downhole contact is variable over 1.0 metres					
			-146.6 - 149.1m: Highly brecciated zone with 3% interstitial cream					
			colored calcite from 146.6 - 148.5 as matrix. General strong					
			5mm to 1cm jointing throughout, possible S_2 fabric. Brecciation					
			may be result of S_3, as high angle crenulation cleavage					
			is visible and generally north-south trending in drill core.					
			NOTE: 152.2 - 153.2, UNIT becomes increasingly siliceous, and contains					
			trace quantities of iron-carbonate and trace malachite.					

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
145.5	153.2		CONT'D:					
			ALTERATION: Sericite: probable sericitic-silicic alteration, part of main alteration zone (?)					
			Carbonate: typically <<1%, locally 3% in ≤2mm veinlets and as void/fracture filling in breccia matrix.					
			Iron-carbonate: trace near downhole contact along strong 1-2 cm partings, probable S_n					
			Potassic Alteration: trace light tan-brown patchy bands near down-hole contact = possible biotite, K-feldspar as potassic alteration					
			MINERALIZATION: - NIL -					
153.2	160.4		Quartz-Sericite Schist	153.2	155.0		7923	5
			Very similar to 145.5-153.2 but appears more altered and	155.0	156.3		7924	3
			sheared than previous unit. Strong 0.5-1.5 cm partings throughout a	156.3	157.4		7925	20
			probable S_n cleavage. Note- 1 to 5 cm metachert bands occur randomly	157.4	158.4		7926	1
			throughout unit. Overall a increasing percentage of iron-carbonate alteration	158.4	160.4		7927	9
			downhole					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52 P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
153.2	160.4		CONT'D.					
			Generally non-calcareous and non-magnetic					
			Foliation / compositional layering variably 50 to 40° to c.a. throughout.					
			Down hole contact sharp at 60° to c.a.					
			Alteration: Sericite: sericite throughout as part of sericitic-silicic alteration event associated with main alteration zone.					
			Iron Carbonate: 158.4-160.4: 8% pink-orange disseminations and irregular wispy bands concentrating along prominent 0.5-1.5 cm partings; probable S_2 strain-slip cleavage.					
			Biotite / K-feldspar: ~ ≤1% dissemination and ragged patches from 155.3-160.4 m, possible potassic alteration.					
			Mineralization: NIL (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
160.4	162.6		Chlorite - Biotite Schist	160.4	162.6		7928	z
			Generally dark olive-green to dark-brown-green intermixed chlorite and chlorite-biotite schist.					
			Typically well foliated at 60° to c.a.					
			Generally locally calcareous and non-magnetic					
			Down hole contact sharp at 50° to c.a.					
			Alteration: Biotite: Light-brown to tan diffuse patches, approximately 5% throughout, intermixed with darker-brown-black compositional/ metamorphic biotite ~ possible potassic alteration					
			Carbonate: ≤ 1% ≤ 2mm white carbonate veinlets (calcite) concentrated along fractures subparallel to main foliation.					
			Mineralization: pyrite: trace as small clots and cubes on fracture surfaces.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
								ppb.
162.6	164.2		Chlorite - Pyrite - Magnetite Iron Formation (Transition Zone)	162.6	164.2		7929	86
			Typically light green to green-grey intercalations of magnetite, chlorite and grunerite in light grey meladchert.					
			Unit is moderately to well foliated at 35° to c.a.					
			Typically non-calcareous and magnetic (magnetite, pyrrhotite)					
			Downhole contact is gradational over 15 cm.					
			Overall, unit appears to be a transition zone from chlorite schist to magnetite iron-formation.					
			Alteration: Grunerite: ≤2% as disseminations and wispy diffuse layers, probably after magnetite.					
			Mineralization: Magnetite: 4% as disseminations and ragged, wispy bands					
			Pyrite: 1% as clots and ragged bands subparallel to the main foliation.					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.		
162.6	164.2		Mineralization: cont'd							
			pyrrhotite: <<1% as minor clots and ragged bands ~ probable							
			alteration of magnetite							
164.2	170.7		Magnetite - Grunerite Iron Formation	164.2	165.2		7930	2190	(.063)	
			Typically dark grey to black bands and disseminations of	165.2	166.2		7931	13		
			magnetite and grunerite in light-grey metachert. Minor interbedding	166.2	167.0		7932	8		
			of chlorite-biotite-garnet schist locally.	167.0	168.0		7933	64		
			Generally non-calcareous and magnetic (magnetite, pyrrhotite).	168.0	169.8		7934	65		
			Foliation / compositional layering is highly variable from 30 to	169.8	170.7		7935	37		
			45° to C.A.							
			Downhole contact sharp at 50° to C.A.							
			Alteration: Grunerite: 3% as wisps and anastomosing							
			disseminations along magnetite bands and							

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
169.2	170.7		Alteration: cont'd					
			throughout. Probable alteration of magnetite					
			Pyrrhotite / pyrite ~ probable alteration of magnetite					
			Mineralization: Magnetite: 45% as ≤ 2cm bands oriented					
			subparallel to compositional layering throughout					
			Pyrite: 4% as clots and ragged bands subparallel					
			to compositional layering / main foliation					
			Pyrrhotite: 3% as above					
170.7	184.3		Sericite - Quartz - Schist and Metachert	170.7	171.7		7936	13
			Typically light-grey to greenish-grey well foliated sericite-quartz and	171.7	173.8		7937	2
			quartz-sericite schist intercalated with 8% irregular bands and clasts(?)	173.8	176.7		7938	1
			of light grey metachert. Metachert sections typically contain	176.7	178.5		7939	2
			up to 9% grunerite along fracture surfaces.	178.5	179.9		7940	6
				179.9	181.7		7941	20

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
170.7	184.3		CONT'D	181.7	184.3		7942	3
			Unit also contains sporadic iron-carbonate alteration along S2(?) cleavage surfaces.					
			Generally non-calcareous and non-magnetic					
			Foliation (main S_1) varies from 30° to C.A. uphole to 60° to C.A. downhole.					
			Note strong S2 strain-slip cleavage from 171.8 – 173.2 m.					
			Downhole contact sharp at 45° to C.A.					
			Note: random sections throughout contain ± 3mm clear to blue quartz augen aligned subparallel to S_1.					
			173.9 – 178.8: Unit contains approximately 20% interbanded chlorite-schist as diffuse and sharp bands ranging from ± 3cm.					
			178.6 – 178.7; 180.0 – 180.7; 181.5 – 181.7; 182.5 – 182.9m: Metachert intercalations averaging 70-80% light grey metachert containing 3-4% grunerite in wisps and ragged bands along fractures.					
			ALTERATION: IRON Carbonate: 171.1 – 173.8: Approximately 12% pink-orange iron-carbonate as disseminations and discreet					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
170.7	184.3		ALTERATION: cont'd.					
			Concentrations along S_2 cleavage planes.					
			178.8 - 184.3: Approximately 2% iron-carbonate disseminated along S_1 and S_2					
			planes.					
			Pyrrhotite: overall <1%, locally 3-4% in melanocratic sections					
			as fine wisps and disseminations along fractures and parallel					
			to the main S_1 foliation. ~ probable alteration of					
			magnetite					
			Sericite: probable result of sericitization within the main					
			sericite - silicic alteration zone.					
			Mineralization: NIL (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
184.3	186.0		Grunerite - Metachert Breccia	184.3	185.3		7943	670
			Generally light-grey to white metachert with 15% interculated wispy	185.3	186.0		7944	210
			anastomosing ≤ 5mm bands of grunerite. Overall texture is patchy					
			and irregular - possibly indicative of a partially recrystallized					
			and healed metachert breccia.					
			Typically non-calcareous and non-magnetic.					
			Foliation: random and highly variable throughout					
			Downhole contact gradational over 5 cm.					
			Alteration: Grunerite: Approximately 15% throughout as wispy					
			anastomosing ≤ 5mm bands and anastomosing fracture-fillings					
			- Probable alteration of magnetite; unit originally a					
			magnetite iron-formation.					
			Possible <<1% honey-colored iron-amphibole as small					
			patches and clots					
			Iron Carbonate: <1% as diffuse bands and disseminations					
			randomly along compositional layering.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
184.3	186.0		cont'd					
			Mineralization: Nil (?)					
186.0	197.8		Quartz-Augen-Quartz-Sericite Schist and Metachert	186.0	188.0		7945	5
			Similar to 170.7-184.3 m;	188.0	189.8		7946	3
			Mostly light-grey to green-grey quartz-sericite schist intercalated with	189.8	191.3		7947	10
			8% irregular metachert bands and lenses. Quartz-sericite schist contains	191.3	192.7		7948	9
			3% ≤ 3mm clear to blue quartz-augen, generally flattened along the main	192.7	193.9		7949	4
			(S$_1$) foliation.	193.9	195.4		7950	210
			Typically non-calcareous and non-magnetic.	195.4	197.8		7951	20
			Foliation varies from 50° to C.A. uphole to 30° to C.A. downhole					
			188.2-188.4; 190.7-191.1; 194.7-195.2: 70 to 80% light grey-white					
			metachert containing 3-7% gromerite.					
●								
			Alteration: Sericite: sericitization throughout as part of					
			probable sericite-silicic alteration zone					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
186.0	197.8		Alteration cont'd:					
			Granite: Varies from 2-7% in orthoclase sections as fine veins and anastomosing bands along fractures and parallel to compositional layering ~ probable alteration of magnetite ~ Unit may have originally contained magnetite iron-formations.					
			Iron Carbonate: ≤2% throughout as random disseminations and ≤2mm ragged layers concentrated along the main (S1?) foliation.					
			Mineralization: Black siliceous material / Tourmaline?:					
			Generally ≤1% black bands, occur randomly throughout section, highly silicified and very fine-grained - occurs mostly as ragged bands subparallel to the main foliation compositional layering ~ possible black tourmaline (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-4
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. M15

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
	197.8		End of Hole					
			Notes: 6.7m of casing left in hole; unable to remove					

Dawn C. [illegible]

M-89-5

L1900W L1500W L1400W L800W L400W L200W L0+00 L200E L400E L600E L950E

816716 M-88-1 816689 816690 M-88-2 M-88-3 816700 816699 816701 816702 816707 816706 M-88-12 M-88-6 M-88-5 816708 816709 M-88-7 816711 816710 M-88-8 M-88-9 816712 816713 M-88-10

M-89-5 589'

BL0 0+00 BL0 0+00

M-88-4

816717 816718 M-88-11 816691 816698 816703 816705 1045818 1045817

1045819

MISEHKOW RIVE

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 ~~1989~~ DIAMOND DRILL HOLE LOCATION MAP

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89- — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

Diamond Drill Record

PAGE 1A OF ●

COLLAR:	HOLE SURVEY		
NORTH 1+75N	FOOTAGE	AZIMUTH	DIP
EAST 2+04W	collar	220°	-49°
ELEVATION	60.6		-47°
LOGGED BY D. ELSBY	121.6		39.5°
DATE LOGGED	179.5		37°
MAP REFERENCE NO. NTS 52P/4	METHOD: ACID DIP TEST		

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME 816076
COMMENCED 15 JUL
FINISHED 21 JUL
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
0.0	8.8		CASING / OVERBURDEN					
8.8	17.4		Chlorite - Quartzo - Feldspathic Schist and Magnetite Iron Formation	8.8	9.4		42151	51
			Typically dark-green-gray fine-grained homogeneous and well foliated chlorite -	9.4	12.3		42152	34
			quartzo - feldspathic schist. Minor wisps and bands of sericite throughout. Non-	12.3	13.8		42153	45
			calcareous and typically non-magnetic. Foliation / compositional layering	13.8	15.1		42154	2
			variable at 40-70° to C.A. Downhole contact sharp at 45° to C.A.	15.1	16.7		42155	83
			10.2-10.5: Possible magnetite-grunerite iron formation. Diffuse black	16.7	17.4		42156	3
			wispy bands in gray-green chlorite and metachert. Possible 10% grunerite					
			as wisps and ragged bands parallel to main foliation. Non-calcareous, locally					
			magnetic (magnetite). Uphole - Downhole contacts sharp at 40° to C.A.					
			16.9-17.4: BANDED Magnetite Iron Formation: Dark-gray-black ≤ 4mm					
			magnetite layers interbedded with chlorite schist and metachert. 17.9-18.1					
			dominantly metachert and grunerite with sulphides. Typically magnetic and					
			non-calcareous. Foliation / compositional banding at 45° to C.A. Uphole					
			contact gradational over 5cm, downhole sharp at 45° to C.A.					

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE Test FOLD NOSE IN ALT IF.

HOLE NO. M-89-05
CLAIM NAME 81670%
COMMENCED 15 Jul
FINISHED 21 Jul
PROJECT NO. MIS
EOH 179.5m

COLLAR:
NORTH 1+75 N
EAST 2+04 W.
ELEVATION
LOGGED BY D. Elsby
DATE LOGGED
MAP REFERENCE NO. NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
Collar.	220	-49
199'		-47.5
399'		-39.5
589'		-36.5
METHOD: Acid Dip Test.		

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
8.8	17.4		cont'd					
			Alteration: Sericite as part of possible sericitization event associated with the main sericitic-silicic alteration zone.					
			10.2-10.5: Gruneritic: possible 10% as wisps and ragged bands, probable alteration of paragenetic					
			17.5-18.4: Gruneritic: ≤ 3% as fine bands and wisps subparallel to compositional layering					
			Mineralization: pyrite: 16.9-17.1; 5% as ragged bands ≤ 4mm subparallel to compositional layering.					
17.4	28.5		Banded, Silicified, Quartz-Sericite Schist	17.4	18.3		42157	54
			Well banded light to dark grey quartz-sericite schist, interbanded with	18.3	20.1		42158	5
			dark-grey-green siliceous bands. Some red-pink sections containing abundant	20.1	22.1		42159	2
			iron-carbonate. Minor (≤2%) ≤2mm interbands of green-yellow iron-	22.1	23.8		42160	7
			amphibole (?) throughout. Overall ≤1% blue 1-3mm flattened quartz augen	23.8	26.1		42161	1
			xeno randomly throughout. Entire unit appears highly silicified.	26.1	28.5		42162	1

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
17.4	28.5		CONT'D					
			Non-calcareous and non-magnetic. Foliation/compositional banding variable at 45-50° to c.a. throughout. Down hole contact sharp at 40° to c.a. Uphole - 17.4-17.6 m composed of interbanded chlorite, garnet schist and metachert?					
			19.9-28.5: Possible strong Sa fabric; characterized by ≤ 1cm partings containing varying percentages of iron-carbonate. 19.9-21.0 - very strong ≤ 1cm partings					
			Alteration: Sericite/Silica: probable sericitization and silicification as part of main sericite-silicic alteration zone					
			Iron-Carbonate: Typically 5%; locally 70% often concentrated along Sa (?) partings. 17.5-18.3: 80% pink-orange iron-carbonate as thorough disseminations along main foliation and as concentrations along Sa planes.					
			Grunerite-(Iron-Amphibole): ≤ 2% ≤ 2mm conformable bands of yellow-green iron-amphibole (?) throughout.					
			Mineralization: NIL (?)					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
28.5	29.8		Chlorite Schist and Chlorite-Sericite Schist	28.5	29.8		42163	9
			Dark olive-green chlorite schist uphole, gradually intercalated with light-grey-green chlorite-sericite schist downhole. Non-calcareous and locally magnetic (magnetite). Foliation at 40° to c.a. Downhole contact gradational over 5 cm.					
			26.0 - 26.4 : Chlorite Schist containing ≤ 1% magnetite and < 1% melachert;					
			26.1 - 26.2 - Rusty Zone containing 8% pyrite and 40% hematite.					
			Alteration : Sericite as part of probable sericitization-silicification event associated with main alteration zone.					
			Mineralization : Pyrite : 26.1 - 26.2 : 8% as clots and ragged bands subparallel to the main foliation.					
			Magnetite : 26.0 - 26.4 : ≤ 1% as ≤ 3mm disrupted bands and clots oriented subparallel to the main foliation / compositional layering					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
29.8	30.8		Grunerite-Actinolite and Magnetite Iron Formation	29.8	30.8		42164	109
			Light-green-grey mottled actinolite containing fine wisps and ragged bands of grunerite changing gradually into banded magnetite iron-formation. Transition appears to be gradual decreasing alteration downhole (carbonate-sericite schist → grunerite actinolite → magnetite iron formation). Non-calcareous and locally magnetic. Foliation at 35° to c.a. throughout. Downhole contact sharp at 35° to c.a.					
			Alteration: Grunerite: 29.8-30.3: ≤4% as fine wisps and bands oriented subparallel to the main foliation.					
			30.3-30.8: ≤2% as fine wisps and bands, along magnetite layers and cross-cutting magnetite layers - all grunerite, probable alteration of magnetite					
			Mineralization: Magnetite: 30.3-30.8; 7% as ≤2cm bands					
			Pyrrhotite: 30.3-30.8; 3% as ragged wisps and clots					
			Pyrite: 30.3-30.8; ≤2% as clots and ragged bands					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
30.8	31.7		Quartz-Augen Chlorite-Sericite Schist	30.8	31.7		42165	16
			Light-green-grey homogeneous, well foliated chlorite-sericite schist containing ≤2% blue ≤2mm quartz-augen, flattened along the main foliation. Non-calcareous and non-magnetic. Foliation at 45° to c.a. Down-hole contact gradational over 20cm.					
			Alteration: Sericite; part of probable sericitic-silicic alteration zone					
			Mineralization: NIL(?)					
31.7	32.8		Pyrrhotite Iron-Formation	31.7	32.8		42166	151
			Dark green to grey chlorite and metachert containing massive anastomosing wisps and stringers of pyrrhotite and pyrite. Non-calcareous and magnetic. Foliation is highly variable and contorted/folded. Down hole contact is sharp at 35° to c.a.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
31.7	32.8		CONT'D					
			Alteration: Pyrite / Pyrrhotite as alteration of magnetite.					
			Mineralization: Pyrrhotite: 20% as highly anastomosing to massive wispy masses, generally concordant contorted and possibly folded					
			Pyrite: 6% as massive vuggy clotted masses, often associated with pyrrhotite					
			Magnetite: ≤ 1% as remnant contorted bands and wisps intermixed with pyrrhotite.					
32.8	33.8		Magnetite - Pyrrhotite Iron Formation	32.8	33.8		42167	260
			Generally dark green-grey to black banded magnetite in green-grey metachert uphole, grading down hole into pyrrhotite and pyrite (similar to 31.7-32.8) intercalated with chloritic material and metachert. Non-calcareous and magnetic. Foliation variable but mostly at 50° to c.A. Down hole contact sharp at 45° to c.A.					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
32.8	33.8		CONT'D:					
			Alteration: Greenstone: ≤ 3% as fine disseminations in metachert sections and as fine bands, often containing magnetite bands. Probable alteration of magnetite					
			Pyrite/Pyrrhotite: probable alteration of magnetite					
			Mineralization: Pyrrhotite: uphole < 1% increasing downhole to 4% as anastomosing stringers and wisps and masses often subparallel to c.a.					
			Pyrite: ≤ 2% throughout, increasing slightly downhole. Mostly as clotted ragged bands and wisps, downhole associated with pyrrhotite.					
			Arsenopyrite: trace as small lensoid clots within the main foliation.					
			Magnetite: ≤ 35% as bands					
33.8	36.5		Pyrrhotite-Chlorite Metachert and Magnetite Iron Formation	33.8	35.0		42168	240
			Uphole - generally light green-grey interbanded chlorite schist, metachert, and sericite-chlorite schist grading downhole into magnetite iron formation.	35.0	36.5		42169	290

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
33.8	36.5		cont'd					
			35.8 - 36.5: Dark grey to black highly disseminated to massive magnetite intercalated with metachert and minor grunerite.					
			Alteration: Uphole: Sericite: probable sericitization associated with main sericitic-silicic alteration zone.					
			Grunerite: typically ≤1%; locally (35.8-36.5) ≤2% as wispy contorted bands often rimming magnetite layers.					
			Mineralization: Pyrrhotite: typically ≤4%, locally 10%, as disseminations and wispy anastomosing veinlets and masses, often intercalated with chlorite and grunerite					
			Pyrite: typically ≤1%, locally massive at 50%, occurs as small clots and massive rusty pitted sections.					
36.5	43.5		Quartz-Augen-Quartz Sericite Schist	36.5	38.0		42170	4
			Light grey to green-grey, homogeneous, well foliated quartz-sericite schist	38.0	40.8		42171	2
			containing 3% ≤2mm blue flattened quartz augen. Non-calcareous and	40.8	43.5		42172	3

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
36.5	43.5		CONT'D non-magnetic. Foliation is variable throughout, varies from 30° to c.a. uphole to 20° to c.a. mid-section to 35° to c.a. downhole — probable fold limb-hinge region. Downhole contact gradational over 10cm. Alteration: Sericite: probable sericitization associated with main sericitic-silicic alteration zone. Iron-Carbonate: ≤ 3% throughout as disseminations and discont bands subparallel to the main foliation. Mineralization: quartz veins: 46.3-46.6 — bone-white quartz veins containing intercalations of chloritic-sericite schist					
43.5	45.7		Chlorite Schist and Metachert Dark olive-green chlorite schist intercalated with up to 12% light-grey-white metachert layers and patchy lenses. Non-calcareous and non-magnetic. Foliation variable, where measurable, approximately 40° to c.a. Downhole contact gradational over 5cm.	43.5	45.7		42173	27

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
43.5	45.7		CONT'D:					
			Alteration: Iron-Amphibole - Sericite: ≤ 1% as fine wisps and bands intercalated with metachert and chlorite schist, probable alteration of magnetite.					
			Biotite ?: 44.4-44.6m; green-brown disseminated color ~ 50% ~ possible potassic alteration or may be sectional disseminated iron-amphibole.					
			Mineralization: Pyrite: overall ≤ 1%, locally 3% as clots and veins, often cross-cutting the main foliation					
			Pyrrhotite: ≤ 1% as small stringers and clots, commonly associated with magnetite.					
45.7	84.3		Quartz-Augen Quartz-Sericite Schist	45.7	47.2		42174	10
			Light-grey to green-grey homogeneous, well foliated quartz-sericite schist	47.2	48.6		42175	290
			containing 4% ≤ 2mm clear and blue quartz-eyes oriented subparallel to	48.6	50.9		42176	176
			the main foliation. 45.7-51.8, unit contains approximately 12-15% metachert	50.9	53.1		42177	8
			(?) layers or quartz veins intercalated with chlorite schist clots and	53.1	55.5		42178	3

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb FA	ASSAYS Au oz/ton F.A.
44.9	84.3		CONT'D:						
			layers. Non-calcareous and non-magnetic. Foliation is highly variable	55.5	58.5		42179	1	
			throughout from 0-35° to C.A.	83.2	84.3		42180	100	
			zones of 0° to C.A. : 53.3-54.3m ~ possible hinge region						
			Alteration: Sericite: probable sericitization associated with major sericite-silica alteration zone.						
			Iron Carbonate: Pink-orange disseminations and discreet layers (≤2mm) variably ≤2% throughout						
			Mineralization: quartz veins (?) - possible quartz-vein activity 44.9-51.8m						
84.3	92.7		Magnetite - Grunerite Iron Formation	84.3	85.3	1.0	42181	3360	(.097
			Wispy irregular black magnetite-grunerite bands in light-grey	85.3	86.3		42182	640	
			metachert. Minor intercalations of chlorite-garnet schist throughout.	86.3	87.7		42183	490	
			Garnets also commonly occur within grunerite-magnetite layers as	87.7	88.7	1.0	42184	2140	.062
			≤5mm subhedral and anhedral clotty masses. Non-calcareous and	88.7	89.7		42185	730	
			magnetic. Foliation highly variable from 50-80° to C.A.	89.7	90.9		42186	1130	.023

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb F.A.	ASSAYS	ASSAYS Au oz/t F.A.
86.3	92.7		cont'd							
			Downhole contact gradational over 40 cm.	90.9	92.7	1.8	42187	2520	(.074)	0.117
			Alteration: Grunerite: overall 10% as ≤ 2mm wisps and anastomosing veinlets in and around magnetite layers ~ probable alteration of magnetite							
			Pyrrhotite / Pyrite: probable alteration of magnetite							
			Mineralization: Magnetite: 35% throughout as ragged wispy bands ≤ 3cm ~ typically intergrown with magnetite and pyrrhotite, less commonly pyrite							
			Pyrrhotite: 3% overall, locally, 6% as ragged wisps and bands commonly intergrown with magnetite – general increase in pyrrhotite down hole							
			Pyrite: 2% overall, locally, 4% as ragged bands and clotted masses, occasionally intergrown with pyrrhotite							
			Arsenopyrite: trace as minor clots and laths (acicular) along the main foliation / compositional layering.							

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
92.7	100.3		Quartz-Augen Quartz-Sericite Schist	92.7	94.2		42188	590
			Light grey homogeneous quartz sericite schist containing 3% ≤2mm blue to clear	94.2	96.0		42189	173
			quartz-augen; variably flattened & subrounded. Typically non-calcareous and non-	96.0	98.3		42190	91
			magnetic. Foliation is well developed but difficult to discern due to very fine-	98.3	100.3		42191	31
			grained-homogeneous nature of the unit, where discernable at 5° to c.a.					
			Downhole contact sharp at 80° to c.a. / 98.9-98.6 - intercalated chlorite schist					
			Alteration: Sericite as probable sericitization associated with main sericitic-					
			silicic alteration zone					
			Pyrrhotite: possible alteration of magnetite					
			Mineralization: Pyrrhotite: 92.7-97.2; <<1% as small clots commonly					
			occurring within pressure-shadow areas adjacent to quartz					
			augen and throughout matrix					

Diamond Drill Record

PAGE 14 OF ●

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb FA		ASSAYS Au oz/ton FA
100.3	108.2		Pyrrhotite - Pyrite - Magnetite - Grunerite Iron Formation	100.3	101.3		42192	101		
			Dark-gray to dark gray green unit comprised of pyrrhotite layers	101.3	103.0		42193	134		
			and ragged bands, intergrown with magnetite and grunerite; in	103.0	104.1	1.1	42194	1710	(.049)	.026
			light grey metachert. Chlorite interbands and irregular wisps and patches	104.1	105.9	1.8	42195	4800	(.14)	.054
			occur throughout the section. Non-calcareous and magnetic (pyrrhotite,	105.9	107.2	1.3	42196	5470	(.159)	.054
			magnetite). Foliation highly variable from 0 to 60° to c.a. Downhole contact	107.2	108.2	1.0	42197	3200	(.093)	.111
			gradational over 15 cm. Overall unit is folded - may be south limb continuation of previous iron-formation.							
			Alteration: Grunerite: ≤ 3% as thin bands and wispy anastomosing stringers, commonly intergrown and replacing (?) magnetite. Orientation is generally continuous throughout.							
			Mineralization: Pyrrhotite: 8% overall, locally 12% as ragged bands and anastomosing stringers often intergrown with magnetite							
			Pyrite: 5% overall, locally 8% as clots and ragged bands often intergrown with pyrrhotite							

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au PPB.		ASSAYS Au oz/ton FA	
108.2	109.7		Magnetite - Grunerite Iron Formation	108.2	109.7	1.5	42198	1130	(1032)	.017	
			Black ≤ 4cm bands and disseminations of magnetite in light grey metachert. Grunerite occurs throughout the unit as fine anastomosing wisps typically intergrown with magnetite. Non-calcareous and magnetic (magnetite, pyrrhotite). Foliation averages 30-40° to c.a. Downhole contact is gradational over 20cm. Notably less sulphidization within this iron-formation compared to the previous section.								
			Alteration: Grunerite: ≤ 2% as fine wispy anastomosing masses, intergrown, replacing (?) magnetite, locally 7%.								
			Mineralization: Pyrrhotite: 3% as ragged bands and anastomosing veinlets often intergrown with magnetite. Pyrite ≤ 1% as coarse cpy-rich bands intergrown with pyrrhotite, grunerite, and magnetite.								
			●								

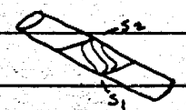
Diamond Drill Record

PAGE 16 OF 18

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb. FA		ASSAYS Au oz/ton F.A
109.7	123.9		Gronmerite Metachert	109.7	111.2		42199	300		
			Light gray to light green-gray homogeneous, poorly foliated metachert	111.2	112.7		42200	56		
			containing wisps and bands of gronmerite. Dark-gray black non-magnetic	112.7	114.2		42201	98		
			siliceous material and chlorite occur as minor fracture fillings throughout	114.2	115.7	1.5	42202	3000	(.087)	.048
			section. Typically non-calcareous and non-magnetic. Foliation is highly	115.7	117.3		42203	230		
			variable from 0-45° throughout. Downhole contact is sharp at 50° to c.a.	117.3	118.6		42204	390		
			Some sections show prominent $S_1 \wedge S_2$ relationships 	118.6	120.1		42205	171		
			- probable hinge regions of S_2 folds	120.1	122.0		42206	71		
			115.8-116.4: Broken core (well foliated fragments)	122.0	123.9		42207	102		
			Alteration: Gronmerite: ≤ 4% as anastomosing wisps and veinlets throughout, generally subparallel to compositional layering / S_1 foliation. Probable alteration of magnetite, locally 25-30%							
			Mineralization: Pyrite: ≤ 2% as clots and coarse veinlets oriented subparallel to main S_1 foliation and compositional layering. Pyrrhotite: < 1% as small clots and ragged bands							

Diamond Drill Record

PAGE 17 OF [redacted]

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au	ASSAYS	ASSAYS	ASSAYS			

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-05
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
123.9	179.5		CONT'D					
			Alteration: Sericite: probable sericitization as part of main sericite-silicic alteration zone.					
			Iron-Carbonate: <<1% disseminated randomly throughout					
			Mineralization: NIL (?)					
			NOTE: 150.7-150.8m: 2cm chloritic gouge zone breccia ~ probable small fault					
	179.5		END OF HOLE —					

Dawn C. Ellis

Diamond Drill Record

PAGE 1 OF 27

COLLAR:		HOLE SURVEY		
NORTH	1494N	FOOTAGE	AZIMUTH	DIP
EAST	0403E	collar	250°	-50
ELEVATION		199'/60.6		-46°
LOGGED BY	D. ELSBY	389'/118.6		-42°
DATE LOGGED				
MAP REFERENCE NO.	NTS 52P/4	METHOD: ACID DIP TEST		

COMPANY NAME NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE TEST FOLD NOSE AT IF.

HOLE NO. M-89-06
CLAIM NAME 816706
COMMENCED 7/21/89
FINISHED 7/23/89
PROJECT NO. MIS EOH 118.6 m

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
0.0	2.3		CASING (12') / OVERBURDEN					
2.3	7.8		Quartz-Augen Quartz-Sericite Schist	2.3	4.3		42215	24
			Light to dark grey, homogeneous, well foliated, silicified quartz-sericite schist	4.3	6.2		42216	1
			Minor chlorite interbands throughout subparallel to main foliation / compositional layering	6.2	7.8		42217	40
			Non-calcareous and non-magnetic. Foliation varies 6b at 0-20° to C.A. Downhole contact sharp at 40° to C.A. Note: Foliation is at low ∠ to C.A. but compositional layering is at a higher angle - possible S_1 fold structure. 					
			- Approximately 3% ≤ 2mm blue sub-rounded quartz-augen throughout -					
			Alteration: Sericite as probable sericitization associated with main sericitic-silicic alteration zone.					
			Mineralization: NIL (?)					
	8.6		Quartz-Sericite Schist	7.8	8.6		42218	990
			Light grey generally mottled homogeneous quartz-sericite schist containing 6%, ≤2mm chlorite laths oriented parallel to the main foliation. Non-calcareous					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
7.8	8.6		CONT'D					
			and non-magnetic. Foliation averages 15° to c.a. Down-hole contact					
			sharp at 25° to c.a.					
			8.1-8.3m: Metachert band - oriented at 60° to c.a. while foliation is running					
			0-10° to c.a. ~ poss. S, fold hinge region.					
			Alteration: Sericite as probable sericitization as part of main sericitic-silicic					
			alteration zone/event					
			Mineralization: Pyrite ≤ 1% as clotted masses and ragged bands, some ≤ 1mm cubes.					
			often associated with metachert					
8.6	10.5		Grunerite - Iron Formation	8.6	10.5		42219	570
			Typically light grey homogeneous metachert containing 15% wispy, anastomosing					
			grunerite and minor pyrite. Non-calcareous and non-magnetic. Foliation					
			is highly variable but where discernable, 35° to c.a. Down hole contact sharp					
			but variably oriented.					
			9.3-9.9 - Limonitic staining throughout core, some broken core					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
8.6	10.5		CONT'D					
			Alteration: Sericite: 15% overall as fine wisps and anastomosing masses oriented subparallel to compositional layering. Probable alteration of magnetite? Limonite: probable oxidation of sulphides					
			Mineralization: Pyrite: ≤ 2% as clots and ragged bands throughout. note minor limonitic stain surrounding numerous pyrite clots.					
10.5	11.5		Quartz-Sericite Schist	10.5	11.5		42220	530
			Similar to 7.8-8.6m. Non-calcareous and non-magnetic. Foliation variable 0-10° to c.a., compositional layering / Sx at 65° to c.a. (S, folding). Down hole contact gradational over 30 cm.					
			Alteration: Sericite as probable sericitization associated with main sericitic-silicic alteration zone.					
			Mineralization: Pyrite: ≤ 6% as clots and ragged bands throughout 15% - possible chloritic porphyroblasts with yellow alteration haloes?					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
11.5	14.9		Quartz-Sericite Schist and Grunerite-Iron Formation	11.5	13.2		42221	260
			Light to dark grey homogeneous, well foliated quartz-sericite schist containing	13.2	14.1		42222	770
			20% light grey to grey green metachert. Metachert contains 12% wispy,	14.1	14.9		42223	51
			anastomosing grunerite. Non-calcareous and non-magnetic. Foliation typically at					
			25° to c.A. Downhole contact sharp at 25° to c.A.					
			13.9-14.1: Grunerite-Iron Formation: 12% wispy anastomosing grunerite					
			in grey metachert.					
			Alteration: Sericite as probable sericitization associated with main sericitic-					
			silicic alteration zone.					
			Grunerite: 13.4-14.1: 12% as anastomosing wisps - probable alteration					
			& magnetite					
			Mineralization: Pyrite: 11.5-13.4m: ≤2% as clots and ragged bands					
			13.4-14.1m: ≤1% as above					
			14.1-14.9: ≤2% as clots, possible flattened porphyroclasts					
			or porphyroblasts (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
14.9	19.8		Grunerite - Iron Formation	14.9	15.9		42224	21
			Typically light grey homogeneous metachert containing wisps and ragged bands	15.9	16.8		42225	410
			of grunerite. Generally non-calcareous and non-magnetic. Foliation oriented	16.8	17.8		42226	132
			at 20° to c.a., compositional layering (Sx oriented at 70-80° to c.a. (S, fold hinge)	17.8	18.8		42227	79
			Downhole contact sharp at 60° to c.a. / overall, unit appears sheared	18.8	19.8		40228	106
			18.8-19.8 : Unit contains 50% light to dark-grey sericite-chlorite schist and					
			metachert bands. Banding oriented at 45° to c.a.; S oriented at 15° to c.a.					
			- strong Sa partings (0.5cm) oriented at 40° to c.a. (subparallel to comp. layers).					
			16.3-16.4; 17.8-18.9; limonite staining on broken core					
			Alteration: Grunerite: 20% average as ragged ≤ 2cm bands and crosscutting					
			wisps; probable alteration of magnetite					
			Sericite: 18.8-19.8: probable sericitization associated with main sericite-					
			silicic alteration zone.					
			Limonite: 16.3-16.4m; 17.8-18.9m; 15% yellow-orange limonite staining					
			throughout broken sections of core.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au AA ppb		ASSAYS Au F.A oz/ton
14.9	19.8		CONT'D							
			Mineralization: Pyrite: average ≤ 1% as clots and ragged bands							
			Pyrrhotite: <<1% as minor clots, often associated with pyrite.							
19.8	23.0		Sulphide — Gruneritic Iron Formation	19.8	21.0	1.2	42229	3060	(.089)	.060
			light grey-green homogeneous metachert containing ragged bands and clots of sulphides	21.0	22.0	1.0	42230	1120	(.032)	.037
			with intrusions and dissemination of grunerite. Downhole (20.7-23.0) unit contains	22.0	23.0		42231	400		
			magnetite interbands. Foliation varies from 50° to c.a. uphole to 20° to c.a.							
			downhole and more variable. Non-calcareous and locally magnetic (magnetite, pyrrhotite)							
			Downhole contact sharp at 35° to c.a.							
			Alteration: Grunerite: 9% overall, locally 15% as ragged wisps and bands							
			subparallel to compositional layering / Sx (but not S_1), probable alteration of magnetite							
			Mineralization: Pyrite: 9% average, locally 13% as wispy clotted masses subparallel							
			to compositional layering + often interrelated with 10% chloritic schist							
			interbands.							

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
19.8	23.0		Mineralization: cont'd					ppb.
			Pyrrhotite: 3% as clots and ragged bands often intergrown with pyrite and associated with grunerite down-hole.					
			Magnetite: 21.7-23.0: ≤ 3% magnetite as ≤ 1.5 cm: wisps and bands					
23.0	27.4		Quartz-Sericite Schist and Metachert	23.0	24.3		42232	39
			Light gray to green gray homogeneous, well foliated quartz-sericite schist mobile,	24.3	25.9		42233	53
			grading and becoming interealated with grunerite-metachert down hole. Non-calcareous	25.9	27.4		42234	460
			and non-magnetic. Foliation/compositional layering at 35° to c.a. Down hole					
			contact sharp at 35° to c.a.					
			25.9-27.4: ≤ 10% grunerite-metachert interealated with quartz-sericite schist.					
			Alteration: Sericite; probable sericitization associated with main sericitic-silicic alteration zone.					
			Grunerite: 25.9-27.4: 25% grunerite as anastomosing wisps and ≤ 3cm bands in gray metachert, probable alteration of magnetite.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
23.0	27.4		CONT'D					
			Mineralization: Pyrite: average ≤1%, locally 2% as clots and ragged bands					
			Pyrrhotite: average <<1%, locally ≤1% as small clots					
			Chalcopyrite: trace as ≤3mm clots and small ragged bands					
			often associated with pyrrhotite.					
27.4	32.3		Grunerite-Metachert	27.4	28.3		42235	65
			Light grey homogeneous metachert containing 12% grunerite wisps and diffuse	28.3	29.9		42236	260
			bands and 10% sericite schist as minor 5-15 cm layers. Non-calcareous and	29.9	31.0		42237	33
			non-magnetic. Foliation at 10 to 25° to c.a.; Compositional layering at 40°	31.0	32.3		42238	104
			to c.a. (S. fold hinge). Downhole contact gradational over 50cm.					
			Alteration: Grunerite: average 7%, locally 15% as anastomosing wisps and					
			bands subparallel to compositional layering (Sk) (but not the main S. foliation)					
			Sericite: average 10% sericite schist interbands approaching down-hole					
			contact - probable association with main sericitic silicic alteration zone.					
			Bands may be in folded layers from next unit downhole.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
27.4	32.3		Mineralization: Pyrite: average, <1%, locally ≤2% as clots and ragged bands					
			Pyrrhotite: <<1% as small clots and wisps					
32.3	33.4		Quartz-Augen Quartz-Sericite Schist	32.3	33.4		42239	60
			Light grey homogeneous, well foliated quartz-sericite schist containing ≤3% ≤2mm blue, to clear highly flattened quartz-augen. Unit contains <1% metachert as minor intercalations. Strong ≤ 1cm parallel visible adjacent to 33.0m, possible S_2 foliation // or S_1 on S_2 or S_X? Non-cohesive and non-magnetic. Foliation at 20-25° to c.a. throughout. Down-hole contact sharp at 40° to c.a. (compositional layering / S_X)					
			Alteration: Sericite as probable sericitization associated with main sericitic-silicic alteration zone.					
			Gunnerite: ≤1%, locally (32.7m) 9% as wisps and bands associated with metachert, probable alteration of magnetite.					
			Mineralization: NIL (?)					

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
33.4	34.3		METACHERT	33.4	34.3		42240	90
			Light grey homogeneous metachert containing 10% granerite wisps and bands and 1% quartz-augen quartz-sericite schist. Non-calcareous and non-magnetic. Foliation / compositional banding at 35° to c.a. Downhole contact sharp at 35° to c.a.					
			33.7-33.8 : light grey quartz-augen quartz-sericite schist - sharp contacts at 35° to c.a.					
			Alteration : Granerite : 10% overall as wisps and ragged bands, probable alteration of magnetite.					
			Sericite : probable sericitization as part of main sericite-silicic alteration zone					
			Mineralization : Nil (?)					
34.3	48.2		Quartz-Augen Quartz-Sericite Schist and Granerite-Metachert	34.3	35.5		42241	14
			Light grey-green homogeneous well foliated quartz sericite schist	35.5	36.7		42242	3

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
34.3	48.2		CONT'D					
			containing ≤ 2% clear to blue ≤ 2mm flattened to subrounded quartz-augen.	36.7	38.2		42243	1
			This schist is intercalated throughout with 15% metachert containing	38.2	40.9		42244	1
			6% grunerite - iron-amphibole masses and layers. Non-calcareous and non-	40.9	42.4		42245	2
			magnetic. Foliation variable from 35-45° throughout. Compositional layering	42.4	43.8		42246	125
			appears subparallel but most commonly at 45° to c.a. Dumbbell contact	43.8	44.7		42247	46
			is sharp at 42° to c.a.	44.7	47.2		42248	90
			36.8, 39.7, show good relationship between S_1 and S_2; S_2 at 45° to c.a.;	47.2	48.2		42249	5
			S_1 at 35° to c.a.					
			44.9-47.2: BROKEN, LIMONITE STAINED CORE					
			36.2-36.8: strong S_2 partings @ 45° to c.a.					
			Alteration: Sericite: probable sericitization as part of main sericite-silicic alteration zone.					
			Grunerite: average 3%, locally 12% as ragged augen and bands associated with metachert, probable alteration of magnetite					
			Limonite: 44.9-47.2: 5% limonite stain throughout fracture surfaces in broken-core section.					
			K-Feldspar (?): 45.4-46.1% as small patches, probable					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
34.3	48.2		Alteration: cont'd					
			potassic alteration (?)					
			Mineralization: NIL (?)					
48.2	49.1		Metachert	48.2	49.1		42250	32
			Light gray homogeneous metachert containing 5% intercalations of mixed chlorite and grunerite as wisps and anastomosing bands, downhole. Non-calcareous and non-magnetic. Foliation variable at 35-60° to c.a. Downhole contact gradational over 20 cm.					
			Alteration: Grunerite: ≤ 2% as wisps and anastomosing bands intercalated with chlorite wisps ~ possible alteration of magnetite					
			Potassic alteration: <1% brown patches in metachert, possible potassic alteration (biotite ~ K-spar?)					
			Limonite: trace on some fracture surfaces					
			Mineralization: NIL (?)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

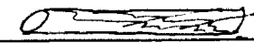
FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS - Au ppb.
49.1	52.2		Quartz-Augen-Quartz-Sericite Chlorite Schist	49.1	52.2		42251	12
			Light to dark green-grey relatively homogeneous quartz-sericite-chlorite schist containing ≤3% clear to blue ≤2mm flattened quartz-augen and 20% intercalated chlorite throughout. Non-calcareous and non-magnetic.					
			Foliation/compositional layering variable from 10° to 45° to c.a. Downhole contact gradational over 30cm. Note: ≤1% metachert intercalations					
			Alteration: Sericite as probable sericitization associated with main sericite-silicic alteration zone;					
			Gamerite: ≤1% as wisps and bands in metachert					
			Mineralization: NIL (?)					
52.2	56.6		Pyrrhotite-Chlorite-Magnetite Iron Formation	52.2	53.6		42252	830
			Highly contorted and folded layers and intercalations of chlorite, metachert and pyrrhotite. Overall light to dark olive-green-grey.	53.6	55.3		42253	135
			Minor magnetite layers and wisps downhole.	55.3	56.6		42254	61

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
52.2	56.6		CONT'D					
			Non-calcareous and locally magnetic (pyrrhotite, magnetite). Foliation variable from 0-10° to c.a.. Compositional layering (Sx variable from 0 to 40° to c.a.  S1, S0≈Sx – in fold hinge region, S1 fold					
			Downhole contact sharp at 35° to c.a.					
			Alteration: Grunerite: ≤3% concentrated mainly inside and flanking magnetite layers near downhole contact (55-56.6m) + often intercalated with pyrrhotite; partially alteration of magnetite; also occurs as disseminations in metachert horizons					
			Mineralization: Pyrrhotite: average 2%, locally 10% as disseminations, clots and ragged bands, often intergrown with magnetite grunerite, and chlorite					
			Pyrite: average 1% as clots and ragged bands, often intergrown with pyrrhotite and chlorite					
			Magnetite: average 1% as wisps and ragged-shaped bands, often intergrown with pyrrhotite and grunerite.					

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	NTS 52P/4

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME: NORTHERN DYNASTY EXPLORATIONS LTD.
PROPERTY NAME: MISEHKOW RIVER PROPERTY
DRILLING CONTRACTOR: LANGLEY DRILLING / BRAMPTON, ONTARIO
ASSAYER: ACME ANALYTICAL LABORATORIES / VANCOUVER, B.C.
PURPOSE OF HOLE:

HOLE NO. M-89-06
CLAIM NAME:
COMMENCED:
FINISHED:
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	WIDTH m	NO.	ASSAYS Au ppb
56.6	61.2		Chlorite-Sericite Schist	56.6	58.1		42255	30
			Dark olive green-grey homogeneous chlorite sericite schist containing	58.1	59.6		42256	88
			≤2% intercalations of light-grey quartz-sericite schist. Non-calcareous	59.6	61.2		42257	44
			and locally magnetic (magnetite). Foliation variable from 10 to 20°					
			to C.A. ~ parallel to compositional layering now (S2 region?) 					
			Downhole contact sharp at 35° to C.A.					
			Alteration: Sericite as probable sericitization associated with main					
			sericitic-silicic alteration zone.					
			Mineralization: Pyrite: ≤1% as isolated clots throughout					
			Chalcopyrite: trace as isolated clots					
61.2	62.7		METACHERT	61.2	62.7		42258	2
			Light grey homogeneous, massive metachert containing ≤1% chlorite					
			schist as wisps and disseminations. Non-calcareous and non-magnetic.					
			Foliation not discernable. Downhole contact sharp at 35° to C.A.					

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

Diamond Drill Record

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb
61.2	62.7		CONT'D					
			Alteration: Generate: << 1% as fine wisps in metachert, possible alteration of magnetite.					
			Mineralization: Pyrite - trace as small clots in chlorite-filled vugs and fractures.					
62.7	63.5		PYRITE IRON FORMATION	62.7	63.5		42269	112
			Light grey - homogeneous metachert containing ragged bands and clots of pyrite. Up to 3% intercalated chlorite schist throughout. Non-calcareous and non-magnetic. Foliation typically at 35° to c.a. Downhole contact sharp but folded.					
			Alteration: Generate: << 1% as disseminations, probable alteration of magnetite					
			Mineralization: Pyrite: 8% as coarse ragged bands subparallel and cross cutting foliation(S1)					
			Sphalerite: ≤ 2% as ragged wisps associated with pyrite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
62.7	63.5		Mineralization cont'd:					
			- Near 62.7-62.8					
			Pyrrhotite: <<1% as small clots and ragged bands subparallel to main foliation (S1)					
			Magnetite: trace as fine black wisps, subparallel to S1 foliation.					
63.5	64.9		Sulphidic Chlorite Schist and Metachert	63.5	64.9		42260	250
			Dark green to green-gray homogeneous and contorted / folded chlorite schist containing sulphidic wisps and layers and intercalations and clasts of metachert. Minor sections of sericite schist. Non-calcareous and locally magnetic (pyrrhotite). Foliation is variable from 0° to 25° to c.a. Downhole contact is sharp but folded.					
			Alteration: Grunerite: <<1% as disseminations					
			Pyrite / Pyrrhotite: probable alteration of magnetite					
			Mineralization: Pyrite: ≤ 5% as vuggy clotted masses and ragged bands					
			Pyrrhotite: ≤ 2% as clots and ragged bands / wisps					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
64.9	66.5		Chlorite-Sericite Schist	64.9	66.5		42261	300
			Light to medium dark green-grey homogeneous chlorite-sericite schist containing ≤ 1% blue ≤ 2mm flattened to subrounded quartz-augen aligned subparallel to the main S. foliation. Non-calcareous and locally magnetic (pyrrhotite). Foliation variable from 0 to 15° to c.a. Downhole contact sharp at 45° to c.a. (compositional layering S0 ASX).					
			Alteration: Sericite ± probable sericitization associated with main sericitic-silic alteration zone.					
			Mineralization: Pyrrhotite: << 1% as small clots throughout Pyrite: trace; as small clots throughout					
66.5	69.5		Metachert	66.5	68.0		42262	31
			Light grey homogeneous metachert intercalated with ≤ 2% chlorite and ≤ 1% magnetite wisps and anastomosing stringers / fracture fillings. Typically non-calcareous and locally magnetic (pyrrhotite, magnetite).	68.0	69.5		42263	17

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
66.5	69.5		CONT'D					
			Foliation is highly variable and contorted throughout (due to competent nature - appears more blocky and fractured and only mildly folded).					
			Down hole contact is sharp at 15° to c.a.					
			Alteration: Garnierite: ≤ 3% as disseminations and small ≤ 0.5 mm wisps and ragged bands, subparallel to recognizable foliation(s), probably alteration of magnetite					
			Mineralization: Pyrrhotite: ≤ 2% as fine ragged bands subparallel to main recognizable foliation, fracture system.					
			Pyrite: ≤ 1% as disk and fine ragged bands often associated with pyrrhotite					
			Magnetite: <<1% as fine wisps and ragged bands throughout.					
69.5	70.6		Chlorite - Sericite Schist	69.5	70.6		42264	22
			Similar to 64.9 - 66.5					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
69.5	70.6		CONT'D					
			Non-calcareous and locally magnetic (pyrrhotite). Foliation variable from 15 to 20° to C.A. Downhole contact (compositional layering) sharp at 42° to C.A.					
			70.3-70.5 : METACHERT, light grey-homogeneous, containing minor sulphides and grunerite.					
			Alteration : Sericite ; probable sericitization associated with main pervasive/silicic alteration zone.					
			Grunerite : 70.3-70.5 ; in metachert as disseminations					
			Mineralization : Pyrite : overall, ≤1% , locally 2% as clots and ragged bands subparallel to main foliation.					
			Pyrrhotite : <1% as small clots and ragged bands often associated with pyrite.					
70.6	73.0		METACHERT	70.6	71.8		42265	.22
			Similar to 66.5-69.5	71.8	73.0		42266	31

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
70.6	73.0		CONT'D.					
			Light grey homogeneous bleached with 5%, ≤2mm bands of chlorite and/or iron-amphibole. Foliation is at 25° to C.A. (chlorite - Fe-amphibole bands)					
			Downhole contact gradational over 8cm, at 30° to C.A. Non-calcareous, locally					
			magnetic (pyrrhotite)					
			Alteration: Grunerite(?)/Green Amphibole: possibly 5% as ≤2mm					
			wispy bands throughout ~ may also contain ≤2% chlorite					
			Mineralization: Pyrrhotite: ≤1% as small clots and fine veined bands					
			subparallel to main S foliation.					
			Pyrite: <<1% as clots and veined bands.					
73.0	75.9		Chlorite - Sericite Schist and Sericite - Chlorite Schist	73.0	74.9		42267	49
			Dominantly dark green - green-grey chlorite sericite schist (73.8-75.9)	74.9	75.9		42268	66
			and light-grey green sericite-chlorite schist (73.0-73.8). Both units					
			appear homogeneous and well foliated throughout. Non-calcareous and					
			locally magnetic (pyrrhotite). Foliation variable from 10-20° to C.A.					
			Downhole contact gradational over 20cm - contact may an					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au
73.0	75.9		CONT'D:					
			subparallel to foliation ~ 10° to c.a.					
			75.3 - 75.5 : Pyrrhotite - Grunerite Iron Formation					
			sharp contacts at 15° to c.a. (compositional layering S$_0$ // S$_1$)					
			Alteration : Sericite : probable sericitization associated with main					
			sericite - silicic alteration zone.					
			Grunerite ; 75.3 - 75.5 m ; 4% as wisps and ragged					
			≤ 1mm bands, subparallel to foliation / compositional layers					
			intergrown with magnetite ; probable alteration of magnetite					
			Limonite : << 1% as trace on fracture surfaces.					
			Mineralization : Pyrite : average : ~ 1% ; locally (75.3-75.5) 5% ; as					
			clots and ragged bands often associated with pyrrhotite					
			Pyrrhotite : average : << 1% ; locally (75.3-75.5) 9% ; as					
			clots and fine (≤ 1mm) ragged bands					
			Magnetite : 75.3-75.5 : 9% as ragged wisps and bands					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
75.9	78.2		Chlorite-Schist and Chlorite-Quartz Schist + Magnetite Iron Formation	75.9	77.0		42269	340
			Dark green to light grey unit composed of homogeneous subphidic	77.0	78.2		42270	10
			chlorite schist, chlorite silica schist and magnetite iron-formation.					
			Intercalation of units is quite variable as lithologic contacts / foliation					
			are subparallel to C.A. Non-calcareous and locally magnetic. Foliation					
			/ compositional layering averages 10° to C.A. Downhole contact sharp at					
			10° to C.A. Non-calcareous and locally magnetic (magnetite, pyrrhotite).					
			Alteration: Sericite: ≤ 2% throughout as probable sericitization associated					
			with main sericitic / silicic alteration zone.					
			Grunerite: ≤ 2% in iron-formation intercalations as					
			alteration of magnetite					
			Mineralization: Magnetite: ≤ 10% as ragged bands and wisps					
			Pyrite: ≤ 5% as clots and ragged bands subparallel					
			to compositional layering.					
			Pyrrhotite: < 1% as small clots and ragged bands (≤ 1mm)					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO. NTS 52P/4	METHOD:		

COMPANY NAME Northern Dynasty Explorations Ltd.
PROPERTY NAME Misehkow River Property
DRILLING CONTRACTOR Langley Drilling / Brampton, Ontario
ASSAYER Acme Analytical Laboratories / Vancouver, B.C.
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO. MIS

FROM m	TO m	RECOVY %	DESCRIPTION	SAMPLE FROM m	SAMPLE TO m	SAMPLE WIDTH m	SAMPLE NO.	ASSAYS Au ppb.
78.2	81.3		Quartz-fuscn Quartz-Sericite Schist AND (CHLORITE-SCHIST)	78.2	81.3		42271	10
			Light grey to grey-green homogeneous quartz-sericite and sericite-quartz schist containing ≤3% blue to clear ≤3mm quartz-eyes + often subrounded but contained within the main foliation. Non-calcareous and non-magnetic. Foliation / compositional layering averages 7° to C.A. Downhole contact gradational over 10cm, at 7° to C.A./Note- approx 7-10% intercalated chlorite schist throughout.					
			Alteration: Sericite: probable overprinting associated with main sericitic alteration zone.					
			Mineralization: pyrrhotite: trace as small clots and disseminations pyrite (?): trace as small clots					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
81.3	83.3		MAGNETITE-(CHLORITE)- Iron Formation	81.3	83.3		42272	220
			Light grey homogeneous metachert containing 7% magnetite as wispy, ragged bands and 4% chlorite as wisps and irregular intercalations. Non-calcareous and locally magnetic (magnetite, pyrrhotite) Foliation highly variable from 15°-40° to c.a. Downhole contact transitional over 30 cm and averages 10° to c.a. (compositional layering parallel to S_1 foliation)					
			Alteration: Grunerite: ≤ 2% as fine wisps and disseminations within and surrounding magnetite.					
			Mineralization: Magnetite: 7% as wisps and ragged bands sub/parallel to foliation (S_1) and compositional layers Pyrite: 6% as clotted masses and ragged bands both parallel to and cross-cutting main foliation Pyrrhotite: ≤ 2% as ragged bands and wisps often intergrown with magnetite.					

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME	
PROPERTY NAME	
DRILLING CONTRACTOR	
ASSAYER	
PURPOSE OF HOLE	

HOLE NO.	M-89-06
CLAIM NAME	
COMMENCED	
FINISHED	
PROJECT NO.	

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
83.3	98.8		Sericite - Quartz - Schist and Quartz - Sericite Schist	83.3	84.8		42273	7
			Nearly equal variations and intercalations of light-grey to grey-green	84.8	87.3		42274	45
			homogeneous, well-foliated sericite-quartz and quartz-sericite	87.3	90.3		42275	26
			schist ~ alternations are a function of degree of silicification	90.3	92.8		42276	8
			present in sericite schist. Minor (≤1%) intercalations of	92.8	94.3		42277	400
			chlorite schist throughout. Non-calcareous and non-magnetic.	94.3	96.9		42278	30
			Foliation is highly variable throughout: 84.5m @ 20°; 87.8m @ 35°	96.9	98.8		42279	37
			94.6m @ 10°; 96.8m @ 20° to C.A.; probable small F_2 folds					
			as S_1 is seen deformed.					
			Down hole contact sharp at 15° to C.A.					
			- overall, drilling close to strike of units now -					
			Note: ≤1% blue quartz-augen throughout					
			Alteration: Sericite/Silica; as probable sericitization and					
			silicification as part of main sericitic/silicic alteration zone					
			Iron Carbonate: 94.2-96.9; ≤2% pink-orange					
			iron-carbonate alteration, subparallel to main S_1 foliation					
			Mineralization :- Nil (?) -					
			* Broken core: 87.0-87.6 m; 90.2-90.4; 90.7-90.9, 92.7-94.1 m					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
98.8	102.3		Pyrite-Magnetite-Pyrrhotite-(Limonite) Iron Formation	98.8	99.6		42280	32
			Variably light grey to green-grey homogeneous metachert	99.6	101.1		42281	133
			containing coarse and fine ragged bands and wisps of magnetite	101.1	102.3		42282	104
			intercalated with stringers and ragged bands and clots of both					
			coarser pyrite and fine-disseminated pyrrhotite. Note: significant					
			rust-red limonite throughout sections = probable oxide zone.					
			Non-calcareous and magnetic (magnetite, pyrrhotite).					
			Foliation/compositional layering averaged 20° to 25° to c.a.					
			throughout.					
			Downhole contact is sharp at 20° to c.a.					
			Note: approximately ≤ 2% intercalated chlorite throughout					
			Alteration: Limonite; approximately ≤ 2% overall, locally = 99.6-100.2m ~ 8% as ≤ 1mm wisps and anastomosing ragged bands and stringers intermixed with pyrite and pyrrhotite = probable oxidation of pyrrhotite.					
			Grunerite: ≤ 1% as disseminations intercalated with magnetite, noteably less grunerite here - may be due to an oxidation environment instead of standard arenitic-silicic zones					

Diamond Drill Record

COLLAR:
NORTH
EAST
ELEVATION
LOGGED BY
DATE LOGGED
MAP REFERENCE NO.

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO.
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
98.8	102.3		CONT'D:					
			Mineralization: Pyrite: 13% as vuggy clotted masses and anastomosing stringers and bands throughout (late & early phases)					
			Magnetite: 6% overall as wisps and ragged bands ≤ 3mm					
			Pyrrhotite: 5-6% as fine disseminations intergrown with magnetite and pyrite					
			Chalcopyrite: trace as small clots associated with pyrrhotite.					
102.3	118.6		Quartz-Augen Quartz-Sericite Schist and Sulphidic Metachert	102.3	103.7		42283	18
			Mostly light-grey to green-grey quartz-sericite schist containing	103.7	105.0		42284	330
			≤ 2% blue to clear ≤ 2mm quartz-augen variably intercalated	105.0	106.4		42285	42
			with sulphidic metachert. Approximately 3% intercalations of	106.4	108.8		42286	111
			chlorite schist throughout (≤ 5mm bands). Drill is now tracking	108.8	111.0	2.2	42287	1280
			subparallel to the main-foliation-compositional layering, intercalations	111.0	113.0	2.0	42288	2840
			are highly variable and difficult to outline (often included	113.0	114.0	1.0	42289	920

Diamond Drill Record

PAGE 27 OF

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
102.3	118.6		CONT'D	114.0	115.7	1.7	42290	2800
			completely).	115.7	118.6	2.9	42291	800
			Non-calcareous and locally magnetic (pyrrhotite).					
			Foliation ~ approximately 5-10° to c.a.					
			Alteration: Sericite: as probable sericitization in association with main sericithi- silicic alteration zones.					
			Limonite: trace along minor late fractures					
			Gromerite: ≤1% as disseminations in metachert sections					
			Chrome-mica: trace @ 109.9 m					
			Mineralization: Pyrite: ≈2%, locally 4% as scattered clots and ragged bands in metachert and mixed metachert-sericite schist sections.					
			Pyrrhotite: ≤2% as clots and disseminations - as above					
			Chalcopyrite: trace as small clots, often associated with pyrrhotite					

Diamond Drill Record

COLLAR:
NORTH
EAST
ELEVATION
LOGGED BY
DATE LOGGED
MAP REFERENCE NO.

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP

METHOD:

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-06
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS						
118.6	—		END OF HOLE											
			Notes: Casing pulled											
			[signature]											

Diamond Drill Record

COLLAR:		HOLE SURVEY		
NORTH 0+85N		FOOTAGE	AZIMUTH	DIP
~~EAST~~ 6.3+10W		collar	275°	-48
ELEVATION		199'		-45
LOGGED BY D. ELSBY				
DATE LOGGED				
MAP REFERENCE NO. NTS 52P4		METHOD: ACID DIP TEST.		

COMPANY NAME Northern Dynasty Explorations
PROPERTY NAME Misenkow River
DRILLING CONTRACTOR Langley Drilling / Brampton, Ont.
ASSAYER Acme Analytical Labs, Vancouver, B.C.
PURPOSE OF HOLE Test extent & plunge of mineralization encountered in M-89-05

HOLE NO. M-89-07
CLAIM NAME PA. 816706
COMMENCED 8/17/89
FINISHED 8/18/89
PROJECT NO. MIS. EOH 94.2 m

FROM m	TO m	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb ASSAYS
0	4.6		CASING / OVERBURDEN					
4.6	21.8		Quartz-Augen Quartz-Iron-Amphibole Schist	4.6	7.7		42301	5
			Generally light to medium grey homogeneous quartz-(iron-amphibole)	7.7	10.7		42302	81
			schist containing 7 to 10% clear to milky blue 1-4mm flattened	10.7	13.0		42303	3
			quartz augen (p-clasts or p-blasts ?) aligned subparallel to the	13.0	15.6		42304	1
			main foliation / compositional layering?). Some sections contain moderate	15.6	18.3		42305	67
			hematite and iron-carbonate staining.	18.3	19.8		42306	144
			Non-magnetic and non-calcareous.	19.8	21.8		42307	6
			Downhole contact at 3° to C.A., Drilling nearly parallel to the					
			main (S) foliation.					
			Broken-core: 9.9m-10.2m ; 14.9-15.6m					
			Note: Unit becomes increasingly chloritic near down-hole contact					
			Alteration: Iron-Amphibole: 10% (?) - possible grunerite ? - probable					
			alteration of magnetite					
			Iron-Carbonate: 5% as disseminations and small					
			fracture-fillings throughout					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
4.6	21.8		Alteration: CONT'D					
			Hematite: ≤1% as minor fracture-fillings and in small vugs associated with pyrite; probable alteration/ weathering of pyrite					
			Mineralization: Pyrite: trace ~ as small scattered vugs and clots randomly throughout unit.					
21.8	23.6		Quartz-Augen-Quartz-Iron-Amphibole Schist and Chlorite-Silica (Schist)	21.8	23.6		42308	24
			- TRANSITION UNIT -					
			Light to medium gray homogeneous quartz-iron-amphibole schist containing ≤3mm clear to blue elongate quartz-augen interbedded with light olive green aphanitic, homogeneous chlorite-silica unit. Prominent S$_0$ foliation is developed in the quartz-iron-amphibole unit but not in the chlorite-silica unit; Chloritic-nature is only assumed by greenish color ~ not able to positively identify due to fine-grained/silicified nature ~ looks to be a silicified-fine grained basalt or a chlorite-metachert? Non-calcareous and non-magnetic					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au
21.8	23.6		CONT'D					ppb.
			Foliation is oriented at 0 to 5° to C.A. (probably S_1).					
			Note interrelation of the two rock types may be due to foliation/ compositional layering orientation with CA.					
			Alteration: Mainly silica ~ possible nearly-complete silicification of chlorite schist (basalt).					
			Iron amphibole: ≤ 1% as small wisps subparallel to compositional layering					
			Iron-carbonate: <<1% as small wisps and bands near up-hole contact ~ contained wholly within quartz-Fe-amphibole schist					
			Mineralization: Nil (?)					
23.6	26.7		Chlorite-Silica Schist (or CHLORITIC-METACHERT?)	23.6	25.0		42309	22
			Medium to dark drab green-homogeneous aphanitic chlorite-silica (schist?)	25.0	26.7		42310	26
			unit containing light green wisps of possible iron-amphibole.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-85-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb.
23.6	26.7		CONT'D:					
			Non-magnetic and non-calcareous.					
			Foliation/compositional layering is variable from 0 to 10° to c.a.					
			Note: As in 21.8-23.6, sphaeritic-siliceous nature of unit may represent					
			either a chloritic metachert exhalite or silicified chlorite schist as					
			the presence of iron-amphibole would support a metachert protolith.					
			Alteration: silica(?) - possible silicification of chlorite schist (base?)					
			Iron-carbonate: ≤ 1% as wisps and stringers sub-parallel to					
			the main foliation/compositional layering.					
			Iron-Amphibole: ≤ 2% as wisps and layers sub-parallel					
			to the main foliation/compositional layering.					
			Mineralization: Nil (?)					
26.7	30.0		Quartz-Augen Quartz-Iron-Amphibole Schist	26.7	30.0		42311	5
			Generally as in 4.6-21.8m with ≤ 1% chlorite disseminated					
			throughout.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

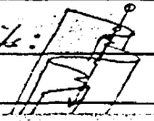
FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au
26.7	30.0		CONT'D)					n.d.
			Foliation / compositional layering variable from 10 to 30° to C.A.					
			Alteration: Iron-Amphibole: ≤ 3% as wisps, stringers and disseminations throughout (mostly sub-parallel to comp. layering) - possible alteration of?					
			Silicification: NIL(?)					
30.0	32.9		Iron-Amphibole-(chlorite?) Metachert	30.0	31.5		42312	64
			Generally as in 23.6 - 26.7 with increased definition of compositional layers - previous unit and other intercalations most likely represent iron-amphibole-rich metachert, not chlorite-silica (schist). Alternations of olive-green and brown compositional bands (≤ 8mm) often separated by dark-gray - black siliceous material and limonite stained fractures. Minor pyrite throughout. Non-calcareous and non-magnetic. Foliation / compositional layering is variable from 5 to 30° to C.A.	31.5	32.9		42313	3

	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

DIAMOND DRILL RECORD

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb.
20.0	32.9		CONT'D					
			Alteration: Iron-Amphibole: ≤ 10% as disseminations throughout - possible alteration of augen(?)					
			Limonite: ≤ 1% as staining on fractures oriented sub-parallel to main foliation/comp. layering.					
			Mineralization: Pyrite: << 1% as small clots and ragged bands concentrated along fractures oriented subparallel to main foliation/comp. layering.					
32.9	50.3		Quartz-Augen Quartz-Iron-Amphibole Schist	32.9	35.8		42314	37
			Generally as-in 46-21.8m with ≤ 1% light green-iron-amphibole(?)	35.8	38.8		42315	750
			disseminated weakly throughout; overall, << 1% interclated metachert as	38.8	41.7		42316	4
			diffuse interbands	41.7	43.4		42317	3
			Non-calcareous and non-magnetic	43.4	45.4		42318	1
			Foliation/compositional layering is oriented weakly from 5 to 35° to c.a. ~	45.4	46.9		42319	3
			weak lineation most likely reflects F_2 folding of the units: 	46.9	47.9		42320	19
				47.9	50.3		42321	3

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

Diamond Drill Record

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS
32.9	50.3		cont'd					
			45.2-47.4m: Transitional unit composed of intercalations (70%) of chlorite rock type and sulphide-bearing light green iron-amphibole metabasalt ~ most likely a fore-runner to the next main iron-formation unit.					
			Alteration: Iron-Amphibole: generally ≤ 2%, locally 15% as greenish-green wisps and disseminations and green-brown wisps oriented subparallel to main foliation / compositional layers					
			Iron-Carbonate: ≤ 1% brick-red to orange-pink wispy, disseminations and fracture fillings oriented subparallel to comp. layering / main foliation.					
			Mineralization: 45.2-47.4m: Pyrite: ≤ 2% as small clots and ragged bands oriented subparallel to the main foliation / comp. layering					
			Arsenopyrite: trace as small clots and cubes associated with pyrite (but probably post-date pyrite)					

Diamond Drill Record

COLLAR:		HOLE SURVEY		
NORTH		FOOTAGE	AZIMUTH	DIP
EAST				
ELEVATION				
LOGGED BY				
DATE LOGGED				
MAP REFERENCE NO.		METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-87-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb	ASSAYS	ASSAYS	ASSAYS
32.9	50.3		Mineralization cont'D:								
			Quartz-vein: minor 2cm folded quartz-vein @ 39.1m.								
			Pyrite: scattered traces along limonite-filled fractures								
			within main rock type - nothing significant.								
50.3	53.1		Chlorite-Garnet Schist and Pyrite-Grunerite-Magnetite Iron Formation	50.3	52.0	1.7	42322	1530	(.044)		
			Typically olive-green homogeneous chlorite schist containing 8% ≤1cm pink	52.0	53.1	1.1	42323	12			
			subhedral garnets intercalated/interbanded with light green-grey								
			metachert containing 10% wispy magnetite-grunerite bands and coarse								
			bands and masses of vuggy pyrite.								
			Generally non-calcareous and locally magnetic.								
			Foliation/compositional layering highly variable from 0 to 25° to c.a.								
			Down-hole contact sharp at 80° to c.a.								
			52.1-53.1: section composed of 95% chlorite-garnet schist.								
			Alteration: Grunerite (Iron-Amphibole): overall 5%, locally 10% as								
			fine wisps and anastomosing masses which flank and are								
			contained within magnetite layers ~ probable alteration								
			of magnetite.								

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS
50.3	53.1		CONT'D:					
			Mineralization: Pyrite: overall, 4%, locally 12% as clotted, vuggy masses and coarse bands, often folded and intercalated with chloritic bands; pitted corrosion texture throughout - sometimes associated with grunerite and relict magnetite; pyrite mostly conformable w/ comp. layers.					
			Pyrrhotite: trace, fine wisps, often associated with magnetite and grunerite; mostly conformable with comp. layering					
			Magnetite: overall: 3%, locally 10% as relict wisps and bands often conformable to comp. layering					
			52.8 m: NOTE; small 1cm vein containing metachert (quartz), pyrite and an olive-drab green mineral which contains concentric rings of pyrite; dark mineral was soft and somewhat platy ~ like shale or slate ~ possible reduction spots? (py) PYRITE NUCLEUS					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
53.1	58.1		Magnetite-Pyrite-Grunerite Iron Formation	53.1	54.5	1.4	42324	340
			Light to medium grey homogeneous metachert containing 35% black	54.5	56.1	1.6	42325	480
			magnetite bands and disseminations often intercalated with grunerite,	56.1	58.1	2.0	42326	920
			pyrite and ≤1% chlorite. Most layers/bands appear contorted and					
			often folded.					
			Non-calcareous and generally magnetic.					
			Foliation appears highly variable from 0 to 70° to c.a. (due to folding)					
			Down-hole contact appears gradational over 30 cm at 25° to c.a.					
			Alteration: Grunerite: overall: 8%, locally 12% as fine wisps and					
			anastomosing stringer networks which both flank and are					
			contained within magnetite wisps and bands - very probable					
			alteration of magnetite (textural replacement)					
			Mineralization: Magnetite: approximately 35% black wispy					
			bands and disseminations throughout flanked					
			by fine-grained masses of grunerite					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
53.1	58.1		Mineralization cont'd:					
			Pyrite: overall 2%, locally 5% as fine disseminations and bands along with small clots and wispy masses. Small wispy mass of fine black magnetite-grunerite layers (pass. alt. of Py?) ~ most pyrite bands appear conformable to compositional layering / main foliation.					
			Pyrrhotite: trace as small clots within magnetite-grunerite layers.					
58.1	62.4		Pyrite-Magnetite Iron Formation	58.1	59.4	1.3	42327	6210
			Light grey homogeneous metachert containing wispy anastomosing ragged	59.4	60.9	1.5	42328	1870
			bands and stringers of pyrite and more minor dissemination of	60.9	62.4	1.5	42329	2210
			black magnetite. Some sections contain large, corroded wispy masses of pyrite					
			intercalated with ≤ 1% chlorite overall. Sulphides appear both					
			conformable and non-conformable with the main foliation/compositional					
			layering.					
			Non-calcareous and locally magnetic					
			Foliation/compositional layering is highly variable from 0° to 80° to C.A.					

Diamond Drill Record

COLLAR:		HOLE SURVEY	
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS						
58.1	62.4		CONT'D											
			Downhole contact appears gradational over 20 cm.											
			59.1-59.4m: massive folded magnetite layer containing 5% intercalated granite ~ probable in-fold-											
			Alteration: Garnerite: overall, ≤2% as fine anastomosing wisps and disseminations - color variable from whitish-green to yellow-brown ~ may represent several varieties of iron-amphibole.											
			Hematite: overall <<1%, locally 2% as small masses associated with corroded, vuggy pyrite masses, probable alteration-weathering product of pyrite											
			Mineralization: Pyrite: overall 7%, locally 15% as coarse irregular vuggy masses which are often corroded and occasionally accompanied by hematite - and as fine disseminations which often flank magnetite and often appear conformable to the main foliation/compositional layering											

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
58.1	62.4		MINERALIZATION: CONT'D					
			Magnetite: overall ≤ 2% as fine irregular wisps and disseminations throughout					
			Pyrrhotite: <<1% as small clots and disseminations often associated with pyrite and magnetite. Generally, pyrrhotite % increases as downhole contact is approached					
62.4	65.6		Pyrrhotite-Pyrite-Iron-Amphibole Iron-Formation	62.4	63.9	1.5	42330	690
			Light grey-green homogeneous iron-amphibole metachert which contains	63.9	64.7	0.8	42331	250
			irregular wisps and ragged masses and bands of pyrrhotite and pyrite.	64.7	65.6	0.9	42332	2440
			Minor intercalations, ≤2%, of chlorite-schist occur throughout. In general					
			sulphides appear wispy and mostly non-conformable replacement/					
			remobilization type features. Minor magnetite wisps occur randomly.					
			Non-calcareous and magnetic (pyrrhotite, magnetite).					
			Foliation highly variable from 0 to 25° to C.A.					
			Downhole contact sharp at 25° to C.A.					
			65.1-65.6m: Minor unit of olive-green chlorite schist containing					
			large clotted masses of pink garnet, the base of					
			which forms the sharp down-hole contact					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS
62.4	65.6		CONT'D:					
			Alteration: Iron-Amphibole: overall 5% (?) throughout as fine grey-green disseminations in metachert as seen in previous up-hole lithologies.					
			Greenrock: ≤1% as fine wisps and disseminations within chloritic sections and with pyrrhotite.					
			Mineralization: Pyrrhotite: overall; 7%, locally 13% as wispy masses and ragged bands which appear both conformable to and cross-cutting the main foliation/compositional layering.					
			Pyrite: overall; 3%, locally, 8% as ragged wispy masses and bands as above.					
			Magnetite: ≤1% as random disseminations and irregular wisps					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
NORTH	FOOTAGE	AZIMUTH	DIP
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
65.6	67.9		Pyrrhotite-Magnetite Iron Formation	65.6	66.7		42333	410
			Light grey to grey-green homogeneous metachert which contains	66.7	67.9		42334	179
			20% black magnetite as ≤ 1 cm wispy irregular bands and disseminations which often contain and are flanked by fine wisps and disseminations of grunerite.					
			Pyrrhotite occurs as irregular wisps and ragged bands most often conformable with the main foliation / compositional layering.					
			Non-calcareous and generally magnetic (pyrrhotite, magnetite).					
			Foliation appears highly variable (folded) from 0° to 30° to c.a.					
			Down-hole contact appears sharp at 15° to c.a.					
			Note: metachert contains disseminated green-grey minerals; most likely an iron-amphibole.					
			Alteration: Iron-Amphibole: approximately 15% as aphanitic grey-green disseminations within metachert					
			Grunerite: 4% as fine wisps and disseminations which occur on the flanks of and within magnetite wisps and layers.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ppb ASSAYS
65.6	67.9		CONT'D:					
			Mineralization: Pyrrhotite: 3% overall as fine wisps, ragged bands and clots and disseminations throughout; mostly as conformable wisps and bands with main foliation / compositional layering					
			Pyrite: ≤ 1% as coarse ruggy clots and ragged bands often associated with pyrrhotite					
			Magnetite: 20% as black irregular ≤ 1cm wisps and bands and disseminations.					
67.9	68.6		Chlorite-Garnet Schist and Pyrite-Magnetite Iron Formation	67.9	68.6		42335	85
			Dark green homogeneous chlorite-schist containing 3% ≤ 1cm pink garnets intercalated with light grey metachert which contains 8% disseminated magnetite and 4% pyrite in ragged clots and bands.					
			Non-calcareous and locally magnetic (magnetite)					
			Foliation appears highly variable from 0° to 15° to C.A.					
			Downhole contact appears sharp at 80° to C.A.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS Au ppb
67.9	68.6		cont'd					
			Alteration: Sericite: << 1% as fine wisps and disseminations associated with magnetite					
			Mineralization: Magnetite: overall 8% as fine disseminations often associated with pyrite and chlorite. Pyrite: overall 4% as ragged bands and clots intercalated with chloritic material and disseminated magnetite - mostly foliation conformable Pyrrhotite: trace as small clots and wisps					
68.6	76.3		Magnetite-Pyrrhotite-Pyrite Iron Formation	68.6	70.2		42336	25
			Dark gray to grey-green homogeneous metachert which contains 30%	70.2	71.5		42337	30
			magnetite as wispy bands and disseminations throughout. Sulphides occur	71.5	72.7		42338	37
			throughout as mostly conformable wisps and ragged bands with occasional	72.7	74.1		42339	35
			irregular vuggy masses of pyrite. Non-calcareous and magnetic throughout	74.1	76.3		42340	210
			Note: Approximately 15% intercalated chloride, randomly throughout.					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS
68.6	76.3		CONT'D: Foliation variable from 0-25° to C.A./ Dominant contact sharp at 25° to C.A.					
			Alteration: Iron Anhydrite: grey-green fine dissemination throughout					
			matachert sections; approximately 10-20% (?)					
			Grunerite: ≤1% as fine wisps and dissemination associated					
			with magnetite.					
			Mineralization: Magnetite: overall 30%, locally 60% as fine					
			pervasive disseminations and ≤1cm wispy irregular layers					
			throughout.					
			Pyrrhotite: overall: 8%, locally 12% as ragged					
			clots, bands and anastomosing stringers predominantly					
			conformable to the main foliation/compositional					
			layering though some sections show more irregular					
			replacement/remobilization textures.					
			Pyrite: overall 4%, locally 15% as ragged bands					
			and clots often conformable to main foliation/					
			compositional layering with some more irregular					
			(corroded, clotted, wispy masses which show replacement/					
			remobilization textures (72.4-74.6m; 75.3-75.6m).					

Diamond Drill Record

COLLAR:	HOLE SURVEY		
	FOOTAGE	AZIMUTH	DIP
NORTH			
EAST			
ELEVATION			
LOGGED BY			
DATE LOGGED			
MAP REFERENCE NO.	METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	Au ASSAYS ppb
76.3	94.2		Quartz-Augen Quartz-Iron-Amphibole (sericite?) Schist	76.3	77.6		42341	12
			Light to medium grey homogeneous well foliated quartz-iron amphibole-(sericite?) schist containing 5% ≤ 3mm clear to blue elongate quartz	77.6	80.6		42342	8
			augen. Recessive unit encountered at top of hole.	80.6	91.8		42343	1
			Non-calcareous and non-magnetic.					
			Foliation/compositional layering (S$_1$ // S$_2$ // S$_x$) variable from 10 to 20°					
			to C.A. (due to minor folding)					
			Downhole contact not intersected					
			Alteration: Iron Amphibole: grey-green iron-amphibole conformably					
			intercalated throughout unit ~ 15% (?)					
			Sericite: possible sericitization as opposed to iron-amphibole above ~ part of main silici-sericitic					
			alteration zone.					
			Iron-Carbonate: 77.2-77.4m; 78.0-78.4m - brick-red to					
			orange-pink iron-carbonate concentrated mainly along					
			minor fractures and compositional layering.					

Diamond Drill Record

COLLAR:	
NORTH	
EAST	
ELEVATION	
LOGGED BY	
DATE LOGGED	
MAP REFERENCE NO.	

HOLE SURVEY		
FOOTAGE	AZIMUTH	DIP
METHOD:		

COMPANY NAME
PROPERTY NAME
DRILLING CONTRACTOR
ASSAYER
PURPOSE OF HOLE

HOLE NO. M-89-07
CLAIM NAME
COMMENCED
FINISHED
PROJECT NO.

FROM	TO	RECOVY	DESCRIPTION	SAMPLE FROM	SAMPLE TO	SAMPLE WIDTH	SAMPLE NO.	ASSAYS						
76.3	94.2		CONT'D:											
			Mineralization: Quartz-Veins: white to translucent conformable quartz-veining - often associated and flanked by 1 to 2 cm of chloritic material and possible iron-amphibole.											
			79.8m: 2cm wide											
			81.4m: 2cm wide											
			81.7m: 1cm wide											
			83.9m: 3cm wide											
			84.1-84.2: 10cm wide											
94.2	—		E.O.H.											
			NOTES: CASING PULLED											
			- ONE DIP TEST AT 199'											

[signature]

Ministry of Natural Resources — Report of Work

Ontario

Assess. Library

Mining

52P04NE0004 20 ACHAPI LAKE

900

Name and Address of Recorded Holder	Prospector's Licence No.
NORTHERN DYNASTY EXPLORATIONS LTD.	T-1884
844 W. HASTINGS ST VANCOUVER B.C.	

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: 4543

for Performance of the following work. (Check one only)

- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work.
- ☐ Compressed Air, other Power driven or mechanical equip.
- ☐ Power Stripping
- ☒ Diamond or other Core drilling
- ☐ Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
Pa	998963	200	Pa	998971	200	Pa	998978	200
	998964	200		998972	200		998979	200
	998965	200		998973	200		998980	200
	998966	200		998974	200		998981	200
	998967	200		998975	200		998982	200
	998968	200		998976	200		998983	200
	998969	200					998984	200
	998970	200					998985	200

All the work was performed on Mining Claim(s): Pa 816706, 816708, 816709, 816710, 816713, 816698, 816699

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below) Achapi Lake G 1920

1989 MISEHKOW RIVER DRILL PROGRAM.

CONTRACTOR : LANGLEY DRILLING, 49 JAYFIELD RD. BRAMPTON, ONT. L6S3G3

GEOLOGIST : DARREN C ELSBY 844 W. HASTINGS ST VANCOUVER B.C. V6CK8

EQUIPMENT : JKS 300 DRILL.

CORE DIAM & FOOTAGE : 4543 FEET B.Q 4400' PLACED ON RECORD THIS REPORT 143 days in Reserve

DRILL HOLES SUBMITTED : M-89-1, M-89-2, M-89-3, M-89-4, M-89-5, M-89-6, M-89-7,

SKETCHES & DRILL LOGS. : ATTACHED

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE DEC - 1 1989 RECEIVED

RECEIVED NOV 23 1989 PATRICIA MINING DIVISION

R. Mycho Recorded

Date of Report	Recorded Holder or Agent (Signature)
20 Nov 89	J. Simpson

Certification Verifying Report of Work

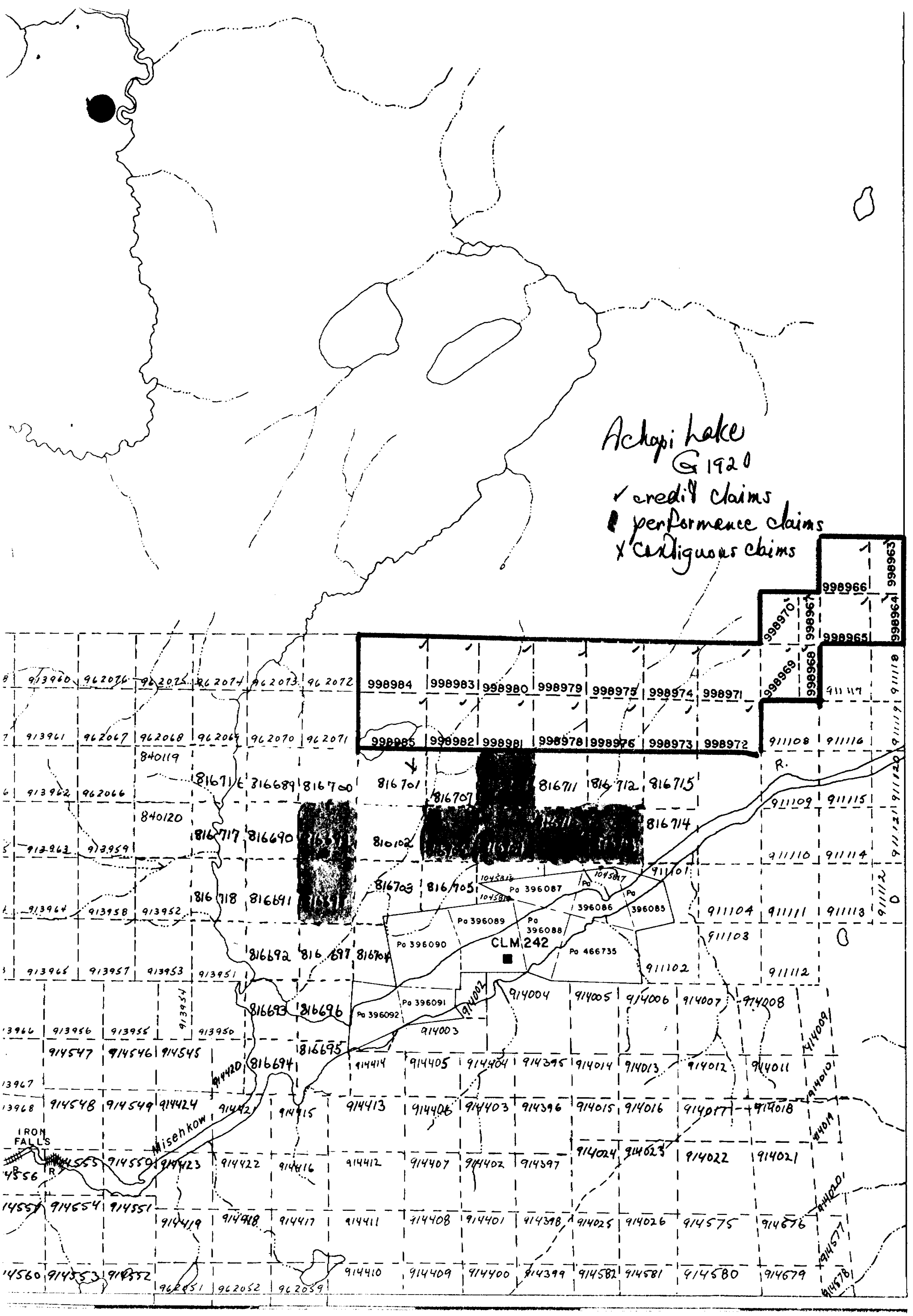
I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying	Date Certified	Certified by (Signature)
J.G. SIMPSON 844 W. HASTINGS ST VANCOUVER B.C. V6C1C8	20 Nov 89	J. Simpson

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

768 (81/3)



Achapi Lake
G 1920
✓ credit claims
▮ performance claims
X contiguous claims
998984
998983
998980
998979
998975
998974
998971
998985
998982
998981
998978
998976
998973
998972
998970
998969
998967
998968
998966
998965
998964
998963
913960
962076
962075
962074
962073
962072
913961
962067
962068
962069
962070
962071
840119
840120
816716
816689
816700
816701
816707
816711
816712
816715
816714
816717
816690
816702
816718
816691
816703
816705
816692
816697
816704
816693
816696
816695
816694
Po 396087
Po 396086
Po 396085
Po 396089
Po 396088
Po 396090
CLM 242
Po 466735
Po 396091
Po 396092
911101
911104
911103
911102
911108
911116
911109
911115
911110
911114
911111
911113
911112
911117
911118
911119
911120
911121
911122
R.
913962
962066
913963
913959
913964
913958
913952
913965
913957
913953
913951
913954
913966
913956
913955
913950
913967
913968
914547
914546
914545
914548
914549
914424
914420
914421
914415
914414
914405
914404
914395
914014
914013
914012
914011
914413
914406
914403
914396
914015
914016
914017
914018
914002
914003
914004
914005
914006
914007
914008
914009
914010
914019
914412
914407
914402
914397
914024
914023
914022
914021
914020
914555
914550
914423
914422
914416
914556
914557
914654
914551
914419
914418
914417
914411
914408
914401
914398
914025
914026
914575
914676
914577
914560
914553
914552
962051
962052
962059
914410
914409
914400
914399
914582
914581
914580
914679
914678
IRON FALLS
Misehkow

1989 DDH 1-7 COMPOSITE

L1900W L1500W L1400W L800W L400W L200W L0+00 L200E L400E L600E L950E

816716 M-88-1 M-88-2 816689 816690 M-88-3 816700 816699 816701 816702 816707 816706 M-89-4 M-88-12 M-88-5 M-89-6 M-89-5 M-89-7 M-88-6 816708 816709 M-89-1 M-88-7 816711 816710 M-88-8 M-88-9 816712 816713 M-89-2 M-88-10

BL0 0+00 M-89-3 M-88-4 BL0 0+00

816717 816718 M-88-11 816691 816698 816703 816705 1045818 1045817

1045819

MISEHKOW RIVER

RECEIVED NOV 23 1989 PATRICIA MINING DIVISION

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 (& 89) DIAMOND DRILL HOLE LOCATION MAP

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4 METRES X 100

— CLAIM POST

89- — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

M-89-1

L 1900 W
L 1500 W
L 1400 W
L 800 W
L 400 W
L 200 W
L 0+00
L 200 E
L 400 E
L 600 E
L 950 E

816716
M-88-1
M-88-2
816689
816690
M-88-3
816700
816699
816701
816702
816707
816706
M-88-12
M-88-6
816708
816709
M-88-5
M-89-1
M-88-7
816711
816710
M-88-8
M-88-9
816712
816713
M-88-10
BL0 0+00
M-88-4
M-88-11
816717
816718
816691
816698
816703
816705
1045818
1045817
1045819
MISEHKOW
RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE
9 89

LOCATION MAP

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89- — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

M-89-2

L 1900 W
L 1500 W
L 1400 W
L 800 W
L 400 W
L 200 W
L 0+00
L 200 E
L 400 E
L 600 E
L 950 E

816716
M-88-1
M-88-2
816689
816690
M-88-3
816700
816699
816701
816702
816707
816706
M-88-12
M-88-6
816708
816709
M-88-5
M-88-7
816711
816710
M-88-8
M-88-9
816712
816713
M-89-2
709'
M-88-10

BLO 0+00

M-88-4
M-88-11
816691
816698
816703
816705
1045818
1045817
816717
816718
1045819

BLO 0+00

MISEHKOW
RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE LOCATION MAP

89

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89-⊗ — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

M-89-3

L1900W L1500W L1400W L800W L400W L200W L0+00 L200E L400E L600E L950E

816716 M-88-1 M-88-2 816689 816690 M-88-3 816700 816699 816701 816702 816707 816706 M-88-12 816708 816709 M-88-5 M-88-7 816711 816710 M-88-8 M-88-9 816712 816713 M-88-10

M-88-6

BL0 0+00 M-89-3 M-88-4 BL0 0+00

816717 816718 M-88-11 816691 816698 349' 816703 816705 1045818 1045817

1045819

MISEHKOW RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE LOCATION MAP

M-89

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89 - — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

M-89-4

L 1900 W
L 1500 W
L 1400 W
L 800 W
L 400 W
L 200 W
L 0+00
L 200 E
L 400 E
L 600 E
L 950 E

816716
816689
816690
M-88-1
M-88-2
M-88-3
816700
816699
816701
816702
816707
816706
M-89-4
M-88-12
649'
M-88-6
816708
816709
M-88-5
M-88-7
816711
816710
M-88-8
M-88-9
816712
816713
M-88-10

BL 0+00

M-88-4
M-88-11
816691
816698
816703
816705
1045818
1045817
816717
816718
1045819

BL 0+00

MISEHKOW RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE LOCATION MAP

489

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89- — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

M-89-6

L 1900 W
L 1500 W
L 1400 W
L 800 W
L 400 W
L 200 W
L 0+00
L 200 E
L 400 E
L 600 E
L 950 E

816716
816689
816690
816700
816699
816701
816702
816707
816706
816708
816709
816711
816710
816712
816713
816717
816718
816691
816698
816703
816705
1045818
1045817
1045819

M-88-1
M-88-2
M-88-3
M-88-4
M-88-5
M-88-6
M-88-7
M-88-8
M-88-9
M-88-10
M-88-11
M-88-12
M-89-6
389'

BLO 0+00
BLO 0+00

MISEHKOW
RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE
989

LOCATION MAP

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89-Ø — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION

N

M-89-7

L 1900 W
L 1500 W
L 1400 W
L 800 W
L 400 W
L 200 W
L 0+00
L 200 E
L 400 E
L 600 E
L 950 E

816716
816689
816690
M-88-1
M-88-2
M-88-3
816700
816699
816701
816702
816707
816706
M-88-12
M-88-5
816708
816709
M-88-7
816711
816710
M-88-8
M-88-9
816712
816713
M-88-10
M-88-6
M-89-7
300'
BLO 0+00
BLO 0+00
M-88-4
816717
816718
M-88-11
816691
816698
816703
816705
1045818
1045817
1045819

MISEHKOW RIVER

NORTHERN DYNASTY EXPLORATIONS Ltd.

MISEHKOW RIVER PROPERTY

1988 DIAMOND DRILL HOLE
989

LOCATION MAP

CLAIM MAP : ACHAPI LAKE G-1920

NTS : 52 P/4

MARCH 1989

0 1 2 3 4
METRES X 100

— CLAIM POST

89- — DRILL COLLAR, HOLE NUMBER

SURFACE PROJECTION