85-348-14593

REPORT ON DIAMOND DRILLING
AT THE PROPERTY OF
CONSOLIDATED CINOLA MINES LTD.
ENERGY RESERVES CANADA (METALS) LTD.
NOVEMBER - DECEMBER 1984

03/86

CINOLA CLAIM GROUP
GRAHAM ISLAND, B.C.
SKEENA MINING DIVISION
LAT 53°32' N
LONG 132°13' W
NTS 103 F 9E

BY

FILMED

K.G. SANDERS P. ENG.
MAY 29, 1985
FOR ASSESSMENT REQUIREMENTS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,593

03/86

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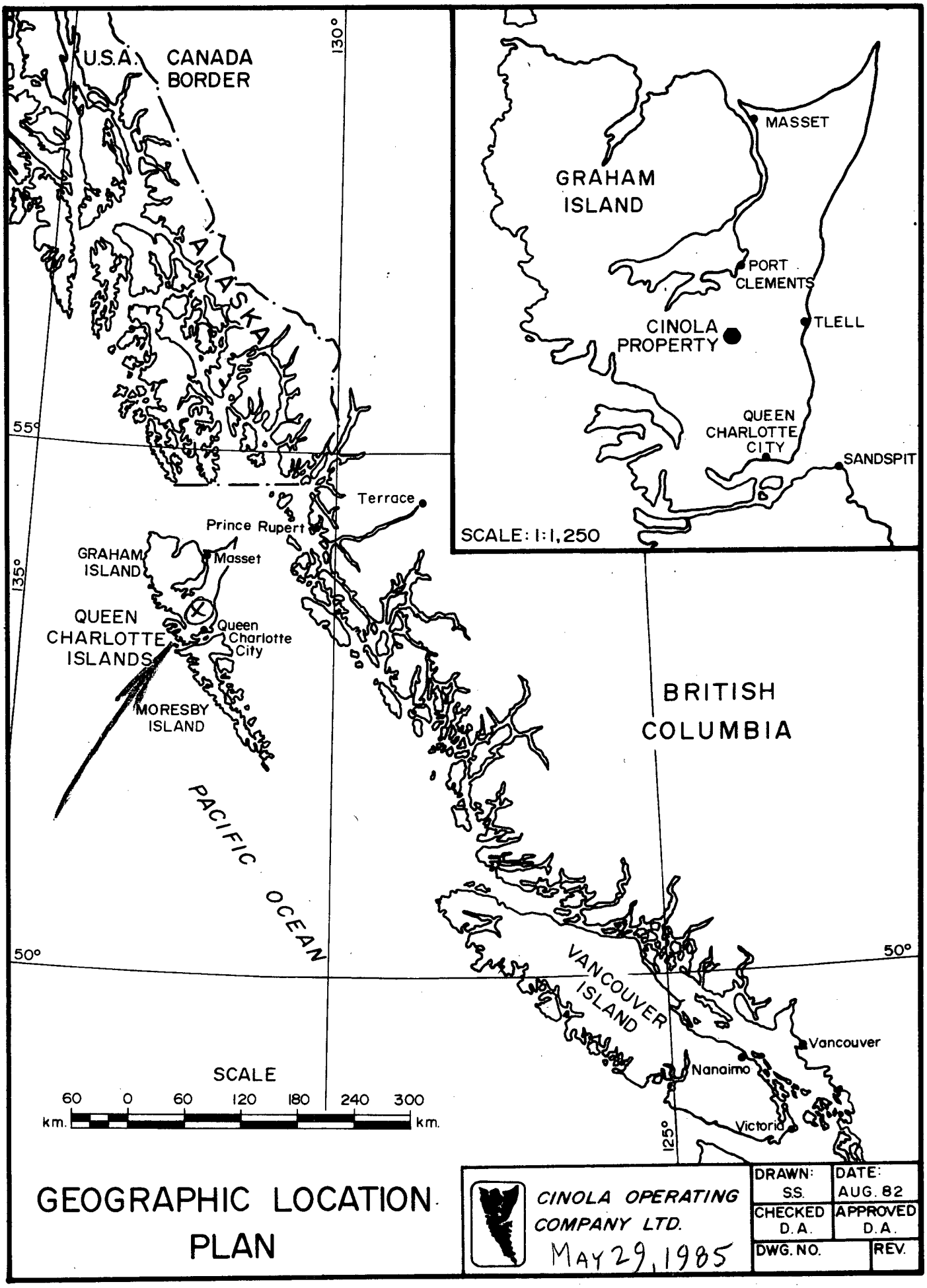


GEOGRAPHIC LOCATION PLAN

CINOLA OPERATING COMPANY LTD.

MAY 29, 1985

DRAWN: S.S.	DATE: AUG. 82
CHECKED D.A.	APPROVED D.A.
DWG. NO.	REV.

SUMMARY:- This is a report on diamond drilling on the Cinola claim group on Graham Island carried out in November and December of 1984. Fourteen BQ daimond drill holes were completed for a total of 917.4 metres. The cost of the program for assessment purposes is calculated at $81.75 per metre. Maps, core logs and a cost statement are included in this report.

CLAIM GROUP LOCATION AND ACCESS:- The claims are on Graham Island in the Queen Charlotte Islands and lie at 53°32" N lat. and 132°13' W long. (NTS 103 F 9E). Access is by daily jet service from Vancouver to Sandspit and thence by good public and private logging roads. A B.C. Ferry also operates twice weekly between Prince Rupert and Skidegate Landing.

CLAIM DATA:_ See Page 3.

K.B.

3.

420-

SUB-RECORDER
RECEIVED
MAR 5 1985
M.R. # ..... $ .....
VANCOUVER, B.C.

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH–TITLES DIVISION
MINERAL ACT

STATEMENT OF EXPLORATION AND DEVELOPMENT

I, KENNETH G. SANDERS (Name) — Agent for ENERGY RESERVES CANADA (METALS) LTD. CONSOLIDATED CINOLA MINES LTD. (Name)

440-625 HOWE ST. (Address) — 440-625 HOWE ST. (Address)

VANCOUVER, B.C. V6C 2T6 669-1524 — VANCOUVER, B.C. V6C 2T6 669-1524

Valid subsisting F.M.C. No. SANDKG — Valid subsisting F.M.C. No. CONCIM

STATE THAT

1. I have done, or caused to be done, work on the CINOLA GROUP COMPRISED OF BABE 1-8 INCL., BABE 9-17 INCL., BABE 18-23 INCL., BABE 24-29 INCL., BABE 30-32 INCL., RIC 1-12 INC., RIC FR. 20-26 INC. Claim(s)

Record No.(s) 34966-73, 35222-30, 36578-83, 36601-06, 36746-48, 36589-600, 36739-45

Situate at GRAHAM ISLAND in the SKEENA Mining Division, to the value of at least 75,000 dollars. Work was done from the 1 ST. day of SEPTEMBER 19 84, to the 31 ST. day of DECEMBER 19 84

2. The following work was done in the 12 months in which such work is required to be done:

(COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)

A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by section 13 of regulations.)

	COST
TOTAL PHYSICAL	

I wish to apply $ ..... of physical work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

DRILLING SUMMARY:- Fourteen BQ holes were completed for 917.4 metres in the period November 19, 1984 to December 16, 1984. Two BBS #1 surface drills were supplied and operated by two drilling contractors - Calar Developments Vancouver B.C. and Core Enterprises, Smithers B.C. All monies were paid to Calar. The holes were numbered 84-4 to 84-17 inclusive.

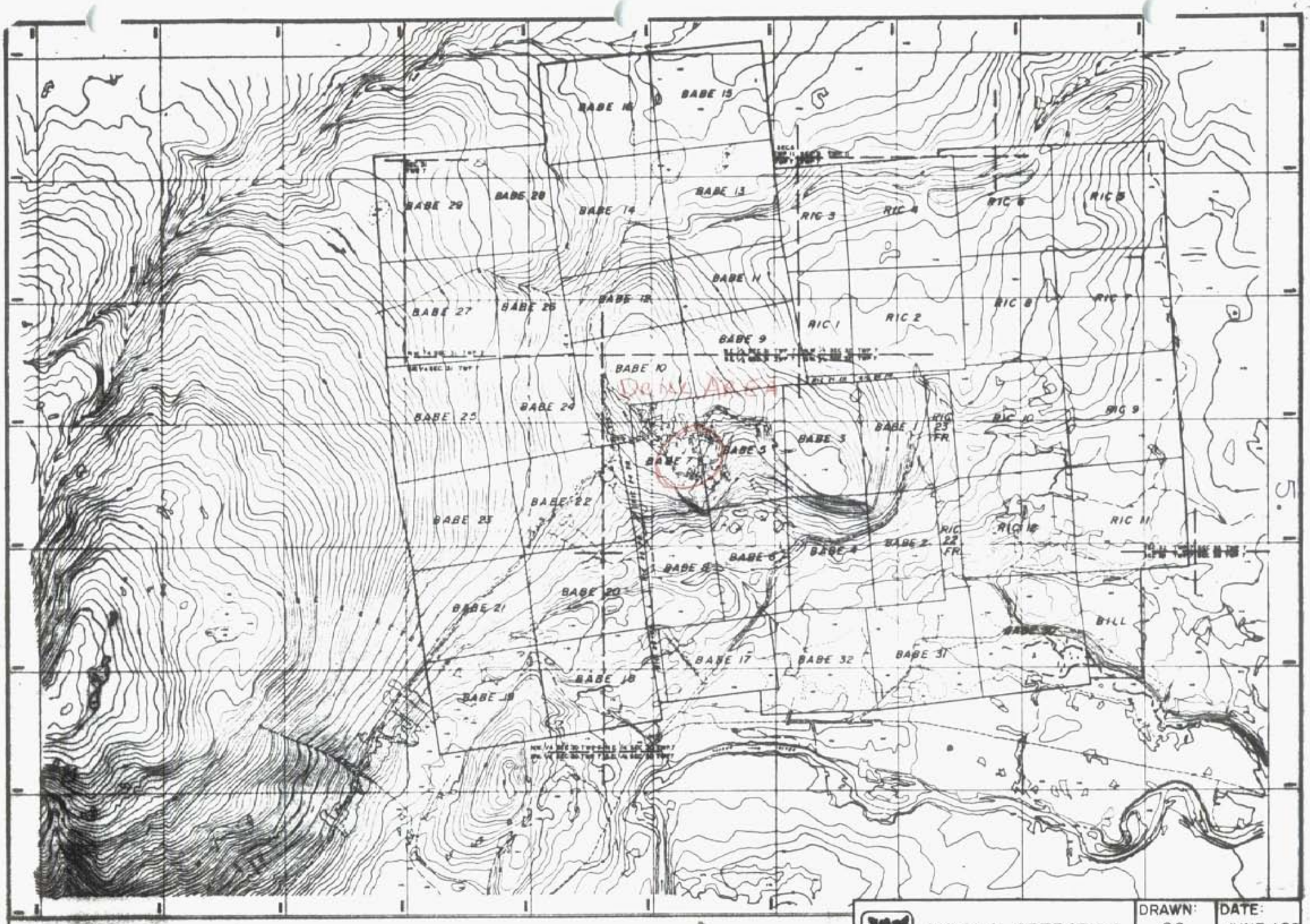
The core was logged by E.A. Ostensoe, consulting geologist, and was assayed at Chemex Labs Ltd. in North Vancouver B.C. All split core is stored at the property.

COST STATEMENT:- The total value of the work to be filed is $75,000 as per Statement of Exploration and Development filed on March 5, 1985 in Vancouver B.C. We have used $81.75 per metre for assessment purposes and include invoices to cover the full amount.

Respectfully submitted by

K.G. Sanders

K.G. Sanders, P. Eng.
May 29, 1985



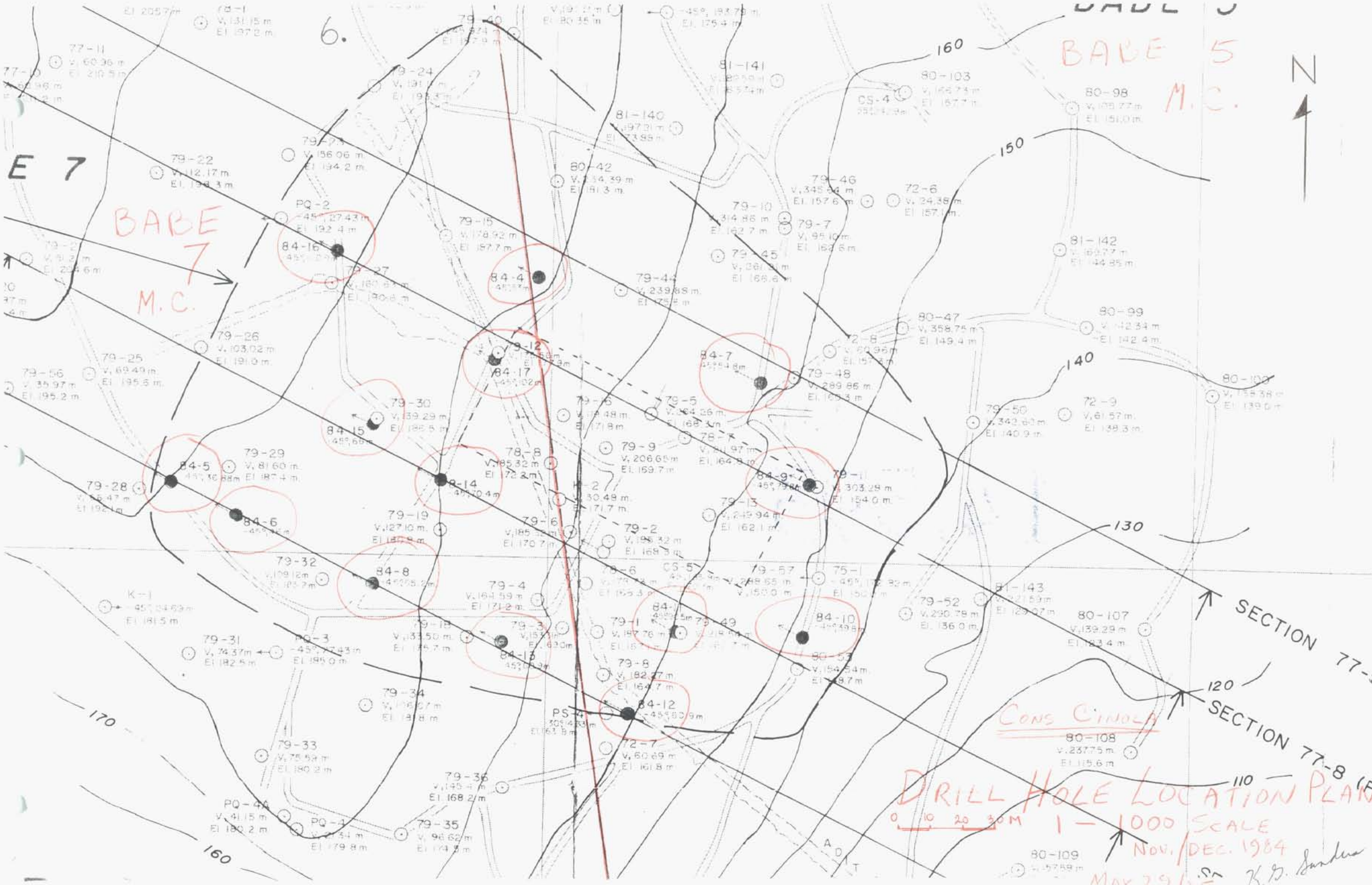
MINERAL CLAIM MAP

SCALE 1:20,000

0 250 500 1000 m.

CINOLA OPERATING COMPANY LTD.

DRAWN: S.S.	DATE: JUNE / 80
CHECKED S.S.	APPROVED S.S.
FIGURE NO. 1-3	REV. 3


BABE 7 M.C.
BABE 5 M.C.
N
160
150
140
130
120
110
170
SECTION 77-8
Cons Cinder
DRILL HOLE LOCATION PLAN
0 10 20 30 M 1 — 1000 SCALE
Nov./Dec. 1984
May 29/85
K.G. Sandra

6.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,593

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 2 (Unsurveyed)

CINOLA PROPERTY

HOLE No. 84-4

METRES NORTH 2886.5 ELEVATION 180 m BEARING 296°30' DEPTH 53m 174 ft STARTED Nov. 19, 1984 COMPLETED

DIP AT COLLAR -45°

DIP AT

Hor. component 37.5m

METRES EAST 3196 SECTION DIP AT DRILLED BY CALAR LOGGED BY E.A.O.

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	10.25		Overburden - mud, debris and 40cm to 60cm sections of									
			siliceous mottled rock, possibly rhyolite breccia; some green andesite									
			separated by sections of mud-gravel-sand									
10.25	13.80		Weathered very siliceous dark grey fragmental rock - cherty	high	mod	mod	mod	80744C	10.25	12	0.044	80744C
			matrix conglomerate with pyrite. Numerous rusty cross fracture						12	14	0.044	
			with surface weathering effects, sub-rounded clasts, numerous						14	16	0.092	
			small vugs. Plant remnants from 12.6 to 13.80						16	18	0.108	
13.80	14.86		Quartz vein zone - banded vuggy grey-ivory-cream						18	20	0.014	
			coloured, short sections of grey cherty rock. some vugs						20	22	0.030	
			filled with clay, others empty. Banding 25° ∧ CA						22	24	0.047	80750C
14.86	15.07		Dark grey angular fragmental chert formation						24	26	0.048	80603C
15.07	16.00		Mixed banded quartz-veins with dark chert. Some						26	28	0.026	
			box-work/open silica veinlet patterns						28	30	0.065	
16.00	22.55		Dark grey silicified conglomerate - clasts are mostly chert	v. high	mod	mod	low		30	32	0.075	
			but include rhyolite (ivory-brown), granite, argillite. Much						32	34	0.006	
			plant fragments at 17.28 to 18.50. clast sizes 3 to 5cm						34	36	0.007	
			2cm mud seam at 17.60 - 17.62.						36	38	0.068	
			At 21.73 to 21.86 probable dyke - green porphyritic andesite						38	40	0.032	80610C
22.55	30.78		Very siliceous section - vein quartz in part vuggy									
			and in part brecciated. Short sections, i.e. 10-20 cms, of									
			siliceous sst - mudstone. Very high content of voids from 25.9 to									
			27.80 with Q xls lining some, also at 28.50 to 28.70; 29.40-30.10									
			open box work texture at 29.64 to 29.90. QV 29.90 - 29.93 - obliquely									
			across core at 25° ∧ C.A. silicified sandy bed at 30.23 to 30.48 - small									
			-rounded lapilli like clasts of rhyolite with v.f.gr. black silicified argillite.									
30.78	35.62		Q-chalcedonic textures 30.48 to 30.78 with brecciation.									
			Coarse sub-rounded clasts in cherty to sandy matrix. Clasts are									
			between 3 and 5cm dia, and many are pitted - apparently of									
			volcanic origins. Bdg approx perpendicular to CA. A few									
			diorite pieces. Probable andesite dyke 33.25 to 33.51. Very									
			coarse angular frag'l sst at 33.56 to 33.74.									
			34.40 to 35.60									
35.62	37.80		Coarse densely packed conglomerate with matrix similar to clasts.									
37.80	38.20		Fine to medium grained sandstone									
38.20	40.60		Coarse cgl. grading to medium grained cgl. Some									
			plant material. Bedding @ 35° ∧ C.A.									
			38.85 to 40.60 relatively homogeneous bed of pea-									
			gravel in sandy matrix. Some rhyolitic frags. Silicified.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84 - 4

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____
DIP AT _____
DIP AT _____

METRES EAST _____ SECTION _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	METRES To	ASSAYS Au	ASSAYS Ag
40.60	41.00		V. strong vein quartz - banded white - grey and black	V.high	low	nil	nil		40	42	0.139	80611C
41.00	41.92		Black silica fragments - angular breccia. Some compound						42	44	0.026	
			clasts - some are outlined by marcasite						44	46	0.024	
			rims 1-2mm thick. 2-3% voids.						46	48	0.030	
41.92	45.50		Heterogeneous unsorted coarse sandstone with	high	med	med	-		48	50	0.080	
			lapilli, rhyolite, argillite. Few much larger diorite cobbles to 12cm						50	52	0.384	80616C
			V. fine grained chalcedonic quartz banded at 68° ∧ CA						52	53	0.098	80617C
			Coal pieces.									
45.50	46.00		All finer grained material - agate-like banding with									
			some cavities lined with clear Q xls. Mostly black chert									
46.00	47.00		Medium grained conglomerate with coal layers, banding very									
			inconsistent									
47.00	48.28		Almost entirely quartz - crusty vein quartz, silicification	V.V.high	tr.	nil						
			black chert									
48.28	49.45		Tuff - agglomerate - silicified. Dark grey									
49.45	50.00		Chalcedonic quartz veining - banded, vuggy.									
50.00	53		Mixed coarse conglomerate with volcanic and									
			diorite clasts, short sections of vein quartz - 50.90 - 51.33									
			51.67 - 52.34 Section 52.34 - 53 is conglomeratic mush.									
			E.O.H.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 1. (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-5

METRES NORTH 2823 N ELEVATION 192 m. BEARING 236°30' DEPTH 36.88 m 121 ft STARTED Nov. 21, 1984 COMPLETED

DIP AT 0m -45°
DIP AT
DIP AT

METRES EAST 3083 E SECTION DRILLED BY CORE ENT. LOGGED BY E.A.O.

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	0.8		Overburden					0.6	0.8	2	0.054	80551C
0.8	2.0		Rust-stained fragmental formation. Light grey, subrounded particles						2	4	0.048	
			up to 2cm diameter. Strongly pyritic. Vuggy. Possibly tuff. Some					0.1	4	6	0.047	
			siliceous grains - possibly rhyolite.						6	8	0.055	
2.0	4.52		As above but less weathered. Very coarse heterogeneous cgl.	Mod.	1-2%	minor	minor		8	10	0.044	
			Bedding is weakly expressed. Core is pitted with vugs. Pyrite						10	12	0.073	
			is present as very finely divided grains, occasionally as rounded clasts 3mm dia.						12	14	0.079	
			Coal/plant remains at 4.20 – 4.52						14	16	0.038	
4.52	5.23		Quartz vein with wall rock breccia pieces; Druses. White and	v. high	traces	nil	2%		16	18	0.076	
			orange discolouration – clay minerals fill pits and other small cavities						18	20	0.065	
5.23	10.95		Coarse conglomerate - subrounded clasts up to 6 to 10cm dia. in matrix	high	up to 10%	minor	minor		20	22	0.055	
			of silica, pyrite and argillaceous fragments, some coaly wood pieces						22	24	0.053	
			Clasts are mixed - sandstone, rhyolite fs porphyry, diorite (?). Some						24	26	0.022	
			drusy vugs 3cm dia. Qtz vein at 7.23 – 7.46 metres. and						26	28	0.018	
			8.33 – 8.56 m						28	30	0.008	
			Mixed qtz and brecciated argillic seds. to 8.84m						30	32	<0.002	
			QV 9.20 – 9.55 - v. drusy. Au specks?						32	34	<0.002	80567C
10.95	13.72		Very strongly silicified argillite with narrow rhyolite tuff						34	36	0.012	80601C
			bands, much drusy chalcedonic quartz in banded ribbon						36	36.88	0.014	80602C
			veinlets with voids. Narrow sections of argillic matrix contain									
			20 – 30% pyrite. Overall pattern is mixed grey-white-black									
			rock.									
13.72	27.50		Rhyolite breccia - grey and mottled grey-white mush									
			of silica. May be a lapilli tuff formation. Few v. narrow									
			dark brown argillic sections – totally silicified. Voids are									
			irregularly distributed – create a crusty appearance. Some sections									
			are siliceous argillite breccia									
27.50	28.30		Dense dark argillite – homogeneous texture, narrow pyritic									
			layers.									
28.30	34.25		Compact black pyritic mud - as above but not silicified									
			very soft spongy mud.									
34.25	36.05		Brecciated siliceous dk brown argillite. Fragments are									
			in-filled with drusy vein quartz - chalcedony									
36.05	36.88		Very pale green-grey rhyolite – crosscut by 2-4mm wide									
			drusy Q veinlets. Crackle pattern.									
			E.O.H									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 1 (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-6

METRES NORTH 2811.5 ELEVATION 187 m BEARING 296°30' DEPTH 46 m / 151 ft STARTED Nov. 1984 COMPLETED

DIP AT COLLAR -45°

DIP AT

METRES EAST 3104 SECTION DIP AT DRILLED BY CORE ENT. LOGGED BY E.A.O.

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	1.52		Overburden.					0.5	1.52	4	0.045	80618C
1.52	4.16		Weathered orange-stained fragmental - silicified agglomeratic						4	6	0.046	
			formation with clasts up to 5 cm dia. Some rhyolite	v high	high	low	high		6	8	0.098	
			fragments. In part strongly pyritic						8	10	0.056	
4.16	8.00		Continuation of above without as much weathering and						10	12	0.106	
			fracturing. Plant matter present as large clasts.						12	14	0.134	
			Strongly pyritic at 6.00 to 6.50 - plants associated						14	16	0.053	
			Vein (?) quartz at 6.87 to 7.25 with black silic'd arg.						16	18	0.178	
8.00	10.00		coarse mixture of dioritic appearing clasts; much finer	High	mod	mod	mod		18	20	0.178	
			material. All silicified. Porphyritic clasts to 4 cm.						20	22	0.069	
			May be a mixed ash-fall - lapilli formation.						22	24	0.066	
10.00	14.78		Mixed siliceous cherty conglomerate - very heterogeneous					0.46	24	26	0.084	80629C
			varies from coarse to v. f. gr. in very short distances. Clasts are						26	28	0.055	
			angular. Some sections contain pyritic mud/chert						28	30	0.121	
14.78	23.60		Pale coloured coarse rhyolitic - tuffaceous conglomerate	high	mod	mod			30	32	0.100	
			with short sections of silicified argillite, sandstones						32	34	0.152	
			Occasional plant fragments and narrow QVs.						34	36	0.122	
			Bedding at 65° ∧ C.A					0.40	36	38	0.116	
23.60	23.80		Black argillite - in part brecciated						38	40	0.034	
23.80	23.86		Quartz vein						40	42	0.055	
23.86	26.68		Fragmental rock - sub-rounded coarse clasts, some finely banded	v high	high	low			42	44	0.080	
			argillite - sandstone - completely silicified. Cut by chalcedonic						44	46	0.068	80639C
			vein quartz including voids and brown quartz; narrow veinlets									
			of granular pyrite/marcasite - framboidal textures, also tiny									
			seams, disseminated grains and short sections with as much									
			as 30% sulphides.									
26.68	29.95		Crushed brecciated rhyolite mixed with argillite and much	v high	mod	low						
?			vein quartz, pyrite layers up to 1 cm wide, Numerous drusy									
			quartz-filled vugs. Banding almost perpendicular to CA									
29.95	37.30	Insert	Rhyolite - with brecciation textures but little									
			evidence of movement. Much quartz. Green rhyolite.									
37.30	43.50		Mixed white vein quartz and black cherty argillite, large									
			proportion of voids.									
43.50	46.		Continuation of above but increasing amounts of									
			whitish-grey rhyolite in crushed angular fragments.									
			Contrasting colours is particularly noticeable. Rhyolite									
			is about 30% maximum.									
			E.O.H.									
			25.25 - 26.60 Fine-medium angular conglomerate. Banding ⊥ CA									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-7

(Unsurveyed)

METRES NORTH 2855N ELEVATION 161 m. BEARING 296°30' DEPTH 54.86 m 180 ft. STARTED Nov. 26, 1984 COMPLETED

DIP AT collar -45°

DIP AT

METRES EAST 3265E SECTION DIP AT DRILLED BY CALDR LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	1		Overburden. Casing to 1.22.					0.6	0	2	0.024	80640C
1	8.90		Coarse v. siliceous mudstone conglomerate. Grey.						2	4	0.010	
			mottled patterns. Fragments are sub-rounded to	High	minor	minor	patchy		4	6	0.024	
			sub-angular. Some clasts are completely kaolinized						6	8	0.018	
			-originally were granitic cobbles. Banding is somewhat						8	10	0.082	
			disorganized. At 4m - ~55° ∧ CA						10	12	0.055	
									12	14	0.064	
8.90	16.15		Heterogeneous sedimentary sequence - clasts include much						14	16	0.141	
			lignite, rhyolite, argillite-chert, granite (?). Some dark brown						16	18	0.110	
			coalified tree pieces are 6 to 8 cm wide with prominent						18	20	0.088	
			growth rings. Some vugs but only a few seams of									
			vein quartz. Banding between 60° and 80° ∧ C.A.									
			Some sandy and silty beds. Possibly rhyolite chips at 15.90-16.08.									
16.15	17.00		Massive white vein quartz cut by 1mm dark grey to black									
			coloured argillic seams. Numerous open vugs lined with									
			quartz xls. Minor amounts of sulphides.									
17.00	17.88		Continuation of vein quartz with about 50% argillic									
			chert. Ribboning pattern of chalcedonic quartz. Some brecciation.									
			Minor amounts of sulphide minerals									
17.88	22.35		Very heterogeneous section of sandy beds, chert fragments	V. high	mod.	mod	minor					
			-angular, rhyolite fragments, plant fragments. Some									
			very dense, dark grey chert or very siliceous (silicified ?)									
			sandstone. Clasts up to 3 cm diameter. Some breccia						20	22	0.156	80650C
			textures. Occ'l pockets of kaolinite. Cross bedding.						22	24	0.142	27751E
22.35	22.90		Fine grained section - sandstone - siltstone.						24	26	0.065	
	25.95		Sub-angular "chips" of mudstone and chert. Similar to						26	28	0.072	
			17.88 - 22.35.					0.20	28	30	0.054	
25.95	31.01		Fine grained arenite, cross bedding, laminated					0.20	30	32	0.157	
			chalcedonic quartz at 28.04 - 28.18.						32	34	0.176	
31.01	36.45		Return to variable textured sandstone series - including						34	36	0.035	
			siltstone, coarse sst and cgl. In part porous ē vugs.						36	38	0.042	
36.45	38.65		Vein quartz - massive 36.70 - 37.00 then very irregular					0.10	38	40	0.076	
			sub-parallel to core axis - drusy textures - with argillite									
38.65	39.45		Siliceous fragmental mudstone with chalcedonic quartz,									
39.45	44.50		some rhyolite clasts, some pitted weathered									
			granitic clasts. Petrified wood. Fine gr. pyrite									
			Bedding 70° ∧ CA.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-7

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____

DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	METRES To	ASSAYS Au	ASSAYS Ag
44.50	52.57		Rhyolite fragments sub angular to sub rounded up to 3 cm diameter in grey siliceous matrix. Frags are partially absorbed.						40	42	0.144	
									42	44	0.022	
									44	46	0.018	
									46	48	0.024	
									48	50	0.032	
									50	52	0.032	277656
									52	54	0.034	
									54	54.86	0.050	277657E
			Also some dioritic fragments but very altered and absorbed. Much white silica in matrix. Short sections of chalcedonic qtz									
52.57	54.86		Pale brown sandstone with abundant plant fragments. Variation from sand size particles to dust and as coarse as 1 cm diameter. Much rhyolite fragments especially from 54.30 to 54.86									
			E.O.H.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 2 (Unsurveyed)

CINOLA PROPERTY HOLE No. 84-8

METRES NORTH 2790 ELEVATION 184 m BEARING 296° 30' DEPTH 55.17 m 181 ft. STARTED COMPLETED Nov. 1984.

DIP AT Collar -45°

DIP AT

METRES EAST 3146 SECTION DIP AT 51.81m = -51°30 DRILLED BY CORE ENTER. LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	14.93		Overburden - bldrs of granite/diorite, porphyry, white vein quartz, carbon rich sediments, cgl.									
14.93	26.90		Siliceous fragmental formation in part weathered and rusty. Fragments include rhyolite, siltstone, wood. Numerous mud seams and water courses with rust and Kaolin, plant fossils. Quartz veins & vugs and cavities 19.30 to 19.62 and 20.70 to 21.05. Void or v. broken ground at 22.70 to 26.35. Some large porphyry fragments.	high	mod.	mod	mod	1.0± 1.6 m	14.93 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48	16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50	0.036 0.052 0.097 0.066 0.022 0.048 0.020 0.038 0.020 0.034 0.034 0.024 0.024 0.022 0.024 0.006 0.028 0.028	27768E
26.90	28.15		Sandstone - fine grained well-sorted cross bedded									
28.15	30.15		Angular clast conglomerate. 29.05 - QV sub parallel to CA - ribboned chalcedony					0.25 0.72 0.85				
30.15	31.55		Brown sandstone with plant pieces, clasts of mudstone.									
31.55	32.00		Drusy-vuggy quartz with cavities, much plant material in quartz supported breccia-like pieces of silicified argillite or chert									
32.00			Rhyolite fragments, some granitic clasts (much weathered) in coarse sandstone and conglomerate with plant material, occ'l QVs (chalcedonic type) in particular at 34.60 - 34.75 and 36.08 - 36.43. No core 34.75 - 35.05. Mud seam 37.10 - 38.94. QVs are at different orientations from 45° to 85° ∧ CA. Voids with coarse nearly perfectly terminated quartz crystals at 36.81, 39.85, 40.72, 42.00.	high	mod.	mod	low					
42.89	43.26		Fine grained muddy siltstone underlain by chaotic conglomerate with very weathered Kaolinized granitic porphyry clasts - tightly packed which continues to 46.60									
43.26	46.60											
46.60	47.10		Beige-brown dense v.v.f. grained mudstone - a massive unit, with clasts of similar material but even finer textured									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-8

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____
DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
47.10	55.00		Becomes darker grey but otherwise as above						50	52	0.048	
			to 49.90					0.75	52	54	0.097	
			49.90 - 50.10 granitic cobble					0.20	54	55.17	0.042	27788E
			52 - 54 - much vein quartz, vugs with qtz x/s large									
			54 - 55.00 very very strong pyrite in breccia									
55.00	55.17		55.00 - 55.17 rhyolite matrix with angular sedimentary									
			rock (argillite) breccia fragments.									
			Block in box at about 54m "2ft hole" (void).									
			E.O.H.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 2 (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-2

METRES NORTH 2824 ELEVATION 154m BEARING 296°30' DEPTH 79.85m 262 ft. STARTED COMPLETED Dec. 1984.

DIP AT Collar -45°

DIP AT

METRES EAST 3281 SECTION DIP AT DRILLED BY CALAR LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	Ca	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	0.68		Overburden						0.68	2.00	0.195	27789E
0.68	7.00		Rust-stained water courses to 3.0. Rock is						2	4	0.024	
			coarse unsorted conglomerate. Clasts of claystone,						4	6	0.014	
			argillite, porphyry, rhyolite. Many pumiceous						6	8	0.024	27792E
			fragments - much voids. Minor wood.						8	10	0.032	
									10	12	0.050	
7.00	9.13		Bedding at 47° ∧ C.A.						12	14	0.052	
			Debris conglomerate v. coarsely bedded, angular fragments						14	16	0.040	
			but less coarse than unit above. Siliceous but no QVs.					0.20	16	18	0.046	
			Petr'd wood at 8.55 to 8.72					0.70	18	20	0.030	
								1.40	20	22	0.024	27799E
9.13	11.10		Rock is more strongly siliceous from 9.13 to 10.20									
			At 10.80 - start of vein of white quartz - continues to 11.10						22	24	0.022	27801E
			Minor vugs ε qtz xls. Narrow grey bands through Q.						24	26	0.150	
									26	28	0.028	
11.10	20.±		Return to coarse debris conglomerate with cobble						28	30	0.064	
			sized clasts of pumiceous rock, porphyritic fragments,					0.60	30	32	0.016	
			rhyolite and mudstone. Igneous clasts are Kaolinized.					0.25	32	34	0.018	
			Variably silicified. Small amounts of f.gr. pyrite throughout.						34	36	0.026	
			15.0 more siliceous than above but same rock type									
			No VQ. Continues cherty to 17.00±.									
			At 15.85 to 16.46 - only 0.46 m core									
			16.46 to 17.00 - only 0.36 m "									
			At 19.20 to about 20 m - few chips of chert									
			19.20 to 22.55 has 0.92m core much of which is									
20±	22.55		mudstone and soft sandstone, some clay. Cross bedding.									
			In part rust-stained kaolinitic mud									
22.55	24.65		Coarse sandstone and conglomerate with clay alt'n									
			Much rhyolite in clasts. QV at 24.80 to 24.85; 25.05 to 25.09									
24.65	25.75		24.65 is top of a finer grained sst sequence - as above									
			but without the large clasts. Wood fragments, some coarse									
			pyrite grains - cubes up to 4mm diameter, "patches" of pyrite									
			up to 3cm x 1cm									
25.75			Return to very coarse cobble conglomerate with									
			variably siliceous matrix. Much Kaolinitic altered									
			rhyolite clasts. Some large cavities									
			28.49 - 28.95 mostly white VQ. Also other narrow QVs.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-9

METRES NORTH ____ ELEVATION ____ BEARING ____ DEPTH ____ STARTED ____ COMPLETED ____

DIP AT ____
DIP AT ____
DIP AT ____

METRES EAST ____ SECTION ____ DRILLED BY ____ LOGGED BY ____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost
	52.52		Much wood in section 36.28 through 38.48 without the large clasts then return to cobble conglomerate with tuff-rhyolite-wood-mudstone clasts. Mudseam at 38.85, little change except for variations in amount of sandstone relative to coarser material. One 3 cm QV at about 46 m. Some core losses - possibly due to mud seams at 45.40 area also between 46.30 and 47.10. QV - 49.15-49.24 bluish Q with brown Q, some cavities.					0.30
								0.15
52.52	58.12		Contact between conglomerate and heavily lignitic section of fine grained light to dark brown siltstone and sandstone is at 40°, CA. Few open cavities lined with glassy Q xls - cavities are 1-2 cm diameter Narrow sections of coarse fragmental rock - graded bedding on a large scale? Frags. are subangular to subrounded, porcellanous textured, very dense and hard may be rhyolite or silicified mudstone (!). Some are porphyritic, others pumiceous.					
58.12	58.32		Vein quartz with vugs					
58.32	62.31		Coarse conglomerate - very large cobbles - up to 13 cm polymictic - granite and/or diorite, volcanic porphyry argillite, chert, rhyolite, minor wood. Pyrite present					
62.31	64.06		Dark brown and grey laminated siltstone Foliation 55°, CA. Vuggy QV 62.56 to 62.64 63.14 to 63.06 - breccia pieces					
64.06	71.88		Round cobble conglomerate - much rhyolite 64.58 - 65.00 vuggy kaolinitic chalcedonic V.Q Matrix of mudstone and sand, occasionally cherty quartz. Several narrow QV sections. Pyritic					
71.88	73.30		Lignitic wood in heterogeneous sandstone-siltstone-conglomerate 73.60 - 73.72 vuggy vein quartz					
73.30	74.20		Roundstone conglomerate. Pyrite in clasts and matrix					
74.20	"79.85"		Grey-brown coloured volcanic mudstone with angular rhyolite clasts (light coloured) and mudstone clasts (darker), minor wood remnants Lahar?					

METRES From	METRES To	ASSAYS Au	Ag
36	38	0.022	27808E
38	40	0.026	27809E
40	42	0.024	27813
42	44	0.028	4
44	46	0.028	5
46	48	0.022	27816
48	50	0.024	7
50	52	0.024	8
52	54	0.022	9
54	56	0.014	27820E
56	58	0.020	1
58	60	0.056	2
60	62	0.020	3
62	64	0.050	4
64	66	0.024	5
66	68	0.020	6
68	70	0.018	7
70	72	0.032	8
72	74	0.012	27829E
74	76	0.114	27857E
76	78	0.022	27858E
78	79.85	0.012	27859E

2777.5?

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Pg. No. 1 of 1 (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-10

METRES NORTH 28~~6~~7.5 ELEVATION 149 m BEARING 296½° DEPTH 39.62m. 130 ft. STARTED COMPLETED Dec. 6/84

DIP AT collar -45°

DIP AT 39 m -51°30 (uncorrected)

METRES EAST 3277 SECTION DIP AT DRILLED BY CALAR LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	7.55		Pebble conglomerate with rusty fractures, some sand	high	mod	mod	high	0.30	0	2	0.020	27938E
			beds - brown, with wood 60° ∧ CA, pyrite both in frags					0.50	2	4	0.016	
			and interstitial to clasts. Pebbles are subrounded, up to						4	6	0.040	
			8cm dia					0.67	6	8	0.026	
									8	10	0.078	
7.55	12.50		Grey sandstone, siltstone - laminated 60° ∧ CA. Patches of						10	12	0.048	
			pyrite/marcasite. Cross bedding. Quartz crystal cavities						12	14	0.040	
			below 12.50 with stringers of grey-blue qtz and						14	16	0.028	
			increasingly coarse grained texture. Traces of						16	18	0.018	
			wood throughout.						18	20	0.018	
12.50	15.20		Sandstone with larger clasts and wood pieces						20	22	0.015	
			some pumiceous fragments						22	24	0.024	
			QV 14.20 - 14.44						24	26	0.133	27950E
15.20	39.62		Coarse pebble conglomerate. Up to 3cm dia						26	28	0.014	30301E
			porous pumiceous clasts with pyrite. Matrix is pale						28	30	0.015	
			brown to 16.60 then lighter coloured - may be						30	32	0.022	
			tuffaceous. Siliceous. Much of the clasts have granite						32	34	0.018	
			textures and are kaolinized. Pyrite is present in						34	36	0.028	
			irregular forms and "nuggets" up to 1 to 2cm dia.						36	38	0.018	30306E
			Occasional sandstone beds 20 to 30cm. Quartz veins						38	39.62	0.014	30307E
			are scarce compared to other drillholes - 30.20-30.28									
			33.98-35.05						average	39.62	0.032	
			-quartz and chalcedonic quartz at flat angle to C.A.									
			In part bluish coloured. From 35m clasts are subrounded									
			and very mixed - porphyritic diorite (?), diorite, matrix of muddy									
			and sandy nature. Pyrite present both in clasts and matrix; forms									
			rims around some fragments									
			QV 37.79 - 38.69									
			Some large diorite cobbles at 38 to 39									
			EOH 39.62 m									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 3 (Unsurveyed)

CINOLA PROPERTY

HOLE No. 84-11

METRES NORTH 2777.5 ELEVATION 160.7m BEARING 296°30 DEPTH 90.52 m 297 ft. STARTED COMPLETED Dec 10, 1984

DIP AT COLLAR -45°

DIP AT

DIP AT

METRES EAST 3240.5 SECTION DRILLED BY CALAR LOGGED BY E.A.O.

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	2.8		No core					0.4	2.8	4	0.032	30384E
2.8	3.70		Vein quartz - white and brown very minor argillic chert						4	6	0.074	
3.70	9.65		Debris sandstone, minor conglomerate, numerous q. v.'s.						6	8	0.032	
			sub-angular clasts, plant debris, rhyolite frags,						8	10	0.024	
			sandy beds Foliation 40° ∧ C.A. = bedding.						10	12	0.065	
			Becomes more conglomeratic from 8.23 with						12	14	0.136	
			granitic and pumiceous clasts, some smaller rhyolite						14	16	0.084	
			chips in dense brown f. gr. matrix. At 9.66 becomes						16	18	0.082	
			very fine grained light brown without clasts - a normal						18	20	0.055	
9.65	11.75		siltstone not seen in previous drill holes. Gradually						20	22	0.066	
			darker from about 10.80 with increase in amount of organic						22	24	0.070	
			matter and appearance of clasts similar to those in the						24	26	0.174	
			underlying conglomerate unit.						26	28	0.223	96E
									28	30	0.036	
11.75	24.10		Heavily silicified conglomerate - mixed clasts of volcanic,					0.20	30	32	0.040	
			granitic and sedimentary origins, with vein quartz in						32	34	0.076	
			irregular structures both sub parallel to CA						34	36	0.022	30400E
			and at about 45° ∧ CA - some vuggy textures.						36	38	0.024	
			Less siliceous below 15.25. Mostly Q below 14.30									
			to 15.00. Has some chalcedonic textures.									
			Conglomerate continues with large sub-rounded clasts,									
			minimal banding, very little vein qtz. Traces									
			of pyrite. Matrix and frags are similar to some									
			rhyolite fragments, very minor lignite.									
24.10	25.60		Dark grey to black siltstone - dense, homogeneous.									
			VQ at 24.69 to 24.83.									
25.60			Conglomerate - very mixed textures. Much rhyolite									
			fragments - small. VQ 26.05 to 26.50 - bladed									
			structures. A mixed debris sandstone and									
			conglomerate - brown and grey coloured members.									
			Mud seam at 31.30 followed by broken ground									
			with minor core losses to 32.31.									
			VQ 32.31 to 32.70 includes argillic portions. More									
			bladed structures. Fine grained beds of 5 to 20 cms									
			contacts ~ 50° ∧ CA. Lumps of wood; tuffaceous clasts									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 3

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-11

METRES NORTH ELEVATION BEARING DEPTH STARTED COMPLETED

DIP AT
DIP AT

METRES EAST SECTION DIP AT DRILLED BY LOGGED BY

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost
	45.05		40.00 - 41.52 Mostly white and bluish white quartz - few vugs					
			Conglomerate persists to ~~44.00~~ 45.05. Chalcedonic QV					
			at 43.18 at 50° ∧ CA and at 44.00 at 48° ∧ CA					0.10
								1.56
45.05	47.92		Change to light beige-grey sandstone and breccia					
			strong chalcedonic quartz at 45.25 to 45.36 followed by					
			broken core with losses in cherty and broken formation					
			and very little recovery from 46.02 to 47.85 - rock is a					
			grey coloured spongy material - a siliceous sinter or travertine.					
47.92	67.30		Abrupt change to lignitic brown sandstone. Evidence					
			of channelling at contact with several percent marcasite/pyrite					
			chalcedonic bluish quartz at 48.40 to 49.00 - pyritic					
			and vuggy. Followed by cyclical (?) sandstone-conglomerate					
			grey and white with pumiceous fragments and rhyolitic					
			clasts, mudstone pieces, minor lignite, crude bedding.					
			Sections of very heavy pyrite/marcasite one to four cms					
			wide. Coarse roundstone conglomerate between 50.45					
			and 52.00. Brown debris sandstone to 53.65 - with					
			silica bands. 53.65 is top of another roundstone cgl					
			cycle - with much silicification at least in upper part to					
			about 53.90. Bedding 58° to 64° ∧ CA. Much sulphide - mostly					
			in matrix.					
			QV - 55.10 - 55.51					
			60.45 - 61.					
			61.30 - angular breccia supported by white VQ. to 61.65					
			then more massive brown-white quartz to 62.32 core losses					
			At 66 broken core followed by very corroded porous					
			conglomerate with light grey brown clasts and sandy matrix					
			supported by VQ. stockwork to 67.30					
67.30			Light brown mudstones with patches of marcasite in					
			rhythmic cycles - coarse beds have clasts of rhyolite porphyry					
			up to 1.5 cm diameter. QV's at 72.79 to 72.87.					
			Wood pieces up to 5 cm wide, occasionally up to 8 cm.					
			QV 75.72 to 76.33 - includes much silicified					
			rhyolite clast conglomerate - sst.					
			At 82m - Bedding 65° ∧ CA.					

METRES From	METRES To	ASSAYS Au	Ag
38	40	0.040	30402E
40	42	0.503	
42	44	0.042	
44	46	0.435	
46	48	0.024	
48	50	0.055	
50	52	0.028	
52	54	0.028	
54	56	0.028	
56	58	0.020	
58	60	0.018	
60	62	0.170	
62	64	0.020	
64	66	0.018	
66	68	0.012	
68	70	0.012	
70	72	0.055	
72	74	0.035	
74	76	0.024	
76	78	0.022	
78	80	0.006	
80	82	0.006	
82	84	0.064	30426E
84	86	0.014	
86	88	0.016	
88	90.52	0.280	30427E

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DIAMOND DRILL LOG

Pg. No. 3 of 3

CINOLA PROPERTY

HOLE No. 84-11

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____

DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
67.30	86.42		Continued									
			Several mud seams and short sections of broken silicified									
			formation. Few QVs. Increase in amount of coal at lower part of unit.									
			Bedding at 84 m - 50° ∧ CA									
86.42	90.52		V. fine gr., v. finely bedded, cross bedded, pyritic mudstone									
			with occasional Q veinlets. Pyrite is in blebs and									
			irregular masses only vaguely conformable to									
			banding. Bddg 66° ∧ CA at 88.65 m.									
			EOH.									

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DIAMOND DRILL LOG

Pg. No. 1 of 2 (Unsurveyed)

CINOLA PROPERTY HOLE No. 84-12

METRES NORTH 2752 N ELEVATION 163 m. (altimeter) BEARING 296°30' DEPTH 60.96 m 200 ft. STARTED Dec. 7, 1984 COMPLETED

DIP AT COLLAR -45°
DIP AT
DIP AT

METRES EAST 3226E SECTION DRILLED BY CALAR LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	1.50		White massive vein quartz with short sections dark grey siliceous argillite						0	2	0.032	30308E
									2	4	0.097	
1.50	11.21		Round to sub-round pebble conglomerate - mostly						4	6	0.143	
			igneous, either dioritic or rhyolitic, clasts. Matrix						6	8	0.091	
			is variously silica, siliceous siltstone, smaller rhyolite						8	10	0.053	
			chips and argillic frags. red = silica						10	12	0.053	
			Few rusty fragments						12	14	0.091	
									14	16	0.075	
			Matrix varies from 25% to 40%.						16	18	0.022	
			Short sections have large amounts						18	20	0.023	
			of rhyolite (porphyry?) fragments argillic matrix - v. siliceous						20	22	0.017	
			up to 3 mm dia.						22	24	0.023	
			VQ 9.75 to 10.05						24	26	0.053	
			10.20 to 10.36 - some core lost						26	28	0.025	30321E
			11.21 to 11.34									
11.34	14.00		Fine sandstone - siltstone sequence with clots of pyrite/marcasite									
			Laminated 45° ∧ CA. Pyrite also follows laminae.									
14.00	16.40		As above but more strongly siliceous. Wood remnants especially									
			15.75 to 16.28									
16.40	16.71		At 16.40 colour change to grey-ivory white									
			fragmental mudstone transitional to a fragmental comprised									
16.71	24.00		of angular rhyolite chips. Much kaolinization. Passes down									
			into coarse conglomerate - very heterogeneous. In part									
			strongly silicified. Many quartzose clasts. Colour is dark									
			grey. Some rusty fractures. Sandstone beds are graded.									
			Vein quartz sections 22.30 - 22.63									
			white angular rhyolite fragmental continues to 24.00									
24.00	27.85		Chert formation with coarse conglomerate sections									
			VQ 24.24 to 24.52 grey-bluish banded									
			Sections have much plant debris. Banding at 26m at									
			50° ∧ CA. Really not too different from previous									
			unit. Heavily mineralized with marcasite at 24.40 - 24.65									
27.85			Angular congl. and distorted mudstone - rhyolite									
			unit.									

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Pg. No. 2 of 2.

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84 - 12

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____
DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
27.85	30								28	30	0.053	30322E
30	42.60		Very silicified conglomerate with light coloured clasts in						30	32	0.322	
			overall grey coloured rock, short sandstone sections						32	34	0.009	
			with brown debris. Vein quartz and grey-blue siliceous matrix						34	36	0.028	
			Occasional vuggy sections. Clasts vary from pumiceous,						36	38	0.021	
			dark to tuffaceous, light, kaolinized types, cherty						38	40	0.012	
			fragments, few diorite pieces and numerous rhyolite chips						40	42	0.018	
			Bed of sandstone at 32.84 to 33.50 - bedding 45° ∧ CA.						42	44	0.016	
			also 35.06 to 35.35.						44	46	0.005	
			Increase in amount of pyrite						46	48	0.020	38
			39.00 - 39.44 Vuggy grey-white quartz						48	50	0.008	
			41.02 - 41.26 " " " "						50	52	0.021	
			Congl. continues to 42.60 - increasingly light coloured						52	54	0.017	
			- porphyritic clasts - white phenocrysts in light grey matrix						54	56	0.015	
			also rhyolite.						56	58	0.017	
									58	60	0.015	
42.60	46.65		Debris sandstone to 43.00 then passing from brown						60	60.95	0.034	30338
	46.65		laminated into light brown angular fragment rhyolite									
			porphyry chip conglomerate - pieces less than 1 cm dia.									
			pyritic up to 3 %.									
46.65	47.52		Vein quartz - brown - white - bluish - some contorted									
			chalcedonic banding									
47.52	51.40		Debris sandstone similar to 42.60 - 46.65									
			coarser fragments. QV 51.18 - 51.40 - vugs and pyrite									
51.40	52.35		Mixed conglomerate - round fragments - mostly granitic									
			textured clasts. VQ 52.20 to 52.35									
52.35	53.84		Black sandstone v. fg., vaguely laminated, some moscovite									
			becomes lighter coloured toward lower contact									
53.84	60.95		Coarse roundstone to subroundstone conglomerate									
			- Pennsylv. Mixed clasts including rhyolite porphyry									
			some lapilli 3 to 7 cm dia									
			VQ 59.70 - 59.89									
			EOH									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 2 (Unsurveyed)

CINOLA PROPERTY

HOLE No. 84-13

METRES NORTH 2773.5 ELEVATION 174m BEARING 296°30' DEPTH 60.96m (200 ft) STARTED COMPLETED Dec. 15, 1984

DIP AT COLLAR

DIP AT

DIP AT

METRES EAST 3186 SECTION DRILLED BY CALAR LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	1		Overburden									
1	9.30		Debris conglomerate - silicified conglomerate with						1	2	0.106	30428E
			sandy and silt beds, lignite, rhyolite, granitic and						2	4	0.112	30429E
			sedimentary clasts						4	6	0.056	
			Bedding at 7m 50° ∧ CA.						6	8	0.035	
									8	10	0.040	
9.30	10.75		Porcellanous siltstone to 9.60 - light brown - sharp						10	12	0.024	
			change to grey siltstone with quartz to 10m followed						12	14	0.050	
			by brown siltstone with veglation to 10.75						14	16	0.026	
									16	18	0.024	
10.75	18.32		Roundstone conglomerate with QVs at						18	20	0.013	
			11 to 11.22, 11.65 to 12, 12.48 to 12.75, 13.50 to 13.78						20	22	0.012	
			Cgl is grey coloured with variety of clasts, muddy-fine fragmental						22	24	0.070	
			matrix, silicified. Fracture with rust at 12.70 to 12.85					?	24	26	0.030	
								?	26	28	0.019	
18.32	21.45		Finely laminated dark grey siltstone. Much cross bedding without					?	28	30	0.054	
			much consistent bedding.					0.25	30	32	0.018	
									32	34	0.020	
21.45	31.10		Grey-blue conglomerate, white rhyolite clasts.					0.10	34	36	0.022	
								0.20	36	38	0.042	
			Box of scrambled core - 22.25 to 29.70 -					0.20	38	40	0.033	30447
			mixture of congl. with vein quartz - total VQ ≈ 1.40m					2.95	* 40	44	0.078	N.B.!
31.10	31.50		Debris sandstone bed - Bedding 75° ∧ CA					0.58	44	46	0.016	
31.50	32.85		Rhyolite chip conglomerate / sandstone						46	48	0.040	
32.85	34		Lignite to 33.04 then sandstone - siltstone bed to 34						48	50	0.054	
34	44.63		Continuation of pale grey rhyolite etc. coarse sst						50	52	0.034	30452E
			Broken core - faulting? No slickens - at									
			34.10, and at intervals to 35m.									
			Debris sst and cgl with rhyolite (?) component. Wood at 37.60 to .80 ±									
			Short QV intervals 2 to 10 to 15 cms 32° ∧ CA and other attitudes.									
			Very broken rock especially 40 to ∧ 44m.									
44.63	45.45		Light brown debris sst - not conglomerate. Top horizon									
			is a lignite bed.									
45.45	46.00		Vein quartz - chalcedonic and other type, all very									
			broken and much of the core has been redrilled									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-13

METRES NORTH ____ ELEVATION ____ BEARING ____ DEPTH ____ STARTED ____ COMPLETED ____

DIP AT ____

DIP AT ____

METRES EAST ____ SECTION ____ DIP AT ____ DRILLED BY ____ LOGGED BY ____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
46.00	46.32		More solid than above but otherwise same - mostly Q	v. high	low	low	nil		52	54	0.036	30453E
									54	56	0.086	
46.32	48.50		Delons sandstone transitional to conglomerate.						56	58	0.024	
			Pyrite "pellets" or clasts.						58	60	0.076	
									60	60.96	0.016	30457E
48.50			Coarse roundstone conglomerate - dk green to grey									
			colour. QVs at 49.24, 49.29-49.30, 49.47 to 50.00									
			including mudseam									
50.92	51.22		Vein quartz - white, brown, black 65° to CA									
51.22	56.30		Light brown mudstone conglomerate with rhyolite									
			porphyry clasts. Mud at 52.30. Vein quartz									
			52.70 - 53.26; 54; 54.80 - 55+. Bedding 65° to CA									
56.30	60		56.30 - 59.06 - includes argillic breccia frags.									
			some vugs with good quartz crystals, mixed white-brown									
			- and blue-grey quartz. Mud seam at 56.30 to .60									
			mixed with the upper part of the vein quartz									
			59.06 - silicified dark grey rock - apparently									
			altered argillite.									
			At 60 strongly pyritic section transitional to									
			coarser grained material - angular to sub rounded									
			clasts, pyritic, mine wood. Grey colour. Siliceous									
			(or silicified ?)									
			E.O.H.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 3 (Unsurveyed)

CINOLA PROPERTY

HOLE No. 84-14

METRES NORTH 2823 ELEVATION 182 m BEARING 296½° DEPTH 70.40 m STARTED COMPLETED Nov. 1984

DIP AT collar -45° 231 ft.

DIP AT

DIP AT

METRES EAST 3166 SECTION DRILLED BY CALAR LOGGED BY EAO

Note assay sequence is in error

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	9.75		Broken ground. Overburden									
9.75	12		Partly weathered chaotic arenite - kaolonitic alteration						9.75	12	0.050	27830E
			vein quartz with mixed white and brown quartz						12	14	0.046	1
12	22.74		Finer grained sequence - mudstone - siltstone - claystone	high	low	mod.	mod		14	16	0.020	2
			with wood. From 15.50 - coarser grains and clasts						16	18	0.012	3
			with pale coloured clasts - may be rhyolite. Vein quartz						18	20	0.024	4
			- brown and glassy Q - at 14.83 - 15.00						20	22	0.030	5
			16.62 - 16.84						22	24	0.046	27810
			18.29 - 18.39						24	26	0.052	27811
			19.31 - 19.68						26	28	0.066	27812
			20.00 - 20.18						28	30	0.032	27836E
			21.92 - 22.05						30	32	0.036	
			21.44 - 22.74						32	34	0.026	
									34	36	0.012	
22.74	25.52		Fine grained grey siltstone - v. finely laminated						36	38	0.024	
			bedding ~ 50° ^ CA						38	40	0.018	27841E
			Continues to 25.52 but includes much vein									
			quartz - especially 23.05 - 24.10									
			also 24.23 - 24.25									
			24.68 - 24.79									
25.52	35.35		Cobble conglomerate - coarse sub-rounded clasts									
			Totally unsorted. Mixture of rock types. Short									
			sections of V.Q - brown and clear mixed. Also sections of									
			coaly wood. Much VQ 34.20 to 35.06									
35.35	37.80		From 35.35 less silicified, pumiceous clasts									
			possible lapilli fragments. Density of frags and diameter									
			decreases below 36.25. Coal up to 10 cm.									
37.80	38.10		Gradational change to increasingly siliceous breccia. Fragments									
			of rhyolite									
38.10	38.85		Q Veinlet stockwork and vuggy QVs									
38.85	39.67		Lapilli tuff in mudstone. Bedding perpendicular to C.A.									
39.67	40.36		Quartz veining.									
40.36	43.04		Bedding at 42.50 35° ^ CA Debris conglomerate									
			clasts to 1 cm dia. exceptionally to 5 cm dia.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 3

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-14

METRES NORTH ELEVATION BEARING DEPTH STARTED COMPLETED

DIP AT

DIP AT

METRES EAST SECTION DIP AT DRILLED BY LOGGED BY

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
43.04	44.70		Very strongly silicified section - 1/Q with	high	mod	low	mod.					
			breccia pieces and short argillic inclusions									
44.70	47.00		Cobble conglomerate with chalcedonic quartz						40	42	0.016	27842E
			seams and, occaisonally, matrix							44	0.024	
										46	0.044	
47.00	47.55		Fine siltstone, minor wood. Pyrite layers. Laminated.							48	0.042	
										50	0.030	
47.55	48.00		Chalcedonic qtz veins - banded but without a							52	0.014	
			regular pattern? Mostly sub-perpendicular to C.A.							54	0.026	27848E
48.00	48.98		coarse sub-angular to sub-rounded clast conglomerate							56	0.035	
48.98	49.40		white and brown quartz with angular breccia							58	0.028	27850E
			fragments, few vugs.							60	0.010	1
										62	0.024	2
49.40	52.35		Conglomerate as above							64	0.046	3
52.35	53.16		Mudstone bed. Laminated with pyrite/marcasite on folia							66	0.026	4
			Folia at 57° ∧ CA. Silicified.									
53.16	56.44		Conglomerate - siliceous. Some cavities to 3cm dia.									
56.44	57.66		All vein quartz and/or silicification. Mixed colours - grey									
			white, brown? bluish. Sections have large vugs.									
57.66	60.70		Rhyolite breccia. Mosaic of lapilli fragments - porous									
			particles as 1 to 2cm diameter, porcelanous rhyolite									
			chips of all sizes but ivory colour, argillic frags									
			in siliceous matrix of coarse sst grains. Cut by									
			bluish chalcedonic quartz veins - some sub-parallel									
			to CA, others at 60° ∧ CA. Widths 1½ to 3cm.									
		*	This is likely a lahar deposit.									
60.70			Above unit continues but is more strongly									
			silicified and exhibits voids with quartz crystals									
			substantial sections of grey cherty rock.									
			Mostly Q from 60 to 61.56. Several other									
			QVs 60° ∧ CA, some sub parallel ∧ CA									
			Below 63.88 mosaic continues but outlines of									
			fragments become progressively blurred and from									
			66 the clasts are smeared as if while cooling									
			and hardening.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 3 of 3

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-14

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____
DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	METRES To	ASSAYS Au	ASSAYS Ag
	70.40		Continues to E.O.H - very strongly silicified below 68.60						66	68	0.024	27855E
			less obviously fragmental - pieces blend with matrix,						68	70.40	0.035	27856E
			many flow structures.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 1 of 2 (Unsurveyed)

CINOLA PROPERTY HOLE No. 84-15

METRES NORTH 2840 ELEVATION 186.5m BEARING 296°30' DEPTH 66m 217 ft. STARTED Dec. 5, 1984 COMPLETED

DIP AT COLLAR -45°

DIP AT

METRES EAST 3145 SECTION DIP AT DRILLED BY CARE EXT. LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	9.14		Overburden - mostly dense granular andesite						9.14	10	0.020	27909E
9.14	16.04		Sandstone with very abundant white and brown	V. high	?	low	high		10	12	0.126	
			quartz and chalcedonic quartz, kaolinized rhyolite(?)						12	14	0.080	
			fragments. Much surface weathering, rust staining to 14.80						14	16	0.054	
			Boxwork structures in quartz, with voids.						16	18	0.018	
			Lowermost 40 cm is a mosaic pattern of angular chips						18	20	0.036	
			many of which are light coloured rhyolite. Includes pyrite						20	22	0.028	27915
			clasts up to 4 mm dia.						22	24	0.065	
16.40	22.00		Debris sandstone - light brown, variable appearance						24	26	0.078	
			and textures, crosscut by quartz veins, pieces of dark						26	28	0.027	
			brown coaly wood. Becomes coarser and greyer.						28	30	0.031	
			Laminae at 55° ∧ C.A.						30	32	0.036	
									32	34	0.019	
22.00	23.46		Start of quartz vein with few wallrock fragments						34	36	0.027	
			Continues to 23.46. Vugs.						36	38	0.049	
23.46	25.40		Dark grey uniform cherty siltstone with QVs, some large clasts						38	40	0.024	
									40	42	0.036	
25.40	26.93		Quartz vein with boxwork textures, some brown						42	44	0.043	
			discoloration, few argillite remnants, cut by younger						44	46	0.018	
			veins of whiter quartz. Core is very pitted.						46	48	0.032	
26.93			Coarse cobble conglomerate with siltstone/mudstone					0.20	48	50	0.032	27929E
			sections. Laminae 60° ∧ CA. Mixed clasts of									
			argillic, pumiceous, dioritic and rhyolitic porphyry rock types									
			Minor amounts of petrified wood. Pyrite/marcasite variable to abundant (15%).									
			At 31.90 - becomes brown coloured and contains a larger									
			proportion of rhyolite clasts									
			QV at 34. to 34.36 contacts at 55° ∧ CA									
			Several narrower QVs at about 65° ∧ CA, some at 85° ∧ CA									
			Below 34.50 rock is grey rather than brown									
			resembles mosaic.									
			From 37.30 rock as above but much more pumiceous									
			to 39.50									
			QV 39.90 - 40.38 - vugs and cavities with Q vs									
			42.52 - 44.05 - mostly Q and silicified argillite									
			boxwork structures.									
44.05	46		Brown - ivory - white fragmental rock - sedimentary cgl. composed									
			of high proportion of rhyolite fragments, Wood, silica matrix.									
			Passes back into dark grey coarse conglomerate at about 46m.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 2

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-15

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH 66 m STARTED _____ COMPLETED _____

DIP AT _____
DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
46	59.90		Coarse conglomerate with grey silica, narrow brown	high	high	mod			50	52	0.039	27,930
			siltstone layers. Heavy pyrite in matrix especially 46 to 46.50						52	54	0.031	
			48.85 – 49.75 blue-white wen quartz with voids, some losses						54	56	0.040	
			51.40 – 52.02 vuggy V.Q with breccia fragments						56	58	0.037	
			Laminae at 50.00 45° ∧ CA						58	60	0.073	
			Clasts mostly 1cm to 7cm diameter – rhyolite, argillite, diorite						60	62	0.045	
			pumice types						62	64	0.084	
			VQ 53.88 to 54.46 m						64	65.37	0.078	27,937
			58.40 to 59.30 m – banded, much wall rock – upper									
			contact 80° ∧ CA, lower 30° ∧ CA. Some vugs									
			Very heavy pyrite/marcasite 57 to 57.20 in matrix									
			also 58 to 58.40									
59.90	65.37		59.90 – start of rhyolite chip conglomerate – clasts are									
			smaller, more uniform than above – colourful, some									
			pumice lapilli. Numerous VQ sections; wood debris, short									
			sections of grey laminated mudstone. May be mudflow material									
			61.95 – 62.30 much white ivory rhyolite									
			Core ends at 65.37. Hole was continued to 66 in a									
			mud seam									
			EOH									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 3 (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-16

METRES NORTH 2893.5 ELEVATION 191.5m BEARING 296½° DEPTH 100.88m 331 ft. STARTED COMPLETED December 10/84

DIP AT COLLAR 46°

DIP AT

METRES EAST 3133 SECTION DIP AT DRILLED BY CORE ENT. LOGGED BY E.A.O.

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
0	9.14		Overburden						9.14	12	0.038	303396
9.14	10.40		DK brown coalified wood in sandstone. Crossed by narrow	low	low	high			12	14	0.052	
			Q veinlets at various orientations to C.A.						14	16	0.048	
10.40	19.33		Top of roundstone conglomerate sequence. Weathered						16	18	0.037	
			and kaolinized section and fine grained to clotty beds.						18	20	0.068	
			VQ with vuggy discolourations at 12 to 12.85, 13.30 to .36						20	22	0.065	
			strongly pyritic (or marcasite) in finer grained portions						22	24	0.028	
			especially in a laminated black-light brown section						24	26	0.032	
			where laminae are 1mm or less 14.60 to 14.90						26	28	0.024	
			VQ 15.70 to 15.85						28	30	0.016	
19.33	20.90		19.33 to 20.90 opalescent and chalcedonic blue quartz						30	32	0.016	
			in matrix of a veinlet and "pellets" in matrix of black						32	34	0.027	
			silicified argillite - creates a streaked and						34	36	0.027	
			vermicular texture.						36	38	0.073	303352E
20.90	25.00		cobble conglomerate - coarse sandstone matrix									
			bedding 48° ∧ CA. Clasts up to 5cm dia. Much plant									
			detritus from 22.20 to 23.16 then less prominent.									
			heavily silicified 23.90 to 24.63 much vuggy brown									
			v.q. and siliceous argillite matrix. Unit has much rhyolite									
			clasts, sandstone and quartzite									
25.00	27.95		Conglomerate - pebble size and larger clasts of diorite									
			and volcanic derivation. Marcasite in matrix - in places									
			abundant									
27.95	29.55		Black siltstone/argillite unit - very hard									
			VQ 28.45 - 28.59 - v.vugs. Channelling and crossbedding									
			structures.									
29.55	31.00		Granitic clast conglomerate also mudstone, some									
			kaolinization.									
31.00	35.98		Black and dark grey siltstone/argillite. Some brecciation									
			but no significant movement other than compaction									
			includes minor q.v.s especially from 32.80 where hydropy q.v.s									
			sub-parallel C.A. to 33.40									
			33.40 to 34.90 brown chalcedonic and white - brown quartz									
			with drusy-vuggy textures, brecciated wall rock									
			hanging at 65 to 70° ∧ C.A at 35.50.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 3

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-16

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____

DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
35.98			Similar to above but coarser textures, some rhyolite						38	40	0.074	
			porphyry clasts up to 2cm dia. V.Q up to 10cm wide. Also						40	42	0.050	
			autol of clasts ?? of same material as the matrix. 37.25 to 37.64						42	44	0.068	
			a.v. parallel side of core - about 1/4 of volume. 37.25 - rock is						44	46	0.054	30356
			black argillic type similar to 31 to 35.98. Mud-sand seam						46	48	0.126	
			in Q.V. at 34m						48	50	0.048	58
									50	52	0.024	
			Very strong silicification and drusy-vuggy white-bluish-						52	54	0.028	
			brown quartz to 43.25 - with much argillic-chert breccia						54	56	0.080	
			short sections of greenish mudstone breccia-conglomerate						56	58	0.044	
									58	60	0.034	
			43.25 - debris breccia - much rhyolite clasts, plant bits						60	62	0.078	
			and siltstone clasts, short sandstone-conglomerate sections.									
			Mostly poorly sorted. Some marcasite patches - matrix.					0.50	62	64	0.072	
			Continues to 44.51 where a coarse drust of Q crystals (1)					0.44	64	66	0.072	30366E
			marks upper contact of V.Q. that continues intermittently to									
			48.96 - much chalcedonic type Q sub-parallel and oblique to C.A.									
48.96			Brownish quartz breccia									
49.04	62.06		Top of section of mudstone-rhyolite conglomerate followed by									
			dark brown f.gr argillic mudstone then conglomerate again									
			VQ 49.70 to 50.15									
			51.94 to 52.17									
			Few short sections with plant debris									
			52.45 - 52.75 and several other sections - dark brown v.f.gr									
			to cherty quartz - contacts at 45° ∧ CA									
			From 53.60 - increase in size of clasts and in amount of diorite									
			fragments - up to 6cm diameter. Rhyolite content remains									
			prominent									
			VQ 55.24 to 56.18 brown and white banding									
			clasts of cherty argillite									
			then continuation of roundstone conglomerate with dominant									
			volcanic component. Epidotic and kaolinitic alteration									
			Much Q from 58.78 - 61.04 - veining subparallel ∧ CA									
			with cherty argillite breccia fragments									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 3 of 3

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-16

METRES NORTH ELEVATION BEARING DEPTH STARTED COMPLETED

DIP AT
DIP AT
DIP AT

METRES EAST SECTION DRILLED BY LOGGED BY

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
62.06	62.87		Rhyolite porphyry breccia chip conglomerate in cherty						66	68	0.130	
			siliceous matrix. Light coloured unit. Includes white VQ						68	70	0.026	
			lapilli tuff particles.						70	72	0.053	
								0.50	72	74	0.026	
63.09	64.44		Very broken QV with much core lost.					0.60	74	76	0.050	
									76	78	0.070	
64.44	92.76		Dark grey to black coloured silicified argillite and conglomerate						78	80	0.026	
			with much VQ and several v. short sections of same unit						80	82	0.038	
			as 62.06 - 62.87. Mostly silica.						82	84	0.044	
			At 69.13 to 69.40 section of rhyolite porphyry mud(?)						84	86	0.028	
			with angular clasts up to 4 mm diameter sandwiched by						86	88	0.034	
			VQ						88	90	0.065	
			70 - 71.36 similar to above - rhyolite "mud"						90	92	0.082	
			71.82 - 73.40 brecciated rhyolite porphyry with patches of						92	94	0.088	
			marcasite/pyrite - very strongly silicified						94	96	0.038	
			73.40 - start of very strongly broken section - rusty, angular						96	98	0.050	
			fragments with mud seams and substantial core losses						98	100.88	0.034	30383E
			Rhyolite formation continues to 79 m area -									
			about 50% vein quartz and 50% rhyolite and silicified									
			rhyolite - only minor argillic - chert sections. At 74.67 -									
			Banding 66° CA									
			Rhyolite is brecciated and filled with Q - pyrite									
			veinlets. Some coarse Q crystals in cavities. Up to 81.60 -									
			Unit becomes increasingly argillic with quartz veinlets									
			rather than veins. Numerous cavities. Then returns to									
			rhyolite breccia with various textures and some									
			pyrite, minor argillite.									
			Breccia continues to 92.76 with much dark grey cherty									
			and argillic sections. Coarse pyrite 89.73 to 90.12									
			Rhyolite is mixed with chert at 92.76 contact or bedding									
			57° CA									
92.74	96.00		Black siliceous mudstone - siltstone. Short brecciated									
			sections, including some rhyolite bxa frags.									
96	100.88		Very fine grained pale grey rhyolite porphyry increasingly									
			brecciated and silicified from 97.08.									
			E.O.H.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 1 of 4 (Unsurveyed)

DIAMOND DRILL LOG

CINOLA PROPERTY HOLE No. 84-17

METRES NORTH 2861 ELEVATION 178 m BEARING 296°30' DEPTH 102 m 335 ft. STARTED COMPLETED Dec. 1984

DIP AT COLLAR -45°

DIP AT

DIP AT

METRES EAST 3182.5 SECTION DRILLED BY CORE ENT. LOGGED BY EAO

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au art.	Ag
0	4.90		Overburden - andesitic bldrs.						4.90	6	0.028	27860E
4.90	5.42		Vein Q and v. highly silicified siltstone						6	8	0.054	
5.42	16.50		Variable argillaceous - rudaceous (cobbled) sedimentary sequence.					0.54	8	10	0.042	
			9.61 - 9.83 brown stained vuggy V.Q.						10	12	0.026	
			8.0 - 8.23 petrified wood c̄ prominent laminations						12	14	0.028	
			75 to 80° A.C.A. Rusty water channels and vugs						14	16	0.050	
			Gold visible with aid of 10X hand lens at						16	18	0.088	
16.50	25.20		13.15 m 16.0, 17.25						18	20	0.040	
			Section is siliceous black chert but becomes largely vuggy						20	22	0.030	
			white-brown quartz veining with kaolin in some cavities						22	24	0.065	
			Argillic rock or laminated chalcedonic quartz is dark grey and						24	26	0.056	27866E
			white striped laminae ~1 to 3 mm. Gold is most easily rec.						26	28	0.018	
			recognized on rusty-wthd surfaces - coppery red colour.						28	30	0.024	
			Quartz veinlet boxwork at 18.20 - 18.63 (no gold						30	32	0.044	
			noticed) and almost continuously to 25.20. Much of the						32	34	0.052	
			rock is 25% voids						34	36	0.022	
25.20	28.84		Dense conglomerate - grey, dark grey and greenish, narrow						36	38	0.012	
			rusty fractures. Narrow QVs 28.00 - 28.20						38	40	0.020	27877E
			28.47 - 28.70									
28.84	29.77		Brown laminated mudstone/siltstone gradational down into									
			progressively coarser, angular conglomerate (or breccia). Fragments are									
			largely pale coloured rhyolite									
29.77	35.25		Coarse sub-rounded conglomerate clasts in f.gr. silty matrix									
			Clasts up to 4 cm dia. Mixed clasts of volcanic, crystalline									
			and sedimentary derivation									
			Coarse conglomerate continues to 30.90									
			then very abundant ~cm quartz to 32.32									
			with only very minor amounts of argillic breccia									
			fragments. Followed by strongly silicified conglomerate									
			to 32.67.									
			Vein quartz with 10% argillic breccia clasts to									
			35.25 white with brown quartz. Some small vugs partly									
			filled with quartz crystals up to 3 mm									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No. 2 of 4

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-17

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____

DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
									40	42	0.053	27878E
35.25	36.42		Debris sandstone - wood fragments in brown						42	44	0.028	
			sandy beds, graded bedding. Occ'l large rhyolite						44	46	0.023	
			clasts. Bottom contact is somewhat arbitrary -						46	48	0.024	
			unit passes into lapilli tuff clasts. Bedding at 75° CA					0.68	48	50	0.025	27882E
			short sections of v. f gr. mudstone - brown. Few mud						50	52	0.055	
			seams.						52	54	0.077	
37.73	39.75		From 37.73 much vein quartz with wall rock frags.						54	56	0.028	
									56	58	0.020	
39.75	41.06		Debris SST as above.						58	60	0.022	
41.06	42.00		Black silicified argillite and light coloured vein quartz						60	62	0.049	
			Silicified wood. Vugs						62	64	0.074	
42.00	46.16		coarse sub-rounded clasts in siliceous conglomerate						64	66	0.032	
46.16	46.47		Fine grained brown debris sandstone						66	68	0.024	
46.47	48.30		Very coarse fragments in mudstone matrix, much rhyolite						68	70	0.029	
			some wood									
48.30	48.92		Vein quartz - in part very broken with core losses. e									
49.92	50.72		~~50.00 - 50.72~~ Coarse siliceous conglomerate with									
			substantial widths of vein quartz i.e. 51.95 to 53.70					0.24	70	72	0.053	
50.72	57.39		Coarse roundstone to subangular conglomerate						72	74	0.156	
57.39	57.60		Vein quartz - contacts at 27° ACA						74	76	0.032	27895E
57.60	57.91		Conglomerate as above									
57.91	74.30		57.91 is top of a brown silt-mudstone unit									
			with plant debris. Underlying unit is comprised									
			of several sedimentary cycles - coarsening deeper									
			- of lahar units surmounted by fine grained plant									
			rich material. Cycles vary from 0.5 m to 2.2 m									
			thick. Coarser portions are only grossly layered									
			and are very scoriacious. Clasts are pumice, rhyolite,									
			mudstone, siltstone (silicified). Few pyrite clasts. From 62.40									
		silic'd	Sandstone bed to 64.00 including white vuggy vein									
			quartz at 63.00 to 64.00 then lahar as a									
			continuous unit with few narrow (2-5 cm) QVs									
			to 70.17. More siliceous/silicified to 72.10 then									
			mostly vein Quartz - white-brown-grey-bluish to									
			74.30									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

Pg. No 3 of 4

DIAMOND DRILL LOG

CINOLA PROPERTY

HOLE No. 84-17

METRES NORTH ____ ELEVATION ____ BEARING ____ DEPTH ____ STARTED ____ COMPLETED ____

DIP AT ____

DIP AT ____

METRES EAST ____ SECTION ____ DIP AT ____ DRILLED BY ____ LOGGED BY ____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
74.30	84.67		Conglomerate unit - extremely variable in texture and colour. Sugary quartz crystals in cavities at 75 to 75.25. Quartz forms matrix - has chalcedonic appearance, and veins. Rhyolitic clasts up to 25% of rock. At 77.73 - 78.20 Quartz vein with big vugs and much chalcedonic bluish coloured quartz. Two and possibly three generations of silica. 79.20 - 79.60 - broken core some losses - bluish v. f. gr. Banded parallel to CA. From 79.90 - irregular bands of pyrite - much disturbed and discontinuous fragments. From 79.60 rock is v. light coloured lahar-like conglomerate/agglomerate. White QV at 83.76 to 84				0.50						
								0.25				
									76	78	0.078	27896E
									78	80	0.044	
									80	82	0.051	
									82	84	0.055	
									84	86	0.050	
									86	88	0.160	
									88	90	0.040	
									90	92	0.082	
									92	94	0.071	
									94	96	0.040	
									96	98	0.150	27906E
									98	100	0.571	
									100	102	0.262	27908E
84.67	91.29		Very siliceous dark grey to black rock, v. f. gr. weakly banded. White VQ at 84.80 to 85.25 - contacts 45° ∧ CA. 85.95 - 86.25 void or v. broken no core. Much qtz veining throughout, especially at 88 - 88.25 and 88.60 to 89. Elsewhere both chalcedonic stringers and dense cherty textures. Some brown quartz mixed in. 90 - Foliation 80° ∧ CA. 91 - 70° ∧ CA	V. high	low	low						
91.29	98.60		Rock from about 90 is brecciated but no particular evidence of substantial movement. There is a gradual increase in amount of rhyolite porphyry fragments in the breccia with flowage-type textures. Much muddy material in irregular patches. From 92.20 the rhyolitic component is dominant but with deformation - soft breccia fragments were distorted by flow or compaction. Rock is cut by grey QVs and white (±brown) QVs the latter are pillered and purer. At 93 - 93.60 - blue-grey QV almost parallels CA. White QV at 94.95 to 95.10 is at 65° ∧ CA. Rhyolitic component is weakly kaolinized and particularly from 95.60 has interstitial pyrite (marcasite ?) v. f. gr. mineral in pieces up to 3 mm. Also disseminated, in irregular smears and veinlets.									

Consolidated Cinola Mines Ltd. — Energy Reserves Canada Ltd. — Joint Venture

DIAMOND DRILL LOG

Pg. No. 4 of 4

CINOLA PROPERTY

HOLE No. 84-17

METRES NORTH _____ ELEVATION _____ BEARING _____ DEPTH _____ STARTED _____ COMPLETED _____

DIP AT _____

DIP AT _____

METRES EAST _____ SECTION _____ DIP AT _____ DRILLED BY _____ LOGGED BY _____

METRES FROM	METRES TO	GRAPHIC	GEOLOGY	ALTERATION Si	Sulph.	C	Kaolin	Core Lost	METRES From	To	ASSAYS Au	Ag
			visible gold at 98.40 – 1mm speck in grey quartz that fills rhyolite breccia and forms a cement.									
98.60	102		Rhyolite porphyry breccia – porphyritic texture is very subdued. Brecciation by crushing without significant displacement of fragments. Material between fragments is dk grey quartz and f.gr. pyrite. Vaguely defined clots of pyrite (marcasite) also present. Visible coarse gold at 99.10, 99.60–75 but quantity is small. Elsewhere few 0.1mm grains.									
			EOH									

37.

CALAR DEVELOPMENTS LTD.

TO: CONSOLIDATED CINOLA
440 - 625 HOWE ST.
VANCOUVER, B.C.
V6C 2T6

Jan 9/85

MOBILIZATION		
One Truck and Drill	P. Rupert - Skidegate Return	$340.00
Fare	One Man	$24.00
Moving Equipment In and Out		$560.00
TRAVEL TIME		
Three Men	16 hrs = 48 x $13.50	$648.00
Five Men	16 hrs = 80 x $10.00	$800.00
PWA Ticket		$159.00
PWA Freight	#06647550	$32.54
PWA Freight	#06278985	$28.25
Delivery		$10.25
Groceries		$12.52
Hole 84-4	174 ft	$4,872.00
Setting Up	16 Man Hours	$188.00
Hole 84-5	121 ft	$3,388.00
Setting Up	20 Man Hours	$235.00
Hole 84-6	151 ft	$4,228.00
Setting Up	29 Man Hours	$482.50
Hole 84-7	180 ft	$5,040.00
Setting Up	16 Man Hours	$188.00
Hole 84-8	181 ft	$5,068.00
Setting Up	19 Man Hours	$221.50
Hole 84-9	262 ft	$7,336.00
Setting Up	19 Man Hours	$211.50
Hole 84-10	130 ft	$3,640.00
Setting Up	24 Man Hours	$282.00
Hole 84-11	297 ft	$8,316.00
Setting Up	24 Man Hours	$282.00
Hole 84-12	200 ft	$5,600.00
Setting Up	28 Man Hours	$336.00
Hole 84-13	200 ft	$5,600.00
Setting Up	37 Man Hours	$433.00
Hole 84-14	231 ft	$6,468.00
Setting Up	20 Man Hours	$235.00
Hole 84-15	217 ft	$6,076.00
Setting Up	19 Man Hours	$228.50
Hole 84-16	331 ft	$9,268.00
Setting Up	18 Man Hours	$215.00
Hole 84-17	335 ft	$9,380.00
Setting Up	34 Man Hours	$403.00
Water Line	55 Man Hours	$550.00
	TOTAL	$91,385.56
	Credit	36,072.19
		55,313.37
		30,000.00
		25,313.37

Paid out

K.S.

Bal Jan 16/85

37.

CINOLA OPERATING COMPANY LTD.
STE. 440 - 625 HOWE STREET
VANCOUVER, B.C. V5B 3C6

№ 265

Jan 15 1985

PAY TO THE ORDER OF Thirty Thousand ---------- 00/100 DOLLARS $ 30,000.00

Calar Developments

CINOLA OPERATING COMPANY LTD.

THE TORONTO-DOMINION BANK
839 W. HASTINGS AT HORNBY STS.
VANCOUVER, B.C. V6C 1C5

NOT NEGOTIABLE

⑈95280⑈004⑆ 0975⑈040 1122⑈

CINOLA OPERATING COMPANY LTD.

DATE	DESCRIPTION	AMOUNT
Jan 16/85	On Account Drilling	30,000.00

CINOLA OPERATING COMPANY LTD.
STE. 440 - 625 HOWE STREET
VANCOUVER, B.C. V5B 3C6

№ 181

Dec 11th 1984

PAY TO THE ORDER OF Sixty Thousand ---------- 00/100 DOLLARS $ 60,000.00

Calar Developments

CINOLA OPERATING COMPANY LTD.

THE TORONTO-DOMINION BANK
839 W. HASTINGS AT HORNBY STS.
VANCOUVER, B.C. V6C 1C5

NOT NEGOTIABLE

⑈95280⑈004⑆ 0975⑈040 1122⑈

CINOLA OPERATING COMPANY LTD.

DATE	DESCRIPTION	AMOUNT
Dec 11/84	Payment for advance drilling (contract)	$60,000.00

K.S.

ENGINEERS STATEMENT

I am a professional engineer registered in the Association of Professional Engineers of B.C.

At the time of the drill program covered in this report I was president of Consolidated Cinola Mines Ltd. one of the owners of the mineral claims. The company's address is 440 - 625 Howe Street, Vancouver B.C. V6C 2T6.

I have been professionally employed in the mining industry for 35 years. The drilling covered in this report was supervised by E.A. Ostensoe, a consulting geologist of 24 years experience. His certification statement is included herein. I have known Mr. Ostensoe for 25 years and recommended him for the assignment.

K. G. Sanders

K.G. Sanders, P. Eng.

May 29, 1985
Vancouver B.C.

CERTIFICATION

I, Erik A. Ostensoe, a consulting geologist with office and residence in Vancouver, British Columbia certify that:

1. I am a 1960 B.Sc. (Honours Geology) graduate of the University of British Columbia and I have worked as a mineral exploration geologist for twenty-four years.

2. I am a Fellow in good standing of the Geological Association of Canada and a member in good standing of the Canadian Institute of Mining and Metallurgy and the Association of Exploration Geochemists.

3. I personally supervised the program of diamond drilling discussed in the accompanying report and I have reviewed several published and private reports that pertain to the Cinola gold deposit.

January 15, 1985.

Erik A. Ostensoe

Erik A. Ostensoe, geologist