



DEPARTMENT OF ENERGY, MINES AND RESOURCES

GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) -  
REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA,  
EAST-CENTRAL SASKATCHEWAN

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\* OPEN FILE 683 \*  
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GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

GEOLOGICAL SURVEY OF CANADA OPEN FILE 683

GOLD IN LAKE SEDIMENTS (PART OF NTS 64D)

LAKE SEDIMENT SAMPLES WERE SELECTED FROM AN AREA OF APPROXIMATELY 2400 SQUARE MILES IN NTS 64D AND ANALYZED FOR GOLD TO APPRAISE THE UTILIZATION OF ORGANIC LAKE-CENTRE SEDIMENTS IN THE GEOCHEMICAL EXPLORATION FOR GOLD IN THIS REGION OF SASKATCHEWAN (SEE COKER ET.AL., 1980). THE SAMPLE SELECTION AND GOLD ANALYSES, CARRIED OUT UNDER CONTRACT BY NUCLEAR ACTIVATION SERVICES LTD., WERE SUPERVISED BY DR. W.B. COKER. GEOLOGICAL SURVEY OF CANADA.

THE MAJORITY OF THE DATA IN THIS OPEN FILE WERE RELEASED AS OPEN FILE 266, AUGUST 5, 1975 (HORN BROOK ET.AL., 1975). ADDITIONAL DATA FOR MERCURY AND URANIUM, DETERMINED BY DELAYED NEUTRON COUNTING, WERE RELEASED AS OPEN FILE 488, OCTOBER 5, 1977 (HORN BROOK ET.AL., 1977). THIS HARD COPY RELEASE OF OPEN FILE 683 DISPLAYS DATA FOR 14 ELEMENTS (ZN,CU,PB,NI,CO,AG,MN,AS,MO,FE,HG,U-F,U-N AND AU) AND LOSS-ON-IGNITION. A SAMPLE LOCATION MAP OF NTS 64D, FROM OPEN FILE 266, IS INCLUDED WITH OPEN FILE 683.

THE ORIGINAL REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE PROJECT (NTS,63H, 64D AND PARTS OF 63K,63L,63N,73I,73O,73P AND 74A) WAS JOINTLY UNDERTAKEN AND PLANNED BY THE GEOLOGICAL SURVEY OF CANADA AND THE SASKATCHEWAN GEOLOGICAL SURVEY UNDER THE AUSPICES OF THE CANADA-SASKATCHEWAN AGREEMENT ON MINERAL EXPLORATION AND DEVELOPMENT IN NORTHERN SASKATCHEWAN.

MR. E.H.W. HORN BROOK DIRECTED GEOLOGICAL SURVEY OF CANADA ACTIVITIES AND SUPERVISED THE FIELD SAMPLING CONTRACT LET TO TRIGG, WOOLLETT & ASSOCIATES LTD., UNDER G.S.C FIELD PROJECT 740079, 'REGIONAL SURVEYS (LAKE SEDIMENTS)'. DR. L.S. BECK COORDINATED ACTIVITIES AT THE SASKATCHEWAN GEOLOGICAL SURVEY. THE CHEMICAL ANALYSES WERE ALSO CARRIED OUT UNDER CONTRACT BY BARRINGER RESEARCH LTD. AND AECL COMMERCIAL PRODUCTS DIVISION, THE CONTRACTS BEING SUPERVISED FROM THE GEOLOGICAL SURVEY OF CANADA BY MR. J.J. LYNCH. DATA MONITORING, COMPILATION AND MAP PRODUCTION WAS CARRIED OUT AT THE GEOLOGICAL SURVEY OF CANADA IN THE GEOCHEMISTRY AND GEOLOGICAL CARTOGRAPHY SECTIONS UNDER THE DIRECTION OF DR. R.G. GARRETT. THE DATA PLOTTING WAS CARRIED OUT USING PHOTO-HEAD PLOTTING FACILITIES FOR DIRECT PHOTOGRAPHIC PLOTTING MADE AVAILABLE BY THE MAP PRODUCTION DIRECTORATE, SURVEYS AND MAPPING BRANCH.

THE ORIGINAL GEOCHEMICAL LAKE SEDIMENT RECONNAISSANCE SURVEY WAS PART OF THE RECONNAISSANCE GEOSCIENCE SURVEYS PROJECT OF THE AFOREMENTIONED FEDERAL-PROVINCIAL AGREEMENT. THE AGREEMENT IS A COST SHARED VENTURE DESIGNED TO IMPROVE THE ECONOMIC BASE OF NORTHERN SASKATCHEWAN BY CONDUCTING SCIENTIFIC SURVEYS THAT COULD LEAD TO THE DISCOVERY OF NEW MINERAL DEPOSITS, OR THE FURTHER DEVELOPMENT OF KNOWN DEPOSITS.

THE LAKE SEDIMENT SURVEY WAS UNDERTAKEN TO OBTAIN INFORMATION ON THE DISTRIBUTION AND CONCENTRATION OF TRACE METALS IN THE LAKE SEDIMENTS. THE AIM WAS TO DELINEATE BROAD BELTS OF INCREASED METAL CONTENT, POSSIBLY CORRELATIVE WITH FEATURES OF ECONOMIC INTEREST, WORTHY OF FURTHER FIELD INVESTIGATION. THE PROJECT HAS BEEN DESCRIBED BY HORN BROOK AND GARRETT (1976) AND ASPECTS OF THE DATA BY GARRETT AND HORN BROOK (1976) AND GARRETT AND LYNCH (1976). THE LATTER PAPER MAKES A COMPARISON OF THE TWO SETS OF URANIUM DATA.

CENTRE-LAKE BOTTOM ORGANIC-RICH SAMPLES WERE COLLECTED AT AN AVERAGE DENSITY OF 1 SAMPLE PER 5 SQUARE MILES THROUGHOUT THE 20,000 SQUARE MILE SURVEY AREA. THE SAMPLING WAS CARRIED OUT BY 2 TWO MAN TEAMS IN A HELICOPTER SUPPORTED PROGRAM DURING THE PERIOD JULY 30 TO SEPTEMBER 4, 1974. A SAMPLING RATE OF 15 SAMPLE SITES PER HOUR WAS ACHIEVED AND MAINTAINED DURING THE PROGRAM, WHICH WAS UNDERTAKEN THROUGH A CONTRACT TO TRIGG, WOOLLETT AND ASSOCIATES LTD. OF EDMONTON, ALBERTA.

SAMPLE DRYING AND PROCESSING OPERATIONS WERE CARRIED OUT AT LA RONGE, SASKATCHEWAN, BY STAFF OF THE SASKATCHEWAN GEOLOGICAL SURVEY. SAMPLES WERE AIR DRIED AND SIEVED TO MINUS 80 MESH. AT THIS TIME CONTROL REFERENCE SAMPLES AND BLIND DUPLICATES WERE INSERTED AT A FREQUENCY OF 5%, I.E. IN EACH BLOCK OF 18 FIELD SAMPLES TO YIELD ANALYTICAL BLOCKS OF 20. THE PROCESSED SAMPLES WERE THEN SHIPPED TO THE ANALYTICAL CONTRACTORS FOR THE DETERMINATION OF 13 TRACE METALS.

WITH THE EXCEPTION OF LOSS ON IGNITION, URANIUM BY DELAYED NEUTRON COUNTING, AND GOLD BY PRECONCENTRATION, NEUTRON ACTIVATION/GAMMA-RAY SPECTROSCOPY ALL ANALYSES WERE CARRIED OUT BY BARRINGER RESEARCH LTD., TORONTO, ONTARIO ON A CONTRACTUAL BASIS WITH THE GEOLOGICAL SURVEY OF CANADA. LOSS-ON-IGNITION WAS DETERMINED IN THE GEOCHEMISTRY SECTION LABORATORIES OF THE GEOLOGICAL SURVEY IN OTTAWA. THE URANIUM DETERMINATIONS WERE CARRIED OUT BY A.E.C.L., OTTAWA, ONTARIO AND THE GOLD DETERMINATIONS WERE CARRIED OUT BY NUCLEAR ACTIVATION SERVICES LTD., HAMILTON, ONTARIO UNDER SIMILAR CONTRACTS FOR ANALYTICAL SERVICES.

FOR THE DETERMINATION OF ZN, CU, PB, NI, CO, AG, MN, FE AND U, A 1 GRAM SAMPLE WAS REACTED WITH 6 ML OF A MIXTURE OF 4M HCL AND 4M HNO<sub>3</sub> IN A TEST-TUBE OVERNIGHT AT ROOM TEMPERATURE. AFTER THE OVERNIGHT DIGESTION THE TEST-TUBE WAS IMMERSSED IN A HOT WATER BATH AT ROOM TEMPERATURE AND BROUGHT UP TO 90C AND HELD AT THIS TEMPERATURE FOR 1 HOUR WITH PERIODIC SHAKING. THE SAMPLE SOLUTION WAS THEN DILUTED TO 20 ML WITH METAL FREE WATER AND MIXED. ZN, CU, PB, NI, CO, AG, MN AND FE WERE DETERMINED BY ATOMIC ABSORPTION SPECTROSCOPY USING AN AIR-ACETYLENE FLAME. BACKGROUND CORRECTIONS WERE MADE FOR PB, NI, CO AND AG. A 0.1 ML ALIQUOT OF THE ABOVE SAMPLE SOLUTION WAS USED TO DETERMINE U BY A FLUOROMETRIC METHOD DESCRIBED BY SMITH AND LYNCH (1969). A TURNER FLUOROMETER WAS USED FOR THE FLUORESCENCE MEASUREMENTS IN PLACE OF THE JARREL-ASH DESCRIBED IN THE SMITH AND LYNCH PAPER.

ARSENIC WAS DETERMINED COLORIMETRICALLY USING SILVER DIETHYLDITHIOCARBAMATE. DECOMPOSITION WAS ACCOMPLISHED BY HEATING A 0.5 GRAM SAMPLE WITH 10 ML OF 6 M HCL AT 90C FOR 1 HOUR. COLORIMETRIC MEASUREMENTS WERE MADE AT 520 NM. MOLYBDENUM WAS DETERMINED BY ATOMIC ABSORPTION SPECTROSCOPY USING A NITROUS OXIDE-ACETYLENE FLAME. A 0.5 GRAM SAMPLE WAS REACTED WITH 1.5 ML CONCENTRATED HNO<sub>3</sub> AT 90C FOR 30 MINUTES. AT THIS POINT 0.5 ML CONCENTRATED HCL WAS ADDED AND THE DIGESTION WAS CONTINUED AT 90C FOR AN ADDITIONAL 90 MINUTES. AFTER COOLING, 8 ML OF 1250 PPM AL SOLUTION WERE ADDED AND THE SAMPLE SOLUTION WAS DILUTED TO 10 ML BEFORE ASPIRATION.

MERCURY WAS DETERMINED BY THE HATCH AND OTT PROCEDURE WITH SOME MODIFICATIONS, THE METHOD IS DESCRIBED BY JONASSON ET AL (1973). A 0.5 GRAM SAMPLE WAS REACTED WITH 20 ML CONCENTRATED HNO<sub>3</sub> AND 1 ML CONCENTRATED HCL IN A TEST-TUBE FOR 10 MINUTES AT ROOM TEMPERATURE PRIOR TO 2 HOURS OF DIGESTION WITH MIXING AT 90C IN A HOT WATER BATH. AFTER DIGESTION, THE SAMPLE SOLUTIONS WERE COOLED AND DILUTED TO 100 ML WITH METAL FREE WATER. THE HG PRESENT WAS REDUCED TO THE ELEMENTAL STATE BY THE ADDITION OF 10 ML OF 10% W/V SnSO<sub>4</sub> IN H<sub>2</sub>SO<sub>4</sub>. THE HG VAPOUR WAS THEN FLUSHED BY A STREAM OF AIR INTO AN ABSORPTION CELL MOUNTED IN THE LIGHT PATH OF AN ATOMIC ABSORPTION SPECTROPHOTOMETER. ABSORPTION MEASUREMENTS WERE MADE AT 253.7 NM.

LOSS-ON-IGNITION WAS DETERMINED USING A 200 MG SAMPLE; SHORTAGE OF MATERIAL DICTATED THIS RELATIVELY SMALL SAMPLE WEIGHT. THE SAMPLE, CONTAINED IN A 30 ML BEAKER, WAS PLACED IN A COLD MUFFLE FURNACE AND BROUGHT UP TO 500C OVER A PERIOD OF 2-3 HOURS. THE SAMPLE WAS LEFT AT THIS TEMPERATURE FOR 4 HOURS, THEN ALLOWED TO COOL TO ROOM TEMPERATURE FOR WEIGHING.

URANIUM WAS DETERMINED USING A NEUTRON ACTIVATION METHOD WITH DELAYED NEUTRON COUNTING. A DETAILED DESCRIPTION OF THE METHOD IS PROVIDED BY BOULANGER ET AL (1975). IN BRIEF A 1 GRAM SAMPLE IS WEIGHED INTO A 7 DRAM POLYETHYLENE VIAL, CAPPED AND SEALED. THE IRRADIATION IS PROVIDED BY THE SLOWPOKE REACTOR WITH AN OPERATING FLUX OF 10<sup>12</sup> NEUTRONS/SQ CM/SEC. THE SAMPLES ARE PNEUMATICALLY TRANSFERRED FROM AN AUTOMATIC LOADER TO THE REACTOR, WHERE EACH SAMPLE IS IRRADIATED FOR 60 SECONDS. AFTER IRRADIATION, THE SAMPLE IS AGAIN TRANSFERRED PNEUMATICALLY TO THE COUNTING FACILITY WHERE AFTER A 10 SECOND DELAY THE SAMPLE IS COUNTED FOR 60 SECONDS WITH SIX BF<sub>3</sub> DETECTOR TUBES EMBEDDED IN PARAFFIN. FOLLOWING COUNTING, THE SAMPLES ARE AUTOMATICALLY EJECTED INTO A SHIELDED STORAGE CONTAINER. CALIBRATION IS CARRIED OUT TWICE A DAY AS A MINIMUM USING NATURAL MATERIALS OF KNOWN URANIUM CONCENTRATION.

GOLD WAS DETERMINED ON A 5 TO 10 GRAM LAKE SEDIMENT SAMPLE, DEPENDING ON AMOUNT OF SAMPLE AVAILABLE. THE SAMPLE WAS FUSED TO PRODUCE A LEAD BUTTON, COLLECTING ANY GOLD IN THE SAMPLE, WHICH WAS CUPELLED IN A MUFFLE FURNACE TO PRODUCE A SILVER BEAD. THE SILVER BEADS WERE IRRADIATED IN A NEUTRON FLUX FOR 1 HOUR, COOLED FOR 4 HOURS, AND COUNTED BY GAMMA RAY SPECTROMETRY. CALIBRATION WAS CARRIED OUT USING STANDARD AND BLANK BEADS.

ON RECEIPT FIELD AND ANALYTICAL DATA WERE PUNCHED ONTO 80 COLUMN CARDS AND ALL SUBSEQUENT PROCESSING WAS CARRIED OUT WITH THE AID OF COMPUTERS. THE FIELD DATA WERE RECORDED BY THE FIELD CONTRACT STAFF ONTO STANDARD LAKE SEDIMENT FIELD CARDS (REV. 74) USED BY THE GEOLOGICAL SURVEY OF CANADA (GARRETT, 1974). THE SAMPLE SITE COORDINATES WERE RECORDED IN THE FIELD USING A PLASTIC ROAMER AND THE APPROPRIATE 1/250000 SCALE NTS MAP. THE DOMINANT ROCK TYPES IN THE LAKE CATCHMENT BASINS WERE PICKED OFF THE SASKATCHEWAN GEOLOGICAL SURVEY'S 1 INCH TO 20 MILE GEOLOGICAL COMPILATION MAP OF THE PROVINCE. THE ANALYTICAL DATA WERE RECORDED AS FOLLOWS (SEE GARRETT, 1974, FOR DETAILS) AND FOR CONVENIENCE THE DETECTION LIMITS OF THE ANALYTICAL METHODS USED ARE ALSO GIVEN.

GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

ELEMENT	ANAL. CARD	COLUMNS	DETECTION LIMIT	
ZN	1	21-25	2	(1)
CU	1	26-30	2	(1)
PB	1	31-35	2	(1)
NI	1	36-40	2	(1)
CO	1	41-45	2	(1)
AG	1	46-50	0.2	(0.1)
MN	1	51-55	5	(2)
U (F)	1	56-60	0.5	(0.2)
AS	1	61-65	1	(0.5)
MO	1	66-70	2	(1)
FE Z	1	71-75	0.02	(0.01)
HG PPB	1	76-79	10	(5)
LOI Z	2	21-25		
U (N)	3	21-25	0.2	(0.1)
AU PPB	4	26-30	2	(1)

UNLESS OTHERWISE NOTED THE UNITS OF MEASUREMENT FOR THE ANALYSES ARE PPM. THE SECOND FIGURE UNDER DETECTION LIMIT IS THE FIGURE TO WHICH VALUES WERE SET IF THEY FELL BELOW THE DETECTION LIMIT. LOSS-ON-IGNITION WAS A GRAVIMETRIC DETERMINATION AND THERE WAS NO DETECTION LIMIT ESTABLISHED.

GENERAL INSPECTIONS OF THE FIELD AND ANALYTICAL DATA WERE MADE TO CHECK FOR ANY MISSING INFORMATION AND/OR GROSS ERRORS. THE SAMPLE SITE COORDINATES WERE CHECKED BY PLOTTING SAMPLING LOCATION MAPS ON A FLAT-BED PLOTTER FROM THE FIELD RECORDED COORDINATES AND THEN OVERLAYING THESE OVER THE FIELD CONTRACTOR'S FINAL REPORT SAMPLE LOCATION MAPS.

QUALITY CONTROL AND MONITORING OF THE GEOCHEMICAL DATA WAS UNDERTAKEN USING A STANDARD METHOD USED BY THE GEOCHEMISTRY SECTION AT THE GEOLOGICAL SURVEY OF CANADA WHICH IS BASED ON DUPLICATE AND REPLICATE SAMPLES AND ANALYSES. THIS REQUIRES THAT FIELD DUPLICATE, BLIND (ANALYTICAL) DUPLICATE AND CONTROL REFERENCE SAMPLES BE INSERTED AT A 5% FREQUENCY. IN PRACTICE THE REQUIRED EXTRA SAMPLES ARE INSERTED RANDOMLY IN EACH BLOCK OF 20 TOTAL SAMPLES, I.E. EACH BLOCK WILL CONTAIN 17 REGIONAL SAMPLES, 1 FIELD DUPLICATE TAKEN AT ONE OF THE 17 REGIONAL SITES, 1 BLIND DUPLICATE OF ONE OF THE 18 FIELD SAMPLES AND A CUT OF A CONTROL REFERENCE SAMPLE. IN THE CASE OF THE REANALYSIS OF THE SELECTED LAKE SEDIMENT SAMPLES FOR GOLD CONTROL REFERENCE SAMPLES WERE INSERTED AT APPROXIMATELY 10% FREQUENCY. BOTH CONTROL REFERENCE SAMPLES WERE ANALYSED 14 TIMES GIVING THE FOLLOWING DATA:

CR	ARITH. MEAN	ARITH. STD. DEV.	MINIMUM	MAXIMUM
1	562	50	520	670
2	88	9	70	110

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GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

DATA LIST LEGEND

MAP-	NATIONAL TOPOGRAPHIC SYSTEM(NTS)- LETTERED QUADRANGLE (SCALE 1:250000). PART OF SAMPLE NUMBER	ROCK TYPE:	PSCS- PELITIC SCHIST AMPB- AMPHIBOLITE MVCO- METAVOLCANIC GRNT- GRANITE UMFC- ULTRAMAFIC MGHT- HIGHATITE MARK- META-ARKOSE MSDM- METASEDIMENT MRBLT- MARBLE
ID-	REMAINDER OF SAMPLE NUMBER- YEAR(2), FIELD CREW(1). SAMPLE SEQUENCE NUMBER(3)		
UTM COORDINATES-	UNIVERSAL TRANVERSE MERCATOR(UTM) COORDINATE SYSTEM-SAMPLE COORDINATES		
ZN-	ZONE		
EAST-	EASTING(METERS)		
NORTH-	NORTHING(METERS)		
ROCK TYPE-	MAJOR ROCK TYPE OF LAKE CATCHMENT AREA	LAKE AREA:	POND- POND LT 1- 1/4 TO 1 SQ KM 1-5- 1 TO 5 SQ KM GT 5- GREATER THAN 5 SQ KM
LAKE AREA-	AREA OF LAKE SAMPLED		
SMPL DPTH-	SAMPLE DEPTH MEASURED TO THE NEAREST FOOT		
RP ST-	REPLICATE STATUS- RELATIONSHIP OF SAMPLE WITH RESPECT TO OTHERS WITHIN THE SURVEY	RP ST:	00- ROUTINE REGIONAL SAMPLE 10- FIRST OF FIELD DUPLICATE 20- SECOND OF FIELD DUPLICATE 32- ROUTINE SAMPLE-LAYERED WITH LAYED POSITION
REL-	RELIEF OF THE SURROUNDING LAKE CATCHMENT BASIN		
SMPL COMP-	SAMPLE COMPOSITION- BULK MECHANICAL COMPOSITION OF SAND, FINES, ORGANICS AND GEL RESPECTIVELY	REL:	L- LOW M- MEDIUM H- HIGH
CONT-	CONTAMINATION- HUMAN OR NATURAL(WORK-DRILL/TRENCH, CAMP, FUEL OR GOSSAN		
SAMPLE COLOUR-	SEDIMENT COLOUR	SMPL COMP:	BLANK- ABSENT 1- MINOR- LESS THAN 33% 2- MEDIUM- 33% TO 67% 3- MAJOR- GREATER THAN 67%
SUSP-	SUSPENDED MATTER	GEL:	BLANK- ABSENT 1- PRESENT
ZN-	ZINC BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)	CONT:	BLANK- NONE 1- PRESENT
CU-	COPPER BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
PB-	LEAD BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)	SAMPLE COLOUR:	TN- TAN YL- YELLOW GN- GREEN GY- GREY BR- BROWN BK- BLACK
NI-	NICKEL BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
CO-	COBALT BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
AG-	SILVER BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
MN-	MANGANESE BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
AS-	ARSENIC BY COLORIMETRY (PPM)		
MO-	MOLYBDENUM BY ATOMIC ABSORPTION SPECTROSCOPY (PPM)		
FE-	IRON BY ATOMIC ABSORPTION SPECTROSCOPY (X)		
HG-	MERCURY BY FLAMELESS SPECTROSCOPY (PPB)		
U-F-	URANIUM BY FLUOROMETRY (PPM)	SUSP:	BLANK- NONE L- LOW H- HIGH
U-N-	URANIUM BY DELAYED NEUTRON COUNTING (PPM)		
AU-	GOLD BY PRECONCENTRATION, NEUTRON ACTIVATION/GAMMA-RAY SPECTROSCOPY (PPB)		
LOI-	LOSS-ON-IGNITION BY WEIGHT DIFFERENCE (X)		



## GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

MAP	SAMPLE	UTM COORDINATES			ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R E L F	C O N T	S U P	SAMPLE COLOUR	P	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	U-F	U-N	AU	LOI
		ZN	EAST	NORTH																								
640	741014	13	565700	6216600	GRNT	LT 1	3	00	M	21		BR JY	H	96	33	2	32	11	0.4	355	5.0	3	3.20	22	0.2	3.6	3	35.5
640	741016	13	579700	6222100	PCSC	1-5	6	00	L	12		BR GY	L	106	32	1	20	7	0.1	835	5.0	3	2.40	22	0.6	4.3	1	51.0
640	741017	13	582900	6224000	PCSC	LT 1	7	00	L	21		BR	L	70	17	1	15	6	0.1	440	6.0	3	1.70	26	0.9	3.6	1	44.5
640	741018	13	587500	6224400	MSDM	LT 1	11	00	L	12		BR GN	L	118	45	2	34	12	0.1	225	6.0	3	1.20	38	0.2	1.3	1	11.0
640	741019	13	591100	6227200	MSDM	1-5	10	00	M	21		BR GN	L	90	35	1	26	9	0.1	345	5.0	6	2.60	22	0.2	3.2	2	23.5
640	741021	13	588100	6227900	MSDM	1-5	24	00	L	21		GY	L	90	18	1	24	6	0.1	465	4.0	2	3.50	26	0.2	4.4	1	8.0
640	741022	13	591700	6231600	AMPB	1-5	27	00	L	21		BR GY	L	106	35	1	40	7	0.1	320	3.0	6	3.30	42	0.2	4.1	1	24.5
640	741023	13	593700	6234400	GRNT	1-5	25	00	L	21		GY	L	80	18	1	46	10	0.1	345	2.0	3	2.90	26	0.2	6.6	2	60.0
640	741024	13	595800	6238600	MSDM	1-5	15	00	M	21		BR JN	L	138	54	5	57	19	0.1	540	4.0	3	2.20	46	0.2	3.6	3	36.5
640	741025	13	595600	6241200	MSDM	LT 1	18	00	M	21		BR	L	110	28	2	23	9	0.1	200	4.0	2	1.10	30	0.2	2.1	1	24.0
640	741026	13	593400	6246000	GRNT	LT 1	30	00	M	12		BR	L	96	59	3	25	14	0.2	700	5.0	4	2.30	46	1.4	5.0	1	1.0
640	741027	13	595000	6248800	GRNT	1-5	11	00	M	12		BR GY	L	82	31	6	22	11	0.1	405	5.0	2	2.30	30	2.0	8.7	1	3.0
640	741028	13	594500	6253600	GRNT	1-5	14	00	L	111		GY	L	40	15	1	10	5	0.1	225	0.5	2	1.30	5	0.2	2.9	1	26.5
640	741029	13	594400	6254500	GRNT	1-5	25	00	L	21		GY	L	64	12	1	10	9	0.1	560	2.0	1	2.00	10	0.2	4.6	1	26.5
640	741030	13	592300	6255800	GRNT	1-5	40	10	M	12		BR GN	L	116	27	1	12	10	0.1	800	5.0	4	3.70	42	0.2	4.3	1	27.0
640	741031	13	592300	6255800	GRNT	1-5	40	20	M	12		BR GN		102	31	2	12	12	0.1	860	2.0		4.00		0.2	4.3		16.5
640	741032	13	592400	6259400	GRNT	1-5	20	00	L	12		BR GN		68	17	1	8	6	0.1	380	6.0	5	1.90	34	15.6	21.3	1	3.0
640	741033	13	591500	6263000	GRNT	1-5	5	00	M	12		BR	L	18	3	1	1	1	0.1	140	1.0	1	0.68	10	0.2	1.5	1	19.0
640	741035	13	591000	6265400	GRNT	LT 1	15	00	L	12		BR JN	L	84	11	3	5	6	0.2	290	3.0	6	4.80	14	0.2	3.5	1	48.0
640	741036	13	593100	6270400	GRNT	1-5	6	00	M	3		BR GN		80	22	2	10	8	0.1	430	75.0	3	2.20	30	5.5	16.0		36.5
640	741037	13	593200	6273000	GRNT	1-5	13	00	M	12		BR GN	L	80	22	1	11	7	0.2	440	9.0	3	1.40	22	11.2	20.4	1	56.5
640	741144	13	594200	6274400	GRNT	1-5	15	00	M	12		BR GN	L	100	160	1	17	13	0.4	890	4.0	3	3.00	72	9.0	15.6	1	28.0
640	741145	13	594700	6270700	GRNT	GT 5	15	00	L	12		BR GY	L	68	16	1	15	7	0.2	475	2.3	2	2.60	22	3.1	6.5	1	14.5
640	741146	13	594300	6266500	GRNT	LT 1	19	00	L	12		BR	L	66	27	1	15	10	0.4	350	4.0	6	1.30	54	16.0	28.5	1	61.0
640	741147	13	594400	6261900	GRNT	1-5	24	00	M	12		BR	L	95	22	1	16	11	0.2	1050	4.0	5	7.50	38	8.5	31.3	1	31.5
640	741148	13	595000	6258800	GRNT	1-5	17	00	M	21		GY	L	68	17	1	14	8	0.2	1200	1.3	1	2.80	12	2.0	6.4	1	9.0
640	741150	13	597900	6258800	GRNT	1-5	45	00	M	21		BR	L	70	17	1	14	8	0.2	585	3.0	3	2.55	42	0.2	3.6	1	22.0
640	741151	13	599100	6256100	GRNT	LT 1	48	00	M	21		BR	L	76	30	3	31	37	0.8	740	1.0	3	2.75	48	0.5	3.4	1	23.5
640	741152	13	598800	6250000	PCSC	1-5	35	10	M	21		BR	L	156	33	3	28	40	0.2	1250	0.5	3	4.25	88	0.2	4.7	1	34.0
640	741153	13	598800	6250000	PCSC	1-5	35	20	M	21		BR	L	168	35	2	26	10	0.1	1400	4.0	2	4.45	88	1.0	4.6	1	35.5
640	741154	13	600600	6247500	GRNT	1-5	15	00	M	21		GY	L	86	25	2	24	11	0.6	560	0.5	2	2.85	48	1.0	4.1	1	19.5
640	741155	13	597800	6244800	MSDM	1-5	7	00	L	12		GY	L	76	33	7	29	15	0.1	320	3.0	3	1.75	48	0.5	4.1	1	27.0
640	741156	13	597400	6241800	MSDM	1-5	15	00	M	21		GY	L	96	28	3	27	6	0.2	525	5.0	2	1.85	48	1.0	4.2	1	16.5
640	741157	13	597700	6239400	AMPB	1-5	8	00	M	21		BR GY	L	90	34	2	40	9	0.1	310	6.0	2	1.75	48	0.5	4.1	1	26.5
640	741158	13	597800	6233900	GRNT	1-5	50	00	M	21		BR GY	L	106	34	2	31	9	0.6	610	5.0	2	3.10	62	1.5	4.6	1	24.5
640	741159	13	596200	6230400	GRNT	LT 1	20	00	M	21		BR	L	102	35	2	27	13	0.1	510	4.0	1	2.25	126	0.2	2.1	1	42.0
640	741161	13	594000	6226500	MSDM	LT 1	23	00	M	21		GY	L	126	37	2	31	18	0.4	560	4.0	2	3.35	74	0.2	3.0	1	16.5
640	741162	13	592500	6225400	MSDM	LT 1	6	00	M	21		BR	L	96	24	3	34	14	0.1	330	5.0	3	2.00	62	0.2	3.7	1	34.5
640	741163	13	591000	6222000	MSDM	1-5	11	00	M	3		GY	L	200	33	2	63	22	0.8	475	3.0	2	3.45	54	0.2	3.5	1	13.5
640	741164	13	588700	6222000	MSDM	1-5	24	00	M	21		GY	L	200	44	3	72	30	0.1	975	4.0	4	4.20	54	0.5	4.1	2	12.5
640	741165	13	584900	6220300	GRNT	1-5	40	00	M	3		GY	L	122	33	4	39	13	0.1	660	3.0	2	4.10	48	1.0	5.0	4	10.5
640	741166	13	581100	6216300	MSDM	GT 5	11	00	L	3		GY	L	84	17	3	27	16	0.6	600	3.0	1	2.75	36	0.5	4.7	1	4.5
640	741167	13	577700	6210400	MSDM	GT 5	14	00	M	3		GY	L	118	21	6	34	17	0.6	725	5.0	2	3.85	36	1.0	5.1	1	7.5
640	741168	13	570800	6206700	MSDM	LT 1	11	00	M	12		GN	L	118	35	3	44	18	0.4	915	5.0	2	3.70	68	1.5	5.8	6	26.0
640	741169	13	562800	6217400	WVCC	LT 1	25	00	M	21		BR	L	116	48	2	38	19	0.1	690	5.0	3	3.45	88	2.0	5.1	1	35.5
640	741170	13	583500	6217000	MSDM	1-5	12	00	M	3		GY GN	L	122	24	5	34	18	0.1	500	7.0	3	3.60	62	1.5	4.7	1	15.5
640	741171	13	586800	6217200	GRNT	LT 1	11	00	M	21		BR	L	130	50	3	38	16	0.1	320	4.0	2	2.35	114	0.2	2.9	2	35.0
640	741172	13	591000	6217500	MSDM	1-5	10	00	M	21		BR JY	L	128	38	4	46	14	0.6	550	6.0	3	3.50	54	0.5</			

## GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

MAP	SAMPLE	UTM COORDINATES			ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R E L	C O M P	S U P C O L O U R	Zn	Cu	Pb	Ni	Co	Ag	Mn	As	Mo	Fe	Hg	U-F	U-N	Au	LOI
		ZN	EAST	NORTH																						
64D	741175	13	593700	6223900	MSDM	1-5	6	10	M	3	BR GY L	154	31	4	51	17	0.1	510	3.0	1	3.35	62	3.5	4.0	1	16.0
64D	741176	13	593700	6223900	MSDM	1-5	6	20	M	3	BR GY L	160	33	3	56	22	0.4	525	4.0	1	3.35	62	1.5	4.2	2	16.0
64D	741177	13	597600	6227200	GRNT	LT 1	12	00	M	21	BR L	86	25	1	31	16	0.1	370	6.0	2	2.45	74	0.5	2.1	3	26.0
64D	741179	13	598500	6230200	GRNT	1-5	6	00	M	21	BR L	98	21	1	43	14	0.4	420	5.0	2	2.15	62	1.0	2.7	1	32.5
64D	741181	13	602200	6232100	GRNT	1-5	30	00	M	3	GY L	94	26	6	30	11	0.1	440	0.5	2	3.20	34	2.0	4.8	3	12.5
64D	741182	13	601200	6234800	GRNT	1-5	60	00	M	21	GY L	98	29	2	28	10	0.1	420	1.0	3	3.70	31	2.9	4.8		15.0
64D	741183	13	601200	6237600	GRNT	1-5	15	00	M	12	BR L	126	38	1	30	16	0.1	530	1.0	3	3.80	38	1.7	3.6		45.0
64D	741184	13	600800	6242400	GRNT	LT 1	15	00	M	12	BR GY L	92	30	2	35	11	0.1	370	0.5	2	2.05	38	1.4	3.8	2	26.0
64D	741185	13	602200	6246300	GRNT	LT 1	40	00	M	21	BR GY L	84	29	3	23	8	0.1	685	1.0	2	2.60	45	2.8	5.6	1	20.5
64D	741186	13	605900	6245200	MGMT	GT 5	17	00	M	21	1 BR GY L	48	12	1	11	5	0.1	330	0.5	1	1.45	18	2.0	3.7	1	7.0
64D	741187	13	605100	6248000	GRNT	GT 5	14	00	M	3	GY L	42	9	1	10	4	0.1	310	0.5	2	1.70	14	1.9	4.1	1	4.5
64D	741188	13	601500	6251700	PCSC	LT 1	12	00	M	12	BR L	76	36	2	26	8	0.1	450	1.0	4	1.80	45	2.6	5.9	1	31.5
64D	741189	13	601300	6254900	PCSC	LT 1	18	00	M	21	3R L	84	15	1	11	9	0.1	775	2.0	4	3.60	38	5.9	10.6		18.0
64D	741190	13	602400	6258500	AMPB	LT 1	10	00	M	12	BR L	64	48	1	30	6	0.1	300	0.5	2	1.00	45	1.2	3.0	1	37.5
64D	741192	13	600500	6264300	GRNT	1-5	12	00	M	12	BR L	76	19	2	11	8	0.1	625	0.5	2	2.10	52	2.8	5.0		25.0
64D	741193	13	598200	6264700	GRNT	LT 1	27	00	M	12	BR L	70	24	1	16	8	0.4	480	1.0	2	2.30	59	5.7	7.7	1	31.0
64D	741194	13	598400	6266600	GRNT	LT 1	33	00	M	12	BR L	64	26	1	9	5	0.1	280	0.5	1	1.40	59	3.8	6.3	1	26.0
64D	741195	13	601900	6266600	GRNT	1-5	35	00	M	12	BR GN L	74	20	1	16	6	0.1	675	0.5	3	2.20	48	4.0	6.1	12	32.0
64D	741196	13	602700	6270500	GRNT	1-5	38	00	M	12	3R L	74	30	1	13	8	0.1	660	0.5	2	1.90	62	10.1	13.6	1	28.0
64D	741197	13	598900	6269800	GRNT	LT 1	23	00	L	12	BR L	86	29	1	12	7	0.1	650	0.5	2	2.80	66	2.9	2.8	1	44.0
64D	741198	13	597900	6274400	GRNT	LT 1	24	00	M	21	BR L	92	34	1	59	13	0.1	400	0.5	2	1.90	59	4.5	4.5	2	38.5
64D	741199	13	597200	6277000	GRNT	GT 5	50	00	M	21	BR GN L	66	22	1	12	6	0.1	350	0.5	1	2.30	20	8.2	9.5	2	13.0
64D	741217	13	636000	6283000	MVCC	1-5	20	00	M	21	GY L	58	16	2	21	9	0.4	475	0.5	1	1.75	36	4.8	9.4	1	7.0
64D	741218	13	633700	6282400	GRNT	1-5	17	00	M	21	GY L	72	17	2	25	15	0.2	1050	1.0	1	2.50	36	4.2	6.9	1	8.5
64D	741219	13	635300	6279400	GRNT	LT 1	10	00	M	21	BR L	72	30	1	25	10	0.4	300	6.0	2	1.15	94	16.6	21.9	1	35.0
64D	741221	13	633400	6279900	MVCC	LT 1	35	00	M	21	BK BR L	78	43	1	21	33	0.1	1750	5.0	3	4.20	88	3.0	8.0		49.5
64D	741222	13	629400	6282600	GRNT	LT 1	20	00	M	12	BR GN L	64	22	2	14	9	0.4	650	6.0	3	3.10	80	3.8	6.2	1	43.5
64D	741223	13	627000	6283700	GRNT	GT 5	100	00	M	3	GY L	98	28	4	25	8	0.6	1050	1.0	2	2.00	20	4.3	7.7	1	11.0
64D	741225	13	621200	6283200	GRNT	LT 1	8	00	M	21	BR L	59	22	3	21	8	0.4	270	6.0	2	0.75	114	8.5	21.8	1	45.0
64D	741232	13	601600	6276500	GRNT	1-5	25	00	M	21	GY L	68	15	3	18	10	0.2	1000	0.5	1	2.30	20	2.5	7.7	1	7.5
64D	741233	13	602400	6274300	GRNT	1-5	12	00	M	21	BR L	70	20	3	17	9	0.2	400	5.0	3	1.20	48	1.5	9.3	1	35.5
64D	741234	13	604100	6262000	GRNT	1-5	25	00	M	3	BR GY L	62	11	2	15	9	0.4	420	0.5	2	2.20	36	0.5	4.2	1	7.5
64D	741235	13	604300	6256700	MVCC	LT 1	14	00	M	121	BR	34	18	2	18	6	0.2	150	4.0	4	1.05		2.0	3.8	1	34.0
64D	741236	13	605300	6250800	MSDM	1-5	35	00	M	3	BR GY L	76	25	3	23	11	0.1	540	0.5	2	2.65	48	2.5	5.3	1	14.0
64D	741237	13	608800	6256200	MSDM	LT 1	40	00	M	21	1 BR GY L	58	17	3	15	11	0.2	420	2.0	2	1.70	40	1.0	5.2	2	17.5
64D	741238	13	608500	6259900	PCSC	GT 5	20	10	M	3	GY H	56	17	3	16	7	0.1	500	0.5	2	2.00	48	2.0	5.1	1	8.5
64D	741239	13	608500	6259900	PCSC	GT 5	20	20	M	3	GY H	56	17	1	22	8	0.2	525	0.5	1	1.95	48	0.5	4.9	2	7.0
64D	741241	13	608400	6262400	MVCC	LT 1	17	00	M	3	BR GY L	84	52	2	37	9	0.2	370	5.0	1	1.80	78	2.6	4.6	1	20.0
64D	741242	13	612000	6261600	MVCC	LT 1	20	00	M	21	BR GY L	90	42	2	23	8	0.2	435	4.0	2	1.35	67	2.0	4.2	1	40.0
64D	741243	13	612300	6267000	GRNT	GT 5	20	00	M	3	BR GY L	56	13	1	16	6	0.4	230	2.0	1	1.30	28	2.1	4.8	1	15.0
64D	741244	13	608600	6269200	GRNT	LT 1	15	00	M	3	BR GY L	62	15	1	19	8	0.1	240	4.0	2	1.25	34	4.3	5.5	1	24.5
64D	741245	13	612200	6270400	GRNT	LT 1	13	00	M	12	BR GN L	72	31	1	16	10	0.1	585	5.0	3	1.95	78	4.4	6.5	1	47.5
64D	741246	13	611100	6273300	GRNT	LT 1	65	00	M	12	BR GY L	98	19	1	20	23	0.1	9000	3.0	5	10.00	56	0.2	7.4	3	16.5
64D	741247	13	607500	6274700	GRNT	LT 1	15	00	M	12	BK GN H	58	18	1	10	7	0.1	470	5.0	3	6.75	50	10.0	16.3	16	40.0
64D	741248	13	604400	6280400	GRNT	LT 1	50	00	M	21	BR GY L	58	19	3	15	7	0.1	340	2.0	3	1.50	28	6.2	9.9	2	16.0
64D	741249	13	608900	6280000	GRNT	LT 1	35	00	M	21	BR GY L	70	24	2	20	9	0.1	415	2.0	2	1.80	50	6.2	9.2	1	16.5
64D	741250	13	609100	6277000	GRNT	LT 1	15	00	M	21	BR GY L	48	19	1	15	4	0.1	190	3.0	2	0.90	40	3.8	5.0	2	23.0
64D	741251	13	612800	6277200	GRNT	1-5	30	00	M	12	BR GN L	66	19	1	12	7	0.1	240	4.0	3	1.40	56	2.1	3.0	1	40.0
64D	741252	13	612400	6279800	GRNT	LT 1	40	00	M	12	GY GN L	66	30	1	11	8	0.1	305	3.0	3	1.10	128	3.2	3.1	1	41.0
64D	741253	13	622200	6280700	GRNT	LT 1	15	00	M	12	BR GN H	82	27	3	21	9	0.1	230	1.0	3	2.30	56	3.2	6.0	1	55.0

## GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

				UTM COORDINATES				ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R		C		S																	
MAP	SAMPLE	ZN	EAST	NORTH	L	F	SMPL					N	COLOUR	P	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	U-F	U-N	AU	LOI				
64D	741254	13	622600	6277400	GRNT	LT 1	20	00	M	21	BR	GY	L	88	27	2	15	6	0.1	305	1.0	1	1.00	90	1.6	4.6	1	35.5					
64D	741255	13	624500	6278600	GRNT	GT 5	25	10	M	3	GY			88	28	5	18	8	0.1	405	1.0	1	1.70	22	3.2	7.2	1	15.5					
64D	741256	13	624500	6278600	GRNT	GT 5	25	20	M	3	GY			56	23	5	16	8	0.1	295	1.0	2	1.40	18	2.6	4.6	1	11.5					
64D	741258	13	626500	6276800	GRNT	LT 1	8	00	M	111	BR	L	64	28	3	14	6	0.2	595	0.5	2	2.40	56	11.4	20.3	1	42.5						
64D	741259	13	629500	6276800	GRNT	GT 5	35	00	M	12	BR	GY	60	25	6	18	9	0.1	1400	2.0	5	2.40	28	3.8	8.5	2	22.5						
64D	741261	13	625400	6273600	MVCC	LT 1	19	00	M	12	BR	GN	L 260	58	2	30	13	0.2	795	0.5	4	2.80	78	0.8	2.5	2	41.5						
64D	741262	13	622300	6274500	PCSC	LT 1	9	00	M	12	BR	GN	L 144	110	5	46	11	0.1	450	0.5	3	0.90	100	4.1	7.6	1	54.0						
64D	741263	13	619800	6277000	GRNT	LT 1	35	00	M	21	BR	GY	L 94	29	2	21	11	0.1	835	1.0	2	1.75	67	4.6	9.2	1	24.5						
64D	741264	13	620400	6273200	PCSC	1-5	95	00	M	12	BR	L	66	46	2	19	5	0.2	275	0.5	2	1.80	100	3.0	5.4	21	38.5						
64D	741265	13	619800	6269400	GRNT	1-5	8	00	M	3	BR	GN	L 68	24	1	19	6	0.2	750	0.5	3	1.15	34	4.4	7.4	1	71.0						
64D	741266	13	623000	6270000	MVCC	LT 1	33	00	M	12	BK	BR	L 96	64	1	51	41	0.1	1850	2.0	4	5.65	78	0.2	3.6	4	45.5						
64D	741267	13	625000	6269100	GRNT	LT 1	10	00	M	21	BR	L	98	25	1	21	12	0.1	350	0.5	2	1.30	67	3.2	5.1	1	35.5						
64D	741268	13	619700	6265800	MVCC	LT 1	30	00	M	21	BR	L	82	35	1	19	12	0.1	670	0.5	2	1.85	90	3.8	8.6	1	40.0						
64D	741270	13	618100	6262100	PCSC	GT 5	42	00	M	3	GY	L	58	17	3	19	5	0.1	370	1.0	2	1.80	34	3.2	4.5	1	12.0						
64D	741271	13	616800	6261800	PCSC	LT 1	30	00	M	21	BR	GY	L 70	50	4	30	7	0.4	810	2.0	3	1.65	60	1.8	4.1	1	27.0						
64D	741272	13	616300	6254400	PCSC	1-5	44	00	M	3	BR	GY	L 66	25	5	23	8	0.2	725	1.0	3	2.20	45	4.8	7.1	5	14.0						
64D	741273	13	616200	6252200	PCSC	LT 1	6	00	M	21	BR	GY	H 156	29	2	43	11	0.2	305	4.0	2	2.05	64	1.8	3.5	1	29.5						
64D	741274	13	616500	6249100	PCSC	1-5	13	10	M	21	BR	GY	L 330	56	3	78	22	0.4	1250	3.0	4	2.65	45	2.7	6.3	2	19.0						
64D	741275	13	616500	6249100	PCSC	1-5	13	20	M	21	BR	GY	L 370	55	6	88	21	0.4	1350	1.0	5	2.75	40	3.2	6.8	2	17.5						
64D	741276	13	605000	6240500	AMPB	LT 1	26	00	M	3	BR	GY	L 88	22	5	29	12	0.4	470	1.0	2	2.35	45	2.6	5.0	1	13.0						
64D	741277	13	604600	6238600	AMPB	1-5	40	00	M	3	BR	GY	L 92	24	5	29	12	0.4	450	0.5	1	2.55	40	2.4	5.1	1	12.0						
64D	741278	13	603900	6235200	GRNT	1-5	55	00	M	21	BR	GY	L 96	32	6	26	11	0.2	450	1.0	1	2.35	60	2.1	4.9	1	24.5						
64D	741279	13	604600	6232400	GRNT	LT 1	7	00	M	21	BR	GY	L 98	25	1	27	13	0.2	480	4.0	2	2.00	45	2.1	4.5		36.0						
64D	741281	13	601100	6227000	GRNT	1-5	24	00	M	21	BR	GY	L 110	35	4	45	15	0.1	500	0.5	3	2.95	54	3.2	5.4	3	21.0						
64D	741282	13	598200	6224400	GRNT	1-5	16	00	M	3	BR	GY	L 90	19	3	30	12	0.1	340	0.5	2	2.45	36	1.6	3.0	4	10.5						
64D	741283	13	596100	6219300	MVCC	LT 1	11	00	M	21	BR	GY	L 124	31	3	42	13	0.1	340	0.5	3	2.95	45	1.3	2.8	1	20.0						
64D	741284	13	594200	6215100	GRNT	LT 1	4	00	M	21	GY	H 114	28	4	37	14	0.1	600	1.0	3	2.95	30	2.1	3.7	3	17.5							
64D	741285	13	588300	6213000	MSDM	1-5	15	00	M	21	BR	GY	H 112	41	6	45	14	0.1	525	0.5	2	3.35	36	3.3	5.3	1	21.0						
64D	741286	13	583600	6214000	MSDM	1-5	47	00	M	21	BR	GY	H 104	39	5	41	13	0.1	470	0.5	3	3.00	40	3.5	5.8	1	16.5						
64D	741287	13	578500	6207700	MSDM	GT 5	17	00	M	3	GY	L 120	25	5	43	16	0.1	700	1.0	3	3.95	40	3.0	5.6	2	9.5							
64D	741288	13	581000	6207500	MSDM	GT 5	40	00	M	3	GY	L 122	28	4	41	14	0.2	500	0.5	3	3.75	40	2.4	5.8	6	11.5							
64D	741289	13	581300	6210400	MSDM	GT 5	25	00	M	3	GY	L 90	22	3	33	14	0.2	575	0.5	2	3.30	36	1.3	5.8	1	7.0							
64D	741290	13	585700	6209400	MSDM	1-5	15	00	M	3	GY	L 90	24	3	33	13	0.2	480	0.5	3	2.85	26	1.6	6.3	3	7.0							
64D	741291	13	587600	6210700	MSDM	1-5	16	00	M	3	GY	L 104	28	5	39	14	0.2	490	0.5	2	3.35	40	1.8	5.9	1	9.0							
64D	741302	13	608000	6231200	GRNT	LT 1	9	00	M	21	BR	GN	L 136	33	2	25	10	0.1	360	2.0	5	1.35	50	0.9	3.0	1	60.0						
64D	741303	13	608200	6235700	GRNT	GT 5	24	00	M	3	GY	L 52	10	1	14	6	0.2	180	0.5	2	1.50	45	1.0	3.7	3	7.5							
64D	741305	13	608000	6237000	GRNT	GT 5	25	00	M	3	GY	L 42	8	1	12	5	0.1	150	2.0	2	1.15	26	1.8	3.0	4	6.0							
64D	741306	13	616500	6243900	PCSC	1-5	10	00	M	21	BK	GY	L 76	19	2	47	15	0.1	2950	1.0	4	6.15	50	0.5	4.1	1	15.5						
64D	741307	13	619900	6246900	PCSC	POND	55	00	M	3	BR	H	64	22	3	17	8	0.2	170	5.0	4	3.10	45	0.5	3.1	1	18.5						
64D	741312	13	631200	6250900	PCSC	1-5	22	00	M	12	BR	GY	L 450	70	1	84	23	0.2	560	0.5	3	6.00	80	2.4	5.1	2	23.0						
64D	741313	13	630900	6254900	PCSC	LT 1	25	00	L	21	BR	GY	L 74	40	2	23	7	0.1	240	0.5	2	1.50	84	1.7	4.0	1	21.0						
64D	741314	13	631300	6257400	PCSC	LT 1	44	00	M	12	BK	BR	L 26	6	1	10	5	0.1	295	0.5	2	0.85	16	0.2	2.1	1	7.0						
64D	741315	13	634900	6260100	PCSC	LT 1	10	00	M	21	BR	GY	H 46	17	1	16	5	0.1	170	2.0	2	1.00	36	1.6	3.4	4	16.0						
64D	741316	13	635900	6261800	PCSC	LT 1	15	00	M	21	BR	GY	L 52	13	2	14	6	0.1	120	2.0	2	0.85	36	2.0	2.7	1	36.5						
64D	741317	13	641400	6263000	PCSC	LT 1	8	00	M	21	BR	GY	L 72	14	1	58	16	0.1	360	0.5	2	1.00	30	1.8	3.4	1	5.0						
64D	741318	13	641000	6265600	PCSC	LT 1	40	00	M	12	BR	L	132	120	1	56	12	0.1	510	4.0	2	1.25	94	4.2	7.6	1	43.5						
64D	741319	13	644000	6267500	PCSC	1-5	35	00	M	12	GY	L 134	28	5	71	34	0.1	2200	2.0	1	4.05	54	3.4	9.6	1	14.5							
64D	741321	13	648000	6266600	PCSC	LT 1	10	00	M	12	BR	GN	L 146	46	1	53	18	0.1	470	0.5	2	2.25	84	2.7	4.7	1	54.5						
64D	741322	13	650800	6266600	PCSC	LT 1	13	00	M	21	BR	L	98	25	1	32	13	0.2	395	0.5	1	1.95	64	1.0	3.5	1	29.0						
64D	741323	13	651800	6271600	PCSC	LT 1	25	00	M	21	BR	L	86	43	1	25	14	0.1	1500	2.0	1	3.85	54	15.0	23.8	8	19.5						

## GOLD IN LAKE SEDIMENTS (PART OF NTS 64D) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

MAP	SAMPLE	UTM COORDINATES			ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R E L F	SMPL COMP	C O N T	S U S P	SAMPLE COLOUR	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	U-F	U-N	AU	LOI
		ZN	EAST	NORTH																								
64D	741324	13	651200	6273100	PCSC	LT 1	20	00	M	12		BR	GY	L 110	28	1	24	14	0.2	1150	2.0	4	3.35	74	9.6	17.3	9	28.5
64D	741412	13	658700	6270600	PCSC	LT 1	10	00	M	21		BR	H	82	30	1	18	8	0.1	285	0.5	3	0.95	24	1.8	3.8	1	35.5
64D	741413	13	653400	6268800	PCSC	1-5	16	00	L	12		BR	L	86	21	1	20	8	0.1	395	0.5	3	3.25	24	0.8	3.5	1	28.5
64D	741414	13	653900	6266600	PCSC	1-5	16	00	M	3		BR	GN	L 86	39	2	40	10	0.4	130	0.5	3	0.90	18	2.1	3.3	2	
64D	741418	13	649300	6263600	PCSC	1-5	19	00	M	21		BR	GY	L 144	37	2	41	21	0.6	510	0.5	4	3.50	42	0.7	3.5	1	21.0
64D	741419	13	646700	6263300	PCSC	LT 1	55	00	M	21		BR	L	70	100	1	40	6	0.4	360	0.5	4	1.35	70	2.1	4.7	8	40.0
64D	741421	13	644500	6262600	PCSC	LT 1	13	00	M	12		BR	L	84	40	1	44	11	0.1	190	6.0	2	1.60	58	2.5	2.7	1	33.0
64D	741422	13	644400	6258900	PCSC	LT 1	25	00	M	12		BR	L	80	33	1	29	7	0.6	340	6.0	1	1.70	80	2.5	2.5	2	37.0
64D	741423	13	640800	6259000	PCSC	1-5	55	00	M	21		BR	L	96	47	1	25	7	0.1	565	6.0	4	4.40	70	3.5	3.8	1	25.5
64D	741424	13	638000	6259900	PCSC	1-5	11	00	M	21		BR	L	94	23	1	24	11	0.1	670	4.0	3	3.70	48	2.0	2.5	1	32.5
64D	741425	13	637100	6256000	PCSC	LT 1	47	00	M	21		BR	L	66	29	3	19	5	0.1	250	4.0	2	1.20	13	2.5	2.3	1	30.5
64D	741427	13	633500	6255400	PCSC	1-5	55	00	M	21		BR	GY	L 98	28	1	21	6	0.1	550	4.0	2	2.10	41	3.0	4.1	1	12.0
64D	741428	13	633600	6253000	PCSC	1-5	35	00	M	21		BR	GY	L 118	28	1	27	15	0.1	470	6.0	1	2.60	55	3.0	3.9	1	17.5
64D	741451	13	611400	6240700	PCSC	GT 5	12	00	M	21		GY	L	56	11	4	18	8	0.1	380	1.0	1	2.10	22	1.6	3.9	20	9.0
64D	741452	13	607800	6240600	PCSC	GT 5	30	00	M	3		BR	GY	L 42	9	1	11	6	0.1	200	1.0	1	1.30	6	2.0	3.3	1	7.0
64D	741454	13	612600	6245600	PCSC	LT 1	12	00	M	12		BR	H	144	28	3	36	16	0.2	295	1.0	3	3.00	46	2.4	4.5	1	44.5
64D	741618	13	577500	6266000	GRNT	LT 1	14	00	M	3		BR	GY	H 86	47	1	18	6	0.1	240	6.0	2	1.90	42	6.0	13.2	1	44.0
64D	741619	13	580900	6265800	GRNT	LT 1	30	00	M	3		BR	L	66	44	1	18	5	0.1	760	2.0	5	12.00	48	18.5	37.1	1	33.5
64D	741621	13	581400	6262500	GRNT	1-5	25	00	M	21		BR	L	110	37	1	18	11	0.6	7200	4.0	2	6.70	27	9.0	17.0	1	19.5
64D	741622	13	577300	6261800	GRNT	GT 5	70	00	M	21		BR	GY	L 76	23	1	14	6	0.4	1100	4.0	2	2.80	18	3.0	6.5	1	13.5
64D	741623	13	574600	6258500	PCSC	1-5	70	00	M	12		BR	GY	L 68	24	1	13	4	0.1	450	4.0	3	3.20	32	3.0	5.3	1	16.0
64D	741624	13	577200	6258700	GRNT	GT 5	12	00	L	3		BR	GY	L 80	47	1	30	3	0.1	265	2.0	4	2.50		4.0	6.1	1	52.0
64D	741625	13	580500	6258800	GRNT	LT 1	16	00	L	3		BR	L	72	64	1	14	6	0.1	340	8.0	5	2.50	55	1.0	2.7	8	54.0
64D	741626	13	578800	6256400	MARK	1-5	27	00	L	21		BR	GY	L 108	32	1	35	23	0.1	2400	2.0	3	3.90	21	1.5	5.5	1	8.0
64D	741627	13	581400	6254800	MARK	1-5	44	00	L	21		GY	TN	L 62	25	1	9	3	0.2	275	4.0	2	1.80	24	1.0	2.9	2	11.0
64D	741628	13	580500	6251100	GRNT	1-5	25	00	M	21		GY	TN	L 70	27	1	10	4	0.1	460	4.0	2	2.30	36	1.5	4.2	3	17.0
64D	741629	13	577600	6251600	GRNT	LT 1	20	00	M	12		BR	GY	L 780	81	1	86	46	0.1	950	6.0	6	6.00	62	2.5	4.9	12	25.5
64D	741630	13	577800	6249900	GRNT	1-5	25	00	L	12		BR	GY	L 36	9	1	8	7	0.1	600	2.0	2	1.50	13	1.5	3.0	2	5.5
64D	741632	13	580600	6249500	GRNT	LT 1	20	10	M	21		BR	GY	L 82	20	3	13	9	0.1	935	2.0	3	1.80	32	2.0	5.0	1	12.5
64D	741633	13	580600	6249500	GRNT	LT 1	20	20	M	21		BR	GY	L 76	19	1	12	8	0.1	870	2.0	3	1.70	126	2.0	4.8	1	10.5
64D	741634	13	583000	6249700	GRNT	1-5	35	00	M	21		GY	TN	L 78	33	2	28	11	0.1	630	4.0	2	2.90	132	2.0	4.2	1	14.5
64D	741635	13	584400	6245000	HVCC	LT 1	44	00	M	21		BR	L	76	25	2	13	3	0.1	590	6.0	3	1.50	132	1.5	3.7	3	30.5
64D	741636	13	581000	6245800	GRNT	1-5	33	00	L	111		GY	L	98	35	1	27	15	0.1	4700	4.0	7	16.00	58	2.5	6.7	1	16.0
64D	741637	13	574000	6244800	GRNT	GT 5	98	00	M	3		GY	L	64	22	4	15	7	0.1	1200	2.0	3	3.60	94	1.5	5.5	1	4.0
64D	741638	13	578000	6241400	GRNT	LT 1	15	00	L	111		BR	H	88	17	1	10	5	0.1	380	8.0	4	4.30	162	1.5	3.0	2	45.0
64D	741639	13	577800	6238000	GRNT	1-5	10	00	M	12		BR	GY	L 82	26	2	20	5	0.1	330	8.0	1	1.70	66	2.5	5.0	1	33.0
64D	741641	13	577600	6235800	GRNT	1-5	25	00	M	12		BR	GY	L 92	23	3	15	5	0.1	370	6.0	1	2.00	70	2.0	4.8	4	24.0
64D	741642	13	574700	6234700	GRNT	LT 1	13	00	M	3		BR	GN	L 108	38	1	15	10	0.1	615	6.0	2	3.70	100	1.5	3.3	1	47.0
64D	741645	13	564000	6256400	PCSC	LT 1	24	00	L	12		BR	GN	L 122	38	2	54	37	0.1	480	8.0	2	4.70	200	3.0	5.3	1	24.0
64D	741646	13	565900	6258500	PCSC	GT 5	56	00	L	12		BR	GY	L 72	26	1	23	5	0.4	300	6.0	2	1.70	55	3.0	6.2	1	16.0
64D	741647	13	570900	6259000	PCSC	LT 1	17	00	M	3		BR	GY	L 78	43	2	81	10	0.1	275	10.0	3	1.10	190	2.0	3.6	1	45.0
64D	741649	13	570300	6255200	PCSC	1-5	45	00	L	12		GY	GN	L 88	21	1	22	8	0.1	395	4.0	2	2.90	82	2.5	3.9	1	14.5
64D	741650	13	572800	6256000	PCSC	1-5	40	00	L	21		BR	GY	L 66	20	2	16	5	0.1	340	4.0	1	2.00	91	2.5	3.7	1	13.5
64D	741651	13	572400	6253500	PCSC	1-5	50	00	L	21		BR	GY	L 82	22	3	19	7	0.4	415	4.0	2	2.30	52	2.5	4.0	1	16.5
64D	741652	13	570400	6251600	GRNT	1-5	23	00	L	12		BR	GY	L 110	24	1	27	8	0.1	340	6.0	3	3.10	62	3.0	5.2	1	13.5
64D	741653	13	572300	6249200	PCSC	1-5	95	00	L	21		GY	L	66	20	1	22	7	0.1	525	4.0	3	2.60	44	3.0	4.3	1	7.0
64D	741654	13	571200	6247200	PCSC	1-5	110	10	L	21		BR	GY	L 86	53	1	41	18	0.4	4100	8.0	4	3.80	66	1.5	5.3	1	14.5
64D	741655	13	571200	6247200	PCSC	1-5	110	20	L	21		BR	GY	L 94	53	1	46	22	0.1	15000	6.0	5	4.00	96		4.9	2	13.5
64D	741656	13	573400	6241200	GRNT	GT 5	25	00	L	3		GY	L	52	16	1	15	5	0.1	300								

## GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

MAP	SAMPLE	UTM COORDINATES			ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R E L	C O N	S U P	SAMPLE ANALYSIS											U-F					LOI		
		ZN	EAST	NORTH								L SHPL T	F COMP	N COLOUR	P	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	U-F	U-N	AU	LOI
640	741658	13	581800	6239600	GRNT	LT 1	20	00	M			3	BR	GY	L 70	13	1	13	4	0.4	190	4.0	1	1.40	66	0.5	2.8	2	23.0	
640	741659	13	585600	6241800	GRNT	LT 1	9	00	L	12		12	BR	H	98	11	1	9	3	0.1	230	8.0	2	2.40	91	0.2	1.3	1	41.5	
640	741661	13	583700	6239300	MVCC	LT 1	25	00	L	12		12	BR	L	70	11	1	6	5	0.1	425	10.0	3	2.10	74	0.2	2.7	1	35.5	
640	741662	13	573600	6238600	GRNT	GT 5	26	00	M	21		21	GY	L	40	15	3	13	4	0.2	300	2.0	1	1.40	34	3.4	4.9	1	10.0	
640	741663	13	568200	6241600	GRNT	GT 5	30	00	M	3		3	GY	L	62	12	4	20	7	0.1	350	2.0	2	2.10	41	1.5	3.7	1	6.5	
640	741664	13	566900	6246100	PCSC	GT 5	17	00	L	12		12	BR	GY	L 82	16	1	29	15	0.2	630	4.0	3	4.90	52	2.8	5.3	1	13.5	
640	741665	13	565600	6248700	PCSC	1-5	40	00	L	21		21	GY	L	100	18	2	25	15	0.1	415	4.0	2	4.70	66	2.2	4.9	1	17.0	
640	741666	13	566900	6252700	PCSC	LT 1	15	00	M	12		12	3R	JN	L 172	30	1	50	19	0.1	630	6.0	3	7.90	66	2.4	5.9	1	31.5	
640	741667	13	566200	6254400	PCSC	1-5	35	00	M	21		21	GY	L	184	31	1	90	28	0.1	7500	2.0	7	12.00	70	0.7	10.1	1	20.0	
640	741668	13	562700	6251300	PCSC	GT 5	32	00	M	21		21	BR	GY	L 50	16	3	17	7	0.1	285	4.0	2	1.90	66	2.8	5.3	1	16.0	
640	741669	13	562600	6242500	PCSC	LT 1	45	00	L	21		21	BR	H	102	23	1	23	6	0.1	490	2.0	3	5.00	66	2.6	4.0	1	25.0	
640	741670	13	566600	6239400	MVCC	LT 1	40	00	M	21		21	BR	GY	L 82	33	3	22	5	0.2	770	6.0	5	2.90	86	6.2	7.8		31.0	
640	741671	13	564300	6238000	MVCC	POND	10	10	M	12		12	BR	L	110	32	3	34	8	0.2	265	12.0	3	1.30	144	2.4	3.0		62.0	
640	741672	13	564300	6238000	MVCC	POND	10	20	M	12		12	BR	L	106	28	2	34	8	0.1	240	10.0	4	1.30	144	0.9	2.6	1	61.5	
640	741673	13	564900	6234800	MVCC	POND	6	00	M	21		21	BR	H	200	35	1	49	10	0.1	160	8.0	2	1.60	86	1.5	2.2	1	37.0	
640	741674	13	565800	6231400	MVCC	LT 1	19	00	M	21		21	BR	GY	H 110	46	5	39	12	0.1	470	4.0	1	2.90	105	1.9	3.7	3	27.0	
640	741675	13	566600	6234400	MVCC	1-5	75	00	M	3		3	GY	L	92	25	6	25	8	0.1	740	4.0	2	4.00	74	1.5	4.3	1	11.5	
640	741677	13	569700	6234900	GRNT	LT 1	8	00	L	12		12	BR	H	260	40	1	59	11	0.1	320	10.0	2	2.30	100	1.7	2.4	1	46.5	
640	741678	13	571500	6230800	MVCC	LT 1	12	00	M	3		3	BR	GY	L 60	45	3	30	3	0.1	405	8.0	2	0.90	164	1.4	2.1	3	54.0	
640	741679	13	567400	6229400	MVCC	LT 1	10	00	M	3		3	BR	H	66	56	3	29	5	0.4	380	12.0	7	1.30	100	2.6	4.0	4	49.0	
640	741681	13	569200	6228000	MVCC	GT 5	21	00	M	21		21	GY	L	68	14	1	20	8	0.1	500	2.0	3	2.70	66	1.5	4.9	1	9.0	
640	741682	13	563500	6227000	MVCC	LT 1	18	00	L	21		21	BR	L	90	32	1	30	8	0.2	870	10.0	3	2.30	120	2.0	4.6	3	44.5	
640	742001	13	564200	6206800	MARK	GT 5	50	00	M	12		12	BR	GN	L 116	37	3	43	14	0.2	625	4.0	2	3.80	38	0.9	5.2	3	25.0	
640	742002	13	566200	6208100	MARK	GT 5	25	00	M	21		21	GY	GN	L 136	35	5	46	19	0.1	875	1.0	1	4.70	26	1.6	5.8	2	18.0	
640	742003	13	566700	6211200	PCSC	GT 5	50	00	M	21		21	GY	GN	L 100	28	1	39	16	0.2	800	0.5	2	3.70	18	1.1	5.0	4	13.5	
640	742004	13	570800	6210500	MSDM	LT 1	35	00	L	12		12	3R	GN	L 122	48	4	47	16	0.2	675	3.0	3	3.00	46	2.8	4.8	1	31.0	
640	742005	13	563600	6210500	MSDM	1-5	12	00	M	21		21	GY	GN	L 142	34	9	47	18	0.2	575	5.0	1	4.50	22	2.8	5.6	1	10.5	
640	742006	13	573600	6210500	MSDM	1-5	12	00	M	21		21	GY	GN	L 140	34	2	45	16	0.2	560	0.5	1	4.50	22	1.1	5.6	6	10.0	
640	742007	13	575200	6212900	MSDM	LT 1	7	00	M	12		12	BR	GN	L 102	28	5	41	13	0.4	675	2.0	1	2.80	22	1.8	5.7	1	15.0	
640	742008	13	577300	6215200	MSDM	GT 5	16	00	M	21		21	GY	GN	L 116	26	5	40	14	0.2	615	0.5	1	3.80	18	0.5	4.8	4	7.0	
640	742009	13	578200	6218400	PCSC	GT 5	35	00	L	3		3	GY	GN	L 100	22	6	33	13	0.6	600	1.0	1	3.70	14	2.1	4.4	2	2.5	
640	742011	13	577400	6222500	GRNT	1-5	45	00	L	21		21	GN	TN	L 70	17	5	19	8	0.4	370	0.5	2	2.30	14	1.6	4.5	1	6.0	
640	742012	13	577000	6226000	GRNT	GT 5	60	00	L	12		12	GY	GN	L 84	16	14	28	21	1.0	4650	4.0	3	6.90	14	0.2	6.2	1	8.0	
640	742013	13	577500	6226800	GRNT	GT 5	80	00	L	21		21	GN	TN	L 76	18	3	18	9	0.2	525	0.5	1	2.60	14	2.6	4.8	4	4.5	
640	742014	13	581200	6227300	GRNT	1-5	10	00	L	12		12	BR	GN	H 70	22	5	27	7	0.1	345	3.0	2	2.20	22	4.6	8.5	3	22.0	
640	742015	13	585300	6228800	PCSC	GT 5	25	00	M	3		3	GN	TN	64	43	3	27	5	0.1	480	2.0	6	2.20	14	3.9	5.5	1	20.0	
640	742016	13	584400	6230400	PCSC	GT 5	35	00	M	12		12	3R	TN	L 80	22	6	28	12	0.1	490	0.5	2	3.00	26	0.2	5.4	1	10.0	
640	742017	13	587900	6232000	PCSC	1-5	50	00	L	12		12	BR	GN	L 78	28	5	23	7	0.2	345	1.0	2	2.40	14	3.0	5.3	1	11.0	
640	742018	13	591300	6235300	MSDM	1-5	60	00	L	3		3	BR	GN	L 82	49	5	26	6	0.4	355	2.0	3	1.70	30	6.2	8.6	1	41.0	
640	742019	13	590800	6237600	MSDM	LT 1	17	00	M	3		3	BR	GN	L 104	49	4	34	13	0.2	525	5.0	7	2.40	42	9.0	7.7	1	29.0	
640	742021	13	590400	6241900	GRNT	LT 1	13	00	M	3		3	BR	GN	50	29	7	24	4	0.1	550	3.0	2	1.50	38	6.4	7.9	1	27.5	
640	742022	13	591400	6244400	GRNT	LT 1	70	00	M	3		3	BR	GN	150	33	3	28	18	0.6	4750	3.0	3	3.80	30	6.9	16.9	3	32.0	
640	742023	13	589800	6251100	MVCC	1-5	25	00	L	21		21	BR	GN	24	7	2	2	3	0.1	550	1.0	1	1.00	4	1.1	1.4	1	5.5	
640	742024	13	588600	6255000	GRNT	LT 1	25	00	L	12		12	BR	GN	L 76	15	2	5	4	0.4	285	4.0	2	3						



## GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

MAP	SAMPLE	UTM ZN	UTM EAST	UTM NORTH	ROCK TYPE	LAKE AREA	SMPL DPTH	RP ST	R E L S M P L C O M P T	C O L O U R	S U P	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	U-F	U-N	AU	LOI
640	742032	13	588300	6272400	GRNT	LT 1	10	00	L	3	BR GN	L 100	11	2	12	12	0.1	540	6.0	4	2.50	110	1.9	2.5	1	63.5
640	742128	13	584800	6268600	GRNT	LT 1	17	10	L	3	BR GN	L 92	13	1	7	8	0.1	490	4.0	2	3.40	80	3.5	6.6	1	21.0
640	742129	13	584800	6268600	GRNT	LT 1	17	20	L	3	BR GN	L 100	13	3	6	7	0.1	525	3.0	2	3.80	68	2.7	6.7	1	20.5
640	742130	13	584900	6266000	GRNT	1-5	8	00	L	12	BR GN	L 96	23	1	12	7	0.1	295	5.0	2	2.30	56	6.6	7.5	1	30.5
640	742132	13	585600	6263600	GRNT	1-5	25	00	L	3	BR GN	L 56	16	1	8	5	0.1	320	0.5	2	1.60	56	3.0	5.1	1	28.0
640	742133	13	584800	6258200	GRNT	LT 1	9	00	L	3	BR GN	L 58	16	1	8	4	0.1	215	4.0	2	1.20	46	4.0	4.5	3	34.0
640	742134	13	584600	6252400	GRNT	LT 1	30	00	L	3	BR GN	L 66	18	1	13	6	0.1	440	3.0	2	2.00	56	3.2	5.4	1	26.0
640	742135	13	587000	6250600	GRNT	LT 1	13	00	L	3	BR GN	L 62	38	1	22	9	0.1	170	5.0	1	1.60	68	0.6	2.2	1	47.0
640	742136	13	587600	6249000	GRNT	LT 1	35	00	L	3	BR GN	L 50	29	1	4	9	0.1	1250	3.0	7	24.00	56	6.2	8.9	7	29.0
640	742137	13	588600	6244900	GRNT	LT 1	25	00	L	3	BR GN	L 82	90	1	35	11	0.1	250	6.0	3	1.30	90	2.3	2.1	15	49.0
640	742138	13	586600	6242800	GRNT	LT 1	6	00	L	3	BR	L 44	11	1	7	4	0.1	150	5.0	1	1.20	56	1.0	1.5	1	36.5
640	742139	13	587200	6237900	MARK	LT 1	15	00	L	3	BR GN	L 50	35	1	46	10	0.2	235	5.0	1	1.80	80	2.3	1.8	9	54.0
640	742141	13	588100	6235100	PCSC	LT 1	11	00	M	3	BR GN	L 98	31	1	30	15	0.1	295	8.0	1	1.70	80	3.5	2.4	1	31.5
640	742142	13	584500	6235400	MARK	1-5	25	00	L	12	BR GN	L 76	63	3	77	11	0.4	540	8.0	1	1.80	68	3.8	4.6	1	19.0
640	742143	13	581900	6234200	MVCC	LT 1	25	00	L	21	BR GN	L 90	22	1	31	11	0.1	600	7.0	2	4.20	56	2.5	3.4	2	17.5
640	742144	13	579800	6232200	MARK	1-5	45	10	L	21	GY GN	L 74	20	2	21	9	0.1	420	2.0	1	2.20	38	4.2	4.7	1	10.0
640	742145	13	579800	6232200	MARK	1-5	45	20	L	21	GY GN	L 68	22	3	21	9	0.1	440	8.0	1	2.20	38	4.5	4.7	1	10.0
640	742146	13	578200	6230000	MARK	1-5	60	00	L	21	GY GN	L 85	21	2	30	11	0.1	480	2.0	2	2.90	40	6.9	8.3	6	4.5
640	742147	13	575000	6227400	GRNT	GT 5	25	00	L	3	GY	62	12	3	20	9	0.1	620	1.0	2	2.10	22	1.6	3.9	6	4.5
640	742148	13	574600	6225400	GRNT	GT 5	90	00	L	3	GY	76	18	2	24	10	0.1	700	2.0	2	2.80	56	3.8	4.8	1	9.0
640	742149	13	574400	6222300	GRNT	GT 5	10	00	L	21	GY	34	11	1	14	5	0.1	320	3.0	1	1.40	22	2.0	2.5	1	28.0
640	742150	13	570400	6218200	GRNT	LT 1	70	00	L	12	GN TN	L 95	30	5	22	9	0.2	730	4.0	2	2.30	56	2.7	3.7	7	26.0
640	742152	13	568700	6214600	MARK	1-5	20	00	M	3	GY GN	L 124	29	5	52	17	0.4	525	1.3	3	4.30	34	0.5	5.7	6	12.5
640	742153	13	567700	6214600	MARK	1-5	15	00	M	3	GY	L 122	28	5	50	16	0.2	485	1.0	3	4.10	30	1.6	5.6	11	11.5
640	742154	13	563000	6212500	GRNT	LT 1	10	00	L	3	BR GN	L 101	38	2	44	10	0.2	305	4.0	2	2.20	26	1.3	4.0	12	41.5
640	742223	13	563200	6224400	MVCC	LT 1	60	00	L	3	BR GN	L 76	60	1	28	8	0.1	535	1.5	3	1.45	72	1.7	3.3	24	42.0
640	742224	13	566900	6222200	MVCC	POND	9	10	L	3	BR GN	L 46	30	1	19	6	0.1	180	0.5	2	1.45	40	1.5	2.2	6	34.0
640	742225	13	566900	6222200	MVCC	POND	9	20	L	3	BR GN	L 48	28	1	19	7	0.1	170	0.5	1	1.60	50	1.5	2.0	4	31.5
640	742226	13	568100	6223500	MVCC	LT 1	60	00	L	12	BR GN	L 70	40	1	17	7	0.1	350	1.0	3	1.10	53	1.7	2.8		36.5
640	742227	13	570100	6222700	MVCC	LT 1	11	00	L	3	BR GN	L 66	37	1	25	9	0.1	320	1.0	3	1.85	44	2.0	3.8	12	24.0

GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

SUMMARY STATISTICS

SUBSET	VARIABLE	UNITS	N	ARITH MEAN	STD DEV	CV %	SKEW	EXCESS KURT	95% LIMITS ON MEAN	GEOM MEAN	LOG 10 MEAN	STD DEV	95% LIMITS ON MEAN		
TOTAL	ZN	PPH	266	92.9	59.8	64.4	7.00	69.66	85.6	100.	84.3	1.9256	.1760	80.2	88.5
TOTAL	CU	PPH	266	29.5	17.6	59.5	3.02	15.33	27.4	31.6	25.8	1.4124	.2227	24.3	27.5
TOTAL	PB	PPH	266	2.33	1.73	74.0	2.02	7.51	2.13	2.54	1.87	.2718	.2812	1.73	2.02
TOTAL	NI	PPH	266	26.6	15.7	59.1	1.36	2.40	24.7	28.5	22.3	1.3431	.2734	20.7	24.1
TOTAL	CO	PPH	266	10.7	6.57	61.5	2.30	7.47	9.89	11.5	9.21	.9643	.2347	8.63	9.83
TOTAL	AG	PPH	266	.189	.154	81.6	2.15	4.78	.170	.207	.152	-.8190	.2607	.141	.163
TOTAL	MN	PPH	266	667.	981.	147.1	5.73	37.03	549.	786.	484.	2.6845	.2854	447.	524.
TOTAL	U-F	PPH	266	2.81	2.82	100.6	2.70	9.31	2.47	3.15	1.80	.2559	.4505	1.59	2.04
TOTAL	AS	PPH	266	3.45	5.04	146.3	10.89	151.24	2.84	4.05	2.20	.3418	.4264	1.95	2.47
TOTAL	MO	PPH	266	2.51	1.26	50.2	1.37	2.40	2.36	2.66	2.23	.3488	.2111	2.11	2.37
TOTAL	FE	PCT	266	2.78	2.19	78.6	5.13	38.87	2.52	3.05	2.37	.3739	.2304	2.22	2.52
TOTAL	HG	PPB	264	52.8	30.5	57.8	1.51	3.78	49.1	56.5	44.8	1.6509	.2643	41.6	48.2
TOTAL	LOI	PCT	265	25.4	14.6	57.4	.54	-.38	23.6	27.2	20.7	1.3155	.3067	19.0	22.5
TOTAL	U-N	PPH	266	5.78	4.59	79.4	3.51	15.19	5.23	6.34	4.86	.6864	.2349	4.55	5.18
TOTAL	AU	PPB	253	2.26	3.21	141.9	3.96	18.06	1.86	2.66	1.51	.1800	.3183	1.38	1.66

SUBSET	VARIABLE	UNITS	N	MIN VALUE	PERCENTILE								MAX VALUE
					25TH	50TH	75TH	80TH	90TH	95TH	98TH	99TH	
TOTAL	ZN	PPH	266	18.000	68.000	84.000	101.000	110.000	126.000	154.000	260.000	330.000	780.000
TOTAL	CU	PPH	266	3.000	19.000	27.000	35.000	38.000	47.000	58.000	90.000	110.000	160.000
TOTAL	PB	PPH	266	1.000	1.000	2.000	3.000	3.000	5.000	6.000	6.000	7.000	14.000
TOTAL	NI	PPH	266	1.000	15.000	24.000	34.000	39.000	46.000	57.000	78.000	84.000	90.000
TOTAL	CO	PPH	266	1.000	6.000	9.000	13.000	14.000	18.000	22.000	37.000	40.000	46.000
TOTAL	AG	PPH	266	.100	.100	.100	.200	.200	.400	.600	.600	.800	1.000
TOTAL	MN	PPH	266	120.000	330.000	470.000	625.000	685.000	950.000	1500.000	4700.000	7200.000	9000.000
TOTAL	U-F	PPH	266	.200	1.300	2.100	3.200	3.800	6.000	9.000	15.000	16.000	18.500
TOTAL	AS	PPH	266	.500	1.000	3.000	5.000	5.000	6.000	8.000	10.000	12.000	75.000
TOTAL	MO	PPH	266	1.000	2.000	2.000	3.000	3.000	4.000	5.000	7.000	7.000	7.000
TOTAL	FE	PCT	266	.680	1.700	2.300	3.300	3.600	4.200	6.000	10.000	12.000	24.000
TOTAL	HG	PPB	264	4.000	34.000	48.000	66.000	72.000	91.000	110.000	144.000	164.000	200.000
TOTAL	LOI	PCT	265	1.000	13.500	24.000	35.500	38.500	45.000	54.000	60.000	62.000	71.000
TOTAL	U-N	PPH	266	1.300	3.600	4.700	6.000	6.600	9.200	16.300	21.900	28.500	37.100
TOTAL	AU	PPB	253	1.000	1.000	1.000	2.000	3.000	4.000	8.000	15.000	20.000	24.000

GOLD IN LAKE SEDIMENTS (PART OF NTS 640) - REGIONAL LAKE SEDIMENT GEOCHEMICAL RECONNAISSANCE DATA, EAST-CENTRAL SASKATCHEWAN

SUMMARY STATISTICS

SUBSET	VARIABLE	UNITS	N	ARITH MEAN	STD DEV	CV %	SKEW	EXCESS KURT	95% LIMITS ON MEAN	GEOM MEAN	LOG 10 MEAN	STD DEV	95% LIMITS ON MEAN
GRNT	AU	PPB	121	2.12	2.71	128.0	3.42	12.01	1.63 2.60	1.49	.1724	.3025	1.31 1.69
PCSC	AU	PPB	62	2.23	3.77	169.6	3.96	15.77	1.27 3.18	1.39	.1418	.3240	1.15 1.68
MSDM	AU	PPB	31	1.68	1.38	82.0	2.24	4.10	1.17 2.18	1.38	.1392	.2443	1.12 1.69
MVCC	AU	PPB	23	3.39	5.13	151.3	3.18	9.76	1.18 5.61	2.01	.3023	.3926	1.36 2.96

SUBSET	VARIABLE	UNITS	N	MIN VALUE	PERCENTILE								MAX VALUE
					25TH	50TH	75TH	80TH	90TH	95TH	98TH	99TH	
GRNT	AU	PPB	121	1.000	1.000	1.000	2.000	3.000	4.000	8.000	15.000	16.000	16.000
PCSC	AU	PPB	62	1.000	1.000	1.000	1.000	2.000	5.000	9.000	21.000	21.000	21.000
MSDM	AU	PPB	31	1.000	1.000	1.000	2.000	2.000	4.000	6.000	6.000	6.000	6.000
MVCC	AU	PPB	23	1.000	1.000	1.000	3.000	4.000	12.000	24.000	24.000	24.000	24.000



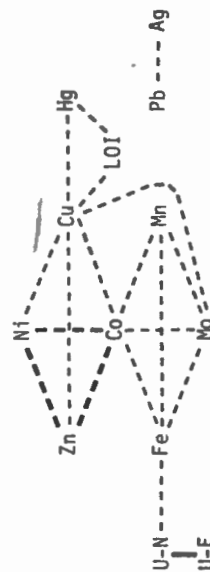
A.

	Zn	Cu	Pb	Ni	Co	Ag	Mn	As	Mo	Fe	Hg	U-F	U-N	Au	L.O.I.
L.O.I.	.05	.30	-.26	-.01	-.07	-.08	-.11	.22	.24	-.10	.42	.13	.08	.09	
Au	.09	.19	-.04	.08	.04	-.07	-.02	-.08	.07	.07	-.02	.03	.01		
U-N	-.03	.08	-.02	-.11	.00	.10	.15	.11	.22	.26	-.06	.87			
U-F	-.08	.10	-.09	-.18	-.14	.01	.04	.07	.14	.11	-.00				
Hg	.13	.30	-.20	.19	.14	-.12	.04	.20	.10	-.00					
Fe	.22	.05	.03	.16	.35	.03	.42	-.01	.43						
Mo	.24	.27	-.09	.16	.19	-.04	.30	.10							
As	.03	.04	-.07	-.03	-.04	-.02	.01								
Mn	.10	.10	.01	.17	.34	.11									
Ag	.09	.08	.27	.15	.19										
Co	.59	.32	.17	.66											
Ni	.64	.49	.20												
Pb	.07	.00													
Cu	.40														
Zn															

N=266

(- indicates a negative correlation)

B.



----- &gt;0.3 &lt;0.5 (a bar over the parameter indicates a negative correlation)

----- &gt;0.5 &lt;0.7

----- &gt;0.7

Correlation matrix (A) and schematic representation (B) of the significant chemical associations in lake sediments (Part of NTS 64D).

THE END

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