



52E105W8513 38 SHOAL LAKE

010

DIAMOND DRILLING

AREA: Shoal Lake

REPORT NO: 38

WORK PERFORMED FOR: St. Joe Canada Inc.

RECORDED HOLDER: Same as Above [xx]  
: Other [ ]

<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
882594	K88-13	332m	Jan/88	(1)
	K88-15	378m	Jan/88	(1)

Notes: (1) #W8801.095, filed in Aug/88

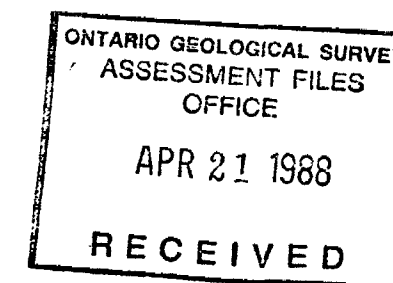
Hole No. K88-113	Northing 1+94	Grid Orient 0	Depth 175.0	Dip - 44	Azimuth 030	Test ACID	Depth 248.0	Dip - 43	Azimuth 030	Test ACID	Started 19/01/88	Logged by RWM
Property KPM	Easting 6+33	Grid Azim. 30	175.0	- 44	030	ACID	248.0	- 43	030	ACID	Finished 23/01/88	Checked by K. LEONARD
Section 6+30E	Elevation 1323	Length (M) 332	332.0	- 43	030	ACID					Drill Co. MIDWEST	Core NR
Claim No. 882594	Survey N.	Bip-Collar -45									Drill No. 1222	Comments:
Target McKINNON REEF	Survey E.	Comp Bearing 30									Drill For. MARC	

*K. Leonard*

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
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## SUMMARY

0.00	14.51	CASING				
14.51	14.79	GRANITIC INTRUSIVE				
14.79	20.83	BASALT				
20.83	22.26	LAMPROPHYRE				
22.26	25.61	BASALT				
25.61	25.75	GRANITIC INTRUSIVE				
25.75	27.97	BASALT				
27.97	28.07	GRANITIC INTRUSIVE				
28.07	30.96	BASALT				
29.69	30.96	GRANITIC INTRUSIVE				
30.96	32.79	SHEARED BASALT				
32.79	35.55	BASALT				
35.77	94.75	BASALT				
94.75	98.52	GRANITIC INTRUSIVE				
98.52	112.05	BASALT				
112.05	332.00	GRANODIORITE				



FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
0.00	14.51	* CASING				
14.51	14.79	* GRANITIC INTRUSIVE -equigranular medium grained, qtz = feldspars (plag) > biotite .				
14.79	20.83	* BASALT -grey green fine grained mafic -pyroxene > plag. numerous calcite stringers infill fractures , no set direction sulphide mineralization (py) scarce and disseminated < 1%				
15.09	15.21	granitic intrusion qtz = orthoclase feldspar > biotite = hbd. ~ 18 deg. to LCA , 3 cm wide				
17.69	17.79	granitic intrusion -similar in composition to unit (15.09 to 15.21 ) ~45 deg to LCA 9 cm wide 19.63-19.69 zone of carbonatization				
20.83	22.26	* LAMPROPHYRE lt. grey mafic fine grained groundmass, biotite phenocrysts increase toward bottom of section, sharp upper and lower contacts.				
22.26	25.61	*BASALT -23.00-23.20 slight variation in colour to lt. green, calcite and quartz stringer at 23.13 cuts core at 45 deg. Sulphides present in quartz stringer -24.75-25.15 oxide alteration conspicuous on occasional fracture surfaces	10882	23.00	23.50	0.50
25.61	25.75	*GRANITIC INTRUSIVE -similar to 15.09-15.21 above, shows micro offset-50 deg to the L.C.A. and is 2 cm. wide.				
25.75	27.97	*BASALT -similar to above				
27.97	28.07	*GRANITIC INTRUSIVE -pink in colour, orthoclase is dominant to quartz, biotite is dominant to hornblende, contacts are 90 deg. to the L.C.A.				
28.07	30.96	*BASALT -similar to units above				
29.69	30.96	*GRANITIC INTRUSIVE -quartz = kspars > biotite = hornblende, contacts at 90 deg. to the L.C.A., medium grained, equigranular texture; fracture infilled calcite stringers; local concentrations of orthoclase feldspar exhibiting strong pink colouration				
30.96	32.79	*SHEARED BASALT -moderately sheared, chloritized, random, concentrated calcite and local quartz stringers with the latter being Cpy mineralized; euhedral disseminated Py at 1.5% overall, specific quartz veinlets at 31.70, 32.0, 32.20 and 32.44 all carry sulphides.	10883 10884	30.96 31.74	31.74 32.79	0.78 1.05
32.79	35.55	*BASALT -similar to 14.79-20.83 above -35.00-35.55 increase in plagioclase intruding basalt originating from intrusive intersected below.				
35.55	35.00	35.55-35.77-granitic intrusive; quartz eyes=plagioclase>biotite=hornblende; contacts at 90deg to the L.C.A.				
35.77	94.75	*BASALT same as section from 14.79 to 20.83 seen above. -narrow granitic segregations observed from 36.67-36.71, and 36.89-36.97. -46.15-46.69-granitic intrusive; contacts at 85 deg to L.C.A., equigranular texture, plagioclase + quartz > orthoclase = biotite = hornblende; narrow 1 cm. Kspar/quartz at 49.86. -51.35-51.44-granitic intrusive; Kspar/Qtz > plag. > biotite = hornblende;	10885 10886 10887 10888	62.65 63.65 70.70 86.80	63.65 64.75 71.60 87.40	1.00 1.10 0.90 0.60

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		contacts at 30 deg to the L.C.A.				
		-53.23-2 cm. wide granitic stringer at 45 deg to the L.C.A.				
		-56.55 - 56.75 : 20 cm granitic intrusion - K Feldspar/qtz > bio = hbd > orthoclase, *35 deg. to LCA				
		-58.14 - 58.18 : Granitic Stringer, same as 56.55 - 56.75, at 45 deg. to LCA				
		-58.79 - 58.89 : alkali feldspar granitic intrusive, K-spar/qtz > plag no mafics, 85deg. to LCA				
		-59.75 - 59.85 : granitic intrusive, same composition as 56.55 - 56.75 85 deg. to LCA				
		-61.04 - 61.09 : Qtz vein, no mineralization, altered basalt for 2 cm on both side of vein				
		- 61.91 - 62.28 : granitic intrusive, same as 56.55 - 56.75, 70 deg. to LCA cross cut by calcite stringer (1cm wide) at 45 deg. to LCA				
63.01	64.28	* BASALT -chloritized and sheared -numerous calcite veinings -increase in mineralization -calcite veins do not show preferred orientation -2% pyrite in calcite stringers -similar to 30.96 - 32.79 -no quartz veinlets -67.41 - 67.45 : Alkali feldspar granitic intrusives same as 57.79 - 58.79 -70.92 - 71.09 : quartz veining, 1% pyrite associated with quartz pyrite generally concentrated along chill margin *2cm on both sides of vein -73.20 : granitic intrusive, plagioclase-orthoclase = quartz > biotite 8 deg. to LCA 74.12 : 1 cm quartz-orthoclase stringer, 50 deg. to LCA 77.37 - 77.80 : alkali feldspar granite, orthoclase > quartz > mafics, 50 deg. to LCA -78.20 : 3 cm granitic intrusive, same as 77.77 - 77.80 -84.29 : granitic intrusion *75 deg. to LCA, plag = ortho = qtz > mafics 84.76 - 84.96 : granitic intrusion same as 84.29 87.00 - 88.95 : Porphyritic feldspar basalt, small feldspar phenocrysts scattered randomly, angular phenocrysts carbonate stringers common, with disseminated pyrite -93.41 - 93.54 : granitic intrusion - orthoclase > plag; feldspar = quartz > mafics; 60 deg. to LCA; quartz vein dissected the intrusion				
94.75	98.52	* GRANITIC INTRUSIVE -plag > an = ortho = qtz > mafics, hbd > bio; qtz/plag vein at 95.00 m; small chlorite fragment in vein ~ 2cm wide at 30 deg. to LCA -95.90 and 96.10 qtz plag vein with basaltic fragments, both 3 cm wide -1-1.5% chalcopyrite seen occasionally within granitic unit -97.32 : basalt xenolith intruded by quartz plag stringer, banded crystal of amphibole -97.07 : quartz stringer 1 cm wide with 1% disseminated pyrite -98.13 - 9 cm of basalt sill -100.06 quartz stringer, swell to 2 cm wide then pinched out 100.36 - 101.20 : basalt sheared, altered ( chloritized) no mineralization 103.00 - 103.14 Granitic Stringers	10889	95.70	96.30	0.60
			10890	97.32	98.14	0.82
98.52	112.05	* BASALT -medium grained flow	10891	104.74	105.22	0.48
			10892	105.22	105.72	0.50

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		-dark mafic mineral (augite, Fe-pyroxene) visible with unaided eye	10893	105.72	106.22	0.50
		-mottled appearance, calcite stringers, light green, disseminated pyrite 1%	10894	106.87	107.37	0.50
		-104.80-105.30 : chloritized basalt, disseminated sulphides, some calcite carbonate stringer, 1% pyrite				
		-105.30 - 105.70 : series of calcite and quartz veining, infilling and healing fractures within the basalt, pyrite mineralization as high as 4%, 70 deg. to LCA				
		-105.70 - 106.30 : small chlorite vein sinuous through altered (chloritized) basalt				
		-107.13 : small 1cm wide quartz vein 45 deg. to LCA pyrite in halo margin, 1%				
		-108.58 : 3 cm chlorite vein containing calcite stringers, 40 deg. to LCA				
		-112.05 : contact of medium grained basalt and quartz granodiorite at 30 deg. to LCA				
112.05	332.00	*GRANODIORITE	10895	113.70	114.24	0.54
		-plag = ortho. > mafic >= quartz, equigranular, disseminated sulphide	10896	116.59	117.09	0.50
		-disseminated sulphide, blue quartz ey distinguishable characteristic calcite stringer common	10897	117.53	118.28	0.75
		-112.05 - 112.72 : potassic alteration of plag feldspar causing a reddish appearance	10898	119.26	120.26	1.00
		-112.05 - 112.72 : potassic alteration of plag feldspar causing a reddish appearance	10899	120.26	120.82	0.56
		-113.08 - 113.62 : silicified zone, quartz veinlet 2 cm wide at 45 deg. to LCA	10900	121.46	122.46	1.00
		at 45 deg. to LCA; sulphides in halo margin	11801	124.72	126.00	1.28
		-114.67 - 114.80 : alkali feldspar granitic intrusive; 45 deg. to LCA	11802	130.20	131.13	0.93
		phenocrysts of quartz, some disseminated pyrite, small quartz vien	11803	137.91	139.17	1.26
		-116.13 - 116.60 : same as 114.67 - 114.80, no quartz stringer	11804	141.97	142.37	0.40
		-116.68 : small quartz vien 45 deg. to LCA, 1 cm wide, sulphide in halo margin, 1% pyrite	11805	148.26	148.86	0.60
		-117.67 - 117.87 : area of small quartz stringer and disseminated sulphide	11806	151.64	153.08	1.44
		1% pyrite	11807	153.92	154.83	0.91
		-118.07 - 119.22 : granodiorite unit subjected to potassic alteration of the Ca-Feldspar	11808	155.00	156.00	1.00
		-118.82 - 118.93 : same as 116.54 - 116.60	11809	162.33	163.20	0.87
		-118.96 - 118.99 : same as 116.54 - 116.60	11810	163.20	163.95	0.75
		-120.20 - 120.70 : silicified quartz granodiorite; quartz = plagioclase >= mafics (hbd), small quartz stringers at 45 deg. to LCA, 1% pyrite	11811	164.31	164.88	0.57
		-121.37 - 122.30 : highly silicified quartz granodiorite; numerous quartz stringer and calcite stringers; pyrite = 1 - 1.5% pyrite; plag in dull light grey green colour; could be increase in epidote percentage	11812	167.78	168.28	0.50
		-122.30 - 122.67 : same as 120.70 - 121.37	11813	172.08	172.78	0.70
		-124.67 - 124.85 : small basaltic intrusion, calcite stringer infill the fractures; phenocrysts of feldspar found in fine grained ground mass	11814	173.00	173.69	0.69
		-125.06 : 3 cm quartz vein at 45 deg. to LCA; 1% pyrite at halo margin	11815	174.93	175.43	0.50
		-125.80 - 125.93 : alkali feldspar granite; quartz vein at 125.83 cuts AFB at 85 deg. to LCA, 2 cm wide	11816	176.16	177.06	0.90
		-127.33 - 128.58 : unit AFB same as 125.80 - 125.93; 45 deg. to LCA	11817	177.40	178.42	1.02
		-129.68 - 129.72 : same as 127.33 128.50, 45 deg. to LCA	11818	178.42	179.52	1.10
		-129.82 - 130.02 : same as 127.33 - 128.50; 45 deg. to LCA	11819	181.00	181.64	0.64
		-130.42 : small 2 cm AFB; 45 deg. to LCA	11820	184.49	184.89	0.40
		-130.92 : 2 cm quartz vein; <1% pyrite; xenolith of feldspar remains	11821	185.44	185.94	0.50
		-131.32 : 2 cm sinous quartz vein	11822	186.30	187.12	0.82
		-131.49 : 2 cm quartz felspar vein at 45 deg. to LCA	11823	187.12	188.07	0.95
		-133.05 - 137.14 : plag in quartz granodiorite has been saussuritized ?	11824	188.57	189.40	0.83
			11825	190.73	191.33	0.60
			11826	192.17	192.95	0.78
			11827	193.62	195.00	1.38
			11828	195.56	196.77	1.21
			11829	197.38	198.31	0.93
			11830	198.31	198.93	0.62
			11831	199.28	200.74	1.46
			11832	200.90	201.40	0.50

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		recrystallized light grey plag to a off yellow light green; some feldspar remain pink	11833	201.40	202.06	0.66
			11834	202.60	203.40	0.80
		-137.91 - 138.41 : quartz calcite stringer; granodiorite has been silicified losing its equigranular texture; 1% pyrite	11835	203.81	204.61	0.80
			11836	205.28	206.28	1.00
		-140.00 : AFG bleb	11837	206.53	207.08	0.55
		-140.38 : AFG stringer	11838	207.75	208.29	0.54
		-142.16 : small 1 cm quartz vein; 1% pyrite in margin; 30 deg. to LCA	11839	209.17	209.63	0.46
		-142.30 : AFG intrusion; 2 cm wide; 45 deg. to LCA	11840	210.29	211.39	1.10
		-144.00 - 144.48 : AFG intrusion; 45 deg. to LCA	11841	211.39	212.53	1.14
		-144.66 - 144.96 : AFG intrusion; 45 deg. to LCA	11842	212.70	213.30	0.60
		-146.00 : AFG ring with xenolith quartz granodiorite in middle	11843	213.80	214.90	1.10
		-147.74 - 147.98 : AFG intrusion; quartz veining cuts through unit at 30 deg. to LCA; fragments of granodiorite; calcite stringers	11844	214.90	216.08	1.18
			11845	216.70	217.90	1.20
		-148.26 - 148.66 : silicified quartz granodiorite; quartz calcite veinlets; 1% pyrite	11846	217.90	218.40	0.50
			11847	219.59	220.09	0.50
		-149.67 - 150.00 : AFG; 45 deg. to LCA	11848	221.16	222.16	1.00
		-151.64 - 153.08 : silicified quartz granodiorite; quartz calcite stringers; 1-2% disseminated pyrite; quartz vein 2 cm wide; 45 deg. to LCA at 151.90 mineralization on margin; potassic alteration on 151.79; quartz vein crossing through alteration zone	11849	222.53	223.46	0.93
			11850	223.46	224.76	1.30
			11851	225.71	226.46	0.75
			11852	226.40	227.60	1.20
		-153.92 - 154.33 : same as 151.64 - 153.08; silicified quartz granodiorite < 1% pyrite	11853	227.60	228.86	1.26
			11854	228.86	230.36	1.50
		-155.10 : small quartz vein at 10 deg. to LCA; runs for 50 cm; 1 cm wide 1% pyrite at margins	11855	230.36	230.86	0.50
			11856	230.86	231.86	1.00
		-157.11 - 158.44 : altered plagioclase; greenish coloured plag	11857	231.86	233.00	1.14
		-159.00 : AFG stringer; 5 cm wide; 80 deg. to LCA	11858	233.40	234.10	0.70
		-159.52 : AFG stringer; 3 cm wide; 80 deg. to LCA	11859	234.90	235.60	0.70
		-161.00 - 161.71 : quartz granodiorite; mineral composition changes; mafics show a decline in percentage; increase feldspar content	11860	239.30	240.60	1.30
			11861	241.80	242.70	0.90
		162.33 - 162.94 : silicified quartz granodiorite; small quartz/calcite stringer sinuous and carrying sulphides (pyrite) in margins (halo); 1% disseminated pyrite	11862	245.10	246.20	1.10
			11863	246.80	248.20	1.40
			11864	248.20	249.60	1.40
		-163.45 - 164.71 : same as 162.33 - 162.94; 1% pyrite	11865	249.60	251.00	1.40
		-164.31 - 164.86 : thin wisps of quartz calcite; hosting some sulphide (pyrite) wisps sinuous; infills fracturing; 1% pyrite	11866	251.00	252.50	1.50
			11867	252.50	253.85	1.35
		-165.30 - 165.40 : potassic alteration of plag feldspar causing a predominant red area	11868	253.85	255.30	1.45
			11869	255.30	256.40	1.10
		-165.40 - 172.45 : quartz granodiorite has been saussucitized; plag feldspar has a light green appearance; saussucitized area of the plag seem to follow a set pattern; a continuous line of altered plag similar to a stringer cutting through the rock; generally the altered plag section are 1 - 2 cm wide up to several cm.	11870	256.59	257.87	1.28
			11871	258.92	260.00	1.08
			11872	260.00	260.90	0.90
			11873	260.90	261.65	0.75
			11874	261.85	262.35	0.50
		-167.78 - 168.28 : small 2 mm quartz calcite stringer hosting 1% pyrite	11875	263.00	264.00	1.00
		-172.08 - 172.78 : area of small stringers of quartz calcite hosting < 1% pyrite; stringers have no preferred orientation	11876	264.00	265.50	1.50
			11877	265.50	266.07	0.57
		173.00 - 173.69 : silicified quartz granodiorite	11878	267.00	267.40	0.40
		numerous qtz/calcite stringers mm in width to 2 cm.; py 1-1.5 %	11879	267.70	268.90	1.20
175.00	175.29	-qtz/calcite stringers; py > 1%				
176.48	176.50	qtz calcite veinlet; 20 degrees L.C.A.; py > 1%				
176.99	177.00	qtz/calcite veinlet; 20 degrees C.A.; py > 1%				
176.70	178.42	potassic alteration of plag feldspar; red colouration				

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
177.48	178.43	qtz/calcite stringers hosting py>1% ; halo margins host py; plag has been altered to a light green colour.				
178.68	179.52	silicified qtz granodiorite;qtz/calcite stringers;py= 1 % qtz vein @ 119.00 45 degrees to C.A.; sulphides present ; qtz vein xcuts small intrusion of alkali feldspar granite.				
180.22	180.48	alkali feldspar granite intruded by qtz/calcite stringers;90 degrees to C.A.				
181.64	184.44	saussuritization of feldspars;all feldspar grains altered;green colour no set pattern to alteration.				
184.53	184.58	silicified qtz granodiorite;small qtz vein 2 cm wide;py =1 %				
185.64	185.74	same as 184.53 to 184.58 ;qtz vein 3 cm wide; 20 degrees to C.A.				
186.20	186.23	alkali feldspar granite intrusion ;70 degrees to C.A.				
186.30	186.45	same as 184.53 to 184.58				
186.45	186.60	alkali feldspar granite;70 degrees to C.A.;pegmatitic grains of qtz				
186.92	186.95	qtz calcite veinlet;py 1 %				
188.07	188.77	alkali feldspar granite with large qtz grains @ 90 degrees to C.A.; pinches into a stringer runs for 30cm into another alkali feldspar granite int.				
188.77	189.40	silicified qtz diorite; with qtz calcite stringers				
190.42	190.47	alkali feldspar granite;80 degrees to C.A.				
190.50	191.08	silicified qtz diorite				
192.17	192.95	same as 190.50 to 191.08				
193.62	193.78	silicified qtz diorite;qtz stringers; py =1 %				
193.78	194.38	qtz rich intrusion;possibly alkali feldspar granite;sericitized; qtz calcite stringers;feldspars have been hematized leaving unit with deep red rounded blebs;45 degrees to C.A.				
194.78	195.00	qtz stringers;small 1 cm wide;py =1%				
195.56	195.86	silicified qtz granodiorite py mineralization in halo margins.				
196.54	196.77	qtz calcite stringers py disseminated;1-2%				
197.38	198.31	silicified qtz diorite;qtz calcite stringers; py =2-2.5% qtz vein @ 198.02; 4 cm. wide; 30 degrees to C.A.				
200.00	200.67	qtz calcite stringers generally @ 45 degrees to C.A. py < 1 %				
201.05	201.30	series of <del>an</del> qtz calcite stringers associated with py mineralization				
201.90	202.10	silicified qtz diorite				
202.87	202.90	qtz veinlet 90 degrees to C.A. py < 1 %				
204.06	204.10	qtz veinlet 90 degrees to C.A py < 1 %				
204.45	204.55	same as 203.81 to 204.01; silicified qtz diorite; qtz stringer 30 degrees to C.A. hosts py 1 %				
205.30	205.50	silicified qtz diorite;qtz vein 2 cm wide @ 50 degrees to C.A. py 1-1.5 %				
205.88	205.94	silicified qtz diorite; qtz calcite stringer 3 mm wide @ 30 degrees to C.A.				
206.05	206.15	alkali feldspar granite intrusion; qtz eyes				
206.15	206.28	silicified qtz diorite; small qtz calcite stringers present; py < 1 %				
206.83	207.13	silicified qtz diorite; py disseminated;minute stringers				
207.84	207.90	silicified qtz diorite mineralized py = 1 %				
209.00	209.17	alkali feldspar granite; unit intruded by qtz vein and stringers; no sulphides				
209.17	209.22	silicified qtz diorite;small stringers of qtz calcite; py = 1 %				
209.45	209.52	silicified qtz diorite py =1 %				
210.41	210.43	qtz vein; 10 degrees to C.A.; qtz has purple tinge calcite stringers xcut qtz vein ; possible au				
210.98	211.35	silicified qtz diorite; qtz vein 45 degrees to C.A. 5 cm wide ;possible au smeared between qtz vein and margin of the qtz diorite;qtz vein @ 211.06 py =1%				
211.61	211.94	silicified qtz diorite; numerous qtz calcite stringers ; py 1.5 %				
212.20	212.53	silicified qtz diorite				

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
212.70	212.80	same as 212.20 to 212.53				
213.07	213.29	silicified qtz diorite;qtz vein @ 213.25 2 cm wide				
213.80	215.20	silicified qtz diorite,qtz stringers @ 214.54 , 214.72 , 215.00				
215.60	216.00	same as 213.80 to 215.20; qtz vein @ 215.60 45 degrees to C.A. 6 cm wide ; very porous and fractured				
216.10	216.95	potassic alteration,feldspars are red in colour				
216.95	217.90	silicified qtz diorite; numerous qtz calcite stringers; py = 2 % disseminated and associated with qtz calcite veinlets; qtz veinlets @ 217.40 py < 1.5 %				
217.90	218.40	silicified qtz diorite; small mm qtz calcite stringers sinuous py = 1 %				
219.69	219.93	slightly silicified qtz diorite;small qtz calcite stringers;blebs of calcite with some py < 1 %				
221.56	221.83	silicified qtz diorite; sulphides 2 % ; qtz vein @ 221.68 45 degrees to C.A. 5 cm wide; hosts small cubic crystals of pyrite;feldspars bleached to a blue colour.				
222.31	222.35	feldspathic stringer;red hematite specks; 45 degrees to C.A.				
223.16	223.18	qtz veinlet ; goes from 2 cm then pinches out;				
223.96	224.76	silicified qtz diorite; numerous qtz calcite stringers causing halo alteration; py disseminated and associated with stringers; @ 223.85 to 224.50 is a qtz vein very fractured and vuggy;calcite has invaded fracturing; possible au				
225.71	226.12	silicified qtz diorite; qtz stringers @ 226.91 py 1.5 - 2 % qtz stringer @ 45 degrees to C.A.; qtz blebs @ 226.45				
226.40	230.86	silicified qtz diorite;qtz calcite stringers cause halo alteration of host rock ; silicified section is green in places possibly due to the introduction of epidote;py as high as 3 % ;main qtz veinlets @ 227.10 227.77 228.90, 229.39;small alkali feldspar granite @ 229.83				
230.86	231.00	silicified qtz diorite ; 1 cm qtz calcite vein @ 45 degrees to C.A. py < 1 %				
231.18	231.25	two 1 cm veinlets of qtz calcite @ 45 and 30 degrees to C.A.				
231.50	232.82	silicified qtz diorite; numerous 1 mm to 1 cm qtz calcite stringers at different C.A. angles;py from < 1 % to 3.5 % ; qtz vein with 3.5 % py @ 232.10; vein @ 32 degrees to C.A. ; 4 cm wide				
233.40	234.10	small qtz calcite stringers all a couple of mm in width; no set ocore axis angle; veinlets @ 233.45, 233.54, 233.73, 233.93, 234.04				
235.41	235.43	qtz calcite veinlet; py < 1 % veinlet @ 40 degrees to C.A.				
239.40	240.40	silicified qtz diorite; veinlets @ 239.50, 239.58, 239.70, 239.80, 239.87, 240.00, 240.25, 240.30; all qtz calcite stringers 2mm to 1 cm in width 35 to 45 degrees to C.A.				
240.60	241.50	saussuritization alteration; green colour to plaq. could be introduction of some epidote				
241.47	241.50	alkali feldspar granite stringer				
242.28	242.30	qtz veinlet; 88 degrees to C.A. py < 1 %				
245.10	245.23	qtz vein @ 245.16 40 degrees to C.A. py = 1 %				
245.62	245.75	silicified qtz diorite caused by veinlets @ 245.65 and 245.71 sulphides < 1 %				
245.96	246.20	silicified qtz diorite ; x cutting stringers of qtz calcite mm in width py 1.5%				
248.20	250.50	potassic alteration zone of the qtz diorite; silicified; qtz calcite stringers common ; most stringers @ 45 degrees to C.A.; py < 1 % qtz vein @ 247.30 3 cm wide swelling to several cm possible au and sulphides.				
250.50	256.40	highly silicified unit of qtz diorite ; general trend to qtz calcite stringers is @ 45 degrees to C.A. ; 250.75 - 252.20 has been altered sericitized and chloritized; fracture surfaces greasy and easily scratched; py 1-2 % ; unit is vefry fractured and crumbly; silicified qtz vein @ 256.72, 257.00, 257.08, 257.19, 257.29, 257.41, 257.65, veins host sulphides < 1 % ; trend of veins is 45 degrees to C.A. width varies from 2mm to 5 mm				



FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
258.92	260.00	silicified zone of qtz diorite; veinlets @ 258.99 and 259.16 both 3 mm wide number of very fine stringers; py 1-2 %				
260.90	261.65	silicified qtz diorite				
262.05	262.25	4 small qtz calcite stringers py < 1 %				
264.15	264.60	silicified zone @ 264.15 to 264.60 caused by 14 cm qtz vein @ 45 degrees to C.A. py = 1 %; silicified zones @ 264.80 to 264.84, 265.00 to 266.00 numerous qtz calcite stringers py < 1% to 1 %				
267.70	268.50	silicified qtz diorite; veinlets @ 267.76, 267.90, 268.20, py < 1%	11880	269.15	269.75	0.60
270.66	272.90	altered plag; saussuritization plag changed to a light green colour; all plag grains affected	11881	270.66	271.46	0.80
273.10	273.23	slightly silicified qtz diorite; stringers @ 273.10 & 273.20 py 1 -2 %	11882	272.90	273.30	0.40
273.30	273.49	alkali feldspar granite; qtz phenocrysts; 35 degrees to C.A.				
274.00	275.10	change in composition mafics now dominant; 70 % mafic; 30 % feldspars/qtz; feldspar found as large pegmatic grains; unit contains a qtz calcite stringer @ 274.90 which alters the surrounding rock py =1.5 %	11883	273.60	274.60	1.00
			11884	274.60	275.74	1.14
			11885	275.74	276.14	0.40
278.54	278.64	2 cm qtz vein altering rock sulphides 1 %	11886	278.20	278.80	0.60
			11887	279.30	280.10	0.80
			11888	280.10	280.75	0.65
			11889	280.95	281.85	0.90
282.60	283.92	silicified qtz diorite; qtz stringers @ 282.68, 283.00, 283.20, 283.30, 283.66, 283.84; stringers average 1 mm to 5 mm; trend @ 45 degrees to C.A. py < 1 %	11890	282.60	283.80	1.20
284.06	284.20	4 small 1 mm stringers cause alteration halo	11891	283.80	285.10	1.30
284.90	286.20	silicified unit composed of numerous qtz calcite stringers	11892	285.10	286.55	1.45
			11893	286.55	287.70	1.15
288.54	290.00	silicified qtz diorite; stringers @ 288.57, 288.87; qtz vein 3 cm wide @ 289.10 stringers @ 289.22, 289.47 and 289.86	11894	287.70	289.10	1.40
290.00	307.00	saussuritization of plag feldspar; plag lime green in colour;	11895	289.10	290.10	1.00
			11896	290.40	291.20	0.80
292.82	292.94	pegmatitic alkali feldspar granite intrusion				
293.16	293.29	same as 292.82 to 292.94	11897	292.60	293.50	0.90
293.70	294.00	silicified qtz diorite stringers @ 293.75, 293.85, 293.97; stringers are sinuous				
294.21	294.35	pegmatitic alkali feldspar granite intrusion	11898	293.50	294.40	0.90
			11899	295.95	296.75	0.80
			11900	297.47	298.07	0.60
			11901	298.97	299.37	0.40
			11902	300.60	301.00	0.40
			11903	301.65	302.15	0.50
			11904	302.75	303.85	1.10
304.65	304.75	alkali feldspar granite intrusion 45 degrees to C.A.				
305.11	305.71	qtz calcite stringers 45 degrees to C.A. sulphides < 1 %				

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
			11905	305.00	305.80	0.80
307.48	308.50	qtz calcite stringers general trend 45 degrees to C.A. py < 1 %	11906	307.30	308.50	1.20
			11907	308.90	309.00	0.10
309.20	320.00	saussuritization of plag feldspar; alteration varies in intensity from all grains being altered to just a few grains.	11908	310.90	311.40	0.50
310.80	310.90	alkali feldspar granite; 45 degrees to C.A.	11909	317.30	317.70	0.40
312.63	312.60	alkali feldspar granite 85 degrees to C.A.				
315.66	315.77	alkali feldspar granite intrusion; pegmatic grains of qtz present				
			11910	318.28	318.68	0.40
321.90	322.10	qtz vein 45 degrees to C.A. sulphides < 1 % ; molyb. present	11911	321.20	321.60	0.40
321.85	322.22	silicified qtz diorite				
			11912	321.60	322.60	1.00
322.70	323.04	mafic intrusion; contacts @ 30 degrees to C.A. fine grained groundmass with phenocrysts of altered green plag				
323.10	329.20	qtz diorite streaked with chlorite stringers and calcite stringers; no set orientation; plag light pink colour; series of silicified zones; py disseminated	11913	322.60	324.00	1.40
324.85	326.00	silicified qtz diorite; qtz veins @ 225.09; 2 cm wide 45 degrees to C.A.; qtz stringers @ 325.80, 325.92 ; 45 degrees to C.A. ; py 1 - 2 %	11914	324.00	325.50	1.50
			11915	325.50	326.10	0.60
			11916	326.00	327.00	1.00
			11917	327.40	328.80	1.40
329.20	332.00	a return to normal texture of the qtz diorite; equigranular; calcite stringers ; qtz veins and stringers	11918	329.00	329.80	0.80
327.54	327.56	qtz vein; py < 1 %	11919	330.30	331.30	1.00
331.80	331.82	qtz vein; 10 degrees to C.A.; py < 1 %				
			11920	331.30	332.00	0.70
332.00	332.00	332.00 end of hole				

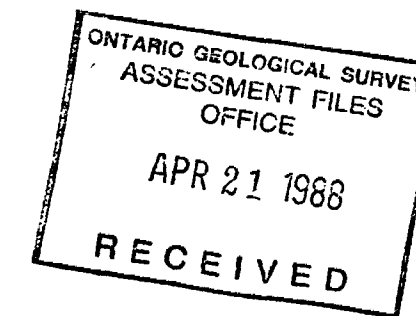
Hole No.	K88-115	Northing	0+B3N	Grid Orient	30	Depth	Dip	Azimuth	Test	Depth	Dip	Azimuth	Test	Started	24/01/88	Logged by	Joanne Paul
Property	Shoal Lake (KPM)	Easting	6+B2E	Grid Azim.	0		97.0	-	45		250.0	-	48	Finished	29/01/88	Checked by	Kevin Leonard
Section	6+B0E	Elevation		Length (M)	398m		398.0	-	49					Drill Co.	Midwest	Core	NB
Claim No.		Survey N.		Dip-Collar	-45									Drill No.		Comments:	cement below *230m
Target	McKinnon Reef	Survey E.		Coap Bearing	30									Drill For.	Marc Breton		

*Kevin Leonard*

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
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## SUMMARY

0.00	5.50	Casing
5.50	8.45	Basalt
8.45	20.42	Porphyritic Basalt
20.42	22.57	Felsic Intrusive
22.57	30.95	Porphyritic Basalt
30.95	34.28	Basalt
34.28	65.10	Porphyritic Basalt
65.10	66.90	Lamprophyre Dyke
66.90	73.95	Altered Porphyritic Basalt
73.95	79.00	Porphyritic Basalt
79.00	83.20	Basalt
83.20	89.55	Porphyritic Basalt
89.55	90.70	Felsic Intrusive
90.70	100.55	Porphyritic Basalt
100.55	156.90	Basalt
156.90	158.88	Quartz Diorite Intrusive
158.88	171.80	Basalt
171.80	176.40	Granodiorite Intrusive
176.40	370.40	Quartz Diorite Intrusive



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FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
370.40	372.59	Lamprophyre Dyke				
372.59	398.00	Quartz Diorite				
398.00	398.00	End of Hole				

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FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
0.00	5.50	* Casing				
5.50	8.45	* Basalt	11921	6.00	7.40	1.40
		-fine grained, greyish green	11922	7.40	8.45	1.05
		-abundant carbonate stringers and carbonatization of the matrix				
		-rusty on some fracture surfaces				
		7.50-8.00: quartz/carbonate vein with rusty fractures				
		-1-2% pyrite and pyrrhotite				
8.45	20.42	* Porphyritic Basalt				
		-dark grey, very fine grained matrix				
		-whitish plagioclase phenocrysts, 1-5mm, subhedral to anhedral, composing 10-15% of rock				
		-numerous hairline fractures surrounded by carbonatization halos				
		-trace to nil sulphides				
		14.33-14.40: med-coarse grained felsic dyke				
		17.32-17.43: same as 14.33-14.40				
20.42	22.57	* Felsic Intrusive	11923	20.42	21.42	1.00
		-generally coarse grained but grades occasionally into fine grained, buff to greyish colour rock	11924	21.42	22.57	1.15
		-myraekitic texture common				
		-0.5% pyrite and pyrrhotite on fracture surfaces				
22.57	30.95	* Porphyritic Basalt	11925	28.45	29.00	0.55
		22.57-27.30: patchy carbonatization and bleaching, especially around fractures				
		-mineralization rare pyrite and pyrrhotite on some fracture surfaces				
		27.30-27.42: non-porphyritic basalt; carbonatized				
		27.42-30.95: similar to 22.57-27.30				
		@ 28.90: quartz/carbonate vein at 25 to LCA				
30.95	34.28	* Basalt				
		-carbonate stringers at 45 to LCA predominantly and carbonatization of matrix				
		-occasional patches of underlying rock towards bottom of interval				
34.28	65.10	* Porphyritic Basalt	11926	39.00	40.00	1.00
		-similar to interval 22.57-27.30 except percentage of phenocrysts decreases to 2-5%	11927	47.60	48.30	0.70
		@ 37.00: carbonate vein with minor quartz and green needle-like crystals	11928	53.70	54.33	0.63
		38.96-40.00: 45cm felsic vein with fine grained chill margin and coarse centre	11929	56.70	57.25	0.55
		-surrounding rock has lost porphyritic texture and developed a slightly banded appearance	11930	57.25	57.85	0.60
		-trace to 0.5% disseminated pyrite and pyrrhotite	11931	57.85	59.00	1.15
		41.67-41.74: felsic dyke	11932	59.00	60.00	1.00
		47.00-52.70: gradual increase in percentage and size of phenocrysts up to a maximum of 20-25% and 2cm- decreases again at bottom of interval	11933	60.00	60.70	0.70
		-predominant angle of carbonate veinlets is 40-50 to LCA	11934	60.70	61.40	0.70
		47.90-48.00: quartz/carbonate vein, carbonatization	11935	61.40	62.20	0.80
		-2-3% pyrite and pyrrhotite	11936	62.20	63.20	1.00
		53.73-54.33: quartz vein, narrow felsic dyke and carbonatization	11937	63.20	64.10	0.90
		-1% pyrrhotite and chalcopyrite	11938	64.10	65.10	1.00
		57.00-57.15: carbonate vein, carbonatization				
		-1% pyrrhotite and chalcopyrite				
		57.55-57.65: quartz/carbonate vein, carbonatization				
		-2-3% pyrite				
		60.45-60.65: diorite dyke, carbonatization				
		-1% pyrite				

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		60.70-62.20: quartz/carbonate vein, carbonatization -1% pyrite and pyrrhotite, trace chalcopyrite @ 62.63, 62.82-62.92: felsic dykes 64.10-65.10: felsic dyke, quartz/carbonate vein, carbonatization -1% pyrite, 1% pyrrhotite, trace chalcopyrite				
65.10	66.90	* Lamprophyre Dyke -fine grained, grey, biotite phenocrysts -2-3% euhedral pyrite throughout dyke				
66.90	73.95	* Altered Porphyritic Basalt -very fine grained, greenish grey; most of the porphyritic texture has been masked by the alteration 66.90-68.30: carbonatization, quartz/carbonate veins and chloritization -<1% pyrite and pyrrhotite 68.30-69.30: carbonatization, silification and quartz/carbonate veinlets -5% pyrite, 1% pyrrhotite -minor brecciation 69.30-69.90: silification -trace pyrite and pyrrhotite 69.90-73.00: weak patchy carbonatization -0.5% pyrite and pyrrhotite 73.00-73.25: felsic intrusive with chilled margins 73.25-73.95: carbonatization, chloritization, carbonate veinlets -2% pyrrhotite, 1% pyrite, trace chalcopyrite	11939 11940 11941 11942 11943 11944	66.90 68.30 69.30 69.90 71.00 72.00	68.30 69.30 69.90 71.00 72.00 73.25	1.40 1.00 0.60 1.10 1.00 1.25
73.95	79.00	* Porphyritic Basalt -dark grey, very fine grained, numerous hairline carbonate fractures -a few small (1-5cm) dykes -phenocrysts up to 4mm and compose 2-3% of rock -trace pyrite and pyrrhotite over first half metre	11945 11946	73.25 74.00	74.00 75.00	0.75 1.00
79.00	83.20	* Basalt -dark, slightly greenish grey -abundant carbonate hairline fractures and carbonatization of the matrix -several bluish quartz/carbonate veins with small green needle-like crystals trace sulphides associated with one vein at 82.10	11947	81.90	82.40	0.50
83.20	89.55	* Porphyritic Basalt -similar to interval 73.95-79.00 but only 1% phenocrysts 84.60-85.10: quartz/carbonate vein, carbonatization, chloritization -minor brecciation -2-3% pyrite, 1% pyrrhotite, trace chalcopyrite -88.35-88.47: fine-medium grained dioritic intrusion	11948	84.60	85.10	0.50
89.55	90.70	* Felsic Intrusive -med-coarse grained; quartz diorite in composition				
90.70	100.55	* Porphyritic Basalt -similar to interval 73.95-79.00 93.10-93.40: quartz/carbonate vein, chloritization, weak carbonatization -1% pyrite and pyrrhotite 96.20-98.35: phenocrysts increase to 1cm in size and 5-10% of rock 99.15-99.25: quartz/carbonate vein; no visible sulphides	11949	93.10	93.60	0.50
100.55	156.90	* Basalt -very fine grained, dark grey; non-carbonatized matrix -localized fine grained patches and occasional small chlorite blebs -occasional feldspar phenocrysts but generally non-porphyritic -minor felsic dykes; patches of brecciation over first three metres	11950 11951 11952 11953 11954	101.00 118.00 120.60 131.73 136.15	101.45 118.70 121.60 132.73 136.90	0.45 0.70 1.00 1.00 0.75

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		101.15-101.35: quartz/carbonate veinlets; 2-3% pyrite	11955	137.50	137.90	0.40
		118.10-118.20: quartz/carbonate vein; no visible sulphides	11956	141.80	142.30	0.50
		118.35-118.50: quartz/carbonate vein; trace pyrrhotite	11957	143.80	144.20	0.40
		120.75-121.57: quartz/carbonate veinlets; 3% pyrite, 1% pyrrhotite	11958	150.50	152.00	1.50
		125.47-125.70: med grained diorite intrusive; 35% mafics/60% feldspar/5% quartz	11959	152.00	153.50	1.50
		131.73-132.73: occasional quartz/carbonate veins; 2% pyrite	11960	153.50	155.00	1.50
		136.20-136.80: brecciated zone; 3% pyrrhotite, 2% pyrite, trace chalcopyrite	11961	155.00	156.00	1.00
		137.70-137.80: quartz/carbonate vein at 55 to LCA; 1% pyrite, 1% pyrrhotite				
		141.95-142.10: quartz/carbonate vein; 1% pyrite, 1% pyrrhotite				
		143.95-144.10: same as above				
		146.67-156.90: slightly coarser grained, greenish colour				
		-up to 1% disseminated pyrite towards bottom				
		149.20-149.30: pegmatoid felsic dyke; 35% quartz/65% feldspar				
156.90	158.88	* Quartz Diorite Intrusive				
		-coarse grained, equigranular				
		-composition- 20% quartz/40% plagioclase/40% mafics				
158.88	171.80	* Basalt	11962	158.90	160.40	1.50
		158.88-163.35: same interval as 146.67-156.90	11963	160.40	161.90	1.50
		163.35-164.80: very fine grained, black, massive	11964	161.90	163.35	1.45
		-numerous carbonate stringers	11965	163.35	164.10	0.75
		-upper contact strongly chloritized	11966	164.10	164.80	0.70
		-pegmatoid intrusive at 164.55-164.67	11967	164.80	166.10	1.30
		-up to 1% pyrite near contacts, decreases towards the centre	11968	166.10	167.50	1.40
		164.80-171.80: similar to above but fine grained and carbonatized matrix	11969	167.50	168.70	1.20
		-patchy sulphides- very finely disseminated and stringers- up to 1% pyrite	11970	168.70	170.00	1.30
			11971	170.00	170.80	0.80
			11972	170.80	171.80	1.00
171.80	176.40	* Granodiorite Intrusive	11973	171.80	172.80	1.00
		-coarse grained, equigranular	11974	175.60	176.10	0.50
		-composition- 5-10% quartz/40-50% mafics/40-50% feldspar				
		-slightly higher quartz content over top 70cm near contact				
176.40	370.40	* Quartz Diorite Intrusive	11975	176.40	177.00	0.60
		-increase in quartz content; comp.-20% quartz/40% feldspar/40% mafics	11976	179.30	180.00	0.70
		-quartz is bluish in colour	11977	181.20	182.10	0.90
		-occasional small quartz/carbonate veins with minor mineralization	11978	182.10	183.00	0.90
		-varying degrees of alteration throughout	11979	185.20	186.00	0.80
		@ 175.70: quartz/carbonate vein with silicified halo; 1% disseminated pyrite	11980	186.00	186.70	0.70
		@ 176.55: quartz/carbonate vein, silicification; 2% pyrite	11981	189.70	190.40	0.70
		@ 176.75, 176.94: as above with weak carbonatization and less sulphides	11982	194.00	195.00	1.00
		179.55-179.85: 1cm quartz/carbonate vein, silicification; 1% pyrite close to vein	11983	195.00	196.00	1.00
		181.35-181.45: quartz/carbonate veinlet, silicification	11984	196.00	196.90	0.90
		181.67-182.05: quartz vein, silicification	11985	196.90	197.30	0.40
		183.50-183.60: quartzo-feldspathic dyke	11986	197.30	198.80	1.50
		-salmon red colour, possibly due to potassic alteration	11987	198.80	199.80	1.00
		-myrækitic texture common	11988	199.80	200.70	0.90
		@ 184.20: same as above	11989	200.70	201.70	1.00
		@ 184.83: quartz vein; barren	11990	201.70	202.75	1.05
		185.45-186.64: quartz/carbonate vein, silicification, weak carbonatization	11991	202.75	203.30	0.55
		-2% pyrite, especially between 185.55-185.90	11992	203.30	204.30	1.00
		188.70-189.10: similar to 183.50-183.60; potassic alteration extends into surrounding feldspars	11993	204.30	205.31	1.01
			11994	205.31	206.00	0.69

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
190.00-190.21:		same as above	11995	206.00	207.30	1.30
@ 191.10:		quartz vein and potassically altered halo	11996	207.30	208.10	0.80
191.90-192.40:		fine grained felsic dyke; pale salmon in colour with darker red spots throughout	11997	208.10	208.90	0.80
193.30-193.45:		feldspars are reddish in colour due to potassic alteration	11999	209.90	211.00	1.10
@ 197.05:		quartz/carbonate vein, silicification, weak carbonatization -0.5% pyrite	12000	211.00	212.00	1.00
198.18-198.40:		similar to 191.90-192.40	13801	216.75	217.30	0.55
198.80-199.00:		silicification	13802	223.43	223.90	0.47
199.08-199.45:		silicification, brecciation, trace pyrite	13803	225.35	225.75	0.40
199.45-200.70:		silicification, quartz/carbonate vein; 1% pyrite throughout, 2% near the veins; mafics altered to chlorite	13804	225.75	226.75	1.00
200.70-201.58:		moderate silicification, trace sulphides -feldspars sericitized, mafics chloritized	13805	226.75	228.00	1.25
201.58-201.70:		quartz/carbonate vein, trace sulphides	13806	228.00	229.00	1.00
201.70-202.75:		strongly silicified zone- original texture nearly overprinted at the top of the interval; only 5-10% mafics	13807	229.00	230.00	1.00
202.75-203.30:		same as 200.70-201.58	13808	230.00	231.00	1.00
204.30-205.31:		moderate silicification, numerous carbonate hairline fractures	13809	231.00	232.00	1.00
205.31-207.30:		patchy silicification and potassic alteration -minor sulphides associated with small quartz/carbonate veinlets	13810	232.00	233.00	1.00
207.30-208.10:		feldspars potassically, mafics chloritized	13811	233.00	234.50	1.50
208.10-208.90:		large areas of quartzo-feldspathic segregation separated by strongly silicified areas	13812	234.50	236.00	1.50
-segregations appear pegmatoid in areas			13813	236.00	237.33	1.33
-carbonate stringers at 50 to LCA			13814	237.33	237.73	0.40
208.90-223.43:		potassic alteration of feldspars, chloritization of mafics -occasional patches where feldspars are slightly greenish yellow in colour due to epidotization	13815	237.73	238.13	0.40
-weak silicification and minor sulphides around quartz/carbonate veinlets			13816	238.13	238.73	0.60
@ 216.00:		potassically altered, reddish quartzo-feldspathic segregation	13817	238.73	239.43	0.70
@ 217.20:		quartz/carbonate vein; moderate silicification starting at 216.80 -0.5% pyrite near the vein	13818	239.43	239.93	0.50
223.27-223.43:		white quartz vein; no visible sulphides	13819	239.93	241.00	1.07
223.43-223.90:		reduction of potassic alteration -feldspars are altered green	13820	241.00	242.50	1.50
-minor pyrite with quartz/carbonate veinlets			13821	242.50	244.00	1.50
225.10-225.35:		similar to above	13822	244.00	245.50	1.50
225.50-225.63:		quartz/carbonate vein, reddish, vuggy in spots -1% pyrite concentrated with carbonate, 0.5% away from the vein	13823	245.50	247.00	1.50
@ 226.00:		quartz/carbonate vein; greenish alteration zone extends to 226.25 -1% pyrite	13824	247.00	247.60	0.60
226.25-237.33:		similar to 208.90-223.43	13825	247.60	248.80	1.20
-localized sulphides around quartz/carbonate veinlets (30 to LCA), trace only after 232.00m			13826	248.80	250.00	1.20
237.33-239.93:		highly silicified zone; mafics completely altered to chlorite -1% pyrite over first 40cm and last 20cm	13827	250.00	250.60	0.60
-8-10% pyrite over the following intervals: 237.73-238.00, 238.20-238.36, 238.58-238.66, 239.57-239.57			13828	250.60	251.60	1.00
239.93-244.18:		similar to 208.90-223.43	13829	251.60	252.80	1.20
241.20-241.48:		white quartz and chlorite vein; trace sulphides along outer edge	13830	252.80	253.55	0.75
244.18-246.45:		moderately silicified zone, greenish in colour, similar to	13831	253.55	254.65	1.10
			13832	254.65	255.80	1.15
			13833	257.80	258.25	0.45
			13834	258.25	259.25	1.00
			13835	259.25	260.60	1.35
			13836	260.60	261.50	0.90
			13837	261.50	262.50	1.00
			13838	266.80	268.00	1.20
			13839	274.60	275.00	0.40
			13840	281.20	281.60	0.40
			13841	282.50	282.90	0.40
			13842	283.20	283.60	0.40
			13843	283.60	284.00	0.40
			13844	286.18	286.68	0.50
			13845	288.00	289.00	1.00
			13846	289.00	290.00	1.00



FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
		223.43-223.90; localized sulphides	13847	291.20	292.10	0.90
		240.45-247.35: similar to 208.90-223.43	13848	299.30	299.70	0.40
		247.35-247.56: buff white quartz vein; 5% euhedral pyrite(5-6mm)	13849	306.72	307.70	0.98
		247.56-268.00: patches of weakly to moderately potassically altered and greenish silicified rock; localized sulphide zones normally associated with silicified areas and quartz/carbonate veins and stringers; sampling is generally over silicified zones	13850	307.70	308.70	1.00
			13851	308.70	309.60	0.90
			13852	309.60	310.00	0.40
			13853	310.00	311.40	1.40
		250.80-251.50: moderately silicified zone; 2% disseminated pyrite	13854	311.40	312.40	1.00
		260.10-260.20: quartz vein; highly silicified on both sides; <1% pyrite	13855	333.46	334.46	1.00
		266.80-267.80: strongly foliated at ~30 to LCA, moderately silicified	13856	334.46	335.16	0.70
		-quartz vein at 267.00-267.10, 1% pyrite	13857	335.16	336.16	1.00
		268.00-270.10: strong potassic alteration, feldspars nearly completely red	13858	336.40	337.00	0.60
		270.10-304.54: less potassic alteration	13859	337.00	338.40	1.40
		-feldspars may be white, slightly orange or pale greenish yellow(epidotized)	13860	340.00	340.40	0.40
		-mafics partially chloritized	13861	343.50	344.00	0.50
		-silicification surrounding quartz/carbonate veins(lca max.), localized sulphides in these zones	13862	345.50	346.10	0.60
			13863	347.40	347.85	0.45
		279.34-279.60: highly silicified zone; no visible sulphides	13864	347.85	348.40	0.55
		279.80-280.74: same composition but fine to medium grained	13865	348.40	349.10	0.70
		-moderate potassic alteration	13866	349.10	350.00	0.90
		280.74-281.00: medium to coarse grained again	13867	350.00	351.00	1.00
		-feldspars nearly completely altered red, mafics well chloritized	13868	351.00	351.80	0.80
		281.00-281.13: well foliated at 35-45deg to LCA	13869	351.80	352.40	0.60
		281.42-281.46: lca quartz/carbonate vein, 2% pyrite	13870	353.75	354.30	0.55
		281.90-282.13: well chloritized, broken core	13871	355.00	355.40	0.40
		282.69-282.75: quartz/carbonate vein, minor pyrite	13872	356.80	357.30	0.50
		283.28-283.46: 3cm quartz/carbonate surrounded by a strongly foliated and moderately silicified zone	13873	357.30	357.80	0.50
			13874	357.80	359.00	1.20
		-foliation at 45-50 to LCA; 1% pyrite	13875	359.90	360.50	0.60
		283.77-283.88: carbonate veinlets, minor pyrite	13876	360.50	361.00	0.50
		285.30-285.40: quartz-feldspathic vein, feldspar potassically altered red	13877	361.00	362.00	1.00
		- sharp contacts	13878	362.30	363.10	0.80
		285.80-287.40: several small quartz-feldspathic and quartz/carbonate veins and moderately silicified areas	13879	364.00	364.80	0.80
			13880	364.80	366.00	1.20
		-minor pyrite in altered zone surrounding qtz/carb vein	13881	366.00	367.00	1.00
		287.40-287.84: potassically altered quartz-feldspathic segregation	13882	367.00	368.10	1.10
		-gradational contacts into altered rock on both sides	13883	368.10	369.10	1.00
		287.84-290.48: highly silicified, original texture faded but visible	13884	369.10	370.40	1.30
		-localized minor sulphides				
		-minor quartz-feldspathic segregations				
		291.20-292.10: same as above, but slightly higher sulphides(<1%)				
		304.54-306.72: composition remains similar				
		-increase in potassic alteration resulting in overall redder colour				
		-minor quartz-feldspar segregations throughout				
		306.72-307.70: highly altered zone around quartz/carbonate vein from 306.93-307.07; strong chloritization and moderate silicification, slight low angle foliation developed				
		-carbonate in vein is orange yellow in colour				
		-0.5% pyrite in altered zone- sulphides within vein have been totally hematized leaving rusty pits				
		307.70-309.60: similar to 304.54-306.72, but locally fine -medium grained				
		-minor sulphides associated with carbonate stringers, rusty pits also present				

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
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309.60-311.30: mottled green and red- mafics chloritized and feldspars potassically altered  
 -foliation parallel to sub-parallel to LCA  
 -2% finely disseminated pyrite from 309.75 to 309.95  
 -trace to 1% pyrite over remainder of interval  
 311.30-311.40: quartz/carbonate vein; highly chloritized next to vein  
 -core somewhat broken up  
 311.40-312.38: similar to 306.72-307.70; trace disseminated pyrite  
 312.38-320.55: similar to 304.54-306.72 with patches of more highly altered rock as in 306.72-307.70  
 320.55-320.82: quartz/carbonate vein, partially brecciated  
 -sheared at ~50deg to LCA; alteration zone 15cm past vein- chloritized  
 320.97-324.37: decrease in mafics to 20% and corresponding increase in feldspar  
 -quartz content remains constant  
 -potassic alteration still strong  
 324.37-339.75: back to original composition- similar to 312.38-320.55  
 -abundant quartz stringers- predominant angle is 35-45deg to LCA  
 33.46-335.16: highly silicified zone; trace localized pyrite  
 336.43-336.86: same as above; 0.5% disseminated pyrite  
 @ 337.31: 3cm quartz vein with mafic stringer along the centre; minor pyrite  
 337.38-338.40: same as 336.43-336.86  
 338.70-339.00: fine grained quartz feldspar vein; slightly reddish in colour  
 339.75-343.49: similar to 270.43-304.54  
 -localized increases in potassic alteration  
 -occasional quartz-feldspar veins or segregations  
 -numerous carbonate stringers- angles vary  
 -localized sulphides associated with silicification zones  
 343.49-344.00: silicification; 1% pyrite around quartz/carbonate veins at 343.56 and 343.80  
 345.50-346.10: silicification; <1% pyrite disseminated throughout  
 350.00-352.20: silicification; localized pyrite up to 1% around carb. stringers  
 353.80-354.20: silicification; 2% pyrite with quartz/carbonate vein  
 357.80-358.90: silicification associated with several low angle quartz/carbonate veinlets at ~10deg to LCA  
 368.20-369.00: silicification; trace to locally 1% pyrite  
 370.36-370.83: quartz-feldspar segregation within felsic intrusive-90% feldspar

370.40	372.59	* Lamprophyre Dyke -dark grey, fine grained; biotite porphyritic -several carbonate gashes and moderately carbonatized matrix				
372.59	398.00	* Quartz Diorite -coarse grained; feldspars commonly pale yellow in colour 372.90-373.60: fine -medium grained, crystalline texture becomes very faint -not sharp contacts -quartz vein at 373.36-373.50 with 5% 374.30-374.80: patches of fine-med grained and med-coarse grained, grades in and out 375.25-376.55: similar to 372.90-373.60 -rock appears to be altered due to presence of quartz veins at 375.73 & 376.20 at angles of 45deg and 20deg respectively -3% pyrite near the veins 377.60-378.80: silicification; 0.5% pyrite throughout, 1% with quartz vein at 378.05	13885	372.90	373.60	0.70
			13886	375.30	375.90	0.60
			13887	375.90	376.55	0.65
			13888	377.60	378.80	1.20
			13889	382.70	383.30	0.60
			13890	386.25	387.68	1.43
			13891	392.40	392.80	0.40
			13892	392.80	393.40	0.60
			13893	394.20	395.00	0.80

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FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH
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379.23-379.34: feldspar segregation; not sharp contact; buff coloured  
382.70-383.30: silicification associated with quartz vein at 383.15; <1% pyrite  
386.25-387.68: silicification; localized minor pyrite  
391.95-392.20: quartz feldspar segregation, <5% mafics; gradational contacts

398.00 398.00 \* End of Hole

# SHOAL LAKE

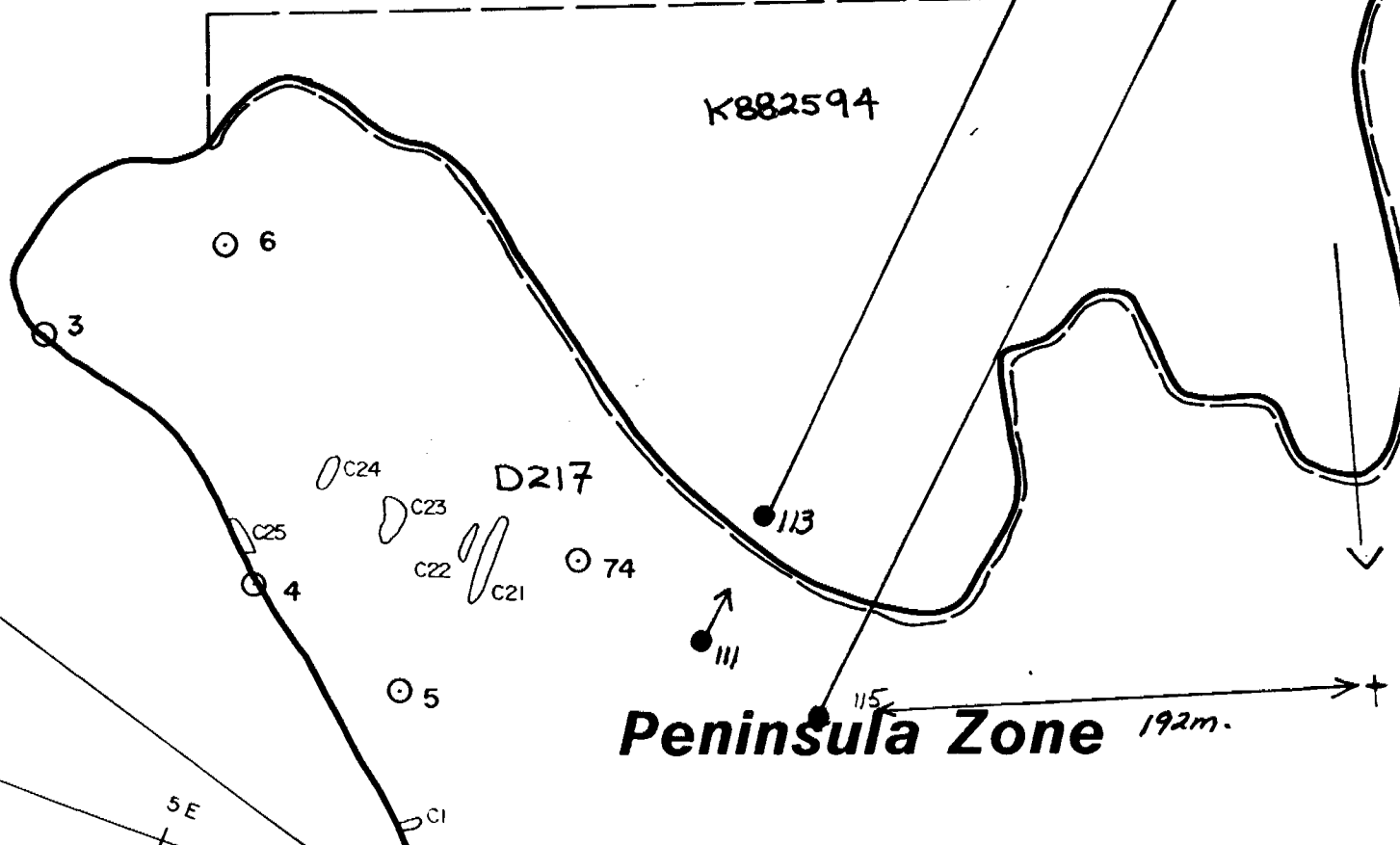
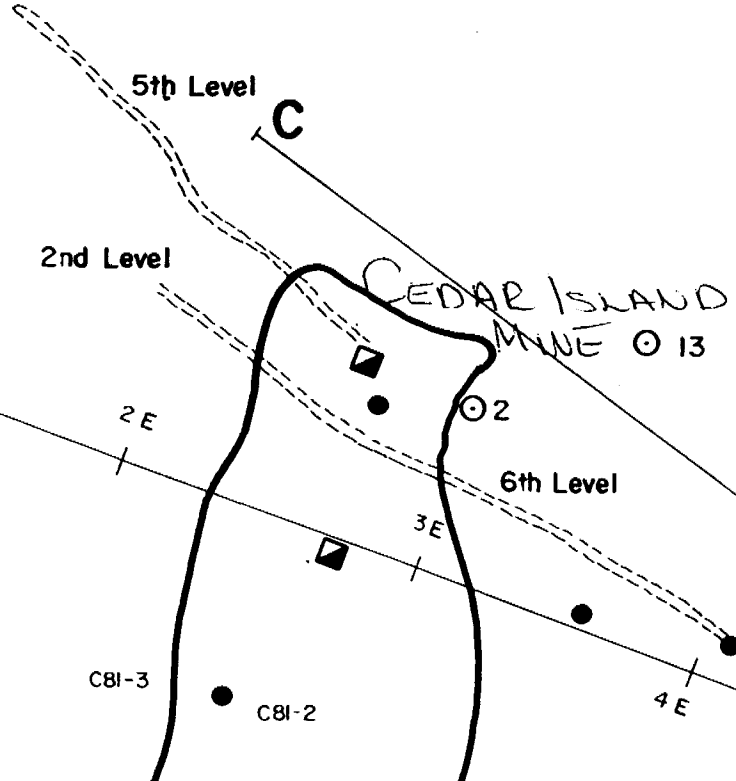
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Ontario

Report  
of Work

DOCUMENT NO.

W8801-091

SHOAL LAKE 6.2642 The M



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900

Name and Postal Address of Recorded Holder

St. Joe Canada Inc.  
2 Adelaide St. E. Suite 1100 Toronto, Ontario M5C 2T6

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed 1722	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.
	Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.	
for Performance of the following work. (Check one only)	K	882575	45	K	882583 ✓	45	K	893635	45			
	<input type="checkbox"/> Manual Work	882576	45		882584 ✓	45		893636	45			
	<input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work.	882577	45		882594 ✓	45		893637	45			
	<input type="checkbox"/> Compressed Air, other Power driven or mechanical equip.	882578	45					893638	45			
	<input type="checkbox"/> Power Stripping	882579	45		893631	45		893639	45			
	<input checked="" type="checkbox"/> Diamond or other Core drilling	882580	45		893632	45		893640	45			
	<input type="checkbox"/> Land Survey	882581	45		893633	45						
		882582	45		893634	45		895881	45			

All the work was performed on Mining Claim(s): K 882594 (1722) see Appendix A

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

Drill Hole	Dip	Azimuth	Length (m)	Date Started	Date Completed
K88-113	-45	030	332	Jan. 19/88	Jan. 24/88
K88-115	-45	030	398	Jan. 24/88	Jan. 29/88

Contractor:  
Midwest Drilling  
180 Cree Crescent  
Winnipeg, Manitoba

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MAR 29 1988  
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Date of Report March 24/88	Recorded Holder or Agent (Signature) Kevin Leonard
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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  
Kevin Leonard 883 Tanager Avenue Burlington, Ontario L7T 2Y2

Date Certified March 24/88	Certified by (Signature) <i>Kevin Leonard</i>
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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	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Sketch (as above) in duplicate
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.	882575	
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

DOCUMENT No.  
W8801-095

APPENDIX "A"

Mining Claims

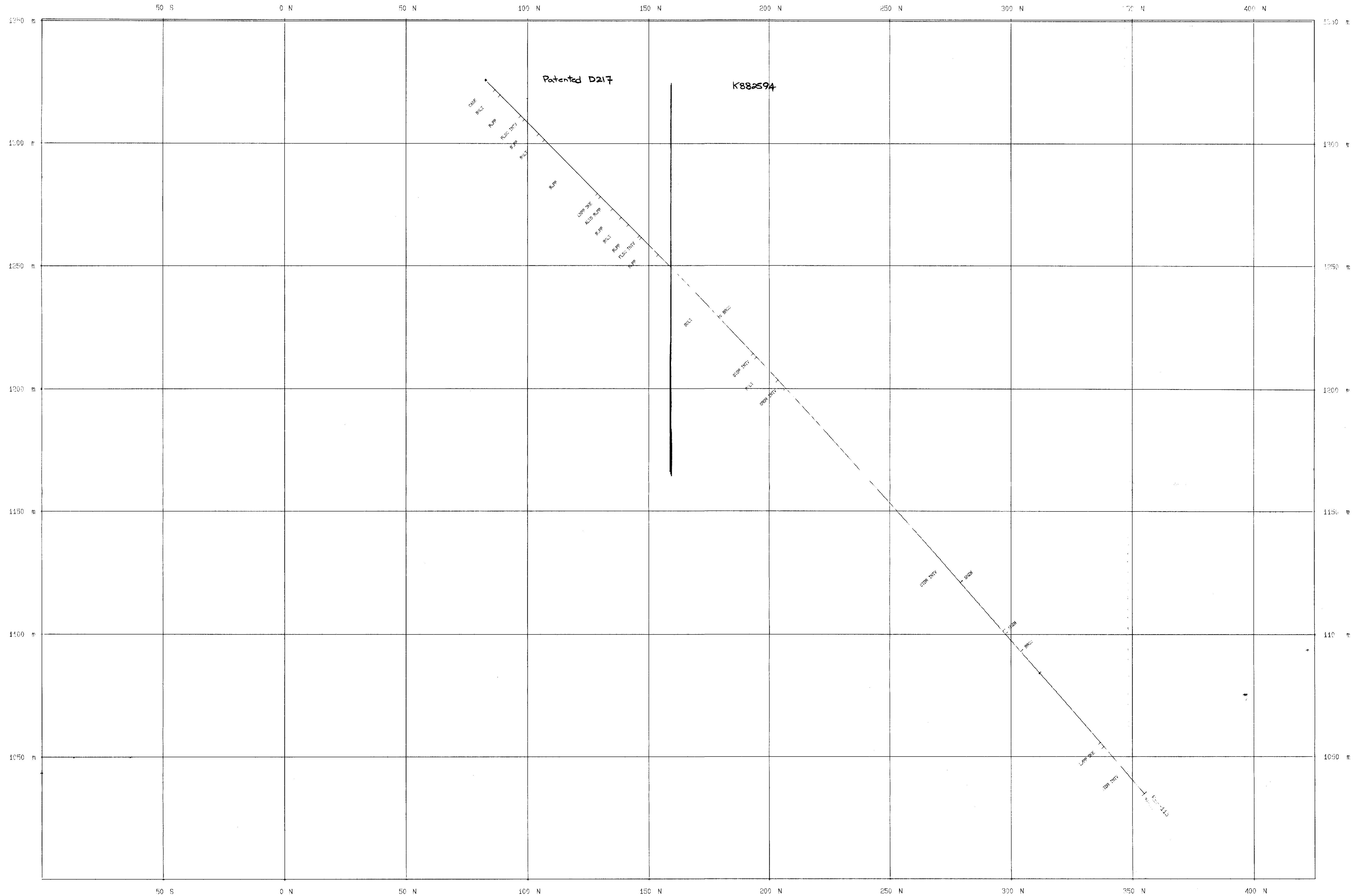
Work Days Credit

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1003269	45

*37 claims*



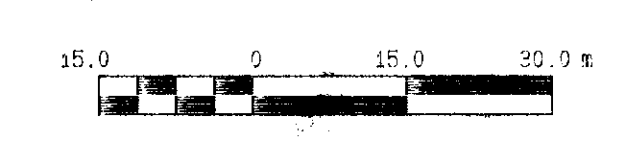




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DRAWN BY	DATE	ST. JOE CANADA INC.
REVISED BY	DATE	
		KPM (SHOAL LAKE) PROJECT 332
		McKINNON REEF ZONE
		SECTION 6+82E
		DDH K88-115
		LITHOLOGY / STRUCTURE <i>K. J. ...</i>



DATE: 2/1/1989 TIME: 11:09

