87-349-15897

DRILLING REPORT

THE THORN PROPERTY

B.C. 104K-10W

58°33; 132° 48'

Daisy, Daisy 2 Claims

Atlin Mining Division

FILMED

for

Inland Recovery Group Ltd.

&

American Reserve Mining Corp.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,897

by
J. R. Woodcock

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May 20, 1987

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THORN PROPERTY

SUMMARY

The Thorn property, a polymetallic mineral prospect, situated in the Sutlahine River of northwestern British Columbia, is presently covered by the 30-unit Daisy claim block. The property has had a history of exploration that dates intermittently from 1959.

The geological setting consists of an intrusive-extrusive acidic complex of Tertiary age that is centred on a small stock of quartz feldspar porphyry. This complex occurs at the contact between Upper Triassic volcanic rocks of the Stuhini Group and some older meta-sedimentary and volcanic rocks. The acidic complex and its few small satellites are extensively pyritized, hydrothermally altered, and locally mineralized.

Mineral occurrences are numerous within and surrounding the intrusive complex. Fissure vein deposits containing enargite, tetrahedrite, and stibnite occur essentially along a major shear zone manifested by the southwest flowing Camp Creek. Small pods of chalcopyrite, pyrite, galena, barite, etc. occur within the Upper Triassic volcanic rocks at the south contact of the acidic complex.

In 1986 eight holes totalling 688 metres investigated three targets over a distance of 600 metres. Because of the very steep topography suitable targets were limited; each target was investigated by drilling from one site.

At the Main target or "Stringer Zone" sub parallel plus a few cross-cutting veinlets of tetrahedrite-enargite occur in the altered pyritized porphyries. Hole No. 6, drilled sub parallel to the stringers and under the stringer zone, did not encounter the mineralization; however it did encounter some pyrite-enargite-tetrahedrite type of mineralization close to the stock contact. Two more holes drilled from the same pad but in different directions also encountered some pyrite-enargite-tetrahedrite mineralization at the collars over short core lengths.

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The East Zone differs in mineralogy consisting of silicified vein and breccia zones and containing massive pyrite in places and small amounts of tetrahedrite-enargite. Two holes dipping 45° and radiating out in directions 30° apart both encountered the mineralized siliceous zones and the mineralized breccia zone with some values in silver and gold. A steeper hole drilled under one of these shallow holes encountered only minor stringer mineralization indicating that the breccia mineralization at this site is faulted off at a shallow depth.

The East Extension showing is an exposure of silicified porphyry carrying some pyrite, arsenopyrite, and minor tetrahedrite. Surface assays show values of 0.16% Cu, 3.87 oz. per ton Ag and 0.212 oz. per ton Au and large blocks of oxidized material downslope in the gully bed have values that are much higher. Two holes collared in the creek bed over the mineralized boulders each encountered about 0.5 metres of pyrite with some chalcopyrite and traces of tetrahedrite. These holes appear to be the down dip extension of the silicified East Extension Zone; however they have completely different mineralogy and could represent merely a stringer out from the prospect exposure.

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INTRODUCTION

GENERAL

Inland Recovery Group Ltd. acquired the Thorn property in 1982 and in 1983 contracted Mr. Doug Blanchflower to map the property and supervise a program of geochemical soil sampling and VLF-EM geophysics. Based on this work, Mr. Doug Blanchflower recommended a drill program in a number of the targets and in January, 1986 J. R. Woodcock compiled the data and concurred in this recommendation.

In 1986, American Reserve Mining Corporation made a joint venture agreement with Inland Recovery Group Ltd. and financed a mapping and drill program amounting to 688 meters in eight holes. The drill contractor was E. Caron Diamond Drilling of Whitehorse.

The mapping program in 1986 was done by J. R. Woodcock and Dave Nowak; the drill program was managed by Dave Nowak and supervised by J. R. Woodcock.

The logging was done by Dave Nowak using his adapted version of the geolog system of International Geosystems Corporation. In this logging, the geology is logged on a separate sheet using commonly accepted abbreviations for geological terms and minerals; the copper-gold-silver values are plotted on a separate sheet; and the core recovery is plotted on a separate sheet.

The locations of the drill holes are shown on the geological map (Figure 3). Drill hole sections are presented on scale 1:500. The core is stored in a rack at the camp site.

LOCATION

The Thorn prospect is located at 58° 33' N latitude; 132° 48' W longitude, map sheet 104K-10W. It lies on a northwesterly flowing tributary of the Sutlahine River in northwestern British Columbia (Figure 1). The Sutlahine River flows northeastward into the Taku River. The Taku River cuts through the Coast Mountains and drains into the Pacific Ocean through the Alaska Panhandle near Juneau, Alaska.

The nearest centres of communication and supply are Juneau, Alaska 100 km to the west, Atlin, B. C. 125 km to the northwest, and Telegraph Creek 125 km to the southeast. Access to the property is best achieved by fixed wing aircraft from either of these communities to Trapper Lake which lies approximately 13 km to the southeast of the property,

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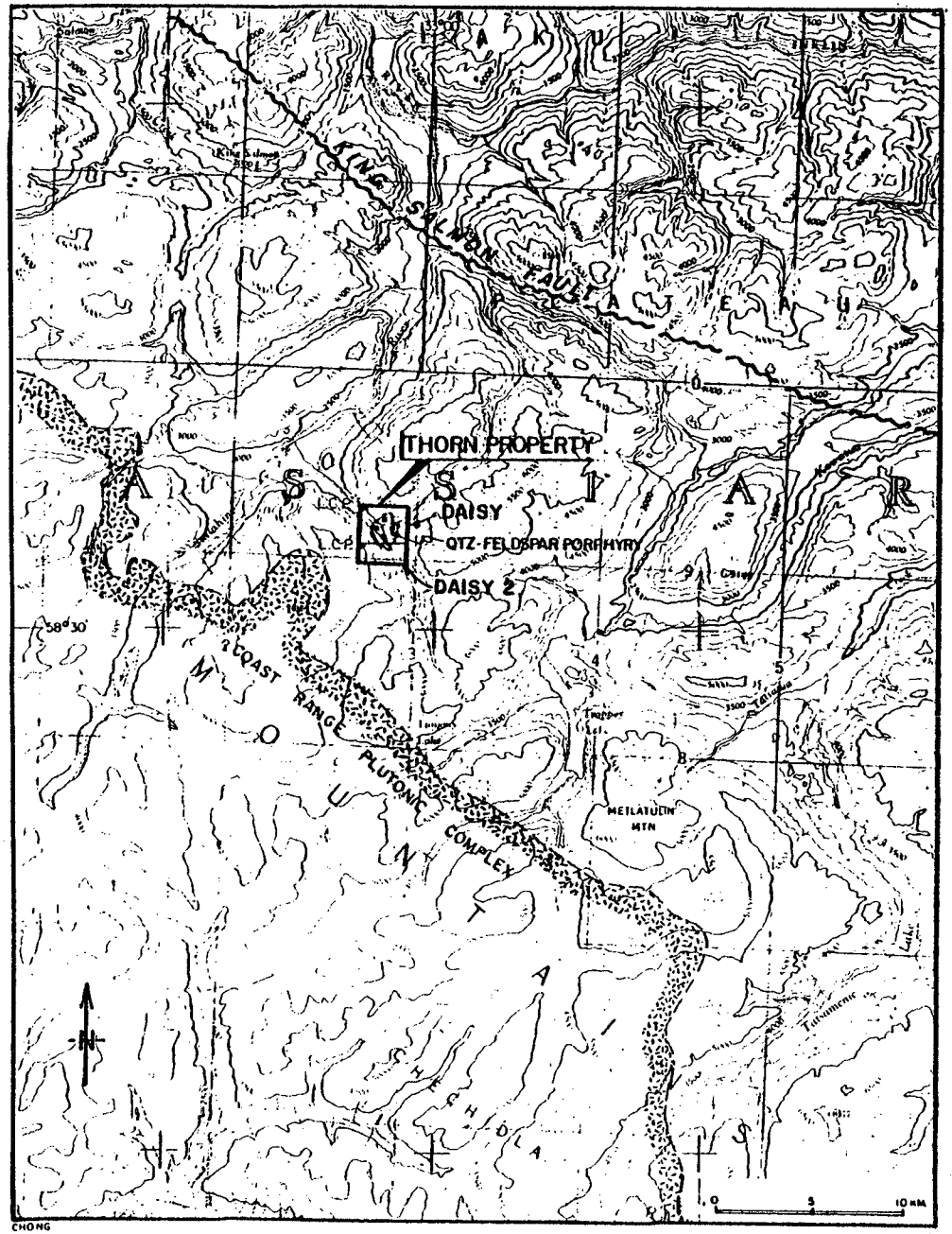
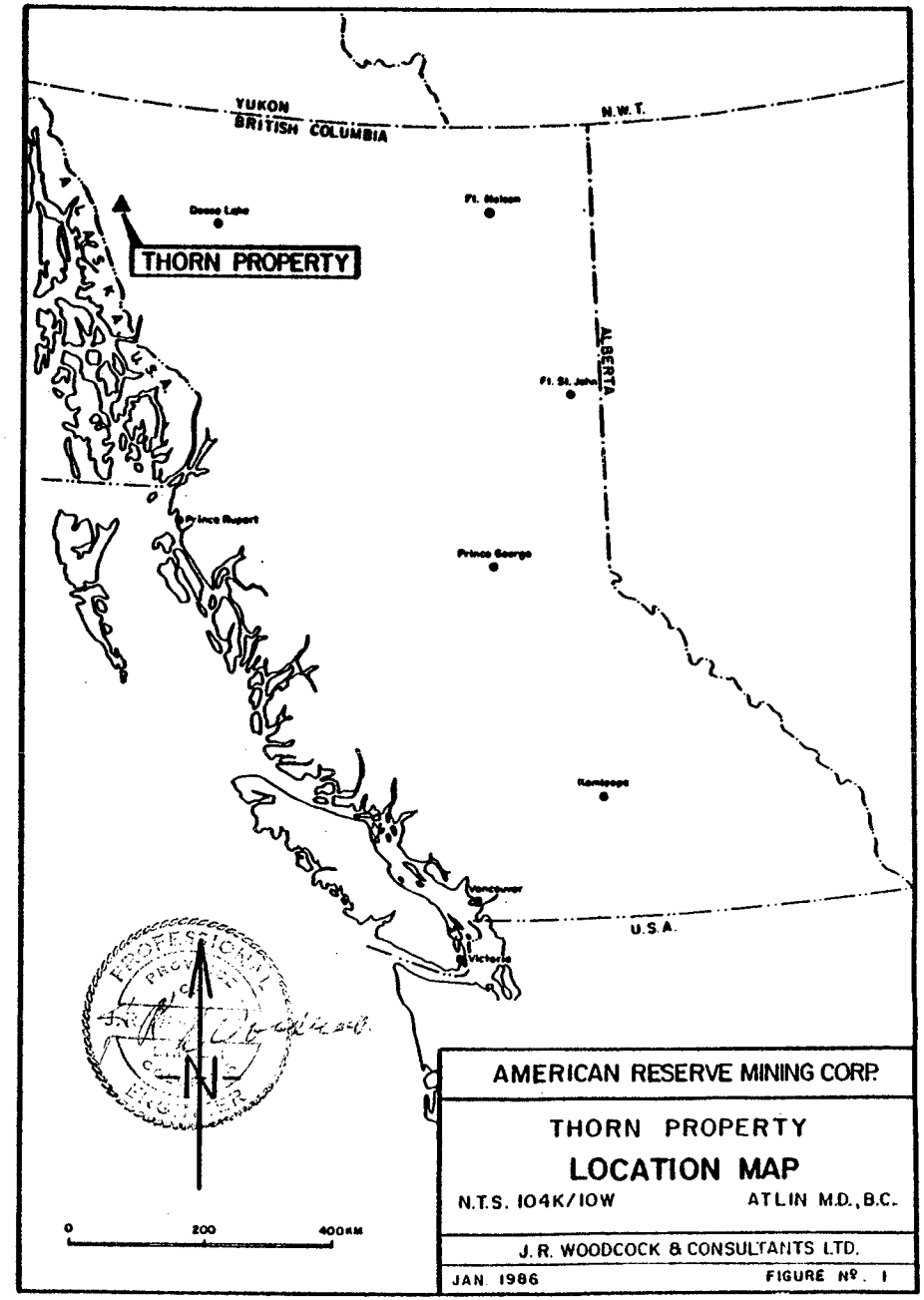




AMERICAN RESERVE MINING CORP.

THORN PROPERTY

LOCATION MAP

N.T.S. 104K/10W ATLIN M.D., B.C.

J. R. WOODCOCK & CONSULTANTS LTD.

JAN. 1986 FIGURE Nº. 1

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

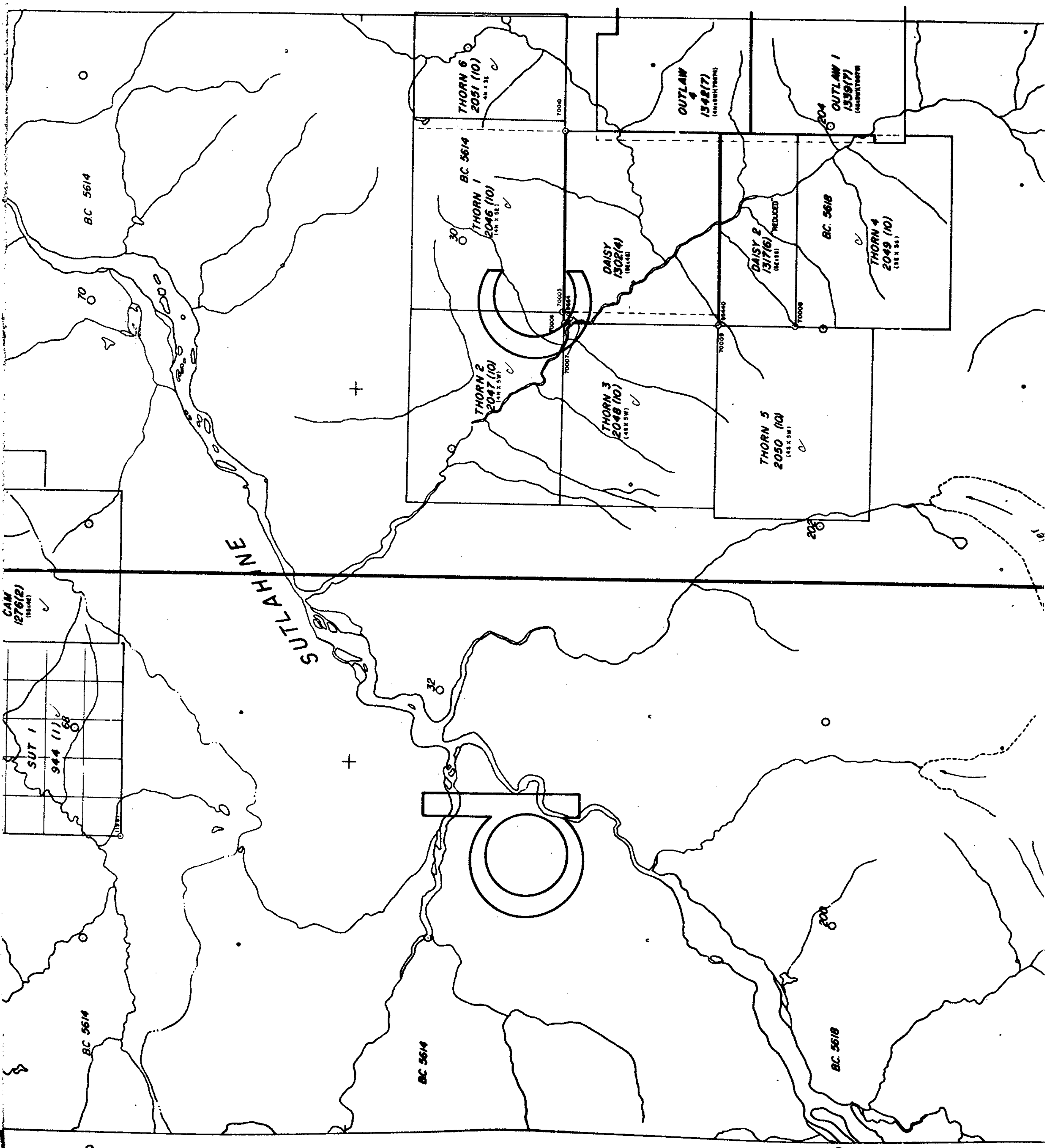
...L CLAIM	C.G.
... CLAIM	Rev. C.G.
...M	✓
... POST	Vac.
	Sec.
... TAG NUMBER	⊙

Miles 1 .5 0 1 2 Miles
Metres 1000 500 0 1000 2000 3000 Metres
Kilometres 1 .5 0 1 2 3 Kilometres

UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH. FOR FURTHER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.

DATE OF MICROFILM: 96.02.14

TO EAST SEE



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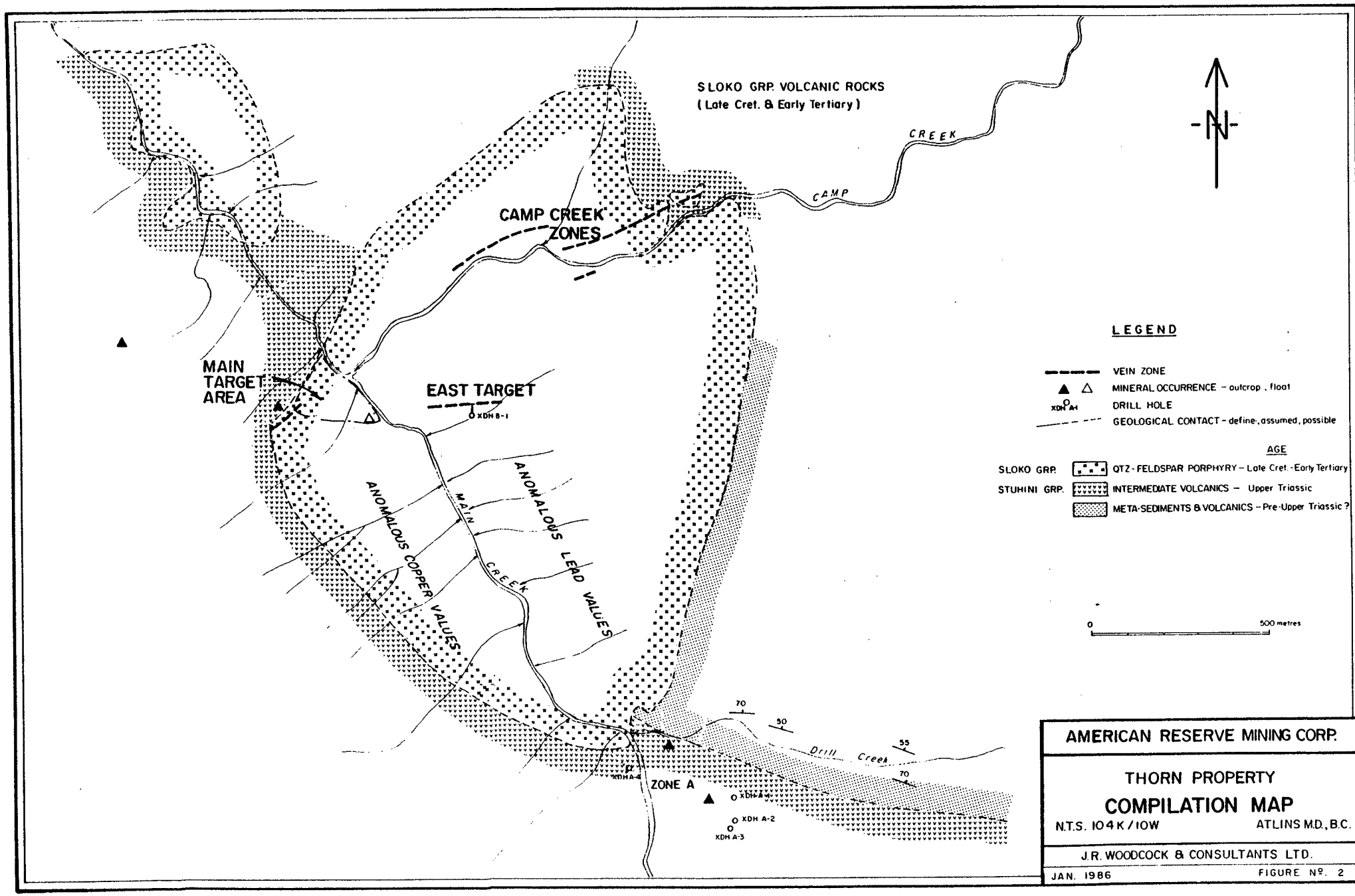

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

COMPILATION MAP

N.T.S. 104K/10W ATLINS M.D., B.C.

J.R. WOODCOCK & CONSULTANTS LTD.

JAN. 1986 FIGURE Nº. 2

CHONG

followed by a short helicopter flight. Helicopters are based at Atlin.

The property is centred on the intersection of two fast-flowing, deeply incised creeks; a northwest flowing main creek (La Jaune or Main Creek) flowing to the Sutlahine River and a southwest flowing tributary (Camp Creek). La Jaune Creek is too deep and swift to cross by foot and so in 1983 two foot bridges were constructed to give access to the south part of the property. Elevation at the junction of the two rugged canyons is approximately 720 m A.M.S.L. Elevations increase rapidly above the canyon floor on either side of both creeks to approximately 1800 m on the southwest corner and to 1200 m on the northeast corner of the property. A flat area at the junction of La Jaune and Camp Creeks is suitable for a drill camp.

Timberline on the property lies at 1400 metres. Much of the property at the lower levels is covered by thick coastal-style vegetation; tag elders and devil's club occur within a predominantly coniferous forest.

CLAIM DATA

The Thorn property currently comprises two located mineral claims which were staked in 1981 by P. Timpany as agent for Mr. J. R. Woodcock. These claims were subsequently sold outright to Inland Recovery Group Ltd.

The claims, which collectively contain 30 units, are enumerated as follows:

Daisy	(20 units)	Record No. 1302	Recorded April 24, 1982
Daisy 2	(10 units)	Record No. 1317	Recorded June 15, 1981

The mapping of 1983 was submitted for assessment work. The Daisy claim is valid until 1989 and the Daisy 2 claim is valid until 1988. On April 23, 1987 an additional four years assessment was requested for each claim.

HISTORY

Prominent yellow-tinted alteration of an intrusive centre apparently attracted Kennco Exploration geologists to this branch of the Sutlahine River in 1959. There is no record of staking any claims as a result of this initial discovery.

In 1963 Julian Mining Company staked the Thorn property to cover mineralized outcrops in the drainage basin of the creeks. One zone that outcrops on a branch creek, (Zone A), was mapped and tested by drilling four short holes using Pack Sack equipment.

In 1964 the property was enlarged and extensive prospecting and reconnaissance geochemical sampling was undertaken. As a result, many other mineralized occurrences were discovered. On some, hand trenching and sampling were carried out. A preliminary geological map of the core of the property was prepared.

In 1965 several gold-silver bearing quartz vein zones that outcrop along and parallel Camp Creek were mapped and sampled. Zone A on Drill Creek was geophysically and geochemically surveyed. The surveys were followed by drilling four holes (179 m) on the zone, with no encouraging results. Finally, reconnaissance soil surveys were undertaken on both sides of the Main Creek between Camp and Drill Creeks.

Subsequently, the property was allowed to lapse. The vein zones lacked adequate grade and continuity of mineralization, particularly in light of the then prevailing gold price.

In 1968 the property was restaked as the Ink Group, acquired by Montana Mines, and optioned to American Uranium Ltd. In 1969 Cordilleran Engineering, on behalf of American Uranium, cut 22 hand trenches on the Camp Creek vein zone and sampled the trenches. The firm also conducted a reconnaissance magnetic survey and carried out reconnaissance stream sediment and soil sampling. After completion of the program no further work was recommended and the property was allowed to lapse in 1970.

In 1981 J. R. Woodcock acquired the Daisy claims which were staked to cover the intrusive complex that hosts the vein zones and in 1981 he did minor rock sampling and stream sediment sampling. In 1982 he sold these claims to Inland Recovery Group Ltd.

In 1983 Mr. Douglas Blanchflower, an independent geologist, supervised a program of geological mapping, geochemistry and VLF-EM on the property. Mr. J. E. Wallis, P. Eng. of Atlin provided logistics for this work and compiled the data into a report.

In 1986, a program of detailed geological mapping and diamond drilling was conducted by Dave Nowak and supervised by J. R. Woodcock.

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GEOLOGY

REGIONAL GEOLOGY

The Thorn property is situated eight km to the northeast of the eastern contact of the Coast Range Plutonic Complex (Figure 1b). Physiographically the property lies on the Tahltan Highland adjacent to the Taku Plateau.

The Highland in this area is underlain essentially by Pre-Upper Triassic metamorphic sedimentary and volcanic rocks, Upper Triassic intermediate volcanic rocks of the Stuhini Group, and Lower to Middle Jurassic sedimentary rocks of the Takwahoni Formation, (G.S.C. 1971). A small granodiorite stock, probably Late Jurassic in age, intrudes those units above and to the east of the property. The youngest rocks in the area are those of the Sloko Group, Late Cretaceous to Early Tertiary in age and generally of acidic intrusive and extrusive origin.

In the Taku River region the intrusive stocks of the Sloko Group frequently represent centres of extensive pyritization associated with base and precious metal mineralization. Several small mining groups actively explored Sloko Group rocks in 1980 and 1981, principally for their potential gold content. An intrusive complex centred on the Thorn property hosts mineralization of this nature.

PROPERTY GEOLOGY

The intrusive complex on the Thorn property is somewhat elliptical in plan, being approximately 1830 m in length and 1340 m along its short axis. Trending northwesterly along the axis of the main creek, it has been exposed by the erosion of La Jaune and Camp Creek canyons. Several smaller satellite bodies occur along La Jaune Creek to the northwest of the main intrusive body. Centred at the junction of Camp and La Jaune Creeks, the complex is apparently cored by quartz feldspar porphyry which has abundant phenocrysts. Rounded quartz phenocrysts are very prominent. Plagioclase porphyry with less plentiful quartz phenocrysts also occurs. Finer-grained acidic rocks (felsites), apparently related to the porphyry, are also present. A breccia of unknown origin, but possibly related to the intrusion, occurs on Camp Creek. The intrusive complex appears to have intruded the contact between a metasedimentary-volcanic unit and an intermediate volcanic unit.

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Metasedimentary rocks have been mapped along the eastern side of the intrusion. Rocks closest to the stock have been mapped as siltstone, but limestone and chert occur at higher elevations to the east. The unit as mapped along Drill Creek at the south side of the stock strikes essentially east-west and dips 55^{o} to 77^{o} to the north.

Volcanic rocks of the Stuhini Group are exposed at intervals along the southwest side of La Jaune Creek and east of the intrusion on Camp Creek (Figure 2). They consist of porphyritic andesite and tuff. Attitudes are unknown. Rhyolitic volcanic rocks of the Sloko Group occur in the northeastern part of the property above Camp Creek.

In 1986 a stadia and transit base map was made and detailed geological mapping was done on a scale of 1:1000. The stock was divided into a feldspar-quartz porphyry with a northwest contact zone of a finer-grained porphyry and fewer quartz phenocrysts. Several basic dikes were also mapped cutting the porphyry and also occurring along the west contact of the stock.

Erosion surfaces, some recent and some possible pre Pleistocene, are marked by a ferricrete-conglomerate in which boulders of a number of rock types including glacial erratics are cemented by limonite and finer soil debris. Such conglomerates are conspicuous along the banks of the stream opposite the camp but also occur at higher elevations on the rusty slopes near Pad 3 and along the gully near Pad 1. These may be overlain by glacial outwash gravels that form large thicknesses in the area north of Pad 2.

MINERAL OCCURRENCES AND DRILL RESULTS

Pyrite mineralization occurs, extensively and erratically, throughout the intrusive complex. Some pyrite mineralization, more massive in texture, occurs along shear zones in the intrusion, frequently associated with enargite, tetrahedrite and stibnite. Numerous mineralized occurrences lie within and peripheral to the stock. Many of these are described in the various reports by Adamson, five of them will be discussed in this report. The names presently used and the letter notation of Adamson's 1964 report are included.

Camp Creek Vein Zones (F, M)

A prominent, northeasterly striking siliceous vein zone outcrops along the northern wall of Camp Creek. The vein zone extends in discontinuous fashion for the full width of the intrusive complex. The overall width of the vein zone is in the order of 60 metres. Parallel but shorter and narrower zones occur on the south side of Camp Creek. Hydrothermal alteration, visible as limonitic staining, silicification, and general bleaching of the intrusion envelopes all zones.

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Within the main zone at least two parallel bands of discontinuous sulphides are evident. These bands, which vary from one to ten metres in width, comprise irregular pods of pyrite and tetrahedrite with lesser amounts of enargite and stibnite. Gold and silver values range up to 0.20 oz. Au and 9.8 oz. Ag per ton. Generally, average values are low and mineralization lacks continuity.

The Drill Creek Zone (A)

Mineralization consisting of chalcopyrite, galena, pyrite, calcite, barite, and quartz occurs in brecciated rhyolites within andesitic volcanic rocks at the southeastern end of the intrusion (Zone A). The andesitic wall rocks are generally pyritic for some distance beyond the base metal mineralization.

In 1965 the zone was geophysically surveyed (IP) and tested by drilling four X-ray holes (179 m). Mineralized outcrops were initially sampled in 1963 by drilling four Pack Sack drill holes (79 m). The zone was not investigated further as the mineralization appeared to be discontinuous and low grade.

East Zone (B)

In the 1986 mapping the East Zone was divided into the East Zone and the East Extension. The East Zone consists of a number of parallel silicified vertical structures that occur within the altered porphyry over a maximum width of 30 metres. The East Extension Zone lies 200 metres east of the East Zone and may be the same zone offset by a fault. It consists of some silicified and mineralized rock in one exposure on the steep hill slope and numerous large boulders of mineralized float in the gully 20 metres to the south.

The silicified structures at the main East Zone include layers of up to six metres wide that consist of almost pure quartz with large pockets of pyrite. The drill core indicates that minor enargite or tetrahedrite occur with the pyrite. The zone strikes about 70° azimuth and can be traced along the hillside for 1200 metres, possibly with some small offsets.

In 1986 three drill holes were placed across the widest part of the zone from one site. Hole No. 3 strikes 137° azimuth and dips 45°. In addition to a number of small silicified and quartz stringers, this hole intersected a six-metre wide breccia zone of silicification and pyritization. The best intersection in this hole had a length of 10.29 metres containing 1.03 oz. per ton Ag and 0.08 oz. per ton Au. Hole No. 4, drilled at a 60° angle under Hole No. 3, did not intersect the silicified zone indicating that it is faulted off at a shallow depth. The best intersection obtained was 0.54 metres containing 1.98 oz. per ton Ag and 0.064 oz. per

ton Au. Hole No. 5, drilled southeasterly, again intersected the silica zone with lithology similar to that in Hole No. 3. The best value obtained in this hole was 5.44 metres with 0.58 oz. per ton Ag and 0.047 oz. per ton Au.

The East Extension Zone (B)

At the East Extension Zone a silicified outcrop on the hill slope was trenched and sampled by Cordilleran in 1969 and returned 0.25 oz. per ton Au, 9.1 oz. per ton Ag, and 0.3% Cu across 12 feet. Six character samples taken in 1963 from the mineralized float of this zone averaged 0.202 oz. per ton Au, 8.01 oz. per ton Ag, and 1.2% Cu. In 1986 grab samples were taken from the large pieces of oxidized and mineralized boulders in the bed of the gully and these had values up to 42 oz. per ton Ag plus 0.402 oz. per ton Au, but no Cu. The boulders are highly oxidized; the effects of supergene enrichment are unknown.

In 1964 one short drill hole was spotted to intersect the extension of the outcropping quartz vein in the hope of encountering the source of the mineralized boulders. However no mineralization was intersected in the drill hole.

In 1986 two short holes were collared on the pad placed over the mineralized float in the gully. These short holes intersected fault zones containing pyrite and some chalcopyrite but no silicification. However, projected up dip, this zone would intersect the mineralized exposure. The mineralogy of the exposure with its silica and arsenopyrite differs sharply from that of the intersections in the two drill holes. Whether the type of mineralization has changed drastically down dip from the surface exposure in a distance of less than 50 metres or whether the zone intersected in the drill hole is different from that exposed on the slope uphill is not known.

The Main Target (B)

In 1964 prospecting on the southwest side of La Jaune Creek, on strike with Zone B, led to the discovery of massive sulphide boulders. Mineralization consisted of pyrite with appreciable tetrahedrite and enargite. A grab sample assayed 8.45% Cu, 0.64 oz. Au per ton, and 9.06 oz. Ag per ton. These boulders occurred in slide debris; their source was the overburden area in or above the slide. Some hand stripping was done but the source of the sulphide float was not found.

The mapping and prospecting by Blanchflower in 1983 led to the discovery of exposures along the southwest side of the stock which could be the source of the float. A fairly recent slide has exposed a seven-metre wide zone which contains en echelon veins of tetrahedrite, enargite, and pyrite with individual veins ranging in width from one to 15 centimetres. A chip sample taken across one metre of this zone

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cut five of the veinlets and assayed 0.059 oz. Au per ton, 4.82 oz. Ag per ton and 4.75% Cu.

Sampling of selected lenses within this mineralized exposure by Dave Nowak in 1986 returned very high silver and copper values across very narrow lenses. Although a number of these enargite-tetrahedrite lenses occur within the exposure, the overall grade would be low.

In 1986, a hole was collared on the ridge to the southeast of the mineralized exposure and directed underneath this outcrop. Below the outcrop there was very little mineralization; however near the end of the hole and at the contact of a bounding dike on the west, some pyrite-enargite mineralization forms a stringer zone. The best value in Hole No. 6 was 2.58 metres with 3.78% Cu, 4.45 oz. per ton Ag, and 0.057 oz. per ton Au.

A hole (DDH #7) was also directed to the southeast from this pad into an area of few exposures and unknown geology but the source of some float in gullies down slope. Near the collar this hole intersected some tetrahedrite-pyrite; however most of the hole cut barren porphyry. A short hole (DDH #8) was therefore drilled from the same collar. The highest value in Hole #7 was 0.6 metres with 5.74% Cu, 7.18 oz. per ton Ag, and 0.12 oz. per ton Au. The second hole (# 8) encountered 2.2 metres containing 1.38% Cu, 3.5 oz. per ton Ag, and 0.041 oz. per ton Au.

Core selected for sampling was split in two — one half for assaying and one half for retaining.

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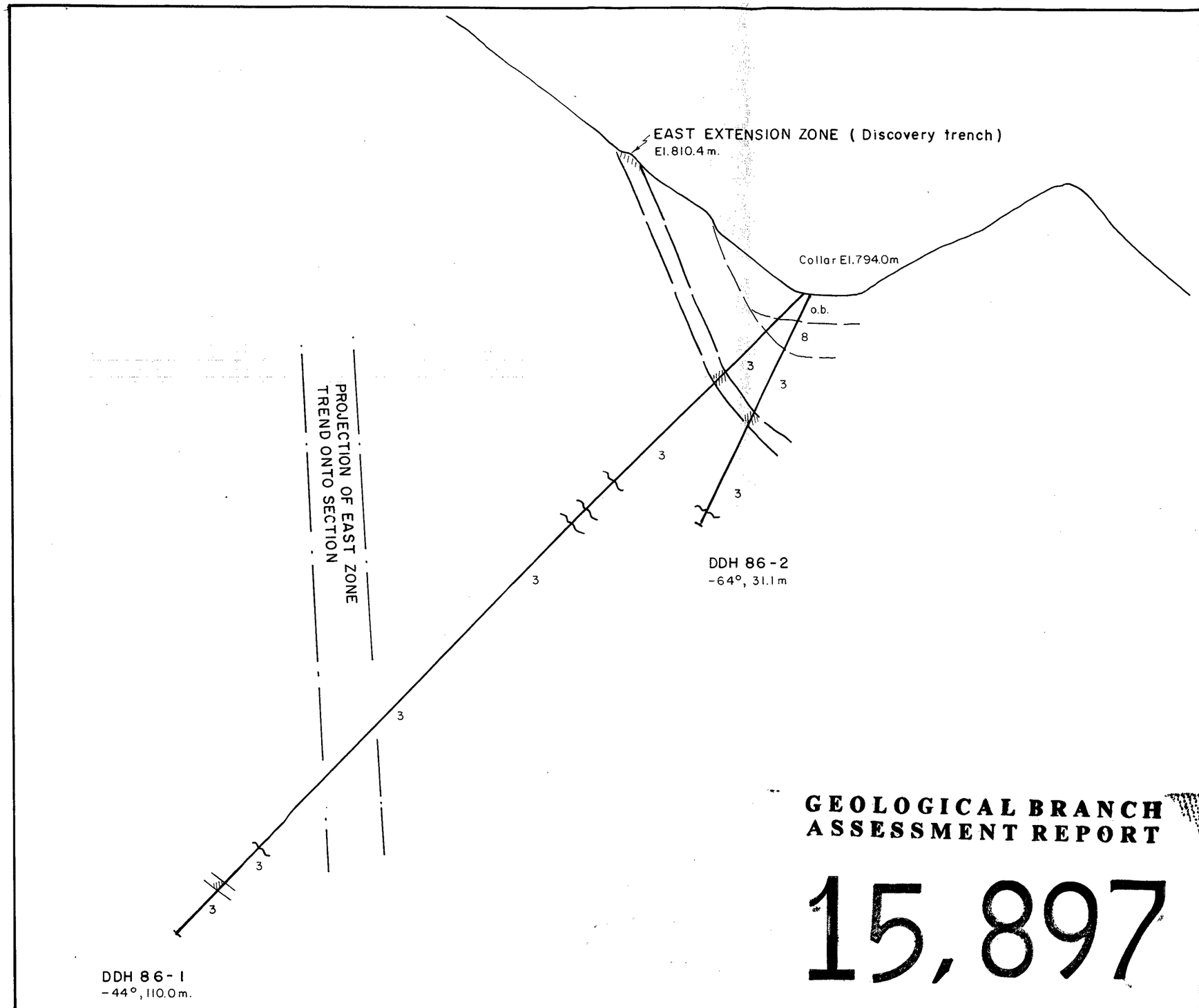

LEGEND

- ob — Overburden
- 8 — Ferricrete
- 7 — Basic dykes
- 6 — Green porphyry
- 5 — Feldspar quartz porphyry
- 4 — Feldspar porphyry
- 3 — Feldspar-biotite porphyry
- 2 — Contact porphyry or tuff
- 1 — Andesitic volcanics
- Quartz sulphide veining
- Fault

Section along azmuth 000°, looking East

GEOLOGICAL BRANCH ASSESSMENT REPORT

15,897

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

DIAMOND DRILL HOLE SECTION
DDH 86 - 1, 2

N.T.S. 104K/10W — ATLIN M.D., B.C.

0 10 20 30 METRES

J. R. WOODCOCK CONSULTANTS LTD.

MAY 1987 — FIGURE No. 4

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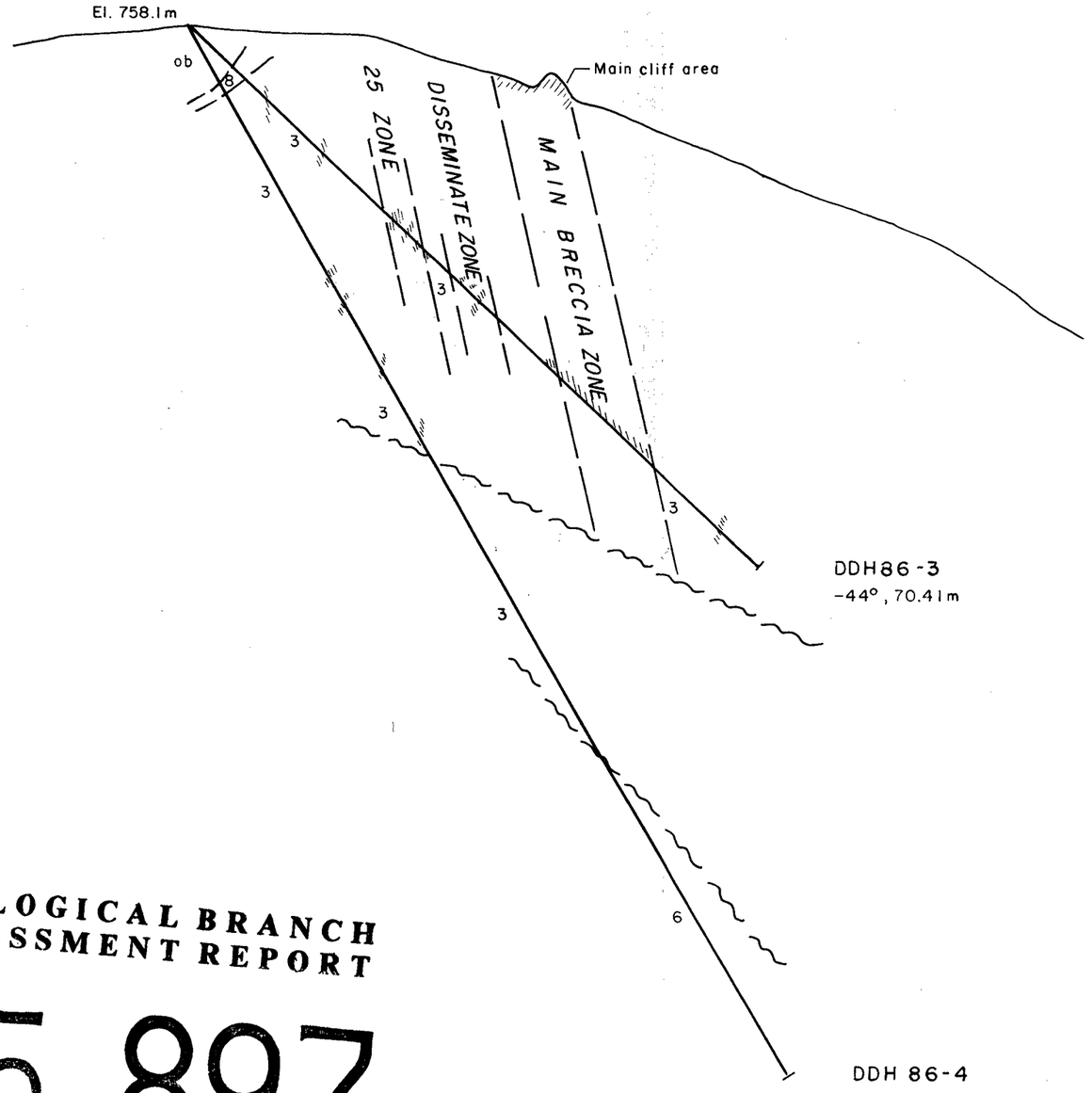


LEGEND

ob	Overburden
8	Ferricrete
7	Basic dykes
6	Green porphyry
5	Feldspar quartz porphyry
4	Feldspar porphyry
3	Feldspar - biotite porphyry
2	Contact porphyry or tuff
1	Andesitic volcanics
//////	Tetrahedrite - pyrite
~~	Fault

Section along azmuth 138°, looking East

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

DIAMOND DRILL HOLE SECTION
DDH 86 - 3,4

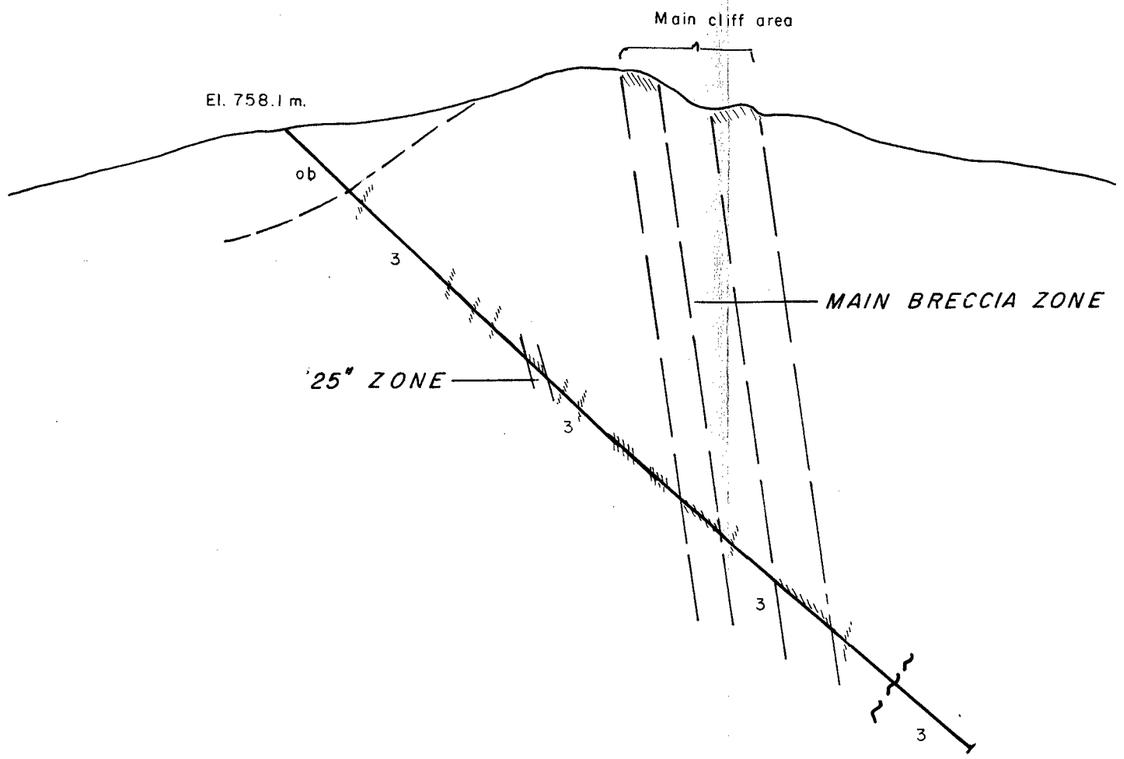
N.T.S. 104K/10W ATLIN M.D., B.C.

0 10 20 30 METRES

J. R. WOODCOCK CONSULTANTS LTD.

MAY 1987 FIGURE Nº. 5

CHONG



DDH 86-5
-45°, 78.03m.

Section along azmuth 108 °, looking North

LEGEND

ob	Overburden
8	Ferricrete
7	Basic dykes
6	Green porphyry
5	Feldspar quartz porphyry
4	Feldspar porphyry
3	Feldspar-biotite porphyry
2	Contact porphyry or tuff
1	Andesitic volcanics
//////	Silicified zone
~~	Fault

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

DIAMOND DRILL HOLE SECTION DDH 86 - 5

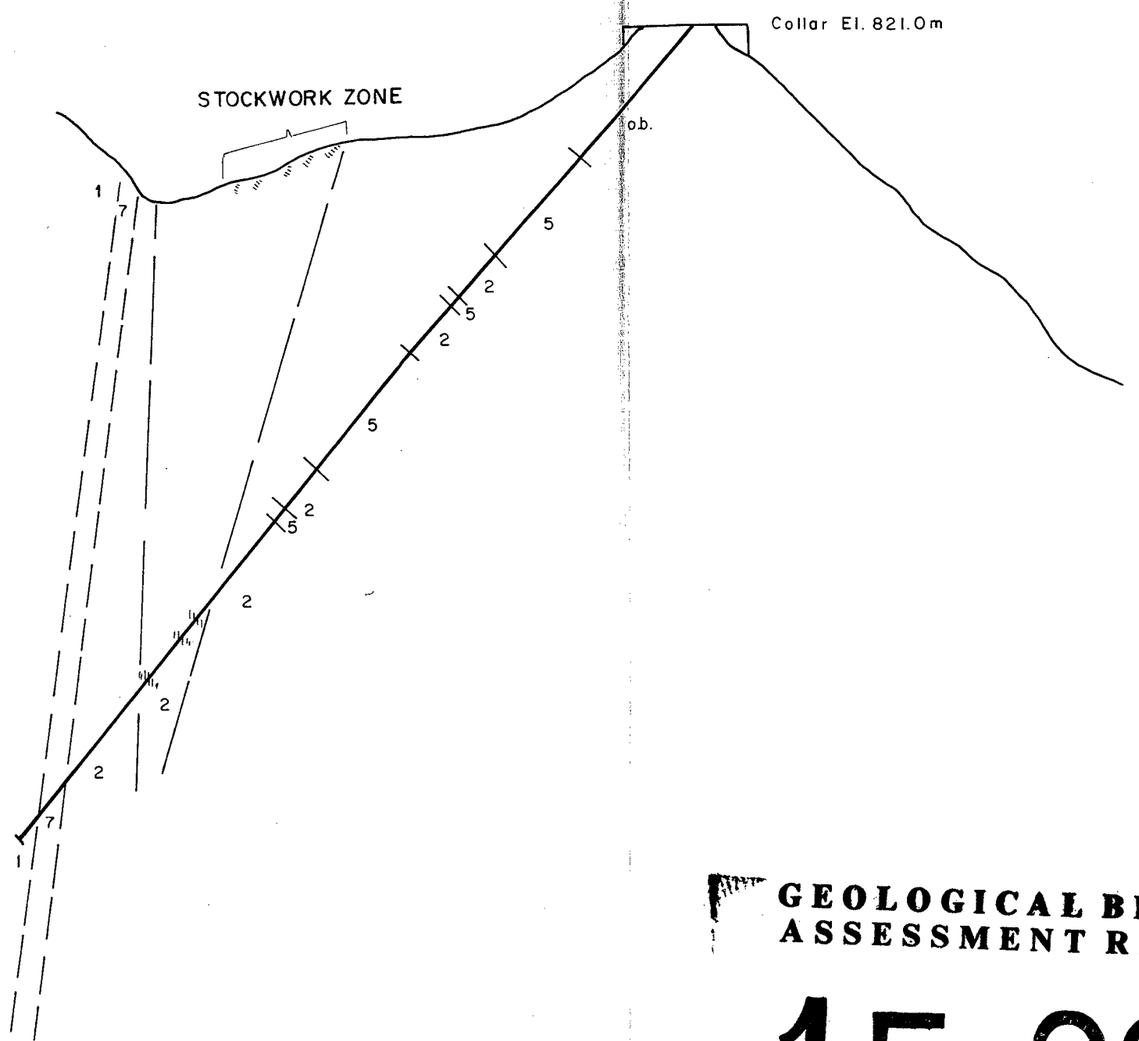
N.T.S. 104K/10W ATLIN M.D., B.C.

0 10 20 30 METRES

J. R. WOODCOCK CONSULTANTS LTD.

MAY 1987 FIGURE Nº. 6

CHONG



LEGEND

ob	Overburden
8	Ferricrete
7	Basic dykes
6	Green porphyry
5	Feldspar quartz porphyry
4	Feldspar porphyry
3	Feldspar-biotite porphyry
2	Contact porphyry or tuff
1	Andesitic volcanics
//////	Tetrahedrite - pyrite
~~	Fault

Section along azmuth 120 °, looking North

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

DIAMOND DRILL HOLE SECTION
DDH 86 - 6

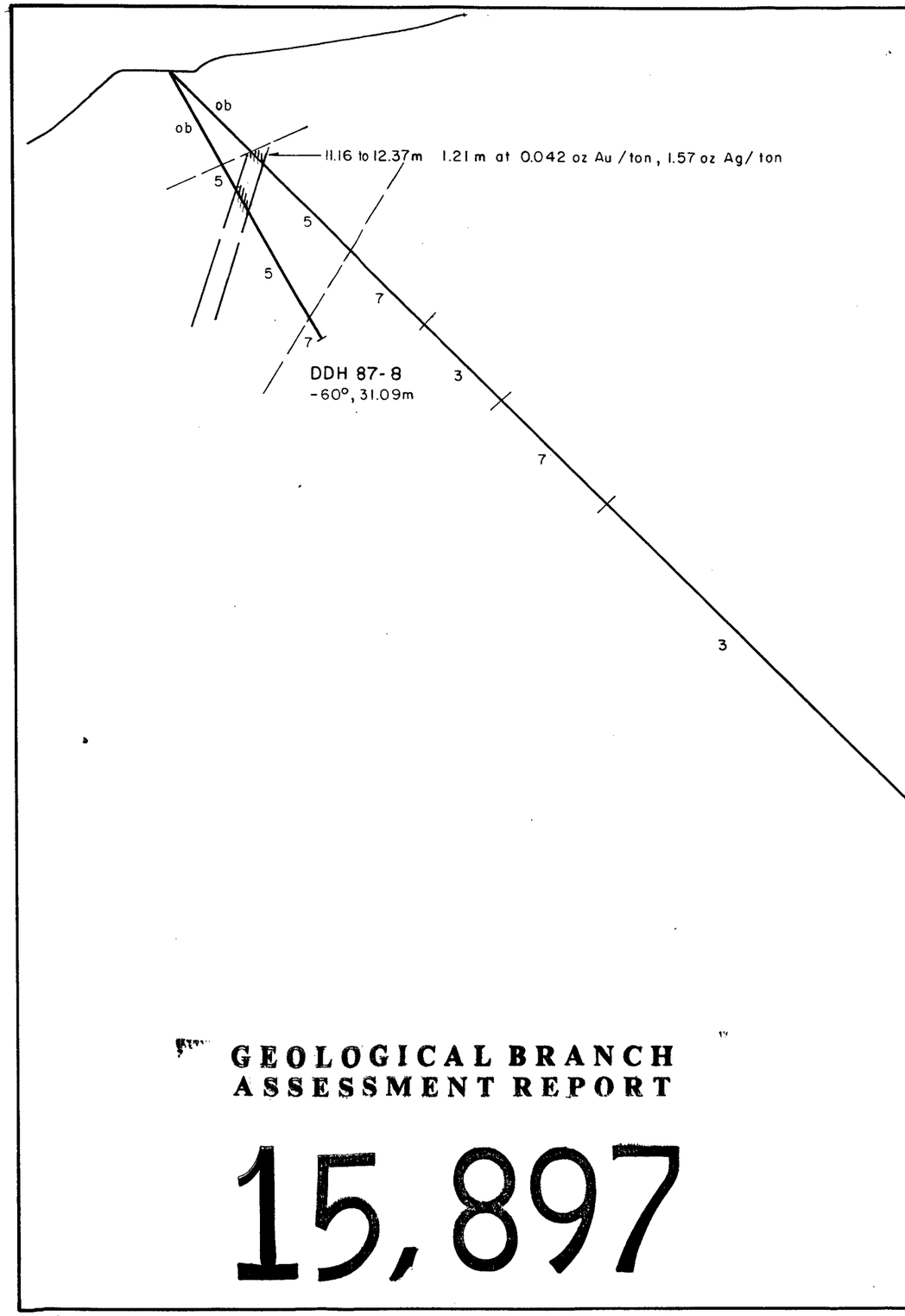
N.T.S. 104K/10W ATLIN M.D., B.C.

0 10 20 30 METRES

J. R. WOODCOCK CONSULTANTS LTD.

MAY 1987 FIGURE Nº. 7

CHONG



LEGEND

ob	Overburden
8	Ferricrete
7	Basic dykes
6	Green porphyry
5	Feldspar quartz porphyry
4	Feldspar porphyry
3	Feldspar - biotite porphyry
2	Contact porphyry or tuff
1	Andesitic volcanics
////////	Tetrahedrite - pyrite
~~	Fault

Section along azmuth 180 °, looking East

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

DIAMOND DRILL HOLE SECTION DDH 86 - 7, 8

N.T.S. 104K/10W ATLIN M.D., B.C.

0 10 20 30 METRES

J. R. WOODCOCK CONSULTANTS LTD.

MAY 1987 FIGURE No. 8

CHONG

TABLE I

THORN DRILL RESULTS

Hole No.	From (m)	To (m)	Core Length (m)	Cu (%)	Ag (oz/ton)	Au (oz/ton)	
East Extension Zone							
1	14.44	14.87	0.43	0.92	1.72	0.05	
2	15.98	18.09	2.11	0.16	0.64	0.014	
East Zone							
3	43.69	53.98	10.29	0.07	1.03	0.080	
4	30.20	30.74	0.54	0.04	1.98	0.064	
5	57.30	62.74	5.44	0.04	0.58	0.047	
Stringer Zone							
6	69.01	71.78	2.58	3.78	4.45	0.057	near stock contact
7	11.16	12.37	1.21	3.35	1.57	0.042	at collar
and	104.33	110.29	5.96	1.34	1.25	0.033	
which includes	104.93	105.23	0.30	0.65	1.36	0.115	
and	109.69	110.29	0.60	5.74	7.18	0.120	
8	13.30	15.50	2.20	1.38	3.50	0.041	near collar

CONCLUSIONS

1. Mineralization and alteration at the Thorn property are associated with an intrusive-extrusive centre of Eocene Age. Alteration includes intense pyritization, generally oxidized to brilliant jarosite, sericite, kaolinite and silicification. Besides the pyrite mineralization, enargite, tetrahedrite and stibnite are widespread in the complex. These occur in altered shear zones or in structurally controlled breccia zones. Good grades of gold and silver are associated with much of the enargite-tetrahedrite.

2. The geology at this mineralized complex indicates that it is not a near surface epithermal deposit but that it conforms very closely to the enargite model. Probably the most spectacular and well known example of the enargite model is the El Indeo deposit in Chile where high grade precious metal lodes are associated with structurally controlled quartz veins and zones of intense alteration. Alteration includes silicification, argillic, and alunite-quartz-sericite types. In addition to the mill feed reserves at El Indeo totalling five million tons with an average grade of 0.3 oz. per mt Au, 3.4 oz. per mt Ag and 5% Cu, high grade shipping ore in much smaller tonnages averages 5.9 oz. per mt Au and 4.3 oz. per mt Ag.

3. In 1986 eight drill holes totalling 688 metres investigated three targets (Main target, East Zone, East Extension) over a distance of 600 metres. Because of the very steep topography suitable drill holes are limited; each target was investigated by drilling from one site.

4. At the Main target or "stringer zone" sub parallel plus a few cross-cutting veinlets of tetrahedrite-enargite-pyrite occur in the altered pyritized porphyries. Similar mineralization was encountered in the first drill hole placed under this stringer zone; however the mineralization of the hole was near the stock contact and not directly below the exposed stringer zone. Two additional drill holes were radiated out from this same drill pad and these encountered some similar mineralization near the collar. The best values of mineralization are summarized in Table I.

5. Three holes were drilled in the East Zone. Two of the shallow holes cut the silicified zones; however the deeper hole failed to intersect this wide siliceous zone indicating some fault offset at a shallow depth. The pyritic silicified-pyrite rock carried some low values in silver and gold.

6. The East Extension may be offset by faulting from the East Zone. It consists of silicified porphyry that carries pyrite, arsenopyrite and good precious metal values. Large blocks of oxidized mineralized rock are found in the gully downslope.

JRW

Two holes collared in the gully downslope from the exposure encountered a mineralized fault zone at shallow depth. These intersections project up to the mineralized silicified outcrop. However mineralogy is completely different, consisting of pyrite and chalcopyrite with negligible precious metal values.

The limitations imposed by topography make exploration with standard drill very costly. Any further work should concentrate initially on gaining additional information on the showings themselves by setting up a portable drill on the showings and radiating out short drill holes. Such short drill holes on the East Extension Zone should indicate more accurately its attitude and extent and short drill holes along the wider East Zone should give information on the fault offsets and possible changes in grade along its strike.

J.R. Woodcock

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J.R. WOODCOCK

JRW:me

JRW

REFERENCES

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Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	680Z	THØRN		TH-86-06	NQ	86 08 05 DJN MJE	8806	CARON · 86 09 02 0 0 0 -		.	M 01
I	PRJ	AMERICAN RESERVE MINING CORPORATION THØRN PROPERTY, ATLIN MINING DISTRICT										

Survey Data

KEY	TURN C PT. 000=Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S	000	0.00	28.70			300.00	-50.00	.	.	.	.	821.00

Upper Tier: U — FLAG, FROM, TO, RECOVERY, T MOD, MIX, ROCK-SOIL, TYPIFY-MAT TM1 TM2, QALMAT QM1, TEXTURES TX1 TX2, GRAIN Fr Cr C CMP, FRACTURE COUNT 1 2, T1, STRUC1 ID, STRIKE AZM, DIP, QZ, BI, ALTERATION & MINERALIZATION DEFAULT SUITES CY CB MG XX PY CP GL YY, SUMMARY F1 F2

Lower Tier Geodata: L — RQD, FM MEM, ENV, RTQ, LC Colour, TM3, QM2, TX3, TX4, Sa Rn Sn O/C, T2, STRUC2 ID, AZM, DIP, KF, MU, CL, EP, HE, Hw Amt, PR, MO, SL, Hw Amt, M1, M2

Assay Data: A — FROM, TO, RECOVERY, Sample Serial No.

F-Entry: F — FROM, TO

GRAPHIC

KEY	FLAG	FROM	TO	Columns 17–80
R	HED			TEST TETRAHEDRITE - ENARGITE SURFACE STØCKWORK IN RØSTY CREEK
R	HED			FØR DØWN DIP CONTINUITY.
/		0.0	14.55	ØVER P
L				
R				UNCØNSØLIDATED ANDESITE FRAGMENTS IN A BRØWN CLAY-SILT MATRIX.
/		0.0	9.75	XØVER D
L				
R				CASING REAMED DØWN TØ THIS DEPTH AFTER SECTIØN WAS DRILLED.
/		14.55	25.77	RC PP FX PY KA = PP BR 4 6 3 6 P D+
L				WA Ø
R				"RUSTY CREEK PØRPHYRY". TEXTURE RANGES FRØM A CRØWDED PØRPHYRY
R				TØ A FINE GR MATRIX WITH ØCCASIØNAL FX PHENØCRYTS. SCATTERED
R				GY-AH VNS.
/		15.42	15.50	XPBDY KA 4 R CN 40
L				RC 6
R				"PEBBLE DYKE" - 5 CM WIDE.
/		15.59	15.84	XPYTF R T CN
L				WA
R				"PYRITIC TUFF", ER-KA CØNTACT. A FEEDER DYKE TØ THE PYRITIC TUFF
R				ØR A BR ZØNE WITH PY-TF FRAGMENTS.
/		15.98	21.35	XBRKX R
L				
R				BRECCIA IN THIS ZØNE RANGING FRØM A WEAK CRACKLE BX TØ PEPT.
R				STRØNG PERVASIVE KA AND CØATINGS ØN FRACTURES.
/		23.58	23.64	XPYTF R CN 20
L				
R				SHARP 1.1 CMS. DYKE!

81-130

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2A **Geoform**

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Key	Flag	Format Version	Identity of Project	ID of Drillhole/Traverse	Units
I	DFN	6805	THØRN	TH-86-06	T 02
I	PRJ				

Key	From	To	Rock-Soil / Entry	Other	Col. 47	Codes (col. 65–75)
/	25.67	29.45	PYTF PY	QZ !	P	D=
L						
R			PYRITIC TUFF. SILICEØUS FINE GR UNIT WITH ØCCASIØNAL FX PHENØ-			
R			CRYTS. CN WITH RCPP ARE GRADATIØNAL CR GR ZØNES WITHIN SECTIØN			
R			BUT NØT PØRPHYRITIC. SCATTERED PY-AH VEINLETS			
/	25.90	26.48	XVEIN		R	TT D1
L						V+
R			ZØNE HAS STRØNG DISS PY WITH IRRG. PY-TT VEINLETS.			
/	27.67	27.91	XPYTF		R	TT D=
L						D*
R			FINE GR DISS. SPHE ØR TT?			
/	29.45	31.20	RCPP		P	
L						
R			SAME DESCRIPTIØNS AS 14.55. SCATTERED MS ALTERED FX PHENØCRYTS.			
/	31.20	31.60	PYTF.			
L						
R			SAME AS 25.67.			
/	31.55	32.28	XPYTF		D	TT D=
L						V) V+
R			IRRG. DISC ØN. PY + PYTT + PYSL? VNLTS.			
/	32.61	33.85	XBRXX	BR	h	
L						
R			CRACKLE BR ZØNE WITH SEVERAL NARRØW PEBBLE DYKES.			
/	33.85	34.73	X+TTF			V)
L						
R			SCATTERED IRRG. PATCHES + VNLTS PY.			
/	34.73	34.96	XVEIN		h	V8
L						V2 V)
R			20% VØL. IRRG SXKA VLINS SPHE, PØSSIBLE TT.			
/	35.32	35.78	XPYTF		D	
L						D=
R			FN GR DISS. STYL ?R TT?			
/	35.78	36.36	XPYTF		D	D2
L						D= V+
R			IRRG VNS ØF SLTPYHL AND IRREG PATCHES ØF PY-SPHE.			
/	36.60	39.32	RCPP		P	
L						
R			SAME AS 14.55.			

81-130

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3A Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB PROJECT (UNIQUE)	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	UNITS M/F	GRID AZIMUTH
I	D F N	6 B 0 E	T H Ø R N	T H - B L - C 6	T	0 3
I	P R J					

KEY	FROM	TO	ROCK-SOIL	Col. 35	Col. 47	STRUC 1 ID	DIP	Col. 67–70	Comment
/	39.32	40.23	X PYTF		P				
L									
R									SAME AS 25.67. BROKEN CORE, DYKE?
/	40.23	41.46	X RCFP		P				
L									
R									SAME AS 14.55.
/	41.46	42.00	X PYTF		P	CN	85	V=	
L									
R									SAME AS 25.67. PYVNS TRENDING DOWN CØRE AXIS.
/	42.00	47.75	X RCPP		P				
L									
R									SAME AS 14.65. MASSIVE SECTIØN.
/	47.75	52.19	X PYTF		P				
L									
R									SAME AS 25.67. ØCCASIONAL FX PHENOCRTS - FRAG?
/	48.81	49.60	X PYTF		B			D=	
L									
R									IRRG. VNLTS + DISS. PATCHES ØF PY.
/	49.60	49.75	X PYTF		D			V1	
L									
R									VERY SILICEØUS ZØNE WITH IRRG. VNLTS ØF PY.
/	52.19	54.08	X RCPP		P				
L									
R									SAME AS 14.55.
/	54.08		PYTF		P				
L									
R									SAME AS 25.67.
/	54.08	54.76	X BRXX	BR	R			D=	
L									
R								X.	BRØKEN CØRE. RØUNDED PYTF FRAGMENTS IN A PYTF MATRIX.
/	57.53	58.06	X PYTF		D			V<	
L									
R									SILICEØUS ZØNE WITH NUMEROUS PY VNLTS. TTT
/	58.06	58.89	X PYTF		D	CN	70	TT V1	
L								V+	
R									4 CM SHEAR ZØNE WITH PY-TT + NUMUROUS IRRG. PY VNLTS THAT
R									HAVE BEEN SHEAR FØLDED.

81-130

International Geosystems Corporation — Geolog System — Geoform 4A

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data: D E N | 6 B 0 2 | T H Ø R N | TH-86-06 | T | 04
P R J

KEY	FROM	TO	ROCK-SOIL	TEXTURES	STRUC	DIP	ALTERATION
/	59.23	59.75	XPYTF	BR	DD FØ	20	
R	SHEARED-BR ZONE, STRONG PERVASIVE KA						
/	60.51	61.17	XPYTF		D CN CN	20	TT V1
L							V1
R	NUMERØUS SUB// PY VNLTS (IRRG) WITH TT?						
/	64.66	65.07	XVEIN		R CN	45	
R	8 CM WIDE PY-KA-TT VN-SHEAR WITH IRRG PATCHES ØF PY IN THE REST						
R	ØF THE SECTIØN.						
/	66.63	67.56	XVEIN		RTCN		TT V7
L					BCN	30	V+
R	MASSIVE SX VEIN 40 + 12 CM SEPARATED BY PYTF WITH VEINLETS ØF						
R	PY.						
/	67.67	67.90	XPYTY	BR	D		
R	BRECCIATED ZØNE WITH PEBBLE DYKE.						
/	67.90	68.05	XPYTF				TT V+
L							V+
R	IRRG TT-PY VNLT TRENDING ALØNG CØRE AXIS.						
/	70.29	70.71	XPYTF		D CN	70	TT V+
L							V+
R	7 MM TT-PY VEIN.						
/	70.71	71.38	XVEIN		RTCN	45	TT V7
L							V2
R	MASSIVE SX VN WITH SOME FRAGMENTS ØF PYTF.						
/	71.33	71.78	XVEIN		R		TT V2
L							V=
R	IRRG. PY-TT VEINLETS + PATCHES						
/	73.10	82.57	XPYTF	BR			
R	BRECCIATED RANGING FROM A CRACKLE BX TO A FULL BX WITH						
	STRONG KA ALTERED PYTF AS MATRIX						

81-130

International Geosystems Corporation

Geolog System

5A

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB PROJECT (UNIQUE)	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	UNITS M/F
I	DEN	6805	TH6PN	TH-36-27	05
I	PRJ				

Key	From	To	Cols 17–23	Rock-Soil (24–27)	Typify-Mat (28–31)	Qalmat (32–34)	Textures (35–38)	Grain (39–42)	Fracture (43–46)	47	Struc (48–50)	Dip (55–56)	69–70
/	82.57	83.80		DIAB	CABI	CAI	PPMY	3526		P	TCN	45	D*
L				DY				0			BCN	60	
R			IRRG. TOP CN WITH 1 CM CHILLD MARGIN. BI + KA PHENOCRYST. IN FN GR GREEN MATRIX. NUMEROUS IRREGULAR QZ-CA VNLTS. A CHILLED MARGIN ALONG A FRACTURE. (2 PHASES?)										
/	83.80	84.47		AYTT			BR			P	TCN		
R			SAME AS 73.10 SHLARLD. KA CNS.										
/	84.47	87.17		DIAB						P	TCN	70	
R			SAME DESCRIPTION AS 82.57. CHILLED CNS.										
/	87.17	89.00		ANAG	CA	CAI	BRSH			P	TCN	70	D*
L					GN		AG						
R			AGGLOMERATE WITH PURPLE + GREEN ROUNDED FRAGMENTS IN A CLAY ALTTER GREEN MATREX.										
/	89.00	89.00											

81-130

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Geolog System

6A Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	N-T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	D F N	6 B 0 5	T H 6		COMPANY					PROSPECT OR PROJECT		T 0 6
I	P R J											

KEY	TURN C PT 000=CoRw	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET	NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S													

	KEY	FLAG	FROM	TO	RECOVERY	T_{MOD}	ROCK-SOIL	TYPIFY-MAT	QAL/MAT	TEXTURES	GRAIN	FRACTURE COUNT		STRUC 1 ID	STRIKE AZM	DIP to Right	ALTERATION & MINERALIZATION DEFAULT SUITES							SUMMARY	
U		FLAG	FROM	TO													Q2	BI	CY	CB	MG	XX	PY	CP	GL	YY	F1	F2
L					RQD	TM MIM	ENV	RTQ	LC Colour					STRUC 2 ID	AZM	DIP to Right	KF	MU	CL	EP	HE	Hw Amt	PR	MO	SL	Hw Amt	M1	M2
A			FROM	TO	RECOVERY	Sample Serial No.																					
F			FROM	TO																							

GRAPHIC

	KEY	FLAG	FROM	TO		ROCK-SOIL	TYPIFY-MAT	QAL/MAT	TEXTURES	GRAIN	FRACTURE COUNT		STRUC 1 ID	STRIKE AZM	DIP to Right	ALTERATION & MINERALIZATION DEFAULT SUITES							SUMMARY	
a					ASSAY RESULTS OF SAMPLES TAKEN FROM THO'N' DDH-SC-06																				
A		SAMPLE			SAMPLE		Ø7/TAU		Ø2/TAQ				SAMPLE												
A		SIZE			NUMBER		MIN-EM		MIN-EM				MIN-EM												
							1/2C		1/4C				1/2C												
			25.38	26.26	TH6-01		0.0011		0.42		0.130		0.46												
			27.62	27.56	TH6-1B		0.0022		0.11		0.008		0.24												
			31.60	32.31	TH6-02		0.0061		0.53		0.006		0.71												
			33.96	34.73	TH6-03		0.0011		0.11		0.014		0.79												
			34.13	34.97	TH6-04		0.0199		1.94		1.290		0.26												
			35.79	36.35	TH6-06		0.0044		1.34		0.364		0.56												
			41.45	42.00	TH6-7A		0.0011		0.12		0.009		0.55												
			48.92	47.61	TH6-7B		0.0011		0.05		0.006														
			49.61	49.72	TH6-05		0.001		0.05		0.004														
			57.55	58.09	TH6-01		0.0011		0.07		0.018														
					TH6-1C		0.0022		0.47		0.232														
					TH6-1		0.003		0.11		0.026														
					TH6-1A		0.0123		0.75		0.910		0.41												
			65.08	66.64	TH6-12B		0.001		0.12		0.014		1.56												
					TH6-13A		0.0573		1.06		0.483														
			67.58	67.88	TH6-1B		0.0233		0.94		2.960		0.30												
					TH6-1B		0.001		0.11		0.088														

1 2 3 4 5 6 7

85-130

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Geolog System

7A

Geoform

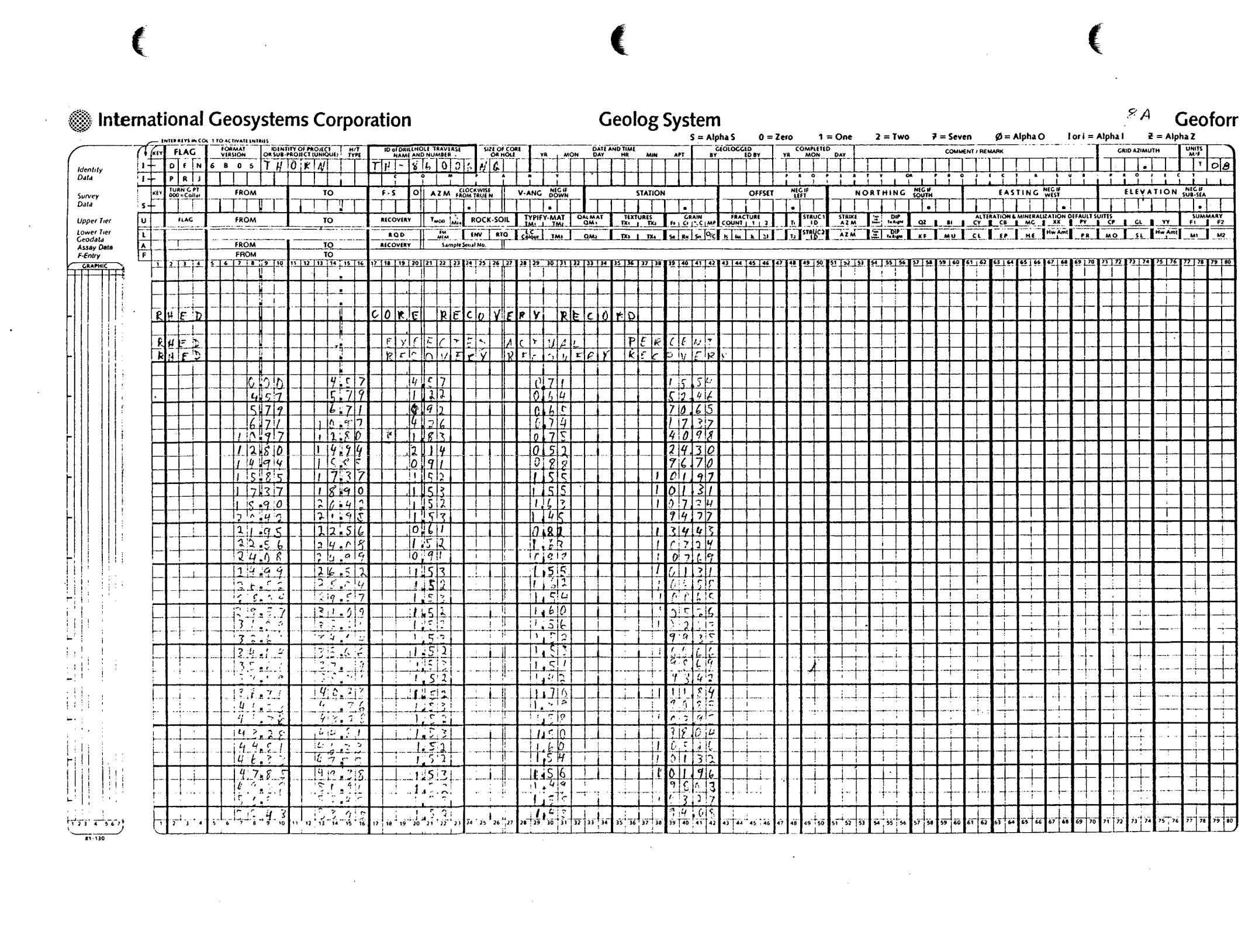
S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	UNITS M/F
I	DEN	6805		TH-S[illegible]-[illegible]	T 07
I	PRJ				

Flag (col 4)	From (cols 5–10)	To (cols 11–16)	ID (cols 21–26)	Cols 28–34	Cols 35–38	Cols 39–42	Cols 43–47	Cols 50–53
?	[illegible]	6[illegible]35	TH6 1[illegible]3	0.140	16.	42	11.820	0.34
o	7[illegible]29	7[illegible]71	TH6-15	0.015	1.	17	1.430	0.32
	7[illegible]71	7135	TH6-16	0.134	6.	45	6.100	0.64
	7135	7178	TH6-17	0.035	5.	80	5.690	0.24

61-130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Geolog System
Geoforr
S = Alpha S
0 = Zero
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7 = Seven
Ø = Alpha O
I or i = Alpha I
Z = Alpha Z
ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES
Identity Data
Survey Data
Upper Tier
Lower Tier Geodata
Assay Data
F-Entry
GRAPHIC
FLAG
FORMAT VERSION
IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)
H/T TYPE
ID of DRILLHOLE TRAVERSE NAME AND NUMBER
SIZE OF CORE OR HOLE
DATE AND TIME
GEOLOGGED BY
ED BY
COMPLETED
COMMENT / REMARK
GRID AZIMUTH
UNITS M/F
TURN G PT 000 = Collar
FROM
TO
F-S
AZM
CLOCKWISE FROM TRUE N
V-ANG
NEG IF DOWN
STATION
OFFSET
NEG IF LEFT
NORTHING
NEG IF SOUTH
EASTING
NEG IF WEST
ELEVATION
NEG IF SUB-SEA
RECOVERY
ROCK-SOIL
TYPIFY-MAT
QAL MAT
TEXTURES
GRAIN
FRACTURE COUNT
STRUC1 ID
STRUC2 ID
STRIKE AZM
DIP
ALTERATION & MINERALIZATION
DEFAULT SUITES
SUMMARY
RQD
Sample Serial No.
CORE RECOVERY RECORD
FRACTURE FREQUENCY
ACTUAL RECOVERY
PERCENT
RED
RED

International Geosystems Corporation

Geolog System

9.A Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Ƶ = Alpha Z

Identity Data: D E N | FORMAT VERSION 6 8 0 5 | UNITS M/F T | 09

P R J

FROM	TO	RECOVERY	TYPIFY-MAT		GRAIN
53.95	55.47	1.52	1.62	1	06.58
55.47	57.00	1.53	1.59	1	03.92
57.00	58.52	1.52	1.49		78.03
58.52	60.05	1.53	1.62	1	05.88
60.05	61.57	1.52	1.46		96.05
61.57	63.09	1.52	1.60	1	05.26
63.09	64.62	1.53	1.52		99.35
64.62	66.14	1.52	1.61	1	05.92
66.14	67.67	1.53	1.55	1	01.31
67.67	69.19	1.52	1.57	1	00.66
69.19	70.71	1.52	1.48		97.37
70.71	72.24	1.53	1.61	1	05.23
72.24	73.76	1.52	1.56	1	02.63
73.76	75.29	1.53	1.58	1	03.27
75.29	76.81	1.52	1.90		92.11
76.81	78.33	1.52	1.62	1	06.58
78.33	79.86	1.53	1.53	1	00.00
79.86	81.38	1.52	1.59	1	04.61
81.38	82.91	1.53	1.44		94.19
82.91	84.43	1.52	1.60	1	05.26
84.43	85.95	1.52	1.41		92.76
85.95	87.48	1.53	1.53	1	00.00
87.48	89.00	1.52	1.56	1	[illegible].63

81-130

International Geosystems Corporation

Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME (YR MON DAY HR MIN)	APT	GEOLOGGED BY	COMPLETED (YR MON DAY)	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DFN	6805	THORN	T-S-?	NQ	86 05 02	DINHJE	0802 CARON	86 05 01	0802	.	M T ? I
I	PRJ	AMERICAN RESERVE MINING CORPORATION THORN PROPERTY, ATLIN MINING DISTRICT										

Survey Data

KEY	TURN'G PT 000 = Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S	000	0.00	78.03			108.00	-45.00	.	.	.	.	758.10

Upper Tier: U | FLAG | FROM | TO | RECOVERY | TMOD | MIN | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN | FRACTURE COUNT 1 2 | T1 | STRUC 1 ID | STRIKE AZM | DIP | ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier Geodata: L | RQD | FM MEM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | Se Rn Sn O/C | T2 | STRUC2 ID | AZM | DIP | KF MU CL EP HE Hw Amt PR MO SL Hw Amt | M1 M2

Assay Data: A | FROM | TO | RECOVERY | Sample Serial No.

F-Entry: F | FROM | TO

KEY	FLAG	FROM	TO	ENTRY (cols 17–80)
R	HED			TEST STRIKE EXTENSION ØF MINERALIZATIØN INTERSECTED IN THORN-
R				DDH-86-03
/		0.00	7.47	XØVER P
L				GR
R				UNCØNSØLIDATED FRAGMENTS ØF VARIØUS CØMPØSITIØNS
/		0.00	7.01	XØVER D
L				
R				CASING TRI-CØN, NO CØRE RECØVERED
/		7.47	46.16	VFXPP FXQZMS+PPMX 4757 P TT D+
L				AWBIKA+BR D) D*
R				ØCCASIØNAL PORPHRITIC QZ-EYE ØR MSPY REPLACED BI BØØK. TEXTURE
R				RANGES FRØM A CRØWDED PØRPHYRY TØ A FINE GR MATRIX WITH ØCCAS.
R				LARGE FX PHENØCRYTS. SILICEØUS ZØNES. KA ØN FRACTURE SURFACES.
R				ØR-BR ALTERATIØN ØF FX IN SECTIØNS.
/		8.21	8.49	XVEIN DBCN 80 V3 TT V7
L				V+
R				5Ø% V/L.
/		8.77	9.62	XFXPP D
L				
R				SILICEØUS ZØNE WITH D[illegible]SEMINATED PY VEINLETS.
/		8.79	10.67	XFXPP D
L				
R				LIMØNITE STAINING [illegible] SURFACES.
/		19.36	19.66	XVEIN R CN 70 V1 TT V8
L				V+ V1
R				10% ØF VØL ZØNE [illegible] VEINLET. SC?
/		21.76	22.08	XVEIN R CN 50 TT V3 SC
L				V7 V= S)
R				5% ØF VØL. I VEIN SL?+TT AND IRR. DISCØN. VEINLETS ØF PY-TT.
/		24.?8	24.92	XVEIN R TT V5
L				VS
R				5% ØF VØL IRR.-DISCØN. VEINLETS ØF PY-TT.

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International Geosystems Corporation

Geolog System

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data
Survey Data
Upper Tier
Lower Tier Geodata
Assay Data
F-Entry
GRAPHIC

81-130

International Geosystems Corporation

Geolog System

3B Geoform

S = Alpha S · 0 = Zero · 1 = One · 2 = Two · 7 = Seven · Ø = Alpha O · I or i = Alpha I · Z = Alpha Z

Identity Data: I — D E N | 6 8 0 5 | T H O R A | TH - SL - 05 NØ
I — P R J

Key	Flag	From	To	Entries (cols 17–80)
/		50.15	57.20	X FXPP · P
L				
R				SAME DESCRIPTIZN AS 7.41.
/		50.70	52.00	X VEIN · BRBN · R · CN · 45 · V6 · V1 · T- · V3
L				YU · V+
R				70% ØF VØL.
/		52.27	52.96	X VEIN · R · Y7 · TT · V3
L				V+ · V- · V-
R				40% ØF VØL.
/		54.00	57.20	X FXPP
L				
R				IRR. QZVN AND PATCHES WITH NØ ASSØCIATED SX.
/		57.20	62.73	ØSBR QZPK KA=BRBN · P · P7 · V2 · TT · D1
L				VU · D)
R				SAME DESCRIPTIZN AS 46.16 BUT STRØNGER PERVASIVE KA. CN ARE GRAD-
R				ATIØNAL.
/		62.73	78.03	X FXPP · P
R				SAME DESCRIPTIØN AS 7.41.
		63.40	64.42	X VEIN · R · V8 · TT · D2
				D)
L				40% ØF VØL. SECTIØNS ØF THE FXPP ARE INTENSLY PERVASIVELY KAØLINITE
R				ALTERED.
/				
/		69.60	69.95	X FXPP · D · FØ · 80
L				
R				SHEAR ZØNE WITH SY-AH CØATING ØN SHEAR SURFACES.
/		74.28	74.58	X FXPP · D · FØ · 80
L				
R				QZ SEALED FRACTURE WITH A 2CM PERVASIVE PY ENVELØPE.
/		77.58	78.03	X FXPP · D · CN · 80
L				
R				IRR. QZ SEALED FRACTUL WITH AN ENVELØPE ØF DISS. SPHE ØR TT?
/	EØH	78.03	78.03	

81-130

International Geosystems Corporation

Geolog System

46 Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data

Survey Data

Upper Tier

Lower Tier

Geodata

Assay Data

F-Entry

GRAPHIC

81-130

International Geosystems Corporation

Geolog System

5B Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

GRAPHIC

81-930

International Geosystems Corporation — Geolog System — 6B Geoform

S = Alpha S, 0 = Zero, 1 = One, 2 = Two, 7 = Seven, Ø = Alpha O, I or i = Alpha I, Z = Alpha Z

KEY	FLAG	FORMAT VERSION	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	UNITS M/F
I	DEN	6805	TH-S[illegible]-0[illegible]	T 06
I	PRJ			

FROM (cols 5–10)	TO (cols 11–16)	Cols 21–27	Cols 28–34	Cols 37–41	Cols 43–47	Cols 50–53
[illegible]	[illegible]	[illegible]-27	0.031	0.35	0.030	1.[illegible]
60.50	61.46	TH5-28	0.026	0.30	0.042	0.[illegible]
61.46	62.18	TH5-29	0.021	0.32	0.041	0.72
62.18	62.70	TH5-30	0.023	0.23	0.034	[illegible]
62.40	64.45	TH5-31	0.030	0.39	0.063	1.[illegible]
74.30	74.59	TH5-32	0.005	0.13	0.003	0.29
77.57	78.03	TH5-33	0.005	0.35	0.010	0.[illegible]

81-130

International Geosystems Corporation

Geolog System

78 Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or l = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier Geodata
Assay Data
F-Entry

GRAPHIC

81-130

International Geosystems Corporation

Geolog System

8B Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H-T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	UNITS M/F	
I	DEN	6B05			005	T	08
I	PRJ						

Identity Data · Survey Data · Upper Tier · Lower Tier Geodata · Assay Data · F-Entry

Form fields: FLAG; FORMAT VERSION; IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE); H-T TYPE; ID of DRILLHOLE/TRAVERSE NAME AND NUMBER; SIZE OF CORE OR HOLE; DATE AND TIME (YR, MON, DAY, HR, MIN, APT); GEOLOGGED BY / ED BY; COMPLETED (YR, MON, DAY); COMMENT / REMARK; GRID AZIMUTH; UNITS M/F; TURN'G PT 000 = Collar; FROM; TO; F-S; O; AZM CLOCKWISE FROM TRUE N; V-ANG NEG IF DOWN; STATION; OFFSET NEG IF LEFT; NORTHING NEG IF SOUTH; EASTING NEG IF WEST; ELEVATION NEG IF SUB-SEA; RECOVERY; RQD; TMOD; MIX; ROCK-SOIL; ENV; RTQ; TYPIFY-MAT TM1 TM2; QALMAT QM1 QM2; TEXTURES TX1 TX2 TX3 TX4; GRAIN; FRACTURE COUNT; STRUC1 ID; STRUC2 ID; STRIKE AZM; DIP; ALTERATION & MINERALIZATION DEFAULT SUITES (QZ, BI, CY, CB, MG, XX, PY, CP, GL, YY, KF, MU, CL, EP, HE, PR, MO, SL); SUMMARY F1 F2 M1 M2; Sample Serial No.

FROM	TO	RECOVERY	(cols 29–31)	(col 38)	(cols 39–42)
55.17	56.70	1.53	1.49		97.39
56.70	58.22	1.52	1.56	1	02.63
58.22	59.74	1.52	1.40		92.10
59.74	61.26	1.52	1.59	1	04.61
61.26	62.18	0.92	1.22	1	32.61
62.18	63.70	1.52	1.57	1	03.29
63.70	65.23	1.53	1.59	1	03.92
65.23	66.90	1.67	1.56		92.31
66.90	68.43	1.53	1.58	1	03.27
68.43	7[illegible]	1.67	1.65		98.80
70.10	71.63	1.53	1.55	1	01.31
71.63	73.30	1.67	1.50		89.82
73.30	74.83	1.53	1.59	1	03.92
74.83	76.35	1.52	1.58	1	02.05
76.35	7[illegible]	1.68	1.62		96.43

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International Geosystems Corporation — Geolog System — Geoform 1C

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Key	Flag	Format Version	Identity of Project	ID of Drillhole	Size of Core	Date and Time	Geologged By	Completed	Comment / Remark	Units
I	DEN	6 8 0 Z	THØRN	TH-86-03	NQ	86 09 10 DJN MJB	0810	CARØN 860809 0810		M T 0 /
I	PRJ	AMERICAN RESERVE MINING CØRPORATIØN						THØRN PRØPERTY, ATLIN MINING DISTRICT		

Key	From	To	AZM	V-ANG	Elevation
S	0.00	30.09	130.00	-60.00	821.00

Key	Flag	From	To	Rock-Soil / Codes	Remarks / Other entries
R	HLD				TEST DOWN DIP CONTINUITY ØF MINERALIZATIØN INTERSECTED IN THE
R	HED				COLLAR ØF THØRN-DDH-86-7
/		0.00	10.40	ØVER	P
L					
R					UNCØNSØLIDATED FRAGMENTS ØF VARIØUS CØMPØSITIØN IN A SILT-CLAY MATRIX.
/		0.00	9.75	XØVER	D
L					
R					CASING INITIALLY PLACED TØ 3.04 THEN LATTER REAMED DØWN TØ 9.75
/		10.40	25.50	XRCPP FX	PD MV 3525 1 DI
L				WG	FØ Ø
R					WEAKLY PØRPHYRITIC TØ FINE GR MX, RESEMBLING PYTF IN FN GR SECTIØNS. LI STAINS ØN SCATTERED FRACTURE SURFACES.
/		12.80	13.30	YRCPP	D
L					
R					BRØKEN CØRE, HANGING WALL SAMPLE.
/		13.30	14.33	XRCPP	D 1 CN 40 TT V=
L					2 CN 80 V+
R					SCATTERED PY VNLTS WITH 1 PY-KA VN (2 CM) AND A PY-KA-TT VN
R					1 CM TRENDING DØWN CØRE AXIS
/		14.33	15.02	YRCPP	D CN 20 TT D)
L					V*
R					BARREN SECTIØN WITH A 5 MM TT-PY-KA VN. GRAD. TKSS CN:
/		15.02	15.50	XVEIN	R CN 20 V2 TT B7
L					V.Z
R					40% ØF VØL. ØNE LARGE MASSIVE VEIN (15 CM) AND SL Y.L KAL. TT PS. VNS AND PATCHES. WEAK PERVASIVE STLICIFICATIØNS ENVELØPS IN MAIN SVN.

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International Geosystems Corporation

Geolog System

2C Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

GRAPHIC

81-130

International Geosystems Corporation

Geolog System

3C **Geoform**

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I (Identity Data)	D E N	6 8 0 5	T H O R N		T H - 8 6 - 0 8							T 0 3
I	P R J											

KEY	TURN'G PT 000 = Collar	FROM	TO	F-S	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S (Survey Data)											

KEY	FLAG	FROM	TO	RECOVERY	T MOD MIX	ROCK-SOIL	TYPIFY-MAT TM1 TM2	QALMAT QM1	TEXTURES TX1 TX2	GRAIN	FRACTURE COUNT	STRUC1 ID	STRIKE AZM	DIP	ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP CL YY	SUMMARY F1 F2
U (Upper Tier)																
L (Lower Tier Geodata)				RQD	FM MEM	ENV RTQ	LC Colour TM3	QM2	TX3 TX4			STRUC2 ID	AZM	DIP	KF MU CL EP HE PR MO SL	M1 M2
A (Assay Data)		FROM	TO	RECOVERY	Sample Serial No.											
F (F-Entry)		FROM	TO													

Key	Flag	From	To	Sample Serial No.				Width
A	HED			ASSAY RESULTS OF SAMPLES TAKEN FRØM THØRN-DDH-86-08				
A	UNT			SAMPLE	ØZ AU	ØZ AG	%CU	SAMPLE
A	LAB			NUMBER	MIN-EM	MIN-EM	MIN-EM	WIDTH
A	SZE				1/2C	1/2C	1/2C	
		12.80	13.30	TH8-01				0.50
		13.30	14.33	TH8-02				1.03
		14.33	15.02	TH8-03				0.69
		15.02	15.50	TH8-04				0.48
		15.50	15.85	TH8-05				0.35

GRAPHIC

81-130

International Geosystems Corporation — **Geolog System** — **Geoform**

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data / Survey Data / Upper Tier / Lower Tier Geodata / Assay Data / F-Entry

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME: YR	MON	DAY	HR	MIN	APT	GEOLOGGED BY	GEOLOGGED ED BY	COMPLETED YR	COMPLETED MON	COMPLETED DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I—	D E N	6 8 0 5	T H C R N		T H - 8 6 0 0 3	N C														T
I—	P R J																			

KEY	TURN/C PT. 000 = Collar	FROM	TO	F-S	O	AZM	CLOCKWISE FROM TRUE N	V-ANG	NEG IF DOWN	STATION	OFFSET	NEG IF LEFT	NORTHING	NEG IF SOUTH	EASTING	NEG IF WEST	ELEVATION	NEG IF SUB-SEA
S—																		

KEY	FLAG	FROM	TO	RECOVERY	T_{WOD}	ROCK-SOIL	TYPIFY-MAT TM_1	TM_2	QALMAT QM_1	TEXTURES TX_1	TX_2	GRAIN Fr	Cr	C	MP	FRACTURE COUNT 1	2	T_1	STRUC1 ID	STRIKE AZM	DIP	DIP To Right	QZ	BI	ALTERATION & MINERALIZATION DEFAULT SUITES CV	CB	MG	XX	PY	CP	CL	YY	SUMMARY F1	F2
U																																	
L				RQD	TM MEM.	ENV	RTQ	LC Colour	TM_2	QM3	TX_3	TX_4	Sh	Rh	Sh	%	h	2	T_2	STRUC2 ID	AZM	DIP	DIP To Right	KF	MU	CL	EP	HE	Hw Amt	PR	MO	SL	Hw Amt	M1	M2
A		FROM	TO	RECOVERY	Sample Serial No.																												
F		FROM	TO																														

GRAPHIC

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International Geosystems Corporation

Geolog System

ID Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

GRAPHIC

81-130

International Geosystems Corporation

Geolog System

2 D **Geoform**

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	UNITS M/F
I	DEN	6802	THØRN	TH-86-57	TCZ
I	PRJ				

Identity Data · Survey Data · Upper Tier / Lower Tier Geodata · Assay Data · F-Entry

Key	From	To	Cols 17–46 (Rock-Soil, Typify-Mat, Qalmat, Textures, Grain)	Cols 47–50 (T, Struc ID)	Cols 51–53 (Strike AZM)	Cols 55–56 (Dip)	Cols 57–80
/	21.25	23.50	X RCPP	D			
L							
R			EXTREMELY BROKEN SHATTERED ZØNE ØCCASIØNAL NARROW PBDY.				
/	24.90	36.26	DIAB AM CA CA2 PPMX 2526	PTCN	30		
L			36 Ø				
R			SAME UNIT NEAR THE BØTTØM ØF DDH-6.				
/	28.50	34.15	X DIAB	D			
L							
R			CROWDED PP AMPHIBØLES.				
/	31.20	31.30	X PBDY	R CN		70	
L							
R			5 CM DIAB FRAGMENT IN GREEN MATRIX.				
/	34.95	35.56	X FXPP	RTCN		70	
L				BCN		45	
R			SAME AS 36.30, BUT LARGER PHENO WITH A MØRE CROWDED TEXTURE.				
R			PERVASIVE CL ALTERATIØN.				
/	36.30	45.72	FXPP FX BI PPMX 4767	P			D).
L			WAO2 Ø				
R			SAME UNIT IN THE EAST ZØNE.				
/	36.62	36.88	X FXPP	P			
L							
R			CRUSHED ZONE KA ALTERED				
/	37.34	37.38	X PBDY	D CN		50	
L							
R							
/	37.63	37.79	X PBDY	R CN		20	
L							
R							
/	42.35	42.67	X BRXA KA3BR 3636	RTCN		80	
L			2790				
R			STRONG KA				
/	42.79	42.82	PBDY	R CN		20	
L							
R							

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International Geosystems Corporation

Geolog System

3D Geoforr

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data	KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	UNITS M/F
I		DEN	6805	THORN	TH-86-07	NQ	T 0 3
I		PRJ					

KEY	FROM	TO	ROCK-SOIL / coded entries (cols 17–46)	Cols 47–56
/	44.88	45.02	X BRXV	R CN 70
L				
R			6 CM // SILICIFIED FR WITH PY SEAMS ALONG THE CN.	
/	45.18	45.72	X BRXV SI	R
L				
R			SAME DESCRIPTION AS 42.35 BUT MORE SILICIFIED AND LARGER	
R			FRAGMENTS. LI STAINING ON FRACTURES.	
/	45.72	60.20	DIAB AMFX CAI PP MX 3636	P
L			39CA BR Ø	
R			SAME AS 24.90. + FV ~PHENOCRYTS, QZ-CA-HE IRRG VNLTS.	
/	50.10	50.28	X DIAB	D
L				
R			CA-HE IRREG. VNLTS.	
/	50.87	50.95	X DIAB	D
L				
R			IRRG CA VN W	
/	51.66	51.70	X DIAB	D
L				
R			IRRG DIAB FRAG WITH A CHILLED MARGIN OF DIAB SURROUNDING IT	
/	58.72	58.96	X FXPP	RTCN 80
L				
R			SAME AS 34.95. UP 1 CM WIDE FX PHENOCRYTS. CHILLED ON CA DIAR	
/	60.20	169.47	X FXPP	
L				
R			SAME AS 36.20, BUT OVERALL COARSER GRAINED, APPROACHING GRANITE	
/	60.51	60.75	X BRXV KAZ	RTCN 70
L				
R				
/	61.20	61.30	X FXPP	D
L				
R			IRRG. CA VN TRENDING DOWN CORE AXIS	
/	63.40	63.80	X BRXV KAZ	RBCN 70
L				
A			ALSO SPECKLED, FAINT FE AT 70°.	
/	67.70	68.83	X BRXV KAZ	R
L				
R				

81-130

International Geosystems Corporation — Geolog System

4D Geofor[m]

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data: I — D E N — Format Version: 6 8 0 5 — Identity of Project: THORN — ID of Drillhole: TH-86-07 — Units: T 0 4

I — P R J

Key	From	To	Rock-Soil	QALMAT QM1	T1	Struc1 ID	Dip	Comment
/	72.32	73.62	XBRXX	KA1	R			
R								NUMEROUS NARROW BR SECTIONS WITHIN THIS ZONE
/	74.35	74.80	XBRXX	KA1	R			
/	78.21	78.37	XFXPP		D	TCN	45	
R								TWO PARALLEL CY-AH VNS (1 CM)
/	79.75	79.80	XFXPP		D			
R								ROUNDED FN GN PY RICH XENOLITH
/	82.65	85.80	XBRXX	KA2	R	TCN	60	
L						BCN	75	
R								VERY STRONGLY BR ZONES WITHIN THIS SECTION.
/	86.13	86.21	XRRXX		R	BCN	70	
R								NARROW BR ZONE
/	86.85	87.04	XBRXX		R	TCN	70	
/	89.44	89.64	XBRXX		R	TCN	45	
L						BCN	70	
/	90.80	92.02	XBRXX		R			
R								ZONE IS STRONGLY BR AND PERVASIVE KA-ALTERATION.
/	92.34	95.32	XBRXX		R			
R								WEAK TO STRONGLY BR ZONES
/	96.35	97.95	XBRXX		R			
/	98.26	99.50	XBRXX		R			
R								IRREG QZ VN 0.1 CN
/	100.10	101.70	XBRXX		R	BCN	70	
R								CRACKLE BR - BR ZONE. QZ LENSES ALONG CN.

81-130

International Geosystems Corporation

Geolog System

.5D Geoform

S = Alpha S | 0 = Zero | 1 = One | 2 = Two | 7 = Seven | Ø = Alpha O | I or i = Alpha I | Ƶ = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Key	Flag	Format Version	Identity of Project or Sub-Project (Unique)	H/T Type	ID of Drillhole-Traverse Name and Number	Size of Core or Hole	Date and Time (YR MON DAY HR MIN APT)	Geologged By / Ed By	Completed (YR MON DAY)	Comment / Remark	Grid Azimuth	Units M/F
I	DEN	6805	THORN		TH-96-05							T 05
I	PRJ											

Identity Data / Survey Data: Key, Turn'g Pt (000 = Collar), From, To, F-S, O, AZM (Clockwise from True N), V-ANG (Neg if Down), Station, Offset (Neg if Left), Northing (Neg if South), Easting (Neg if West), Elevation (Neg if Sub-Sea)

Upper Tier: U — Flag, From, To, Recovery, T Mod, % Mix, Rock-Soil, Typify-Mat TM1 TM2, Qalmat QM1, Textures TX1 TX2, Grain Fr Cr % C MP, Fracture Count 1 2, T1, Struc 1 ID, Strike AZM, Dip to Right, QZ, BI, CY, CB, MG, XX, PY, CP, GL, YY, Summary F1 F2

Lower Tier Geodata: L — RQD, TM MIM, ENV, RTQ, LC Colour, TM3, QM2, TX3 TX4, Sr Rn Sh O/C, Is Im Ir ≥1, T2, Struc 2 ID, AZM, Dip to Right, KF, MU, CL, EP, HE, Hw Amt, PR, MO, SL, Hw Amt, M1, M2

Assay Data: A — From, To, Recovery, Sample Serial No.

F-Entry: F — From, To

Key	From	To	Cols 23–27	Cols 28–46	Cols 47–53	Dip (54–56)	Cols 57–66	Cols 67–70
/	103.07	103.96	XBRXX		R			
L								
R	CRACKLE BRXX GRADINS INTØ A FILL BRXX							
/	104.28	104.84	YVEIN		RTCN	60		TT V3
L								V=
R	KA BR WITH SX FRAGMENT + STRINGERS (30% ØF VØ.). FRAGMENTS ARE							
R	RØUNDED - SPHERICA AND PERVASIVELY SILICEØUS							
/	104.84	105.25	XVEIN		RTCN	60	V2	TT V6
L								V2
R	60% VOL. // VNS.							
/	105.25	106.10	XFXPP		D			TT D=
L								D=
R	TT-PY-GY STRINGER AND SX DISS. IRRG AND DISCØN.							
/	106.10	106.88	YVEIN		RTCN	70	V1	TT V5
L								V4
R	40% VØL. SIL PATCHES + KA IN VEIN + DISS.							
/	106.88	107.90	XVEIN		R			TT V6
L								Y4
R	15% VØL. NUMERØUS NARROW VNS + DISS.							
/	108.51	109.13	XVEIN	FR3	R CN	20	V1	TT V3
L								V3
R	10% VØL, TWØ // SX VNS, BR + IRRG CNS.							
/	109.13	109.70	YVEIN		R			TT V5
L								V5
R	10% VØL. IRRG. PATCHES + VNLTS ØF SX.							
/	109.70	110.30	XVEIN		RTCN	30		TT V7
L					BCN	70		V3
R	80% VØL. MVSX VN WITH SIL FRAGMENTS.							
/	110.30	110.99	XBRXX	KAII	RTCN	70		
L					BCN	70		
R								
/	111.77	111.92	XBRXX		CN	80		
L								
R								
/	114.35	114.55	XBRXX					
L								
R	SHEARED AND BR.							

81-130

International Geosystems Corporation

Geolog System

6D Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Key	Flag	Format Version	Identity of Project	ID of Drillhole	Units	
I	DEN	6805	THORN	TH-86-07	T	06
I	PRJ					

Key	Flag	From	To	Cols 17–46	Col 47	Cols 48–80
/		116.10	116.20	XFXPP	F	TT V+
L						V) V)
R				DISCØN. // VNLTS OF PY-TT-SL?		(SEØ CHEM)
/		116.70	117.37	YBRYX	R	
L						
R						
/		121.66	124.21	YBRXX	R	
L						
R				ZØNES OF CRACKLE BR, PEDY, AN	B	BR.
/		124.21	126.65	XFXPP	D	
L						
R				WEAK PERVASIVE GREEN STAINING NS	.	
/		127.15	129.84	XBRYY	R	
L						
R				THIS SECTION HAS ZØNES ØF CRAC	K	LE BRXX AND FULL BRXX.
/		130.41	130.92	YFXPP	D	
L						
R				HANGING WALL SECTIØN, NØ VNS.		
/		130.92	132.55	YFXPP KAI	D	D+
L				CAI		D) D)
R				SEVERAL IRRG SHEARS WITH LIGH	T	DISS. SX.
/		132.55	132.89	XFXPP	D	
L						
R				HANGING WALL SAMPLE, NO VNS.		
/		139.23	139.56	XFYDP	D	
L						D*
R				ØCCASIONAL. DISCON, DK SX (TT?	)	VNLT AND DISSEMINATIØN.
/		141.90	144.40	YBRXX	R	
L						
R				SHEARED, SLICKENSIDED, BRXX Z	Ø	NES THRØUGH THIS SECTIØN.
/		145.20	146.65	YBRXY	R	
L						
R						
/		149.90	150.18		D	TCN 70
L						
L				10 CM SHEARED BR ZONE.		
/	104	169.47				
L						
R						

81-130

International Geosystems Corporation

Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Key	Flag	Format Version	Identity of Project or Sub-Project (Unique)	ID of Drillhole/Traverse Name and Number
I	DEN	6805	THORN	TH-86-07
I	PRJ			

ASSAY RESULTS OF SAMPLES TAKEN FROM THORN-DDH-86-07

Key	Flag	From	To	Sample Number	Au oz/T AC Min-EM 1/2C	Ag oz/T Min-EM 1/2C	Cu % Min-EM 1/2C	Sample Width			As
		11.16	11.65	TH7-01	0.092	3.18	6.340	0.49	(1.41)	..	1.50
		11.65	12.37	TH7-02	0.008	0.46	0.430	0.72	(1.59)	.005	.7
		104.33	104.93	TH7-03	0.039	1.47	0.260	0.60		0.0239	0.882
	1	104.93	105.23	TH7-04	0.115	1.36	0.650	0.38		0.2345	0.48
		105.23	106.09	TH7-05	0.019	0.27	0.124	0.86			
		106.09	106.88	TH7-06	0.058	6.33	4.420	0.79			
		106.88	107.92	TH7-7A	0.012	1.30	0.502	1.04			
		107.92	108.51	TH7-7B	0.001	0.11	0.024	0.59			
		108.53	109.15	TH7-08	0.024	0.79	0.570	0.62			
		109.15	109.69	TH7-09	0.023	[illegible].98	0.50[illegible]	0.54			
		109.69	110.29	TH7-10	0.120	7.18	5.740	0.60			
		116.10	116.20	TH7-11	0.004	0.25	0.034	0.10			
		130.41	130.72	TH7-12				0.51			
		130.92	132.55	TH7-13				1.63			
		132.55	132.99	TH7-14				0.44			
		139.23	139.56	TH7-15				0.33			

81-130

International Geosystems Corporation — Geolog System — Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE
I	DEN	6805	THORN	TH-5607	NQ
I	PRJ				

Identity Data / Survey Data / Upper Tier / Lower Tier Geodata / Assay Data / F-Entry

FLAG	FROM	TO	EXPECTED RECOVERY	ACTUAL RECOVERY		PERCENT RECOVERY
RHED			CORE RECOVERY RECORD			
RHED			EXPECTED	ACTUAL		PERCENT
RHED			RECOVERY	RECOVERY		RECOVERY
	0.00	11.28	11.28	0.91		8.07
	11.28	12.04	0.76	1.23	1	61.54
	12.04	12.34	0.30	0.50	1	66.67
	12.34	13.72	1.38	1.68	1	21.74
	13.72	14.48	0.76	0.71		93.42
	14.48	15.54	1.06	0.93		87.74
	15.54	16.76	1.22	1.12		91.80
	16.76	17.98	1.22	1.37	1	12.30
	17.98	18.59	0.61	0.90	1	47.54
	18.59	19.81	1.22	1.15		94.26
	19.81	20.42	0.61	0.57		93.44
	20.42	21.34	0.92	1.32	1	43.48
	21.34	22.25	0.91	1.17	1	28.57
	22.25	23.47	1.22	1.01		82.79
	23.47	24.69	1.22	1.29	1	05.74
	24.69	26.21	1.52	1.46		96.05
	26.21	27.74	1.53	1.56	1	01.96
	27.74	29.26	1.52	1.49		98.03
	29.26	30.78	1.52	1.52	1	00.00
	30.78	31.85	1.07	1.05		98.13
	31.85	33.38	1.53	1.59	1	03.92
	33.38	33.68	0.30	0.31	1	03.33
	33.68	34.14	0.46	0.51	1	10.87
	34.14	35.66	1.52	1.43		94.05
	35.66	36.88	1.22	1.17		95.90
	36.88	38.40	1.52	1.59	1	04.61
	38.40	39.62	1.22	1.22	1	00.00
	39.62	41.15	1.53	1.56	1	01.96
	41.15	42.67	1.52	1.52	1	00.00
	42.67	44.20	1.53	1.52		99.35
	44.20	45.72	1.52	1.59	1	04.61
	45.72	47.24	1.52	1.53	1	00.66

81-130

International Geosystems Corporation

Geolog System

9D Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data: I — FLAG: D E N | FORMAT VERSION: 6 B 0 5 | ID of DRILLHOLE/TRAVERSE NAME AND NUMBER: TH-S6007 | UNITS M/F: T 0 9

I — P R J — C O M P A N Y / P R O J E C T & S U B - P R O J E C T

Survey Data: S — TURN'G PT 000 = Collar | FROM | TO | F-S | O | AZM CLOCKWISE FROM TRUE N | V-ANG NEG IF DOWN | STATION | OFFSET NEG IF LEFT | NORTHING NEG IF SOUTH | EASTING NEG IF WEST | ELEVATION NEG IF SUB-SEA

Upper Tier: U — FLAG | FROM | TO | RECOVERY | TMOD | % Min | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN Fr Cr %C MP | FRACTURE COUNT 1 2 | T1 | STRUC 1 ID | STRIKE AZM | DIP To Right | ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier Geodata: L — RQD | FM MIM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | Sa Rn Sn Q/C | Is Im Ir Si | T2 | STRUC 2 ID | AZM | DIP To Right | KF | MU | CL | EP | HE | Hw Amt | PR | MO | SL | Hw Amt | M1 | M2

Assay Data: A — FROM | TO | RECOVERY | Sample Serial No.

F-Entry: F — FROM | TO

GRAPHIC

FROM (5–10)	TO (11–16)	Cols 21–23	Cols 29–31	Col 38	Cols 39–42
47.24	48.31	1.07	1.22	1	14.02
48.31	49.07	0.76	0.80	1	05.26
49.07	50.60	1.53	1.45		94.77
50.60	52.12	1.52	1.56	1	02.63
52.12	53.95	1.83	1.55		84.70
53.95	55.17	1.22	1.46	1	19.67
55.17	56.69	1.52	1.52	1	00.00
56.69	57.91	1.22	1.47	1	20.49
57.91	59.44	1.53	1.52		79.35
59.44	60.96	1.52	1.56	1	02.63
60.96	62.48	1.52	1.62	1	06.58
62.48	64.16	1.68	1.52		90.48
64.16	65.68	1.52	1.61	1	05.92
65.68	67.21	1.53	1.54	1	00.65
67.21	68.73	1.52	1.46		96.05
68.73	70.41	1.68	1.58		94.05
70.41	71.93	1.52	1.49		98.03
71.93	73.46	1.53	1.59	1	03.92
[illegible]	74.98	1.52	[illegible]		[illegible]
[illegible]	76.50	[illegible]	[illegible]		[illegible]
[illegible]	78.03	1.53	1.56	1	01.96
[illegible]	[illegible]	[illegible]	1.57	1	[illegible]
[illegible]	[illegible]	[illegible]	1.51		[illegible]
[illegible]	[illegible]	1.52	1.45		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	87.17	1.52	1.40		92.11
[illegible]	88.70	1.53	[illegible]	1	06.54
[illegible]	[illegible]	1.52	1.54	1	01.32
90.22	91.74	1.52	[illegible]	1	00.66
91.74	[illegible]	[illegible]	1.55	1	[illegible]
[illegible]	[illegible]	[illegible]	1.44		[illegible]

81-130

International Geosystems Corporation

Geolog System

10 D **Geoform**

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME (YR, MON, DAY, HR, MIN, APT)	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	D E N	6 8 0 5			T 14 - 8 6 0 0 7							Y / 0
I	P R J				C O M P A N Y					P R O P E R T Y OR P R O J E C T & S U B	P R O J E C T	

Survey Data

KEY	TURN G PT 000 = Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S												

Upper Tier (U): FLAG | FROM | TO | RECOVERY | T_{MOD} | Mix | ROCK-SOIL | TYPIFY-MAT TM_1 TM_2 | QALMAT QM_1 | TEXTURES TX_1 TX_2 | GRAIN Fr Cr % C MP | FRACTURE COUNT 1 2 | T_1 | STRUC1 ID | STRIKE AZM | DIP To Right | ALTERATION & MINERALIZATION DEFAULT SUITES: QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier Geodata (L): RQD | FM MM | ENV | RTQ | LC Colour | TM_3 | QM_2 | TX_3 TX_4 | Sa Rn Sn O/C | Is Ma Is 31 | T_2 | STRUC2 ID | AZM | DIP To Right | KF MU CL EP HE Hw Amt FR MO SL Hw Amt | M1 M2

Assay Data (A): FROM | TO | RECOVERY | Sample Serial No

F-Entry (F): FROM | TO

GRAPHIC

FROM (cols 5–10)	TO (cols 11–16)	cols 20–23	cols 29–31	col 38	cols 39–42
94.79	96.32	1.53	1.58	1	0[illegible].27
97.38	97.84	1.52	1.49		98.0[illegible] 1
97.84	99.36	1.52	1.57	1	03.29
99.36	100.59	1.52	1.52		99.35
100.59	102.41	1.52	1.57	1	0[illegible].29
102.41	103.94	1.53	1.42		92.81
103.94	105.46	1.52	1.58	1	02.95
105.46	106.98	1.52	1.43		92.42
106.98	108.51	1.53	1.56	1	01.96
108.51	110.03	1.52	1.55	1	01.97
110.03	111.56	1.53	1.58	1	03.27
111.56	113.08	1.52	1.52	1	00.00
113.08	114.60	1.52	1.55	1	01.97
114.60	116.13	1.53	1.50		98.04
116.13	117.65	1.52	1.58	1	02.95
117.65	119.18	1.53	1.40		91.50
119.18	120.71	1.53	1.6[illegible]	1	05.58
120.71	122.2[illegible]	1.51	1.4[illegible]		98.01
12[illegible]	12[illegible]	1.53	1.5[illegible]		[illegible]3.27
12[illegible]	1[illegible]5.[illegible]	1.52	1.54		[illegible]
[illegible]	126.90	1.52	1.58	1	[illegible]3.27
[illegible]	1[illegible]	[illegible]	1.4[illegible]		[illegible]8.[illegible]7
[illegible]	[illegible]	1.5[illegible]	1.50		[illegible]
129.29	131.37	1.53	1.56	1	0[illegible].95
[illegible].27	13[illegible]	1.52	1.52	1	00.[illegible]
[illegible]	[illegible]	1.5[illegible]	1.49		[illegible]7.[illegible]
134.42	135.79	1.37	1.32		96.35
135.79	137.[illegible]	1.52	1.52	1	06.66
[illegible]	1[illegible]	1.5[illegible]	1.42		92.91
138.[illegible]	14[illegible]	1.57	1.60	1	16.79
[illegible]	[illegible]	1.5[illegible]	1.56		[illegible]3
[illegible]	[illegible]	[illegible].5[illegible]	1.57		[illegible]

81-130

International Geosystems Corporation

Geolog System

11D Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data: I — D E N — Format version 6 B 0 5 — ID of drillhole: T[illegible]-7[illegible] — I — P R J

Survey Data: S — TURN'G PT (000 = Collar) | FROM | TO | F-S | O | AZM (clockwise from true N) | V-ANG (neg if down) | STATION | OFFSET (neg if left) | NORTHING (neg if south) | EASTING (neg if west) | ELEVATION (neg if sub-sea)

Upper Tier (U): FLAG | FROM | TO | RECOVERY | T MOD | Mix | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN | FRACTURE COUNT | STRUC 1 ID | STRIKE AZM | DIP | ALTERATION & MINERALIZATION DEFAULT SUITES | SUMMARY F1 F2

Lower Tier (L) / Geodata: RQD | ENV | RTQ | Colour | TM3 | QM2 | TX3 | TX4 | STRUC 2 ID | AZM | DIP | KF | MU | CL | EP | HE | Hw Amt | PR | MO | SL | Hw Amt | M1 | M2

Assay Data (A): FROM | TO | RECOVERY | Sample Serial No.

F-Entry (F): FROM | TO

FROM	TO	Cols 21–23	Cols 29–31	Cols 38–42
143.26	144.93	1.67	1.68	100.60
144.93	146.61	1.68	1.59	94.64
146.61	148.13	1.52	1.53	100.66
148.13	149.66	1.53	1.52	99.35
149.66	151.19	1.52	1.55	101.97
151.18	152.70	1.52	1.60	105.26
152.70	154.23	1.53	1.50	98.04
154.23	155.75	1.52	1.52	100.00
155.75	157.28	1.53	1.60	104.58
157.28	1[illegible]2.56	1.52	1.46	96.05
158.80	160.32	1.52	1.59	104.6[illegible]
160.32	161.55	1.53	1.40	91.50
161.55	163.27	1.52	1.59	104.6[illegible]
[illegible]	164.5[illegible]	1.52	1.44	94.74
164.59	166.42	1.53	1.54	100.65
166.42	167.94	1.52	1.56	[illegible]
[illegible]	169.[illegible]	1.5[illegible]	1.4[illegible]	[illegible]7.37

GRAPHIC

81-130

International Geosystems Corporation — Geolog System — 1E Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Enter keys in col. 1 to activate entries

Identity Data:
I | DFN | 6 8 0 2 | THORN | TH-86-04 | NQ | 86 07 31 | DJ | NM | JB | 86 01 | CARDN | 86 07 30 | 08 01 | M | 01
I | PRJ | AMERICAN RESERVE MINING CORPORATION THORN PROJECT, ATLIN MINING DISTRICT

Survey Data:
S | S 000 | FROM 0.00 | AZM 138.00 | V-ANG -60.00 | ELEVATION 758.10

R | HED | TEST DOWN DIP CONTINUITY OF QUARTZ-SUDPHIDE BRECCIA ZØNE INTER-
R | HED | SECTED IN DDH-86-03.

/ | 0.00 | 6.71 | ØVER | P
L
R | RUBBLE RECOVERED OF VARIOUS CØMPØSITIØNS.
/ | 0.00 | 6.09 | X ØVER | D
L
R | CASING WAS PLACED TO A DEPTH ØF 6.09.
/ | 6.71 | 7.32 | CNGL ANPP | 4869 | P
L | RA | 2770
R | BASAL CØNGLØMERATE, SANDY LIMØNITE STAINED MATRIX.
/ | 7.32 | 75.29 | FXPP FXQZMS+ PP MX | 4757 | P | D+
L | AWBIKAH BR | D).
R | ØCCASIØNAL LARGE QZ EYE ØR MSPY AFTER RELIC BIØTITE BØØK. CR SP
R | CRØWDED PØRPHYRY TZ A FINE GR MATRIX WITH ØCCASIØNAL LARGE FX
R | PHENOCRYSTS. WEAK TO MØDERATELY SILICEOUS IN SECTIØNS. SCATTERED
OR-BR ALTERATIØN OF FX PHENOCRYTS.
/ | 7.66 | 8.53 | X FXPP | D
L
R | 90-IA STAINING ØN SCATTERED FRACTURE SURFACES.
/ | 7.80 | 8.53 | X FXPP | D | CN | 90 | V+ | TT
L | V+
R | TT-KA CØATED FRACTURE (IRE) TRENDING DOWN CORE AXIS WITH DISS
R | TT IN FXPP.

/ | 10.00 | 11.10 | X FXPP | D
L
L | GØ-IA STAINING ØN FRACTURE SURFACES.
/ | 11.40 | 22.00 | X FXPP | D | TT
L | D+ | D+
R | FINE GR DISS SPHL ØR TT? THROUGH THIS SECTIØN AND AS FRACTURE
CØATINGS.

81-130

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Geolog System 2E **Geoform**

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O 1 or i = Alpha I Ƶ = Alpha Z

Identity Data: I | DEN | 6801 | THORN | TH 96 04 NQ | T 02

Identity Data: I | PRJ

Key	Flag	From	To	Cols 17–23	Rock-Soil	Col 47	Struc 1 ID	Dip	Cols 57–58	Cols 63–64	Cols 67–68	Cols 69–70
/		15.15	15.54	X	FXPP	D						
L												
R				IRR. FRACTURE OF PY-HE AND A 10CM DISS. ENVELOPE.								
/		18.63	19.35	X	FXPP	D						
L												
R				DISS. SPHE OR TT? AND FRACTURE COATINGS.								
/		22.40	24.20	X	FXPP	D						
L												
R				SCORODITE STAINING ON FRACTURES.								
/		24.30	25.10	X	FXPP	D					TT	F=
L											F+	
R				IRR. SEALED FRACTURES WITH DISCONTINUOUS DISS. PY-TT AS								
R				COATINGS.								
/		26.58	27.26	X	VEIN	R	CN	45	V4		TT	V3
L											V1	
R				30% VOL. GRADATIONAL CN WITH SX STRINGERS FXPP.								
/		27.20	27.84	X	FXPP	D						
L												
R				OCCASIONAL NARROW PY-TT STRINGERS.								
/		28.60	29.23	X	VEIN	R	CN	30		V4	TT	V3
L											Y3	
R				15% VOL. SHARP CONTACTS. STRINGERS [illegible] + DISS OF SX IN FXPP.								
/		29.57	30.28	X	FXPP	D					TT	
L											D+	
R				SC STAINS ON FRACTURES. TT AS DISS. AND VEINLETS.								
/		30.29	30.70	X	VEIN	K	CN	30	V4		TT	V6
L											V1	
R				30% VOL.								
/		30.70	31.65	X	FXPP	D					TT	V=
L											V1	
R				SCATTERED IRR. VEINLETS PY-TT.								
/		34.76	35.16	X	VEIN	R			V3			V7
L												
R				15% VOL. DISCONTINUOUS [illegible] PY AND SILICEOUS ZONES								
/		37.51	37.86	X	VEIN	R	CN	70	V2			V8
L												
R				30% VOL. 4 CM SXVN [illegible]								

81-130

International Geosystems Corporation

Geolog System

3E Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

Survey Data

Upper Tier

Lower Tier Geodata

Assay Data

F-Entry

GRAPHIC

81-130

International Geosystems Corporation

Geolog System

4C Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

GRAPHIC

81-130

International Geosystems Corporation — Geolog System — Geoform

5E

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

Identity Data: FLAG DEN | FORMAT VERSION 6805 | IDENTITY OF PROJECT THORN | ID of DRILLHOLE TH-86-04 | UNITS T 05

ASSAY RESULTS OF SAMPLES TAKEN FROM THORN TH-86-04

FLAG	FROM	TO	SAMPLE NUMBER	OZ AU MIN-EM 1/2C	OZ AG MIN-EM 1/2C	%CU MIN-EN 1/2C	SAMPLE WIDTH
	7.87	8.55	TH4-01	0.005	0.95	0.100	0.69
	11.42	12.42	TH4-02	0.006	0.54	0.053	1.00
	12.43	13.44	TH4-03	0.007	0.29	0.006	1.03
	15.07	15.44	TH4-4A	0.001	0.30	0.005	0.37
	15.62	16.33	TH4-4B	0.001	0.18	0.003	0.71
	24.36	25.12	TH4-05	0.002	0.18	0.020	0.77
	26.59	27.2[illegible]	TH4-06	0.027	2.22	0.780	[illegible]
	27.7[illegible]	27.9[illegible]	TH4-07	0.008	0.87	0.254	[illegible]
	[illegible]	32.69	TH4-7A	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	TH4-08	0.021	3.09	0.639	[illegible]
	[illegible]	29.54	TH4-8A	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	TH4-09	0.006	0.75	0.068	[illegible]
	30.00	30.74	TH4-10	0.064	1.98	0.393	[illegible]
	[illegible]	[illegible]	[illegible]	0.004	0.18	0.014	[illegible]

81-130

International Geosystems Corporation

Geolog System

6E Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	6805			TH-51-06						.	T 06
I	PRJ									PROJECT OR PROJECT SUB PROJECT		

Identity Data / Survey Data / Upper Tier / Lower Tier Geodata / Assay Data / F-Entry

KEY	TURN'G PT 000 = Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S												

U: FLAG, FROM, TO, RECOVERY, TMOD, MIX, ROCK-SOIL, TYPIFY-MAT TM1 TM2, QALMAT QM1, TEXTURES TX1 TX2, GRAIN, FRACTURE COUNT 1 2, T1, STRUC 1 ID, STRIKE AZM, DIP, ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY, SUMMARY F1 F2

L: RQD, FM MEM, ENV, RTQ, LC Colour, TM3, QM2, TX3, TX4, SR, RN, SH, O/C, T2, STRUC 2 ID, AZM, DIP, KF, MU, CL, EP, HE, Hw Amt, PR, MO, SL, Hw Amt, M1, M2

A: FROM, TO, RECOVERY, Sample Serial No.

F: FROM, TO

GRAPHIC

35.72	35.[illegible]	TH4-12	0.007	0.22	0.023	0.40
37.41	37.98	TH4-13	0.010	0.20	0.021	0.37
41.15	41.27	TH414A	0.010	0.24	0.029	0.12
61.81	62.12	TH414B	0.003	0.61	0.022	0.31
80.28	8[illegible].71	TH4-15	0.005	0.08	0.002	0.43
107.13	107.40	TH4-16	0.007	0.01	0.004	0.27

81-130

International Geosystems Corporation

Geolog System

75 Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O l or i = Alpha I Ƶ = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry

GRAPHIC

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR	MON	DAY	HR	MIN	APT	GEOLOGGED BY	ED BY	COMPLETED YR	MON	DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	D E N	6 8 0 5																		T 07
I	P R J				C O M P A N Y															

KEY	TURN'G PT. 000=Collar	FROM	TO	F-S	O	AZM	CLOCKWISE FROM TRUE N	V-ANG	NEG IF DOWN	STATION	OFFSET	NEG IF LEFT	NORTHING	NEG IF SOUTH	EASTING	NEG IF WEST	ELEVATION	NEG IF SUB-SEA
S																		

KEY	FLAG	FROM	TO	RECOVERY	T_{MOD} Min	ROCK-SOIL	TYPIFY-MAT TM_1	TM_2	QALMAT QM_1	QM_2	TEXTURES TX_1	TX_2	GRAIN Fe	Cr	Cu	MP	FRACTURE COUNT	1	2	STRUC1 ID	STRUC2 ID	STRIKE AZM	DIP	DIP	Q2	BI	ALTERATION & MINERALIZATION DEFAULT SUITES CY	CB	MG	XX	PY	CP	QL	YY	SUMMARY F1	F2
U																																			
L				RQD		ENV	RTQ	LC					Sa	Ru	Sh												EP	HE		PR	MO	Sc			
A		FROM	TO	RECOVERY				Colour														AZM			KF	MU									
F		FROM	TO																																

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

81-130

International Geosystems Corporation

Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O l or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data | Survey Data | Upper Tier | Lower Tier Geodata | Assay Data | F-Entry

GRAPHIC

I KEY | FLAG (D E N) | FORMAT VERSION (6 8 0 5) | IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE) | H/T TYPE | ID of DRILLHOLE/TRAVERSE NAME AND NUMBER | SIZE OF CORE OR HOLE | DATE AND TIME (YR MON DAY HR MIN APT) | GEOLOGGED BY / ED BY | COMPLETED (YR MON DAY) | COMMENT / REMARK | GRID AZIMUTH | UNITS M/F (T 0 1 8)

I KEY | (P R I) | COMPANY | PROSPECT | AREA | TENEMENT | GRID

S KEY | TURN C.PT 000=Collar | FROM | TO | F-S | O | AZM CLOCKWISE FROM TRUE N | V-ANG NEG IF DOWN | STATION | OFFSET | NEG IF LEFT | NORTHING NEG IF SOUTH | EASTING NEG IF WEST | ELEVATION NEG IF SUB-SEA

U FLAG | FROM | TO | RECOVERY | T_{MUD} °/Min | ROCK-SOIL ENV | RTQ | TYPIFY-MAT TM_1 | TM_2 | QAL MAT QM_1 | QM_2 | TEXTURES TX_1 | TX_2 | GRAIN Fr | Cr | $^1/_4C$ | MP | FRACTURE COUNT | 1 | 2 | T_1 | STRUC1 ID | STRIKE AZM | DIP To Right | QZ | BI | ALTERATION & MINERALIZATION DEFAULT SUITES CY | CB | MG | XX | PY | CP | QL | YY | SUMMARY F1 | F2

L | RQD | RECOVERY | Sample Serial No | T_2 | STRUC2 ID | AZM | DIP To Right | KF | MU | CL | EP | HE | Hw Amt | PR | MO | SL | Hw Amt | M1 | M2

A FROM | TO

F FROM | TO

| 1 | 2 3 4 | 5 6 7 8 9 10 | 11 12 13 14 15 16 | 17 18 19 20 21 22 23 | 24 25 26 27 | 28 29 30 31 32 33 34 | 35 36 37 38 | 39 40 41 42 | 43 44 45 46 | 47 48 | 49 50 | 51 52 53 | 54 55 56 | 57 58 | 59 60 | 61 62 | 63 64 | 65 66 | 67 68 | 69 70 | 71 72 | 73 74 | 75 76 | 77 78 | 79 80 |

1 2 3 4 5 6 7

81-130

International Geosystems Corporation

Geolog System

9E Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

Enter keys in col. 1 to activate entries

Key	Flag	Format Version	ID of Drillhole/Traverse Name and Number	Units M-F
I	D E N	6 B 0 5	CCP	T 09
I	P R J			

Identity Data: FLAG, FORMAT VERSION, IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE), H/T TYPE, ID of DRILLHOLE/TRAVERSE NAME AND NUMBER, SIZE OF CORE OR HOLE, DATE AND TIME (YR, MON, DAY, HR, MIN, APT), GEOLOGGED BY, ED BY, COMPLETED (YR, MON, DAY), COMMENT / REMARK, GRID AZIMUTH, UNITS M-F

Survey Data: TURN C PT 000 = Collar, FROM, TO, F-S, O, AZM CLOCKWISE FROM TRUE N, V-ANG NEG IF DOWN, STATION, OFFSET NEG IF LEFT, NORTHING NEG IF SOUTH, EASTING NEG IF WEST, ELEVATION NEG IF SUB-SEA

Upper Tier: FLAG, FROM, TO, RECOVERY, TMOD, MIX, ROCK-SOIL, TYPIFY-MAT TM1 TM2, QALMAT QM1, TEXTURES TX1 TX2, GRAIN, FRACTURE COUNT 1 2, STRUC1 ID, STRIKE AZM, DIP, ALTERATION & MINERALIZATION DEFAULT SUITES (QZ, BI, CY, CB, MG, XX, PY, CP, GL, YY), SUMMARY F1 F2

Lower Tier Geodata: RQD, FM MFM, ENV, RTQ, LC Colour, TM3, QM2, TX3, TX4, STRUC2 ID, AZM, DIP, KF, MU, CL, EP, HE, Hw Amt, PR, MO, SL, Hw Amt, M1, M2

Assay Data: FROM, TO, RECOVERY, Sample Serial No.

F-Entry: FROM, TO

FROM	TO	E R	A R	F R
96.62	98.15	1.53	1.59	103.92
98.15	99.67	1.52	1.44	94.74
99.67	101.19	1.52	1.55	101.97
101.19	102.72	1.53	1.57	102.61
102.72	104.24	1.52	1.50	98.68
104.24	105.77	1.53	1.53	100.00
105.77	107.29	1.52	1.46	96.05
107.29	108.81	1.52	1.55	101.97

81-130

International Geosystems Corporation

Geolog System

IF Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Ƶ = Alpha Z

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	UNITS M/F
I	DEN	6805	THORN	TH-86 03	T C 2
I	PRJ				

Identity Data; Survey Data; Upper Tier; Lower Tier; Geodata; Assay Data; F-Entry

Key	From	To	Entry (cols 17–46)	Struc (47–50)	Dip (54–58)	Alteration / Mineralization (63–80)
/	24.82	25.07	X VEIN QZ	R CN	20 V5	TT V4
L						V1
R			10% ØF VOLUME. SUBPARALLEL CØNTACTS, SX SELVAGE FXP Ø/PY/TT/QZ			
/	25.18	26.02	V VEIN QZ	R CN	30 V2	TT V8
L						V4
R			60% ØF VØL MAIN TREND WITH CROSS-CUTTING QZSX VEINS. VEINS			
R			INCØRPØRATE FXPP FRAGMENTS.			
/	26.02	26.45	X VEIN	R CN	70 VB	TT V3
L						V3
R			10% VØL, IRREGULAR-GRADATIØNAL CØNTACTS.			
R				R CN	20 V2	V8
/	26.73	27.14	X VEIN			
L						
R			10% VØL, TWØ VEINS AND THEY HAVE CRØSS CUTTING DIPS.		V5	V2
/	28.16	28.80	X VEIN BR?	R		
L						
R			30% VØL, WEAK SILICIFICATIØN ØF WALL RX ØR FRAG WITHIN SIL-P~ MAT.		P3	
/	30.00	34.90	X FXPP	D		
L						
R			STRAYS PERVASIVE SILIC IN ZØNES.			
/	30.26	30.65	X VEIN BR	R CN	60 V9	V1
L						
R			100% ØF VØL, SILICEOUS FRAG IN QZ MATRIX			TT
/	32.20	38.40	X FXPP	D		DI
L						
R			??-EN? DISS. THRØUGH SECTIØN. SPECULAR HEMATITE.		70 V8	VL
/	34.75	34.90	X VEIN			
L						
R			100% ØF VØL.			V1
/	38.48	39.23	X VEIN BR 3 BR	RT CN	70 V6	
				BE N		V=
L						
R			80% ØF VØL			V2
/	39.70	39.93	X VEIN	R	10	
L						
R			10% VØL. IRR VN ??? ??? ??IS.		V6	V2 V2
/	41.05	41.15	X VEIN	R		
L						
R			40% VØL TRENDING CØRE AXIS.			

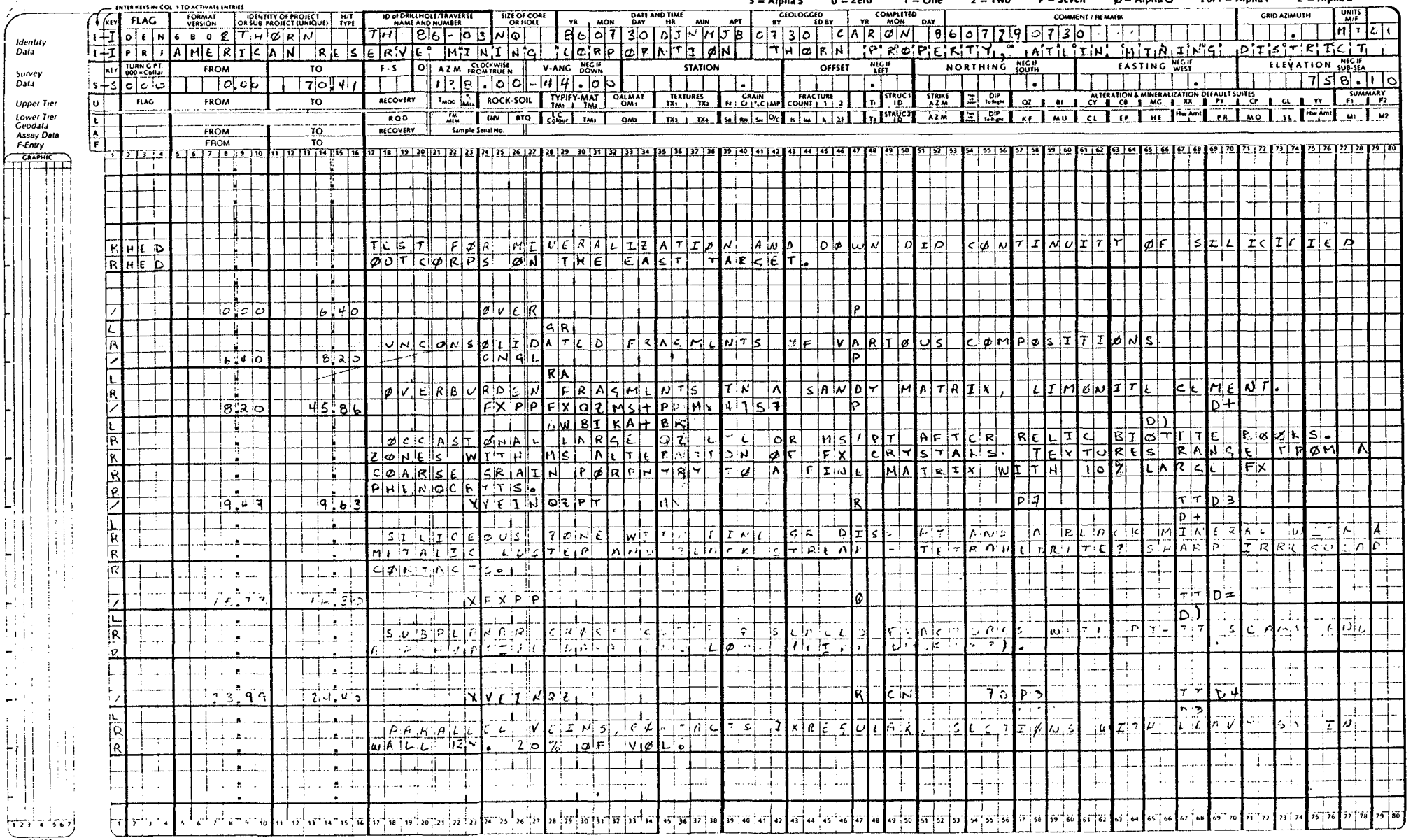
81-130

International Geosystems Corporation

Geolog System

2F Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z



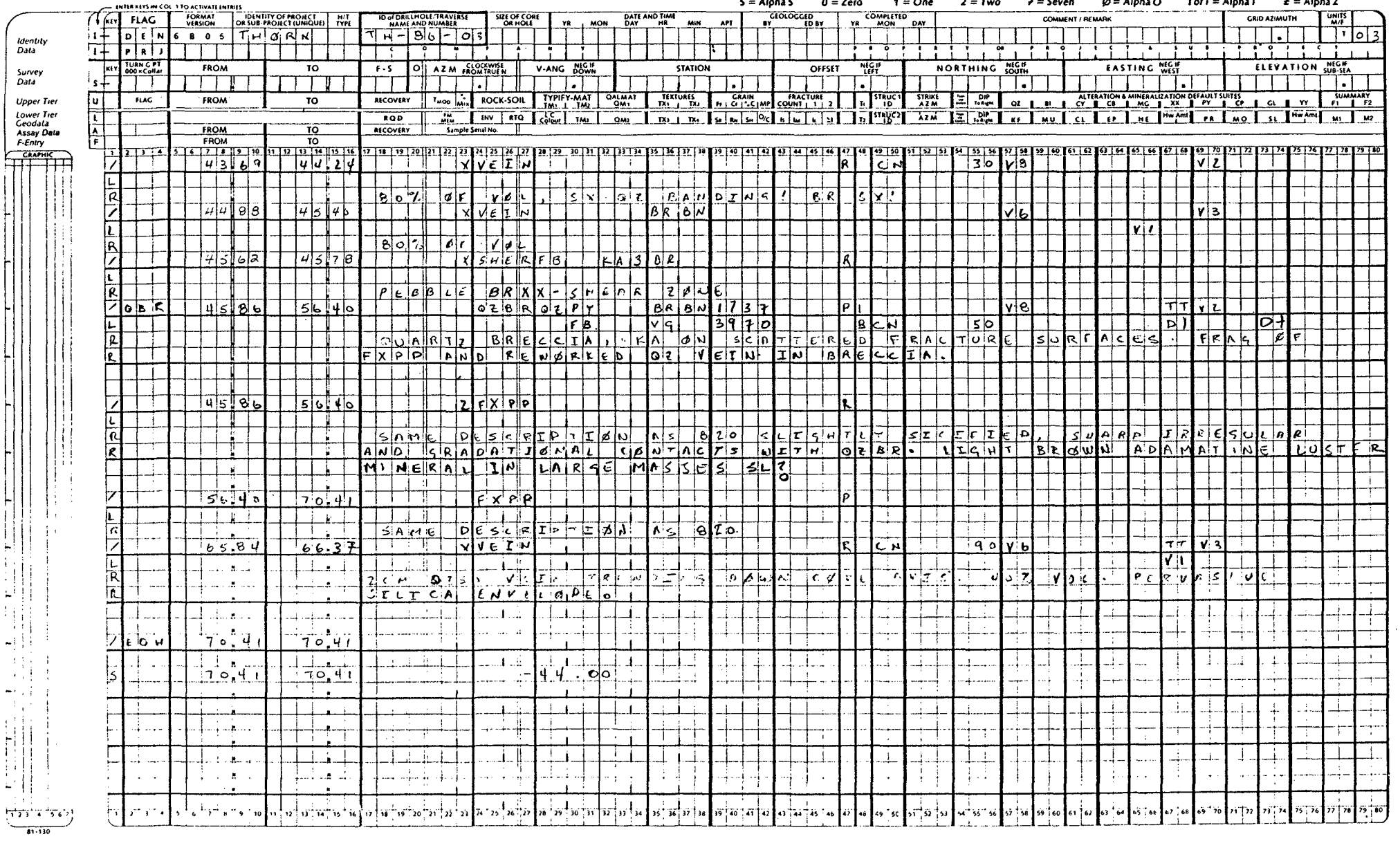
81-130

International Geosystems Corporation

Geolog System

3E Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z



International Geosystems Corporation

Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data: DEN 6805 THORN — TH-56-03

PRJ

AHED ASSAY RESULTS OF SAMPLES TAKEN FROM THORN DDH-56-03

Flag	From	To	Sample Number	Au (oz/ton)	Ag (oz/ton)	% Cu	Sample Width
AUNT ALAB ASZE			SAMPLE NUMBER	OZ AU MINIM 1/2C	OZ AG MINIM 1/2C	% CU MINIM 1/2C	SAMPLE WIDTH
	9.47	9.63	TH3-01	0.030	4.81	0.617	0.16
	15.73	16.30	TH3-02	0.007	1.28	0.033	0.57
	23.79	24.40	TH3-03	0.039	6.21	1.760	0.41
	[illegible]	[illegible]	TH3-04	0.028	2.33	0.580	0.25
	25.15	26.01	TH3-05	0.049	1.75	0.333	[illegible]
	26.01	26.44	TH3-06	0.038	2.63	0.530	0.42
	[illegible]	[illegible]	[illegible]	0.054	2.51	0.217	[illegible]
	[illegible]	[illegible]	[illegible]	0.032	0.85	0.036	0.66
	[illegible]	[illegible]	[illegible]	0.008	0.29	0.052	0.36
	[illegible]	[illegible]	[illegible]	0.006	0.41	0.010	[illegible]
	[illegible]	[illegible]	[illegible]	0.034	0.93	0.112	[illegible]
	[illegible]	[illegible]	[illegible]	0.006	0.23	0.007	[illegible]
	[illegible]	[illegible]	[illegible]	0.005	0.17	0.005	[illegible]
	[illegible]	[illegible]	[illegible]	0.006	0.29	0.008	[illegible]

81-130

International Geosystems Corporation

Geolog System

5F Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Identity Data: DEN | Format version 6805 | ID of drillhole/traverse name and number: TH-86-03 | Units M/F: T | 05

Survey Data / Upper Tier / Lower Tier / Geodata / Assay Data / F-Entry

FROM (cols 5–10)	TO (cols 11–16)	Sample (cols 21–27)	cols 28–34	cols 35–41	cols 42–48	cols 49–53
38.67	39.20	TH3-16	0.082	1.30	0.153	0.52
39.65	39.93	TH3-17	0.035	0.53	0.061	0.25
43.69	40.24	TH3-18	0.053	1.01	0.096	0.55
44.57	45.38	TH3-19	0.164	1.46	0.071	0.51
45.38	45.74	TH319A				0.36
45.74	46.85	TH3-20	0.139	2.80	0.239	1.06
46.85	47.04	TH320A				0.19
47.04	47.54	TH3-21	0.124	1.98	0.073	0.50
47.54	47.85	TH321A				0.31
47.55	48.12	TH3-22	0.036	0.83	0.082	0.[illegible]
48.12	48.54	TH322A				0.42
48.54	49.15	TH3-23	0.093	1.58	0.078	0.6[illegible]
[illegible]	[illegible]	TH323A				0.[illegible]
[illegible]	[illegible]	TH3-24	0.063	0.99	0.095	0.[illegible]
[illegible]	50.21	TH324A				0.30
[illegible]	[illegible]	TH3-25	0.194	1.76	0.097	[illegible]
[illegible]	[illegible]	TH325A				0.[illegible]
[illegible]	[illegible]	TH3-26	0.049	0.47	0.069	0.97
[illegible]	[illegible]	TH326A				0.[illegible]

81-130

International Geosystems Corporation

Geolog System

6F Geoform

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ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	6B05			[illegible]							06
I	PRJ				COMPANY					PROPERTY OR PROJECT SUB-PROJECT		

Identity Data / Survey Data / Upper Tier / Lower Tier Geodata / Assay Data / F-Entry

KEY	TURN C PT. 000=Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S												

KEY	FLAG	FROM	TO	RECOVERY	T_{MOD} / MIX	ROCK-SOIL	TYPIFY-MAT TM_1 TM_2	QALMAT QM_1	TEXTURES TX_1 TX_2	GRAIN	FRACTURE COUNT 1 2	STRUC1 ID	STRIKE AZM	DIP	ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY	SUMMARY F1 F2
L				RQD	FM MEM	ENV RTQ	LC Colour TM_1	QM_2	TX_3 TX_4	SR RN SH O/C		STRUC2 ID	AZM	DIP	KF MU CL EP HE HwAmt PR MO SL HwAmt	M1 M2
A		FROM	TO	RECOVERY	Sample Serial No.											
F		FROM	TO													

GRAPHIC

FROM (5–10)	TO (11–16)	21–27	28–34	35–42	43–48	49–53
52[illegible]	54[illegible]	TH3-27	0.006	0.10	0.026	0.55
5517	5595	TH3-25	0.004	0.03	0.012	0.51
5595	5645	TH3-29	0.013	0.31	0.041	0.50
6596	6636	TH3-30	0.008	0.06	0.030	0.50

81-330

International Geosystems Corporation

Geolog System

7E Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data
Survey Data
Upper Tier
Lower Tier Geodata
Assay Data
F-Entry

GRAPHIC

B1-130

International Geosystems Corporation — Geolog System — Geoform

8 F

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

KEY	FLAG	FORMAT VERSION	UNITS M/F
I	D E N	6 8 0 5	T 0 8
I	P R J		

FROM	TO	EXPECTED RECOVERY	ACTUAL RECOVERY	PERCENT RECOVERY
50.60	52.12	1.52	1.52	100.00
52.12	53.64	1.52	1.51	99.34
53.64	55.17	1.53	1.57	102.61
55.17	56.69	1.52	1.48	97.37
56.69	58.22	1.53	1.58	103.27
58.22	59.74	1.52	1.57	103.29
59.74	61.26	1.52	1.47	96.71
[illegible]	62.79	1.53	1.51	98.69
62.79	64.31	1.52	1.50	98.62
64.31	65.84	1.53	1.59	103.92
65.84	67.36	1.52	1.45	95.39
67.36	68.88	1.52	1.55	101.97
68.88	70.41	1.53	1.54	100.65

81-130

International Geosystems Corporation

Geolog System

Geoform

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ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H-T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	6801	THORN		TH 86001	NQ	860122DJN	07 C	ARON	86072707	.	M
I	PRJ	AMERICAN RESERVE MINING CORPORATION THORN PROJECT										

Survey Data

KEY	TURN C PT 000 = Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S	000	000.	91.00			000.	-44.00	.	.	.	.	1794.00

Upper Tier: FLAG | FROM | TO | RECOVERY | TMOD | MIX | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN Fr Cr C MP | FRACTURE COUNT 1 2 | T1 | STRUC1 ID | STRIKE AZM | DIP To Right | ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier: FROM | TO | RQD | FM MIM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | Sa Rn Sh O/C | b lm h 3I | T2 | STRUC2 ID | AZM | DIP To Right | KF MU CL EP HE Hw Amt PR MO SL Hw Amt M1 M2

Geodata / Assay Data (A): FROM | TO | RECOVERY | Sample Serial No.

F-Entry: FROM | TO

S 91.00 110.03 -46.00

R HED DRILL HOLE COLLARED TO TEST DOWN DIP CONTINUITY OF EAST ZONE EXTENSION TRENCH.

/ OVR 0.0 4.75 OVER P

L

R RUBBLE OF FELDSPAR-QUARTZ PORPHYRY, FINE GRAINED ANDESITE. (DYKE ROCK) AND FINE GRAIN GRANITE

/ 4.75 5.95 CNGL LI VU 4869 P

L RA 2170

R BASAL CONGLOMERATE CONSIST OF SUBANGULAR TO ROUNDED ALTERED

R AND UNALTERED FELDSPAR PORPHYRY AND ANDESITE FRAGMENTS IN A

R LIMONITIC STAINED SANDY MATRIX. SOME PERVSIVE LI STAINING IN

R COBBLES.

/ 5.95 17.10 FBQP FX BI PP 3747 DI

L GAQZ PI PI

R FELDSPAR-BIOTITE-QUARTZ PORPHYRY. PYRITE-CHLORITE AFT CP BIOTITE

R BOOK. SERICITE AFTER MATRIX AND FELDSPAR PHENOCRYTS. TEXTURE

VARIES FROM NARROW FINE GRAINED ZONES TO COARSE GRAIN PORPHYRY

INTENSITY OF CL MS ALTERATION VARIES THROUGH THE UNIT.

/ 7.25 7.55 XFRAC R

L

R FRACTURE ZONE, BROKEN CORE, LI STAINED

/ 7.70 7.84 XFRAC R

L

R SAME AS ABOVE

/ 13.24 17.10 XFBQP D

L P + XX

R CL ALTERATION DISAPPEARS AND INTENSITY OF MS ALTERATION DECLINES ONLY AFTER PLAGIOCLASE PHENOCRYTS.

81-130

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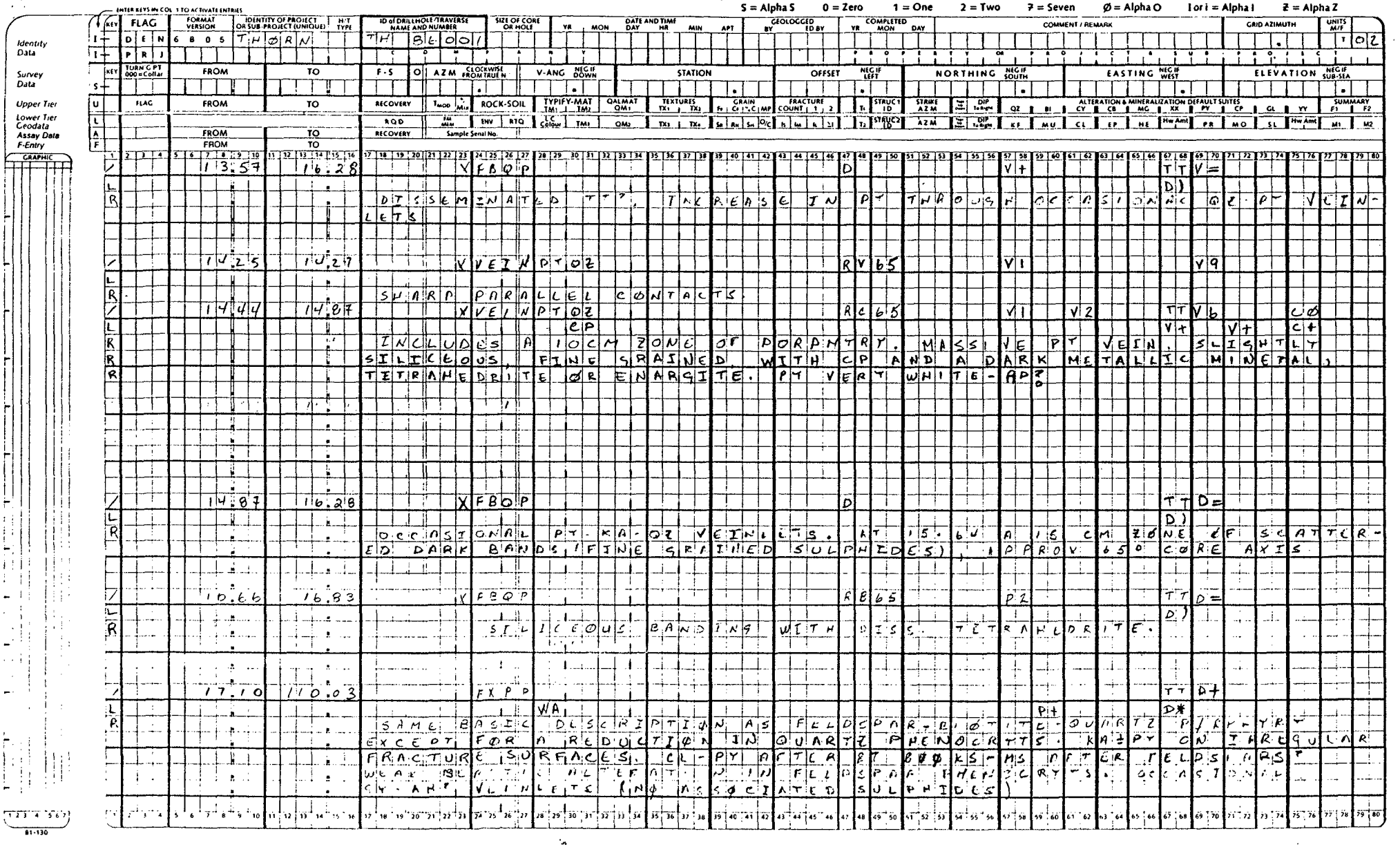
Geolog System

2.6 Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z



International Geosystems Corporation — Geolog System — Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Ƶ = Alpha Z

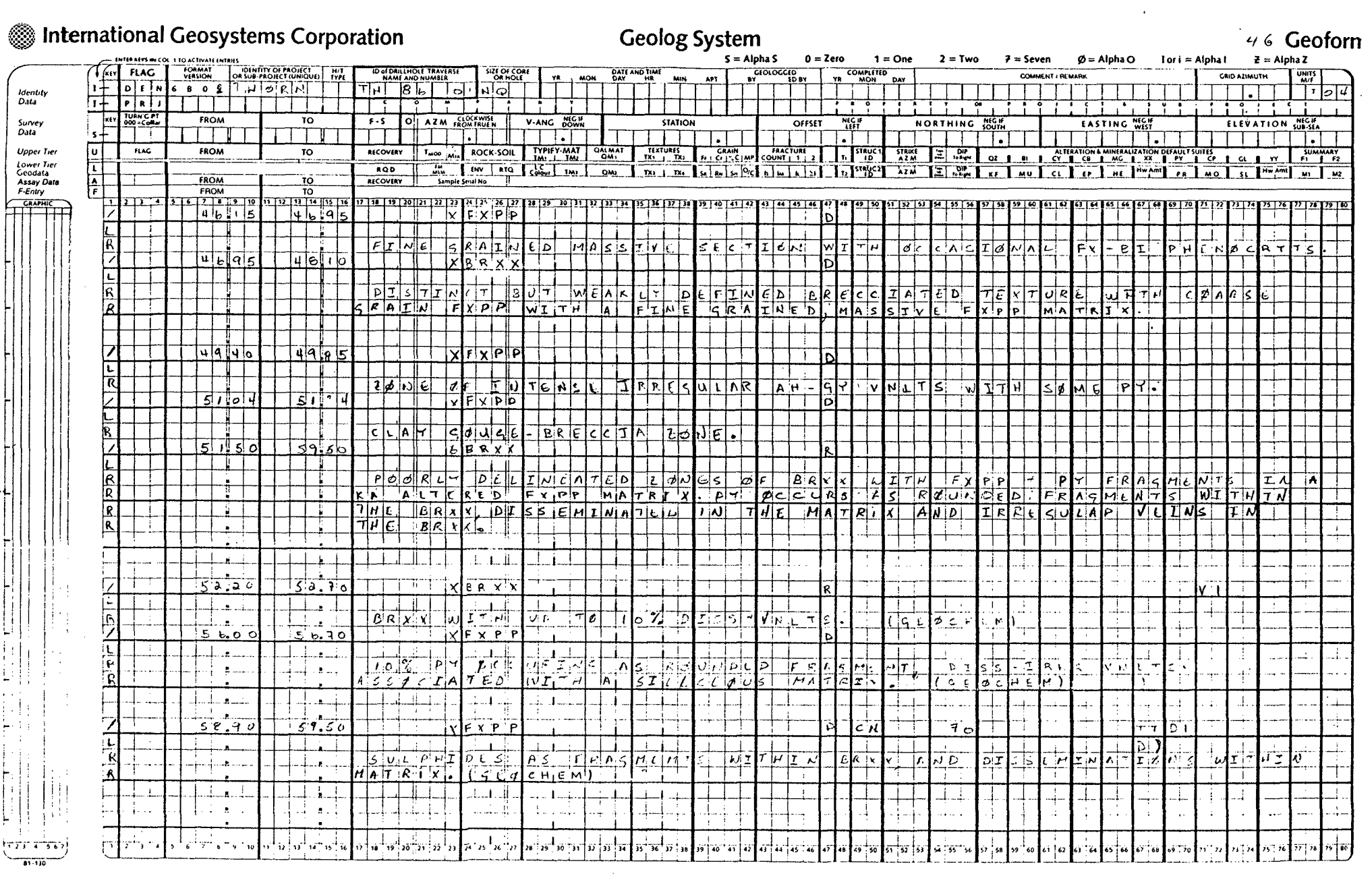
ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Key	Flag	Format Version	Identity of Project or Sub-Project (Unique)	ID of Drillhole/Traverse Name and Number	Units M/F
I	DEN	6 8 0 2	THØRI	TH 86001 NQ	03
I	PRJ				

Identity Data: PROPERTY OR PROJECT SUB-PROJECT

Key	From	To	Rock-Soil (cols 23–27)	Typify-Mat / Qalmat	Textures	Grain	T1	Struc1 ID	Dip	Alteration & Mineralization	Comment / Remark
/	22.60	22.68	XBRXX	KA3		3666	R	CN	30	D+	
L			AW			255C					
R											NARRØW BRXX ZØNE, PARALLEL PLANAR CONTACT FXPP FRAGMENTS IN A
R											CLAY MATRIX (PEBBLE DYKE)
/	22.80	23.15	XFXPP	PY KA	MX		D	CN	25	V2 V3 V5	
L				QE							
R											TWØ PARALLEL PY-KA-QZ VEINS SEPARATED BY 12 CM OF UNALTERED
R											FXPP.
A											
/	23.41	23.59	XBRXX				R	CN	70		
L								FØ	45		
R											SIMILIAR TØ 22.60 EXCEPT IRREGULAR CØNTACTS AND A FØLIATIØN
R											WITHIN THE BRXX.
/	24.05	24.09	XBRXX				R	CN	80		
L											
R											SAME DESCRIPTIØN AS 23.41.
/	32.40	33.53	XFXPP				D				
L											
R											BROKEN CØRE-RUBBLE, CY ØN FRACTURE SURFACES. FAULT ZØNE?
/	34.15	34.24	XBRXX				R	CN	80		
L											
R											SAME DESCRIPTIØN AS 23.41
/	37.17	39.00	XFXPP				D				
L											
R											ABUNDANT BRØKEN CØRE WITH CLAY GØUGE ØN BRØKEN SURFACES
/	39.82	40.64	XFXPP				D	CN	80		
L											
R											SAME AS 37.17 EXCEPT FØR TWØ DISTINCT CY GOUGE ZØNES (2 CM).
/	45.12	45.37	XFXPP				D	SH	50		
L											
R											SHEAR ZØNE WITH STRINGERS ØF CY PARALLELING SHEARING.
/	45.80	45.80	XFXPP				D	FØ1	50		
L											
R											

81-130


International Geosystems Corporation
Geolog System
Geoform
S = Alpha S
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1 = One
2 = Two
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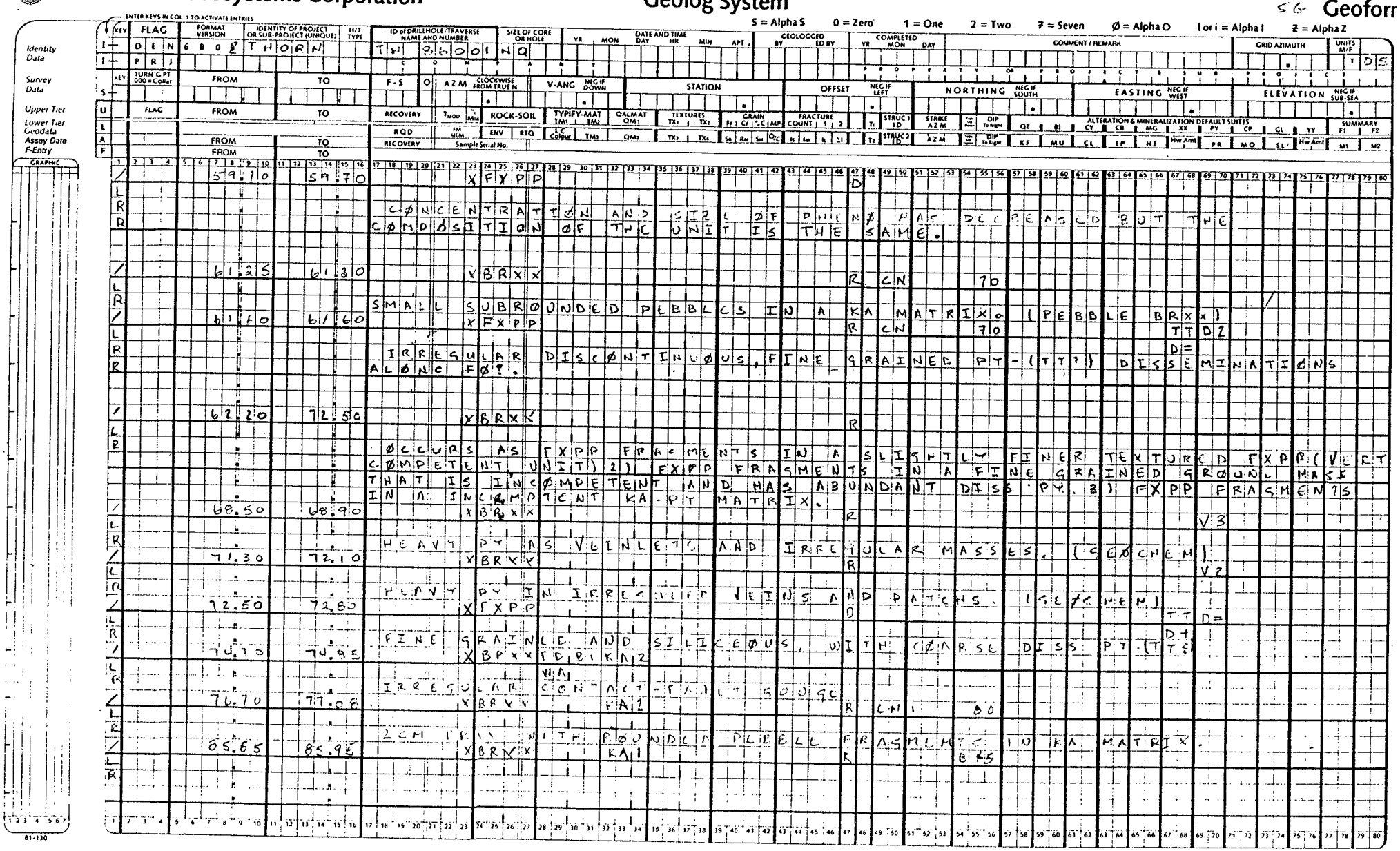
Ø = Alpha O
I or i = Alpha I
Z = Alpha Z
ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES
Identity Data
Survey Data
Upper Tier
Lower Tier
Geodata
Assay Data
F-Entry
KEY
FLAG
FORMAT VERSION
IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)
H/T TYPE
ID of DRILLHOLE TRAVERSE NAME AND NUMBER
SIZE OF CORE OR HOLE
DATE AND TIME
YR MON DAY HR MIN APT
GEOLOGGED BY ED BY
COMPLETED
COMMENT / REMARK
GRID AZIMUTH
UNITS M/F
TURN C PT 000 = Collar
FROM
TO
F-S
O
AZM
CLOCKWISE FROM TRUE N
V-ANG
NEG IF DOWN
STATION
OFFSET
NEG IF LEFT
NORTHING
NEG IF SOUTH
EASTING
NEG IF WEST
ELEVATION
NEG IF SUB-SEA
RECOVERY
ROCK-SOIL
TYPIFY-MAT
QAL MAT
TEXTURES
GRAIN
FRACTURE COUNT
STRUC1 ID
STRUC2 ID
STRIKE AZM
DIP
ALTERATION & MINERALIZATION DEFAULT SUITES
SUMMARY
RQD
ENV
RTQ
LC Colour
Sample Serial No
GRAPHIC
81-130


International Geosystems Corporation
Geolog System
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Identity Data
Survey Data
Upper Tier
Lower Tier Geodata
Assay Data
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GRAPHIC
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International Geosystems Corporation

Geolog System

66 Geoform

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	UNITS M/F
I	DEN	680	THORN	TH 86 01	NQ	T b
I	PRJ					

Survey Data: TURN'G PT 000 = Collar | FROM | TO | F-S | O | AZM CLOCKWISE FROM TRUE N | V-ANG NEG IF DOWN | STATION | OFFSET NEG IF LEFT | NORTHING NEG IF SOUTH | EASTING NEG IF WEST | ELEVATION NEG IF SUB-SEA

Upper Tier: FLAG | FROM | TO | RECOVERY | TMOD | Mix | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN | FRACTURE COUNT | T1 | STRUC1 ID | STRIKE AZM | DIP | ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier: RQD | FM MEM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | T2 | STRUC2 ID | AZM | DIP | KF MU CL EP HE Hw Amt PR MO SL Hw Amt | M1 M2

Geodata / Assay Data: FROM | TO | RECOVERY | Sample Serial No.

F-Entry: FROM | TO

Key	From	To	Cols 23–27	Col 47	Struc ID	Dip	Cols 67–76	Comment
/	85.95	90.40	YFXPP	D				
L								
R								FINER GRAINED, MASSIVE. WEAK SILICIOUS ZONES. WEAK SERICITIC
R								ALTERATION OF FELDSPAR PHENOCRYSTS.
/	90.70	90.70	XFXPP	D	FØ	70		
L								
R								
/	91.37	91.49	YFXPP	D	CN	80		
L								
R								IRREGULAR AH-GT VEINLET.
/	95.72	96.32	XFXPP	D	CN	65		
L								
R								BRØKEN CØRE - FRACTURE ZØNE?
/	98.06	101.00	YFXPP	D				
L								
R								ZØNE IS MØRE MASSIVE AND FINER GRAINED. WEAK BRECCIATED
R								TEXTURE IN SECTIØNS.
/	101.37	102.57	XFXPP	D			TT D=	
L							D)	
R								[illegible]ARSE GRAIN DISSEMINATED TT AND PY
/	102.57	103.94	XBRXY	R			TT DI D=	AP D)
L								
K								SILICIØUS FXPP FRAGMENT IN A WEAKLY SILICEØUS FINE GRAINED
R								MATRIX. FINE GRAINED DISSEMINATE SULPHIDES THROUGHØUT THE
R								MATRIX. CØNTACTS ARE GRADATIØNAL.
/	103.94	105.20	XFXPP	R				BR
L								
R								[illegible] BRECCIATIØN IN SECTIØNS ØF THIS ZØNE [illegible]
R								ACCØMPANYING KAØLINITE CØATED FRACTURES AND IRREGULAR VEINLETS.
/	106.00	110.03	XFXDP	R				
L								
R								FINE GRAINED [illegible] WITH SCATTERED LARGE FELDSPAR PHENOCRYSTS [illegible]
								SLIGHT INCREASE [illegible]
/	ECH	110.08	110.53					

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International Geosystems Corporation — Geolog System — Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

Identity Data: DEN 6805 THORN — TH-86-01 — PRJ — Units M/F: T07

A HED — ASSAY RESULTS OF SAMPLES TAKEN FROM THORN-DDH-86-01.

FROM	TO	SAMPLE NUMBER	CHEMEX OZ/T AU 1/2C	CHEMEX OZ/T AG 1/2C	CHEMEX % CU 1/2C	SAMPLE WIDTH	CHEMEX PPM AG 1/2C	CHEMEX PPM AS 1/2C	CHEMEX PPM CU 1/2C
13.57	14.44	TH1-01	0.002	0.15	0.02	0.87			
14.44	14.87	02	0.050?	[illegible]	0.92	0.43			
14.87	16.28	03	0.006	0.36	0.06	1.41			
16.66	16.83	04	0.008	0.54	0.34	0.17			
22.80	23.15	05	0.006	0.23	0.10	0.35			
52.20	52.70	06				0.50	3.6	180	422
56.10	56.70	6A				0.60	4.0	60	270
58.90	59.50	07				0.60	33.0?	230	1884?
68.50	68.90	08				0.40	4.2	60	646
71.30	72.10	09				0.80	39.0?	740?	3237
72.50	72.80	10	<0.002	0.03	<0.01	0.30			
101.37	102.41	11	0.004	0.36	0.04	1.04			
102.61	103.24	12	0.024	2.54	0.79	0.63			

81-130

International Geosystems Corporation

Geolog System

Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Ƶ = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME	GEOLOGGED BY / ED BY	COMPLETED	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	6805	THORN		TH-86001	NQ						T 0 8
I	PRJ											

Identity Data / Survey Data / Upper Tier / Lower Tier Geodata / Assay Data / F-Entry

RHED			CORE RECOVERY RECORD		
RHED			EXPECTED	ACTUAL	PERCENT
RHED			RECOVERY	RECOVERY	RECOVERY
	0.00	4.88	4.88	0.46	9.43 %
	4.88	6.40	1.52	1.41	92.76
	6.40	7.92	1.52	1.48	97.37
	7.92	9.45	1.53	1.47	96.08
	9.45	10.97	1.52	1.46	96.05
	10.97	12.50	1.53	1.50	98.04
	12.50	14.02	1.52	1.50	98.68
	14.02	15.54	1.52	1.50	98.68
	15.54	17.10	1.56	1.53	98.08
	17.10	18.60	1.50	1.48	98.67
	18.60	20.10	1.50	1.49	99.33
	20.10	21.60	1.50	1.48	98.67
	21.60	23.20	1.60	1.56	97.50
	23.20	24.70	1.50	1.47	98.00
	24.70	26.20	1.50	1.49	99.33
	26.20	27.70	1.50	1.37	91.33
	27.70	29.30	1.60	1.58	98.75
	29.30	30.80	1.50	1.48	98.67
	30.80	32.30	1.50	1.48	98.67
	32.30	33.80	1.50	1.38	92.00
	33.80	35.40	1.60	1.45	90.62
	35.40	36.90	1.50	1.46	97.33
	36.90	38.40	1.50	1.48	98.67
	38.40	39.90	1.50	1.34	89.33
	39.90	41.50	1.60	1.55	96.88
	41.50	42.70	1.20	1.19	99.17
	42.70	43.00	0.30	0.41	136.67
	43.00	44.50	1.50	1.50	100.00
	44.50	46.00	1.50	1.50	100.00
	46.00	47.50	1.50	1.46	97.33
	47.50	49.10	1.60	1.23	76.88
	49.10	50.60	1.50	1.48	98.67
	50.60	52.10	1.50	1.55	103.33

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International Geosystems Corporation — Geolog System — Geoform

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S = Alpha S | 0 = Zero | 1 = One | 2 = Two | 7 = Seven | Ø = Alpha O | I or i = Alpha I | Z = Alpha Z

Key	Flag	Format Version	Identity of Project or Sub-Project (Unique)	ID of Drillhole/Traverse Name and Number	Size of Core or Hole
I	DEN	6805	THORN	TH-[illegible]	NQ
I	PRJ				

CORE RECOVERY RECORD

Flag	From	To	Expected Recovery	Actual Recovery	Percent Recovery
RFED					
	52.10	53.60	1.50	1.55	103.33 %
	53.60	55.20	1.60	1.56	97.50 %
	55.20	56.70	1.50	1.55	103.33
	56.70	58.20	1.50	1.48	98.67
	58.20	59.70	1.50	1.53	102.00
	59.70	61.30	1.60	1.55	96.88
	61.30	62.80	1.50	1.56	104.00
	62.80	64.30	1.50	1.48	98.67
	64.30	65.80	1.50	1.55	103.33
	65.80	67.40	1.60	1.47	91.88
	67.40	68.90	1.50	1.56	104.00
	68.90	70.40	1.50	1.54	102.67
	70.40	71.90	1.50	1.50	100.00
	71.90	73.50	1.60	1.49	93.13
	73.50	74.83	1.33	1.35	101.50
	74.82	76.35	1.52	1.69	111.18
	76.35	77.57	1.22	1.04	85.25
	77.57	79.10	1.53	1.59	103.92
	79.10	80.62	1.52	1.60	105.26
	80.62	82.14	1.52	1.58	103.95
	82.14	83.67	1.53	1.55	101.31
	83.67	84.12	0.45	0.44	97.78
	84.12	85.65	1.53	1.20	78.43
	85.65	87.17	1.52	1.40	92.11
	87.17	88.70	1.53	[illegible]	82.81
	88.70	90.22	1.52	1.49	98.03
	90.22	91.74	1.52	1.54	101.32
	91.74	93.27	1.53	1.52	99.35
	93.27	94.79	1.52	1.51	99.34
	94.79	96.32	1.53	1.58	103.27
	96.32	97.84	1.52	1.30	85.53
	97.84	99.36	1.52	1.60	105.26

81-130

International Geosystems Corporation

Geolog System

/ 06 Geoform

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ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

	KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H-T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
Identity Data	I	D F N	6 8 0 5	T P O F A		TU-R6001	NQ						T / C
	I	P R J				COMPANY					PROPERTY OR PROJECT SUB PROJECT		

Survey Data	KEY	TURN'G PT. 000 = Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
	S												

Upper Tier: U — FLAG | FROM | TO | RECOVERY | T_{MOD} | % Mix | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN Fr Cr °C MP | FRACTURE COUNT 1 2 | T1 | STRUC 1 ID | STRIKE AZM | DIP | QZ | BI | ALTERATION & MINERALIZATION DEFAULT SUITES CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier Geodata: L — RQD | FM MEM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 | TX4 | Se Rn Sw O/C | Is Im Ir Si | T2 | STRUC2 ID | AZM | DIP | KF | MU | CL | EP | HE | Hw Amt | PR | MO | SL | Hw Amt | M1 | M2

Assay Data: A — FROM | TO | RECOVERY | Sample Serial No.

F-Entry: F — FROM | TO

GRAPHIC

KEY	FLAG	FROM	TO	(cols 17–27)	(cols 28–38)	(cols 39–46)
R	HED			CORE RECOVERY RECORD		
R	HED			EXPECTED	ACTUAL	PERCENT
R	HED			RECOVERY	RECOVERY	RECOVERY
		99.56	100.89	1.53	1.62	105.88
		100.89	102.41	1.52	1.45	95.39
		102.41	103.94	1.53	1.56	101.96
		103.94	105.46	1.52	1.58	103.95
		105.46	106.98	1.52	1.53	100.66
		106.98	108.51	1.53	1.46	95.42
		108.51	110.03	1.52	1.48	97.37
		0.00	110.03	110.03	103.47	94.04

81-130

International Geosystems Corporation

Geolog System

1.H Geoform

S = Alpha S | 0 = Zero | 1 = One | 2 = Two | 7 = Seven | Ø = Alpha O | I or i = Alpha I | Z = Alpha Z

ENTER KEYS IN COL 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY / ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	680Z	THØRN		TH-86-(2)	N	860729 DJNIB	0729	CARON 0727		.	MTCI
I	PRI	AMERICAN RESERVE MINING CORPORATION						THØRN	PRØJECT			

Survey Data

KEY	TURN'G PT 000=Collar	FROM	TO	F-S	O	AZM CLOCKWISE FROM TRUE N	V-ANG NEG IF DOWN	STATION	OFFSET NEG IF LEFT	NORTHING NEG IF SOUTH	EASTING NEG IF WEST	ELEVATION NEG IF SUB-SEA
S	000	0.0	31.00			000.00	-64.00	.	.	.	.	794.00

Upper Tier: U | FLAG | FROM | TO | RECOVERY | TMOD | % Mix | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN Ft Cl °C MP | FRACTURE COUNT 1 2 | T1 | STRUC1 ID | STRIKE AZM | DIP | ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY | SUMMARY F1 F2

Lower Tier Geodata: L | RQD | FM MEM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | SA RN SH O/C | T2 | STRUC2 ID | AZM | DIP | KF MU CL EP HE Hw Amt PR MO SL Hw Amt | M1 M2

Assay Data: A | FROM | TO | RECOVERY | Sample Serial No.

F-Entry: F | FROM | TO

KEY	FROM	TO	DATA (cols 17–80)
R HED			TØ DRILL BELOW THØRN-DDH-86-1 AND TEST THE DØWN DIP CØNTINUITY
			ØF MINERALIZATIØN INTERSECTED AT 14.44 METERS
/	0.00	3.66	ØVER P
L			
R			RUBBLE RECØVERED ØF VARIØUS CØMPØSITIØNS.
/	0.00	3.05	XØVER D
L			
R			CASING WAS PLACED TØ A DEPTH ØF 3.05 METERS
/	3.66	7.32	CNGL AN PP 4869 P
L			RA 2770
R			BASAL CNGL. SANDY LIMØNITED CEMENTED MATRIX. ANDESITE,
R			RHYØLITE, SYENITE, GRANITE AND FELDSPAR PØRPHYRY FRAGMENTS.
/	7.32	15.73	FBØP FX BI MS = PP CR 4757 P PT.
L			GAØZ CL + MY BR
R			FELDSPAR-BIØTITE-QUARTZ PØRPHYRY. MS AFTER MATRIX AND FX PHENØS.
R			CL IN MATRIX AND RELIC BI BØØKS. SCATTERED SMALL QZ PHENOCRYSTS.
R			TEXTURE RANGES FRØM A CRØWDED PØRPHYRY TØ A MX FINE GRAINED
R			MATRIX WITH SCATTERED [illegible] PHENOCRYSTS [illegible] AGGREGATES.
/	10.80	11.28	XFEQP D FØ 20
L			
R			FINE GRAIN [illegible] WEAK [illegible] FRACTURE SET.
/	12.00	12.55	XFBQP D
L			CL F
R			CØARSE GR PØ 7ØNE [illegible] STRØNG [illegible] PERVASIVE CL IN MATRIX.
/	12.97	13.63	YFBØP D CN 70
L			
R			FINE GRAINED MX 7ØNE WITH SCATTERED PT VEINLETS AND [illegible] 2CM WIDE.
			KA MATRIX PEEBLE BEDS.

81-130

2 11 Geoform

International Geosystems Corporation

Geolog System

S = Alpha S   0 = Zero   1 = One   2 = Two   7 = Seven   Ø = Alpha O   I or i = Alpha I   Z = Alpha Z

Identity Data: KEY / FLAG: D E N | FORMAT VERSION: 6 B 0 I | IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE): T H Ø R N | ID of DRILLHOLE/TRAVERSE NAME AND NUMBER: T H 86 02 | SIZE OF CORE OR HOLE: N Q | UNITS M/F: 1 | GRID AZIMUTH: 02

P R J | F-S | AZM CLOCKWISE FROM TRUE N | V-ANG NEG IF DOWN | STATION | OFFSET NEG IF LEFT | NORTHING NEG IF SOUTH | EASTING NEG IF WEST | ELEVATION NEG IF SUB-SEA

Survey Data: TURN C PT 000 = Collar | FROM | TO | RECOVERY | TMOD | MIX | ROCK-SOIL | TYPIFY-MAT TM1 TM2 | QALMAT QM1 | TEXTURES TX1 TX2 | GRAIN | FRACTURE COUNT | STRUC1 ID | STRIKE AZM | DIP | QZ | BI | ALTERATION & MINERALIZATION DEFAULT SUITES | SUMMARY

Upper Tier / Lower Tier Geodata / Assay Data / F-Entry: FLAG | FROM | TO | RQD | RECOVERY | FM MIM | ENV | RTQ | LC Colour | TM3 | QM2 | TX3 TX4 | Sample Serial No.

```
                                       XFBQP                                            D
/     14.35     15.08
L                          ZØNES ØF STRØNG CL ALTERATIØN ØF CRØWDED FX PHENØS.
                                                                           DI
R                                      XFBQP                              D
/     15.29     15.75
L                          WEAKLY FRACTURED AND STRØNGLY KA! GRADATIØNAL CN!        D+
R                                      FXPPFXBI KA=PPMY4757                P
/     15.73     31.09                           AW  BR
L                          FELDSPAR BIØTITE PØRPHYRY. ØCCASIØNAL QZ CRYSTALS CAN STILL
R                          BE FØUND. ØCCASIØNAL ZØNES ØF MC+CL ALTERATIØN. THIS IS A
R                          ALTERATIØN CØNTACT RATHER THEN A LITHØLØGICAL CHANGE.
R                                                          TTV7DY         AP
                                                   10DI      DI           D*
                                                R  CN                     D*
                                       XVEINPYQZ       BxMX
/VN!  15.98     16.55                     KA              SHARP IRREGULAR CN. WALLRØCK FRAG-
L                          QZSX VEINING 40% ØF ZONE. SHARP IRREGULAR CN. WALLRØCK FRAG-
R                          MENT IN VEINS. STRØNG KA-PY VEINLETS IN WALL RØCK.
R                                                          TTVb           AP
                                                      2CY4                D*
                                                R  CN                     DX
                                       XVEINPYQZ       BYMX
/VN!  17.60     18.00                  ... CN. NØ SILICIFICATIØN
L                          QZSX VEINS 60% ØF ZØNE. SHARP IRREGULAR CN. NØ SILICIFICATIØN
R                          IN WALL RX BUT SCATTERED PY VEINLETS.
R                                                 D
                                       XFXPP
/     19.00     20.20
L                          ZONES ØF S...ING MC ALTERATIØN ØF FX PHENØS. (LARGE QZ EYE OBSCR-
R                          VED. MARKED INCREASE IN DISS PY IN ALTERED ZØNES.
R                                                 D  CN       45            D2
                                       XFXPP
/SH!  29.23     29.46
L                          SHEAR ZONE, KA ALTERED. APPRØACHING ERYX,
P                                                 D
                                       XFXPP
/EOH  31.09     31.09
```

International Geosystems Corporation

Geolog System

3H Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Z = Alpha Z

ENTER KEYS IN COL. 1 TO ACTIVATE ENTRIES

Identity Data

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT OR SUB-PROJECT (UNIQUE)	H/T TYPE	ID of DRILLHOLE/TRAVERSE NAME AND NUMBER	SIZE OF CORE OR HOLE	DATE AND TIME YR MON DAY HR MIN APT	GEOLOGGED BY ED BY	COMPLETED YR MON DAY	COMMENT / REMARK	GRID AZIMUTH	UNITS M/F
I	DEN	6805	THCRA		TH-86-02							
I	PRJ											

Survey Data: KEY · TURN'G PT 000 = Collar · FROM · TO · F-S · O · AZM CLOCKWISE FROM TRUE N · V-ANG NEG IF DOWN · STATION · OFFSET NEG IF LEFT · NORTHING NEG IF SOUTH · EASTING NEG IF WEST · ELEVATION NEG IF SUB-SEA

Upper Tier (U): FLAG · FROM · TO · RECOVERY · T MOD · Mtx · ROCK-SOIL · TYPIFY-MAT TM1 TM2 · QALMAT QM1 · TEXTURES TX1 TX2 · GRAIN · FRACTURE COUNT · STRUC1 ID · STRIKE AZM · DIP · ALTERATION & MINERALIZATION DEFAULT SUITES QZ BI CY CB MG XX PY CP GL YY · SUMMARY F1 F2

Lower Tier Geodata (L): RQD · FM M/M · ENV · RTQ · LC Colour · TM3 · QM2 · TX3 · TX4 · STRUC2 ID · AZM · DIP · KF MU CL EP HE Hw Amt PR MO SL Hw Amt · M1 M2

Assay Data (A): FROM · TO · RECOVERY · Sample Serial No.

F-Entry (F): FROM · TO

Flag	From	To	Data
AHED			ASSAY RESULTS OF SAMPLES TAKEN FROM THORN DDH-86-02
AUNT			SAMPLE · OZ/TAU · OZ/TAG · %CU · SAMPLE
ALAB			NUMBER · CHEMEX · CHEMEX · CHEMEX · WIDTH
ASZE			1/2C · 1/2C · 1/2C

From	To	Sample Number	OZ/T AU (Chemex)	OZ/T AG (Chemex)	% CU (Chemex)	Sample Width
1598	1657	TH2-01	0.008	0.27	0.12	0.59
1761	1809	TH2-02	0.050	2.48	0.56	0.48

GRAPHIC

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International Geosystems Corporation — Geolog System — 4H Geoform

S = Alpha S 0 = Zero 1 = One 2 = Two 7 = Seven Ø = Alpha O I or i = Alpha I Ƶ = Alpha Z

KEY	FLAG	FORMAT VERSION	IDENTITY OF PROJECT	ID of DRILLHOLE	SIZE OF CORE
I	D E N	6 8 0 5	[illegible] R N	T [illegible]	Q
I	P R J				

CORE RECOVERY RECORD

FROM	TO	EXPECTED RECOVERY	ACTUAL RECOVERY	PERCENT RECOVERY
0.00	3.66	3.66	0.63	17.21 %
3.66	4.27	0.61	0.60	98.36
4.27	5.33	1.06	1.04	98.11
5.33	6.71	1.38	1.[illegible]	94.20
6.71	7.32	0.71	0.65	91.55
7.32	9.75	2.43	2.35	96.71
9.75	11.28	1.53	1.58	103.27
11.28	12.80	1.52	1.45	95.39
12.80	14.33	1.53	1.47	96.08
14.33	15.85	1.52	1.59	104.61
15.85	17.37	1.52	1.55	101.97
17.37	18.96	1.53	1.49	97.39
[illegible]	[illegible]	1.52	1.5[illegible]	104.61
[illegible]	[illegible]	1.5[illegible]	1.5[illegible]	100.00
21.95	23.47	1.5[illegible]	1.55	101.97
[illegible]	[illegible]	1.5[illegible]	1.45	[illegible]
[illegible]	[illegible]	[illegible]	1.56	[illegible]
26.5[illegible]	[illegible]	1.5[illegible]	1.56	[illegible].96
[illegible]	[illegible]	1.53	[illegible]3	[illegible]
[illegible]	[illegible]	1.5[illegible]	[illegible]	97.37

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THORN PROJECT COSTS

Fees

J. R. Woodcock:

Apr. 30 - May 6/86	3/4	day		
May 31 - June 9/86	2	days		
June 10 - 26/86	3	"		
July 4 - 26/86	21	"		
July 27 - 30/86	3	"		
Aug. 1 - 7/86	1 1/2	"		
Aug. 8 - 9/86	1 3/4	"		
Aug. 11 - 18/86	1	day		
Sept. 3 - 18/86	1 1/2	days		
Total	35 1/2	days	@ $385.00/day =	$ 13,667.50

D Nowak:

June 15 - 28/86	8 1/2	days		
June 29 - Jul.12/86	12 1/2	"		
July 13 - 26/86	14	"		
July 29 - Aug. 9/86	14	"		
Aug. 10 - 23/86	12	"		
Total	61	days	@ $175.00/day =	$ 10,675.00
+ 30% fringe benefits, overhead				3,202.50
				$ 13,877.50

M. Boldt:

June 29 - Jul.12/86	12 1/2	days		
July 13 - 26/86	14	days		
Total	26 1/2	days	@ $ 50.00/day =	$ 1,325.00
July 27 - Aug. 9/86	14	days		
Aug. 10 - 23/86	5	days		
Total	19	days	@ $ 60.00/day =	1,140.00
				2,465.00
+ 30% fringe benefits, overhead				739.50
				$ 3,204.50

M. Earnshaw (secretarial work):

Aug. 1/86	5 hrs.	@ $ 18.00/hr. =	$ 90.00

Total Fees	$ 30,839.50
Drill Charges	90,549.97
Helicopter	25,853.28
Fixed Wing	30,612.17
Lab Charges	4,129.15
Food	4,223.67
Fuel	2,935.74
Misc. Supplies & Equipment	6,325.87
Total Cost	$195,469.35

JRW

CERTIFICATE

I, J. R. Woodcock, do hereby certify that:

1. I am a consulting geological engineer with business address at 1226 - 510 West Hastings Street, Vancouver, British Columbia, V6B 1L8.

2. I have a Bachelor of Applied Science degree in geological engineering from the University of British Columbia and a Master of Science degree from the California Institute of Technology. I am a member of the Association of Professional Engineers of the Province of British Columbia.

3. I have worked in mineral exploration since 1953 and have been a consultant since 1969. I have worked in various parts of Canada, United States, Mexico and several other foreign countries.

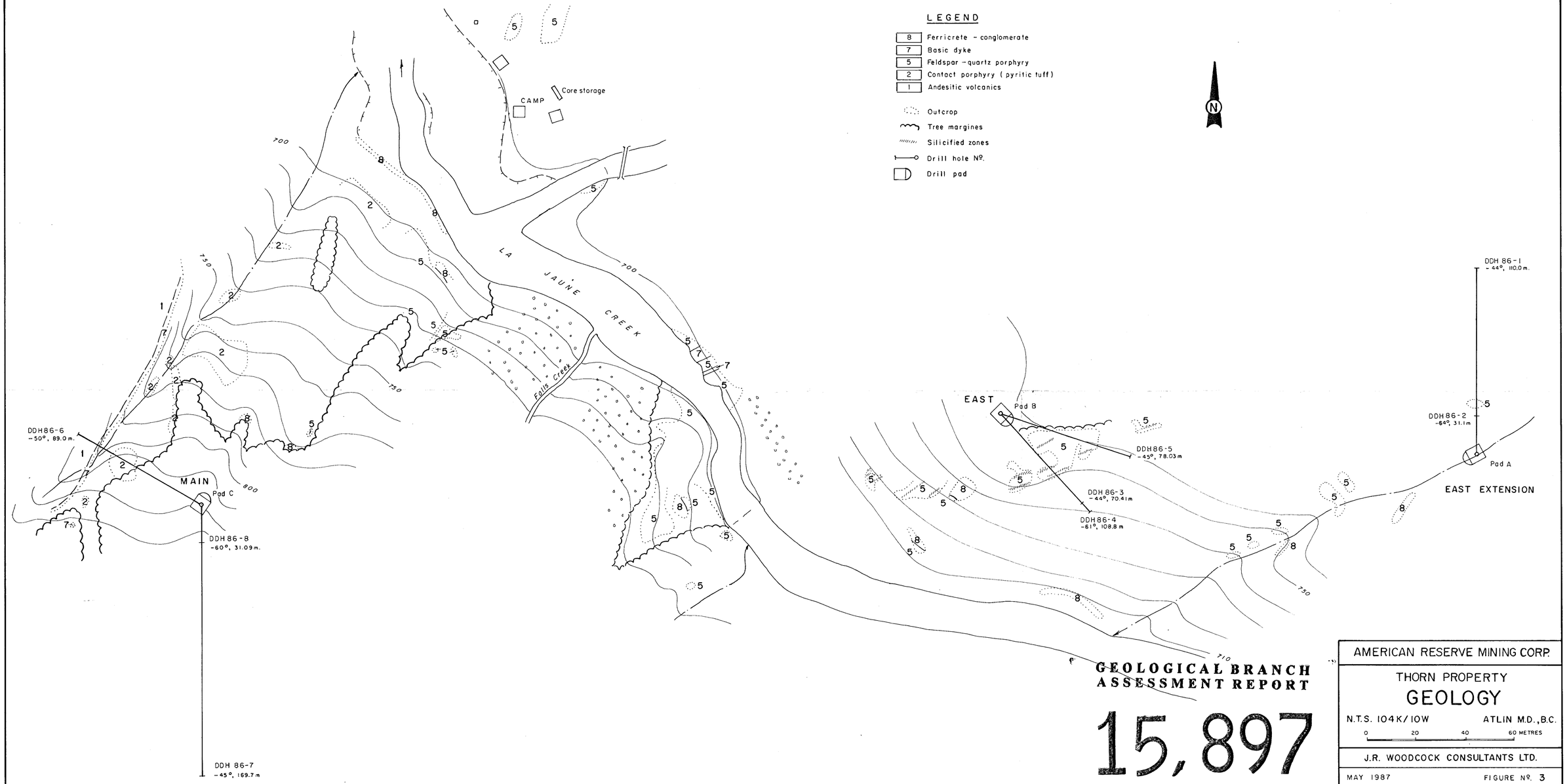
Signed and sealed in Vancouver this 29th day of May, 1987.

J. R. Woodcock

J. R. Woodcock, P. Eng.

JRW:me

JRW



GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,897

AMERICAN RESERVE MINING CORP.

THORN PROPERTY

GEOLOGY

N.T.S. 104K/10W ATLIN M.D., B.C.

0 20 40 60 METRES

J.R. WOODCOCK CONSULTANTS LTD.

MAY 1987 FIGURE Nº. 3

CHONG