'81-E625

Drill logs

1980 - 1981 DIAMOND DRILLING PROGRAM

SAB 3 and SAB 5

MINERAL CLAIMS

VERNON MINING DIVISION

N.T.S. 82E/15E

49°55' N. Latitude and 118°42' W Longitude

OWNER OF CLAIMS: R.W. Yorke-Hardy

OPERATOR OF PROGRAM: Mohawk Oil Co. Ltd.

PREPARED BY: M.W. Waldner

August 19, 1981

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No sludge collected
log Scale 1" = 10'

Core Size: NQ
Completed:
Elevation:
Length: 535'

Hole No.: SAB-80-1
Project: KETTLE RIVER
Claim No.:
Logged by: B. Callaghan
Date: 19th March 1981
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration								Graphic Log			Mineralization and Structures					Estimated Grade			Recovery		Assay Results					
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy BaCPo Py	MoSSSPk Ox	Specific Gravity	Weight (Grams) Core	Weight (Grams) Sludge	Sample Number	Au	Ag	Cu	Pb	Zn
							O.B 0-35' Coring @ 35'		30																	
							35																			
25%	35	25%	15%	-	mod foliation	7	WK Arg alt + GDP 36				60°	contact		minor cpy chlor py @ 36'	35											
	10%	25% MG 10% Bio			poppy		Porphyritic Chl And Dyke 37	Dyke Repl			30°	1/4" C'	Cal													
							Int alt + GDP by Dyke 39		40		30°	contact				100										
					fg grain		P. Chl Dyke 41				55°	contact														
							Dyke 42				40° 40°	contact	cal in parallel partings	minor py cpy @ 44'	45	100										
							Int Alt + GDP by 49		50		40°	1/16"	Cal													
							Dyke In moon 51				30°	1/16	Cal	Porphyritic And. Dyke oxidized												
							Porphyritic And Dyke		60		30° x 2	1/8" + 1/16"	Cal	Core blocky 50'-60'	55	80		.08								
							65				60°	1/16"	cal													
											30°	1/4"	Cal	Core blocky oxidized												
							Int alt + GDP				40°	1/8"	cal		65	90										
									70					disseminated py				.08								

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 9576

Part 2 of 2

Hole No. [illegible]

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag	Cu	Pb	Zn	W
							Int Arg Alt of Qtz Porp 73½							disseminated py + hem stringers															
			bot gen 74½				WK-Mod Arg alt 77				40° 50° 80°	⅛" ⅛" ¼"	cal - chl cal - ser qtz	Core missing 1'	75	90												
							Int Arg Alt 80½		80					disseminated py minor vuggy cal - hem															
							WK - Mod Arg Alt 84				50° × 2 50°	⅛" × 2 ⅛	qtz - chl cal - ser	disseminated py + hem. bit fresh														
							Int Arg Alt 90½		90				cal - hem stringers	Core missing D approx 90'494' approx 3' at 94 Crumbly + 89-90' disseminated py - clayey.	85	85												
							High Grade Mineralization 91½				85° 60°?	vein contact	qtz	H G Vein - blebs To massive Py Some Cu Py?														
							Int Arg Alt 95							Hem + py	95	80												
							WK-Mod Arg Alt 99																					
							Int Arg Alt 100½		100					py minor hem														
							Porphyritic Andesite Dyke				20°? 50°	Contact ⅛"	cal - hem															
											40° × 2 5°	⅛" × 4 ⅛"	qtz cal		105	100												
									110		60 - 30	⅛" - ¼"	cal															
											50° 50°	⅛" ⅛"	cal cal stringers		115	100												
									120		50°	¼"	cal	v. minor disseminated hem.														
											40°	⅛" ⅛"	cal - qtz cal - hem															
											30° × 3	H/line	cal		125	100												
									130					Core blocky														
							132							Core blocky Core ground @ 135'														
							WK Arg Alt							V. Minor disseminated py + hem + limonite	135	80												
							WK-Mod Arg Alt 139½		140																			

Hole No.: SAR-80-1

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy ~~BaCp~~ Py	Cpy ~~Most Sd~~ Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag	Cu	Pb	Zn	W
							WK-Mod Arg Alt (cont)	150		10°, 70°	1/8" x 2	Cal-Ser	dissem hem, minor py core ground @ 147½ blocky 145'-148'	145	80'													
							151 WK Arg Alt HGDP	160		30°		Cal-hem	Core ground @ 151' cont blocky. Minor dissem hem	151 155	95													
							160' Int Arg Alt 166			60° 50°	1/8" 1/8"	Cal Cal-Ser	minor dissem hem, py and cuprite?	165	100	Cu .01 —	—											
			20-25% biot				WK Arg Alt 170'	170		15° 30 70°	1/16" 1/8" fract 3"	Cal-Ser-hem Cal-chl	hem or Cu_2O			—	—											
							Int Arg Alt 171 Mod Arg Alt 174 Mod-Int Arg Alt 179	180		30°	H/L	Cal	Zone of biotite alt GDP. Dissem hem + py	175	100													
							Int Arg Alt 186 Mod Arg Alt 190	190		30° 20° 5°	fracture H/line fracture	Cal-chl Cal-Ser Cal-Chl	30" miss ~180'-185' Core ground @ 185' Diss hem or Cu_2O	185	70													
							Int Arg Alt 199	200					dissem hem. Cu_2O ?	195	90.													
							Mod Arg Alt 201½ WK-Fresh Arg Alt 203½ Mod Arg Alt 206 F-WK Arg Alt 209	210		5° 10° 80°	1/4" 1/4" 1/4" 1mm 1/8"	qtz Cal-Ser py veinlet Cal-Ser.	minor py dissem hem.	205													

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ba Ga	Cpy MoS2 Sp	Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	%	%	Assay Results: Sample Number Core	Sludge	Gold	Silver	Cu	Pb	Zn	W
							WK-Mod Arg Alt 212 GDP				5°	1/8"	Cal Sm - py	Good Core recovery																			
							WK Arg Alt GDP																										
							Porphyritic And Dyke 216 217				40° 20°	contact contact		disem hem disem py @ 214	215	100																
							F-WK Arg Alt GDP 219½		220		20° x 4 45°	1/16" x 4	Cal - Sm - chl Cal																				
							Int Arg Alt GDP							disem py + hem	225	95																	
									230																								
							240½		240						235	80																	
							Sand Green Porphyritic And Dyke				30°	1/8	Cal - stringers	Core ground @ 243' missing 1'																			
				Chl.	fine grain		WK Arg alt 243 244½				40° x 80°	1/16 x 4 1/16"	Cal - chl Cal.	Minor disem py	245	90	—	—															
											60° 70° 50°	4	Cal - chl - hem. clay. qtz	Dyke chloritized																			
									250								—																
					fine-med.		252½ Dyke dark-Green				60 x 4	π x 4	Cal stringers	minor py																			
							255				60° - 30° 30°	1/8" - 3/4" contact	Cal. chl - clay		255	100																	
							WK Arg Alt pGD				50° 50° x 2	fracture 1/16" x 2	chl - clay Cal - chl.																				
15-20 prism	40%	20%	25-30% Pio, Po & Cp.		fine grain	7	265½ Non-porphyritic GD 267½		270		45° 20° + 40° 60° 70°	1/16" x 2 contact 1/2" contact	qtz - chl. - hem stringers Cal - chl seam Cal.	minor disem py + hem. + Limonite Minor disem hem.	265	100																	
				5-2½%					280		30° 5° 40°	1/16" 1/8" 1/16"	Cal - chl. Cal - chl. Cal.	Some minor 2nd K/Spar alt envelopes. Cal - chl stringers from 270'-290' minor disem hem	275	100																	

Rock Types and Alteration: Qtz. / Plag. / K Spar / Mafics / Accessories / Texture / Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy ~~Bo Cp~~	~~Mo S2 Sp~~ Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag	Cu	Pb	Zn	W
	WK Arg Alt GDP (Qtz)			40° x 2 30° x 3 5° 40°	1/16" x 2 1/16" x 3 1/8" 1/8"	Cal - chl - Lim Cal - (Limonite) Cal - chl - Lim Cal - chl	Lt K/Spar Alt. in patches + along Cal-chl stringers Minor dissem hem	285	100														
	Int Arg Alt GDP 290	290																					
				80° x 3	1/16	Cal - (Lim)	Dissem hem + minor py	295	(100)														
		300																					
	307			5°	1/4"	qtz - chl - py	dissem hem + py. Core recovery looks good. where samples already taken	305	100														
	WK - Mod Arg Alt GDP	310		80	1/16	Cal - chl.																	
	320			50° 15°	1/16" 1/4"	Cal - chl - Lim Cal - chl. Lim stringers qtz - sev.	minor chlo hem. Some 2nd K/Spar Alt. dissem hem. Minor py.	315	100														
	Int Arg Alt GDP	320		60° x 3 75°	1/4" x 3 1/2"	Cal. Cal - vuggy.	Minor dissem py Dissem hem, substantial	325	100	-	-												
		330		15°	1/4"	Cal - chl - clay				+5	-												
	334 Sand Green Porph Andesite Dyke	340			30°	Cal - chl.	Core crumbly @ 334 - 335'4 missing approx 1'	335	90														
	341 Int Arg Alt GDP 344 Andesite Dyke. 345 Int Arg Alt GDP	344½ 347 350		50° 80°)	2" 1/2" →	Cal vugs in dyke Dyke intrudes for 2" qtz-sev-py - massive @ 347' Cal - chl stringers	Minor py in dyke. Phenos altered to chl. Py occ as blebs and along fracture surfaces, dissem hem.	344	100														

Hole No.: _____ Page ___ of ___

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag	Cu	Pb	Zn	W
							Int Arg Alt GDP (oxd) 359		360		30°	2" ¼'	Cal. chl. vuggy Cal-chl.		354	100														
											10°	1/16"	cal-chl.	drizzem hem.																
			30-40%				Zone in picture In mafics 367				20°	1/16"	cal-chl-hem	Core grounded 367'																
											80°	¼"	qtz-hem-py	Massive sulphide mineralization veinlet? Py-cpy, Sph ~ 363½-365¼	365	95														
							Sand Green And Dyke Porphyritic 370		370					Dyke contains qtz																
							Int Arg Alt GDP 371				80°	contact		Stringers + drizzem py																
							Sand/Green And Dyke porphyritic 374				30° x 3 60°	⅛ x 3° contact	qtz stringers ⅛"	Core ground @ 375'	375	100														
							Dark Green (Lamp) Dyke porphyritic 377						qtz blebs random	very minor py																
									380		80° 50° 50° x 3	¼" ¼" 2 x ¼ x ¼"	qtz																	
							Sand/Green And Dyke porphyry 382				35° 80° x 3 + 25° 50°	⅛" ⅛" x 3 + ¼" contact	qtz-py qtz vuggy stringers	Core recovery good																
							Int Arg Alt Qtz porphyritic 384				20°	6"	Dyke intrusion	No Ortho closer up to 2cm 2nd K/Spar alt. 382½-384½	385	100														
							Int Arg Alt GDP				5'	fracture	chl-clay	disseminated blebs of py																
									390		30°	1/16"	Cal-chl-py-cpy																	
											40° 30° x 3 70°	⅛" fracture 1/16" x 3 ⅛"	chl-qtz-py Cal-chl. cal-chl-py	Disseminated py ~ py blebs py on fracture surfaces	395	100														
			2m				399		400					Broken up to 2mm @ 399' for 1'																
							Sand/Green And Dyke P 404				5° 40° 35°	¼" fracture ¼"	Vuggy qtz chl-clay-py qtz stringers	Disseminated																
							Int Arg Alt GDP 408				40°	¼"	qtz-sph-py		405	100														
									410		40° 80°	¼" ¼	cal qtz																	
							Sand/Green And Dyke porphyry				35 30 x 2 40 35 25 45 40	fract. ¼ x ⅛ ⅛ ¼ ¼" ¼ contact	in fracture & chl-clay polished stringers qtz qtz qtz qtz qtz-sph-py	Core ground @ 415' Core missing @ 417' Scattered blebs of qtz and disseminated py	415	99														
							Int Arg Alt GDP 417 418																							
							WK Arg Alt GDP		420					magnetite																

Hole No. _____ Page 7 of 8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD	SILVER	Cu	Pb	Zn	W
							WK Arg Alt GDP (cont) 426½			50° 30° 35°	⅛ ¼" contact	qtz - Ser. chl-chl-clay chl-clay - hem.	disem hem entire py and magnetite	425	100													
			10% bio 2mm.		porph. fine gm.	7	Med Gray, Green And Dyke Porphyry 430			30×2, 70×2	3×½" 1×¼"	Cal	-															
							432½			20 50 30° 30	¼" contact ½"	Cal - chl Cal - chl qtz - Ser. May-py-cpy-hem	Disem py + hem. Minor cpy. Magnetite quite abundant @ 433½-435	435	100	.02 .02	.09										
	20-25 ↓ chlor	30% from Arg.		10% mag.	med coarse	7	WK Arg Alt GDP Mod. 439			5° 30°	⅛" contact	qtz - chl - hem. py				5												
			10-15% bio 2mm ↓				Med Gray And Dyke Porphory 449½			20×2 30°	⅛" ¼"	Cal. Cal - chl - hem	GOOD core recovery.	445	100													
				mag 10%	fine gm.		WK-Mod Arg Alt GDP 453 Med Gray Green And Dyke porph			40° 00°×3 45° 40-30-50	⅛"×3 contact ⅛"×3.	qtz - Ser - hem. qtz Ser Cal.	disem py GOOD core recovery	455	100													
	chlor.	chl.					Fault Zone 461½ 462½ Mod-Int Arg Alt GDP 467 WK Arg Alt GDP			60° 10° 5°×2	contact ¼" ⅛"×2	chl-clay (alt Dyke) Cal. chl - clay - py Cal. chl - Clay	Core ground @ 465' core blocky 461½-462½ Disem py + hem 50m 2nd K/par vein. less orthoclase @ 467' pv 1'	465	99	-	.050 .3											
			20-25% bio 15 HO.10																									
							Ground Dyke Pervasive 2nd K/par 477 477½			25°-10° 60-50 15° 20° 30° 40°	¼"×2 ⅛"×2 ⅛" 1" contact fracture	chl-clay - py - hem chl. - clay Cal - chl. And Dyke. qtz - Ser - py chl - hem.	Core ground @ 475' minor disem hem + py. Mineralization - Sp, Ga?	475	99	.05 .3	.005 .7										
							WK Arg Alt GDP 482 qtz - Ser Grv 485 - Mod Arg Alt GDP			40°	⅛"	qtz Ser. py Cal - hem	py in qtz-Ser-chl veins as blebs, in fractures disem hem and veins along fracture surfaces	485	100													

Hole No.: SAB - 80 - 1

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ba Py	Cpy Mo62 Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	GOLD	SILVER	Cu	Pb	Zn	W
							Mod Ag Alt Grd (cont) 496				15° 30° 50° 40°	1/4" 1/8" fract 1/4" fracture	Cal - chl - hem. Cal - chl - hem stringers. chl - hem - clay chl - hem - clay	disem py and hem. hem occurs along fractures.			.005										
							qtz - Ser - Py, Ev 497 498				45 30° 30°	1/4" 1/8" contact	qtz - ser - hem. cal - hem.	py as blebs in fractures	495	100	.02 .2	.05									
			10% 2mm		fine grn.		Mod Gray And Dyke Porph 508		510		70° 80 30° 30° 30°	1/4" 1/8 1/4" contact 1/16"	cal - chl. hem (py) cal - chl - hem cal hem qtz - Ser	Core crumbly at 505!	505	100											
			15% bio fresh				Wk-Mod Arg Alt Grd 520				20° 35°	fracture 1/16"	chl - clay qtz chl. - hem	Core ground @ 515' disem py. and hem. 2nd Arg. Alt 515' for 2"	515	100											
				mag >5%	hem porph frac		Grey/Green And Dyke Porphyry 523		530		5° 70° 35° 70° 50°	1/4" contact. 1/8 1/16"	cal - chl - clay bio - chl - py qtz - chl cal. cal - hem.	Core ground @ 525'? mag in dyke @ 528' 531'	525	100											
			↓ chl 10% 2mm	mag >5%	fine grn mafic xenoliths		Sand/Green And Dyke Porphyry 531		540		60° 30°	1/16" 1/4	cal - hem qtz - chl.		535	100											
													End of hole 1 @ 535'															
													Argillic alteration is weak to intense. mineralization in intense Arg altered core - Au, Ag mineralization in weak - Mod Alt																
													is !! Au Ag, Pb, Zn This hole has been sampled extensively															

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No sludge collected. Core entirely logged by B. York-Hardy. See adjoining bedrock log. Log Scale 1" = 10' Sampled

Hole No.: SAB-80-2
Project: KETTLE RIVER
Claim No.:
Logged by: B. CALLAGHAN
Date: 26th May 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Completed:
Elevation:
Length: 645'

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Coring @ 35'		25														
20%						5	5" qtz Sericite Pyrite altered Granodiorite Porphyry		40					Core blocky 35-41 missing approx 1' minor diorite dyke		80.							
							Mod Arg alt Porphyry 45½ 46½ Wk Arg Alt GDP 49½		50					Core ground @ 41 blocky from 41-45. missing approx 1' minor diorite dyke	41 45	75. 100							
							~~Fresh Porphyry~~ 57¼ Wk Arg Alt GDP 58¾ Mod Arg alt GDP		60					Core missing @ 59-63.7 approx 4½' @ 54-75. qtz Sericite inclusions average millimeters to cm. Approx 1-1½' apart. Pyrite diorite.	55	58.							
						7	63¾ Wk Arg alt GDP		70						65	100							
									80						75	100							

FORM A WP

Hole No.: [illegible]

Rock Types and Alteration								Graphic Log			Mineralization and Structures																	
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Py	Estimated Grade Cpy Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge					
							WK Arg Alt GDP fon 85¼								85													
							Fresh Granodiorite		90							100												
							99 qtz-feldspar zone 100		100						95	100												
							Mod Arg Alt GDP 102																					
							Wk Arg Alt GDP with local intense chlorite alteration Remaining Porphyry 106								105													
							Wk Arg Alt GDP E local intense top qtz Sericite 108¾ qtz Ser-Py 110		110							100												
							Mod Arg Alt GDP 112							0.117 - qtz-Ser-Py 132¼ - " " " ½"														
							Fresh GDP E local intense chlorite Mod 114¾ Str Arg Alt GDP 115¾								115													
							Wk Arg Alt GDP E local qtz-Ser-Py		120							100												
							Mod Arg Alt GDP 120¾ 121¾																					
							Wk Arg Alt GDP 125¼																					
							Mod-Int Arg Alt GDP 127								125													
							Fresh Granodiorite Porphyry		130																			
							qtz-Ser-Chl-Py 135¼ 135¾								135	100												
							Fresh Granodiorite 139¼		140																			
							Fresh GDP 141									100												
							Mod-Int Arg Alt GDP								145													
									150																			

Hole No.: SAB-80-2

Rock Types and Alteration								Graphic Log			Mineralization and Structures					Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy		Specific Gravity	Weight (Grams)		Sample Number					
																	Cpy	Sph		Core	Sludge						
																	Py	Ox		%	%	Core	Sludge				
							Mod - Int Arg alt GDP (cont) 152½																				
							WK - Mod argillic								155												
							Zones in fresh GDP.		160							100											
															165												
							168½ 169		170							100											
							170½ 171½ WK Arg alt GDP 173½ 174½ Int Arg alt GDP								175												
									180							100											
							186½ 187½ Mod Arg alt GDP								185												
							Mod - Int Arg alt GDP		190					190-191 - Core fracture		100											
							193½ Fresh - WK Arg alt GDP 195								195												
							Mod - Int Arg alt GDP		200							100											
							205½ WK Arg alt of GDP																				
							205 Fresh GDP								205												
							208 WK Arg alt GDP		210																		
							210½ Mod Arg alt of GDP 212½																				
							Mod - Int Arg alt GDP								215												

Hole No.: SNS-80-2

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Mod: Intrang alt QDP (Co Alt)																
							225 / 225¾								225								
							Mod-Int Arg alt QDP		230							100							
							240		240		35 × 2	¼ × ⅛	Vuggy qtz-clays kaolinite		235	100							
							Mod Arg alt of QDP 243½				30° × 4 ↑ 30°	¼ × 2, ⅛ × 2, ½" × 2	Sheared clays. Dyke inclusions	Mod arg alt pervasive not kaolinitic	245	100							
							Mod-Int Arg alt of Cl. and white Arg		250														
							253½								255								
							qtz vein																
							257																
							Mod-Int Arg alt 259½		260							100							
							Fresh QDP 262																
							Wk Arg alt QDP 263½																
							2nd Feldspar 265							Arsenic here	265								
							Wk Arg Alt QDP																
							270		270							100							
							Mod Arg alt of QDP 273																
							Wk Arg alt of QDP							@ 274, 273 biotite rich zone (gneissic) @ 60°, 2-3" wide	275								
							Wk Arg alt of QDP 278																
							Epimerolant Pokeno alt		280							100							
							282																
							Fresh-Wk Arg alt								285								
							Wk Arg alt 287 / 287½						2nd qtz-feldspar			100							

Hole No.: SAS-80-E

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qz Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Fresh. WK Arg alt of GDP & minor biot rich inclusions.		300			2½"	gunnic 2" 0295½ biotite 0297		295	100							
									310		70° / 50°	½" / ½"	biotite rich 0301 / Potassic alt 0309		305	100							
							3184		320		50°	2"	biotite rich 0317		315	100							
							WK Arg alt of GDP & local potassic alteration. WK Arg alt + mon 328 ~~Potassic alt 329½~~		330		60 × 2	⅜ × 2	calc, chl - clays.		325								
					fine grn.	7	WK Arg alt of GDP. ~~3328 355~~ Pervasive Potassic Alt 3341½ Mag, Anh, Dick 335½ Fresh. WK Arg alt. GDP. WK - Mod Argillic 3394 ~~3400~~		340		50° / 50° / 50°	wavy & 1¼" / constant / constant	andesite dyke, porph	Dyke - andesite strongly	335								
							Fresh QDPE minor local pocket potassic alt		350					Potassic alteration approx. ¼" - 1" wide, approx. 30 cm, approx. 1' from each other	345								
							4" 3544 355 Fresh. WK Arg alt. 359 Mod Argillic alt of GDP		370		60°	1"	biotite rich inclusion.		355								

Hole No.: SAG - 80 - 2

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Mod Arg alt 362				55°	1"	2% k/spar + arsenopyrite, blebs										
							WK Arg alt + minor 1-2% k/spar + 365				50	2"	biotite veinlets 363 top (arsenic)										
							Sandy Gran Andesite 367				80°	contact		Dyke contains calcite stringers. Composition change 6" from 367 ft. = [illegible]	365								
							Mod Arg alt GDP		370		40°	contact				100							
							371				80°	contact		Dyke contains calcite stringers + vuggy veinlets of calcite + qtz									
							Sandy Gran Andesite 374				80°	contact			375								
							Int Arg alt GDP 376																
							Mod Arg alt 380		380							100							
							381				80°	2"	and dyke inclusion										
							383				70°	contact			385								
							Mod Gray Andesite 386				65°	contact											
							WK Arg alt GDP 387									100							
							Mod - Int Arg alt GDP		390														
							399		400						395	100							
							WK Arg alt of GDP		410						405	100							
							411																
							Fresh GDP 413								415								
							WK - Mod Arg alt 417									100							
							WK Arg alt of GDP		420														
							Fresh GDP 421																
							WK Arg alt GDP 422																
							424								425								
							Mod Arg alt GDP									100							

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Gn	Py	Sph	Ox	Recovery	Assay Results
							Mod Arg alt (cont) 433¼																
							Mod arg alt & local wk arg alt of GDP 438½								435								
							Fresh GDP		440							100							
															445								
									450							100							
							Mod Arg alt 452¾ 453¼																
							Int Arg alt of GDP							dissem py	455								
									460		50°	¼	calc-qtz (vuggy)			100							
							461½ Mod Arg alt																
							wk arg alt 464 465								465								
							Mod Arg alt 467½																
							Fresh GDP 470		470							100							
							Wk-Mod Arg alt				60°	3/8"	calc-qtz-mt vuggy										
											55	½"	calc-qtz clasts vuggy										
							474				50	¼"	calc-qtz clasts		475								
							Fresh GDP & local wk arg alt'n.		480							100							
							481½				60° x 2	½ + 3/8"	calc qtz 2nd flt/pm										
							Fresh GDP								485								
									490							100							
							491																
							Wk Arg alt of GDP 494				60°	4"	2nd x flt/pm @ 493¼										
							Fresh GDP 496								495								
							wk Arg alt of GDP 498½																
							wk Arg alt & local		500														

Hole No.: SAB-80-2

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							WK Arg Alt & local mod Arg alt. 506½ Fresh GDP 508½ WK Mod Arg alt 509¾		510		40°	w/ mt.		Mod arg alteration extends 6"-1½' alternating w/ wk arg alt.	505	100											
				10% chlorite 2mm grain	10-15 mag. 2-4mm		Light-med gray dark (brecc.) dyke Porphyry		520					Dyke bleached from 509¾ - 511¾ Calcite stringers in dyke. ¼-½" wide closely spaced in bleached zone. Dipping stringers vary from 2"-4"-1' apart and are orientated approx. 50-60°	515	100													
							527 Fresh GDP		530		50°	coarse		Calcite stringers more abundant 2 contacts	525	100												
							532½ WK Arg Alt of GDP 536½		540		40° 30°	½" ¼	2° Feldspar + Tr. @ 530½' 2° Feldspar + Tr.	minor dissem py @ 533 - 536½	535	100												
							Fresh GDP 547½ Fresh GDP & local WK Arg alt		550					WK alteration in fresh porphyry ½"-4"-1'	545	100												
							554½ Mod Arg alt 557½		560		50°	2½"	2° Feldspar rich zone	minor dissem py + thin py stringers + veins @ 557'. minor 2° Feldspar alt. @ 558'-559'	555	100												
							Fresh GDP 566 WK arg alt		570			1'		@ 564 - 569 minor 2° Feldspar alt.	565	100											

Hole No.: SKB-80-2

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cpy	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sample Number Sludge	Gold	Silver
							571 Mod gray gray Dk and Porphyry	580		50°	contact	Calc - qtz - Limonite	Dike (cavity blocked Calcite stringers are 1/16", 1 foot apart 575 595 - 585 stringers 1/16 - 1/4" thick, 3-9" apart orientated approx 50°	595	100													
							587 Fresh GDP 588 590 590	590		80° 35° 75°	contact contact contact			585	100													
							~~Fresh GDP 590 590~~	600		45	contact		@ 595 calcite stringers 1" apart, 1/16" thick, orientated 50°.	595	100													
							4" qtz-Sch-Calcay 602 603 Mod Hy alt GDP 604 Fresh GDP	610		75° 40°	contact 2"	mag-pyrite coating @ 604 ft, qtz - calc - pay		605	100													
							612 3/4 Intra-qy alt. 615 4" qtz Sch Calc 616 Fresh GDP	620		50°	1/4" 2"	@ 616. qtz-Sch-pay 2" K/Spar + Calc (trace)	diminish Py + pay blebs in qtz veinlet	615	100													
							Mod Hy alt GDP 620 621 1/2 Fresh GDP Mod. brecciated gouge. 4" 624 1/4	630		75°	contact			625	100													
							631 1/2 4" Mod A-gouge 632	640		40°	2 1/2"	K/Spar		635	100													

Hole No.: SAS-80-2

Rock Types and Alteration								Graphic Log			Mineralization and Structures								Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy	Sph	Py	Ox	Specific Gravity	Weight (Grams) Core %	Sludge %	Sample Number Core	Sludge					
							Fresh GDP									100														
													End Hole @ 645'		645															
									650																					
													Mineralization mainly disseminated py and py blebs in qtz stringers + veinlets with approximately 260' Some mineralization including disseminated py + blebs @ 612 + 452 Granodiorite is mostly fresh.																	
													alteration zones appear wk - Extensive Dyke intrusions @ 411 - 603 502 - 527																	

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected — Core initially logged and sampled by B. York Hardy Co., see adjoining bedrock log by Scale 1" = 10'. length recovery is an approximation

Hole No.: SAB-80-3
Project:
Claim No.:
Logged by: B. Callaghan
Date: 27th May 1981
Core Size:
Completed:
Elevation:
Length:
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
									10					Reports B York Hardy's description on mineralization.									
							blocky, fractured sbrkwnk varg qtz; 18 Phyllic alt		20					limited markers not block. - unable to determine orientation of qtz stringers?	12.5 17	50%		.05					
							Intrdrg alt 20ft 21ft; Phyllic alt; 30		30					- qtz contains py blebs with minor chalcopyrite staining (blue) - py in fracture in surrounding rock, see	25	75% 95%		.05					
							Mod. Arg alt; 33½ Phyllic alt 35½; Intrdrg alt		40					bedrock logging by Bob. York Hardy. vuggy qtz @ 35½'	35	71%							
							41½; Mod - Intrdrg; 45½ Intrdrg alt 47½; Phyllic alt		50		70°	2"	qtz veinlet - py blebs	core wound @ 48½	42 45	100							

Reports B York Hardy's description on mineralization.

Hole No.: SA-3-80-3

Rock Types and Alteration								Graphic Log		Mineralization and Structures																	
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Bn Py	Estimated Grade Cpy MoS2 Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge					
							Phyllic alt (Grd) 50½ Int Arg alt 54½ Phyllic alt 58 Int Arg alt.		60						55	90											
							61½ Phyllic alt 64 Mod-Int Arg alt "		70						65	95 100											
							72 Phyllic alt c local Int A. gelt moderate alt 75¾ Phyllic Alt 80		80						75	100											
							Int Arg alt Phyllic Alt 84 88½		90		60 10° approx	¼" contact	9"y - Py blebs		85	100											
			C.hl. 2-3mm		fine grain	6	Light Sand Green Dyke Porphyry (Lamph) 96½ Phyllic Alt 98½ Mod Arg alt 98¾		100		60° "	3/4 "	9"y - Py blebs	Phenocrysts in dyke - (crowded subhedral to euhedral mag + chlorite by, upto ¼")	95	100											
			1x or 10% 2-3mm		fine grn.	7	Med-Dark Green and Porphyritic Dyke 110		110		10° approx	contact			105	100											
							Phyllic Alt 114½ Int Arg alt (Grd) P Phyllic alt 115½ 116½ Mod Arg alt								115	100											

Hole No.: SAB-80-3

Rock Types and Alteration								Graphic Log		Mineralization and Structures							Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage / Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge						
							Phyllic Alt 121 Mod Argillic 122 Phyllic Alt 3" [illegible] 129		130					125	100												
									140					135 139	100													
							Intargillic 146 147		150					145	100													
							Phyllic Alt Int Phy Alt 156¼ 157¼ Phyllic 158¾		160				2' missing N. 155-157	155	100												
							Int Argillic 166½ Phyllic Alt		170				3½ ft lost	165	80 58													
							175 Int Argillic 175 Phyllic Alt 176½ Int Argillic Alt		180					171	75													
							181 Phyllic Alt 185½ Int Argillic Alt		190				2' missing N 182-185 5' missing N 185-190	182 185	33 50													

Hole No.: SAB-80-3

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Int Arg alt (Cont) 193							6" missing 195' - 199 3/4									
							Phyllic Alt 195								195								
							Int Arg alt 199½		200							1.95							
							Phyllic Alt 203							@ 201 3/4 semi massive magnetite in qtz veinlet									
							Wk Arg alt on qtz & local sericite 205								205								
							Wk Arg alt		210							100							
							qtz veining 213½ 213¾ 214¾								215								
							mod argillic 219½ 219		220		70°	Fair 1 qtz	2 x 1 inch qtz stringers	@ 219½ - 221.2 ½" to 1½" qtz stringers									
							Phyllic alt Wk Arg alt 222½ Mod Argillic									100							
							Phyllic Alt 223 224								225								
							Wk Arg alt																
							Int Arg alt 228 229½		230														
							Mod Arg alt									100							
							Int Arg alt 232 233																
							Phyllic Alt								235								
							Int Arg alt 236½ 238		240							100							
							Phyllic Alt 246								245								
							Wk Arg alt		250		60°	1½"				100							
							250½ Mod. Int Arg alt & local sericite 255								255								
							Phyllic Alt									100							

Hole No.: SAB-20-3

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Phyllic alt WK Argillic 265 266 Phyllic alt		270						265	100												
							Dyke Intrusive 275 275½ WK Argillic 4" qtz veinlet 277½ Phyllic alt		280						275	100												
							5" WK Argillic 282 Phyllic alt 284½ WK Argillic 286 Fresh GDIP 288½		290						285	100												
							Hornfels alt 292 Phyllic alt		300						295	100												
							303 Int Arg alt 306 Phyllic Alt		310						305	100												
							Mod. Int Argillic 317½ 318½		320			(fractured)			315													
			chl 2-3% 10-15°	fine grn.	6.5		[illegible]		330					Dyke altered	325	100												

Hole No.: SAS-80-3

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Phyllic alt 334¼ Light Grn/Sand Alt Dyke Porphyry 336¼ 6" Dike (Fel) 338¼		340						335	100											
							Phyllic Alt local intens alt 345¾ Light-med green Alt Dyke Porphyry.		350					Dyke pattern appears and lower contacts. N 345¾ - 358¼	345	100											
							Phyllic alt. 358¾		360						355	100											
							Fer Arg alt 364½ Phyllic Alt Fer Arg alt 369½		370			fault 91	bleached clays chl.		365	100											
							Phyllic Alt 371½ Alt Sericitic Grey Dyke Porphyry 379		380					bleached w major contact	375	100											
							Phyllic alt with local mod-int arg alt.		390						385	100											
															395	100											

Hole No.: SAB-80-3

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Phyllic Alt (cont)																
							Fresh GDP 403 404																
							Phyllic alt								405								
							mod Ag alt 408½ 409½		410							100							
							Phyllic alt								415								
									420							100							
							Intrusive 425 425½								425								
							4" mod Ag alt 428		430							100							
															435								
									440							100							
							4" Mod Ag alt 443																
							5" Pinkish 445								445								
							Mod Ag alt 448 449		450							100							
							3" Int Ag 456								455								
									460							100							
							464½								465								
							Med grey-dark dol-Brecciated Dyke.							Dyke altered at contact									

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Hole No.: SAB-80-3

Rock Types and Alteration								Graphic Log		Mineralization and Structures																	
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Bn Py	Estimated Grade Cpy MoS2 Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge						
							Phyllic alt (wk) 471 Int Arg alt 472 Phyllic alt Int Arg alt 474 475 Phyllic alt		480					@ 469' phyllic altered QDP brecciated @ 524' less brecciated	475	100												
							4" Int arg alt		490						485	100												
							Mod-Int arg alt 494 496 Phyllic alt Mod-Int arg alt		500						495	100												
							Light Sul Grey dyke porphyry 507½ Phyllic alt		510						505	100												
							Mod-Int Argillic 512 513½ Phyllic alt & local mod arg alt		520						515	100												
							Mod Arg alt 529½ 530		530						525													
							Phyllic alt 535 Mod Arg alt 539½ Phyllic alt		540						535													

Hole No.: SAS-80-3

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Phyllic alt (cont) 542; Mod Arg alt 543; Phyllic alt 544; Mod Arg alt 545½; Phyllic alt 546¾		550					@ 546-549 magnetite veining.	545	100							
							Fresh-wk Arg alt 558¾		560						555	100							
							Phyllic alt; Mod Arg alt 562¾; Phyllic alt 563¾; wk Arg alt 566; Phyllic alt		570						565	100							
									580					– @ 577' matrix in phyllic altered porphyry & [illegible] mineralized & few local inclusions of wk-mod arg alt.	575	100							
							wk Arg alt 581; Phyllic alt		590						585	100							
							593¾; Fresh-wk Arg alt 600		600						595	100							
							~~Mod-Arg alt~~ 601; Phyllic alt; Intrarg alt 605 605½; Phyllic alt								605	100							

Hole No.: SA3-80->

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Phyllitic [illegible] Lamp Dark		620						615	100							
									630					@ 620-625 [illegible] @ 644-636 15% mg - 2-4mm	625	100							
									640						635	100							
									650					@ 643-648 [illegible] 18" long @ 646 [illegible]	645	100							
									660					@ 655 [illegible] no [illegible]	655	100							
									670					@ 669 [illegible] 20° long	665								
														[illegible] stringers [illegible]	675	100							

Hole No.: SAB-80-3

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							lamp Dyke cont		690						685	100							
									700						695	100							
							701 Dark Gray basaltic Dyke							no chilled margins in evidence		100							
									710				End Hole @ 705'		705								
													See mineral description recorded by Bob York-Hardy. Consists of disseminated py in phyllic altered granodiorite porphyry. 1% veinlets in phyllic altered porphyry contain bornite. See more [illegible] and blebs of py.										
													alteration is mostly phyllic. Int weakens slightly with depth. Major Dyke intersects @ [illegible] end of hole.										

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected.
log scale 1" = 10 ft.

Core Size: NQ
Completed:
Elevation:
Length: 825'

Hole No.: SAB-80-4
Project: KETTLE RIVER
Claim No.:
Logged by: B Callaghan
Date: 11th May 1981
Contractor: Mohawk / Markland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Sph Py	Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Coring @ 13'		10																
		60% pink p-k	10% chl	>2% tr	med gm.	7	Potassic Alt		20					Core blocky, missing 6' from 13-22' Hairline fractures	13	33				.05					
									30					Core blocky @ 22-33' missing approx 2' Core ground @ 22½, 23½, 32. Minor disseminations	22	80									
									40		30°		chl-clay stringers	chlorite stringers widely spaced approx 2.5' fractures in fresh chlorite	33	100									
											30		chl-clay stringers	chlorite appears in stringers and as coating in clay in core. 2nd biotite → chlorite.	45	120									

Hole No.: SAS-80-4

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge
							Porous Alt (cont) 52 Intense Potassic Alt 54				85	1/8"	chl - chlor	Core ground @ 50'. Core blocky 56-59' missing approx 1'. Alt of Potassic. High over 60% of rock with 2% bnt. to 70% chl.	55							
							Dike Rock Inclusion 60		60					Footage on dike approx. Core blocky		88							
									70					Core blocky @ 68' for 1 foot	64	100							
							79½		80		50°	1/8	chl - py.	Core blocky from 80-85' missing approx. 6"	74	95							
							Int Potassic Alt		90		60 50	1/4 fracture	9% chl - chlor.	Core blocky @ 85'-91', 93-95. missing approx 2'. minor disseminated	85	80							
									100		50	1/16	chl stringers	Core blocky 99-103' minor disseminated	95 99	50							
							103.6 Alt and Dike Porphyry Dike Alt 109½		110		70° 40 70°	contact 1/16	chl stringers	Remnants of porphyry in dyke @ 104' + 105'. Dyke contains chl stringers. Some stringers veining. disseminated py minor.	103.6							
							112½ Alt and dike 112 Potassic Alt Dyke Inclusion 113½ Dyke Inclusion 113½		120		50° 10 x 3	contact 1/8 x 3	chl	hematite coating in porphyry + minor disseminated fractures in fault with chlorite.	114							

Rock Types and Alteration

Qtz. | Plag. | K Spar | Mafics | Accessories | Texture | Hardness | Rock Name Appearance

Graphic Log

Rock Type/ Alteration | Footage | Structure

Mineralization and Structures

to Core Axis | Width of Vein | Mineralization and Faulting (Type) | Remarks

Estimated Grade

Footage Blocks | Length Recovery | Cpy: Py | Cpy: Ox

Specific Gravity

Recovery

Weight (Grams): Core % | Sludge %

Assay Results

Sample Number: Core | Sludge

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Dyke Porphyry 121.5							Core blocky 121.5-135									
							Phyllic Alt		130						124.6	100							
							134 Aphanitic Porphyry c quartz + feldspar		140		60 60	1" 1/8"	Cal Cal	Core blocky 135-136.5	135	100							
									150		50 20 x 2	1/2" 1/16 x 2	Cal - vuggy + Lim Cal	146-148 Core blocky 151-155 146-153 Core broken Cal stringers at 1/16" every 4"	145	70		0.5					
							153½ Fault Gouge 156½ Phyllic Alt		160		40 55 70 x 3	contact contact 1/8"	Chl - clays breccia frags Cal - hem.	Chlorite, calcite veins 163' 2" folds, minor fractures in pilitic rock	155	100							
		20% gray pink	10% chl.	>2%			163½ Wk-Mod. Arg Alt c/o p		170		70 50 x 2 60 60 30	To 1/8 x 2 Contact 1/8"	Cal - hem Chl. Cal - hem. Chl.	Chlorite + tourmaline Propylitic Alt is not 100% pervasive and is peripheral to argillic alteration. most stringers Cal with chlorite. Hematite in feldspar contact with argillic	165	100							
							Qtz Dk Porphyry 179 180½		180		30 50	1/8 contact	Chl.	~~gradational~~ fractures in feld with hem + calcite chlorite stringers in argillic alt. minor disseminated py. chlorite stringers in phyllic - closely spaced.	175	100							
									190		30 20 40 20°	contact 1/8" 1/8" 1/16 Av.	Chl Chl. Chl stringers	fractures in feld c hem + chl. very minor py.	185								

Hole No.: [illegible]

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qz Py	Cpy Spa Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
									200		40	1/8"	py - chl - cal	Chlorite stringers Ap. 1/16" spaced approx 6" apart from 192 - 203½'	195	100						
							203½ Lamprophyre - Dyke 205½ and Dyke ? 209½		210		50° 60° 25°	contact fault "gouge" 2" contact	chl clays	Core blocky 201 - 205' 206' - 207' 209½ - 211. 202 - 204½ Core oxidized Dyke heavily oxidized with cal stringers oriented 50°. and Dyke cal stringers Ap. 1/16 5°. oriented 50°	205	100		.05				
	30	30	1 cc + chl 20.		med.	7	WK-Mod Arg alt'd Sp		220		50°	1/4" fracture	cal. chl - py - hem	chlorite stringers 1/16" every 1' (approx) fracture surfaces heavily oxidized	215	100						
									230		20	1/16"	chl - hem	222½ - 226 Core blocky Core oxidized 221 - 254 + hem + chlorite along fractures	225	100		.05				
							238 Mod - Int Arg alt'd Sp		240		70° x 2 50° x 2 70° x 2 40	1/16" x 2 1/16" x 2 1/8" x 2 1/4"	cal - hem cal - hem cal cal - lim	Core blocky 227' - 255 fracture surfaces heavily oxidized. Very minor disseminated py	235	100		.05				
							242 Int Arg alt'd Sp 245 Light Grey Dyke Rock 249 Int Arg alt'd Sp		250		70°	contact		fracture surfaces coated with hematite Core blocky @ 245' - 247' 249 - 257. Dyke contains chlorite stringers 1/16 with 1' spacing	245	100 100		.05				
							260½ Dyke Contact 260½ Mod - Int Arg alt'd Sp 257 Mod Arg alt'd Sp		260					251 - 263' blocky Fracture surfaces heavily oxidized lim + hem	255	95		.05				

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy. Eq. Py	Cpy. Eq. Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Fol Argillite 261 Pauville Gamp 262 263 WK-Mod Arg Alt'd		270		60° 60°	1/8" 1/8"	Chlorite alteration Chl-Hem Chl stringers	Fracture stockwork in wk alt'd pyroxenite + chlorite clay matrix. fractures infilled with hematite coating	265	100							
							Mafic-rich porphyry 278½ 276 WK-Mod Arg Alt'd		280		40° x 3 10° 70+50+40	1/16" x 3 1/8" 1/8" x 3	qtz-Py Chl-Hem Chl	hematite-magnetite fracture	275 278.5	100							
									290		30° 40°	1/8" 1/16"	Chl Chl-Hem		285	100 100							
									300		20°	1/8"	Chl	minor 2nd K/spar alt. from 291-292. Stringers of hem + chl. spaced more 1" apart or 1/16" to. from 294-300. 297-298 2nd K/spar alt + hem stringers in matrix Pl. rich zone	295	100							
							308½ 301½		310		85x2 5° 60° 60° x 2 60°	1/8 x 2 1/16 1" 3/16 x 2 contact	Py blebs + stringers Chl - Hem qtz K/Spar qtz. K/Spar	missing 1' approx.	305	90							
							Light Grey Andesite Porphyry WK-Mod Hydrothermally Alt'd 302½ 39		320		70°	1/16"	qtz	Core blocking 315'-319' missing 6" approx. Chlorite stringers mostly av. 1/16" spaced in broken zone 1½'.	315	95							
							WK-Mod Arg Alt'd 324½ Light Grey Chl Dike		330		20°	contact		Core blocking 325'-328' chlorite veining + dissem hem in porphyry minor dissem Py from 321-324' Chlorite stringers Av 1/16" closely spaced dissem Py + dyke.	325	1' 100							

Hole No.: SAB-80-5

Rock Types and Alteration								Graphic Log		Mineralization and Structures						Estimated Grade			Recovery		Assay Results					
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage / Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy	Py	Ox	Specific Gravity	Weight (Grams) Core %	Sludge %	Sample Number Core	Sludge				
							335 WK-Mod Arg Alt GDP		340	20° 40° 60	1/4" 1/8" 1/16"	Cal - hem Cal - hem Cal - hem	Core block 337½ - 340' dissem hem @ 338+ some mag - 2nd k/pow alteration.	335	95											
							349		350	40° 60° 60°	1/8 1/8 3/4"	Chl - hem Chl Potassic alt	Core block 346½ - 349' missing 6" approx. hem replaces fractures - rest in coating. Calcite stringers & chl stringers	345	95											
							Light Gray and Dark Bands 353½ WK-Mod Arg Alt 45° 356½ gray - k/spar - hem 356½ 357½ Light Gray and Dark WK-Mod Arg Alt GDP		360	40° 40	45° fracture zone 4" contact	chl - clays - hem 4" - k/spar - hem Veins Cal - hem chips	Core block 350½ - 353' 356½ - 365. missing 1½' Core oxidized from 357 - 385	355	85		0.5								
							367½ Mod - Tr Arg Alt GDP		370	70 50 30	1/16 1/8" 1/8	Cal - hem Cal - chl Cal - chl - clays - hem	Core poor recovery block @ 365 - 375. Core ground @ 374½ missing 3½' dissem hem @ 371	365	65		0.05								
							Light Gray Hd Dyke 374½ WK-Mod Arg Alt GDP		380	55° 35°	contact contact		Core block 375 - 381 Core ground @ 381' and 384½. Missing 2' Dissem hem + minor dissem py	375	80		0.05								
							Light Gray Dyke 385 WK - Mod Arg Alt GDP 385 Light Gray and Dyke 2' 385 Tr Arg Alt GDP 387½ Light Gray and Dyke P.O.P.	CA 15% Zone	390	70°	Fm 1½ 9.9 contact	Mylonitic 80% clay matrix	Chlorite stringers 380½-1½ Strongest Chlorite Fractures + dissem py	385	100											
							390 Mod Arg Alt GDP 392½ Dyke Fragment 393½ 394			30° 60° 30° x 3 30 40	contact 1/4" 1/16 contact 3/4" 3/4" 3/4"	Cal - chl Chl - hem mylonitic clays matrix	Core block @ 397 - 402.5 missing 1' Many veinlets in dyke.	395	01											

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qa Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	%	Assay Results: Sample Number Core	Sludge	Gold					
							Int Arg alt GDP					fracture zone	fine grained clay	Core blocky to 402½															
							404½				70 x 2	1/2	chl-chl-qtz	1 - 408															
							Mod Arg alt GDP								402½															
							408				30	1/8"	cal-qtz		408	81													
							Int Arg alt GDP		410					Core blocky 408 - 409½															
							413½				60°	contact				85													
							Light Sand Green dk. Dacite porphyry							Dyke 413½ - 415															
							Mod Arg alt GDP 416½				50°	contact		Cal, chl, stringers	415														
							417½									100													
							Fresh GDP minor weak alteration		420																				
							425½				50	contact																	
							green Light Gray Andesite Porph								425														
									430		30° x 4	1/8 x 4	cal	Calcite stringers + chl		100													
							431½				80° 50°	1/8 contact	cal - very																
							WK Arg alt GDP 433½				10° x 5	H/L	chl - qtz																
							Light Green Gray dk P				25°	contact		minor chrome pyrite dyke	435														
												3/4" 1/2"	cal blb, porphyry fragments	chlorite amphibole															
							Mod Arg alt GDP 439		440		50°	contact	cal stringers near contact			100													
							442½																						
							WK Arg alt GDP						chl-clay hem																
							1" Dyke inclusion				50	1/4																	
							Dyke inclusion 447½				20°	1/4	qtz, K/Ap, hem		445														
							448½				60°	H/L																	
											20°	contact				100													
							WK Arg alt GDP		450		75	1/4	cal																
							451½																						
							Mod Arg alt GDP				85	fault 912'	clays - Mont Kaol																
							2" sil. zone 455								455														
							456																						
							WK Arg alt GDP 457				75	H/L	Py - chl																
											30°	1/4"	cal - ser	minor chrome mica															
							460		460		30° x 2	1/8 x 2	cal - chl - hem			100													
							Mod Arg alt GDP				30° x 2	H/L x 1'	chl - py	chrome mica + py stringers H/L															
							465				Ser 60°	H/L contact	py		465														
							Gray Green Andesite Porph							Chlorite, stringers chlorite															

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade		Specific Gravity	Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox		Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge	GOLD	SILVER			
							Potassic alt 475 / 475.5; Potassic alt 477; Mod Arg Alt GD 477.5		480		60 40° 10 60	½" ½ contact ½"	Vuggy Cal - qtz Cal - hem cal	Core ground @ 477, 483 missing 2' @ 477 - 480 hem + calcite in fractures	475 477	100											
							484; WK - Mod. Arg alt GD; 2" Dike Rock - 487; 489		490		50° 50 60	1" ⅛ 2"	qtz - Sm. Py cal - chl - py	Core blocky @ 491 - 493' @ 485 - 490. Hem-chl along fractures - stringers white or chalky crystals	483	66 100													
							Int Arg alt GDP; 495; WK - Mod Argillic + 30 - 40% potassic alt; Intensely altered 498 - 500		500					Core ground @ 493 - 494'. blocky @ 493 - 494'. missing 1' core blocky 500 - 502. hem chl stringers and along fractures. Py blebs in stringers. Some in quartz. Mostly gouge & chlorite-rich.	493 494.6	62.5 100													
							5% qtz, Sm Py 503		510		70 50° 45 80 40	1" 2" ¼ ¼	Py blebs. qtz - py chl - py - Sm qtz - py cal cal	Core blocky @ 500 - 502. py mineralization in qtz stringers. core blocky 508' - 515.	502 508	100													
							qtz - Sm - Py blebs 515; Intensely Arg alt GD; 517.5; Mod Arg alt GD		520		45	H/L	chl - hem - py stringers, disseminated py blebs disseminated py + blebs	Core blocky @ 515 - 518 core blocky 518 - 522	515 518	100 100 75													
							qtz - chl - py - Sm 521 - 522; Mod - Int Arg alt GD; 525; Int Arg alt GD		530		80° 90	3" ½"	irregular blebs + disseminated py Cal - qtz	missing 1' core blocky 522 - 525 chlorite + clays in fractures Minor disseminated py @ 530' core brecciated	522 525	100 100													
							Good 535.5; Light Gray and Dark Arg		540		25 60 35 40 30 x 2	⅛ ½" H/L contact ½"	chl - clays chl qtz - Py Vuggy qtz - cal - chl		535													

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Eq.	Cpy Sol. Py	Cpy Sol. Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver
							Mod Arg alt 545 [illegible] 545½ WE Arg alt 545½ [illegible] 546 WE Arg + qtz 545½ Mod-Int Arg alt qtz		550		60° 30° 60°	[illegible] ⅛" ¼"	py - py chl - clays py blebs random. ¼"	Vein mostly py stringers. Py also occurs as [illegible] stringers and random blebs in both frost replacing [illegible] as well as [illegible]	545	100											
2.7	50%	35%	6.5% 5% [illegible] chl	Mag 2%	med - coarse [illegible]	7	551½ WE Arg alt + potassic zone		560		80 15° 70	½" H/L 2"	calc chl - hem - py stringers bottom [illegible]	[illegible] chl [illegible] in [illegible] along fracture [illegible]	555	100										
									570		60 30 50	⅛" H/L ¼ H/L	very [illegible] chl - py chl - py stringers calc - clays. py blebs.	@ 567 [illegible] potassic alteration for 3"	565	100										
							573½ Mod Arg alt [illegible] WE Arg zone. 580		580		50	¼	chl - clays.	@ 574 core slightly altered. Py occurs as many blebs in stringers mostly [illegible] from 573 - 581'	575	100										
							Fresh [illegible] minor WE Arg alt zone [illegible] potassic alt 585 Mod Arg alt + potassic alt zone		590		40 70 mostly 60 & 4 60 80	1/16 ⅛ H/L 1/16 & 4 H/L ¼	chl - hem. calc - hem. chl - py chl - hem, stringers chl - py calc - chl		585	100										
							Potassic alt 593 595 599 Potassic alt 600		600		40 50	⅛" ½"	qtz - py (semi massive) chl - clays	Core blocky @ 595 - 602', 604 - 605'. Core broken 595 ¼, 605' missing approx 6". Very calcareous @ 590' Fractures are filled with chl.	595	100 95										
							605 Int Arg alt 609½		610		75°	¾" ½"	calc. calc	chl - hem in stringers H/L along 9° open oriented 30-40° from 595 - 599 ⇒ 60° from 599 - 605 and now slightly spaced along 2" [illegible] py. chlorite clasts in fracture [illegible] angular. [illegible]	605	100										

Hole No.: S213-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver
							610 Mod Arg alt GDP 615 Intermediate GDP 619				30°		chl - hem	Core block 612-615											
							Mod Arg alt GDP 617 619½ Int Arg alt GDP		620		60° 50°	⅛" ½"	py - py py - kinoite		615	100									
							621 Mod Arg alt GDP		630		70° 30° 50° 30° x 4	½" ⅛" ⅛ ⅛ ⅛	py - Ser mm - py chl - chlo - py chl chl - py	core block 626-627 py in stringers mm chl & Ser in veinlets Larger py blebs in py veinlets than in wider spaced only an upper py stringer in chlorite clay block spaced 1-2"	625	100									
							636¾ Intermediate GDP 637 Mod Arg alt GDP 7" py Ser 639½		640		40 x 2 60 30 40	¼ ¼ ¼ ⅛	chl - py py - py - Ser cal - py chl - py	@ 638' - 642' chlorite + clays in fine fracture diminish py + minor py stringers	635										
							Mod Arg alt GDP minor Potassic alt 649½		650		80' 40° x 2 30' 90° 60 x 4	⅛ ⅛ ⅛ ½" H/L	chl - Ser - py chl - Ser chl cal chl - clays	Potassic alt @ 643½ for 1 foot. - @ 646' closely spaced chlorite stringers 1" apart (hairline)	645	100									
							WK Arg alt of GDP 656½ Mod - Int Arg alt 658		660		60 20 x 4	¼" H/L	cal chl - Ser	@ 656½ - 658' diminish py mm	655	100									
							WK Arg alt of GDP minor Potassic alt		670		40° 70 + 50 60	⅛" H/L < L ⅛	chl + Ser - py cal chl - hem	- @ 661 1' of potassic alt - 663 1' of chl - Ser - 675 hem in fine fractures	665	100									
							675 Mod Arg alt GDP 676½				75 + 55	H/L	cal	- 676 chlorite - clays in fine fractures.	675	100									

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
														Outblocky 689-691'									
											5°	¼" 2"	cal cal blebs										
							Mod Arg alt GDP 688¾ 686¾								685								
							WK Arg Alt GDP		690		80° x 2 85	¼" x 2 1"	cal qtz 2nd K/Spar			100							
							Mod Arg Alt GDP 690¾ 691¾				80°	1"	qtz - 2nd K/Spar										
							WK Arg Alt GDP				85	¼	chl - clays.		695								
							Potassic Alt 698 700¼		700							100							
							Fresh GDP																
											70° x 3	1/16	chl		705								
									710		80°	¼	chl - ser			100							
											80	⅛	cal										
											60	1/16	cal - hem		715								
							716¾ Mod WK Arg Alt Potassic alt zones		720		30	1/16	chl - clays	limonitic & chloritic along fracture surfaces & in matrix		100							
											80x2 10°	¼ x 2 ⅜	cal - chl cal - qtz 1' long	Very minor disseminated py @ 723'									
							724				40°	⅜	cal - clays		725								
									730		80 50	⅜ ⅛	cal - chl chl - clays			100							
											30°	1/16	chl stringers	-732¼ - 734¼ chl stringers closely spaced Av ⅛"									
							734¼ Fresh GDP								735								
							738		740		80 10°	⅛" ¼"	chl cal			100							
							WK Arg Alt & Potassic alt				80	¼	cal - chl - clays	@ 747 - 748' - cal stringers ¼" discontinuous lipping 4H aspect. 745 - 748' - intense dark coloured fum - hb. no brecc.	745								
									750		65	1/16	cal			100							

Hole No.: SAB-80-4

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Sph	Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag				
							WK Ag Alt & Potassic alt (cont)		760		70 40	½ ⅛	chl - hem. chl		755	100														
									770		50	¼ ¼	cal chl - hem - clays	Chl stringers closely spaced 2" apart average thickness ⅛" angle to 60-70° from 754-772' Dissem py @ 761 - 767'	765	100														
							FZ 4DP with Potassic alt 772 774		780		80 50	¼ 1"	chl - hem. gouging rights (Hm)		775	100														
									790		25x2 80 80	⅛x2 ⅛ contact	Chl - clays. cal. chl - hem	Hem-chlorite in fine fracture surfaces in post mineralization. Int ang alt Alpo. Kaolinized along fractures	785															
							WK Ag Alt & Potassic alt 793½		800		75	1"	chl-ser-py		795	100														
							Graphite Band 801½ 803 WK Ag Alt & Potassic alt. 807 Graphite and Dike		810		50° 60 50	contact contact contact	chl-clays-mont	Cal stringers in dyke Chl-hem stringers closely spaced 2" N/L from 803 - 807 Chlorite stringers closely	805	100														
							WK Ag Alt & Potassic alt 811½ Med Ag alt & Potassic alt 818½		820		25° 25° 30° 20 25°	contact ¼" ¼" ⅛ contact	cal - hem - chl cal - chl - py cal - hem	approx 65-15. minor disseminated py in dyke & disseminated py to porphyry @ 815'	815	100														

Hole No.: SAS-80-4

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Med Grain Sandstone 821½																					
							NK Argillic Potassic cpt 825									100												
									830					Argillic alteration is from weak to intense. Potassic alteration is pervasive occurring at purpose to stay and	825												
														Mineralization - disseminated py + cpy blebs in qtz stringers found in qtz. Sericitic environment. Py stringers are hairline and are slightly Spar with clusters associated with more chloritic less intense material														

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Sludge corrected log Scale 1"=10'

Hole No.: SAB-80-5
Project: Kettle River.
Claim No.:
Core Size: NQ
Elevation:
Logged by: R. Callaghan
Date: 5th May 1981
Completed:
Length: 785'
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cp	Cpy Sp	Py	Ox
							Bedrock 20' logging @ 20'		20						20					
	25 30	35	15	Spec Hem			Intermediate Alt. of Granodiorite Porphyry		30		75° x 4	1/16 x 4	Lim - clays.	Core blocky @ 20'-22' Core oxidized to 44¾ Specular hematite to 34¾'	25	100				
												¼"	9% - Lim stringers							
							31¼ And Dyke Porphyry Light Grey 34¾ WE Angle HEM GD		40			3½"	9% - Ser - Py	Core ground @ 35', @ 31' missing approx 1'. Core blocky @ 30'-35 fractures oxidized in dyke	35	90				
							47¼		50		50 30	¼" ¼"	K/Pers. Cal - chl - Lim - Py	@ 40' absence of larger 1½' K/Spar phenos for 1½'	45	100				
							Mod Wig HEM GD 55 WK Angle GD 56¼ 57¼ Mod - Inc Wig alt GD		60		50 80 25 85	2" fractures 1/16 1.1 Fracture 9 ¼" ¼"	margins + cal + hem. CH - clays. chl - hem - bio brecciated - chl. + clays + pyrite Py - Py	dissem hem. minor lapilli tuff in dyke - [illegible]	55	100				

FORM A WP

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy. Gn	Cpy. Sph	Cpy. Py	Cpy. Ox	Gravity	Recovery: Weight (Grams)	Assay Results
							61 WK Arg alt'd qtz P 64 mod-intense arg alt'd qtz P WK Arg alt'd qtz P 67 1/2 Mod-Int Arg alt'd qtz P		70		60° x 4 30° 50° 60°	1/16" x 4 1/8" 1/4" 1 1/2"	qtz - py - hem cal - lim cal - lim qtz Ser - py	py is also disseminated. Hem is disseminated minor magnetite coating	65	100						
									80		30° 50	1/4 1/16" 1/16	qtz Ser Py qtz - lim qtz - chl. lim		75	100						
	Pink jasper						82 3/4 mod Arg Alt'd qtz P 84 3/4 Tuff A-qtz qtz P		90		35 x 2 3"	1/16 x 2 fault gy.	qtz - lim chl. clay & K/spar qtz	Core blocky @ 89'-90 1/2 3" of qtz vein blocky, one end ground and missing approx 6" qtz contains vugs + light brown calcite.	85	95						
							3" qtz-Ser-Py 2" qtz-Ser-Py 98 qtz Vein		100		85 70 70°	1/2" 1/4" contact	qtz vuggy calcite qtz - py - ser (cpy) qtz & minor py - some vugs o ends of qtz vein not ground 100% recovery.	Core ground @ 96' qtz veinlet 1" missing approx 4"	95	95	03					
							100 1/2 WK Arg Alt'd qtz P 108 1/2 109 1/2		110		70° 50 65 70 65	contact 1/2" 1/4 1/4" 1/8"	qtz - py qtz vuggy py qtz vuggy magnetite - hem		105	100						
			30% Py				117 1/2 Lienic rich 119		120		50 50°	1/2" 18"	qtz - lim stringers Ser - crushed sulphides? clay biot rich gneiss	Core blocky @ 115-119'	115	100						
							Sandblasted and Dark Arg. 122 1/2 123 1/2 124 1/2 Mod Grey and Dark Rock 127 1/2 WK-Mod Arg Alt'd qtz P		130		30° 50° 60 60 [illegible]	1/8" contact 1 contact 1/8" 1/8"	vuggy qtz qtz - lim		125	100						

Hole No.: SAB-8D-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Assay Results: Sample Number Core	Sample Number Sludge
							132 Mod Arg Alt qtz DP 134 Int Arg Alt qtz DP 5" qtz Vein 137¾ 3" qtz-Sec Py		138½ 140		70° 60 to 70. 70° x 3 60°	3" ⅛" ¼" x 2 ¼" x 2 Convert	qtz - sec py qtz - Lim qtz - Lim + crushed sulphides py stringers + calc.	minor local jointing stream py in N.E. mod alt porph Core blocky 135'-137½' fractures kaolinized Core crumbly 136-137. chl-clays - dissem hem.	135	100										
							Light Sericitic Alt Dyke Porph: 142¼ qtz-Sec-Py 142½ Int Arg Alt qtz DP 145 6" Dark Intrusion 145½ qtz Sec Py - qtz veins 148½		150		20° 20°	fault. qtz-4" contact 2" contact	chl-clays crushed sulphides. qtz - Py - sec.	Core blocky 139'-145' missing 2 ft from 145-149 Core ground @ 145½ + 148½' + 148' + 149'	145 149	50										
							Alt Dyke Porphyry (Andesite)		160		20°	¼"	Vuggy qtz + Lim-py	Core blocky @ 157½'-60' Core ground @ 159'	155	100										
							160½ 163 1" qtz-Py 1" qtz-Py 3" Moderate porp 6" K Spar qtz Mod Arg Alt qtz DP 167¼ 168¼		170		60° 40. 60°	contact contact contact.	→ qtz vein		165	95										
							Int Arg Alt qtz DP 176½ Mod Arg Alt qtz DP		180		30°	¼	vuggy qtz - Lim	Porphyry fractured @ 175 for 5" dissem hem + py	175	100										
							~~180½~~ Int Arg Alt qtz DP 186 Mod Arg Alt qtz DP		190		70°	¼	Vuggy qtz + calc.	@ 186-188' porphyritic	185	100										
			Med to Coarse Porph		Fine grn porph	7	192 Int Arg Alt qtz DP 193 6" Diorite 194 Light Green Altered Dyke Porphyry		200		20° 50° x 3	co-[illegible] 1/16"	cc		195	100										

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Light grey Andesite Porph (cont)		210		50'	¼"	Cal - Lim	Core crumbly 204'-206'	205	100											
											70'	⅛"	Cal	Very minor arsen py													
2mm									220		50	⅛"	Cal - chl		215	100											
											50'	⅛"	Cal - chl - hem														
											50'	⅛"	Cal														
									230		30'	⅛"	Cal		225	100											
											45'	¼"	Cal - qtz - py														
											40'	2"	qtz - cal - Lim py														
											50'	½"	qtz - cal - Lim														
											70 x 2	⅛" x 2	cal														
									240		30	¼"	cal - qtz		235	100											
											85	½"	Vuggy Calcite														
10% - 15%	30% - 35%		biot 15% Hb 5-10% fresh		porphyritic aphanitic groundmass				250		30	¼"	cal - chl	core fragile, now sound, green colour. 244 - 249 ½' Phenop not recognizable (qtz - plag) + hb.	245	100											
											20	¼"	qtz - Lim														
											50	¼"	cal - qtz - Lim														
									260		45 + 50°	¼ + ⅛"	cal - qtz - hem - py	arsen. disseminated	255	100											
											50	⅛	qtz - cal - hem														
											10	¼"	qtz - cal														
											50 x 2	¼" x 2	qtz - hem - cal														
70'	40% white qtz	10 - 15%	15% biot 15% Hb & Cal.				Diorite 261¾ - 263				30	½"	cal - hem - py	disseminated py	265	100											
														Calcite stringers average 1' apart average ½" [illegible]													

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							And Dyke Porph. (cont)		280		50°	3"	chl-clay fresh biotite massive biotite included	core fractured @ 276' calcite stringers spaced approx 1", ⅛-¼" wide and heavily oxidized to 324'	275	100							
									290					core ground @ 291' Dyke light sand colour @ 280-284'	285	95							
									300		60°	3"	chlorite-chl.-biotite sev. clayey frags of porph	fractured	295	100							
									310						305	100							
									320						315	100							
									330		30	¼	calc. hem.	Dyke @ 325' less porphyritic and more fine grained calcite stringers less oxidized, more regular and stronger	325	100							
														~~are more thin~~ attitude approx 50° from 324' - 342 calcite stringers more closely spaced +	335								

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn Py	Cpy Sp.n Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							And Dyke Porph (cont)																
									350		30°	¼	vmly Cal - qtz - hem		345	100							
									360		45°	1"	Cal		355	100							
									370		35° 80° 60°	¼×2 ¼ ¼×2	Cal - hem. Cal hem Cal - hem	Calcite stringers less frequent AV ¼"	365	100							
									380		30°×2	¼"+1"	light green Cal - hem - chlor.		375	100							
									390		35	1" ½"	Sendrich of porphyry Cal - qtz - hem.	Core ground @ 310'	385	100							
									400		60×2	¼"+2	Crosscut stringers of calcite hem Cal - hem	Calcite stringers oxidized min w/ only spaced - less frequent	395	100							
															405								

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sludge
	9mm						416. WK Arg alt c/w 417 ft chunk porphyry		420		55°	contact		zonation of porphyry @ 412' con fragments from 417' - 420'	415	100									
									430		60°x2	1/4"	Cal - hem	Con. light sand grain in colour, oxidized	425	100									
									440		40x3 / 30°	1/4"x3 / 1/4	Cal-chl-hem / qtz + Lim	Calcite stringers less pyrite / orange py (minor)	435	100									
									450		50 / 70° / 10°x4	1/8" / 1/4 / 1/8"x4	Cal - hem / Vugly cal. qtz / qtz - hem.		445	100									
									460					Calcite stringers now pyrite in stain with brownish stain	455	100									
20% quartz	35% chl & clay 9mm	30% white pink 2cm	25% biot pen plum		med grain pink	6-7	461 ft WK to Mod. Arg alt c/w		470		40°	contact 1"	2nd K/spar alt + Cal - hem stringers	Some 2nd K/Spar alteration in porphyry, most stringers oxidized	465	100									
									480		30° / 50	1/4 / 1/8	Cal - hem - chl / Cal - Lim		475										

Hole No.: [illegible]

Rock Types and Alteration								Graphic Log			Mineralization and Structures							Estimated Grade			Recovery		Assay Results					
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Specific Gravity	Cpy.			Weight (Grams)		Sample Number					
																		Gr	Sph		Core	Sludge						
																		Py	Ox				Core	Sludge				
					nearly crystalline quartzite	7+	Banded Metavolcanics 484½ L 6" qtz Sp. Ep. = 484½ Intermediate 487½ Banded Metavolcanics 489½		490		30° 85° 45°	8" contact 8"	Cal - Lim Cal - Lim	qtz - Sph - py core ground @ 485. missing approx 6" mineralization - qtz, py banded with ovrbd + py mineralization bands are approx 65° 3/8" thick spaced. Light brown colour	485	95											
							Highly altered 491½ banded light brown material 493½ banded gray material		500		15	4"	Cal - qtz - Lim - py	@ 498½ dark green + py. Py associated in thin stringers in quartzite	495	100		.05	.01								
							505½ Fresh Granodiorite Porph 507¾ 509¾		510		90 5°	contact ⅛"	Cal - Lim		505	100												
	50% light pink	30% white gray	20% brn		med grain Porph.	7	Fr-wk Arg alt granodiorite		520		60 5°	⅛ ⅛	Cal - Hem Cal - chl - hem		515	100												
									530						525	100												
									540		20°	⅛"	Cal - Lim		535	100												
									550		70° 60°	12" 3"	plag - qtz - no magnetite Alag + qtz + py		545	100											

Hole No.: [illegible]

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Qtz	Sph	Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	%	%	Assay Results: Sample Number Core	Sludge
							551 Banded Metasedi		560		85°	contact		bands in metasedi are both dark gray and black containing some py stringers and qtz veinlets. Often inclusions are light brown. bands generally approx 50° and are parallel throughout	555	100												
							564 alt. inclusions porphyry 568		570						565	100												
							banded Metasedi		580		30° 80° x 2 50° 60 x 3	¼" ⅛ x 2 2" ⅛ x 3	qtz - py blebs. qtz - Lim qtz - py blebs Cal.		575	100												
							586½ Alt and Dyke Lough		590		60° 20°	¼" ¼	Cal Cal - qtz	bounding 80° oxidized stringers. Core is more black and less visible py. Dyke light sand brown with calcite blebs.	585	100												
							591 Gray banded Metasedi		600		30 60° 40 80°	contact ¼ ¼ fault 99.5°	cal qtz - py blebs cal - qtz - py Montmorillonite brecciated	matrix gray - black. bands orange brown. Py stringers are randomly spaced. Py is also disseminated and also occurs as local blebs in qtz. bands are contorted and offset	595	100												
							~~Hornfelsed sediment~~ 600½ Gray banded Metasedi 607½ Highly Alt Sediment Dyke Porphyry		610		60 80 70 60° 80° 30	⅛ ¼" ¼ contact fault 99.3° ¼	qtz - py qtz - py cal - qtz - chlorite brecciated + Mont. cal - qtz - py	metasedi highly altered @ 601' - 605' cal - qtz stringers disseminations	605	100												
									620					Core blocky, crumbly from 615 - 625'	615	100												

Hole No.: SAB-80-5

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Gn	Sph	Py	Ox	Recovery	Assay Results: Sample Number
50% frags		70%	Hbl	clays	mylonitic		622½ Fault zone; Highly alt'd Dyke 622½–628½		630		60° 70°	contact contact		Core blocky, squeezed @ 625-635. Core blocked, grey c. bleached frags, many cpy, most disseminated	625	100							
							Highly alt'd Dyke (?) 637½–639		640					Core blocky and crumbly, missing approx 1'	635	90							
20-25% frags	35%	45%	chl. 10%		Hard not very competent	6.	Intrusive?		650		70 60	fault gg 2" " " 1"	chl Ser. clays presented	chlorite + clays - giving waxy, along fractures popping bleached white. Sericite appears to predate - with over kaolinite in this alteration. Disseminated cpy.	645	100							
									660					Disseminated cpy	655	100							
									670		80° 40-60	2" fault gg. ¼ xl	chl - Ser. clays. chl - Ser - clays.	Core blocky, good recovery. Disseminated cpy	665	100							
									680			fault gg 1'	chl. Ser. bleached frags disseminated cpy.	Core crumbly, good recovery. fractures in fault with waxy chlorite clays.	675	100							
							Highly alt'd Dyke 682½–683 Highly alt'd Dyke 683–683½ Dyke Fault 686–686½							Chl - Kaolinite strongly closely spaced	685	100							

Estimated Grade: Cpy

Recovery: Sample Number

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qz	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Au	Ag	Cu	Pb	Zn	W
							693½ Light Sericite Dill Dyke Porph. 697½ Dike inclusions in Highlight Porphyry		700		40 x 3 60° 40°	⅛" contact ¼"	Cal. Lim qtz	Cal stringers spaced approx. 5" apart from 695-700 trace diseem py	695															
							700½ Highlight Quartz Andesite Porphyry 703 TREAGHADA		710		70° 70° contact 80°	⅛ ¼" fract 9.9.6"	vuggy qtz qtz vuggy qtz brecciated - clean	trace of chlorite green vuggy qtz to porphyry trace contact trace diseem py	705	100 100														
									720		30° 40° 30	⅛" ⅛" ⅛"	cal - ser - py cal - ser - py cal. chl - ser - py clays	trace diseem py	715															
									730					diseem py	725	100														
									740						735	100														
									750		30°	½" fract 99 2" fract 99	ser - clay - py clay - chl - ser - py	Core blocky at 745 - 755½. Waxy chlorite + clays along fracture surfaces.	745	100 100														
									760		30°	3" fract 99 ½"	clays - ser - py vuggy qtz - chl		755	100														

Hole No.: SAB-80-5

Rock Types and Alteration								Graphic Log				Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration		Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Gn	Cpy Sph	Cpy Py	Weight (Grams) Core	Weight (Grams) Sludge	Sample Number						
							763 Silicous zone (greenish) + Porphyry. 765.6 769			770					chlorite & clays in fine fractures. Patches of carbonate speckled with limy white plagioclase phenocrysts. Core is mottled green in	765	100												
							Mod-Int Arg Alt. QDP.					50°	¼"	Cal.	appearance with dissem Py. Orthoclase plag looks kaolinized brown-pheno mm. Cal stringers sparse, thin and kaolinized.	775													
										780		45	⅛	Cal			100												
												30°	¼"	qtz - clays py	Dissem py End Hole @ 785'	785													
										790																			
														mineralization is mainly dissem py in porphyry. Dissem Galena appears as minor specks in metasediments @ 497'. Py blebs occur in qtz veinlets in other metasediments as well as thin stringers throughout. qtz veins occur above the porphyry which extends from 194' - 461'. qtz veins not heavily mineralized. Py is not abundant and occurs as small blebs in the qtz and also in qtz ser envelopes. Dykes occur above major faulting which starts @ 662'. Fault gouging is prevalent below major fault zone. Composition of Dyke is mainly andesitic with minor composition changes. Some diorite occurs @ 261' for 1 foot.													

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Survey Corrected
log Scale 1" = 10'

Hole No.: SAB-80-7
Project: KETTLE RIVER
Claim No.:
Logged by: B. Callaghan
Date: 5TH MARCH 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Completed:
Elevation:
Length: 635'

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Go	Sph	Py	Specific Gravity
							O.B. 0-22' (Coring @ 22')														
							22														
Fresh 55%	white Qtz 25%	Fairly fresh 15%	biotite 10%		Fine-med grain	7	Fresh Arg GD				10°	Contact 1/16"	qtz vein	Core solid good recovery	25	100					
							Fresh to wkly alt Porph G.D.		30		40° 50° 30°	1/8" 1/2" 1/16"	fracture Sericite clay qtz + feldspar vein Sericite (clay)	No mineralization							
Fresh Cloudy 15%	white Feldspar 35°	phenocrysts 2cms 30°	biotite + Ho part Chl	above 10-15%	med-coarse porph	7			40		50° 80°	1/16" 2"	fracture sericite (clay) qtz + feldspar vein	Core blocky from 30-35 minor py.	35	100	—	—	—	—	
							44.5				Contact 10° x 2 30° Contact 30° x 2	1/16" 1/16" 1/16" x 8	Hypo py + (sph) Calcite stringers (py) Calcite sericite stringers	minor py 6" core missing @ 45' (core ground)	45	95					
					fine ground	7	Basalt Dyke Grey-Black 47.5 Wkly Alt. Porph G.D.		50												
							Dyke 53 Basalt Dyke Grey Black		60		10° x 3 5-10° 10° x 15°	< 1/16" x 5 1/8" 1/8" x 1/16"	Fine Feldspar more abundant sericite alt'n minor py. Calcite stringers Sericite alt in fracture Calcite stringers	Core solid good recovery Calcite stringers	55	100					

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Sludge
							Basalt Dyke						py (sph)	abundant py										
							68				10° x 2	1/16" x 2	Calc Stringers	4" Core missing @ 65' (Core ground)	65	95	-	.2						
							WKly Alt GD 69		70		15° contact	1/16"	Calc Stringer	minor py in Alt. GD (sph)? with minor			.5							
											22°	1/8"	Calc stringer	minor py										
											30° x 2	1/16" x 2	Calc stringers											
							75				40°	3/8"	Calc. Stringers	Calc stringers	75	95								
							WKly Alt GD Porph				70°	1/8"	1% (sph)											
									80		35°	1/16"	qtz sericite fracture (alt)	Core blocky from 75-80.										
											40°	1/16"	py (sph) sericite qtz thin hem											
											40°	Contact	qtz + py + Lim Sericite Alt											
											30°	-	qtz + py - Sericite (alt)	Good Core recovery										
											50°	1/16"	fracture - chl - hem - Sericite	polishing										
							84				30°	contact												
					t.g.		Basalt dyke Gray black				60° + 80°	1/16" x 2	Calcite stringers - py	Biotite 15-20%	85	100								
											40° - 35°	1/16" x 2	qtz + Lim + py											
									90		25°	1/8"	Calc fracture - py + (Lim)											
											10°	1/8"	fracture in fine chl + qtz + py											
											50°	3/16"	fracture - qtz - Lim + py	Calcite stringers										
											45°	1/16"	qtz + chl											
							Dyke 96				10°	1/16"	qtz - Lim + py vein	Good Core recovery	95	100								
											45° x 2	1/16" x 2	qtz + chl. + K spar + Sericite											
							WKL Alt GD P		100															
							Basalt Dyke 102.5				35°	1/16"	Calc stringer - py disseminated	py along fractures 1/16"										
							Basalt Dyke 106								105	100								
				Chl 10-15%			WKly Sericite Alt GD. 108		110		50° + 60°	1/16" x 2	Calcite + Chl + py disseminated qtz + sph + mg + Sericite + py	chloritic alt. 10-15%										
							WKly Alt GD P				60° x 2	1/16" x 2	qtz - sericite - chl. py	py mainly in veinlets but also disseminated			—							
							113.5				10°	1/16"	py + sph + mg											
							WKly Sericite Alt GD Porph				40° x 2	1/16" x 2	py + sph + mg	Good Core recovery	115	100	—	.01						
							WKly Alt GD P																	
									120				minor disseminated py	Dyke intrudes GD P			.1							
											40°	1/8"	2nd Feldspar + Sericite + hem + py	2nd f/spar Alt (hem stain)?										
							123.5				35°	Contact												
							Basalt Dyke 125							Biot. - 15% Hb 10-15%	125	100								
							WKly Alt GD P 126							Dyke matrix with										
			Biot. 10-15% patches throughout				Basalt Dyke		130				Dyke matrix composition	small mass of WKly Alt GD P along sides of core										

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Gpy	Ga	Sph	Py	Specific Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number
							Basaltic Dyke. Slightly porph (Gray)	140		55° 30° 30 x 2 30°	1/16" 1/16"	hem stain in veinlets? py + mag Calcite stringers Calc St. Calcite stringers mag	Core 1'-½' missing? @ 132' blocky py very minor calc stringers	135	95							
					fine to medium			150		60° 40° 30° 40° 30°	1/4" 1/4" 1/16 + 1/8" x 2 1/16"	Calc stringers mon chlorite/py with some calcite not hem Calc. Minor py Calc (hem-py)	Good Core recovery	145	100	– – ·5	– –			
							151 Fresh 2nd feld WKly Arg Alt C.D.P	160		30° 30°	Contact 1/16"	qtz-sericite-hem 2nd feldspar + sericite hem 2nd feldspar qtz ser hem qtz-sericite-hem-py	Core recovery good dissem py	155	100	– ·01 ·5	·02			
					fine grained		163 Basalt Dyke 10 m wide	170		25° 30° 60° 40° x 2	Contact 1/8" 1/8" 1/16"	qtz-sericite-clay-2nd feldspar Calc stringers fracture-chl-hem py Calc stringers	Dyke varying in compo from Basalt to more porphyritic Good Core recovery	165	100					
							176½ WKly Arg Alt C.D.P	180		20° 80° 50° x 2 35° 40°	1/16" 1/16" 1/16" x 2 Contact 1/8"	Calc stringers hem-chl py Calc stringer-chl-hem Calc Stringers qtz-chl-py 2nd feldspar qtz-sericite-py	Core recovery good.	175	100					
							187½ basalt dyke 189	190		35° 30°	1/16" Contact	2nd feldspar qtz sericite py qtz-sericite-chlo-mag	good core recovery dyke minor oxidation (hem)	185	100					
							(mottled) C.D.P 193 qtz-chl-ser WK to Mod Arg Alt C.D.P			45° 45° 40° 50° x 3 40° 50° 3	3" 1/8" 1/4" 1/16" 1/16" 1/4-5/8" 1/8"	Pink K spar alt qtz sericite py + mag Calc Stringer Calc stringers Calc (chl) py-2nd feldspar qtz veins	½' missing @ 195 ground blocky core 192-195 Core blackish @ 194 minor oxidation (hem)	195	95	·03	·02			

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Gn	Spl	Py	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							qtz - ser - py 201				75°	1/4"	qtz - py - (sph) - (gn) - (hem?)	alteration mod.											
							Mottled G.D.P. 202.5 203							Good Core Recovery											
											70°	Contact	qtz - ser - clay + hem.												
							Lamp Dyke.				60° 65°	1/16" x 2	Calcite stringers (hem)	Porphyritic with aphanitic											
							(Dacite)				60-65°	1/16" x 2		groundmass. Phenos biot.	205	100									
			15% Biot		Fine-med. g.						50° x 2	1/16" x 2	Calc-hem (py)												
											50° x 2	1/16" x 2	Calc-chl-py	Calcite stringers & chl. minor py.											
									210		60°	fracture ?	chl - clay - lim - py												
											40° x 2	1/16" x 2	Cal - chl - py	Calc - chl stringers											
											50° x 40°	1/16 x 2	Cal chl - (py)	Dyke compositional change											
							213.5				70°	Contact	Minor 2nd Feldspar (Pre)	apparent.											
											50°	8"	qtz - py - mag - chl	greenish alt. - plag.	215	100									
							WKly Arg Alt G.D.P. 215																		
							qtz - Wkly Arg 217.5				30°	Contact													
							Lamp Dyke							Calc - chl stringers											
									220		40-45° x 5	Av 1/16" x 5	Calc chl. stringers py minor	in dyke & smaller phenos											
											50°	Fracture	Cal. - chl - py	Good Core											
											40°	"													
											20°	Contact			225	100									
							~~Wkly Arg Alt GD~~ 224 225				50° x 2	1/16"	Calcite stringers				.03	.02							
							Lamp Dyke 228				30°	Contact													
							Wkly Arg Alt G.D.P.		230		45° x 2	1/4" x 2	qtz - chl - mag - py - hem	Green - plag			5								
											20°	8"													
							232				30°	Contact	qtz - ser - spn - (gn) - mag	Good core recovery											
							Lamp Dyke 233				20° x 2	1/16" x 2	Calcite stringers												
							(MOD) Arg Alt GDP 234				50°	Contact													
											40°	fracture	qtz - ser - mag - py												
							Lamp Dyke 236				50° 50° + 60°	1/16 x 2½ fracture	Calcite stringers	black? sum core											
										Int Alt	75° contact	1/4 Vugs + Cavities		fault GG intensely	235	100									
							Int Argillic GD P 237				60°	1/16"	Calcite + hem	sheared - chl clay minor											
											60°	1/4" qtz vein	qtz - py - lim	- pyrite											
											40°	Contact	chl - clay												
							Lamp Dyke		240		75°	1/4 x 1/4"													
											50°	1/16" x 4	Calcite stringers with py (minor)												
											70°	fracture	Calcite py												
							242				55°	Contact		Good core recovery											
							Wkly Arg Alt GD P 244						qtz - sph - ga - py - mag	1 to 2" monzonite dyke											
											10°	Contact		Pt qtz qtz - ser - py alt	245	100									
											30°	1/4"	qtz vein - qtz chl - py												
											60° - 40°	1/16 x 3 fracture	Calcite stringers py												
			Biot 2mm		Hem aphanitic		Lamp Dyke				80° 60°	Hairline fracture	mall - py												
													ent - py												
									250		60°	1" fracture (mod)	Calcite 1/4" - lim - py	dark saloney & (black sh)											
							Dyke Light Grey 248 Anclesitic				40-60°	1/4 x 2	Cal - chl - hem - py	Crumbly core recovery											
											30°	fracture		Mag + chl hem py in dyke											
											30° x 2	fractures	Cal chl - hem		255	60									
											30°	1/4" vein	qtz - chl - hem py												
													phenos or Anc Alt Kelyphite	phenos x 2 - appx 1" diam											
							249		260		75°	fracture	Cal - chl - clay	hornblende up to 3mm											
							LAMP DYKE 251				70°	fault	chl - clay - (spt) - (gal)	Dyke Alt. Light Green Lamp.											
														Core crumbly at											
							Int Alt Arg G.D.P. 254							Fault zone.											
											75°	Contact													
											60°	1/8"	- Cal. spn - Gn - py												
											40°	fracture	Cal Ser. py	Intensely alt with	265	95	.03	.03							
							qtz Sericite py (Light Grey)							Calc stringers											
							Int alt.		270		65°	fracture	Cpy - Chl - Lim.	and mineralization			.3								

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Estimated Grade: Mo	Specific Gravity	Recovery: Weight (Grams) Core	Recovery: Weight (Grams) Sludge	Assay Results: Sample Number	Assay Results: Core	Assay Results: Sludge
							271. Int Alt'd Mg CDP 272				40° x 2 30° 75°	1/8" fracture fault contact	tr 1/2 (qtz)-(qtz) py chl - clay - Lim	Core recovering good										
							Mod - Propylitic Alt. Plag hem stained				70° 30°	1/8" fracture	chl - chl - py calc-chl - clay - py	No epidote ?	275	99								
									280		30°	fracture	chl - chl - clay - Lim	2nd K/Spar zone Pink Alt + hem - minor py.										
											50°	fracture	chl - chl - clay	Core crumbly from 280 - 285	285	80	.01							
											80° 70° 60°	3 fractures	calc chl - clay - hem				.02	.01						
									290		80° 60°	fractures	calc chl - clay - hem calc chl - clay				.3							
											40°	fracture	2' Feldspar qtz knot moderate mottling. chl - chl - clay (Lim)				—							
			2.0% 20 7 2% 30 ?				296.5 Int Propylitic Alt. 298.5				40°	fracture fracture qtz.	chl - clay - py	fracture qtz + calcite stringers Core grounded @ 298-1' ?	295	99	—							
									300								—	—						
							Mod - Int Propylitic Alt				60°	fracture	chl - clay - Ser	Good core recovery										
											80° 30° 30 80°	fracture fracture qtz	chl - clay (Lim) ? - ser chl - clay (hem) Ser chl - clay - py (Lim) Ser		305	100								
							308 Pervasive Potassic Alt 309		310		50°	1'	chl - clay - hem - py - ser chl - clay - Ser qtz - chl ? Ser - py											
							Mod Int Prop Alt 311.5				70° 75 80 80° x 2 - 200°	1 qtz contact 1/8 x 4 - 1/16	chl - ser - clay (Lim) chl - ser - clay - (polished) Calc stringers	Chlorite qtz Calc stringers	313	100								
							Lamp Dyke				50°		Calc - chl - ser - clay - hem	Arg Alt + Dyke material Minor py										
							Mod Propylitic Alt 93		320															
							321 P.P Alt + K Spar 323				70° 40°	fault qtz. contact	calc chl - clay - hem	Minor Py.										
											70°	+ qtz contact	Calc chl - ser clay - Lim											
					6.		Lamp Dyke 326				50°	note 1/2"	Calc stringers	Dyke chloritized and oxidized (hem) along fracture stringers	323 325	100								
						Hm-mod. Alt.	Pervasive Potassic Alt 325				60°	contact qtz	Disseminated (cpy) - chl - ser - clay											
							Lamp Dyke		330		70	fracture	calc - chl - clay - hem - py											
							334 2nd K Spar Alt				40 + 80 40° x 45° 40°	1/8 x 2 1/8 x 2, 1' contact	Calc. hem Calc stringers	Calc - chl - hem stringers in dyke + disseminated py (odd) Core recovery good	335	100								
											60° 20	fracture. fracture	calc - chl - ser - clay chl ser - clay	2nd K/Feld Less mottled										

Hole No.: SAR-80-7

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge
							2nd Feldspar - Alt (Kaol?)				30° 30° x 50 70°	fracture 1/16" x 2 gg	Cal - chl - sm py cal - chl - (py) ser - clay chl - hem	Good recovery on core.			—					
							core less mottled pink, grey green 347		350		50°, 40° 40° x 20°	1/16" x 2 1/16" x 2'	qtz - (sph) (Cp) py - hem qtz - (sph) (Cp)	Stringers of mineralization with py no cpy.	345	100	.04	.03					
											50°	1/4"	qtz vein inclusions gouge	(chlorite gouge) ? - 9"			-3.						
											85		Cal - clay										
							qtz - ser vicular cav 352.5				85	1/16"	qtz - (sph) (py) hem.	Core less mottled more grey green with pink 2nd Feld. alt.									
							Core mottled pink with qtz - ser + chl. + mottled 2nd alt K/spar				60 85	1/16 1/2"	Cal - chl - hem qtz - K/spar		355	100							
									360		55°	fracture	Pyl - chl	nt. - hem or manganese unknown in the extent of core									
							362				30+40	1/16" x 2	Calc hem stringers	Good core recovery									
							Tot Propylitic Alt Apple green				30° x 2	1/16 x 2.	Chl + hem.	Core less green grey, qtz more frac.	365	100							
	30-60	- 0%	10-15% biot Hb ψ Chl	chl. <10% hem	fine - med.	7					10° 30°	1/8"	qtz - cal - chl. Cal - chl - hem.										
									370		50	fracture	Stringer's of hem. Cal - hem - clay										
							Lamp Dyke 374				50° 70°	Dyke 1/16	offset 1/4" alt plag. Cal - chl.	Core missing @ 385 Dyke 2.3"	375	99							
							LAMP DYKE		380		30 20° 40°	1/16 6" fracture	Cal chl. tonal. Dyke - cn - clay Pods of py - (sph) - (Cp)										
											40° 65 75 40°	fracture 1/16" fracture	Cal - chl - hem Cal - qtz - (sph) (Cp) py fine grained	Core blocky Probably missing @ 392' + 390½	385	98							
								Dyke			60°	4" contact part	Cal - chl hem. Cal - chl - clay										
			CHLORITIZED.				394½ Lamp Dyke. Fl/gray phenos - upto 4" apple green phenos		390		30	fracture	Chl - clay	Calc stringers - chl.									
							391 Mod. Int Propylitic Alt of GDO 398½				60° 50° x 2 35°	1/8" x 2 contact 1/8"	Cal stringers Cal - chl - clay	Core recovery good.	395	100							
								Dyke	400		40 60° 40°	1/16" contact 4" Dyke	Cal - chl - sm stringers Dyke. Lamp.	hem stringers Very minor py.									
							Mod. - Avg. Alt (Pr of GD) 2nd K/spar Alt.		410		55° 15° 30°, 25°, 35	1/4" 1/8" qtz 1/16" x 2	Grey Cal + py + chl chl + clay cal - chl - py	Good core recovery Minor py.									
											15° 40° 40°	4" fracture fracture	Calc - chl - clay hem Cal - chl - clay Cal - chl - py		405	100							

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Mo S2	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number
							2nd K/spar alt (Continued)				40°	fracture	Cal-chl-hem-py	Good core recovery								
											40° 30-80°	fracture	Cal-chl-Ser									
											30°	"	Cal-chl									
											60°	1/16"	Cal-chl. - (py)									
											30	fracture	Cal-chl-clay-py	Minor disseminated py.	415	100						
												1/8"	Cal-chl-clay-py									
							445		420		60° 75°	1/8" > 1/4"	Cal-chl. Cal-(sph)-(gn)									
											70°	fracture	chl-chl									
											30°	1/8"	qtz-K/spar-chl-hem	Stringers of mineralization + disseminated (CPY) - py								
											30°	fracture	cal-chl.									
							Gray green mod Argillic alt of QDP				30°	1/8"	qtz-K/spar-chl-py	Cal-chl stringers								
											70	fracture	qtz-K/spar-chl. Cal-chl.		425	100						
											35	1/4"	qtz-K/spar									
									430		70	fracture	cal-chl-py									
											60°	1/16"	qtz-chl-py (sph)(gn)	Good core recovery								
											70°	1/16	cal-chl									
											20°	1/16	qtz-py-(sph)-(gn)									
												1/8"	qtz-K/spar-chl-py									
											35°	1/4"	qtz K/spar		435	100						
											40° - 60°	fracture	qtz-chl stringers	qtz-Ser-chl-hem stringers								
											40°		cal-chl-Ser	Minor py								
									440				qtz-K/spar-chl. stringers cal-chl-Ser									
											10°	1/8"	chl-py	Good core recovery								
											55°	1/4"	cal-chl.									
											60°		Cal-chl-Ser (py)									
											20°	1/4"	qtz-Cal-chl-Ser-K/spar		445	100						
													qtz-K/spar-Ser									
											50°	1/2"	qtz-K/spar-Ser									
									450				qtz-K/spar-hem	Disseminated py								
												6"	qtz-Ser stringers	2nd alt K/spar for 1' qtz Ser stringers (Cu-py)								
							437				30°	fracture	Cal-Ser.		455	100						
											40°	Contact	Cal-chl-Ser stringers	Cal-chl-Ser stringers								
				Chl. Alt			Lamp Dyke		460		50°	1/16	Cal-chl.	Cal-chl stringers								
											75°	1/8 - 1/16	qtz-hem.	in dyke								
											40°	1/4	Cal-hem									
											10		Cal-hem									
											35° 60°	1/8 1/16 - 1/8	Cal-hem									
											50° 80°	1/4 1/2"	Cal-hem		465	100						
											30°	1/8	Cal-chl									
							407½				50°	contact	Cal-hem									
20-30	15-20	30-40	> 5%	Chl 5%	Med.	7	Hd. Propylitic Alt.		470		30°	contact	Cal-hem-py	zone of mineralization (qtz)(hch) stringers								
											10°	1/4"	Cal-hem	Cal-hem stringers								
							411½							with some mineralization								
							Lamp Dyke				75°	4"	red mottled core with Cal-hem-py stringers									
											50°											
											15°	fault gy.	Cal-chl-clay	Dyke has cal-chl stringers and is more fine grained	475	110						
							Dyke Lighter green grey				85°		Cal-chl stringers									
											80°		Cal-hem									
											20-40°	1/4" x 2	Cal-chl.									

Hole No.: SAB-80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Mo62Sph	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number
							Lamp Dyke diorite (cont)		440		80° 60° / 80°	fault 1' / ⅛"	clay, cal-chl-clay / qtz-chl-hem.	Cal-chl stringers in dyke.	485	100								
						7	Mod-fine Arg Alt gy, m = gd. bd. pink gray / gray alt gy clay?		490		80° = 4 / 65° / 75° = 65° / 85° / 80°	⅛" / contact flat = allow ⅛" / contact ⅛"	cal-chl stringers / qtz-(sph-gn) / LGM-glass-clay / qtz-sph-gn-py	mineralized hem stringers (sph)(gn)	495	100	.01	.02					
						6	Alt Lamp Dyke 497																	
						7	Mod-fine Porphyritic Alt pink gray		500		75° / 50°		cal-chl-ser-hem / ser-clay-hem-py	hem stringers with mineralization			.3							
									510		20° = 4 / 60° / 60° / 40° / 35° / 80°	>⅛" / tr / + qtz. / ⅛"	ser-hem / cal-ser-hem / ser-clay-hem / cal-chl-ser-py / cal-ser-clay-py / sph-gn-cpy-py / chl-ser-clay / cal-ser-minor bornite?	Disem py + some mineralization - cpy-sph-gn / cal veins	505	100	.2 / .02 / .6	.03					
							Lamp Dyke 510 / Lapilli Alt				60° / 30° = 3 / 80° / 30° = 2 / 50° = 10° / 50°	fault gg. ⅛" / ⅛" + ½" / ½" + ⅛" / fault gg 1'	cal-chl-cpy / cal-chl-hem stringers / cal-ser-py / cal-ser-stringers	Dyke contains cal stringers with py which also has abundant disem py / Dyke contain qtz-ser stringers + cal-hem-py.	515	100							
							Fault zone 521 / Alt. Lamp Dyke 525 / Rock bleached white, py		530		30° / 60°	fault / fault 1½'	/ gray clay	Core split, sample taken at 525-529 / Disem py + Cu spots	525	(100)								
							Alt 534 / Rock multicoloured		540		50°	+ qtz 3"	chl-clay-py, minor cpy 1/2 6" / cal. clay-py	Good core recovery but low assay with abundant sulphide py. qtz is more frequent. Mag-clay + mineralization	535	100							
							542		550		50° / 80° / 70° = 2 / 75°	f. qtz. 3" / f. qtz / f. qtz = 2" 1½" = 2 / f. qtz	clay-chl-py / clay-chl-py / chl-clay-py	Core allowing good assay core. Calcite-ser stringers / mineralization in quartz in core zones. + f gouge	545	100							

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Fault zone (continued)				60°	f gg 2"	chl - clay - py	from 551 - 554 core less sheared. gtz									
											60°												
											70°	f gg 2½"	chl clay py	fresh. Calcite stringers									
													chl-clay py	with minor chem.	555	100							
														abundant hemp calc.									
														py. Lenses of minerals									
									560			f-gg	Qtz stringers minor chem py	Core blocky at 555-558									
											80°	f gg 2"	chl - clay py	gtz fresh with									
											75°	" 1½"	calc - py (red)(grn)	Calc - Ser stringers									
											30° x 2	f-gg. ¼"	chl - clay - py (green)	(brown)									
											65°	2"	mainly chl - clay.		565	100		-					
											60°	f-gg - 2'	chl. - clay - py	core sheared abundant py									
									570		75°	f-gg 2"	qtz - chl - py										
											30°	f-gg 3'	qtz. chl. — py										
											75°	f-gg 2"											
														qtz chl. stringers									
														Dyke chl-chl-chem stringers	575	100							
														qtz fresh - py									
														blebs of chl. hemp py. within Dyke									
									580														
Fault Zone Facies											80	f gg 2"	chl. - py clay										
											40°		chl-clay py										
											60°	contact											
											75° x 2	qtz x 2	chl-clay										
							Chl. Altn Lamp dyke				75° x 2	qtz 1"	qtz - chl clay py		585	90							
														blebs of mag.									
											30°	contact		Core ground at 585'									
														missing 1'									
							Int Arg Alt + QD		590														
							Dyke				50°	¼"	qtz - chl, hem	qtz Less slight									
											60	contact	chl-clay py	foliation at 55° to									
							Int Arg Alt (QD)							core axis									
														qtz fresh may be 2nd.	595	100							
											30°		chl - clay - py	mineralization given									
											60'	contact	qtz - chem stringers	qtz stringers									
											50°		chl - clay py										
											30°	¼"	Qtz stringers	qtz. Arg. chem veinlets									
							CN Altn Dyke						qtz - py	chem - py									
							qtz Hem py							Core highly	605	100							
											40° x 2			qtz hydrothermally alt.									
											50°												
											35°		chl - clay py										
							Int Arg Alt + QD		610		20°		chl - clay										
												6"											
											60°		amphi - chl - clay py										
							CN Altn Lamp Dyke						Vein altered	chemic py.	615	100							
											60 ?												
							Int Arg Alt (QD)		620		60°		contact										

Hole No.: SAB - 80-7

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox.	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
											60°	fractures.	chl- clay - py.	lots of clay in multi mottled core. disseminated py.								624 - 630	
							Int Arg Alt (cont'd)				80°	1'	py rich zone	Core recovery good.	625	100	—	—					
											80°	1/2 - 2	clay-py										
									630		50°	fault	chl- clay - py										
											60°	fracture	chl- clay	few thin stringers									
											30°		chl-clay, cpy - py										
											60°	fault	chl- clay - py	End Hole @ 635'	635	100							
									640			Alteration varies from weak - Intense Arg Alt and some intense propylitic alteration. Dike composition varies from lamp - basalt or possibly andesite. Some plag in dike replaced by chl. Fault zone at 521' is mylonitic with abundant white pyrite and some cpy. extends to 578' Mineralization cpy - Gal - Sph.												
												Samples already taken from 1980 include: — 525 - 529' 587½ - 590'											

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip: -45°
Collared: Sept. 2/80
Dip Tests:
Remarks: Drilled with mud, no sludge recovered
Scale 1" = 10'

Hole No.: SAB-80-8
Project: Kettle River
Claim No.:
Core Size: N.Q.
Elevation:
Logged by: M.W. Waldner
Date: March 5, 1981
Completed: Sept. 7, 1980
Length: 570'
Contractor: Maitland / Mohawk

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga Py	Cpy Sph OX	Specific Gravity
							O.B. 0-21' (Corina @ 21')												
							21												
20% (fresh grey)	30% white w.w. alt'd	25% fresh white Phenos 1-3cm	15% Bio 5% Hbl slight chl	chl 2%	mod f porph	7	Weak Argillic							Minor oxidation on fractures to about 26'			–		
							Alt'd Porph. G.D.								25	100	–	–	
					Mottled app.		Basalt dyke		30					Diss. (mag-hem?) (v.v.fg. reddish mineral) Metallic lustre) (cupr-ite??)			–	.3	
											30x5	1/4x3+tlers2	mag-qtz x3 + chl x2				–		
											20	1/8	qtz-mag-chl	Core grown @ 36'			–	–	
											50	1/8	qtz-mag-chl	minor v.f.g. diss. py	35	98			
									40		30	1/4	qtz-mag-chl				.1	–	
							40½												
							Mod Arg. Alt'n 42							~~A~~ missing @ 42'			–		
							43½												
							Wk-Mod Arg. 45								45	96%	–	–	
											40+60	3+1	qtz-((cpy))-((py))				–	–	
									50		00,20+30	hlc	chl						
																	–		
											35	2	qtz-((cpy))-((py))		65	100	–	–	
											45	1/4	qtz-chl-hem				–	–	
									100		50+30+15	1/2+1"+6	qtz-chl+qtz x2						

Hole No.: SAB-80-8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy / Ga / Py	Sph / Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD oz/ton	SILVER oz/ton	Pb %	Zn %	Cu %	Mo %	W %
											5	hle 88	chl 88																	
											60	4	qtz-(cpy)	1' missing @ ≈ 62'			.1													
											40-50	1/2+1/4	qtz-qtz-mag-chl		65	90	-	-												
											60×2	hle×2	qtz-mag																	
									70								-	-												
											45	1/2	qtz																	
																	.2													
											50	1 1/2	qtz-py-mag-ser.																	
											55×6	hle	hem-cpy-cup?×6		75	100	-	-												
											20-30	hle's	chl-mag-py-hem	stringers																
									80								.1	—												
											30																			
											10																			
											20	1/2	qtz-py-ser.	≈4" missing @ 84'																
															85	96														
							Diorite 88 / 89 1/2		90			55	carbonate																	
							Mod. Arg. Alt'n 93 / 95				50×2+30×4	hle×6	qtz-mag-hem×6 & ser. alt'n	1 1/2' missing 100' to 103																
											5	hle	qtz-mag-hem-ser	*	95	85														
									100																					
											40×5	hle ×5	hem+chl. ×5	minor oxidation on fracts at 101-103																
														≈ 3' missing 100-110		70														
							Qtz-Ser. Py Env.		110		65+80	1/4+1/2	qtz-(py)-ser.	Core very brkg ground in saw blade																
											45+70+3	hle×4	Fract with (chl)				.4													
							114 / Qtz-Ser. Alt'n 116				80?	1	qtz-cpy-py	qtz-ser.-py alt'n																
											80	1/2	qtz-py-cpy		115	100	-	-												
							117 / Qtz-Ser-Py 119				70	1/2	qtz-py-cpy	qtz-ser. py alt'n			.8	-												
									120																					
											15	hle	chl				.3													
											20	hle	mag-hem-chl	4" missing @ 123'																
											25	hle	mag-chl		125	96	-	-												
							Qtz-Ser-Py alt'n		130		80+90	1/2+1/2	qtz-py-c				.5	-												

Hole No.: SAB-80-8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga/Py	Cpy Sph/Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD oz/ton	SILVER oz/ton	Pb %	Zn %	Cu %	Mo %	W %
											50+20	1/4 + 1/8	qtz-lim.-py x2	≈10' core missing @ 133'	135	91%														
											10x2	1/16x2	qtz-chl-hem x2																	
									140									.01												
							18" qtz-ser-py alt'n				80	4"	qtz-py-(ga)-((cpy))	1' missing 140'-145 (x 1+5)			.10													
							6" qtz-ser-py env.				85	1/4	qtz-mag-hem-(py)	1' missing x 146'	145	80	.02	—												
									150		80	3"	qtz-ser-py-mag-(hem)	Probably in Qtz vein.			3%	—												
							6" qtz-ser-py env.				70	1	qtz-mag																	
							6" qtz-ser							6" missing @ 155-160																
							12" qtz-ser-py				80	1	qtz-py		155	95														
							4" qtz-ser-py				80	1/4	qtz-(mag)																	
							qtz-ser-py		160		75	1/4	qtz-py-(mag)	Core ground @ 159'	159															
							4" qtz-ser-py				80	1/8	qtz-py-(hem)																	
											0																			
															165															
									170		15 x3	1/16 x3	qtz-(mag) x3																	
											50	1/2	qtz-(hem)-(mag)																	
											25	1/8	qtz-mag.		175															
							178				80	Contact																		
					f.g. v.fg.		Basalt Dyke		180																					
					block to gray.		188							Core blocky & poor recovery 180'-235'	185	50														
							189																							
							lamp. dyke 190		190					≈7' missing 185-195'																	
														4' missing 195-205																	
															195	50														
					mod.		Mod Arg. All'd							← Rock Not																
							G.D.		200																					

Hole No.: SAB-80-8

Rock Types and Alteration								Graphic Log		Mineralization and Structures							Estimated Grade			Recovery	Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage / Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Specific Gravity	Cpy / Ga / Py	Sph / Ox		Weight (Grams) / Core %	Sample Number	GOLD	SILVER	Pb	Zn	Cu	Hd	W
							qtz-ser-Py → 202 Lamp. dyke 204		210	80?	6?	qtz-(sph) py-spec.		201 205	50												
							Intense Argillic?		220				qtz-ser-Py alt'n & mineralization	215	60												
							qtz-ser → 223 Lamp. Dyke (Dacite) 225		230	80	6?	qtz-sph-py-ser		225	50												
							233		240																		
25% Fresh gray	40% all'd to hem	20% wkly all'd to non-clay	15% Bio + Hbl all'd to chl + clay	Hem chl	med-coarse	6	Intense Propylitic All'd G.D.			50+75 80x3 20x2	1/4+1/8 hlex3 hlex2	qtz-chl x2 chl-hem x3 chl x2		235	40												
	clay chl						core has red mottled appearance		250	80-90	hlex5	chl x5		245													
							254 Mod. Prop. All'n 258		260	70 90+80x2	1/4 hlex3	cal-chl chl x3		255													
							265							265													

Hole No.: SWD-85-8

Rock Types and Alteration								Graphic Log			Mineralization and Structures																	
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy	Estimated Grade Ga	Estimated Grade Sph	Estimated Grade Py	Estimated Grade Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge						
25% Frost	40% alt'd to chl clay, Ser	25%	Bio 10% chl +Ser.	chl 10%	med-coarse	6-7	Mod.-Argillic				60	hlc	chl.															
							Alt'd G.D.				75	hlc	chl		275													
							Greenish colour (light apple grn) (Not Porphyritic)		280		30x3	hlc3	chl															
											70-85	hlc3	Stringer of chl + clay		285													
									290																			
															295													
									300																			
															305													
									310																			
															315													
									320																			
															325													
									330																			
							K'spar veins & dicr. 330-337				20	2'	K'spar-qtz	Pink K'spar alt'n														
											70	10	qtz-K'spar		335													
									340																			

Rock Types and Alteration								Graphic Log			Mineralization and Structures																	
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy / Ga / Py	Estimated Grade Sph / Ox	Specific Gravity	Recovery Weight (Grams) Core	Recovery Weight (Grams) Sludge	Recovery % Core	Recovery % Sludge	Assay Results Sample Number Core	Assay Results Sample Number Sludge						
							Mod. Argillic Alt'd GD (cont'd)		350		5	1/2 qq	chl-chl qz FH.		345															
									360						355															
		40% pink Fresh					K'spar zone ≈ 361-380' ↓		370		85 80x3+75 75	2 blev 4 1/4	qtz-cpy-sph-ga chl-clay cal		365															
							K'spar ↓		380						375															
									390		80?	6"	qtz-((py))		385															
									400		55 50+65+80	1 1x2+2	qtz-((py)) K'spar x2+qtz		395															
									410		50-80 80x3+40x2	blebs-1/4 1' blev 5	chl-clay stringers + (cal) chl-clay x5		405															

Hole No.: SAB-80-8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy / Ga / Py	Sph / Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD oz/ton	SILVER oz/ton	Pb %	Zn %	Cu %	Mo %	W %
							410																						
							Basalt Dyke									—													
							414			40 x 2	1 x 2	qtz-k'spar		415		—	—												
										45	2	qtz-chl-clay				—	—												
								420																					
										20	1/4	qtz-((py))				—													
										40 x 5	hle x 5	clay-clay x5		425		—	—												
								430								0.2	—												
										5	1/16	qtz-py	Core ground																
										15	1/2	qtz	@438 1/2																
							Pink Feldspar (K'spar alt'n?)			40	1/16	qtz-py																	
							≈30% K'spar			15 + 70	1 + hle	qtz-K'spar + qtz-py	105 ft ≈ 6"	435	95	—	—												
							435 - 463			40 x 1 + 50 + 60	hle x 4	chl x 4																	
								440		60 + 80, 45	1/8 x 3	cal-py x 3				1.00	—												
										65 x 2 + 40 x 2	2 + 1/8 x 3	cal-py x 4	minor disseminated																
										10	1/4	cal-py																	
										30 x 2	1/2 + 1/4	qtz-(py) + qtz-py	Pyrite																
										45						—													
							qtz-ser-(py)			50 x 2	hle x 2	cal-py (qtz)(ser)																	
							3" Basalt			60?	6"	qtz-chl-clay-rhodonite?		445		—	—												
										30			← chl. in Basalt																
							8" Basalt	450		25 contact						0.2	—												
										30 x 6 + 45	hle x 6 + 1/4	chl x 6 + qtz-py				—													
										40	hle	chl	minor hle's																
										50 x 4	hle x 4	chl	of pyrite			—	—												
													@ 430 - 460	455															
								460		60 + 20	1/4 + 1/2	qtz-py x 2				0.5	—												
										50	1	qtz-cal-py	105 ft ≈ 8" @			—													
										40-60	hle x 6	py x 6	464			—	—												
										60-80	hle 8	chl + cal + clay stringers		465															
								470		90	2	qtz-(py)-(cpy)				.05	—												
							472																						
20% fresh	40% alt'd part. to clay hem. chl	15% fresh	20% alt'd to clay chl-hem	hem chl ≈ 20%	mod	5-6	Mod. Propylitic			35	1/4	cal				—													
							Alt'd G.D.			40 + 50 x 4	1/8 thle x 4	cal + hem. x 4	numerous																
										55	1/4	cal	hematite stringers	475		—	—												
													Foliation ≈ 60° to CA.																
								480					C = 4 hle / inch.			.05	—												

Hole No.: SAB-80-8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga/Py	Cpy Sph/Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD oz/ton	SILVER oz/ton	Pb %	Zn %	Cu %	Mo %	Cu %
											65+30 60+30 40 50x4 50+30+45 50+4	1+1/4 2+1/4 1 1/8+hle x3 1/8 x3 hle x4	qtz-sor-py qtz-py-cpy+cal-py qtz-py-cpy qtz-py+cal +chl x3 qtz-cal-py x3 chl		485	100	.1 — .3	— —											
									490		30	1	qtz-hem	diss. pyrite																
											20 10 30x5 40x5	1/2 1/2 1+hle x4 hle x5	qtz-(hem) qtz-(hem) qtz-py-chl x5 chl-clay x5		495	100	.5												
									500		65 50-60	1/4 hle @ 2"	qtz-py-hem py-qtz		505	100	.8												
20% Fract	white	clays			mylonite		Fault Zone Rock bleached white, abundant pyrite		510		contact @ ≈ 65°		Abundant	diss. pyrite throughout fault zone Excellent Core	515	100	1%													
	(Kaol. + mont? ≈ 80%)				gouge		all structures obliterated		520		20?	1	qtz-py diss. pyrite ((cpy)) ?	recovery in fault zone	525	100	1%													
									530					≈3" missing ≈534'	535	97	1%													
									540					≈2" missing	545	98	.01													

Hole No.: SAB-80-8

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy / Ga / Py	Sph / Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold oz/ton	Silver oz/ton	Pb %	Zn %	Cu %	Mo %	W %
														6" missing 545-555	555	95														
									560																					
											60x2	2+14	qtz-melanterite?x2																	
											60x25x90	44x3	clay-melanterite																	
											40	4	qtz-melanterite?	15" core missing @570'		87														
									570					END HOLE @ 570'																

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip: -60°
Collared: Sept. 7, 1980
Dip Tests:
Remarks: Drilled with mud; No sludge recovered
scale of log 1" = 10'

Hole No.: SAB-80-9
Project: Kettle River
Claim No.:
Core Size: NQ
Completed: Sept. 10, 1980
Elevation:
Length: 285'
Logged by: M.W. Waldner
Date: March 16, 1981
Contractor: Maitland Expl. / Mohawk

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga Py	Estimated Grade: Sph ox	Specific Gravity	Recovery: Weight (Grams) Core %	Recovery: Weight (Grams) Sludge %	Assay Results: Sample Number Core	Assay Results: Sample Number Sludge
							O.B. to 14' Coring @ 14'		14								—						
25% grey Fresh	30% white to cream	30% cream to light	2½% Hbde 10% Bio wkly chl.	5% mag. 1% cl	med-coarse & Porph.	7	Fresh to Weak				40x6	½x6	clay-lim. x4	Slight oxidation Limonite on fract's to x 30'	15		—	—					
							Argillic Alt'd Porph		20		40	½8	mag-(limonite)			100	—	.1					
											10	¼	mag		20								
		pink orthe					Granodiorite				80	½	mag-(py)				—						
											15	¼4	chl-(mag)	6" missing									
											30	½8	mag.		25	95	—	—					
									30		40	½	mag.				—	.1					
														Core ground			—						
											50x3	1/16+½x2	mag-chl x3	5" missing @ 35'	35	96	—	—					
									40		40x4	1/8x4	mag-(chl)x4				—	—					
							42.5				15	Contact					—						
							Basalt Dyke 44.5				20	Contact		minor diss. py in dyke	45	100	—	—					
											40+70	½x2	mag x2										
											50x2	4x2	qtz-mag x2										
									50		30	44	mag chl				—	—					
							diorite -				20	1	qtz-(mag)										
											70+75	1+2	diorite zenolith + qtz-(py) mag				—						
															55	100	—	—					
							52.5				10-30	mag	stringers over = 12"				—	—					

Hole No.: SAB-80-9

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							62							61		—						
										40	hle	mag			100	—	—					
										70	6	qtz-mag-(py)										
								70		35+60	12x2	qtz-mag-(py)x2				.1	—					
										40x3	hle x3	mag				—						
										20	14	mag-qtz										
										30	hle	mag		75	100	—	—					
										20	10	qtz-mag-(py)										
								80								.1	—					
							81.5'			60	116	cal-chl	2' missing @ 81'	83		—						
							Basalt Dyke			65	hle	cal.	core ground @ 82'		80	—	—					
								90								—	—					
							Core missing? 92			35x2+20	hle x3	limonite x3	core ground			—						
										40	hle	hem-chl	1½' missing @ 92	93	85	—	—					
										30+40	hle+	hem-chl-clay slips				—	.2					
								100														
													core ground @ 100' ≈ 2.5' missing			—						
							3" qtz-sor-py ENV.			70	14	qtz-py			75	—	—					
								110								.1	—					
										30x2	hle+10	hem-chl-mag x2				—						
													6" missing @ 115' - core ground @ 118'	115	90	—	—					
								120					6" missing @ 118'			—	—					
										5	hle	limonite				—						
										10x3+20	hle x3+1/4	mag x3 + qtz-mag-py		123								
										80	1	qtz-py-sor-mag			100	—	—					
										0	hle	limonite		125		—						

Hole No.: SAB-80-9

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ga Sph. Ox.	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							135				40 50 50x3	hle hle 1/4x2x1/2	mag-chl. mag-chl qtz-mag x 3	14" missing	135	88							
20% fresh gray	30% fresh white	10% indistinct	40% Bio ±Hbl		med. f.g.	7	Diorite ? Probable Zone		140		20+50x3+60x3+80	1/4 x 8	qtz-mag-(chl)	Core ground @ 139'	139								
							of Sec. Bio. ∴ alt'n rather than change in rock type 149		150		30x2	1/4x2	chl-mag.	14" missing 4.5' missing 145-155 Probably @ 150 Core very blocky	145	88							
rock	pleur to imm	gray	to	green.	porph		Lamprophyre Dyke (Porph. Andesite?)		160		20	2" 99	fault	148'-172' (poor recovery) core very blocky 2.75' missing 155'-160	155 160	27							
							Wk Mod Arg. P.G.D. 160 165 170		170		70 15x4	4" 99 1/2x2 blebs	fault cal x4	1.75' missing 160-165 14" missing 165-172	165	71							
20% fresh	35 wkly alt'd to dy white	30 fresh light pink to wh. Pers t.	15 Bio	-	med & porph	6	Weak to Mod. Arg. Alt'd P.G.D.		180					core ground @ 172'	172 175	100							
		Dem									30 20-40 40	hle hle. hle	chl clay filled slips chl-mag	4" missing @ 189'	185 190	97							
											90-60	hle	chl-clay-	ground @ 190' 11"	195	100							

Hole No.: SAB-80-9

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Ga Py	Cpy Sph Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
											70	3	qtz-(py)-((cpy))	18" missing														
											0m	Mex2	chl-clay x2	@ ≈208'	205	85												
											80	2	qtz-(py)-((cpy))															
									210		40	1	qtz-(py)-(mag)															
															212													
							Felsic dyke ≈1' 215'							18" missing @ 214'	215	85												
							Fault Zone																					
							greenish-white		220					very minor														
							clay gouge							f.g. Pyrite in fault zone														
														6" missing @ ≈223'	225	75												
														24" missing 225'-230														
									230		20-50	Hex	chlorite abundant 235-245		230													
														18" missing 230-232	232	-												
															235	65												
							237							24" missing 235'-240														
20%	25	40%	Bio chl	-	val to	5-	Potassic Alt'n		240					Pink feldspar	240													
			15%		coarse stylb porph. locally textu	6	of P.G.D.? (primarily K'spar-chl. alt'n assemblage							+ chlorite very abundant														
														12" missing ≈245		90												
				often					250					Core has greenish														
														mottled appearance to locally very														
											45+65x3	1/4 x2+1lb x2	qtz-((py)) x4	pink to orange	255	100												
									260		50+20	1/4+1lb	qtz-((py)) x2	due to local														
														Increases in K'spar														
															265	100												
							266'																					
							bandrecydyke Dyke																					

Hole No.: SAB-80-9

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Ga	Sph	Py	Ox.	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
															275	100										
									280																	
							282'				≈50	Hole's	chl. & abundant stringer chl.			100										
															285											
														END HOLE 285'												

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No shrinkage corrected
Log scale 1" = 10'

Hole No.: SAB-80-6
Project: KETTLE RIVER
Claim No.:
Logged by: P. Collingham
Date: 19th May 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Completed:
Elevation:
Length: 735'

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Weight (Grams) Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							Bedrock 20' logging @ 20'		20						20										
							Lightgreen Andesite porphyry		30					Core blocky 23-25 Core oxidized till 43' @ 27-28½ chlorite stringers rev & south spaced 2" 50° Core blocky 25-33 missing 1½' (approx)	25	100 81				.04					
20%	20%	35%	15%		Mod gain porphyry	7	32 WK Arg Alt Grano diorite porphyry		40					Coreblocky 33-35, 41-45 missing 3' (approx) Core gouged @ 34'	33	75				.04					
				3% mag.			Dyke inclusion @ 45¾'		50		60	H/L	Pty - Sil	Core gouged @ 45¾'	45	100									
							Lightgreen Andesite 50½ WK Arg Alt GDP 52½ Dyke Inclusion 53 54 WK Arg Alt GDP	LSS			60 36° 35" x 5° 25°	contact contact, H/L x 5° contact	Core stringers	@ 56' minor potassic alteration approx 5%	55									
											60 x 2	1" x 2	K/S, [illegible]	@ 58½ minor [illegible]											

Specific Gravity

Recovery: Weight (Grams) Core % / Sludge %

Assay Results: Sample Number Core / Sludge

Hole No.: SAS-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn	Cpy Apy	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
			65% 20% 15% 0.5%	2% mag			60																		
							62 WK Arg alt GDP Core									100									
											50	½	chl		65										
							68 Light grey and Dyke																		
							69¾		70		25°	contact													
							WK Arg alt GDP				15°	½"	chl - py	Minor potassic alteration.		100									
							74½				50° 50	¼ contact	grey clays + mag.		75										
							Light grey and Dyke Porph.							chlorite stringers in dyke w. ¼, 1, 6" apart orientation 50°		90									
									80																
											70°	H/L	cal stringers discontinuous	coa blocky 85-90. missing approx 1' coa ground u. co 85½, 90											
							85								85										
							WK - Mod Arg alt GDP & 10-15% Potassic alt									80									
									90						90										
														Coa blocky 90-95 missing approx 1½' coa ground @ 91.		70									
															95										
									100		85	⅛"	cal - Sw			100									
							6" Fine Potassic alt 101½				80°	contact		Coa blocky w. 110-115 missing approx 6"											
															105										
							WK-Mod Arg alt & potassic alt GDP		110							95									
							Fine Potassic Alt 111				80°	contact													
							112¾																		
							Dyke Inclusion 115				20°	contact			115										
							116½				70 x 2	⅛ x 2	chl.												
									120		25 x 2	¼	chl - clays			100									
											60	¼	chl - mag.	chlorite clays stringers ⅛ - ½" - 4" apart & different orientation from 123 - 135											
							125								125										
							WK Arg Alt GDP Common potassic alt				50	¼	chl.												

Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							6" Porphyritic dike (Fel) 134½									100							
							136				40	coarse			135								
							Light Green and Dark Porph 137		140					Calc stringers H/L every 2" in dike.		100							
							Wk Arg alt of GDP & potassic alt							Calc chl stringers H/L @ 60° every 2" from 139-141.	143								
				2% mag							60° x 3, 60	H/L x 3/4, 1/4	calc - chl, chl - clays	Drilling time write	145	100							
							3" Int Porphyritic dike 147, 149½		150		5°	coarse	calc.	Dike contains H/L calc stringers		100							
							Light green and dark Porph		152		50°	2"	2" porphyry	Core blocky 150-155. Core ground @ 154. 150-175 core oxidized									
							Porphyry (Felsic) 154, 155								155								
									160							80		.04					
							Porph (Felsic) 163, 164							Core blocky @ 155-165 missing approx 2' core ground @ 160' Core blocky @ 165-168									
							6" porphyry 166, 167½								165								
							Mod Arg alt		170		30°	1/8	chl - clays			100		.04					
							172							Core blocky @ 160-165. @ 172' chlorite stringers 2" apart random orientation, for 3. @ 174-178 closely spaced chl stringers w/ 1/8-1/8.									
							Wk Arg alt & minor potassic alt.				30°	1/8	chl - clays		175								
											60	1/8	calc chl - mag										
							178 Intense Potassic alt		180							100							
							181							@ 188 - 191 closely spaced H/L 1/16									
							Wk Arg alt of GDP & potassic alt				50	3/4"	K/spar, 1/2" [illegible]	chl - calc stringers approx 40°-50°	185								
									190					Core along fracture surfaces		100							
							191				40°	coarse											
							Light Green and Dark Porph				20	1/8	calc		195								
							Mod Arg alt of GDP 196¾, 198½																

Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cpy Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							WK Argillic DPC & Potassic alt				60 50	1/8" 1/8"	cal - hem. cal - hem.	core blocky from 195 - 205. Core ground @ 199 missing approx 6"	205	95							
							209		210		30° 80° 10°	1/4 1/8 1/4	chl cal - hem cal - hem			100							
							Mod - [illegible] 4" Dike 213				10° - 30°	contact											
							WK Argillic to DPC & potassic alt 216				60 25°	1/16" contact	cal	cal stringers spaced approx 4" apart or 1/16". 60°-70°	215								
							Mod Chloritic Quartz Diorite Porphyry 219		220		15°	contact				100							
							Mod Argillic to DPC potassic alt 226½							core blocky 220 - 225	225								
							Light Grey Aphanitic Dike 228¾		230		15°	contact		cal stringers 1/16. 50-60° 2-3" apart in dike.		100							
							WK Argillic to DPC & potassic alt. 3" Dike 233 234				40°	1/8"	chl - clays	core blocky @ 235 - 245									
							Light Grey Aphanitic Dike (porphyry)		240		50 + 50	1/8 x 2	cal - hem		235	100							
							WK Argillic to DPC 240½ 241¾ Potassic alt Light Grey Aphanitic Dike (porphyry)		250			content 1/4"	mag - clays cal stringers + hem	core blocky 250 - 255 missing approx 6"	245	95							
							251 WK Argillic to DPC Potassic alt		260		25 + 2 + 50 20	1/4 + 3 H/C	cal chl - hem	Fracture surfaces coated & stained + chlorite @ 249-253 minor amount hem.	255	100							
											5 70 50	1/8" 1/4 1/8	chl - clays chl - clays cal - hem chl - [illegible]	upper part of alt is pervasive in some areas extent is not large - 2-3"	265	95							

Hole No.: SAIS-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Opa Py	Cpy Sulf. Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Weight (Grams) Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							WK Arg alt of GDP c potassic alt							Core ground @ 274' core broken 266-275 missing approx 6"	275							
							3" Ank Dike @ 279½		280		30 40	½ cm	chl - ser - clays chl - clays			9.5							
							284 Mod Arg alt of GDP c potassic alt 288		290		30	¼	Cal - chl - hem	Core blocky 275-284 Core ground @ 284 missing approx 6' hem - chl - clays along some fracture surfaces from 280-285' 285-301.	284	100							
							294¼ 295½ 296¼ 298 WK Arg alt of GDP c potassic alt		300		35° 60	contact ¼	Cal - chl - hem Cal - hem	core blocky 284' - 291 core blocky from 295' - 300.	291 295	100 100							
							301 302¼ 304¼ VF Arg alt GDP c Pot alt		310		50° 80°	¼ 4"	Cal Potassic alt + disseminated hem	- core blocky @ 300 - 305 - disseminated hem + chlorite sporadic in fracture surfaces. from - chlorite - clays in fracture more pronounced @ 306'	300 305	100 100							
							320¼		320		35° 40 × 2	¼" ¼" × 2	Cal - hem - chl. Cal - hem - chl - clays	disseminated hem in core minor disseminated pyr. to 319'	315	100							
							Mod Arg alt GDP 6" [illegible] 325¼		330		25° 60° 40° 40 × 5 60 × 6	contact ¼ ⅛ ¼ × 5 HL	Cal cal - hem chl. chl.		325	100							
							330¼ VF Arg alt of GDP c potassic alt.		340		70° 45	contact ¼	Cal - chl - hem - clays	Cal - hem - chlorite stringers spaced 1"-3" apart orientated 40° from 330¼ - 335.	335	100							

Hole No.: 543-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							6" in Pyrrhotite		340														
							WK Arg alt of GDP E minor fine-med				50	1/16	Cal - chlor	Core blocky @ 345-352									
											40°	1/4	chl - chlor stringers		345								
									350		38° - 5	1/16	chl - chlor - clays	@ 349 1" [illegible]		100							
							Dyke Fel porphyry 350 1/2				60°	1/4	cal - chlor	Core ground @ 350 3/4									
							WK Arg alt GDP 351 1/2 352 1/2				15°	as-cut											
							Lower contact of Dike?								352								
							3" WK Arg alt GDP 357 357 1/2				30°	contact			355	100							
							WK Arg alt GDP		360		60°	1/16	chl - chl			92							
											20°	1/16	Cal - chl	Core ground @ 365 missing 3/4									
											40°	1/4"	chl - Cal		365								
									370		70	1/4	Cal - chl - clays			100							
											40 x 2	1/8 x 2	Cal - chl										
											40	1/2"	cal - chl		375								
									380		20	1/4	cal - chl			100							
							387 1/2							@ 385 stringers of cal - chl - clay are oriented 60°. Av 1/8" in thickness.	385								
							Mod Hydrothermal GDP		390				chl - clay mixture	From 387 - 397 stringers are mostly cal 3-6" apart av 1/8" thick 65°-80°		100							
							391 1/2																
							WK - Mod Hydrothermal GDP & E Porphyry				20°	1/16"	cal	Chlorite, [illegible], clays in fine fracture surfaces									
											50°	1/8"	Cal - chl		395								
											40 + 70°	1/2" x 2	cal - chl										
									400		30	1/4	chl - cal - clays			100							
							3" Dike (Fel) 405								405								
											50°	1/4" f.g	chlorite - clays	polished striated chlorite - clays - [illegible]									

Hole No.: SMB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories.	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							410. Intense Chlorite 411 Mod Arg alt of GDP c potassic alt							core bloody MOS. 413		100							
							Dyke (-ch) 446¾ 447¾		420		80 80	contact contact			413	100							
							221 WK-Mod Arg alt of GDP c minor potassic alt		430		25° 20° 30 70	¼" 4" ⅛ 1/16	chl-cal-hem. cal. chl-cal-clays cal-hem.	chlorite hematite clays in fine fractures and matrix as a bit of matrix	423	100							
							431½ Light grey-green Arg Dyke Porph. 437 wk Arg alt of GDP c Potassic alt		440		30° 55° x 4 80° 60°	contact 1/16 x 4 contact ¼"	cal. cal	@ 435 2" c.g.p. inclusions in dyke	433	100							
					fine grained		Light Grey Green Arg Dyke Porphyry 445½ mod Arg alt of GDP 448		450		55 40° 30°	¼" contact ¼"	cal-chl-hem. chl-clays	cal stringers 6" apart 1/16" in dyke @ 55°. chl stringers 4/c 2-3" apart @ 30°	445	100							
							WK Arg alt of GDP c Potassic alt		460		40 70°	1" ⅛"	Dyke Porphyry-chl-cal cal-chl-clays	hem + chlorite inpis fracture stringers chl-clays stringers 6-1" apart Av 1/16" thick quartzite. 30° approx from 450-465. 1 minor chrysocolla	453 455	100							
							470		470					chlorite hem-clay stringers 4/c from 465-470. 3-4" apart. minor chrysocolla @ 470	465	100 100							
							Int Arg alt GDP 476½ WK Arg alt GDP				60° 40° 45	½" ¼" ¼"	cal. 1 tg chl-ser cal-hem.	chrysocolla in chlorite-clays	475								

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Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qtz Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							wk Arg sericite GDP (20%)				60	1/8	cal - hem - chl										
											50°	1/8"	Cal - hem			100							
							Intense Polymictic 486 487								485								
									490														
							493½				80°	2"	qtz - Ser - py			100							
															495								
									500							100							
							wk Ser-P sericitic 501½ 502½ 503½				65° 70°, 30°	2" 1/8", 1"	qtz Ser - py qtz - Ser	mostly qtz-Ser in zones. Very minor chlorite, py									
							WK-Mod Arg 504 505								505								
							wk Arg Ser GDP									100							
									510		65°	1/2"	chl - clays hem										
											65	7/8"	qtz inclusion										
															515								
											45	1/4", 3	cal - qtz - Ser - chlorite										
									520							100							
											60°	1"	Potassic alteration - K feldspar veinlet	2' 520-528 chl-hem - clays in fine fragments									
															525								
									530		80	1/8"	cal. Ser - chl			100							
											70°	1/4	cal - chl										
											80	7/8	chl - clays - hem										
															535								
									540		30	1/8	chl										
											20	fracture	chl - clays - hem			100							
											20	fracture	chl - clays - hem		545								
							Pervasive Polymictic 544 545				60°	contact											
												4"	cal										

Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qz	Cpy Sph	Cpy Py	Cpy Ox	Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number
							WK Arg alt GDP (cont)				70 x 80	1" + ½	Pervasive Potassic alt.										
											18°	1"	chl-clay stringers										
											5°	¼	chl-clay		555								
							qtz-ser-chl-Py 556¾ 558				70°	contact		stringer Py 556¾ - 558									
									560		75°	contact				100							
							Mod Arg alt GDP 561 562¾				30°	⅛"	chl. qtz										
							WK Arg alt GDP				70°	⅛"	chl-clays		565								
									570		50	¼	calc-hem			100							
											50 x 2	⅛ x 2	calc-chl-hem										
											60 x 3	¼" x 3	chl-clay stringers										
							Mod Arg alt GDP 576								575								
							qtz-ser-chl-Py 578				70°	contact	qtz-Py blebs										
							Lamp Dyke 579¾		580		70° 50°	¼ contact	calc stringers			100							
							WK-Mod Arg alt 580¾ 581¾				50	contact											
							Lamp Dyke 582¾				75	contact											
							WK-Mod Arg alt				50°	3"	potassic alt 584										
							585¾				30°	contact			585								
							Lamp Dyke		590					Porphyry contacts 587 Dyke contains calc stringers Av ⅛" wide		100							
														approx 9"-1' apart, orientation approx 45-60° other calcite stringers are H/L with no particular orientation and appear in clusters.	595								
									600							100							
							600¾ Int Mod Arg alt GDP				40° 70°	contact ⅛"	chl-clays-hem										
							604½							Stringers of Calcite less frequent and thinner with no particular orientation	605								
							Lamp Dyke 609		610							100							
							Strong alt Lamp Dyke				50°	½"	calc stringers										
							WK-Mod Arg alt 615				55°	contact			615								
							Lamp Dyke 616¾ 617				70 x 5 70° 50°	⅛" x 2 contact contact	calc										
							WK Arg alt GDP		620							100							

Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qa	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Assay Results: Sample Number
							Wk Argillic + GDP (cont)				60°	1/4"	chl - clays											
											60°	1/4"	chl - Ser		625									
									630		25	3/8"	chl - clays			100								
											55	1/4"	cal - hem	Potassic alteration very minor for 633 - 643'										
											35	1/4"	chl - clays		635									
									640							100								
											80	1/4"	chl - cal - clays											
											20°	1/4"	chl - clays		642	100								
															645									
									650		30	1/8"	chl - clay stringers cal											
														Chlorite stringers approx 1' apart 1/4" thick and are oriented at approx 40-50° from 653 - 657 1/4		100								
															655									
							Black Lamp Dyke 660 657 1/4		660		60°	contact				100								
							Wk Argillic + GDP: Potassic alt 663																	
				mg 10% 2-3mm			Black Lamp Dyke								665									
							670 1/4		670		20° 60°	fracture	cal stringers chl - clays - cal			100								
							Wk Argillic + GDP 675				80	contact	chl - clays											
							Mafic Hydrothermal Breccia?							cal stringers very dark and H/L? no particular orientation, randomly spaced	675									
									680		60°	1/4"	cal			100								
							680 1/4				60	3/8"	cal chl	Fracture sequences are coated with chlorite and chlorite, porphyry, hydrothermal breccia (dolomite) containing chlorite fragments 690 - 692'										
							Mafic Hydrothermal Breccia w/ Wk-Mod Argillic + GDP				50	3/8"	chl - clays											
											70	1"	chl - clays		685									
									690															

Hole No.: SAB-80-6

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Ga	Sph	Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number
						7	692¼ Light-med gray Hard Dike		700		70°	contact		Dike contains H/C cross cutting stringers of chlorite throughout. Random calcite stringers across chlorite. Fractures are coated c hematite + chlorite?	695	100									
									710		30°	⅛"	Cal. - hem.	calcite from 692¼ - 712¼ 709-710 Calcite in pin fractures. ¼ thick	705	100									
						7	714¾ Dike? Dark gray-green 719		720					714¾ - 719 Dike? contains disseminated fragments - are rounded porphyry w/ ½" in size	715	100									
						6	Light gray Felt Dike Porphyry									100									
						7	726 Med Gray Green Med Dike Porphyry		730					726 - 731 chlorite stringers at ½ 3-5' apart. Some pyrite present.	725	100									
														731 - 735 Calcite Stringers at ⅛" 2-7" apart opposite 50°	735										
									740			End Hole @ 735'													
									750				minor mineralization is mainly disseminated in mod - intensely porphyry. Py-Hem is in in Sericitic environments. Potassic alteration	Hem is present as white occurs altered Groundmass in 9½' veinlets occur @ 578-589¾ 556¾-558 occurs throughout core.													
														Hem is pervasive extend in greater in zones where than a few feet. Main alteration is mostly weak argillic. Dike cuts in most @ 585' and continues including till - 35'												

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected
log Scale 1":10'

Hole No.: SAB-80-10
Project: KETTLE RIVER
Claim No.:
Core Size: NQ
Elevation:
Logged by: B. Callaghan
Date: 16th March 1981
Completed:
Length: 345'
Contractor: Mohawk / Mid Hand Exploration

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							O.B. 0-18' Coring @ 18'						Core grounded @ 18'								
							Porph GD 18	20		60°×4 45°	Wide contact	chl-Ser stringers		21							
							Basal Dyke 19														
15-20% from 1	35%	20-35 up to 2mm	Biot 16 5% 1-3	Mag 5%	med porphyritic	7	Porph GD 21			30°	contact	chl-Ser	Core grounded @ 25" missing 1'								
							Lamp Dyke 25														
							Fresh Hlt GD P 26			40°×2	1/16"×2	py-chl-Ser	(Mag. Mineralization minor py in GDP) Large phenos <2cms.	25	90						
							WK. 2nd K/spar porph	30		50° 40°	1/16"-1/4"	py-chl. cal-chl. hem	(cpy)? py	28							
		?	Bo No 20%	mag 5%	fine-med. Vesicular		Lamp Dyke 32			30°×2	1/16"×4	cal-hem.	Dyke has minor mag. py Core ground @ 33' missing 1'	33							
										35°	1/16"	cal-chl.									
										35°	1/8	chl-Ser			90						
							Fresh Alg Alt GDP			30°	1/4"	chl-Ser-mag.									
								40		30°	-	chl-py-cal.	Magnetite in core.								
							45			30°-50°	1/16×2	cal-chl.	Core good recovery	43							
										25°	hairline system	cal-chl-hem-py									
										45°×4 50°×30°	1/16"×4 1/16×8	chl-Ser stringers-py cal. hem.		45	100						
							Lamp Dyke	50		40°×2	1/16×2	cal-chl.	Dyke porphyritic here. Minor py + mag in dyke								
										35°+	1/8-1/4"	cal-chl-hem.									
							55			50°×2 30°×2 40°	8×2 1/16×8 contact	cal-chl cal-chl. hem cal-chl-hem		55	100						
							Fresh Alt GDP 56														
							Fault Gouge 57½					Gouge dark green ash - Hb-clay	no structures in footage								
							Lamp Dyke	60		20°×3	1/16-1/4"	cal-chl-hem.	Dyke fine grained								

Hole No.: SAB-80-10

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Graphic Log: Footage	Graphic Log: Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Estimated Grade: Mo S2 Ox	Specific Gravity	Recovery: Weight (Grams) Core	Recovery: Weight (Grams) Sludge	Assay Results: Sample Number
							Lamp Dyke (Cont) 64½				70°	hairline	Cal-hem stringers	Core grounded at 60' missing approx 1'	60							
											30°	¼-½"	Cal-Ser-chl	Dyke highly alt. biot rpls 2mm		90						
20%	30 ↓ clay	25-30	10-15 Bio				wk-Mod Alg Alt of GDP							Core blocky	65							
									70		30° 75°		clay Ser. qtz-Ser.		70							
							74½ Dyke (Andesite) 74½				40°	⅛"	Cal-Ser.	Core possibly missing at 74½' and @ 90' Core grounded @ 76½, 1' missing								
							Int Arg Alt 76½				50-60	⅛"+ fault.	qtz-Ser		75	80						
	Silicification		Mylonite		blend		Fault Gouge 77½															
							Int Arg Alt & Silicified zones		80		40°	¼"	qtz Ser - mag in qtz vein	Core blocky, crumbly in places								
							82				55°	contact	chl-Ser stringers		81		3					
							Int Arg Alt 84 Quartz Vein						cpy-py	Melanterite (gum) @ 85' banded Mineralization 60° Graphite (Mo)-cpy-py		100		Mo				
			no mafics		thin sug.	7-8					60° 70° 50°	¼" - ⅛" + ⅛"	Cal-cpy-py				7					
									90		50°		Crushed sulphides black gouge									
											30°	⅛"	qtz-chl-py		91		3					
											85°		cpy-py-chl	Core grounded at 98'								
											50°	¼"	qtz-Ser. qtz-chl-Ser stringers		95	100		Mo				
							99 Alt Lamp Dyke 100		100				cpy-py in dyke				7					
											30° + 50°	⅛"	qtz-Ser-py	Less porphyritic								
				mag >10%	Mod.		Fresh/wk Arg Alt of GDP				30°	⅛	qtz-Ser stringers		105	100						
									110		50	¼"	qtz-Ser. hem-py									
							110½ Silicified Zones				50°	contact		Some cpy-py-mag								
	co.	grey	- light	brown.			qtz Ser-py Alt.								115	100						
							119		120		70'	contact	cpy-mag									
											50°		Cal-hem				3					
20%	30-35 pink 10-20 Mod.	15-20		>5%	>5%		WK-Mod Arg Alt of GDP				30°	⅛" ⅛"	clay in jiggy. Cal-Ser. cpy-Mo.-py	mag. mod-py Molyin Core Aplite cpy-py less mafics	125	100		Mo.				
																	5					

Hole No.: SAB-80-10

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Estimated Grade: Bo Gn Mos2 Qx	Specific Gravity	Recovery: Weight (Grams) Core	Recovery: Sludge	Assay Results: Sample Number
							Silicified Dyke 130 ft														
2-5%	5%	>10%	>2%	CN Sec	fine g	7	qtz-Ser-py Env 132			45° 10°	contact	Calc-Ser-py + Calc stringers Chl-Ser-hem-py	qtz-Ser-py envelope around qtz silicified (Vein). Mineralization: mo, Cpy, py. diss py abundant			2				
40	25%	20%	>2%	hem			Silicified Zone 135 ft			75° → 30°	1/16 x 2	qtz-Ser.		135	100		Mo-			
	↓ Green clay ↓ Hem	1 2nd Alt	bio ↓ Chl ?	Ser Mo Cpy Py.	fine grain	7				60°	1/8"	Calc.								
							qtz-Ser-py Env 136 ft				now time contact	qtz Ser									
							Silicified zone 139 ft	140		30° 70°	1/16	Calc-Ser-py clay hem stain				7				
							mottled grain qtz-Ser zone 141			45°	contact	Ser-clay								
							Silicified zone 143			50	1/4"	2nd K/spar - Vuggy calcite qtz Ser stringers	no pyrite, mo			2				
							qtz-Ser Env 145			75° 60°	1/8	Calc-Ser								
							Mod Propylitic Alt 147			80-70-60°	contact 1/4-1/8-1/16 (convex)	Calc-Ser-clay qtz-Ser	qtz ser stringers no py some hem stain minor py	145	100		Mo-			
			5-20%				Nodules 148	150		80		qtz-Ser stringers Calc stringers				7				
			CN				2nd K/Spar zone 154 ft			60 55 x 3	1/4" 1/16	Ser-clay Calc								
							Lamp. Dyke 156 ft			10 50.	1/16" contact	qtz-Ser		155	100					
							2nd K/Spar Alt.			80°	contact	Calc stringers	Core crumbly @ 157'							
								160		45		Calc-Ser-clay								
							165			60	h/c.	Ser-Calc		160.5						
							Lamp Dyke 169			10° 80° 45 70° 30°	1/8" contact h/c. contact	Calc-Ser Calc-Ser Calc-Ser stringers		165	100					
							Mod Propylitic Alt 170	170													
							qtz vein 172 ft			40°	1/16	Calc-Ser		171						
							Mod Propylitic Alt L.D. 176			40° 45	contact	Calc-Ser stringers		175	100					
							Andesite Dyke 178 ft					qtz-Ser-clay								
							Mod Propylitic Alt 179 ½	180		65 95	contact contact									
							2nd K/Spar Alt 182 ½			40 50°	contact 1/8"	Calc-Chl.	Minor py							
							And Dyke 184 ft			40°	contact	in jumbled calcite								
							Mod Propylitic Alt			80° 70° 60°	1/4"	Calc-Ser Calc-Chl-hem py	Minor (pyr, cpy) mag.	185	100					
				Cor Mo Cpy Cal			2nd K/Spar 188	190		50° x 2	h/c	Calc Ser stringers qtz-Ser								
							191			35°	1/8"	Calc-Ser								
							Mod Propylitic Alt of qtz Dyke			50° → 70°	1/8"	Calc-Ser-hem	diss py	195	100					
							2nd K/Spar Alt 198 ½			60°	1/4"	Calc-Ser-hem								

Hole No.: SAB-80-10

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							2nd K/Spar (cont)				60°	1'	Cal-Ser-clay	mag stringers Qtz Ser stringers									
				5-10%			207½				60°	3"	qtz-ser-hem stringers qtz vein		205	100							
							Mod Prop-Lith-Alt of C.D.		210		30° x 2	½" x 2	qtz-ser	qtz-ser-hem stringers									
											60°		qtz ser-hem										
											40°	½"	qtz ser										
							215½				40°	contact	cal-clay infilling		215	100							
							Lamp Dyke 210½				50°	contact		minor amo py									
							qtz-Ser-Env.		220		60 x 3	½"	qtz ser hem										
				Dark	Crack		Dyke 226				45 x 6	½"	qtz-Ser-hem	minor py in dyke	225	100							
							221½		230		60° 45° 10°	½-½-½	Cal and qtz ser										
							Dyke 231																
							qtz-Ser-Env 233½				30° x 4	½"	Cal-Ser										
							Lamp Dyke 234½				30° 15° 70° 30° x 2	½" + trace contact	qtz-ser-hem stringers cal-ser-hem.		235	80							
							qtz-Ser-env							Very Siliceous									
							238½		240					con biotite									
Dark green	Clay	–	none	Cal clay → Mont. chl			Mylonite-bleached zone 245							Calcite vuggy. No structure Containing D/7 242½	245	100							
							Mod Propylitic Alt Siliceous Zone		250		30°	¼"	Cal-Ser. qtz-ser-hem stringers	Minor py									
							2nd K/spar Zone 252½				40 x 2	⅛"	qtz ser hem										
											70 x 3	½" x 3	qtz ser hem	Minor py									
							254				50° 75°	½" contact	qtz ser	py + trace arsenopyrite in clay bleached zone	255	100							
							bleached, clay in C.D. 256																
							2nd K/spar Alt		260		50°		Ser Cal - clay	py (cpy)									
							Lamp Dyke 264½ 2nd K/spar 265		265		contact 70° contact	⅛"	Cal Ser-chl ser clay		265	100							

Hole No.: SA13-80-10

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy ~~BnCu~~	Cpy ~~MoS2~~	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							Mod Propylitic Alt. continued				50	1/4"	clay cmsnd sulphides						—								
											70°		ser - hem stringers														
											40° 70°		chl - py	mino - py	275	100			—	—							
							277 Hew hmalt																				
							280		280										2								
											70°	1/8	qtz - ser														
														Good Core recovery no mineralization	285	100											
							Lamp Dyke 286 287				70° 50°	contact contact															
							WK-Mod Propylitic 289		290																		
							Lamp Dyke 291																				
											40°	1/8"	cal - ser														
											60°		cal - ser - py		295	90											
											70°	1/16"	cal - ser														
									300		40°	1/8"	cal - ser	missing core which is to bottom													
							300							Core crumbly @ 307-306' disem py minor					—								
							WK-Mod Propylitic Alt. E ?" K/Spar							Core ground @ 305' disp py	305	95	—										
							308 Fault Gouge 310		310			fault							3								
							312 Fault Gouge 314																				
											15°	-	qtz - ser - hem.														
							315 Fault Zone				70°	fault	ser - clay cmsnd sulphides	disem py	315	100											
				0% Ser Clay	(c)	hem	317							disem py good core recovery at fault zone													
									320		40° x 4	1/16 x 4	qtz - ser - hem														
							WK-Mod Propylitic alt QDP				50° x 2	1/16 x 2	cal - ser	disem py													
											fault g.g.	3"	minor cpy + py		325												
									330		60°	1/16	cal - ser			100											
											50	fg qg. 3"	clay - ser.	disp py	333	100											
											30°	1/4	cal - ser - clay														
							335 Mod. Propylitic Alt							Core crumbly py stringers H/line	335	90											
							Fault Gouge		340																		

Hole No.: SAB - 80 - 10

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Int - Propylitic Alt (cont)							blocky, crushed no sulphides & Py 6" @ 341' (gum. black)									
											End Hole @ 345'				345								
			-						330					Intense hydrothermal alteration in zones to 345 from 340'									
											Propylitic alteration is weak to intense with some 2nd. K/Spar alteration. Shattered zones contain mineralization ie cpy mo. Dyke intrusions not extensive. No major fault zone other than a 2' zone @ 315'												

Specific Gravity

Recovery: Weight (Grams) Core % / Sludge %

Assay Results: Sample Number Core / Sludge

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip: -70°
Collared: Sept. 21, 1980
Dip Tests:

Core Size: N.Q.
Completed: Sept. 24, 1980
Elevation:
Length: 285'

Hole No.: SAB-80-11
Project: Kettle River
Claim No.:
Logged by: M.W. Waldner
Date: March 17, 1981
Contractor:

Remarks: Drilled with mud; No Sludge recovered ; Completed to 255' Sept 21 , deepened to 285' Sept 24th
Log Scale : 1"=10'

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Ga Py	Cpy Sph Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge
							O.B. & Casing 0'-32'																
									32														
25% fresh frag	35% weak alt'd to clay	25% fresh white to pink	5% Hbl 0% Bio weak chl.	-	med-coarse porph Kspar	7	weak Arg. Alt'd Porph. G.D. 36'							6" missing @ 33	32		—						
			10% Bio phenos to 1mm		v.v.f.g grey to grn.	-	Porph. Andesite		40		5	1/4	cal	core blocky 32' to 35'		94	—	.10					
					mod brn									minor ox. to ≈50'			—						
							WK. Arg. alt'd P.G.D. 49'		50		20	1/4	qtz	22" missing @ 47' blocky 45-50	45	82	—	—					
							WK Arg Alt'd P.G.D. 51½ 52½ 55½ 56							Core ground @ 52' (fault zone)	53	100							
							WK. Arg. Alt'd P.G.D		60		No x3	30 to 1/2	Fract x8										
							63				60'	Contact			635	100							
									70														

Hole No.: SAB-80-11

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
											25 +20	1/8 +2	cal-chl-clay+2										
											90	1/4	qtz-(py)		74	100							
											20	1/8	cal-chl-clay										
							79'		80														
	Sae		35'				Weak Arg. Alt'd Porph. Granodiorite																
															84	100							
							87' mod-Int Arg. 88'				60	Contact											
							Porph Andesite Dyke 91½		90		40	Contact		6" missing									
															94	95							
							Porph. And. Dyke		100														
							103							12" missing = 102'									
															105	90							
									110														
											25	Contact			115	100							
							117 Por. And. dyke 119				25	Contact											
									120														
					locally mod-f.g.		121 Por. And. dyke				20	1/4	qtz.	core ground @ 121'	121								
											20	1/4	qtz.										
											15	1/8	f.g. qtz. disc py		125								
											25	1/2	qtz.				.10						
									130														
															135								
																	.10						

Hole No.: SAB-80-11

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga Py	Cpy Sph. Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo	W
							Porphyritic Andesite Dyke (cont'd)		150						145														
							152' Mod-Int Arg. Alt'd P.G.D. 154½ 157				?	6" g.g.	fault	6" missing @ 152	152 155														
							WK-Mod. Arg.		160		85?	2	qtz-(Py)		160														
							Alt'd P.G.D. 168½ 169½ 170½ Mod Arg. P.G.D.		170				foliated & contorted qtz-clay-(Py)-(Chl) some sericite	4" missing, core ground @ 160' minor diss. Py.	165														
							Dyke locally light green in colour		180		20 25	1/4 1/8	qtz qtz	minor qtz stringer in dyke @	175														
							199'		190 200		75? 30 25	3" g.g. 1/8 1/16	fault qtz qtz	20°-40° to CA.															
							WK-Mod Arg. P.G.D. 203				50	2" g.g.	fault																

Hole No.: SAB-80-11

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							Porph. Andesite Dyke (Cont'd)		220		30-40	1/8-1/4	minor qtz stringers														
							221 Mod-Int Arg. P.G.D. 224½		230		60 40 30	Contact 1" 88. Contact	Fault	Alt'n related to dyke intrusion													
							231 Mod-Int Arg. Alt'd P.G.D 235																				
							240		240		60	Contact	calcite														
							Int Arg Alt'd P.G.D 245 WK Arg Alt'd P.G.D 248		250		20x2 dissemi 50	2'88.+1+2 nated 44	Fault + Cal x2 ← pyrite qtz-(CPY)	calcite healing of brecciated dyke ≈ 239-241					.10								
							Int Arg. Alt'd P.G.D. 254				30	Contact															
							Andesite to Basalt Dyke (Grn to Blk colour)		260																		

Hole No.: SAB-80-11

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration		Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Ga Py	Sph Ox	Specific Gravity	Weight (Grams) Core %	Sludge %	Sample Number Core	Sludge					
							Mod-Tot Alt Alt'd Porph. GD.					70	1/2	qtz-py														
																285												
															END HOLE 285'													

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Sludge Collected
log Scale 1" = 10'

Core Size: NQ
Completed:
Elevation:
Length: 275'

Hole No.: SAB-80-12
Project: Little River
Claim No.:
Logged by: B. Callaghan
Date: 25th March 1981
Contractor: Mohawk / Maitland Explorations

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Py	Estimated Grade Cpy Ox
							OB - 0 32 Bedrock 32' Coring @ 32'		30									
25% fine	30-35 fine	30% fresh white and 2cms	10% bio fine. 5% Hb	>5% mag.	Med ↓ coarse	7	Fresh - WK Arg Alt Grano diorite Porphyry		40		35° 30°	1/16" 1/16	Cal - Ser Clay - hem.	oxidized from 32'-47	34	100		
↓ fresh	fine grain. clump Ser.	↓ Ser	↓ chl Ser.		med		Int Hy Alt GDP 46 42 Fault? 53½ 54' qtz-Ser-carb 57½ qtz Ser Grv 58½ Int Arg alt 59½		50 60		40° x 2 20° x 2 70° 70. 50°	to 2 to x 2 connect 2" ⅛°	qtz - chl qtz - Ser qtz. chl - clay - py. qtz - Ser - (sph) - py - hem. qtz hem. py chl - clay - sph - py	Core crumbly 17' - 53½ Missing 3' ground @ 53' disem py - hem Core ground @ 58½ Missing 1' Missing 2½' @ 50 - 53½ disem hem and py py occurs along fractures and as blebs.	44 55	70 65	.01 .03 .5	.08
				mag 7%			WK - Arg Alt GDP		70		40 35°	½" ½°	qtz. K/spar - chl. Cal - chl - hem.	mno - py + disem hem.	65	100		

Hole No.: SAB-80-12

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							WK Arg Alt GDP (cont)							Core ground @ 74+ 74½' + 76½' missing approx 1'.								
							Int Arg Alt GDP 75½ 76½						Py + disem hem.		75	90							
			10%	>3% mag	4mm	7	And Dyke Porphyry		80		85° × 5	⅛ × 5	Cal - chl										
			fresh																				
							WK Arg Alt GDP 82½ 84				35°	contact		Core recovery good									
							Black Basalt Dyke				"	"		"									
							WK Arg Alt GDP 87						disseem py and along fractures	Dyke chloritized	85	100							
				cal			Grey Aphanitic porph Dyke Altered		90		30° × 2	⅛ × 2	Cal - chl										
							WK Arg Alt GDP				40°	3"		Core ground @ 95+96 missing 1'									
											30°	⅛"	cal	Core blocky @ 95.-100'									
							WK Arg Alt GDP 95 96				40°	contact											
											65°	contact	vuggy cal - hem - lim	minor py - disem hem @ 96	95	90							
							Porphyritic Arg Dyke 97½ 98½				80°	¼	gtz - py - (sph)										
							7% Sericite		100		50°	¼	cal - chl - hem.										
							WK Arg Alt GDP				40° × 2	⅛"	cal - chl.	Core ground @ 104½ missing 1' Core blocky @ 103'-104½'	104	90							
									110														
							Int Arg Alt GDP 112 113½							Core ground @ 113' + 114'. missing approx 6" Core blocky 111'-114'		95							
											20° 20°	½" fracture	qtz - ser - chl. alt - clay - lim - py	disem hem + minor py	114								
									120														
							WK-Mod Arg Alt GDP 123' 124				20°	fracture	chl - clays.	disem hem minor py Good Core recovery									
											85 15°	⅛" ⅛	Cal - lim Cal		124	100							
									130														
							Mod Arg Alt GDP 133 134				75° + 60° 55°	⅛" × 2' fault gouge	chl - clay - lim chl. - clay	disem hem. Core assembly 133'-134'	134	100							

Hole No.: SAB-80-12

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD	SILVER	Cu	Pb	Zn	Ni
							Wk Arg Alt GDP 141				35°	contact		Core ground 144½' + 146' missing 1'														
							Mod Grey And Dyke Porph 144½				55°	⅛	calc.	Core blocky 144 - 145½														
											30°	⅛	Calc-chl-clays		144	90												
							Wk Arg Alt GDP 149		150					Core blocky 149 - 152														
		2½' pink plag phenocrysts					Int Arg Alt GDP.							Core ground @ 150' and 151' Missing 6"	150													
							Dyke 2"				85°		Calc-chl	CHL-clays disseminated py. minor, disseminated hematite minor														
							157½				60°	¼" offset ½"	clays - K/spar - hem		155	95												
							Alt And Porph Dyke 159		160		70°	contact.		Dyke contains calc-chl stringers														
											5°	⅛	calc-chl.	Core blocky 168' - 169'														
											30°	⅛	calc-chl.															
											85° x 2	⅛ x 2	qtz-Ser	disseminated hem and py														
											70° x 3	⅛ x 3	qtz Ser		165	100												
											70°	2½"	qtz-Ser-py (GPH)	Dyke inclusions at 169½(2").														
							Minor 167.8 Sulphides in qtz veinlets 167¾ 40° to 170		170		40°	2"	Dyke inclusions	Veinlet 169¾ - 170. Core not ground. copper py (GPH) (SPH) py blebs + disseminated py														
											40			copper py														
											70°	Lenticular																
											85	¼"	qtz - py	minor py.														
											70°	1"	qtz-Ser. - py		175	100												
									180					disseminated hem + blebs minor py														
							183'							Core ground @ 181½' missing 6" @ 181½-183'														
	CHLORITE		KAOLINITE.				Alt And Porph Dyke.				70°	¼"	qtz															
		CALCITE					187¾				70°	⅛"	qtz	Dyke has minor py and magnetite	183	95												
							190		190																			
											40°	contact	clays.															
			HLORITE				Alt And Dyke Porph.				80°	⅛"	calc unsigy	Dyke contains calc veins along fractures, disseminated py - chlorite and kaolinite	193	100												
							196½				50°	⅛"	calc.															
	BLEACHED		CHLORITE MONT KAO		MYLONITIC NO Specimens.		MINOR ZONE 197		200					Core ground @ 197' Disseminated py	195													
														Core ground @ 202' missing 2'														
							qtz-ser-Py 205							Core blocky at 196½'-202'														
							Alt And Dyke Porph 205				60°	¼"	qtz-chl.	qtz-ser-Py 6" @ 204½'	205	80												

Hole No.: SAB-80-12

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GaO	SILVER	Cu	Pb	Zn	Wl
							Int Arg Alt c,DP cont 214'				40° 30° 85° 10° 50° x 3 40° 45°	¼" ¼" contact ¼" ¼" x 3 contact	qtz qtz - chl - py qtz - lim cal stringers cal stringers	disem py abundant from 213½ - 215														
							Alt Arg Dyke Porph 218½ 219							Dyke contains disem py, disem hem minor mag + cal stained (lim) stringers	215	100													
							Wk Arg Alt c,DP 220		220																				
			25%		non porphyritic		Some mafics Biotite Sericitic				60°	contact		disem hyp, some in minor mag. Some minor K/spar alt + some K/spar veins. Phenos not altered.	235	100													
65%		10%	25% 60 15%	>5% mag	not porphyritic		qtz Biot c,D 227 228 Silicified zone		230		30°	contact		minor py. Silicified some hem in 10 cm in silicified qtz minor pyrite															
							231							with 2nd K/spar alt + minor py veinlets															
							237				40°	contact			245	100													
			40% fgrn		fine grn		Gray Wkd Dyke Porph		240					Dyke contains very minor py and mag.															
											60°	1/16"	cal.	with hem/lim Calcite stringers	255	100													
					V fine grained				250		30°	2"	black basaltic dyke inclusion	blebs of cal + hem.															
											40° 60°+85°	1/16" 1/16"	cal - chl. cal chl cal stringers		265	100													
			CHLORITIZED				258½ 260		260		60° 40°	1/8" contact	cal - chl																
							Int Arg Alt c,DP 262							disem py + minor hem.															
							Wk Arg Alt c,DP								275	100													
									270		25 40	1/4" 1/4"	qtz - chl qtz																
							Int Arg Alt c,DP 272				5°	1/4"	qtz - chl																
									280					Hole ends @ 275' Alteration varies from wk - Int Argillic qtz-ser-chl vns. not as massive as 57½ - 58½' - 97½ - 97½ 204½ - 205. Mineralization in Int Arg alt disem py - Aw - Ag - near stringers.																	

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Sludge collected
Log Scale 1" = 10'

Hole No.: SAB-80-13
Project: Kettle River
Claim No.:
Logged by: B. Gallagher
Date: 27 March 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Elevation:
Completed:
Length: 281'

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Gn Py	Estimated Grade Cpy Sph Ox	Specific Gravity	Recovery Weight (Grams) Core	Recovery Weight (Grams) Sludge	Assay Results Sample Number	Gold	Silver	Cu	Pb	Zn
							Casing to 32'																				
							Coring @ 32'		30																		
							32																				
25%	25-30	30%	25%	25%	Med Grain	7	WK Arg Alt'd GDP				45°	1/16"	qtz - Sulf	Core ground @ 32.2 missing 6"	35	80											
											45	H/L	Cal - hem.	Core oxidized from 36½'-50'													
														minor disseminated py													
									40		80	H/L	qtz - chl					.05									
											50	H/L	Cal - chl - clay														
											75°	1/2"	qtz - 2nd Khaow.														
							Int Arg Alt GDP						Mass Sulphides - Sphalerite - Cpy - Gal - Py	Core ground @ 41½' @ 44' (approx) @ 45½ @ 49' Missing 2'													
											80-75	H/L = 2	qtz - Sulf - py	Core crumbly @ 41½ - 50½ Missing 2' from 45'-50'.	45												
							Leached Fault Zone		50		85	¼	qtz - chl - hem	qtz vein may be longer than 6" by [illegible]	75% 50	80											
							Int Arg Alt GDP				40-55	1/8" = 2	Cal - Lim	Core ground at 52' Missing 6" from 50-53'													
											50°	1/4"	qtz - Lim		53	95											
														Core blocky 56'-56½'														
																90											
							WK Arg Alt'd GDP				20°	1/4"	Cal - chl	Core good recovery. Very minor py.	63	100											
							70		70		20°	1/4"	Cal - Lim														

Hole No.: SAB-80-13

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga/Py	Cpy Spk/Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Cu	Pb	Zn	Wl
							70																						
							Int Arg Alt GDP 71½						diss py + hem.	Core ground @ 73.6' @ 77' diss. py + hem @ 74-75			-												
							Wk Arg Alt GDP																						
							Int Arg Alt GDP 74 75										-	-											
							Wk Arg Alt GDP																						
							Int Arg Alt Sch GDP 76½ 78				30°	¼"	qtz - Ser.	Core blocky @ 73.6 - 78' missing 1½" of it	73.6 78	85	-												
							79½		80																				
							~~Int Arg Alt GDP 80½~~				45°	⅛ x 2	Cal - Lim.	Core blocky 80½ - 82' Core ground @ 84'															
							Mod Arg Alt GDP 82										.02												
							Wk Arg Alt GDP							Core blocky @ 86-86½' 87¾' - 89½'		100													
							85				45°	1/16" x 2	Cal - hem	Possible High Grade @ 84' but only 1 small fragment massive py in qtz Ser. Ev found since core in ground @ 84'	84		.03	.08										
							Mod Arg Alt GDP																						
									90		20°	1/16	Cal - Lim - hem.		89	100	.3	-											
							92				10° x 2	⅛" x 2	Cal - lim	Core ground @ 95' Good core recovery diss hem															
											70° x 3	1/16 x 3	Cal																
											60° x 2 - 40°	1/16 x 3	Cal - Lim																
							Wk Arg Alt GDP				5°	fracture	Cal - chl - hem.		95	100													
									100		80°	¼"	Cal - hem.																
				~~mafic~~ 2%										minor diss py with diss mag.															
											15°	1/16	qtz - Ser	Very minor py.															
											60°	⅛"	Cal - hem																
											15°	1/16	qtz - chl - Ser		105	100													
							107				5°	fracture	Cal - hem - py																
							Mod Arg Alt GDP		110		60°	6" fault gg		bleached clays qtz py at fault.															
							112½																						
											40°	1/16	Cal	very minor hem. biotite fresh															
							Wk Arg Alt GDP				70°	½"	2nd Biotite (chl)		115	100													
									120																				
											70°	½	2nd Biotite (chl)	Core ground @ 128' minor disseminated hem															
											80°, 40° 60°	1/16" x 3.	Cal - hem.		125	100													
							127																						
							Wk-Mod Arg Alt GDP		130																				
											30°	¼"	Cal.																
							134				60°	2"	qtz - 2nd Apar Intermixed qtz		135	100													
							Wk Arg Alt GDP				30°	⅛	Cal - hem	Minor diss hem.															
									140																				

Hole No.: SAB-80-13

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Ox	Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number	Gold	Silver	Cu	Pb	Zn	(%)
							WK Arg Alt (Core) 143½				40°	½"	cal															
							Dyke Int Arg Alt GDP 148½				50°	1"	Cal - Sev - py cal - clays.	Core crumbly @ 145' digism py + hem	145	100												
					fine grained		Alt And Dyke		150		40° 60°	¼" contact	cal - hem.	Core blocky @ 149-150' Dyke chloritized & calcite stringers & minor py 1"														
							Silicified GD zone 151½ 152¾				50° 50°	contact contact	Tr ½ veinlets Spa - Ga minor py	Core ground @ 150'	150													
					mod porphyritic		155½				30° 80°	½" contact	cal		155	100												
				any > 2%			MOD HRG ALT GDP		160					diss hem minor limon py and along fracture.														
							162 Int Arg Alt GDP				50° 30° 30°	1" 1/16" ⅛"	Spa - py in qtz veinlets cal - chl. cal - chl	Core ground @ 164' missing 6" Core blocky 164-165' Diss hem and minor py	165	95												
									170		5° 35° 45 35°	⅛" 1" 1" contact	cal - chl - sev (Cal vuggy) qtz veinlet - interstitial qtz Spa - Ga - Spy - py Spa - ga py qtz veinlet cal fth chlo. brit fract.	Core ground @ 170¾' missing 6" Core ground @ 176¾' core blocky 170 - 180' diss py Spy / Spa - Ga Core ground @ 179' tooth	170 175	95	01 02 5										
			15% 40 grain 1mm		fine grn		179' MOD. CHLORITIZED DYKE 183½		180		40° x 4	⅛" x 4	cal	Core ground @ 180' missing 1½'	180													
							Black and Dyke 183½ CHLORITIZED + Arg Alt 188 Block + porphyritic		190		35° 45 x 2 - 60° 70° 20°	⅛" ¼ x 2 - 1 ⅛" ⅛"	qtz qtz qtz - hem cal	Dyke contains some py	185	85												
							191 Mod Arg Alt GDP 194½ CHLORITIZED + Arg.		200		25-60 20° 30° 40° 70° 50° x 2 45°	⅛ x 2 ⅛" ¼ contact ¼" ⅛ ⅛"	cal, cal + hem cal. cal - chl. qtz cal. cal - hem.	Good Core recovery Dyke push in GDP 193' minor diss hem + py in GDP	195	100												
							209½		210		50° 80° 35° 25°	fracture 1" ¼" 1/L contact	cal - chl - hem. cal cal stringers cal - chl - hem - clays.	diss py and py as blebs and along fracture stringers @ 201-204' Pink - Crimson hem. Dyke contains cal stringers + diss hem.	205	100												

Hole No.: SAB-80-13

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Ox	Recovery	Assay Results
			20-25% 15-20% 10-15% 5-10% 0-5%				WK Arg Alt CDP				5°	fracture	hematite stained	Good core recovery chrsem hem and hem filled H/L fractures Py is minor							
							K/Spar zone 213½ 214½				25°	contact									
											60°	¼"	qtz-hem		215	100					
											70 x 2	⅛ x 2	calc-chl-hem								
									220		20°	H/L	calc-chl.								
											60°	H/L	chl-hem	chrsem hem also along fracture surfaces v. minor py							
											30°	⅛"	qtz-chl-hem								
											20°	⅛"	calc-chl-hem		225	100					
							229 WK-Mod Arg Alt CDP		230												
							231				40°	H/L	qtz-chl	Core ground @ 230', 231', 236'. Core blocky 230'-231' 235½ - 238.6'	231						
											90°	⅛"	calc-chl		235	95					
											10°	fracture	hem-chl.								
							Int Arg Alt CDP 239½		240		30° x 2	H/L	calc-lim-chl.		238.5						
				5-10% mag			240½				65°	contact		Core blocky 242½'-244'							
											70°	4"	Intrusion qtz-sericite matrix								
											60°	⅛"	calc-chl		245	100					
									250												
							Intrusive qtz porp 253½ 254 254½				40°	⅛"	calc-chl	Core ground @ 257'. Core blocky 257'-258' v. minor py and disem hem							
													Intrusive qtz + hem matrix								
							Mod Arg Alt CDP				70°	¼"	calc-chl		255	100					
											20°	⅛"	calc-chl-clays								
							Leached CDP + Dyke 3" 258½		260		55°	¼"	qtz-chl-veins	Core ground @ 258'	259.6						
				Slist	Cy R fine grained	polygon	Wkly Alt Amcl Dyke Porp 263¾						Calc-chl stringers	Core blocky 269-271' missing 6". Dyke consists of hem along fractures + calc stringers							
							Mod Arg Alt qtz P. 266½				40°	contact			265	95					
							Tot Arg Alt CDP		270					Disem hem.							
							Calc Hematite Dyke 274¾ 275½				50° 50°	contact ¼"	qtz-hem	Core ground @ 274' 275, 276'. missing 6"	274	95					
							Hematite Alt Dyke + CDP Minerals 278¾							Hematite alt of Dyke + chlor, tourmaline, hem, stringers + minor py							
							Int Arg Alt CDP		280												

Hole No.: SAB-80-13

Rock Types and Alteration								Graphic Log			Mineralization and Structures				Footage Blocks	Length Recovery	Estimated Grade		Specific Gravity	Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks			Cpy: Bn / Py	Cpy: MoS2 / Ox		Weight (Grams): Core %	Weight (Grams): Sludge %	Sample Number: Core	Sample Number: Sludge					
															291	100												
														Hole ends @ 281'														
														Argillic alteration weak to intense														
														Mineralization includes massive sulphides														
									290					Sph-Gn-Cpy-Py in qtz vein @ 43.0-43.5'														

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No sludge collected. log scale 1" = 10'

Hole No.: SAB - 80 - 14
Project: KETTLE RIVER
Claim No.:
Logged by: B Callaghan
Date: 31st March 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Elevation: ~ 3830'
Completed:
Length: 125'

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity
							O.B. Bedrock @ 18' Coring @ 18'												
									20						18				
.5%	30%	35%	25%	Mafs 22%	med gn.	7	Fresh QDiorite to Pryxl				60 30 85 75	H/L H/L fracture H/L	qtz - chl qtz - chl py (cpy) qtz - chl + lim	Core ground @ 20½ Py. and dissem hem. Py stringers also along fracture surfaces.	25	100			
									30										
											70° 85°	fracture fracture	chl - clay - py chl - py	only 33" of core recovered - 3" alt. QDP on both contacts					
							38.8 Int Arg Alt QDP		40		40 75	⅛" ¼"	cal - lim qtz - chl - hem - py qtz veinlets (2) 1", 2", 5"	py blebs dissem py @ 37¼' @ 38.8' to 42.2' dissem py, blebs of py, heavy sulphides	35	75			
							Int Arg Alt QDP Lim qtz veinlets (3) 42.2		50					in veinlets cpy, Q, Bar, Spk; minor sulphides @ 42.2 - 49.8		80			
							Int Arg Alt QDP 44 Mod Arg Alt QDP 44½				50° 30° ± 2 85 35	contact ⅛" ± 2 ¼" ½"	Cal - Lim intensive qtz - py bleached clays.	dissem hem, clays.	45	100			
							Mod Arg Alt 49½		50						49.5				
							Fresh QDP								55	100			
									60		25 30° ± 2	H/L ⅛" ± 2	qtz - chl qtz - chl						

Recovery: Weight (Grams) Core	Sludge	Sample Number	Gold	Silver	Cu	Pb	Zn

Hole No.: SAIS-80-14

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Bn Py	Estimated Grade Mo	Recovery	Assay Results
							Fnsl GDP (cont)							Core ground @ 64' minor dissem hem.						
							Wk Arg Alt GDP 60/63													
											70	1/16"	Cal-chl		65	100				
							Wk-Mod Arg Alt GDP 67/71				25	1/8"	cal-chl-lim-py	Core ground @ 67½' minor inclusions of chlor @ 69.5'						
											20	1/4"	qtz-chl							
							Dyke Alt		70											
							71.6				35	varies		Dyke chlorite alt 73-73.4 minor calcite stringers in dyke & py (minor)						
			Biot 4-5 mm	5-10%	Thin gn.		Brec. Basalt Dike Rock													
							GDP inclusions				40°	6"								
											30x2	1/16	Cal-chl		75	100				
											60 x 40	H/L x 2	cal							
									80											
														Veinlet (M/L) of cal py						
				5%			87½				70°	varies	cal-py		85	100				
											85	1/4	cal-hem.							
							Mod Arg Alt GDP 90/92		90		35	1/16	cal-limpy	minor dissem py and along fracture surfaces						
			20-25											dissem hematite	92					
							Wk Arg Alt GDP				35x2	1/4 x 2	Cal-Lim	Core recovery good. most alteration chlorite						
											30°	1/16"	cal-lim		95	100				
											20°	1/4"	cal-chl-lim							
							99		100											
														Core blocky @ 100'-102'	103	100				
							Mod Arg Alt GDP													
											30° x 4	1/16 x 4	Cal-chl-lim stringers							
											20	1/4	Cal-chl-lim							
							108½		110		60°	1/4	Chl-lim-py							
							Wk Arg Alt GDP				20°	1/4	Cal-lim-hem-py	Core blocky 109½-110½						
											75	2"	2" K/Spar	116½-125'						
							114½				40°	1/4"	Cal-chl-lim	Core ground @ 117' missing 6"	113	100				
							Int Arg Alt GDP				30°	1/4	Cal-chl-hem	dissem hem						
							117													
	Chlor	Tiz	Cl	Al	Dis	Kaol	Int And Dyke Rock		120		10°	trace	Vn qtz Cal-chl-chlor.	qtz + cal stringers in dyke.						
											80		qtz stringers	hem and chl along some fractures in dyke.	123 125	95				
													End hole @ 125'			95				
												Alt from - intense			38.8 - 42	2.9			

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:

Core Size: NQ
Completed:
Elevation:
Length: 134

Hole No.: SAB-80-15
Project: Kettle River
Claim No.:
Logged by: B. Callaghan
Date: 10th April 1981
Contractor: Mohawk / Maitland Explorations

Remarks: No sludge Collected. Footage blocks out by 10' starting at 69.5' which should be 79.5'. Therefore length of Core is 135' and not 125' as recorded. Core recovery is bad missing approx 15½'
Log Scale 1" = 10'

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Pb	Zn	Cu	Mo/W
							Drilled through boulders to 30.5. Coring @ 30.5		30					Core ground @ 30-31' 3 times	30														
			cl 1'	chlor 40-50		5	Highly Alt Green (And) Dyke Porphyry		40					Core blocky @ 30-32 missing 1'. @ 32-33.5 missing 6'; @ 33.5-43' missing 6½' Core ground @ 33½'	32 33.5	75 87 31														
							Int Arg Alt of Granodiorite P. 46 47		50					Core blocky @ 43'-55' missing 4' Core ground @ 42', 49' Dyke bleached from 45'-59'. Fractures & gouges contain clays (mylonite) qtz stringers are discontinuous average thickness ¼"	43	66														
							55 59		60			fault 99.	clays. Mylonitic clays.	Core ground @ 51½' @ 58½' missing 2' Core blocky @ 55-58½	55	80													
							Int Arg Alt of 61 68						qtz. Ser. py. (sph)	core blocky @ 67½-73.	65	75													

Hole No.: SAB-80-15

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sample Number Sludge	Gold	Silver	Pb	Zn	Cu	Mo/W
						5	Highly alt'd Green (dark) Dyke Porphyry		80		30 30° 70	¼ ¼ ¼ tr to 99.	qtz - cal. qtz - cal. qtz. cal with ofset ¼" chl - clays (dark green)	Core ground @ 73', 75¼, 79'. missing 2¼'	73 79.5	66.																
									90		50	¼ tr qtz 2" tr qtz 2" tr qtz 1¼"	qtz (vuggy) { chl clays (dark green) Dyke brecciated c Argillic & P fragments @ 85'-85.8.	Core blocky 83'-85. missing 6" Core ground @ 85' Core blocky @ 89-89 Dyke less altered containing abundant calcite qtz stringers, minor py.	85 89	90. 100																
									100					Py abundant in altered dyke material both brown + along fractures.	95.	100 100																
			yellow green patches & clay block (10-15')						110		30 30 40	⅛ ⅛ ⅛	qtz stringers H/L Cal - chl. Cal - chl Cal - chl	Core ground @ 100'	100 104	100 100																
							qtz inclusion 117¾ 118¾		120		40 50	¼" ¼"	Cal no mineralization. qtz-chl	Core ground @ 115½' @ 116. minor py in dyke. chl altered material	114.4	100																
									130			¼	Vuggy qtz stringers		124.5	100																
									134		10°	¼	qtz - (cpy)		134																	
									140					Hole ends @ 134'. Mostly highly chlorite altered Dyke material. qtz inclusion @ 117¾ - 118¾ with no mineralization.																				

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Survey conducted. Log Scale 1" = 10'

Hole No.: SAB-80-16
Project: Kettle River
Claim No.:
Logged by: B. Callaghan
Date: 2nd April 1981
Contractor: Mohawk/Maitland Explorations
Core Size: NQ
Elevation:
Completed:
Length: 164'

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Graphic Log: Footage	Graphic Log: Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Estimated Grade: Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Recovery: Weight (Grams) Sludge %	Assay Results: Sample Number Core	Assay Results: Sample Number Sludge	Gold	Silver	Cu	Pb	Zn
							OB Till 40' Coring @ 40'		40					from 40-41: Chips of basaltic dyke, Feldspar porphyry - High Apatite, and Ab, mag rich granodiorite. Core ground 40¾	40													
			mafs ↓ chl 3cm		fine grn		41 Highly Alt And Dyke 45				45° 20°	contact	chl-clay @ 43' c.D.P. inclusions @ 43' calc-chl stringers	Core blocky 40-43', 44-71 1' missing @ 40-43. 1½' missing 43-48' Core oxidized from 40-66' Hem along fractures from 47'. disseminated hem + py (minor) 1" missing @ 48-54	43 48	66 25 91		.04								
no fines	30 ↓ clay alt	35 pink 2nd K-spar	10-15 bands ↓ chl.		med grn.	6	Int Arg Alt of Granodiorite porphyry		50					chl + py along fracture surfaces 3' missing @ 54-58'	50 54	25											
							58½ Heavy Alt And Dyke Porph		60		45	contact		Core ground @ 58'	58	66		.04									
							c.D.P. inclusions → 61 62 63 Int Arg Alt c.D.P. c.D.P. inclusions 68 Mod Arg Alt + c.D.P.		70		60°		Calc stringers	Core ground @ 64½' 1' missing 58-61' 6" @ 61-64' 6" @ 64-68' Hem along fractures.	61 64 68	83 85		.04									
							72½ Mod Alt & inclusions of wk alt.		80		50° 50	H/c. H/c.	calc-chl-hem-hem stringers calc-hem	Core blocky 78-95½' mod alteration with inclusions of wk alt. Core missing @ 79-84'-1'	71 79	100 100		.04									

Hole No.: SAJ-00-10.

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Qz	Estimated Grade Cpy Sph	Estimated Grade Cpy Py	Estimated Grade Cpy Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge	Gold	Silver	Cu	Pb	Zn
							Area Dyke inclusions Mod Alt Inclusions of Wk Arg Alt cont. 81	3"		65	H/L fault 1.5	Cal - Qtz - hem chl - clays	Core ground @ 81½' Core missing @ 83-87.1' " " 87-90.6"	83	80													
							84½																						
			20-25% biot [illegible]	mag			Wk Arg Alt GDP 87½			65	H/L	Cal - Lim	chl - py along fractures.		75													
							Mod Arg Alt of GDP	90						87	100													
							96			5	¼	Cal - chl stringers	disseminated and minor disseminated py shears along fractures.	90	100													
							Wk Arg Alt GDP	100		30	H/L	Cal - hem	Core missing @ 94-102' 1', core blocky	94	87													
		Chlorite - Radiolized	Pyroxene 3mm				101½ Int Arg Alt Dyke Porph. 103 104½ Int Arg Alt GDP 107½ 107			6°	¼	Inclusions of GDP for 5" in dyke. Vuggy Cal - Lim	Core missing @ 103' qtz Veinlets in alt Dyke @ 103' for 1½' disse py - hem.	102 105	75													
			None 3mm				Wk Arg Alt GDP 109	110		30°	2-3"	Dyke inclusions for 1'			95													
										30° 150 40	H/L H/L H/L	Cal - chl - hem. qtz - Ser stringers Cal	py - chl - along fracture surfaces.															
								120		30°	H/L	Cal - chl	20cm [illegible] in [illegible] 2" @ 114'	115	100													
							124½			50° 60° x 3 65	¼ ⅛" x 3 contact.	qtz - Lim Cal - Lim	disseminated py and along fractures. A few py blebs															
						6	light Green Alt Dyke 130	130		40, 20, 60	⅛" x 3	Cal lim	Dyke not so porphyritic minor disseminated py	125	100													
										60-70 50°	⅛ x 3 contact.	Cal lim	Highly alt Dyke inclusions @ 145' for 1"															
			No. 10% V. chl.	mag 10-15% pyrite up to 1cm wide stringer		5-6	Highly Alt Arg Dyke Grey Porphyry 135			30 60	¼ ¼	qtz - lim qtz - Lim	mostly chlorite in dyke with calcite and qtz stringers. Phenos highly altered to chl.	135	80													
							Mod Arg Alt GDP 140	140																					
							Highly Alt Arg Dyke Porph			40	2"	non porphyritic dyke inclusion @ 141'	Core ground @ 140'	140 145	100													
							149 Alt Arg Dyke Porph	150		20 30	¼" 3" ¼"	Cal - very crystalline inclusions of Int Arg Alt Porph. @ 149' qtz - lim	Dyke contains some phenos.		100													

Hole No.: SAB-80-16

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration		Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Alt and Dyke Porph Mod Arg Alt			155 156½ 160		20°	contact	qtz stringers	Good core recovery. Alt-chl. Many fractures. Mostly CN. alt.	155	100											
												50° 60	¼	chl-clays. qtz.	Dyke has inclusions & has altered material with less mag	164												
										170				End hole @ 164' Alteration WK - Intense Argillic Dyke highly altered with magnetite chl. Dyke ultrabasic - Andesite?																
													poor	core recovery and no mineralization.														

Page 3 of 3

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: -no sludge collected
log Scale 1" = 10'

Hole No.: SAB-80-17
Project: Kettle River
Claim No.:
Logged by: R. Callaghan
Date: 3rd April 1981
Contractor: Mohawk / Maitland Explorations
Core Size: NQ
Elevation:
Completed:
Length:

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy / Bn / Py	MoS2 / Ox	Specific Gravity	W / O
							OB unkn 42½ Coring @ 42½		40											
							42½													
			40 v chl. 2-4mm 15-20	mag >3%	med grained	5.6	Highly altered with some Dyke A.		50		50	¼	chl - clays. qtz	Core blocky 43-45' 47-48' alteration in dyke varies from light to dark grey green with Hb, chl varying in amount and sligh. Magnetite oxidized	43 48	70				
						5	5.1 light green leached, alt & HB dyke. Porph.		60		20	¼' ¼-¼ 8" ¼-¼	chl - clays - bleached. Cal - Lim chl - clays bleached.	Core blocky 52½ - 60' qtz stringers & chl. disseminated py. Core ground @ 60'	55 60	64.2 70				
						5	65½ Light green altered Dyke Porphyry		70		50°	contact.	discontinuous qtz stringers	disseminated py + trace in portion but is less disseminated. chlorite phenos larger and greater in quantity qtz stringers discontinuous	65	65				
							77½		80				qtz - cal - matrix	Chl - Lim along fractures	75 78	90 83.3				

Hole No.: SAB-80-17

Rock Types and Alteration: Qtz	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Pb	Zn	Cu	Mo/W
							Mod Arg alt GDP 92 92			45	contact		diss cpy, cal along fractures														
							Light gray alt Dyke Porphyry			70	1/16"	qtz-cal		55	100												
								90		85	f.b.g. 4"	cal-chlo.			100												
							Light Gray Band Dyke Slightly porphyritic 98½ 94½			65	contact	Cal-qtz stringers															
							Light Gray Band Dyke Slightly porphyritic 96½			25°	½"	qtz-cal	dissem py @ 95' composition varies greatly in dyke	95													
							Light-Med Green alt	100		25	1/16"	qtz-cal			100												
							WB. Dyke porphyry			70° 85°	1½" ⅛"	qtz blebs 1" diam light gray dyke inclusions @ 104' Cal-qtz		105													
							106 Highly alt WB dyke Porphyry	110		50°	fault 55-6"	chl-clays			100													
										55°	fault 9.1'	cal blebs 1" @ 113½	Round things pink in colour with dissem py in core ½" across.	115													
										65	fault 9.1'																
							Mod Arg alt GDP 118½ 119	120					Core ground @ 119'		100												
										5°	⅛	cal-chl	Core ground 122' missing 1'	122													
							125½ Light Gray Aplite Dyke Porphyry 128			25°	⅛"	qtz			90													
					fine grain mafics			130		30° x 2	⅛"	cal-chl															
							137 Int Arg Alt GDP	140		35°	contact	cal-chl.	dissem py + lain	132 137	100 80												
							med green 142½ Highly alt Dyke WB Porp 145½ Int Arg Alt	Dyke		55° 40 80°	contact ½" contact	qtz-cal-py	Core ground @ 141, 145½ Dyke inclusions 147'	142 148	90												

Hole No.: SAB-80-17

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade				Recovery		Assay Results					
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Med-Dark green highly alt. w/B Dyke Frgm. 155				75	1/8"	qtz - carb	Carb - qtz discontinuous stringers	155	100												
									160					End hole @ 155. alteration mod-intense argillic mostly highly altered dyke, no mineralization														
									170																			
									180																			
									190																			
									200																			
									210																			

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No sludge collected
log Scale 1" = 10'

Hole No.: SAB - 80 - 18
Project: KETTLE RIVER
Claim No.:
Logged by: R. Callaghan
Date: 6th April 1981
Contractor: Mohawk / Moirland Explorations
Core Size: NQ
Elevation:
Completed:
Length: 200'

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Coring approx 19½' (no footage block) 19½		20														
	5-10% chl-sericite		20-25% bw-py Zone	5-10% mag	fine grained	6-7	22½				40x2, 60x3	H/L	Quartz stringers	Core blocky 22-25, 26⅓ - 35½									
25	30	35	10-15% chl MO & py	-	[illegible]	7	WK Arg Alt GDP 25½							Core grounded @ 22½' 6" recovery @ 25-30'	25								
							WK-Mod Arg Alt of Granodiorite Porphyry 30		50		30'	¼"	Cal - chl - Lim. clays	Core oxidized from 19½ - 34½'. chl-Limonite stain along fracture surfaces.	30	90		.05					
							Tuf Arg Alt GDP 38½		40		35 5 25 45 60° 30°	fault gg. fracture ¼" ½ contact fault gg. 1½	chl - clays Cal - Lim Cal - Lim. chl. Cal - gy - chl. chl - biot - clays chl - biotite clays	Core missing @ (34-35) 1½'. Py Veinlet H/L @ 34' mostly chlorite alt. wide dissem hem. mostly chl and fine biot along fractures & seams	34	100 81							
gray green	yellow	75 yellowish pink	No Bio & few chl		med	4	Fault Zone 45½				60 60°	1" fault gg. 1½	Intermixed qtz - k/spar - py chl - biotite - clays	GOOD Core recovery	42								
							WK Arg Alt GDP 46½ Tuf Arg Alt GDP 48½		50		80° 30	¼" ½	Cal - chl - Lim. Cal - Lim	Dissem hem.		100							
							WK Arg Alt GDP 54				30	¼"	Cal - chl - hem.	GOOD Core recovery	52								
			No chlorite			7	Light green Rhyolite Breccia 56				25° 25°	contact contact		Cal - Lim stringers in light rounded qtz phenocryst zone of hem		100							
							Mod Arg Alt GDP 59½		60		60	⅛"	Cal - hem.										

Hole No.: SAR-80-72

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Fresh with small inclusions of WK Arg Alt of GD.P		70		35	1/16	Cal - Lim stringers.	Good Core recovery minor dissem hem	62.5	100.							
											50	1/4-1"	qtz - cal - chl - lim										
									80		50 30	1/4 1/4	Cal - Lim Cal - Lim	Good Core recovery	73	100							
											30° 15	1/8 1/16	Cal - Lim Cal - Lim										
							80%																
				>5% mag.			Med Gray And Dyke Rock 83¾ WK Arg Alt GD.P Med Arg Alt GD.P 97½ 88		90		45 50 50 30 60 60 × 3	contact contact 1/4" fracture 1/4" contact 1/4 - 1/8 × 2	Klinz - qtz - chl - clays. Cal - qtz - lim	Good Core recovery Cal - Lim stringers in dyke material. phyllosilicate in dyke, have dominant orientation of 60° to core axis upper 1/3 of core. alteration in dyke mainly chlorite.	83.5	100							
			Mod-Low 3-4		not pronounced		Med Gray Green And Dyke Rock 95½ 94 Med-Light Gray Green And Dyke Rock 97½ Light Gray Green And Dyke Rock		100		40 × 2 40 + 25 40 50	1/8 × 2 1/8 × 2 contact 1/4" - 1/4	Cal Cal - chl vuggy qtz - hem. vuggy qtz	Good Core recovery Stringers of py - hematite in dyke Dyke @ 97½ not so pervasively altered & vuggy cal - qtz stringers	94	100							
							101½ Mod Arg Alt GD.P with minor inclusions of WK Arg Alt GD.P		110		25	contact	chl - clays - hem.	Core blocky @ 101 - 122½'. fractures infilled with chl - hem. Core oxidized @ 103' - 131.	104 109	100		1.05				
									120		66	fault gouge	chl - clays.	approx 6" missing @ 118-122	114 118	100 100 87							
							(Fragmental qtz Vein 121 - 1" 123' WK Arg Alt GD.P 128. Med Gray And Dyke Rock		130				Cal - Lim stringers	immediately above @ 124' in qtz vein inclusions - dissem of cpy - (spa). fractures infilled with clays - hem. minor py. Py also dissem. Core fragmented @ 128'	122 128	100							

Hole No.: SAB-80-18

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number Core	Sludge
							Mod Grey and Dk Grey (GDP) 134							Core missing at 138-139'-6"	134	100							
							Int Arg Alt GDP 134½				40	contact	py-py-(cpy)-hem.	dyke inclusions in porphyry for approx 4'									
							qtz vein in Sulphides 136				50	contact		heavy sulphides in vicinity									
											40°	contact		cpy, Py, Gn, Sph. Py is diseminated not massive.		90							
							Mod Argillic GDP 139		140						139								
							140½																
							qtz veinlets in Int Argillic GDP 143½				60°	⅛"	qtz-py-Lim	Core ground at 144.5'		100							
							"				"	"	"	Core blocky @ 147½-150½'	144								
							146½							140½-141½ - Intermittent qtz-py emplacement (cpy)									
							Py veinlets in Int Argillic GDP									88							
									150		30-45	⅛-½"	qtz-py-(cpy)(sph)	Int qtz-py veinlets + diseminated (cpy)									
							150½																
							Light and Green Mod Dyke Porphyry				5	⅛	Cal-Lim	py stringers in dyke M/L + diseminated py.	152½								
											25	⅛	Vuggy Cal-Lim	Play stringers									
							155				10°	contact											
							Int Arg Alt GDP						intermittent qtz-cal-py-(cpy)-(sph)										
							qtz-Sec Env 158				70°	⅛"	intermittent qtz-chl-py (cpy)(sph)			100							
											50°	contact		most alteration chlorite diseminated py.									
									160														
							Mod Arg Alt GDP				70°	⅛"	cal-Lim	good core recovery									
											60	⅛	cal-Lim	diseminated hem.	163								
											40	⅛"	cal-cal-Lim										
																100							
									170		20	⅛	cal-chl-py-Lim										
							170 qtz-Sec Py Envelope in Int Argillic GDP				60°	1" approx	qtz-py-hem.	Good core recovery									
							Int Arg Alt GDP 174 174½							diseminated hem. minor py	173								
							M/L Arg Alt GDP with diseminated from GDP				30 x 2	⅛ x 2	cal-chl-Lim	chlorite in fine fractures diseminated hem.		100							
									180														
														Good core recovery									
														diseminated hem	183								
									190			M/Lim	qtz-Sec stringers			100							
							194				35	1"	intermittent qtz-chl-py	minor + local play alteration									
							Fresh GDP				30	M/L	cal-chl.		193								
																100							

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected
Log Scale 1" = 10'

Core Size: NQ
Completed:
Elevation:
Length: 203'

Hole No.: SAB-80-19
Project: Kettle River
Claim No.:
Logged by: B Callaghan
Date: 7th April 1981
Contractor: Mohawk / Mairland Explorations

Rock Types and Alteration								Graphic Log			Mineralization and Structures														
Qtz	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Ga Py	Estimated Grade Cpy Sph Ox	Specific Gravity	Recovery	Assay Results Ag	Assay Results Sium	Assay Results PD	Assay Results Zn	Assay Results Cu
							Broken core, fragments from 20' Coring @ 22¼		20																
20	35	30	20% 15% 5% 5%		med grain	7	Mod - Arg Alt of Gdp dark porphyry 27½				35	⅛"	qtz - chl	Core crumbly from 25' - 28' missing 2½' oxidized upto 37'	25										
			2-4% of 1-3mm			7	light sand green Wd				30	¼	qtz - calc - lim	Dike contains chlorite blebs + calc - qtz stringers throughout		68.8		.05							
							Dike Porphyry 32¾				50	⅛	qtz - calc.	Core blocky from 32¼ - 35' Core ground @ 33' missing 1' hem - chl along fracture surfaces. 7% Disem hem. Py - (Po) @ 33' hem veinlets & Py	33									
							Intermediate (Sh) 33				70	contact													
							Int Arg Alt of GDP 37½				5'	H/L	hem.												
							Mod Arg Alt of GDP		40		50°	f.qtz. ¼"	chl - clays.			91									
			Biotite 20% 1-2mm	chl clays 30%	fresh	5	Fault Zone 42½																		
						1	WE Arg Alt GDP								45										
							Int Arg Alt GDP 47 48½ 49½ Lost Sand Green and Dark		50		65° 90°	fault qtz .5" contact.	chl - clays. (light green) calc - chl - hem.			100									
							Mod Arg Alt GDP 54½				20	¼	calc - chl.	Core blocky @ 51¼ - 55' missing 6"	52 55	83									
			20% 4a. ½cm.				Fresh GDP with WE Arg. Alt and inclusions		60							100									

Hole No.: SAB-80-19

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo/W
							Fresh GDP with weak carbonatizations (cont)				30°	1"	K/spar - qtz - hem.	Core quartz @ 64'																	
							Mod. Dark Gray And Dyke 66¾ 66¾ 67¾ Fresh GDP				30 40 40	½" ¼" contact	qtz - lim cal		64															
									70							100														
							Mod. Dark Gray And Dyke 72¾ 73¾ 75				50 70	contact ¼"	cal.	Linear orientation of cal-qtz in dyke of 60° to Rin. Calcite blebs up to 3mm. v. minor py.	73															
				2% mag.			Trans. mod qtz-chl-ser. WK Arg Alt of GDP				20	¼	cal-chl-lim			100															
									80		45	¼	cal-chl.																		
							81 Mod Arg Alt of GDP 86¾							Core blocky 82-85. missing 1" Core blocky 85-88. missing 1'	82.5 85	40															
							Highly Alt'd Mod Green And Dyke Rock		90		70	fault gg.	chlys - chl. (brown qtz)	Core blocky 88-93' missing 6"	88	66															
							95 Mod Arg Alt GDP 97¾ Mod Gray And Dyke Rock 99		100		35 30 25 × 2 45 75 70 70	⅛ fault gg. 1" ¼ × 2 contact contact contact 1"	cal - qtz - chl cal chl - Lim chl - chlys Lim qtz - ser - py		93	90															
					Less porph		WK Arg alt GDP 103¾ Light Gray Green And Dyke Porphyry		110		65 60° 40-45 × 2	5" contact ¼ × 3	K/spar - qtz - disc hem cal - Lim	Dyke contains cal stringers and chl - hem in filling fractures.	103.5	82															
							111¾ qtz - ser/pyr 113 Int Arg alt GDP 115 116 qtz - ser - py - Enr 119		120		60°	contact		Core blocky 114-117' missing 1', blocky @ 117' - 120' missing 6" py - (+py) disem in interstitial qtz - chl - ser	114 117	66 83																
							qtz - ser - py Enr 123 Light Gray Green And Dyke Porphyry 125¾ qtz - ser - py Enr				60° 40° 65 × 5	1¼" contact 40 × ¼ 1 × ¼	qtz - py (+py) (spn) cal - Lim - py	Core blocky @ 120 - 125' missing 6" blocky @ 125-128' missing 8" blocky @ 128-135 missing 6" @ 133.'	120 125	90 75															

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Hole No.: SAB-80-19

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qz	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Assay Results: Sample Number Core	Sample Number Sludge	Gold	Silver	Pb	Zn	Cu	Mo%
							Light Gray Qtz Arg DP 132½ / 133½ / 133½; Qtz-Ser-Py Arg 133½ / 139½; Mod Arg Alt GDP				10°; 40	¼; 1"	Calc-chl-hem; Dyke Biotite	Core ground @ 133'; Pty stained yellow orange then drown very minor Py.	135	93; 100															
					fine grain	7	qtz-Ser-Py Arg 143 / 144 / 144½; Light Gray Arg Dyke Porphyry		140; 150		75 × 60 × 2; 20°; 40, 70, × 2; 30	3/16 × 1/16 × 3/16"; contact; H/L; H/L	qtz-mag-Py (cpy); Calc stringers; Calc-chl.	Core missing @ 144 missing 6"; mag surrounds qtz-Py veinlets minor cpy; Core ground @ 151'	144	94															
							152½ qtz-Ser-Py Arg; Tan Arg Alt GDP; 158		160		60 × 2; 85°; 40	H/L × 2 matrix; fracture; contact	Calc; qtz-Ser-Py-hem; chl-hem	Core blocky 153-156 missing 1', missing 6" 156-159; missing 3/4 @ 158-162	153; 156; 158	66; 75; 81															
					Lin mod.	6?	Southern Alt Dyke Porphyry; 167; Gray Green Alt Dyke		170		35; 25	¼" contact; ½"	Calc; Calc-chl-Lim	Core ground @ 164'; Core blocky 161-164 missing 6"	162; 164; 169	75; 100															
							Mod Arg Alt GDP 173½; Gray Green Alt Dyke 174½; Mod Arg Alt GDP		180		20°; 20°; 35	contact; ½"; ½	Calc; Calc-chl-Lim	Good Core recovery	175	100; 100															
							qtz-Ser-Py-Arg 184; 184.5; qtz-Ser-Py Arg 189; 190½		190		20; 15; 70°	½; ½; 1"	qtz-chl; qtz-chl; qtz-Ser-Py (cpy)	Core commonly and intersection of qtz-Ser-Py environments minor chrom hem. Ser-Py in qtz veinlets with chlorite.	181; 189	100															
							WK Arg Alt GDP		200		25; 20 × 3	½"; ½ × 3	Calc-chl-Lim; Calc-chl-Lim		195	100															

Hole No.: SAB-80-19

Rock Types and Alteration								Graphic Log			Mineralization and Structures							Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration		Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy		Specific Gravity	Weight (Grams)		Sample Number						
																		Cpy	Spl		Core	Sludge							
																		Py	Ox		%	%	Core	Sludge					
							WK Arg. Act of GDP (cont) 203					20	½"	cal - chl - lim		203	100												
										210				End hole @ 203' alteration WK - Intense mineralization - 0.5% in qtz - ser - py environments. It includes dent minor cpy. @ 143-144 @ 111½-114½ 184-184.3 189 for 1"																
													inclusions																	

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No Sludge collected
Log Scale 1" = 10'

Core Size: NQ
Completed:
Elevation:
Length: 200

Hole No.: SAB-80-20
Project: KETTLE RIVER
Claim No.:
Logged by: B Callaghan
Date: 9th April 1981
Contractor: Mohawk / Maitland Exploration D

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cpy Py	Cpy Sph Ox	Specific Gravity
							OB with 14. Coring @ 14'												
[illegible]	[illegible]	[illegible]	25 15 mg 10 bo		[illegible]	7	Fresh Granodiorite ~~Porphyry~~		20		30	fracture	Calc - Lim	Oxidation from 15-34½'	15	95		.05	
							20½ Int Arg Alt GDP				50	1/16	qtz - Sev	Core blocky @ 24½ - 26½' missing, 6" @ 24' Core ground @ 26' missing 3'	25				
				Chl 1% 3mm			26 Light Green Alt Dyke Porphyry		30				vug qtz - calc.	Dyke contains vuggy qtz - Calcite stringers		70			
				Tourmaline 3mm 2%			33 Int Arg Alt GDP				40+80	1/8 x 2	qtz - calc						
											80	contact							
											35	1/8	qtz - Lim.		35				
											35	1" fault gouge	chlorite - clays.						
									40		35 x 3	1/16 x 3	qtz - chl - Lim	Core blocky @ 39-45'		100			
				Hb? Chl 0.5 from 2mm.			41 Mod Arg Alt GDP				30	1/4"	Calc - chl	Dyke inclusions @ 44-45					
							45 Light Green Alt Dyke P 46½ Mod Arg Alt GDP 47½				30	1/8 contact	calc - chl - clays	chrysocolla chem. in chlorite alteration of GDP	45				
											30		chl - clays						
									50		75	3"	s/Raw - qtz (no magnetite)			100			
							Fresh GDP				80	1"	Hb - biot (Zeolite)						
											50	contact 1'	Dyke inclusion						
							55 Mod Arg Alt GDP				40 x 2	1/8" x 2	Calc - Lim	minor chrysocolla py @ 50' chrysocolla chem	55				
									60		20	1/8	calc - qtz - chl - Lim			100			

Hole No.: SAS-80-28

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy. Qa. Py	Cpy. Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Pb	Zn	Cu	Mo/W
							Mod Arg Alt (Cont) 68																						
			2mm qtz	>1% mag	fine grained	7	Black Basaltic Dyke Porphyry		70		75°	1"	qtz-ser-py																
											15 x 2	1/4	cal-chl	Cal-blebs in dyke mafics 2mm. no orientation white. alt. calcite-chlorite stringers minor mag	65														
											15	1/16"	Cal-chl, mag.																
											30	1/16"	cal			100													
							71½ Felsic QDP 72½				35 x 2	1/16 x 2 contact	Cal - mag.																
			—								30	1/4	K/spar																
						7	WK Arg Alt QDP								75														
									80							90													
							80½				30°	contact		Core blocky @ 81-85 - mining @ 85-89 6" mining															
				Pyrite highly altered yellow brown		5	Light Green Alt (Arg) Dyke Porphyry.								85														
																87													
							90		90		50	contact			89														
							Mod. Arg. Alt QDP 91				30	contact																	
											30	1/4"	cal stringers	{qtz-ser-py @ 90-91 inclusions		100													
							93½				70	contact																	
							Kfldspar-hem-qtz 94 94½				30	1/4"	cal-chl-hem.		95														
							Mod Arg Alt QDP with qtz-ser-py inclusions																						
									100							100													
							101				60	contact		Core blocky @ 103'-107'															
							Mod Grey and Dyke Frag 102½				60	1/4	cal.																
											40	contact																	
							Int Arg Alt QDP				80	1/4"	cal-chl-him																
							Light Green and Dyke? 107 108½																						
														Disseminated py in light chlorite altered Dyke rock															
							Mod Grey and Dyke P 110		110																				
							Mod Arg Alt + qtz-ser 113		30"		70	1/2	cal	disseminated py + chl. Very minor cpy.														
				>2% mag			Med Grey And Dyke P							Dyke contains calcite stringers	115														
									120		50	1/8	qtz			100													
															125														
									130		40	1/16	cal																

Hole No.: SAB-80-20

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy: Cp.	Cpy: Sph	Cpy: Py	Cpy: Ox	Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number
							Med Gray And Dyke? cont				40 70 50	¼" ¼ trace ¼	cal - chl gtj - cal cal - py. gtj - cal - lim		135	100						
							138½		140														
							Alt Light Sericitized And Dyke (?) 145																
							Int Arg Alt & DP Pick mineral 147½ 148½				50°	⅛	gtj - lim	disseminated py and hem	145	100							
							149½		150														
							Highly sericitized Arg 151½				60° 60°	contact contact											
			80%				Fault. 153																
							Int Arg Alt & DP 155½				30°	⅛"	cal - chl - hem		155								
							WC Arg Alt & DP		160							100							
											30° 10° 15° 70°	⅛" 1" contact contact	cal - chl - lim Dyke inclusion	Very few calcite stringers	165	100							
							166½ Med Gray Basalt Dyke not pervasive 170		170														
							gtj hem. dyke 172½						Py - minor cpy.										
															175								
									180		30	⅛"	gtj chl.			100							
							Mod Arg Alt & DP 181½				30°	contact											
											20 x 3	⅛ x 1	cal		185								
									190							100							
							190½				35	contact											
							Int Arg alt & DP				40	⅛	cal - chl.		195								
							198½				80 x 2	⅛ x 2	cal - chl			100							

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: No sludge collected
Log Scale 1" = 10'

Core Size: NQ
Completed:
Elevation:
Length: 370'

Hole No.: SAB-80-21
Project: KETTLE RIVER
Claim No.:
Logged by: B. Gallagher
Date: 13th April 1981
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo
							Casing ends @ 18'																				
							18½ Int Acid Altered		20																		
							Granodiorite Porphyry																				
							23½ qtz-Ser-py Env 25				60°-65	2"+1"	qtz-py-lim, qtz, vuggy	Core broken @ 23½ Core blocky @ 23-33' 1' missing	23	90										
							26 qtz-Ser-py Env 27½				50°-55	1" contact	qtz-py-lim	blebs of py in qtz stringers and in dissem in wt angular C.D.P. inclusions throughout												
									30																		
							32½ qtz-Ser-py Env 33½				60° 65	contact 1"	chlorite-clay. qtz-py-lim	Core ground @ 33½ blebs of py in qtz stringers dissem in wt angular C.D.P. inclusions throughout. Minor sph + gn @ 38-46'	33											
							qtz vein 1" 33½				50°	H/L	lim in qtz vein														
							qtz-Ser-py 34¾ 36½				50	¼"	qtz.			87.5											
							qtz-Ser-py		40																		
							2" qtz vein 44½ 45				35	¼"	qtz-py	Core blocky @ 45-48. From 33-53 missing 2'													
							Int Aug dec CDP 45½ 46½ qtz-Ser-py 47½ 2" CDP							47½-48: qtz-py-lepy. large blebs in qtz stringers.													
							qtz-Ser-py Env		50					Core blocky @ 50-53.													
							51½							Core ground @ 51½ Core blocky 53'-58' Core ground @ 57' @ 55-59. large blebs of py	53											
							qtz-Ser-py 54½ 55 qtz vein 56 qtz-Ser-py 57½ Mod Aug Alt & CDP									76											
							58½		60																		

Hole No.: SAB-80-21

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo
							qtz-Ser-Py 62½							dissem py throughout. Limonite-clay infill some fracturing w. 1% Py blebs in qtz stringers. Rhodonite @ 66½, 68½ Galena @ 69' minor.	63½												
							Mod Arg Alt w GDP 65																				
							qtz-Ser-Py 65½																				
							Int Arg Alt GDP 66½									100											
							qtz-Ser-Py		70																		
							71							Core blocky 70½-73½ @ 74½ minor cpy + py blebs in qtz also dissem throughout.												
							Mod Arg Alt GDP 72½																				
							qtz-Ser-Py 74½								73½												
							Int Arg Alt GDP							dissem py also seen in mod arg alt GDP.	75	100											
							qtz-Ser-Py 76½																				
							Int Arg Alt GDP 78½							Core ground @ 76' missing 1'													
							qtz-Ser-Py		80							90											
											55	3/4"	qtz-Py	Py seen as blebs in qtz & veinlets and in mod dissem throughout. Plags stained orange (Lim)												
											30'	1/2	Py		85												
									90		30	½	qtz-Py-Lim			100											
											35	1"	qtz-Py	Core ground @ 95' Core blocky 90'-91' 94-96' missing 6"													
											70	1/8"	Py														
							(Green chlorite) 95				70	1½"	qtz-Lim		95												
							Wk-Mod Hydrothermal GDP 97½							dissem py + lim in GDP, alteration is chlorite. Large py blebs in qtz veinlets.		90.											
							qtz Ser Py		100		40	1½"	qtz-chl-Py														
											60	1/4	qtz-Py	Core ground @ 105' blocky 104-105' missing 6"													
											60	1/4	qtz-Py chl														
														py occurs as large blebs in qtz veinlets along fractures or stringers and in dissem	105												
							110		110		60	½	qtz-Py	chl + clays infilling fracture surfaces.		100											
							qtz Ser Py 116½				20 x 2	1/4 x 2	Cal-chl-Lim	Core blocky 115'-120' missing 1'													
							qtz-Ser-Py							Lim-chl-clays infill fracture surfaces.	115												
							117½						bleached														
							119		120			fault 99.4½	clays (mylonite)			26.											
							qtz-Ser-Py							qtz-strain (Lim) most noticeable. qtz more interstitial, less veinlets.	122½												
							124½				75°	1" contact	chlorite-clays														
							Highly Mod Arg Alt/Gouge									95.											
									130					matrix of light grey													

Hole No.: SAB-80-21

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo/W
							Dyke Porph (cont)																					
							Int Arg Alt GDP 133 / 133½							~137' Bornite - Cpy - Pyrrhotite gran Py? or Smithsonite? (blebs) or (Tennantite)														
							Qtz-Ser-Py								133													
							137½																					
							Int Arg Alt GDP 140 / 139½		140			fract 99.1'	chl - clay (moist) py			100											
							Qtz-Ser-Py				30°	¼	vuggy qtz veinlets + lim. vuggy qtz - limonite	Good core recovery													
							Int Arg Alt GDP 146½					3"	clay - py	py blebs in silicified qtz zones + diss py	143	100											
							99 Ser-Py 149		150		60°	contact																
							Int Arg Alt GDP				30 / 5° / 60 / 60 x 3	½" / ¼" / ⅛" / ⅛"	qtz - lim / qtz - Ser - py 1" / qtz - lim	Good core recovery considerable fracturing, staining of porphyry (lim) diss py + hem mineralized along fractures	153											
							Qtz-Ser-Py 3" 158½ / 159		160							100											
							Qtz-Ser-py							Good core recovery													
							Int Arg Alt GDP 161¾ / 162½																					
							Mod Arg Alt GDP 165				80 x 2	1" x 2	qtz - py - Ser		165½													
							Qtz-Ser-py																					
							Mod Arg Alt GDP 167¾ / 168½				40	¼	qtz - chl.	chl minor - hem along fractures in mod GDP		100											
		CHLOR-IZED					Dyke Porph		170																			
							Qtz-chl-Ser-py 171½							Core ground @ 178'													
							Mod Arg Alt GDP 173																					
							Fresh-Wk Arg Alt GDP								173½													
							Qtz-chl-Ser-py 176¾ / 176½							Dyke matrix fine grained phenos, wk - chl minor py													
							Wk Arg 178									100											
							Qtz-Ser-Py 178½		180		60	contact			178													
			Chl.	Mag. 1%			Dark Green Alt Dyke Porph (phenos)				30 x 2	¼" x 2	qtz-chl			100											
							185																					
							Qtz-chl-Ser-py inclusions of mod Arg Alt GDP 187½							Py blebs in silicified qtz zones and also diss py	185													
							Dyk Porph light sand green		190		35 / 45	¼ / ¼	qtz / qtz	Dyke matrix sections		100											
							192				40 x 3	¼ x 3	vuggy qtz stringers	white diss py with vuggy qtz stringers														
							Qtz-chl-Ser-py inclusions of Int Arg Alt GDP 194½				5°	¼"	qtz-chl-hem stringers / chl - hem	F/R v - Pink mn Kaolinized fractures or Lim. chlorite + minor cpy + py + hem along fractures.	195													
55%	30%	30%	20%		mod-coarse	7	Qtz-Ser-chl-py Env with inclusions of GDP 199				30°	contact				100												

Hole No.: SAS-80-21

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number
							Alt Sand Grain Porph Dyke 202 Int Arg Alt GDP with local inclusions of qtz-ser-py-chl + Silicified zones. 2% qtz. 209½		210		50° 40° 80° 30°	¼ contact ¼ ¼/4	qtz - lim vuggy calcite calc-chl	Plag - Sericitized + kaolinized along fractures	205	100							
							qtz-ser-py with ser. phenos 212½ alt ss dyke - lim 215½ Int Arg Alt GDP kaolinized along fractures 217½		220		75°	½	qtz-calc-lim (Rhodonite)	Phenos submarginal Entwined fractures - black massive mass argentite? wolframite? 210½ 3' chlorite - crushed sulphides along fractures surrounded qtz zones. Mo in qtz.	215	100							
							Alt Dyke Porp 221 221½ Int Arg Alt GDP, Kao Ser along fractures		230		50° 50° 60° x 2 50°	contact rounded ¼ x 2 ¼	calc - chl - lim qtz - lim		225	100							
							233 Int with inclusions of mod Arg alt GDP 237 qtz - ser chl py		240		40° 35 30 50 50	¼" ¼ ¼ ¼ ¼"	qtz - chl - lim (vuggy) qtz - chl - lim (vuggy) qtz - py qtz - py - lim qtz - py - chl.	Py occurs as large blebs in qtz stringers + disseminated. large Py blebs and qtz + green massive areas - smithsonite ??	235	100							
							243 Mod Arg Alt GDP with inclusions of qtz ser py minor calc along fracs 248½ - qtz-ser-py-chl		250		50° 50	½" ¼	qtz - hem. qtz - chl - py	disseminated py + hem.	245	100							
			chl				Mod Arg Alt GDP qtz-ser-py-chl inclusions 255½ Alt Andesite Porp 259½		260		40° 40° x 3 55 x 2 50°	contact ⅛" 3 1/16" x 2 contact	qtz - lim hem.	Dyke contains qtz stringers + hem along fractures.	255	100							
							~~qtz-ser-py-chl~~ 264½ Int Arg Alt GDP		270		50° x 2 35 10	⅛" ⅛ ¼	qtz - lim qtz - lim qtz - chl - lim	chl + hem prominent in qtz stgr. py and chl in fine fractures. Hem is disseminated. Minor inclusions of qtz-ser-py.	265	100							

Hole No.: SAB-80-21

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Core	Sludge
							Inc Arg Alt of GDP		260		80°	faulting 1" / ¼ fault agg 1'	chl - clays / chl - clays brecciated polished	py disc chl to qtz stringers. dissem py is minor. Some epidote?	275	100								
							281 WK-Mod Arg alt of GDP 285½ Mod Arg alt of GDP 290		290		30	⅛"	chl - hem.	minor dissem py and along fracture surfaces which are polished - slickenslides. hem along partings + dissem	285	100								
							WK Arg alt with inclusions of Mod Arg		300		30	H/L / 6"	cal - chl / qtz - chl - hem. zone		295	100								
							3½" chl inclusion zone		310		65	1' / contact	silicous zone cold + hem / cal - chl.		305	100								
									320		65° x 2 / 55°	⅛" x 2 / ½"	cal / K/Spar	hem + chl in pits to fractures	315	100								
					fine grained not porphyritic	7	321½ And Dyke.		330		65° / 35° / 50° x 3	½ / contact / H/L	K/Spar - hem. / cal - chl. / cal	Dyke contains Cal; chl stringers, + Cal stringers	325	100								
							Sandy Dyke 334½ 335½ / 6" qtz porphyry inclusions 339		340		60° / 50° x 3	contact 1' / H/L	cal - clays / cal stringers w qtz / cal.	dissem py limonitized	335	100								

Hole No.: SAB-80-21

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Bn Py	Estimated Grade MoS2 Ox	Specific Gravity	Recovery Weight (Grams) Core	Recovery Sludge	Assay Results Sample Number Core	Assay Results Sludge
					slightly porphyritic on 344	fine	Aph Dyke (cont) 349½		350		50° 30 40°+60° 25 65	¼ x 2 ¼ ¼ x 2 ¼ contact	cal qtz-hem. cal cal cal-chl-hem.	v. minor disem py hem in fwd fracture-chlorite	345	100							
							WK Arg Alt c inclusion of mod Arg Alt 355 Mod Arg Alt 359		360		40°	6" contact.	K/spar hem gone. chl-hem	disem py + hem.	355	100							
							Aph. Dyke 367 WK Arg Alt		370		15° 40°	contact 1"	cal-chl-hem. K/spar-hem		365 370	100							
													End Hole @ 370. mineralized within intervals from approx 23½ - 260' Minor, hairs found in qtz veins occur at 32½ - 44½ Molybdenite seen @ 219'	Py extensive. in qtz - ser - py environment. qtz veins + stringers 33½ Py chlorite throughout 45 stockwork											
													Dyke cuts in @ 323½ alteration - WK Int	contact 367' argillic									

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected
log Scale 1" = 10'

Hole No.: SAB-80-22
Project: KETTLE RIVER
Claim No.:
Core Size: NQ
Elevation:
Logged by: B. Carlaghan
Date: 21st April 1981
Completed:
Length: 575'
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Sph
							Casing to 10'		10					Core blocky from 10'-15'. Fragments consist of intergrown alt qtz. with qtz veinlets. Pyrite blebs in qtz (vuggy). Core heavily oxidized	13	100			.08
							Int. Arg. altered qtz. Extensive Py. alteration		20					Core blocky to 15'-19' missing 6". Py blebs in qtz & chlorite	15 19				.05
									30		45	4"	qtz - py - chl	qtz veinlets vuggy with py blebs. Py also occurs along fractures. Average veinlets ½" - 2" no particular orientation (random). Py up to 1" diam.	24	90			.05
							32 qtz - chl - py		40					Core ground to 34'. Some py in chlorite + blebs minor (cpy). Core limonite stained	34	100 100			
							Intermediate qtz 43 44 45 Strongly altered qtz 46 47 10. qtz - chl - py		50		25	2"	qtz - chl	disseminated py in groundmass. Strongly qtz vuggy & py. blebs & [illegible]	44 46 ?	100			

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Qtz Py	Cpy Sph. Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Pb	Zn	Cu	Mo/U
							qtz: [illegible] (cont) & porphyry inclusions 55¾ Tuff Arg [illegible]		60					core blocky @ 55-65' dissem py + chem.	55 60	100												
							qtz [illegible] 64½ 65¼ Tuffaceous [illegible] qtz [illegible] py inclusions 69½		70					qtz blebs in qtz veinlets. + dissem py minor (cpy) (augmentite) qtz vuggy. Some cavities contain py + lim minor py in porphyry core blocky @ 68½ - 75	65	100 100												
							Tuff Arg [illegible] 71¾ qtz [illegible] inclusions 72¾ Tuff [illegible] 75 qtz vein 76½ qtz [illegible] inclusions [illegible]		80		45° 45°	¾" 6"	qtz - py qtz - py	Massive py + minor cpy in qtz veins + (py)	75	100												
							3" qtz - py 89½ 90		90		80° 80° 75°	2½" ½" 3"	qtz - py qtz - py qtz - py - chl	massive py veins in qtz veinlets @ 89	85	100												
							Tuff Arg [illegible] 93 qtz - [illegible] inclusions in Tuff Arg [illegible]		100		5 35°	HL HL	hem - chl. chl - lim	core blocky @ 90' - 98½' core ground @ 98½ missing 1' qtz veins in large blocks in qtz veinlets. Possible fines of MOW 101' (cpy)	92 95	100 87												
							101½ Tuff Arg [illegible] 105½ qtz [illegible] inclusions 107½		110		60° 15° 20° 65	¼" ¼" ⅛" contact	qtz - py - chl chl - lim chl - chl - hem stringers qtz - chl - hem.	missing 2' from 104' to 115' dissem py + hem. hem + chl in fris fractures. hem coats py	104	81.												
							[illegible] 116½ [illegible]		120					core blocky 115' - 122½ missing 1' chlorite alter of dyke. Kaolinite minor. dissem py + hem	115 120	80.												

Hole No.: [illegible]

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gn Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							Aphanitic Dark (lava) 126 [illegible]		130					missing 1¼' @ 120-125' Core ground @ 120'	125	75 100						
									140		5°	⅛"	1'qtz qtz - calc - chl	Core ground @ 133+ 134' no core missing minor disseminated pyr. in chem	133 135	100						
									140		45° x 2	⅛" x 2	qtz - chl. limi			100						
													inclusions of porphyry.										
											25	¼"	qtz - calc		145								
									150		40	¼ mit qtz	chl - chlorite of [illegible]	indication		100						
														Core ground @ 154½ missing ½'									
															154½	83.							
									160		40°	⅛"	qtz - chl	missing 1' @ 57-160'	157	66.							
														Core ground @ 160½, 166 3/4 missing 1' @ 100-101	160								
									170		50° x 2 25	⅛ x 2 ⅛"	qtz - calc. qtz - chl			99						
														Core ground @ 171'	171								
									180		15°	⅛"	qtz - calc.			100						
							132¾		190			1' [illegible] 6"	chl - calcite (qtz)	minor disseminated py in dark material	181								

Hole No.: SRD-20-22

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade				Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy		Specific Gravity	Weight (Grams)		Sample Number							
																	-			Core	Sludge								
																	Py	Ox		%	%	Core	Sludge						
											25°	¼"	qtz - chl			100													
											15°	¼"	qtz - cal - chl		191														
											40°	¼"	qtz - cal		195	100													
									200		25	¼"	vuggy qtz - cal			90													
							201¼ Intermediate Dyke [illegible] 205 [illegible] 207 [illegible] 209		215		60°		contact	Core ground @ 204¼ missing 1' ground @ 206¼ 6" @ 209 missing 6" disseminated + blebs @ 202	205	87														
											50°	fault gg 1'	lithology barren-chlorite		209														
							211¼ [illegible] 212¼ qtz = K/[illegible] 214 Mod Arg alt (GD) P. 218¾		220		30° 45 x 2 35 x 2	contact ⅛" x 2 ¼ x 2	acc - lim qtz	Core ground @ 214' missing 6" disseminated + blebs abundance in GD P	215	83 100												
							Fresh GD P. [illegible] 223 [illegible] 225 Fresh GD P. [illegible] 228 qtz [illegible] 230				25° 50°	⅛" fault gg 3"	cal - chl - lim chl - limo - biot		225	100														
							236 Fresh GD P.		240		25	⅛"	cal - chl.		235	100													
							[illegible] 244¼ 245¼ 250		250		40 50	¼ ¼	qtz - lim qtz - K/[illegible]		245														
							[illegible] 252 mod. [illegible] 253¼ qtz [illegible] 254¼ 255¼ [illegible] 257 2" [illegible] 259¼		260		30° 60°	⅛" contact 1'	cal - chl.	disseminated qtz @ 252 - 251¼	255	100														

Hole No.: SAB-80-22

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold	Silver	Pb	Zn	Cu	Mo/W
							4" qtz-chl-sericite 263 264 mod Arg alt'd qtz veinlets + qtz-sericite-py 269½		270		25° 65° 55°	3/4" 1/2" 2½"	qtz - massive py. qtz veinlet - pyrite blebs qtz - py blebs	Possible Mo in qtz veinlets + py + hem. Py is also disseminated	265	100															
							Mod Arg alt'd qtz 274 qtz-sericite-py veinlets in mod Arg alt'd		280					Hem surrounds py in qtz veinlets. Py large blebs + disseminated in hem matrix. qtz's slightly vuggy.	275	100																	
							Fresh-wk Arg alt'd qtz 288½		290						285	100															
							291½ qtz-chl-sericite-py veinlets in mod Arg alt'd qtz 297½		300		40°	1/2"	qtz - py		295	100															
							Mod Arg alt'd qtz qtz-sericite-py veinlets 302½ qtz-sericite-py 305 307¾ 3" qtz-ser-py. 308½		310		50 20	1/2" 2"	py - py qtz - py	qtz veinlets with py blebs in qtz-sericite-chl matrix.	305	100															
							Intermediate Arg alt'd with qtz-sericite-chl. 312½ qtz-ser-py 315¾ qtz-sericite-py veinlets in int Arg alt'd		320						315	100															
							321½ Intermediate Arg alt'd 4" qtz-ser-py 325		330		50° 5	3/8" 1/4"	qtz - hem - chl. vuggy qtz - limo.	Core slightly stained @ 325½. No core missing clays in porphyry matrix minor py cloud core in places. minor py in qtz veinlets	325																		

Hole No.: SAI - 80 - 22

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number Core	Sludge
							Qtz-Sericite inclusions in Fine Arg Mod GDP				50°	½"	Cal - Lim.	Py occurs in veins + disseminated.		100							
							335½ Fine Arg Mod GDP 336½								335								
							Qtz Sericite inclusions in Fine Arg Mod GDP		340		30	¼	qtz - py			100							
							6" qtz vein 343				50	6"	semi massive py	Py massive + blebs + disseminated, minor qtz veinlets.									
							qtz-chl-Ser-py								345								
									350							100							
							Mod Arg GDP 352½ 353½																
							qtz-chl-Ser-py				30°	½"	varegated qtz - cal		355								
							357½				50°	½"	qtz - Lim	Py blebs on selvages 2" qtz. No veinlets but disseminated py.		100							
			mod	chl	fine		Mod Dark GDP				30	½"	cal - lim.	Chl + cal qtz stringers in dark porphyry.									
											35	½"	cal		365								
												¼-½"	cal - qtz										
							368 Mod Arg GDP 370		370		25	wavy cont	-	magnetite veins in contorted stringers associated py		100							
											40°	contact											
											40	½"	qtz - chem										
											30	¼	qtz		375								
									380		60	1"	qtz - chl			100							
							382 Mod Arg GDP 385½				45	contact			385								
							Qtz Sericite inclusions in Mod Arg GDP		390					Py blebs + disseminated py. chl alt		100							
							GDP 1" qtz vein 393 WK Arg GDP 394							qtz contains minor py minor py blebs + chl - py.									
							qtz - Ser. chl. inclusions in wk Arg GDP								395	100							

Hole No.: [illegible]

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy	Py	Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number Core	Sludge
							qtz-sericite-py [illegible]		410						405	100								
							[illegible] 412 / 415 / [illegible] / 418		420		40° / 25° / 45	[illegible] / 1/8" / 1/4" [illegible] 2"	[illegible] / chl-sericite / [illegible] chl-clay py	Very minor py + dissem hem. / Kaolinized [illegible]	415 / 417	100								
							[illegible] 424 / qtz-[illegible] py / [illegible] 427½ / 428		430		25 / 25	1/8 / 1/8"	[illegible] qtz-sericite-lim / qtz-sericite-lim	fractures from 418-428. qtz sericite envelopes spaced approx 1-1½' apart in zones 20' max. qtz veinlets & blebs of py random, spaced approx 2' apart thru 20'. There	425	100 / 100								
							qtz [illegible] / [illegible] 434		440			4"	qtz-py veinlets	have no orientation average about ½-¾" in width. qtz carrying massive magnetite surrounding Py. Intervals porphyry contain vuggy calcite thru to 438'	435	100								
							[illegible] 444 / qtz [illegible]		450					dissem py in alt. porph. / dissem py + py blebs / Feldspars heavily sericitized [illegible] Py veins.	445	90								
							[illegible] 452 / 453 / 451		460					~~[illegible]~~ Core gained 452¾" missing approx 1" blocky to 451-453' qtz vuggy containing Py (argentite, Mo)?	455	100								
							[illegible] / [illegible] 464 / 465 / 466 / [illegible]		470		30° / 60° / 55° / 40	1/8 / 1/8" / 1/4 / 1"	py + (argentite)? / qtz-calc / qtz-py-mag. / [illegible]	Vuggy calcite in porphyry. minor [illegible]	465	100								

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams)	Assay Results: Sample Number
							Intrargillitized QP (Comm. qtz, sericite, chlorite, carbonate)		480		40 30 55 50 40	1/8" 1/4 1/16 1/2"	qtz - ser - py vuggy qtz - cal - py qtz - ser - py - hem. qtz - py qtz - py	Cor. kaolinized along fractures. Local vuggy calcite. Some cavities contain py. Py mostly associated c̄ qtz - ser. as small blebs. Py is disseminated in porphyry to minor extent.	475	100					
							480.5 Moderately Int. QDP 483 Fresh QDP		490		30 65 30	1/4 1/8" 1/2	cal - lim vuggy qtz - chl - py qtz - py	mineralization very minor. Local unfilled to fractures including py, hem. chl. ser.	485	100					
									500		40°	3°	qtz - py - Hem - chl - ser	py blebs + disseminated	495	100					
									510		20°	1/16"	cal		505	100					
							512 Andesite Dyke 10 phyry 515 1/4 Fresh-wk Argillic QP Dyke Fragments 519		520		30 20 30 20 30 30 30	contact 1/16" contact 1/8" contact 1/8" contact	cal - chl cal - chl - py qtz - py	Some mineralization along dyke contacts & fractures including py. Zones up to 3' long. py disseminated + minor blebs with extend locally for 2 inches to 511, 515 1/4, 523 1/2'	515	100					
							Intermediate wk Argillic QDP zones 4" Dyke intrusion		530		25 + 35 70 35	1/16" + H/L H/L contact	qtz - chl - py qtz - chl - py		525	100					
									540		30 × 5 30 × 2 30 × 5 40 × 2	H/L × 5 H/L × 2 H/L × 5 H/L × 2	qtz py qtz py qtz - py qtz - py		535	100					

Hole No.: SMS-20-22

Rock Types and Alteration								Graphic Log		Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
							Sheared Fresh Dark Porph 542				6"	qtz - ser - py															
							Mod Argillized GDP 544 3/4	5"		30° × 3	1/16" × 3	qtz - ser - py															
							Fresh Dark Porph GDP			5	1/8"	qtz	py along fractures sulfides	545													
								550		30	1/4"	qtz - chl - py py - chl - mag	magnetite occurs as massive additions		100												
							551 Mod Argillized GDP 552 Aid Dyke Porph			25 25	3/8" contact	qtz - ser - py															
														555													
							559 qtz - ser - chl - py 560	560		20°	contact				100												
							Fresh mass inclusion of wk Argillized GDP																				
														565													
							569 qtz - ser - chl - py	570		15°	"4"	qtz - ser - chl - py			100												
							572 575							575													
								580				End Hole @ 575' mineralization is associated with qtz ser py															
												environment massive, semi massive, blebs are secondary in stockwork qtz veinlets. The veinlets are mostly randomly oriented occurring as stock with continuous zones or as irregular spacings approx 1 - 1½ apart especially towards the end of the hole. mineralization is mainly py with a																
												not a trace fleck of molybdenum and galena in qtz veinlets. It is possible that some of the py in the qtz ser py in the material may be flooded in certain zones and constant chlorite in other zones. alteration varies from Int - mod - wk - fresh. The fresh porphyry occurs at deeper																
												levels. Mineralization plus mostly in the intense altered porphyry in qtz ser py cav — The qtz ser - chl - py in not altered porphyry. Dyke material occurs at approx 100' for 90' and [illegible] @ 350' - 600'																

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip:
Collared:
Dip Tests:
Remarks: no sludge collected
Log Scale 1" = 10'

Hole No.: SAB-80-23
Project: KETTLE RIVER
Claim No.:
Logged by: B. Callaghan
Date: 28th April 1981
Contractor: Mohawk / Mainland Explorations

Core Size: NQ
Elevation:
Completed:
Length:

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cpy Py	Cpy Spt Ox	Specific Gravity	W
							Casing @ 20'		20											
							qtz [illegible] 22½; WK Argillic Alt of DP 28½; qtz [illegible] 29¾; Fresh Granodiorite Porphyry 31½		30		55; 25	⅛"; 1/16"	Py; cal-chl-hem.	qtz veinlets in stockwork ½" wide approx. Py blebs + disem Py. no orientation. Some qtz veining @ 25' Py semi massive in qtz veinlets	25	100				
5.	[illegible]	30% [illegible]	40% 10% no. 5%	may 2%	med-coarse porphyry	7	WK Argillic Alteration of Granodiorite Porphyry 34½; Fresh GDP		40		45	1/16; fracture	cal-chl.; unfilled with CH-Lim	Core blocky @ 30-32';	35	100; 100				
							qtz-Sericite-Py-chl 45½; 47; 48½; qtz-chl-Py		50					Core blocky 40-42'; qtz blebs in qtz veinlets thins to N. Py is also disem.	45	100				
							51; WK Arg Alt of GDP; 56¾		60		55; 40°	½"; ⅛"	qtz-chl-ser-Py; calc		55	100				

Rock Types and Alteration								Graphic Log		Mineralization and Structures				Footage Blocks	Length Recovery	Estimated Grade		Specific Gravity	Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage / Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks			Cpy: Cpy Py	Cpy: Sph Ox		Weight (Grams): Core %	Weight (Grams): Sludge %	Sample Number: Core	Sample Number: Sludge					
							Fresh core (cont)		70				[illegible] clean. good core recovery	65	100												
							77 [illegible]		50	70 25	[illegible] ½	cal - chl - Lim qtz		75	100												
							84 qtz [illegible] 89½		90	50° 55°	½ contact	qtz - py [illegible]	Core blocky 89¾' - 91 Core missing @ qtz ground @ 93' intervals of qtz sericite approx 1½ - 2'.	85	85												
							Intermediate [illegible] qtz sericite py inclusions		100	70	¼	qtz - py	Core oxidized. [illegible] clean. minor disseminated py @ 90 - 92' Core ground @ 99¾' py blebs in qtz. [illegible]	92	84		.06										
							105½ Fresh core 107½ qtz sericite py		110		[illegible] 1"	chl - clay [illegible]	mostly disseminated py + py blebs.	105	90												
							112½ Intermediate qtz 117 qtz sericite 118½		120				Core blocky 110 - 115' Core ground 115½' 110. missing 6" 115 - 110' Core [illegible] with clays @ some massive py in qtz veinlets in qtz sericite	115	95												
							[illegible] 122½ Mod [illegible] 125½			30°	[illegible]	cal - qtz [illegible]	[illegible] (Kaolinite)	125													
			cal [illegible]		[illegible]		[illegible] qtz [illegible]		130	20°	6"	[illegible]	depth [illegible] qtz - [illegible] stringers		100												

Hole No.: SAB-80-23

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							131½				30°	contact		W/174 clays, co...									
							Mod-Int Arg Alg qz ... 2" Dyke inclusion				55	¼	cal-chl.	clays-olive along fractures.									
												faulting	chl-clay.		135								
							138½ qz Ser-Alg-Frag		140							100							
							140½ 8" qtz + vuggy cal.							Vuggy light brown calcite in qtz veinlet. Pb blebs with gray chlorite stringers in qtz.									
							145 qtz-Ser 2" 145½				50°	contact		@ 141' green-gray clay intervals 143'.	145								
			chl lim				All altered Porph		150		40 ± 2	½" ± 2	qtz	Dyke contains qtz stringers		100							
											30° ± 4	½ ± 4	T1										
											50°	½"	cal		155								
							2" qtz-py inclusion		160							100							
							165½ qtz-Ser-Alg-Frag 166½ 165				45 ± 5	½" ± 5	Cal-Lim	Core ground @ 165.	165								
							qtz-Ser-Alg int. in qtz veinlet 50° 50° Dissemination 170		170		30° 30°	contact surface				100							
							qtz-Ser-Alg 170½				30°	½ ½	Cal. Cal inclusion.		171								
																100							
															175								
									180		30 ± 30	½ ± 2	qtz + chl.			100							
							183½				40° 70°	½ contact	qtz - chl - lim		185								
														core recovery good. qtz veinlet contains poly-Ser-Alg inclusions & porph		100							
							qtz Veinlet 188½ 189½		190														
							190½ qtz-Ser-Alg-Frag 191½				70°	¼	qtz-Alg.										
							195½								195								
														Dissem py + Sm. Heavy calcite at 199½ in qtz veinlet. Pb blebs in qtz veinlets		100							
											50	¼	qtz - Alg - lim.										

Hole No.: SA3-80-23

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number Core	Sludge
							202½ Fresh-wk Ag alt qtz sericite 224¾ qtz ser. ? & minor pervasive alteration 210		210		30° 35° 65°	⅛ ⅛" 2"	qtz - Lim qtz - Lim qtz - K/Pyr	General trend of qtz ser Py contacts with alt pervasive approx 75 - 80°. Intervals of pervasive qtz-ser-Py env. every to 2' qtz ser Py zones vary in width, often blebs & semi massive Py replacing qtz veinlets	205	100								
							Fresh qtz 210½ qtz ser. & intensely alt qtz alteration 217½ High Grade qtz vein 218½		220		45° 45	½" ½	qtz Lim. qtz - qtz Black - clays - N.1	Massive Py in blebs - lk kaolinized core along fractures. Galena blebs - good cleavage ½". Also slightly veined. Core crumbly N 218½-22 Sec. - clays.	215	100	.1	.03					
							qtz ser. Py in fine long alt qtz 227 Intl. fine alt. qtz inclusions in bleb qtz + minor qtz. ser Py		230		20	⅙	qtz - Lim	Core ground N 226½' missing 1½'	225	87								
							232½ qtz ser. Py & minor sericite qtz inclusions 240		240		50 60	3" ¼"	qtz - py Calc - Lim	possible galena N 231½ galena N 233' surrounds Py	235	100							
							Intensely alt qtz 244 qtz ser. Py 245 Intensely alt qtz 246½ qtz ser. Py & intl. veinlets N 249		250		40" 40" 40	1/16" 1/16" ¼"	Calc - Lim Calc - Lim Vuggy Calcite	pervasive vuggy alteration with Py blebs in qtz veinlets. Some vuggy calcite in qtz.	245	100							
							Alt and Qtz 256½ 257		260		65 25 25°	¼" ¼" unknown	Vuggy Calc. - Lim vuggy Calc. Lim brecciated chl. ser. clays.	number specimen here	255	100							
							Fresh intrusive 265¾ 266½				55 45	¼ ¼"	Calcite (vuggy) vuggy qtz, calc	Py blebs in qtz veinlets + disseminated Py. minor chal. Some sericitic veinlets	265	100							

Hole No.: SAL-20-23

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							272¾ Act Ant Dyke Rock		280		60°	contact		Dyke contains calcite stringers + discontinuous veinlets.	275	100									
							285 qtz-Ser-Py 287½ Wk Arg w/ rare SD?		290		45 xx 40 30 25	¼" ⅛" ¼" ⅛"	cal. cal - qtz cal chl - clays	Semi massive py + blebs disem in qtz veinlets	285	100									
							291½ qtz-Ser-Py 296½ Wk Arg w/ rare SD? 298¼ qtz-Ser-Py 300		300					Semi massive py + py blebs in qtz veinlets.	295	100									
							Fine Grained Felsic 301¼ Act Ant Dyke Rock		310		45 20°	contact fracture 1"	chl - clays qtz blebs	Dyke dark green with chl and qtz stringers, alteration mostly chlorite	305	100									
									320		30°	¼"	qtz discontinuous + chlor stringers ¼"	minor disem py	315	100									
							330½ qtz-Ser-Py 332¾		330		50° 30 x 2	contact ¼" x 2	offset ½" qtz blebs random. qtz - Lim	qtz + many calcite py blebs + disseminated dyke is quite siliceous	325	100									
									340		15 20	¼" ¼"	chl - qtz qtz - Lim		335	100									

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Cu	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Weight (Grams) Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							Alteration (cont)		350		50°	¼	qtz - lim		345	100									
							352½ pg-Sericite [illegible]		360		25°	contact		Rock o	355	95									
							Fresh rock 365		370		20°	¼"	Variety qtz - lim	Core ground @ 365 missing 6". Core missing is qtz-sericite. [illegible] qtz veinlets with no visible reason for missing core.	365	100									
							[illegible] 375½ [illegible] 377½ [illegible] 379½ pg-Sericite [illegible] 380		380		60° 30° 30° 30	contact contact ¼" 1¼"	qtz-cal-chl-lim qtz-[illegible] qtz-[illegible]	chrom pg-bleb. chrom [illegible] in fracturing fractures. [illegible]	375	100									
							[illegible] 381½ qtz [illegible] 390		390		40°	¼	qtz - lim	chrom stringers. py blebs in qtz veinlets @ 387' core noticeably brecciated with chr in [illegible] fractures. Py blebs in qtz [illegible]	385	100									
							[illegible] 393½ qtz-Sericite 395 [illegible] 400		400					chrom - clays in fracture.	395	100									
							[illegible] 402½ [illegible] 404½		410		20 15 30°	⅛" ⅛" ¼	cal cal qtz - cal		405	100									

Hole No.: SRS-80-23

Rock Types and Alteration								Graphic Log			Mineralization and Structures				Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Py	Cpy Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge				
							413½ Dark Gray And Dyke Rock 417 Fines & D.P. & minor sk. magnet & D.P. inclusions		420		30°	contact	py stringers	py blebs in qtz, veinlet, qtz Ser Py – joints not intensive.	415	100										
									430		60° 70°	contact ½	qtz K/spar													
											75° 80° 75° 75° 30°	⅛" ⅛" 6" 1" ¼	cal cal - hem. qtz - K/spar qtz - Ser - py - Mag. qtz - Ser - py - Mag	mineralization in veinlets - py blebs. Abundant magnetite is intergrown around py in qtz. Porphyry has very minor disseminated py.	425											
									430		30°	½"	qtz - cal - mag - py.	qtz Ser Py inclusions in stockwork local and extend out the most for 8". qtz is less abundant in stockwork		100										
											30° 40 30°	¼ ¼ ½"	qtz. Ser py - mag qtz - Ser py - mag qtz Ser - py - mag	Sludge to 6" @ 435	435											
									440		35°	½	qtz Ser - Py - mag			100										
							0° qtz - Ser - Py 443 445 qtz - Ser - Py 448½ Dark Rock		450		60° 35	¼ 1"	qtz Ser Py - mag. qtz - Ser. Py - mag		445	100										
			bior 15% 2mm		Tan 7mm	7	451 453½ And Dyke Rock		460		55	1/16"	cal	Dyke dark gray few cal stringers	455	100										
									470						465	100										
									480		30 60	1/16 1/16"	cal. cal - chl.		475	100										

Hole No.: SAB-80-25

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Weight (Grams) Sludge	Core %	Sludge %	Assay Results: Sample Number Core	Sample Number Sludge
							483½				45 v 3	1/16 x 3	cal														
											40°	contact	chl. - clays														
							qtz - ser - py				5°	1/4	qtz - py - cal - ser		485												
							3" Dyke inclusion 488½		490		40°					100											
							Fresh GDP					2"	K/Spar, + mafics.														
											30°	1/16"	cal - chl		495												
									500		30°	1"	qtz - ser stringers			100											
							3" Dyke inclusion 501							semi massive py blebs ~ 501' - 503'													
							qtz - ser - py c. inc. of fresh GDP				30°	1/16"	qtz - ser stringers		505												
									510							100											
							513½				30°	1/8"	qtz - ser - py.	py blebs 1/4" cubic structure													
											80	1/4	qtz - chl														
							Fresh GDP				35	trace	qtz - chl stringers, in fresh & hematite		515												
							518½		520		35	contact	hem - chl.			100											
							Fine Dyke Rock				30	1/16	cal	Dyke more porphyritic @ 527													
											30	1/4"	cal		525												
				mag >2%							40 - 20	1/4 x 2	cal	Dyke more granitic @ 529' orientation of veining 60°		100											
											30°		cal - qtz - hem stringers														
							Fresh GDP 528½				25°	contact	chl - clays.														
							531				55°	contact		cal - chl stringers in dyke.	535												
											30	1/16"	cal - chl.														
							536				40°	contact															
									540		50	1/16"	cal - chl.			100											
							Fresh GDP				60 v 3	1/16 x 3'	cal - chl. cal - chl stringers		545												
									550							100											

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Gx Py	Cpy Sph Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge
							554½ Andesite Porphyry		560		35°	contact			555	100							
											45	1/16"	chl										
											80×2	1/16" ea	chl										
											30	1/4	chl-chl-hem										
							Fresh QDP 562 / Andesite Dyke 563 / 563½ / Fresh QDP 565 / Pg Sericite inclusions in fresh Porphyry		570		25°	contact		inclusion of mineralization similar below - denser py!	565	100							
							570 / Fresh QDP / Andesite Dyke 573½ / 576 / Fresh QDP		580		40	1/4"	chl-chl.		575	100							
											30	1/4	chl-chl										
											40	contact		minor Pg & Sericite Pg in chrism									
									590		50	1/8"	chl-chl.		585	100							
											70	1/16"	chl-chl.										
							Pg Sericite 591 / Andesite Porphyry		600		50°	contact			595	100							
											35°	1/16"	chl										
							598½				65°	contact.											
							Fresh Porphyry		610		25°	1/16"	hem + biot	random py stringers 1/16" wide and discontinuous fractures mineralization chl-clay @615	605	100							
											5°	1/16	chl										
											30-60°	1/8×2	chl.										
							Weak Argillic 612½ / 615 / Fresh QDP		620		25°	1/4	fol-chl.		615	100							
							8' Dyke inclusion																

Rock Types and Alteration								Graphic Log			Mineralization and Structures						Estimated Grade			Recovery		Assay Results						
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Cpy Bn Py	Cpy MoS2 Ox	Specific Gravity	Weight (Grams) Core %	Weight (Grams) Sludge %	Sample Number Core	Sample Number Sludge					
60	35	15%	10%				Fine Gr. 630¼ Dyke Intrusion 631½ 624 Fine Gr. Diorite 627½ 6" Dike Intrusion 629		630		80° 50° 30 20	contact contact contact ½	chl-clay 9tz-chl	" @ 624' noticeable absence of large K/spar - phenocrysts. dissem py.	625	100												
			10%		Fine grn.		Ant Dyke Rock		640		50 35 30	½" ⅛" ¼	cal - chl cal cal	dissem sulf in dyke porphyry	635	100												
									650		40 x 2 30	1/16 x 2 1/16	cal cal		645	100												
									660		40 35 40 x 2	¼ ¼ ¼" x 2	cal cal cal cal stringers		655	100												
10%	65%	25%	-	medium grained	S med grn	6	Dolomite mellow 662½ Dolomite 665½ Brecciated Diorite		670		35 50° 50	contact contact contact		Dolomite white gray. containing calcite + qtz Possible meta-sediment. contacts strong stem dyke. Some 2nd K/spar alt. Some xenoliths of diorite in dolomite.	665	100												
							Silicous Dyke 676½ 677 676 banded Dolomite + Tremolite		680		80	contact		gray banding in dolomite Tremolite extends 1½' in 678½.	675	100												
							highly alt Dyke 685½ 686½ Brecciated qtz + bended Dolomite inclusions 687		690					minor dissem py dissem py	685	100												

Hole No.: SAS-80-23

Page ___ of ___

Rock Types and Alteration								Graphic Log			Mineralization and Structures																
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade Cpy Bn Py	Estimated Grade Cpy MoS2 Ox	Specific Gravity	Recovery Weight (Grams) Core %	Recovery Weight (Grams) Sludge %	Assay Results Sample Number Core	Assay Results Sample Number Sludge					
							Propylitic alt 692 3/4							dark compact [illegible] tentative admixed c clay + epidote + 2nd [illegible] alt.								0258						
							Hydro alt Dyke Porph		700		40° 50° x 2	1/4 1/16 x 2	qtz - cal. cal chl - clays		695	100											
							700 4 Dolomite 705 705 2		710		30° 50° x 3	1/2 1/4 x 3	cal - qtz - py (argillic)? porphyry inclusions	Chlorite - clays. Porphyry inclusions w. 710.	705	100											
							Hydro alt Dyke Porph.		715		30°	1/16"	cal - qtz - chl	Core blocky w 712-715 inclusions of diorite + calcite + qtz.	715												
									720				end Hole @ 715'														
													Mineralization mostly py blebs in qtz veinlets and disseminated in qtz sericite environment. Galena blebs in qtz vein @ 217' not found together with py. alteration is mostly intermediate and pervasive phyllic alteration. The intensity of alteration increases and decreases over short intervals associated with the pervasive phyllic.														

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip: -45°
Collared: October 22, 1980
Dip Tests:
Remarks: No sludge collected; log scale 1" = 10'

Hole No.: SAB-80-24
Project: Kettle River
Claim No.:
Core Size: N.Q.
Completed: October 23/80
Elevation:
Length: 235'
Logged by: M.W. Waldner
Date: 2/23/81
Contractor: Mohawk / Maitland Explorations

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga/Py	Cpy Sph./Dn.	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold oz/ton	Silver oz/ton	Pb %	Zn %	Cu %	Mo %	W %
							O.B. 0-20' (ie Casing to 20')		20						20															
		5% 1-2mm phenos white light pink	20% F.g. Alt'd phenos	Calcite phenos <1mm <5%	F.g. to U.Fg & slightly porph.	4-5	Lamprophyre Dyke grey to black slightly porphyritic		30		25°-30°	hle - 1/16	minor calcite stringers 1/8 to 1/16" wide	core generally solid - good recovery	25	100													
							Porphyritic Granodiorite Fresh to v. wkly Alt'd		40		25 x 2 20+70	1/2" 1/4+2	calcite on contact qtz-(py)-(sph) + K'spar x2 minor dissem. of	≈ 1/2' missing @ 34', ground core @ 36'	35	95	- .5%	.3%											
15% Fine gray	40% part. alt'd white phenos	20% phenos to 2cm White to light pink	25% B.io & Hbl part. chl	chl. ≈ 15%	med-Coarse porph	6-7	wk Propylitic? alt'n		50		25 35+2 45+35	2" 1/4+2	py ± cpy? & some fracture in filling epidote-hem. hem-(ep) x2 qtz-cal.+hem-ep.	Biotite ≈ 15% Hbl ≈ 15% Minor calc veinin & fracturing	45	100	- .5	.1											
									56½		70 75+20	4" hle+2"	qtz-K'spar-(py) py + ep-hem-(py)	Diss. py ± (cpy?) them	55	100	-	-											

Hole No.: SAB-80-24

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Gold oz/ton	Silver oz/ton	Pb %	Zn %	Cu	Mo	W
							core has mottled Appear. 65'			50 35 25x2	2" 1/8 1/4x2	k'spar qtz-cal-(Py) qtz-sph-(Py)x2					-											
							Lamprophre dyke	70				calcite stringer in dyke	Some alt'n @ dyke contacts		90	.02 .05	.00 -											
15% Fresh	white grn alt'd to clay + ser.	part alt'd to Jarg 2cm phens	Totally alt'd to chl + clay		med-coarse grd. porph		Moderate Arg. All'd Porph. P.G.D.			45 30 35x2 25x2 15	1/8 1/2 1/4x2 1/4x2 1/8	qtz-Py-ga-((sph)) qtz-Py-ga-((sph)). qtz-Py-ga-(sph)x2 qtz-ga-(sph)-(Py)x2 qtz-ga-(sph)-(Py)	diss. Py & Ga k'l missing @ 73'	74	100	.10 .10	- .05 -										
							apple green to dk grn. mottled appearance 86'			20 20 60+25 30x3 25-30	1/4 1/4 2 + hle hle x1+ 1/4 hle's @ 6"	qtz-(Py)-(ga)-(sph) qtz-ga-(sph) (Py) qtz-k'spar-(Py) + qtz-ga-Py qtz-ga-(Py) x3 qtz-ga-Py-(sph)?		84	100	.1 .1	- .05 -										
							Fresh to Wkly All'd Porp. GD.	90																					
							Lamp. Dyke 92'			20x2 25x3 30 35	hle+hle hle x3 1/4 Contact	qtz-Py-ga x2 qtz-Py-ga + cal qtz-Py-ga qt-Py-ga-sph. a G.D-dyke	≈ 4" missin @ 91'	94	97	.05	- .02										
							Mod. Arg. All'd Porph. P.G.D. 95'					calcite stringer in dyke	diss. Py-ga																
							Lamp. Dyke 101.5	100								.05	-												
Fresh ≈15%	apple grn ser + clay	part or totally all'd large phens oblit.	chl.		mottled med-coarse grd. slightly porh. locally porph.	5-6	Mod. Argillic All'd Porph. P.G.D.			30 15x2 15 20 35	contact 1/4x2 1/8 1/8 1/2	qtz-sph-ga-Py x2 qtz-sph-ga-Py qtz-ga-sph-Py cal	well min diss. sph-Ga-(Py)	104	100	.5 .3	- .5 -										
							112 Mod-Int Argillic All'd P.G.D.	120		20x2 30x2 20+2 20	hle x2 hle x2 hle x2 1"	qtz-ga-(sph)-Py x2 qtz-ga(sph)-Py x2 qtz-Py-ga-(sph) x2 qtz-Py-(ga)	4" missing 117'	118	97	.60 .5	.4										
							126 Lamp. Dyke			70x2 40+30 25x2	hle x2 hle+1/2 hle x2	qtz-ga (sph)-(Py)	Stringer @ 25' to 40' to G.A.		100	.1	.05										

Hole No.: DHB-80-29

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/ Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: cpy Ga/Py	cpy Sph/Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	GOLD oz/ton	SILVER oz/ton	Pb %	Zn %	Cu %	Mo %	W %
							139½				35	1/4	cal																	
											60	1/4	cal																	
										2	30°		Contact																	
Fresh	Altd/ AH.1	part altd	chl.		Med-Coarse	45	Mod. Arg. Altd			2	45	2" gg	fault		135															
							P.G.D.				45	3/10	qtz-hem-chl																	
											50+65x2	1/10 thk x2	hem-chl x3																	
							5' Lamp Dyke		140		50°+55	5"	Lamp contacts top & bottom																	
										2	15	12" gg	fault																	
							Lamp. Dyke			2			calcite strings	Calcite																
						4	(Grey to Grn)				45	3/10	cal 40°-50°	Mineralization	145															
											45	1/10 x5	cal x3 to GA.																	
									150		45	1/10	cal	Post Lamp.																
							152½				40																			
					vv fg		Basalt Dyke				25+45x2	1/10 x3	cal. x3	& Basalt dykes																
							(Black)				40 x2	1/10 x2	cal x2	Basalt intrudes																
											40 x5	1/10 x5	cal x5	Lamp dyke	155															
							156																							
					f.g		Lamprophyre				20x2+10	3/10 x3	cal x3																	
							159½		160		25	Contact																		
							WK to				40	1/10	hem-chl																	
						163	Mod Arg. Altd				60	1/2	hem-chl + (py)	minor diss. py																
											35	Contact		poss. fit -																
					f.g.		Lamp Dyke				20	1/10	cal	clay g.g. ?	165															
											20+2+35	1/10+thk	cal x2																	
							(Gray to Black)		170																					
							171				60	Contact																		
					vvfg		Basalt (black)							V.V.f.g. dyke																
							174				65	Contact		post f.g. sl. porph																
					f.g porph.		Lamp.							dyke	175															
							176½				25°	Contact																		
		Some phenos			mottled app.		WK - Mod Arg.		180																					
					Med-Coarse Porph		P.G.D.				80																			
											70	14"	qtz-K'spar-(chl)																	
							185				40°	Contact			185															
							Lamp Dyke																							
							(Gray to Black)		190		50	4" (G.D.)	G.D. Contact	very minor py.																
							191½				20	2" G.D.	G.D. Contact																	
			Bio to 90%	Some chl.			WK - Arg. Altd					8" K'spar	Breccia																	
							P.G.D.				60	3"	Graphic G.D.	Sec. B ?																
											35	Na	hem	minor diss. py	195															
											70	1/8 gg	fault chl. chlorite																	
											40	1/2	fault " "																	

Rock Types and Alteration								Graphic Log			Mineralization and Structures							Estimated Grade			Recovery		Assay Results					
Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Specific Gravity	Cpy Ga Py	Sph Ox		Weight (Grams) Core %	Sludge %	Sample Number Core	Sludge				
							201				20°	Contact	with P.G.D.	very minor														
							Lamp. Dyke 203				35	Contact	with P.G.D.	dkr. py														
							WK- Arg Alt'd				60	2"	qtz-K'spar (pink)															
											5	1/4"ss.	fault (chl.gg) displaces	K'spar vein x 4"	205													
							P. G.D.				60x3	1"x2+1/2	qtz K'spar (pink)	WEAK														
									210		30	1/4	cal.	Sec. K'spar Zone?														
							211				40°	Contact																
							Lamp dyke 213½				20+35	1/8 + hle	cal. x 2															
											35																	
											70	1" ss	fault chl-clay gg.															
									220																			
											50+55	1" x2	qtz-(K'spar) x2															
											50	1/2 gg	clay+chl gg.															
												5"	K'spar alt'n															
											50+55	1/8 x2	cal	some cal + chl stringers														
							4" Lamp. →		230		80	Contact	with dyke	very minor dis.														
							2" Lamp →				65	"	"	py														
														END HOLE 235'	235													

Summary: Hole Generally wk to Moderately altd Porphyritic granodiorite & Lamprophyre/Basalt dykes

Galena + (Sphalerite) + Pyrite mineralization from about 30' to 130'

MOHAWK OIL COMPANY LIMITED

DIAMOND DRILL RECORD

Section:
Lat.:
Dep.:
Azimuth:
Dip: -70°
Collared: October 23, 1980
Dip Tests:
Remarks: Drilled with Mud, No Sludge recovered
Scale of Log 1" = 10'

Hole No.: SAB-80-25
Project: Kettle River
Claim No.:
Core Size: N.Q
Elevation:
Completed: Oct. 24, 1980
Length: 255'
Logged by: M. Waldner / B. Callaghan
Date: March 3, 1981
Contractor: Mohawk / Mairland Explorations

Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Rock Type/ Alteration	Footage	Structure	to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery
							O.B. 0-20' Casing to 20'		20						20	
5mm phens 5%	?	?	15% Bio 5mm 1mm		med-f.g. slight porph		Basalt Dyke (Very F.G. Matrix) Grnt. black 27¼				80°	Contact			25	100
15% fresh gray	30% Plag part altd to Chl clay + Ser.	30-40% white to light pink phens	10-15% Bio 5-10% Hbld	Chl.	med-coarse porph.	6-7	Basalt 32 — wk-Mod Arg Alt'd Porphyritic Granodiorite		30		35°+35°	4"	Dyke (Basalt) Contacts			
									40		35° 35° 50° 45° 45° 30°x2 30° 30°x2	1/16" 1/4" 1/16" 1/16" 1/16" 1/16"	Fault gouge (Minor dissem py). qtz-Cpy-py (sph) Minor dissem Calcite vein + cpy Fault gg chl + clay Stringers of Gal + Sph + cpy + py Fault gg (slickensides) py down calcite veins	@ 32' ~3" core missing West mineralized with veins stringers of Galena Sph Intense alteration from 32-35.	35	98
							Lamp. Dyke 44 45		50		30° 30°x2 25 25 20° 60° 50°	1/16 1/8" 1/4" Contact Contact 1/16" 1/16"x2	fracture chl + clay disseminated py K feldspar + qtz veins fracture hematite + minor Ser qtz, clay, minor Sph + galena. Calcite veins	dissem py - Calcite stringers @ 40° + 50° no mineralization in dyke dissem py with minor cpy 24½' to 56'	45	100
									60		30 30°x3 25° 20°	1/16" 1/4"x3 1/16" 6" 1/4" 1/16"	qtz + Sph + Gal + cpy fracture chl + clay Calcite stringers in matrix mottled porph with Sph + Gal fault gg slight polish clay zone of large feldspar xtals Calcite stringers	core slight mottled appearance dissem py + cpy dissem py.	55	100

Hole No.: SAB-80-25

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox	Specific Gravity	Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Sludge	Gold oz/ton	Silver oz/ton	Pb %	Zn %	Cu %	Mo %	W %
	See		20'				62' Basalt Dyke (gray to black). 66½				30° 30°x2	Contact ⅛"	Cak Cak stringers	disem py distinct contact	65	100	.2	.2														
15% Fresh	Alt'd to chl. Some clay	Alt'd to some clay	Alt'd to chl.	—	Solit.	4-5	Int. Arg. Alt'd P.G.D.		70		30° 45° 45°	¼" ⅛"	fracture chl + clay Py + Ga + Sph + hem	stringers of Py, Ga + Sph @ 45° fine grained py + hem			.5															
15% Fresh	30% white to lt gray alt'd to chl + chl	30-40% wh - light Pink Fresh	15% Bio 5-10% Hlbd alt'd to chl.	—	mod. Coarse porph mottled App.	5-6	71 Moderate Arg Alt'd P.G.D.		80		30° 30° 30 50+45 40-50	⅛" ⅛ ⅛ + ¼ 99 hle + ¼ 99 hle's	fracture chl clay fracture chl clay Fault chl-clay calcite stringers	mottled appearance Py minor minor diss. Py + C(cpy)	75	100	— .5	—													
							82 Lamp. Dyke 84 4" Lamp Dyke 85 86 Lamp Dyke 88		90		40 50° 50° 40° 60° 40° 50x3	¼ Contact Contact Contact Contact Contact ¼x2 + ½ 99	cal cal x2 + flt.	diss. py in P.G.D. & cpy ≈ 4' loss @ 85' core ground	85	97																
							97 Lamp Dyke 100½ 102		100		40+30 50 30 50° 60 x 2 80°	⅛+2 hle ¼ Contact contact	qtz - (ga) - (sph) - (py) x2 py qtz - py - ga - hem	minor diss. py + cpy	95	100																
15% Fresh	gray to Green vvfg 20% plag phen		15% Bio phen to 1 mm	—	v.fg matrix slight porph	4-5	Lamprophyre Dyke (gray to Green) 106 Mod Arg P.G.D. 109½		110		25 70° 60x2	¼ Gradational (Indistinct contact ⅛x2	cal cal	cal stringers in dyke minor diss. py	105	100																
									120		70+30 30+2	¼+2 ½+¼	cal.x2 cal x2	cal stringers in dyke	115	100															
	See		75'				121½ Mod-Arg Porph. G.D.				50x2	1" x2	qtz. - K'spar x2	diss (py) + ((cpy))	125	100															

Hole No.: SAB-80-25

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration	Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga	Cpy Sph	Cpy Py	Cpy Ox.	Specific Gravity
	Sem	35'					WK-Mod. Arg. Alt'd. P.G.D.				35°	1/16"									
											25°	1/16"	fracture chl + clay	Minor py. dissem							
											10°	1/8"	Calcite stringer								
											20	1/16	fracture hem.		135						
											30°	1/16 × 2	Calcite stringers + hem	minor cpy ?							
									140		90°	1/16	fracture - chl + clay + hem	dissem py minor							
	Sem	100'									30°	1/16"	fracture qtz sericite alt	Calcite stringers @ 30° + 50°							
							143				50°	Contact									
											25° × 2	1/16"	calcite streamers.	minor Py							
							Lamprophyre dyke				50°	1/16"	" "	"	145						
											30°										
											10°	1/16"	calcite stringer + hem.	minor py							
							149		150		50°	Contact	qtz minor Ga + Sph	more calc stringers toward contact							
											35°	1/16"	Calc stringers + hem	minor py							
											50°	1/16"	fracture - chl + sericite								
											30 + 40°	1/16" × 2	Calc.	Calc stringers							
											20°	1/16"									
											50 + 40°		quartz + sericite + hem fracture	minor dissem pyrite	155						
											40°	1/8" × 2	qtz + feldspar + veins								
											70°	1/2" × 2									
									160		2-3"	1/4"	qtz + feldspar qtz - sericite fracture	Intense alt.							
							161				10	contact									
											20° × 4	1/16" × 4		Calc stringers with minor pyrite on fracture 20°							
							Lamprophyre Dyke				30° + 50°	1/8" × 2	Calcite stringers								
											50° + 20	1/16" × 2	silt + clay fractures.		165						
							168				40°	Contact		Sharp contact minor Sph + Gal + minor py - highly altered.							
							170		170		30°		qtz sericite fracture								
							Lamprophyre Dyke				25	3" 22	silt.	intense alteration from 169 - 175.							
							Intense Argillic P.G.D.					10"	- chl + clay + hem								
					Cpy		Intense Arg. alt'd						-								
														minor py	175						
											30° + 50°	1/16" × 2	Calc stringer								
									180												
							181				45	Contact									
													minor sph + Ga + Py								
							Weak Arg. Alt'd				80°	10"	fracture - sericite clay + hem.	minor py + cpy ?							
											20°	1/16"	Calc stringers		185						
							Porphyritic G.D.						qtz sericite fracture with py + cpy.	- noticeably more mineralization esp cpy/py							
									190		30° × 2	1/16" × 2	qtz sericite fracture	minor py							
							192				45	1/16" Contact	Dyke material minor pyrite								
							Lamp dyke 193				50	Contact		Minor pyr with							
														Calc stringers	195						
											35° + 30°	1/16" × 2	Calcite stringers	Cpy more noticeable							
													sericite + hem.								
											60°		fracture hematite clay.	at 198 - 200 ft							

Recovery: Weight (Grams) Core	Sludge	Assay Results: Sample Number	Gold	Silver	Pb	Zn	Cu	Mo	W
			oz.	oz.	%	%	%	%	%

Hole No.: SAB-80-25

Rock Types and Alteration: Qtz.	Plag.	K Spar	Mafics	Accessories	Texture	Hardness	Rock Name Appearance	Graphic Log: Rock Type/Alteration Footage	Structure	Mineralization and Structures: to Core Axis	Width of Vein	Mineralization and Faulting (Type)	Remarks	Footage Blocks	Length Recovery	Estimated Grade: Cpy Ga/Py	Cpy Sph/Ox	Specific Gravity	Recovery: Weight (Grams) Core %	Sludge %	Assay Results: Sample Number Core	Sludge	Fold oz/ton	Silver oz/ton	Pb %	Zn %	Cu %	Mo %	W %
							201			40	contact																		
							Lamp. Dyke																						
							205			60	contact																		
							Weak-Mod Arg.			40	1/4	cal	diss (py) + (ga) + Sericite	205	100	.1	–												
							Alt'd Porph. G.D.	210		50+40x2+60	1"+1/2+1/4x2	qtz-Ser.-Py-Cpy x 4	diss py-cpy-ga-sph			.1	–												
							(Minor Phyllic Alt'n)			30x2	1/4+ hle	qtz-hem-mag-py x 2					–												
										35																			
										30+20	4"+12"99	Lamp. dyke + Flt	6" core missing @ x 217'	215	95	–	–												
							Lamp. Dyke 217' 218 219	220		15° 50	contact contact					–													
							Basalt Dyke			30°+40°	1 to 5	calcite stringers					–												
							226			40°	contact			225	100	–	–												
								230								–	–												
										30+65	1"x2	cal + qtz	minor diss. py.	235	100	–	–												
							1' K'spar Alt'n	240								–	–												
15%	25% alt'd gr-white	50% pink flesh	60%	–	mod-f.g.	67	242 Potassic Alt'n of Porph. G.D.? (or Alaskite Dyke)? 244	250					May be Alaskite dyke rather than Potassic Alt'n Zone	245	100	–	–													
							Weak-Mod. Arg. Alt'd P.G.D.			50+20+55	1/4x3	cal + qtz hem-mag-Py-Ser	minor cpy - qtz-Ser. Env.	255	100	.1 .01	.01												
																.5	–												