010

Diamond Drilling

Township of CUNNINGHAM

Report NO 31

Work performed by: Texasgulf Canada Limited

Claim NO	Hole NO	Footage	Date	Note
S 443165	CU-42-05	142.0	May/79	(1)
	CU-42-01	250.0	May/79	(1)
	CU-42-02	284.0	May/79	(1)
	CU-42-03	166.0	May/79	(1)
	CU-42-04	186.0	May/79	(1)
	CU-42-07	251.0	May/79	(2)
		1279'		

Notes:

(1) #85-79

(2) #177-79

PROPERTY Cunningham 42 PROJECT 998 **Texasgulf** CONTRACTOR Bradley Bros START 26.5.79 FINISH 27.5.79

HOLE No. Cu-42-05 LAT. _____ DEP. _____ ELEV. _____ LOC. L0 @ 1400N AZ. 000° ANGLE -45° collar DEPTH 142' CASING 12'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
0	12	CASING									
12	17.8	CHERTY IRON FORMATION, mafic tuff?, numerous dark green, fine grained									
		chloritic beds, some with po, py seams									
		- occassional beds of carbonated cherty clasts									
		- banding (foliation) at 65° to C/A									
17.8	19.2	MAFIC DYKE, fine grained, dark green, massive, siliceous inclusions,									
		vague contacts									
19.2	34.5	CHERTY IRON FORMATION, many chloritic beds (mafic tuff?)									
		- seams, blebs po throughout									
		- 25.3' cpy, po, minor py									
		- 29-31' slightly graphitic									
		- becoming argillaceous downhole									
		- 33.6' minor breccia, carbonated									
		- banding at 55° to C/A									
34.5	35	ARGILLITE, fine grained, medium-dark grey									
		- banding at 55° to C/A									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-05 PAGE No. 1

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
35	36.9	MAFIC TUFF, chert inclusions									
		36.2' - 36.7' seams, blebs po, py									
36.9	39.9	INTERMEDIATE DYKE, fine to medium grained, medium grey, minor chlorite									
		contains quartz eyes?									
39.9	51.9	CHERTY IRON FORMATION, many chloritic and dark, fine grained, slightly graphitic									
		argillite beds, cut by carbonate veinlets, stringers									
		- minor seams, blebs po									
		45.6', 45.9' disseminated sph.									
		47' banding at 60° to C/A.									
		po, carbonate blebs increase towards 51.9'									
51.9	57	CHERT-MAGNETITE IRON FORMATION, minor stringer, disseminated po, chlorite									
		- banding at 45° to C/A									
57	66.5	GRAPHITE-CHERT-SULPHIDE IRON FORMATION, chert interlayered with finely									
		laminated massive pyrite and graphite									
		- 57.4'-59' massive pyrite with disseminated sph, gal, minor chlorite									
		laminated 65°-70° to C/A									
		-59.2-60.2' finely laminated, massive pyrite									
		- 60.5' cpy, sph stringers with po, py and chert									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
57	66.5	CON'T									
		61-61.9' nodular py									
		62'-62.4' massive py									
		63.5'-64.7' stringers, seams po, py with minor graphite									
		65.1'-65.3' disseminations, stringers cpy, sph									
		65.3-66 graphite									
66.5	68	MAFIC DYKE, fine grained, dark green, upper contact broken, lower contact									
		obscured by large blob py.									
68	83.3	CHERT-SULPHIDE IRON FORMATION, less chert, more chloritic than before minor									
		graphite									
		70'-71' numerous hairline seams, stringers sph in dark graphitic zone with po,									
		py seams, trace galena									
		72.6'-73' stringers disseminated sph, trace cpy, po, gal									
		73'-75.3' chert beds with po stingers									
		75.3' disseminated sph									
		77'-83.3' semi-massive to massive finely laminated pyrite, minor chlorite									
		disseminated sph 81.2', laminated at 80° to C/A									
83.3	85	FAULT ZONE, contorted, broken beds of laminated pyrite with stringers of sph									
		with carbonate-chlorite seams running parallel to C/A									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
85	88.4	CHERT-SULPHIDE IRON FORMATION, minor graphite									
		- minor slips disrupt bedding									
		- finely laminated massive to semi-massive pyrite mixed with minor chert and graphite laminated at $\sim 90^{\circ}$ to C/A									
		- disseminated sph at 85'									
		86.8'-87' stringers cpy									
		87.6'-88.4' stringers, seams, disseminations of cpy , sph, po, trace galena									
88.4	96.5	CHERTY IRON FORMATION, minor graphite and chlorite beds with seams po, py									
		- cut by numerous stringers py, po									
		93' disseminated sph.									
96.5	115.5	CHERT-MAGNETITE IRON FORMATION, minor po blebs, seams									
		107.5' po stringers									
		- banding at 80°-90° to C/A									
115.5	121.6	GRAPHITE-CHERT IRON FORMATION,									
		- stringers, seams disseminations py, sph, cpy, trace galena throughout									
		- banding at 80° to C/A									
121.6	142	CHERT-MAGNETITE IRON FORMATION, occassional chlorite seam									
		- cut by odd po stringer, green alteration throughout									

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FROM – TO		DESCRIPTION	SAMPLE No.	FROM – TO		SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
121.6	142	CON'T									
		128.4' disseminated sph									
		136.6' black aphanitic chert filling a void(?)									
		- light to dark spotted chert									
		140' banding at 85° to C/A									
142		END OF HOLE									

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PROPERTY Cunningham 42 PROJECT 993 **Texasgulf** CONTRACTOR Bradleys START 17/5/79 FINISH 19/5/79

HOLE No. Cu-42-01 LAT. _____ DEP. _____ ELEV. _____ LOC. L3W, 1+50N AZ. 000° ANGLE -45° DEPTH 250' CASING 6'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
0	6	CASING									
6	17.5	FELDSPAR PORPHYRY, euhedral to anhedral white, cream to light pink feldspar phenocrysts up to 3mm, set in a blue-grey fine grained matrix, carbonate and chlorite on fractures, occassional quartz eye - 10.4 - 10.7, 16.4 - 16.5 - chloritic inclusion - possible breccia at 12' - disseminated sphalerite at 12.2'									
17.5	27.2	MAFIC TUFF(?), dark green, very chloritic, carbonated foliation at 70° to C/A, cut by several carbonate stringers, veinlets with minor pyrite, sphalerite 18.2' to 18.4 feet - narrow seams and blebs of sphalerite, galena chalcopyrite, pyrite (cpy rimmed by gal rimmed by sph) 19' - 27' disseminated pyrrhotite 23.5 - 26.5' blebs and seams po									
27.2	29.5	CHERT FRAGMENTAL, similar to above but with chert fragments intermixed with chloritic material blebs, minor seams py, trace po.									

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FROM – TO		DESCRIPTION	SAMPLE No.	FROM – TO		SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
29.5	33.8	MAFIC TUFF(?), as above, chlorite, carb, minor sphalerite									
		30 ~ 31.5' - 15% sulphide, seams, stringers of cpy, sph, gal, py, po seams run									
		at 65° to C/A.									
33.8	36.2	MAFIC TUFF (?), more siliceous, less carbonate, still chloritic									
		33.8' - narrow pyrite seam, minor graphite									
		sph, py stringers at 34.5', 35.2', 35.8'									
		faint foliation at 75° to C/A.									
36.2	52.3	CHERT FRAGMENTAL, minor chert - mag IF - 37.1 - 38.1', grey-white angular chert									
		blocks to 10cm set in a dark green foliated chloritic matrix, foliation at 45° -									
		65° to C/A.									
		- chert blocks are slightly carbonated									
		- section cut by numerous carbonate veinlets and stringers									
		*- disseminations, stringers and seams of sph, gal, cpy, po, py in chloritic									
		matrix throughout section.									
		- sph, gal, cpy in occassional carbonate veinlet									
		45.5' - 46.5' - po rich section with minor cpy									
		coarsely crystalline galena at 47.2'									
		- estimated 15% sulphides in section at least ½ cpy, sph, gal.									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY ~~Cunningham 42~~ HOLE No. ~~Cu-42-01~~ PAGE No. ~~2~~

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
52.3	57	MASSIVE SULPHIDES. 50% - 100% of finely laminated pyrite, chalcopyrite, sphalerite, minor galena									
		- one section (56.3' to 57') 70% cpy 20% sph 2% gal									
		laminations at 60° to C/A.									
		- minor carbonate and chlorite									
		- carbonate veins contain sphalerite									
		- cross-cutting fractures also contain stringers cpy, sph.									
57	69	CHERT FRAGMENTAL, as before but appears not as broken up, more bedded									
		appearance, cut by many carbonate stringers									
		- less chlorite in matrix, more siliceous, carbonated									
		- a few seams of magnetite									
		- up to 10% sulphides in matrix - coarse grained galena at 57.8 with cpy, sph.									
		- disseminated, stringers and narrow seams of cpy, sph, po, py throughout									
		section									
		- minor graphitic zones at 67', 68 feet.									
69	69.9	GRAPHITIC ZONE, finely laminated at 60° to C/A									
		disseminated pyrite throughout									
		- 69.8 - carbonate stringer with sph, gal.									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-01 PAGE No. 3

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
69.9	72	CHERTY FRAGMENTAL with graphitic matrix, minor carbonate stringers of po, py, surrounding chert fragments.									
72	75	MAFIC TUFF (?) dark green, chloritic, carbonated, blebs of po disseminated po, py faint foliation at 65° to C/A.									
75	80	MASSIVE TO SEMI-MASSIVE SULPHIDE, finely laminated pyrite with minor sphalerite and chlorite, laminated at 75° to C/A disseminated sphalerite at 75.2 feet, 76' chert lens - with pyrite stringers 78' - 78.5'									
80	85	GRAPHITIC ZONE, interbedded finely laminated graphite and pyrite with minor chlorite, minor sph with py at 80 feet - laminations at 70° - 80° to C/A - minor carbonate stringers with sph.									
85	105.5	CHERT-MAGNETITE IRON FORMATION, interbedded light-dark grey chert with thinner seams magnetite, minor graphite - beds are from paper thin to 10cm, bedding at 70° to C/A disseminations, narrow aeams and stringers of sph, cpy, gal, py, po throughout section - greenish alteration around magnetite beds and throughout chert layers - grunerite?									

LOGGED BY: D. Mullen DATE: May 1979 PROPERTY Cunningham 42 HOLE No. CU-42-01 PAGE No. 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
85	105.5	CON'T									
		- sulphide seams decrease downhole becoming more disseminated									
		- cut by numerous carbonate veinlets									
105.5	117.8	CHERT-GRAPHITE ZONE - little to no magnetite									
		- appears fragmental at 112'									
		- small slips at 112.6', 114.6'									
		- sulphides throughout section, finely laminated sphalerite po, py minor cpy,									
		gal, laminations at 50° - 60° to C/A.									
		- contorted at 111'									
		- section cut by many carbonate stringers.									
117.8	118.7	CHERT-MAGNETITE IRON FORMATION, gradational contact with above unit, carbonate									
		stringers									
		sphalerite seams near 118.7'.									
118.7	119	POSSIBLE FAULT, large carbonate vein with chlorite, sph trace gal, cpy									
		- N.B. sphalerite in carb vein is a darker red than the lighter brown sphalerite									
		in iron formation adjacent to the vein									
		- carbonate vein cuts bedding at 60°									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-01 PAGE No. 5

FROM – TO		DESCRIPTION	SAMPLE No.	FROM – TO		SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
119	126.2	CHERT-MAGNETITE IRON FORMATION, minor graphite initially with disseminations									
		and stringers of sph, trace cpy, magnetite appears at 120'									
		- banding at 60° to C/A									
		- magnetite bands from 1 to 5cm thick, white chert beds are generally thicker									
		up to 15cm									
		- occassional pyrite around magnetite bands									
		- minor py, sph at 126'									
126.2	127.6	MAFIC DYKE, medium green, fine grained, upper contact broken, lower contact at									
		~15° to C/A, carbonated									
127.6	127.7	CHERTY IRON FORMATION, minor pyrite									
127.7	130	MAFIC DYKE, as before, upper contact at ~20°, lower contact broken.									
130	136.5	GRAPHITE-CHERT IRON FORMATION, graphite beds contain disseminated to slightly									
		nodular pyrite, occassional thin seam of pyrrhotite									
		- bedding at approximately 60° to C/A									
		odd stringer, seam of sph, cpy, po, py									
		- galena, sphalerite forming matrix of graphitic breccia at 135.8'									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No Cu-42-01 PAGE No. 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
136.5	145.5	CHERT-MAGNETITE IRON FORMATION, gradational contact									
		- banding at 53° to C/A									
		- po, py seam at 138.4' with minor graphite									
		- disseminated po throughout usually associated with magnetite bands									
		- still green alteration around magnetite (Grunerite?)									
		- disseminations and stringers of sph 144.9' - 145.2'									
145.5	147.2	FELDSPAR PORPHYRY, greenish, altered - limonite staining									
		minor graphite, subhedral to anhedral feldspar phenocrysts average 1.5mm									
		- contacts are nebulous, upper one at ~30°?									
		lower contact from 0° to 50°									
147.2	150.7	GRAPHITE-CHERT IRON FORMATION, narrow seams of py, po associated with graphite									
		banding at 70° - 80° to C/A									
		- chert bands occasionally cut by stringers of po,py									
		- sph, gal at 149.2'									
		- magnetite appears at 150'									
150.7	152	CHERT-MAGNETITE IRON FORMATION, some disseminated py, po, trace sph									
		- pyrite lined carbonate stringer at 151.2', minor chlorite slips									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-01 PAGE No. 7

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
152	152.6	MAFIC DYKE(?) py, sph at contacts, dark green, fine grained minor carbonate,									
		upper and lower contacts at ~70°									
152.6	187.4	CHERT-MAGNETITE IRON FORMATION, relatively light to dark grey chert bands,									
		chert taking on a definite spotted appearance with banding (elongation of spots)									
		at 70° to C/A									
		- disseminated po, py associated with magnetite po,py rich at 160.8', py band									
		at 166.6, band at 167'									
		- more chert downhole									
		- disseminated sphalerite 168'-169'									
		170.5' - carbonate veinlet with cpy, sph, gal, po, py									
		170 - bands at 65° to C/A									
		174 - po seams									
		176.1 - 176.3 - po,py, sph, trace cpy with narrow graphitic zone									
		180.9 - sph stringer									
		185. - banding at 70° to C/A									
187.4	191.2	GRAPHITE-CHERT IRON FORMATION, chert very fractured hairline fractures filled									
		with carbonate									
		- large contorted carbonate vein at 187.7 - 188.1 cutting graphitic section									
		with minor sph, gal, cpy									
		- sph in laminated graphite at 188.6'									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-01 PAGE No. 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
187.4	191.2	CON'T									
		189' - 189.5 - sph, trace po, with chert									
		190 - banding at 45°, trace sph at 190.1'									
191.2	250	CHERT-MAGNETITE IRON FORMATION, minor graphitic interbeds									
		- possible fault at 193.5', carbonate rich disseminated sph bands at 194.7,									
		195.1', 195.8',									
		196.2' - sph band with trace cpy, py									
		200' - banding at 60° to C/A - ACID TEST - Corrected									
		204' - possible fault at ~15° to C/A									
		210' - banding from 50° - 60° to C/A									
		- chert brecciated at 210.8', 213.3', 216'-217'									
		- disseminated and seams of py, po, 213.6-214.6, 215.8-217'									
		- graphitic zone with pyrite 219.4'-220.3', 221.9'-222.2'									
		- 222.5' - banding at 50° to C/A									
		223.2' - 223.7' - slightly graphitic, dark green mafic tuff?									
		po at contact with dark chert									
		226.1' - 226.4' - graphitic seams with po, trace py, cpy									
		229' - minor brecciated section with carbonate veining trace py, cpy									
		230' - carbonate veinlets with trace py, cpy									
		232.3' - trace sph, gal with magnetite band									
		232.8' - banding at 55°									

LOGGED BY: D. Mullen DATE: May 1979 PROPERTY Cunningham 42 HOLE No. CU-42-01 PAGE No. 9

FROM – TO		DESCRIPTION	SAMPLE No.	FROM – TO		SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
191.2	250	CON't									
		narrow fragmental zones at 234.8', 239.6' and 242.6'									
		242' - banding at 40° to C/A									
		245' - banding at 50° to C/A									
		appears brecciated 246' - 250'									
		qtz veins from 248.6' to 250'									
		- minor sph, py, po, cpy, 248'-249'									
		END OF HOLE - 250 FEET									

LOGGED BY: D. Mullen DATE: May 1979 PROPERTY Cunningham 42 HOLE No. CU-42-01 PAGE No. 10

Texasgulf

PROPERTY Cunningham 42 PROJECT 998 CONTRACTOR Bradley Bros. START 19/5/79 FINISH 22/5/79

HOLE No. Cu-42-02 LAT. _____ DEP. _____ ELEV. _____ LOC. L3W; 1+50N AZ. 000° ANGLE -70° at collar, -73° at 200' (corrected) DEPTH 284' CASING 6'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS	AVERAGES AND REMARKS
0	6	CASING						
6	13	MAFIC TUFF(?), dark green, massive, fine grained						
		elongate blebs of pyrite parallel to foliation at 65° scattered throughout						
		- up to 5mm in diameter, associated with carbonate						
		- some carbonate stringers at shallow angle to core axis						
13	13.8	SILICEOUS FRAGMENTAL (?), carbonate rich, vague contacts (cooked up chert?)						
13.8	14.7	MAFIC TUFF (?), dark green, fine grained, some pyrite						
14.7	16.2	SILICEOUS FRAGMENTAL (?), vague contacts, dark grey, fine grained, cooked						
		up chert?						
16.2	26.2	MAFIC TUFF (?), fairly massive, cut by several carbonate veinlets 18'						
		- minor mafic dyke(?) at shallow angle to core axis						
		- disseminated sphalerite,galena, pyrite at 19', 21-22',						
		- with carbonate veinlets at 22.6' - 23', 23.5'						
		- banding becomes more prominent downhole at 25' at 55° to C/A						

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 1

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
26.2	28.5	CHERTY FRAGMENTAL, chert beds becoming intermixed with chloritic beds, some									
		beds are brecciated									
		- more sulphides disseminated throughout, also seams stringers of sphalerite,									
		minor chalcopyrite, galena, pyrrhotite and pyrite									
28.5	30.1	MAFIC DYKE (?) granular looking, fine grained, minor carbonate, vague contacts,									
		appears slightly banded, medium-dark grey-green									
30.1	34.4	CHLORITIC TUFFS with Chert and Sulphides,									
		- banding at 32' at 55° to C/A									
		- sph, gal, cpy, py 31.8-32.4, 33.2-34'									
34.4	35.8	MAFIC DYKE (?) as above									
35.8	37.2	GRAPHITIC ZONE, with sph., minor cpy, galena									
37.2	39.9	MAFIC DYKE (?) as before									
39.9	40.5	CHLORITE-CHERT ZONE with sph., py, and po.									
40.5	41	MAFIC DYKE (?) as above									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. CU-42-02 PAGE No. 2

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
41	41.3	CHLORITE CHERT ZONE, po, py, trace sph									
41.3	42.2	MAFIC DYKE(?) as before									
42.2	44	CHERTY FRAGMENTAL, with disseminated sulphides									
		42.2 - 42.3', sph.									
		disseminated po, py, trace cpy, sph throughout chloritic matrix									
44	45.5	CHERT MAGNETITE IRON FORMATION, thick chert beds with thinner (up to 2cm)									
		magnetite bands, trace pyrrhotite.									
45.5	55	CHERT FRAGMENTAL, coarse, up to 3cm subangular blocks of chert set in a chloritic									
		matrix with disseminated po, py, blebs and minor sph.									
		- fragments becoming smaller and less abundant downhole									
		tops? downhole, sulphides mainly pyrite, increases									
		- abundant sph with pyrite at 52.5' - 53'									
		- banding at 50° to C/A									
55	55.7	MASSIVE PYRITE, with po, (fairly massive)									
55.7	62.0	CHERT FRAGMENTAL with thin interbeds of sulphide and minor magnetite bands									
		56' disseminated sph, py									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 3

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
55.7	62.0	CON'T									
		57.3' disseminated sph									
		58.5' disseminated po, py									
		61-61.6 Stringers disseminations of py, po, sph.									
		62' stringer sph.									
62.0	62.5	FAIRLY MASSIVE PYRRHOTITE - faint banding at 75° to C/A									
62.5	70.5	CHERT FRAGMENTAL, with very minor magnetite and some graphitic zones, numerous									
		stringers and occassionally seams sulphide									
		62.6-65.5' stringers sph, py, po									
		67.2-69' disseminated patches of sph, gal, py, stringers of sph, narrow									
		seams po									
		- cut by occassional carbonate veinlets.									
70.5	71	FAIRLY MASSIVE PYRRHOTITE, a few small chert fragments scattered throughout it,									
		stringers of sph, gal.									
71	77.5	CHERT FRAGMENTAL, very siliceous, with up to 20% sulphides in matrix cut by									
		carbonate veinlets, some carrying minor gal, sph, cpy, sulphides in matrix									
		surround chert clasts									
		- clasts are light to dark grey									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
71	77.5	CON'T									
		-71-74.5', disseminationsm seams and stringers of cpy, sph, po, two types of									
		sphalerite at 74.3' - dark reddish brown, honey coloured									
		-76.3 - 77.5', minor po, py, trace sph.									
		nodular? pyrite at contact at 77.5'									
		foliated at 45° to C/A									
77.5	82.2	FELDSPAR PORPHYRY DYKE, medium grey, subhedral to anhedral feldspar phenocrysts									
		up to 2mm in diameter									
		- not as porphyritic as previously noted dykes									
		- upper contact at 65° 5o C/A, lower contact broken									
		- cut by stringers of pyrite									
82.2	94	CHERT FRAGMENTAL with 25% sulphide matrix, some graphite									
		- 82.3' - quartz vein with cpy, py, sph.									
		- 82.3-84.8' sph, cpy, minor py, trace gal surrounding chert clasts									
		- 84.8 - 92.5' disseminated sph, po throughout section									
		- 92.5 - 94 py, po, sph seams, disseminations, and stringers cp to 10% trace gal.									
94	94.3	MAFIC DYKE, dark green, fine grained, broken contacts, chloritic possibly									
		contain minor specular hematite(?)									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 5

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
94.3	95.8	CHERT FRAGMENTAL, initially with graphite zone with sph, gal stringers, blebs									
		py, narrow seams of sph, disseminated cpy at 95.7'									
95.8	96.7	MAFIC DYKE, as before, cut by occassional carbonate veinlet, contacts are vague									
		but appear to be at ~55° to C/A									
96.7	98.7	CHERT FRAGMENTAL, with disseminated sph, po throughout									
98.7	100	GRAPHITE ZONE, with seams of po, py, trace sph									
		- banding at 55° to C/A									
100	100.5	MAFIC DYKE, as before, slightly quartz porphyritic									
		contacts at ~55° to C/A									
100.5	102.2	CHERTY IRON FORMATION, finely banded chert beds with minor graphite, disseminated									
		po									
		- 102' carbonate zone with narrow seams of sph, gal, minor cpy									
		- banding at 47° to C/A									
102.2	127	CHERT MAGNETITE IRON FORMATION									
		- light to dark grey chert bands interbedded with thinner magnetite bands,									
		magnetite bands often have po and py associated with them									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
102.2	107	CON'T									
		- also green alteration surrounding magnetite bands (grunerite?)									
		107.5' carbonate veinlet with cpy, trace py, po									
		108.7' carbonate veinlet with disseminated sph									
		carbonate veinlets up to 1cm wide									
		120' banding at 50°									
		- massive, slightly laminated, and light and dark spotted chert beds									
		- becoming darker downhole, more graphite									
127	150.7	GRAPHITE-CHERT IRON FORMATION, little magnetite, very dark numerous graphitic									
		slips, zones									
		- 127.9' graphite with sphalerite seam, stringers of sph, gal									
		-po, py, cpy stringers at 130', 131.2'									
		-130' banding at 55°									
		- 132.5' large bleb of sulphide, py, cpy, sph, cut by stringers of sph, gal, cpy									
		- pyrite coats many bedding plane slips									
		- sphalerite stringers at 134', 134.8', 136.2'									
		- sph seams with graphite at 137.9'									
		- 145.5' trace cpy with po.									
		- disseminateions, seams py, sph, cpy, po, 148-150.5' (15% sulphide)									
		- 150' banding at 45° to 50°									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 7

FROM – TO		DESCRIPTION	SAMPLE No.	FROM – TO		SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
150.7	177.6	CHERT MAGNETITE IRON FORMATION, light to dark chert with thinner beds of magnetite									
		up to 3cm thick									
		- magnetite often has disseminated po throughout									
		160' banding at 60° to C/A									
		170' banding at 55° to C/A									
		- increase in po from 170'-177.6'									
		trace sph at 175.6' with carbonate veinlet									
177.6	180.5	CHERTY IRON FORMATION, somewhat brecciated, abundant sulphides in seams up to									
		7cm wide, mainly po but with disseminations, stringers cpy, sph, minor py									
		- 180' banding at 60° to C/A									
180.5	181.1	FELDSPAR PORPHYRY DYKE, occassional quartz eye									
		- cut by carbonate veinlet with sph.									
		- upper contact at 20°, lower contact at 55°.									
181.1	182	CHERTY IRON FORMATION, with seams po, stringers py, sph, trace galena.									
182	182.5	FELDSPAR PORPHYRY, as above, upper contact irregular, lower contact at 50°									
182.5	183	CHERTY IRON FORMATION, with stringers py, sph, disseminated sph.									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 8

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
183	183.9	BRECCIATED CHERTY IRON FORMATION AND FELDSPAR PORPHYRY									
		- porphyry runs almost parallel to core axis									
		- iron formation contains sph stringers									
183.9	194.5	FELDSPAR PORPHYRY, medium grey, quite porphyritic									
		subhedral to anhedral feldspars up to 3mm, irregular lower contact at ~55° C/A									
194.5	197	CHERTY IRON FORMATION, with dusting of sphalerite									
		- stringers of po, py									
		195.5' sph in carbonate veinlet									
		196.9' seams of py									
197	201.9	CHERT-MAGNETITE IRON FORMATION									
		minor po associated with magnetite									
		199' banding at 75° to C/A									
201.9	209.1	CHERTY IRON FORMATION, with minor seams of sulphide									
		- 201.9 - 202' sph, cpy									
		- 202.2'-202.7' seams, disseminations of py, sph, cpy									
		203'-204.2' seams stringers sph, gal, cpy, po									
		205' sph, gal, seams with graphite									
		207'-208.2' sph patch cut by 2cm carbonate stringer with cpy at 208'									

LOGGED BY: D. Mullen DATE: May 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 9

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
201.9	209.1	CON'T									
		208.4' po seam									
		208.5' py seam with chlorite									
209.1	218.6	CHERT MAGNETITE IRON FORMATION, minor sulphides, chlorite seams									
		- minor seams po, py some associated with magnetite bands									
		210.8' fault with sph, cpy, po, chl.									
		217.9' pinkish quartz-carbonate vein									
218.6	222.5	MAFIC DYKE, fine grained, dark green, massive, minor carbonate chill at upper contact at ~40° to C/A, lower contact broken									
222.5	229.3	CHERT-MAGNETITE IRON FORMATION, minor chlorite seams up to 4cm wide often containing banded pyrite									
		- po disseminated in magnetite bands									
		226.6 - 227.1 disseminated sph in chert and carbonate veinlets									
		228' banding at 45° to C/A									
		- carbonate veinlets appear to be thicker									
229.3	233.8	CHERTY IRON FORMATION, with chlorite seams, little magnetite									
		- brecciated from 232'-233'									
		- stringers, disseminations, seams sph, po, py, trace cpy 229.5-231.8'									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 10

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
233.8	239.1	CHERT-MAGNETITE IRON FORMATION, much pervasive green alteration (grunerite?),									
		trace disseminated sph, minor po, py with magnetite									
239.1	240	CHERTY IRON FORMATION, with chlorite seams, chert at 240' looks granular,									
		"cooked up"									
		- seams, stringers and disseminations of sph, py									
		- minor carbonate veinlets									
		- 239.2' banding at 60° to C/A									
240	257.2	QUARTZ-FELDSPAR PORPHYRY, chlorite spots at contact									
		- vaguely porphyritic, much carbonate alteration, light grey,									
		- upper contact at 65°, vague lower contact at ~45°									
		- somewhat banded at 256'									
257.2	267	CHERTY IRON FORMATION, minor graphite which increases downhole, chert much									
		darker and appears more foliated									
		- interbedded with medium greenish-grey to dark buff coloured, thick to thin									
		granular - "oolitic Looking" mafic units									
		- 263' podular pyrite in graphite									
		- 266-267' sph, py stringers									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 11

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
267	268	MAFIC DYKE(?) fine grained, grey-green, broken contacts									
268	276	GRAPHITIC CHERTY IRON FORMATION									
		- 269.5 - 270', recrystallized nodular pyrite with graphite									
		- trace sph at 271-271.6', 272.8'									
		- disseminated py throughout, occassional py seams with graphite.									
276	284	QUARTZ PORPHYRY, minor feldspar, light grey, massive									
		- numerous qtz eyes up to 3mm near contact									
284		END OF HOLE									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-02 PAGE No. 12

PROPERTY Cunningham 42 PROJECT 988 **Texasgulf** CONTRACTOR Bradley Bros. START 23/5/79 FINISH 24/5/79

HOLE No. Cu-79-03 LAT. _____ DEP. _____ ELEV. _____ LOC. L1+45 W @ 1+00 N AZ. 000 ANGLE -45° at collar -44° at 166' (corrected) DEPTH 166' CASING 2'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS	AVERAGES AND REMARKS
0	2	CASING						
2	4.5	CHERT FRAGMENTAL, chloritic matrix, dark green, broken core, minor po, py						
4.5	6	MAFIC DYKE? dark green, fine grained, broken contacts						
6	13	CHERT FRAGMENTAL, chloritic matrix, dark green						
		- some chert beds (not clasts)						
		- foliated at 60° to C/A						
		- 10', trace sph, po, cubes py, occassional py stringer						
13	23	CHERTY IRON FORMATION, interbedded chert and chlorite bands with much po, py						
		- occassional chert fragment in chlorite band						
		- 14.8' - 15', sph, galena, py seams						
		seams of po with minor cpy, sph, py, 16.2-17', 17.5-18', 18.5-20', 21-21.5'						
23	38	CHERT FRAGMENTAL, as before, chlorite matrix, subangular chert clasts up to 5cm						

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cummingham 42 HOLE No. Cu-42-03 PAGE No. 1

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
23	38	CON'T									
		- very fractured chert bed from 24'-24.5'									
		- sulphides throughout section, mainly po but with minor disseminated cpy									
		- some pyrite seams, stringers									
		- disseminated sph at 25.4', 26', 28'									
		- stringers of sph at 30.8' with carbonate vein									
		- appears to be an increase in carbonate veining downhole									
		- 32.5' - 38' disseminated and stringer sph, minor gal, cpy									
		32' banding at 50° to C/A									
38	39.8	CHERT MAGNETITE IRON FORMATION, minor disseminated po throughout magnetite									
		bands, seams chlorite									
39.8	40.6	MAFIC DYKE, fine grained, dark green, broken contacts									
40.6	42	CHERT FRAGMENTAL, as before, stringers, disseminations, seams sph, po, gal									
		stringers of cpy									
42	45.7	FAIRLY MASSIVE SULPHIDES, minor chert bands, seams of sph, gal, cpy, po, py,									
		in chloritic matrix, 65% sulphides									
45.7	47	CHERTY IRON FORMATION, with minor stringers of po, py, sph, cpy throughout									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. C-42-03 PAGE No. 2

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
45.7	47	CON'T									
		- minor chlorite									
47	48.3	MAFIC DYKE, fine grained dark green, chloritic, massive, broken contacts									
48.3	49.6	FAIRLY MASSIVE SULPHIDES with chloritic seams,									
		- mainly po with minor py, sph									
		- py cubes at contact with mafic dyke									
49.6	51.4	CHERTY IRON FORMATION, disseminations and stringers of po, sph, py, throughout									
		section, initially brecciated									
51.4	57.3	INTERBEDDED MASSIVE PYRITE, GRAPHITE-CHERT IRON FORMATION									
		- massive pyrite occurs in finely laminated bands from 2 to 10cm									
		thick with minor cpy, sph									
		- laminations at 75° to C/A									
		- graphite beds contain stringers and seams py, sph, gal and nodular py									
		- cut by occassional carbonate stringer with sph, py									
57.3	58.4	MAFIC DYKE, fine grained, dark green, cut by carbonate veinlets									
		- upper contact at ~35°, lower contact broken									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-03 PAGE No. 3

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
58.4	58.8	CHERT FRAGMENTAL, with massive po band									
58.8	61	MAFIC DYKE, as before, upper and lower contact are broken									
61	65.6	CHERT FRAGMENTAL, angular chert fragments cut by stringers of po, py, minor sph, cpy set in a chloritic matrix - minor magnetite at 64.5'									
65.6	77	CHERT-SULPHIDE IRON FORMATION, with many chloritic interbeds - chert is fairly massive, occassionally brecciated, cut by stringers of po,py - sulphides mainly po with py, trace cpy, chloritic matrix 76' - banding at 60° to C/A 76'-77', fairly massive po									
77	86.6	CHERT-MAGNETITE IRON FORMATION, initial 2.5' with stringers of po, py, trace sph cutting very massive chert - becoming interlayered with the magnetite bands with disseminated po - chert has disseminated pyrite blebs throughout									
86.6	96	CHERT-SULPHIDE IRON FORMATION - chert bands interlayered with sulphide-rich chloritic bands 88' - 88.5' massive po with trace cpy, py									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-03 PAGE No. 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
86.6	96	CON'T									
		91.4' - 94' laminated py and minor chloritic bands with py blebs									
		- laminated at 80° to C/A, disseminated sph at 91.4'									
		94.5' - 95' massive py									
		95' - 95.5' massive po									
		- some chlorite bands have small chert fragmetns									
96'	104'	MAFIC DYKE(?) with inclusions of chert, dark green, fine grained chloritic,									
		minor po, py									
104	105.4	GRAPHITIC CHERTY IRON FORMATION, minor laminated py, po, trace sph									
105.4	106	MAFIC DYKE(?) no inclusions									
106	115	GRAPHITIC CHERTY IRON FORMATION, chert somewhat brecciated									
		- stringers, seams, cpy, sph 106.5', 107'									
		- initially graphitic becoming chloritic downhole									
		- po seams at 110?, 114', with chlorite									
		- stringers po, py in chert at 110'?, 112'?									
		- 115 minor cpy									
		- core broken and ground (6' of core for 9' of drilling)									
		- banding at 65° to 80° to C/A									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-03 PAGE No. 5

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
115	119	CHERT-MAGNETITE IRON FORMATION, light to dark chert beds, with thinner									
		magnetite beds, with disseminated po.									
		- green alteration around magnetite bands (grunerite?)									
		- 117' banding at 85° to C/A									
119	120.6	CHERT-SULPHIDE IRON FORMATION, interbedded chert, py, sph, cpy, trace po, gal,									
		- much sph, trace galena with carbonate veinlet at 120'									
120.6	124.5	CHERT-MAGNETITE IRON FORMATION, as before, banding at 75°-85° to C/A									
		- 124.1' carbonate stringer with sph									
124.5	132	GRAPHITIC CHERT-SULPHIDE IRON FORMATION, chert brecciated at 125' - cut by									
		numerous py, po, sph stringers									
		- 125.2' contorted graphitic chert cut by sph stringer									
		- 125.7' - 126.3' massive po with blebs, cubes py, stringer sph, trace gal,cpy									
		- 126.6 - 128' dark chert cut by numerous sph stringers - minor disseminated py									
		- 128' - 129' stringers and disseminations of py in dark chert									
		- 129'-130' stringers of sph, carbonate veinlet with sph, gal, occassional									
		patch cpy									
		- 130' - 132' minor disseminations, seams, po									
		some po has a cubic habit - may be secondary po after py -									
		increase in magnetite at 132'									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-03 PAGE No. 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
132	140.5	CHERT-MAGNETITE IRON FORMATION, very thick chert beds, thin magnetite seams,									
		grunerite? alteration, minor po, occassional carbonate stringers									
1405.	142.1	GRAPHITIC CHERT IRON FORMATION, thin seams py, po with graphitic zones									
		interbedded with chert bands									
		- finely laminated at 85°-90° to C/A									
142.1	152.7	CHERT-MAGNETITE IRON FORMATION, disseminated po in magnetite chert is both									
		light and dark grey as well as being spotted light or dark									
		- 145' - 145.4' chlorite seam									
		- 152' banding at 90° to C/A									
152.7	153.1	GRAPHITIC ZONE, trace py									
153.1	166	CHERT-MAGNETITE IRON FORMATION, occassional thin chlorite seam									
		- light to dark massive to spotted chert									
		- trace po with magnetite bands									
		- 160' banding at 85°-90° to C/A									
		- 164.7' minor py									
166'		END OF HOLE									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-03 PAGE No. 7

PROPERTY Cunningham 42 PROJECT 998 **Texasgulf** CONTRACTOR Bradley Bros START 24/5/79 FINISH 25/5/79

HOLE No. Cu-42-04 LAT. _____ DEP. _____ ELEV. _____ LOC. 1+45W@ 1+00N AZ. 000° ANGLE -70° collar -70° 156' (corrected) DEPTH 186' CASING 2'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS	AVERAGES AND REMARKS
0	2	CASING						
2	7	MAFIC TUFF(?), dark green-dark grey, core broken, some ground occassional chert clast in chloritic matrix, minor blebs, disseminations and seams py, ~ 3' sph, cpy						
7	26	CHERT FRAGMENTAL, rounded chert clasts set in a dark green chloritic matrix, not many fragments - much matrix - minor seams disseminations, patches sph, py, cpy, po - foliated at 50° to C/A - disseminated sph, 15.1', 19.9', 20.5', 23.5' - sph, cpy 17.2' - fairly massive sulphide cpy, py, sph, po, ~21' - 22'-22.5' sph, py disseminations and seams						
26	28	MAFIC TUFF(?), fine grained, dark green, initially well banded at 35° to C/A 26'-26.6' wispy seams sph, minor py 27.5' - 27.9' disseminated sph						

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-04 PAGE No. 1

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
28	31.9	CHERT FRAGMENTAL, little matrix, light grey chert cut by several stringers sph,									
		py, minor po seams and carbonate veinlets									
		- banded at 45° to C/A									
31.9	32.7	MAFIC DYKE(?) dark green, fine grained, disseminations blebs po, faintly									
		banded, inclusion? of chert, could be a mafic tuff									
32.7	34.1	CHERTY IRON FORMATION, minor chloritic seams									
		32.8 sph stringers with carbonate veinlet									
		- chert somewhat brecciated									
34.1	39.8	CHERT-MAGNETITE IRON FORMATION, minor disseminations, stringers po,									
		- grunerite(?) ground magnetite bands									
		- 38' banding at 60°-65° to C/A									
39.8	44.9	GRAPHITIC CHERTY IRON FORMATION, chert somewhat brecciated									
		- section cut by numerous stringers, seams, disseminations of sph, cpy, gal, py									
		- 40.1' coarse grained galena in carbonate vein									
		- minor graphitic zones with seams py, sph									
44.9	46	MAFIC DYKE - dark green-grey, fine grained, chloritic, massive minor po,									
		upper contact at 70° to C/A, lower contact broken									

LOGGED BY: D. Mullen DATE: May 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-04 PAGE No. 2

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
46	49.9	GRAPHITIC CHERTY IRON FORMATION, chert somewhat brecciated									
		- cut by numerous stringers sph, carbonate, disseminated po									
		- minor black, aphanitic chert beds									
		- banding at 70° to C/A									
49.9	73	CHERTY IRON FORMATION, chert initially brecciated									
		- minor magnetite, occassional sulphide seam									
		- black aphanitic chert beds									
		51.8' - black chert appears to be filling a void(?)									
		54.5' - seams sph, cpy, gal, carbonate stringers, minor graphite									
		55.1' - sph, cpy									
		55.8' - contorted graphite with trace sph									
		57.9' fault									
		- numerous breccia zones - 51.9'-58.7', 59.5'-60.2', 61'-61.6', 70.5'-71' plus many narrower ones									
		- breccias consist of angular to subangular chert fragments up to 3cm set in a very dark, fine grained, slightly graphitic matrix									
		64.2' - disseminated po with chlorite wisps									
		68' - banding at 55° to C/A									
		- green alteration (grunerite/) throughout much of the section but very little magnetite									
		70.2' sph in carbonate veinlet									

LOGGED BY: D. Mullen DATE: May, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-04 PAGE No. 3

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
49.9	73	CON'T									
		71.2' - disseminated and seam sph									
73	75.2	CHERT FRAGMENTAL, unusual looking - long stringy seams of chlorite running									
		almost parallel to C/A surrounding elongated chert clasts.									
75.2	78.2	CHERT-MAGNETITE IRON FORMATION, chert brecciated "Tectonic"?									
78.2	79.7	MAFIC DYKE, fine grained, dark green, massive, broken contacts									
79.7	95.5	CHERT MAGNETITE IRON FORMATION, occassional chlorite seam									
		- chert often brecciated, disseminated po, minor py									
		- banding ranges from 10°-50° to C/A									
		- chert spotted									
		88.1' trace sph with chlorite, minor graphite									
		disseminated sph 88.9', 89.8'									
		- last 2' very massive looking									
95.5	98	MAFIC DYKE(?) dark green, fine grained, chloritic, occassional chert inclusion?									
		nebulous contacts									
98	103.2	GRAPHITIC CHERT - SULPHIDE IRON FORMATION, chert cut by stringers and seams py,									

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS	AVERAGES AND REMARKS
98	103.2	CON'T						
		sph, po, gal interlayered with fairly massive py, po , with minor sph, cpy						
		- banding at 70° to C/A						
103.2	135	CHERT FRAGMENTAL - initial 2' the matrix consists of 20% sulphide py, po,						
		trace cpy						
		- sulphides diminish at 105', matirx becomes darker more graphitic						
		- cut by numerous carbonate veins, stringers						
		116' - 118' sph stringers, disseminated py, po						
		121 - po seam						
		127'-128' not brecciated - chert -magnetite iron formation, banding at 70° to						
		C/A becomes less graphitic toward 135'						
135	158.3	CHERT-MAGNETITE IRON FORMATION BRECCIA, magnetite increases downhole, many						
		brecciated sections 138.4-139.1', 141-143.3', 144.1-145.2', 150.5-152',						
		152.7-154.5', 157-158.3'						
		- disseminated po throughout breccia sections, dark matrix slightly graphitic						
		- 143.7 carbonate veinlet with sph						
		- 145' banding at 25° to C/A						
		- large dark laminated chert clast at 151.8'						
		- banding at 25°-35° in laminated chert unit at 157'						
		- 157.9' trace cpy with po						

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS				AVERAGES AND REMARKS
158.3	183	CHERTY IRON FORMATION, several chloritic seams									
		- several breccia and graphitic zones									
		160'-161' stringers disseminations sph, gal, minor po, py carbonate stringers									
		165.3'-167.5' stringers seams sph, gal in breccia zone with carbonate veinlets									
		168'-169' chert fractured and carbonated									
		172.2'-173.2' graphitic zone with seams py, po									
		175' banding at 50° to C/A									
		177' - 179' brecciated chert with minor po, chloritic matrix									
		179.8'-180.1' brecciated, stringers py disseminated po graphitic matrix									
		181-182.5' brecciated, disseminated po, py, graphitic matrix									
		182.3' sph stringers									
183	186	CHERT-MAGNETITE IRON FORMATION, well banded, green alteration throughout									
		(grunerite?), chloritic fractures, spotted chert									
		- 185' banding at 70° to C/A									
186		END OF HOLE									

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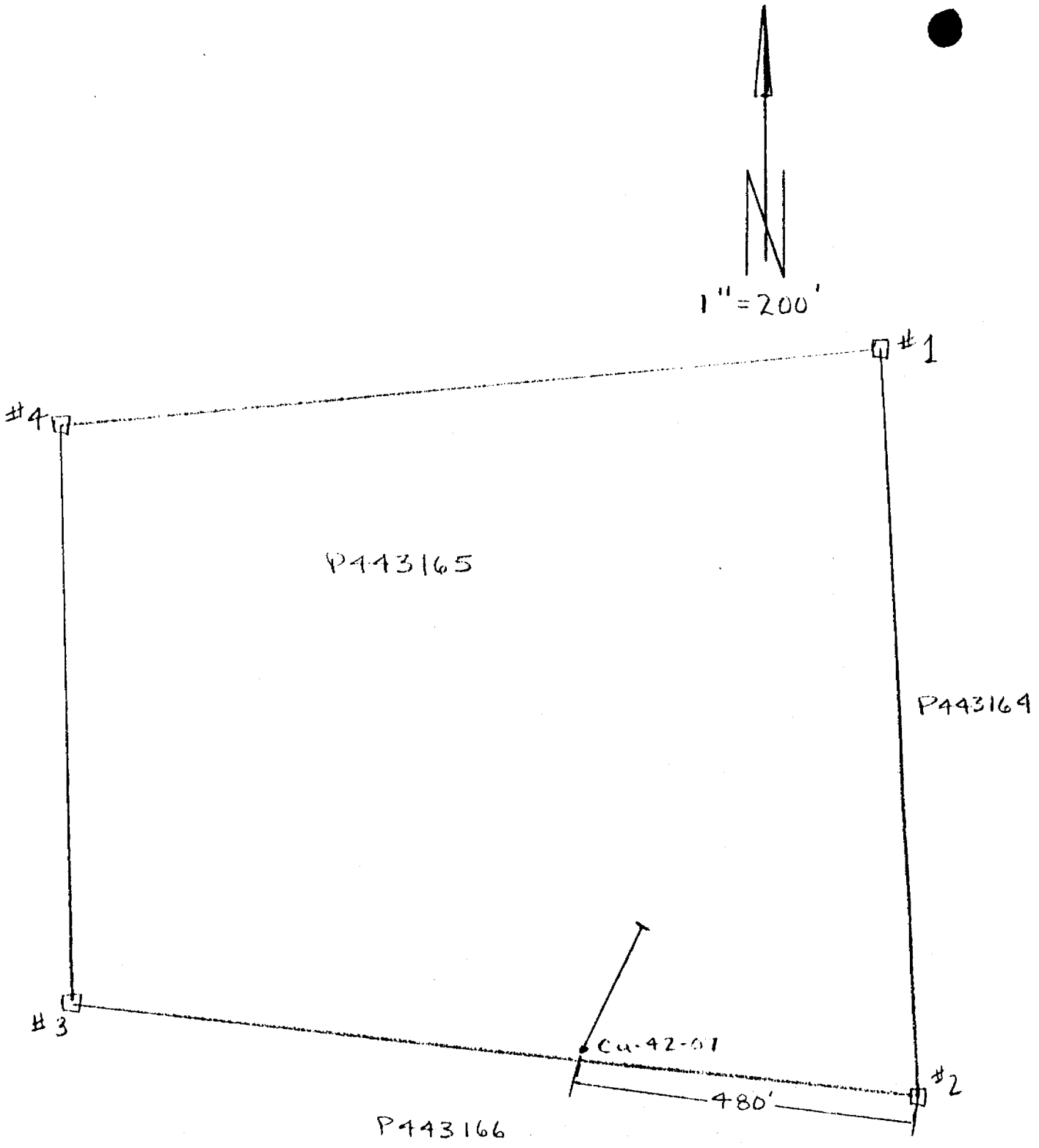

DRILL HOLE LOCATION for Cu-42-01
CUNNINGHAM TWP.

PROPERTY Cunningham 42 PROJECT 993 **Texasgulf** CONTRACTOR Bradley Bros START 31/5/79 FINISH 3/6/79

HOLE No. Cu-42-07 LAT. _____ DEP. _____ ELEV. _____ LOC. 4+70W; 0+70N AZ. 025° ANGLE Collar-80° DEPTH 251' CASING 14.5'

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES AND REMARKS
0	14.5	CASING									
14.5	28.8	MAFIC VOLCANIC (?), TUFF (?), fine grained, dark grey-green, minor foliation									
		at 55° to C.A., odd siliceous clot, minor pyrite, carbonate veinlets									
		- grades into banded very siliceous section from 27'-28.8'									
28.8	29.8	MAFUC TUFF (?), becoming very siliceous towards 29.8'									
		- quartz-carbonate veinlet at 28.9'									
29.8	32	FELDSPAR PORPHYRY, very finely porphyritic, medium grey, siliceous matrix									
		- very nebulous contacts									
32	33	SILICEOUS TUFF, very fine grained, medium to dark grey									
		- banding at 50° to C.A., minor py									
		- 32.8' quartz-carbonate vein									
33	38.5	FELDSPAR PORPHYRY, very finely porphyritic, very siliceous									
		- upper contact vague but appears to be at 50° to C.A.									
		- lower contact at 35° to C.A.									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES AND REMARKS
38.5	50.4	INTERBEDDED MAFIC TO FELSIC TUFFS, felsic component somewhat sericitic,									
		mafic component chloritic									
		- lighter coloured carbonate-rich zone 42.8'-43.2'									
		- banding at 50° to C.A.									
		- minor py with mafic tuff									
50.4	56.2	MAFIC TUFF, carbonate rich, chloritic, occasional siliceous clot									
		53.2' - sph with carbonate "breccia"									
		55.5' - disseminated, stringer py									
		56' - contorted									
56.2	64.8	FELSIC TUFF (?), possibly fine grained(?), cherty lamination									
		- contains clasts (?) of feldspar porphyry									
		- feldspar phenocrysts in medium grey, fine to very fine grained matrix									
		at 61.4', 62'									
		59.2'-60', carbonate zone with disseminated sph, galena, py									
		63' - banding at 55° to C.A.									
64.8	68	MAFIC TUFF, with siliceous fragments grading into banded "cherty" tuff,									
		minor py									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES A REMARKS
68	71	MAFIC TUFF, with chert fragments up to 5cm grading into a cherty tuff,									
		disseminations py									
		- 69' black chert clast with sph									
71	91.5	MAFIC TUFF (CHERT FRAGMENTAL) very carbonated dark green chloritic matrix									
		with minor chert clasts									
		- minor py, po									
		- foliated at 40° to C.A.									
		- becomes rather non-descript massive looking from 81'									
		- carbonated zones are "splotchy" looking									
91.5	97.6	CHERT FRAGMENTAL. chert fragments set in a chloritic matrix									
		- carbonate throughout									
		91.8' carbonate veinlets with sph, stringers sph, disseminated py									
		- becoming more massive downhole, chert beds, po seams									
		- minor argillaceous zone									
		- 96.5' disseminated sph, stringers py									
		- 97.3' - very dark chert cut by carbonate veinlets									
97.6	103.5	CHERT-MAGNETITE IRON FORMATION, initial magnetite band with much po, chlorite,									
		minor brecciation, po stringers in chert									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES AND REMARKS
103.5	113.6	MASSIVE TO SEMI-MASSIVE SULPHIDE, interbedded with minor chert fragmental and									
		occasional chlorite seams, graphite, carbonate									
		- sulphides consist mainly of finely laminated py with minor po, disseminated									
		and stringer sph at 105.5', 106.5', 109.7', 113.5',									
		- laminated at 50° to C.A.									
113.6	122	CHERTY IRON FORMATION, with chlorite seams carrying po, sph, cpy									
		- py stringers cutting light grey chert at 113.6'									
		- sph stringers 118' - 118.5', 119.5'									
		- stringers cpy, sph, galena, 120-212', 121.6' with carbonate veinlets									
122	135.5	CHERT MAGNETITE IRON FORMATION, light coloured chert with black spots,									
		disseminated po throughout magnetite bands and chlorite seams									
		- 122.8' actinolite rosette									
		- 126' banding at 50° to C.A.									
		- 130.4' - 131.1' po-rich section									
		- 132.4' disseminated cpy with po									
		- some green alteration grunerite?									
135.5	140.1	CHERTY IRON FORMATION, well banded, chlorite bands with disseminated po									
		quartz carbonate veins at 135.9', 136.2'									
		disseminated sph at 136' , 138.5'-140'									

LOGGED BY: D. Mullen DATE: June, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-07 PAGE No. 4

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES A' REMARKS
135.5	140.1	CON'T									
		139.7-140' large carbonate veinlet with stringer sph, galena									
		140-140.1', fairly massive sph with galena, cpy									
140.1	142.3	MASSIVE PYRITE, finely laminated at 55°-60° to C/A									
		- minor chert band at 142'									
142.3	149	GRAPHITE-CHERT-SULPHIDE IRON FORMATION, finely laminated massive to semi-									
		massive pyrite interlayered with dark graphitic and light coloured chert									
		- laminated at 50° to C/A									
149	152.4	CHERT-MAGNETITE IRON FORMATION, light chert,									
		150.2' py with chlorite zone									
		150.6' disseminated sph									
		150.8' - sph in carbonate veinlet									
152.4	158.3	GRAPHITIC-CHERTY IRON FORMATION, minor chlorite beds									
		- cut by py stringers									
		- sph stringers 152.4'-152.6', 153.7'									
		- disseminated sph at 155.8'									
		153.4' coarse galena with py stringer in graphitic zone									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES REMARKS
158.3	158.7	FELDSPAR PORPHYRY, medium grey, odd quartz phenocrysts, sparsely porphyritic									
158.7	161	CHERTY IRON FORMATION, minor chlorite, graphitic argillite,									
		minor quartz phenocrysts, pink alteration									
		- minor brecciation									
		- banding at 60° to C/A									
161	178	FELDSPAR PORPHYRY, core very broken, full of chloritic fractures									
		minor quartz phenocrysts, pink alteration									
		- medium grey feldspar phenocyrsts up to 3mm, quartz phenocrysts to 1.5mm									
		- upper contact broken, lower contact at 40° to C/A									
178	181.6	CHERT-MAGNETITE IRON FORMATION, initially brecciated with much disseminated									
		sph, minor galena, cpy.									
		- disseminated po associated with magnetite bands									
		- odd chlorite seam, fracture									
		- actinolite rosettes 180.5' - 180.9'									
		- 181.1' black aphanitic chert, appears to be filling a void									
181.6	201	GRAPHITIC CHERTY IRON FORMATION, very dark graphitic chert									
		with minor chlorite seams, minor magnetite									
		- minor lighter coloured carbonate rich zones									

LOGGED BY: D. Mullen DATE: June, 1979 PROPERTY Cunningham 42 HOLE No. Cu-42-07 PAGE No. 6

FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES REMARKS
181.6	201	CON'T									
		sulphides mainly in graphitic sections, finely banded at 55° to C/A									
		191' - disseminated cpy, stringers sph, trace galena									
		196' disseminated cpy, with po seams									
		198.5' sph stringers									
		- chert breccia 199.8' - 200.8'									
		- stringers disseminations sph 199.8'-200.3', 200.7'									
201	214.6	CHERT MAGNETITE IRON FORMATION, carbonate rich chert bands									
		- magnetite bands with disseminated po, minor chlorite seams									
		- 211 banding at 50° to C/A									
214.6	215.1	MAFIC UNIT, dyke(?), fine grained, dark green, chlorite full of tiny light									
		coloured euhedral crystals, leucoxenes?									
215.1	251	CHERT-MAGNETITE IRON FORMATION, little magnetite initially,									
		increasing downhole. light-dark chert, spotted cherts									
		- disseminated po in magnetite									
		- minor brecciation, po stringers, carbonate veinlets									
		- 228' - minor fault									
		- green alteration - (grunerite?) throughout									
		- 230' banding at 45° - 50° to C/A									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES AND REMARKS
215.1	251	CON'T									
		243.5' - disseminated sph									
		245' banding at 65° to C/A									
251		END OF HOLE									

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FROM	TO	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE LENGTH	ASSAYS Cu	Zn	Pb	Ag	AVERAGES AND REMARKS
215.1	251	CON'T									
		243.5' - disseminated sph									
		245' banding at 65° to C/A									
251		END OF HOLE									

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TEXASGULF CANADA LTD.

CUNNINGHAM 42

DIAMOND DRILL HOLES

Date of Survey 07 / 06 / 79	Drawn By D. E. Lyst
Survey By D. Mullen	N.T.S. 41 - 0 / 10

0 200' 400' 600' 800'
Scale 1" = 200'

KEY MAP Scale : 1" = 8 miles