



ROGUE RESOURCES, INC. GOLDEN CHALICE RESOURCES INC.

> PETROGRAPHY REPORT ON SAMPLES FROM DDH-10-01 RADIO HILL

> > TIMMINS AREA ONTARIO, CANADA



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1.0 EXECUTIVE SUMMARY

In October, 2010, Micon International Limited (Micon) was retained by Golden Chalice Inc. to undertake the logging of one or more drill holes on the Radio Hill deposit and to prepare a petrological analysis of samples from the core. Effective October 13, 2010, Golden Chalice announced that it would trade under the name of Rogue Resources Inc.

The Radio Hill iron formation intercepted in DDH-10-01 is a banded iron formation composed of varying amounts of chert, minnesotaite, and magnetite with minor amounts of siderite, pyrrhotite, chlorite, and pyrite. DDH-10-01 contained several intervals of relatively high-grade iron formation with interbedded chert, chert magnetite, and magnetite beds. Historical metallurgical work classified the high-grade iron formation as E-Type ore. The magnetite is fine-grained and is typically less than 35 microns (μ) with an average grain size of approximately 20 – 25 μ . Metallurgical work will be required to determine if concentrate with acceptable levels of SiO₂ can be achieved with reasonable grinds (500 mesh or above). However, magnetite in the massive ("metallic") bands has an estimated, effective liberation size of approximately 45 μ (325 mesh). This suggests that rejection of lower grade and finer grained chert-magnetite by cobbing could result in production of concentrate with reasonably low SiO₂ grades (<7 wt.% SiO₂) at reasonable grinds (+500, -325 mesh).

The dominant iron oxide mineral at Radio Hill is magnetite and the preferred processing method would be magnetic separation. Multiple bedding parallel veins and veinlets of chlorite-magnetite-pyrrhotite were intercepted in DDH-10-01. Since pyrrhotite is magnetic, zones containing the chlorite-magnetite-pyrrhotite veins would need to be treated as waste or diluted with low sulphur ore to control the sulphur content of the concentrate.



2.0 INTRODUCTION

Diamond drill hole DDH-10-01 was logged in November, 2010 by an Associate of Micon, an iron ore geologist, at the Rogue Resources Inc. core logging facility in Timmins, Ontario. Eleven samples representing different iron formation and other rock types were collected for petrographic analyses (See Table 3.1).



3.0 METHODOLOGY

Eleven samples were selected for petrographic study by Micon. Thin sections and polished mounts were prepared at Rod Johnson and Associates, Inc. in Negaunee, Michigan. The thin sections were analyzed in transmitted light and polished mounts with reflected light with an Olympus BX60 petrographic microscope. Images were collected using a Canon 5D digital SLR and processed using Adobe Photoshop C3 Extended. Cursory image analysis was also performed using Adobe Photoshop CS3 Extended.

Minerals were identified using their optical properties. In some instances, the very finegrained nature of some of the minerals prevented the collection of adequate data for an unequivocal identification. In these instances, minerals were identified based on partial optical properties, habit and mineral association. The sample description attempts to correlate iron formation types with the historic F- and E-Types.

Start	End	Description
(m)	(m)	
47.00	47.07	Gabbro
156 51	156.56	Possible F-Type
150.51		ch-mt>mt>ch-sil>ch
203.00	203.05	Possible E-Type
205.00	205.05	ch-mt>ch-mt2>mt>ch
205.33	205.40	Chlorite-magnetite-pyrrhotite
208.17	208.23	Possible E-Type
200.17	208.25	ch-mt2>mt>ch-sil
310.04	211.00	Possible E-Type
310.94	511.00	ch-mt>mt>ch
338.05	338 10	Possible F-Type
	550.10	ch>ch-mt>mt
341.00	341.05	Possible F-type
541.00	541.05	ch>ch-mt>mt
360 73	260 78	Chert-silicate
509.75	507.78	ch-sil>mt>ch-mt>ch
401.00	401.06	Possible F-Type
-01.00		ch-mt>mt>ch
416.26	416.31	Possible E-Type
410.20	410.51	ch-mt>mt>ch

 Table 3.1

 Samples Collected for Petrographic Analysis

Abbreviations for bedding types and rank of abundance are also indicated: ch - chert, sil - silicate, mt - magnetite, and mt2 - magnetite-rich.



4.0 **RESULTS**

The Radio Hill iron formation is composed of chert (microcrystalline quartz), silicates (dominantly minnesotaite), magnetite, and siderite. The beds in the iron formation can be classified as chert (ch), chert-silicate (ch-sil), chert-magnetite (ch-mt), magnetite-rich chert magnetite (ch-mt2) and magnetite (mt). Gabbro was intercepted at the top of DDH-10-01 (9.6 - 71.0 metres (m)). Veins or beds composed of chlorite-magnetite-pyrrhotite were interbedded with the iron formation. The various rock types and iron formation bed-types will be discussed in the following section.

4.1 GABBRO

The gabbro that was intercepted at the top of DDH-10-01 is equigranular and composed of plagioclase laths, prismatic clinopyroxene and interstitial (see Figure 4.1). Plagioclase laths are partially altered to sericite and epidote. Prismatic clinopyroxene (augite) are partially altered to epidote. Interstitial glass is altered to chlorite and biotite. Magnetite is skeletal and contains ilmenite exsolution lamellae. Pyrite occurs in trace amounts as disseminated anhedral grains.

4.2 CHERT

Chert bands or beds are off-white to light gray and are composed of fine-grained granoblastic quartz with varying amounts of disseminated euhedral magnetite (Figure 4.2). The disseminated magnetite in chert bands is euhedral and commonly less than 20 μ .

4.3 CHERT-SILICATE

Most chert bands contain some silicates. The most abundant iron-silicate mineral a Radio Hill is minnesotaite. Chert-silicate bands or beds are conspicuous by their greenish color (Figure 4.3). Minnesotaite occurs as decussate fibres.



Figure 4.1 Photograph and Photomicrographs of Grab Sample of Gabbro (47.00 – 47.07 m)



a) and b) Photographs of grab sample of core 47.00 - 47.07 m. c) Photomicrograph of prismatic clinopyroxene and plagioclase laths cross-cut by a chlorite veinlet. d) Photomicrographs of skeletal magnetite grains and anhedral pyrite. Note magnetite grains contain ilmenite lamellae.

Figure 4.2 Photograph and Photomicrographs of Chert



a) Photograph of alternating bands of chert (white to light gray) and magnetite (dark gray) at 281 m. b) Photomicrograph of chert (fine-grained granoblastic quartz) with minor disseminated magnetite (opaque).



Figure 4.3 Photograph and Photomicrographs of Chert-Silicate (369.73 – 369.78 m)



a) and b) Photographs of core and grab sample of interbedded green silicate (minnesotaite) and massive magnetite beds. c) and d) Photomicrographs of granoblastic quartz and decussate minnesotaite.

4.4 CHERT-MAGNETITE

Chert-magnetite beds or bands are light to medium grey and are composed of fine-grained granoblastic quartz and disseminated grains or thin laminae of magnetite. Magnetite grains in chert-magnetite beds are commonly less than 25μ .



Figure 4.4 Photograph and Photomicrographs of Chert-Magnetite

a) Photograph of core (164 m) composed of alternating chert and chert-magnetite layers. b) Photograph of chert-magnetite bed composed of chert with thin laminae of magnetite. c) and d) Photomicrographs of magnetite grains in chert magnetite layers. Magnetite grains in chert-magnetite bands or beds are commonly less than 25 μ .

4.5 MAGNETITE-RICH CHERT

Magnetite-rich chert beds are medium- to bluish-grey and composed of fine-grained granoblastic quartz and disseminated to semi-massive magnetite. (See Figure 4.5). Magnetite grains in magnetite-rich chert beds are commonly less than 35μ .



 a)
 b)

 a)
 b)

 Image: Constrained on the second on the sec

Figure 4.5 Photograph and Photomicrographs of Magnetite-Rich Chert

4.6 MAGNETITE

Massive magnetite beds are composed of semi-massive to massive magnetite with interstitial chert and minnesotaite. (See Figure 4.6). Magnetite grains range in size from 2 to 50 μ with an average grain size of approximately 20 to 25 μ . Effective liberation is estimated to be approximately 50 μ (-270, +325 mesh).

a) Photograph of core (207 m) composed of alternating chert and magnetite-rich chert bands. b) Photograph of magnetite-rich chert bands. c) and d) Photomicrographs of euhedral magnetite in beds. Magnetite grains range in size from approximately 2 μ to 40 μ . The magnetite grains in magnetite-chert beds average approximately 20 μ . Effective liberation is estimated to be approximately 45 μ (325 mesh).



Figure 4.6 Photograph and Photomicrographs of Magnetite Beds or Bands



a) Photograph of core (209 m) composed of alternating magnetite-rich chert and magnetite bands. b) Photograph of thinly interbedded chert and chert-minnesotaite with massive magnetite beds. c) Photomicrograph of massive magnetite. d) Photomicrograph of massive euhedral magnetite with interstitial chert. Magnetite grains range in size from 2 to 50 μ with an average grain size of approximately 20 to 25 μ .

4.7 CHLORITE-MAGNETITE-PYRRHOTITE

Several of chlorite-magnetite-pyrrhotite veins and veinlets were intercepted in DDH-10-01 (see Figure 4.7). Some of the intervals contained massive pyrrhotite up to 60 centimetres (cm) thick. The chlorite-magnetite-pyrrhotite veins, in most cases, were parallel to bedding and could be classified as beds.



Figure 4.7 Photographs and Photomicrographs of Chlorite-Magnetite-Pyrrhotite Veins.



a) Photograph of core (252 m) composed of fractured chert with pyrrhotite-chlorite-magnetite veins. b) Photograph of bedding parallel chlorite-magnetite-pyrrhotite vein in white chert. c) Photomicrograph of bedding parallel pyrrhotite-chlorite-magnetite. d) Photomicrograph of pyrrhotite with pyrite porphyroblasts.



5.0 **DISCUSSION**

The Radio Hill iron formation intercepted in DDH-10-01 is a banded iron formation composed of varying amounts of chert, minnesotaite, and magnetite with minor amounts of siderite, pyrrhotite, chlorite, and pyrite. DDH-10-01 contained several intervals of relatively high-grade iron formation with interbedded chert, chert magnetite, and magnetite beds. Historical metallurgical work classified the high-grade iron formation as E-Type ore. The magnetite is fine-grained and is typically less than 35 μ with an average grain size of approximately 20 – 25 μ . Metallurgical work will be required to determine if concentrate with acceptable levels of SiO₂ can be achieved with reasonable grinds (500 mesh or above). However, magnetite in the massive ("metallic") bands has an estimated, effective liberation size of approximately 45 μ (325 mesh). This suggests that rejection of lower grade and finer grained chert-magnetite by cobbing could result in production of concentrate with reasonably low SiO₂ grades (<7 wt.% SiO₂) at reasonable grinds (+500, -325 mesh).

The dominant iron oxide mineral at Radio Hill is magnetite and the preferred processing method would be magnetic separation. Multiple bedding parallel veins and veinlets of chlorite-magnetite-pyrrhotite were intercepted in DDH-10-01. Since pyrrhotite is magnetic, zones containing the chlorite-magnetite-pyrrhotite veins would need to be treated as waste or diluted with low sulfur ore to control the sulfur content of the concentrate.



6.0 PETROGRAPHIC DESCRIPTIONS

The following petrographic descriptions are based on the legend for the photomicrographs shown schematically below.



6.1 SAMPLE: 47.00-47.07 METRES

Equigranular; composed of plagioclase laths, prismatic clinopyroxene and interstitial. Plagioclase laths are partially altered to sericite and epidote. Prismatic clinopyroxene (augite) are partially altered to epidote. Interstitial glass is altered to chlorite and biotite. Magnetite is skeletal and contains ilmenite exsolution lamellae. Pyrite occurs in trace amounts as disseminated anhedral grains.



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Figure 6.1 Sample at 47.00 – 47.07 m







Photograph and photomicrographs of grab sample of core 47.00 - 47.07 meters. a) Photograph of grab sample of core 47.00 - 47.07 meters. b) and c) Photomicrographs of plagioclase laths and prismatic clinopyroxene with interstitial chlorite and biotite. d) and e) Photomicrographs of prismatic clinopyroxene and plagioclase laths cross-cut by a chlorite veinlet. f) and g) Photomicrographs of skeletal magnetite grains and anhedral pyrite. Note magnetite grains contain ilmenite lamellae.

6.2 SAMPLE: 156.51-156.56 METRES

Thinly bedded; alternating bands of minnesotaite-chert and magnetite-chert. Minnesotaite-chert bands are composed of alternating laminae of decussate minnesotaite, chert and very thin laminae of magnetite. Magnetite-chert beds are composed of euhedral magnetite with minnesotaite and chert.

Magnetite grains range in size from approximately 5 μ to about 35 μ with an average grain size of approximately 25 μ . Effective liberation is estimated to be approximately 35 to 40 μ (400 mesh).



Figure 6.2 Sample 156.51-156.56 m





Photograph and photomicrographs of grab sample of core 156.51 – 156.56 meters. a) Photograph of grab sample of core with alternating bands of chert-minnesotaite-magnetite and magnetite-chert. b) and c) Photomicrographs of decussate minnesotaite (yellowish) and chert. Note the off-setting faults. d) and e) Photomicrographs of magnetite-rich beds with euhedral magnetite. Magnetite ranges in size from about 5 - 35µwith a mean of approximately 25 µ. f) and g) Photomicrographs of euhedral magnetite in magnetite-rich beds. Note that the magnetite in g) is relatively finer-grained with a coarse size of approximately 20 µ. Effective liberation is estimated to be approximately 35 to 40 µ (400 mesh).



6.3 SAMPLE: 203.00-2.3.05 METRES

Thinly bedded and fragmental; composed of alternating beds of minnesotaite-chert, chert, siderite and magnetite-chert. Minnesotaite chert-beds are composed of decussate minnesotaite and chert with minor magnetite. Chert beds are composed of microcrystalline chert. Siderite beds are composed of euhedral siderite grains intergrown with fibrous minnesotaite. Magnetite chert beds are composed of euhedral magnetite and chert. Magnetite occurs as primary bedded magnetite and secondary cross-cutting magnetite. Magnetite grains range in size from approximately 1 μ to 20 μ with an average grain size of approximately 15 μ . Effective liberation is estimated to be approximately 30 to 35 μ (+500, -400 mesh).



Figure 6.3 Sample 203.00-203.05 m





Photograph and photomicrographs of grab sample of core 203.00 – 203.05 meters. a) Photograph of grab sample of core with alternating chertminnesotaite, chert-siderite, and magnetite-chert beds. Note the fragmental testure in some of the beds. b) and c) Photomicrographs of thin laminae of chert-minnesotaite alternating with thin magnetite laminae. d) and e) Photomicrographs of alternating layers of magnetite, chert, minnesotaite-chert, and siderite. f) Photomicrograph of thin laminae of magnetite cross-cut by irregular networks of secondary magnetite. g) Photomicrographs of irregular networks of magnetite. h) and i) Photomicrographs of beds of magnetite. Magnetite grains range in size from approximately 1 μ to 20 μ . Effective liberation is estimated to be approximately 30 to 35 μ (+500, -400 mesh).



6.4 SAMPLE 205.33-205.40 METRES

Vein; bedding parallel vein of pyrrhotite, chlorite, and magnetite. Chlorite occurs in coarse-grained decussate aggregates. Pyrrhotite occurs as aggregates of relatively fine-grained crystals intergrown with platy silicates. Magnetite occurs as disseminated euhedral grains. Muscovite occurs as thin bands parallel to the contact with the iron formation.

Figure 6.4 Sample 205.33-205.40 m







Photograph and photomicrographs of grab sample of core 205.33 – 205.40 meters. a) Photograph of grab sample with bedding parallel pyrrhotite, chlorite, and magnetite. b) and c) Photomicrographs of massive chlorite, magnetite, pyrrhotite, and muscovite. d) Photomicrograph of pyrrhotite intergrown with platy silicates. e) Photomicrograph of pyrrhotite with pyrite porphyroblasts.

6.5 SAMPLE 208.17-208.23 METRES

Bedded; composed of alternating beds of chert-minnesotaite, magnetite-chert. Chertminnesotaite beds are composed of granoblastic chert with disseminated decussate minnesotaite. Chert-magnetite beds contain thin magnetite laminae. Magnetite chert beds are composed of euhedral magnetite with interstitial chert. Magnetite grains range in size from approximately 2 μ to 40 μ . The magnetite in magnetite-chert beds average approximately 20 μ . Effective liberation is estimated to be approximately 45 μ (325 mesh).



Figure 6.5 Sample 208.17-208.23 m





Photograph and photomicrographs of grab sample of core 208.17 – 208.23 meters. a) Photograph thinly bedded chert-minnesotaite and chertmagnetite. b) and c) Photomicrographs of thin laminae of chert-minnesotaite with thin magnetite laminae. d) and e) Photomicrographs of bedded and disseminated magnetite. f) and g) Photomicrographs of euhedral magnetite in beds. Magnetite grains range in size from approximately 2 μ to 40 μ . The magnetite in magnetite-chert beds average approximately 20 μ . Effective liberation is estimated to be approximately 45 μ (325 mesh).



6.6 SAMPLE: 310.94-311.00 METRES

Bedded; interbedded chert-minnesotaite-magnetite and massive magnetite beds. Chertminnesotaite-magnetite beds are composed of thin laminae of chert, minnesotaite, or magnetite. Massive magnetite beds are composed of euhedral magnetite with interstitial chert. Magnetite grains range in size from 2 to 20μ . The massive magnetite beds have an effective mean liberation size of approximately 25 to 30 μ .

Figure 6.6 Sample 310.94-311.00 m







Photograph and photomicrographs of grab sample of core 310.94 - 311.0 meters. a) Photograph of grab sample of core with massive bands of magnetite interbedded with quartz-minnesotaite beds. Note the cross-cutting fault containing magnetite breccia. b) and c) Photomicrograph of beds of chert-minnesotaite-magnetite. d) Photomicrograph of massive magnetite bed with fault off-set . e), f) and g) Photomicrographs of massive magnetite. Magnetite grains range in size from 2 to 20μ . The massive magnetite beds have an effective mean liberation size of approximately 25 to 30μ .

6.7 SAMPLE 338.05-338.10 METRES

Bedded; thinly interbedded chert, chert-minnesotaite, and chert-minnesotaite-magnetite beds with massive magnetite beds. Chert beds are composed of granoblastic quartz with minor minnesotaite. Chert-minnesotaite-magnetite beds are composed of laminae of chert, minnesotaite and magnetite. Massive magnetite beds are composed of euhedral magnetite with interstitial chert. Magnetite grains range in size from 2 to 50 μ with an average grain size of approximately 20 to 25 μ . Effective liberation is estimated to be approximately 50 μ (-270, +325 mesh).



Figure 6.7 Sample 338.05-338.10 m







Photograph and photomicrographs of drill core sample 338.05 - 338.10 meters. a) Photograph of thinly interbedded chert and chertminnesotaite with massive magnetite beds. b) and c) Photomicrographs of thinly interbedded chert, chert-minnesotaite, and chert-minnesotaite magnetite beds cross-cut by quartz-carbonate veinlets. d) and e) Photomicrographs of siderite and chert-quart-minnesotaite veinlets crosscutting massive magnetite beds. f) Photomicrograph of massive magnetite. g) h) and i) Photomicrographs of massive euhedral magnetite with interstitial chert. Magnetite grains range in size from 2 to 50 μ with an average grain size of approximately 20 to 25 μ . Effective liberation is estimated to be approximately 50 μ (-270, +325 mesh).

6.8 SAMPLE 341.00-341.05 METRES

Laminated; thin alternating laminae of chert-minnesotaite and chert-minnesotaitemagnetite with sparse siderite laminae. Chert ocurs in granoblastic aggregates. Minnesotaite occurs in decussate networks. Magnetite grains range in size from 1 to 30 μ and an average grain size of approximately 5 to 10 μ .



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Figure 6.8 Sample 341.00-341.05 m







Photograph and photomicrographs of drill core sample 341.00 - 341.10 meters. a) Photograph of drill core sample of thinly laminated chertminnesotaite-magnetite. b) and c) Photomicrographs of inter-laminated chert, chert-minnesotaite, and chert-minnesotaite-magnetite laminae. d) Photomicrographs of magnetite laminae. e) f) and g) Photomicrographs of disseminated and laminated magnetite. Magnetite grains range in size from 1 to 30 μ and an average grain size of approximately 5 to 10 μ .

6.9 SAMPLE 369.73-369.78 METRES

Bedded; interbedded green chert-minnesotaite and magnetite-chert-minnesotaite beds. Chert-minnesotaite beds are composed of granoblastic chert and decussate minnesotaite. Magnetite-chert-minnesotaite beds are composed of massive to semi-massive magnetite with interstitial granoblastic chert and decussate minnesotaite. Pyrrhotite occurs in minor amounts intergrown with silicates or as disseminated grains. Magnetite grains range in size from <1 to 15 μ with an average of 5 to 10 μ . Pyrrhotite grains average approximately 20 to 25 μ .

Figure 6.9 Sample 369.73-369.78 m



a)









Photograph and photomicrographs of grab sample of core 369.73 - 369.78 meters. a) Photograph of grab sample with interbedded green silicate (minnesotaite) and massive magnetite beds. b) and c) Photomicrographs massive magnetite beds, granoblastic quartz, and decussate minnesotaite. d) and e) Photomicrographs of quartz-carbonate veinlet cross-cutting granoblastic quartz and decussate minnesotaite. f) Photomicrograph of massive magnetite bed with minor disseminated pyrrhotite. g) Photomicrograph of semi-massive magnetite with interstitial chert. h) Photomicrograph of magnetite-pyrrhotite bed. i) Photomicrograph of disseminated pyrrhotite in magnetite. Magnetite grains range in size from <1 to 15μ with an average of 5 to 10μ . Pyrrhotite grains average approximately 20 to 25μ .

6.10 SAMPLE 401.00-401.06 METRES

Bedded; alternating beds of chert-minnesotaite-magnetite and massive to semi-massive magnetite beds. Chert-minnesotaite-magnetite beds are composed of granular chert, decussate minnesotaite, and ultra-fine-grained magnetite. Massive to semi-massive magnetite meds are composed of euhedral magnetite and interstitial chert-minnesotaite, and/or siderite. Magnetite grains range in size from less than 2 μ to 45 μ with an average grain size in the massive to semi-massive beds of approximately 25 μ . Effective liberation is estimated to be approximately 35 to 40 μ (-325, +400 mesh).

Figure 6.10 Sample 401.00-401.06 m







Photograph and photomicrographs of drill core sample 401.00 - 401.06 meters. a) Photograph of drill core sample with alternating beds of chert-minnesotaite-magnetite and massive magnetite. b) and c) Photomicrographs of chert-minnesotaite-magnetite bed between massive magnetite beds. Note the increase in minnesotaite at the contacts with the massive magnetite beds. The beds are cross-cut by quartz-siderite veinlets. d) Photomicrograph of massive magnetite bed with cross-cutting silicate veinlets. e) and f) Photomicrographs of massive to semi-massive magnetite with interstitial chert and minnesotaite. g) Photomicrograph of magnetite in chert-minnesotaite bed. Note that the magnetite grains are smaller than in the massive and semi-massive magnetite beds. The coarse magnetite grains are 10 μ the finer magnetite grains are less than 2 μ . Magnetite grains range in size from less than 2 μ to 45 μ with an average grain size in the massive to semi-massive beds of approximately 25 μ . Effective liberation is estimated to be approximately 35 to 40 μ (-325, +400 mesh).



6.11 SAMPLE 416.26-416.31 METRES

Fragmental; composed of fragments of thinly laminated chert-magnetite and chertminnesotaite-magnetite and massive magnetite. Chert-magnetite is composed of granular chert and laminae of ultra-fine-grained magnetite. chert-minnestotaite-magnetite is composed of granular chert, decussate minnesotaite, and magnetite laminae. Massive magnetite is composed of euhedral magnetite in massive to semimassive aggregates with interstitial chert, minnesotaite, and siderite. Magnetite grains range in size from 3 to 45 μ with an average grain size of approximately 30 to 35 μ . Effective liberation is estimated to be approximately 35 to 40 μ (-325, +400 mesh).



Figure 6.11 Sample 416.26-416.31 m





Photograph and photomicrographs of drill core sample 416.26 - 416.31 meters. a) Photograph of drill core sample with rotated fragments of thinly laminated chert-magnetite, chert-minnesotaite-magnetite, and massive magnetite. b) and c) Photomicrographs of chert-magnetite composed of granular chert and disseminated magnetite. d) and e) Photomicrographs of thinly laminated chert, chert-minnesotaite, and chert-minnesotaite-magnetite laminae cross-cut by quartz veinlets. f) Photomicrograph of massive to semi-massive magnetite with interstitial chert, minnesotaite, and siderite. g) Photomicrograph of semi-massive magnetite with interstitial chert and siderite. h) and i) Photomicrographs of semi-massive magnetite with interstitial chert and siderite. h) and i photomicrographs of semi-massive magnetite with an average grain size of approximately 30 to 35 μ . Effective liberation is estimated to be approximately 35 to 40 μ (-325, +400 mesh).



APPENDIX A

LITHOLOGIC LOG FOR DDH 10-01


Appendix A. Lithologic Log -- DDH 10-01



Owner	1 Mb all man	Promotion 1	D-methoda		Ir on Formation Bedding		An Add at an Andrews	S. Michaele	Magnetie
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Dent	144.4-2	e	Down both		from Formation Bedding				Magnetic
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					Ir as Formation Bedding		a an example a	B. M. L.	Magnotic
Depth	Lithelegy	Sain by	Description	Type	Mineralogy	T bickness	TO PROPERTY HOUSE		Susceptability
		Escopie	Duriptiss	<u></u> <u></u>	ire Frindin fielding Minoralog	T Michanise	- Ye Mit - chart beda	9. Mikoda	

0	Litheory Sample Description		is an Formation Bedding		the latter of source bands	Do Makada	Magnetic		
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Depts	runeed.	and to be a	Dest shree	ĬŢ	Mineralogy	Thirkness	An talk - Linds (moda		Europtability	
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0 meth	1 ist at any	Vermela	Description -		Ir an Formation Bodding				Magnetic
Ungen	Litheogy	oumper	Description	Type	Miner al ogy	Thickness	7. MR - chart beds	To MILLINGS	Suse op tability
71		71.0 - 73.0	71.00 85.50 m; iron Fermation: Bunded ron formation composed of alternating bedr of obert, chert-alic se (manerotate), chert- magnetile, and massive magnetic 71.00 - 75.70 m	mx	ch vch ai vch navres	10	7	3	1009
- 73 - 73		73,0-78.7							1100
									ג רוד
- 15									104 4
		75.7-72.0	73.70 - 80.26 m; t row Fernantian:	wax	ch-nl>ch>ch-mt	2	10	5	727 9
		70.014							478 1
									547 (
- 80									1 590

	100.0	West Sec.	D. with the	Jran Formation Bedding			Sh Mit should hade	In Although	Magnatic
Dapta	Lithelogy	Sample	Description	Type	Mineralogy	Thickness	AR THE COMPLEMENT	TH PALC IN DRIV	Susceptability
E		80.26 - 83.2	80.26 - 95.90 m;)r on Formation:	reg	ch≥ch-mt>ch-si≥mt	1	8	5	
\$1 									1483
E «2									1236
		83.2 - 85.96							1130
► 8-1									205 3
E 85									2217
E 80			85.54 - 80.78 m; Diabasa						6 105
- 87	<u>H</u> 1415 (444)		86.78 - 95.56 m, 11 cm Formation: Chert-magnetite als: de 11cm formation with pregid or pods of magnetite chlorite synthetite chalcopyrite						892 5
88									748 1
E 89						1			1289
20									40.98

Dent	1 bb dam	Farmela	Download -		It on Fernation Bedding		the bill a sharet haves	S. M. S.d.	Magastic
Depta	CTO BASE	and the second sec		Type	Mineralogy	Thirkness			Susceptability
									96 96
	!								34 T8
۰, ۲									205 0
E «			93.50 - 97.31 m: Iron Fernmadan:	mx	ch-mat>do-∎t>ch-mat	50	70	7	802 l
E "									1062
- "									430 i
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			97,1 - 97,31 m: Iran Fernation: Diseminard prite 97,31 - 90,5 m; Dahaser						1401
									33 16
• "									25 94
- 100			99.5 - 101.33 m; Irm Farmation: breccsa, costact metamorphosed	ωx	נט×מג-או אודי זוויל	80.00		\$	1174

			No. 1. I	Ir on Formation Hedding					Magnetic
Debo	rundeß	bampte	Description	1799	Mineralegy	T backness	™ MI - chart beds	To MCDOILS	Susceptability
101 101 102	A construction of the second s		101, 23 - 104.52 m; Dieberen						37 32 16 45
- 103 - 104 - 104			- 104.33 - 113.32 m; bras Farmation:	nx	ch≻ch-al≻ah-aaraas	1.00	12	s	47 12 25 15
100 107									1069 1559
			108.30 - 113.22 m; ir en Fammatien: Dissenanded pyrtokete z chalopyste						350 3 790 4

0	h I februar	famala	Described as	T	Iran Farmation Bodding		So Site about hade	B. Mcharle	Magnetic
		camper		Туре	Minoralogy	Thickness	*** FRM - COMPT 0-803		Susceptability
F_				1° –					
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F									
									1140
		J							
	112								1349
F									
F									
	11.3								94.23
F	11-11-12-12-12-12	-	113.97 - 134.96 pp. Distance						
F			A DOLLAR - A POLLO GIL, LEGAND DE		1				
	14 21 22 22 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24			1					206.4
	111111111								
L	BORNERAR B								
F			14.35 - 119.03 m; bron Formation:	mx	ch-al>>ch>ch-mt>mt	15	30	,	
F			114.38 - 119.113 m; is an Farmation: Existimated pythotite						
									642.40
-									
F		1							
r	1								
	110								898 3
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E -									
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—	119	-							4471
F	- 日本国内市住		1 19 415 · 1 19 · 41 III; 1460218						
F	4 - 19 8 A E M								
۳	10101128		119.70 - 121.30 m: tran Formation:	_ mz	ch-mi>ch>mt>mt	20	25	•	
E_	120	1	119.70 . 121.3 m: from Formation: Dissemanted pyrrhoute						420 0

Dent	Lithelor	Esmala	Description .		It on Formation Bedding		the hole and hand have	B. Mahari	Magnetic
Depa			Literatific 20	Туре	Mineralogy	T bickness	TO THE COMPLEMENT	70 mt 841	Susceptability
	1 Fill Heinstein grobe		121.30 - 124.30 m; Dialayer						5176
	2								44.21
									61.76
	5		134.38 - 130.31 m; b to Formation; 134.38 - 130.31 m; b to Formation; Cristianistical pythesis	mx	ch ant-ant	6	90	7	1134
	c								1213
	2								266 3
	9								1545
F "									1539

- Г	Denth	f bib ada at	Female	Description	Ir on Formation Bedding		% Mt-cheribada % Mibeda		Magnetic	
L	U MARIA	Pringeo &	erubte	Unit if Clas	Туре	Mineralogy	Thickness			Susceptability
	- (3)	Working Working Participation Par		1.10.31 - 1.19.5% m : Denine and 1.20.38 - 1.24.57 m : Bran Formation: chart, breccia (robubgo beccia?) consented with delynomid are (*), delivere and symbolic, bed: of charter and pyrrbite	a	ch >chi mt po>ch mt>mi	15	۲	3	9727
	132									272.0
										30 93
	134									187.3
	135			134 57 - 155 28 m: Dista er						501
	136			1.15.28 - 1.38.71 m; ir co, Fermation; (* ican)	irr	ch≻chi-mi-po≻ch-mi≯mat	5 00	7	2	234 4
	137									588
	- 138									1837
	139			138.71 - 145.63 m; it en Formation: 138.71 - 145.63 m; it en Formation: Communated pyrhoase and dua chionie-magnetice pyrhoase beds	In	ch-mt>ch-mt>ch>mz	٩	70	10	3879
Ē	- - 140									1355

Durath	Lithelow	Cauncha			true Formation Bedding		N. M. sharthale	M. Michaele	Magnetic
Degea	Cititate	autopre	Ureac april view	Type	Mineralogy	Thickness		TH MEL DELS	Susceptability
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F	1			1					
E						í i			
141									2497
E .				1					
- 147									713.6
E				1					
-		1							
H-				1					ł
L 143				1					5595
F .									
F					ł				
F				1					
144									356 1
E									
-									
145									1258
F									
F									
Ľ		145.63 - 146.57	145.43 - 151.51 m; iron Formation: Trace to monor amounts of pyrchonic along bedding	reg	ch-mt>mt	5	75	25	
140		a second a mo							1204
E		and the second							
F		1. A. 199 1.							
H 147									1799
F		the state of the							
+		and the Paris							
F		State of the second							
145		and the second							1103
F	(
F		148.57 - 151.51							
- 149									1272
E "									
F									
E.									
150									843

			■ C101 • 10 0 00		iran Farmatian Bedding		A March and a second		Magnetic
Depth	Lithelogy	Sample	Description	Type	Mineralogy	Therkmess	TI MA . LINET DECK	76 MIL 8 083	Susceptability
E 131									1966
È	4 116 114		151.51 - 131.98 m; Diabasic						1216
E 152	9.23276.3	152.0 - 155.0	151.38 - 163.58 m; tros Fermention:	la	ch-mt>mt>ch-al>ch	્ય	63	30	1216
E 153									1102
									3576
- 155		155.0 - 158.0							769 8
	e.								722 \$
E 137	,								1100
158		158.0 - 161.0							878 4
- 159									3057
160	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1			1		1

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D	The state	E	Dime to dime		fron Formation Bedding		A 14		Magnetic
Depth	Lithelogy	Sample	Description	Type	Mineralogy	Thickness	To Mill - rhee'l beds	The full to deals	Surreptability
161		161 - 165-58							1464
- 162 - 163									929 3 2716
165		163.58 - 165.68 165.58 - 167.78	103.58 107.78 m; b an Farmation: Includes magnetite mit, chert-magnetite beds (cht mr2)	Reg	chi mi2≥ch mt≥mt≥ch sit≥ch	23	80	13	639 7 2430
160								2 	2345 1152
168		1677.78 - 170	167.78 - 177.35 to: Iron Fernantica	freg	ch > ch-sil > ch-sil > ch-sil > ch	15	23	15	750 9 750 3

			Provide the second s		Ir on Formation Bodding		No. Mr. about hads	Si Mirhada	Magnetic
Depth	Lithelogy	Sample	Description	Type	Mineralogr	Thicknew	THE CHART DOOL	Se Brender	Susceptability
E in		170.0 - 171.35	170.6 - 172.35 m: Iron Formation: Pyrrholite in brecusal thert and in chl-micpo beds						353 3
- 172									1200
173		130-17548	172,35 172.76 m: Diabaser 172,36 179.2 m: Iron Formation:	۶a	cp-ma,suna,scp>cp-enjscpj-matebo	5	05:	27	815.9
174									1056
175									1350
- 176 		175.06 - 178.36							185 9
- 177 -									161
E 178									1963
173		179.2 - 181.77	19 34 - 1940 m: Fon Formation: Call and polytops 19 93 - 1917 m: Iron Formation: Interval contains that body with a hackly approximate. Hackly bedy are chert-minnesstate bedg, some of	Reg	ch mt>ch-ml>mi>ch	2.5	70	20	1165
180			the chert munnesstate beds appear to have an under take texture	1775					2271

Durat	1 hhalom	famala	Devolution		Ir on Formation Bedding		billing should have	N. Maximu	Magnetic
stabes.	Constant 2	Sentiple	Linear all the data	Type	Mineralogy	Thickness	70 IVM - 1 CMT 0 (43	THE SECTION	Susceptability
									1528
		181.77 - 184.77	181,77 - 187 <i>9</i> 2 m.; iran Formatiog:	Reg	ch an≥m≥ch al	1.5	80	10	898 4 658 S
									1004
185		184.77-187.83							1538
180									1411
188		127.82 - 191.38	187 32 - 197366 m: Bon Farmation: Pounble "Exype", with manner magnetite bods and magnetite nch chert-magnetite bods, chlorite- magnetite symbotice	Irr	ch:mt2>ch:mt>ch-nl>ch] ent-po		80	15	819
190									2192



		1 Martines	Franks	Description		Iron Formation Bedding	_	AV A.A		Magnetic
	Veyus	Lineogy	Santpar	Description	Туре	Mineralogy	Thickness	TH NE - CAPTI DEAL	74 1921 6 665	Susceptability
	_ 201		200.78 - 202.8	200.78 · 204.73 m: ir co Fernancian: Possible "E type"	Мах	ch-mi>ch-mi2>mi>ch	2.5	75	20	641.8
	202									1730
	203		202.8 - 204.73							144)
	205									717
11111	_ ²⁰ c			209.0 - JUDZY W: Z'ON FORTRAGEN: With Listenbeddes in the political feat less that yin thick, allo contain histomenado pyrtuetic						397 9
	207		206.59 - 209	200,59 - 210,50 m; b on Formation: Pomble "E-type", completious marave magnetic bods, [visually the highert magnetice grade interval]	Mix	ch-mat2>mat>ch-mi	23.00	55	40	1776
	20.0		200.0 - 213.41							1321
	210									2366

100 20	2000 11	·	20 000	r	Iron Formation Bedding				Magnetic
Drepth	Lithelegy	Sample	Description	Type	Mineralogy	î hicknes	To WH - chert beds	To pill bolls	Susceptability
	2	21141-213.85							2388
2		213.83 - 115.5	213-83 - 317.17 m: b on Formation:	Mile	da meranirch-al	700	80	17	2805 521 7
	5								568 4
2	7	2155-217.17							1630 303.6
E 2	81		217.17 - 218.07 m; ir on Formation: With chi-mi-po bods including manive gymboate		5				382 9
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9	218.07 - 220.05	218.07 - 222.18 m; ir on Formation:	Reg	ch>ch-ml>mt>ch-nl	2	20	13	1626
F 2	0								2446

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Г	Durati	L tab at a say	Franke	Descented as		Ir as Formation Bedding				Magnetic
- L	Distantia .	CHIMORY	See A Lines	្រាមក្នុងក្រុង	Туре	Mineralagy	Theirkness	The AME - CRANT DINGS	We All liteds	Susceptability
E			220.05 - 222.18							
	221									2174
	222			222.18 - 223.79 m; ir on Furmation: interval composed of manive chert-ninease beds (40 cm), manive pyribotic, and chert brecon a with						574 7
	223			pymone cement						58.64
	224		123.79 - 126.71	223.70 - 232.46 m; Iron Fernandure Constant disseminated pyrthetite	Mox	ch ent>mt>ch ent2>ch al	4 00	60	30	6874
	225	2								1 574
	226									690 9
	227		226.71 - 229.63							515 9
	228									809 5
	229									2141
F	230		229.63 - 232.56							759.7

D	/ MA at a sec	No. of Lot	Dt-r-		Ir an Farmation Building		the bilt schurt hads	St. My had a	Magnetic
Depos	CHARGE	sample	Urita ilija dal	Туре	Mineral og /	T beic Kasterns	With the total	- All Har	Susceptability
731									6195
- 232									2161
233 			232 56 - 236.1 m: Iron Formation: Contains manave pyrthetic (60 cm thick), chert breec a connested with pyrthetic	Mux	ho,, cp, cp•unt, cp•nt, unt	8	30	2	465.8
234									159.9
C 215									114 t 343 9
237		236.1 - 298.83	236.1 - 238.83 m: Iron Formation:	Reg	ch-ml>ch-mt>mt	15	20	15	1127
238		19991 141 8							298.1
239			238.25-244.95 m; Iran Farmattaa:	in	ch est≻ch>ch mt	15	40	15	503 8
240									1249

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Durath	Lith alount	Famela	Designed at an	Iron Formation Bedding				Magnetic	
Dispor	Commegy	Sanapar	Creating and the second s	Type	Minoralogy	I báckzsem	The NER - CART OPOS	79 310 003	Susceptability
2 1 2 2 4		241.8 - 244.93							918 3
242									1576
243									7177
245			141 01. 1917 as the formation backadded during the block manufacture back to stars the stars where the source of a discount	a V					577 3
246			lesso - star / m : r m / r mauea: airrienaea airrienaea airri wita (dunie-inaga due pymolair wra, in puter (det i) art (duets da (duntera With pymbaite						1649
- 247 -									472 3
- 248 -									1509
249									142 2

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Iron Formation Bedding			P.C. 362 - O. 15 - O. 15	cool addiction in	Magnetic
Depth	Lithelogy	Sample	Description	Type	Atineralogy	Thirkness	% Mt - chert beds	% Mtbeats	Susceptability
2	 Construction (Application) Construction (Application)		250.72 - 252 2 m: Diabase:						11.83
	3		251.3 - 253.62 m: Iron Formation: M wave perhouse (53 cm thick) with chert fragmentaveriping chert with thin magnetice beds					5	12 12 50 90
- - - -	4	253.62 - 256.49	233.42 - 259.34 m; tron Fermanien;	Irr	ch-ant+mt>ch-ail	3	72	27	366
2:	5								681.5
	6								359.6
	7	250.49 - 259.34							384 5
	8								183 1
25	9		259-34 - 260.66 htt: Diabases						399.2

100000	A DECOMPOSITION OF	10000 - 1010	No. of Contract of		Iron Formation Bedding			No. Mirkudy	Magnetic
Depth	Lithelogy	Sample	Description	Туре	Alizeral ogy	Thickness	te Mit - chert beds	% Mitheds	Susceptability
-									
201		250.68 - 263.80	200.04/- 376.27 m; tron Fermation:	lσ	ch-mt>mt>ch-nj	د	70	20	1 244
263	e e								1 39 5
- - - - - - - - - - - - - - 	8								316 9
264		263-50 - 266.92							1102
265	5								439.9
260	6								1019
263	r.	266.92 - 270							591.7
268	ł.								373 6
- - -									1214
F n									101.0

0	114.4				Ir an Formstion Bedding		White chart hade	a since	Magnetic	
nde	n choady	Samper	Jest pue	Type	Atineralogy	Thickness	VS NH - CHEFT DOOS	THE OVER & CHES	Susceptability	
L.		270.0 - 173.1		1						
L										
E										
L		and the second second								
<u> </u>	271	The second second second							675 9	
L .		A REAL POINT AND						ļ ļ		
		11 11 14 15 11 12 I				1				
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L I		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
	272	and the second							955.1	
F .				1						
H .		100 C 201 L 201 L								
									170.2020	
	613								465.9	
		13.1-1/01/								
~						1				
-										
-	74								1576	
-									1370	
-										
								ſ		
-										
-	275								7851	
				í –						
E				I						
1				I						
	76			I					404 4	
-										
F				I						
-			270.17 170.36 m; From Formation: Lean cheri with chlorite-magnetite pyrtholite beds					5		
-				I		1 8			1.000	
						3			370 1	
-				I						
H										
				I						
-	72								101.3	
-									101.5	
-										
-										
1										
	79								37.26	
_										
Г		1	279.36 - 281.0 m; Diabase: Sheared along the upper contact							
E	1. 1917 24 2									
E	I FREE T									
	80 08								21.01	

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					Ir on Formation Bedding		the Mit, should have	No. Mitchards	Magnatic	
Dupth	Lithelegy	Sample	Description	Type	Mineral ogy	Thickness	AR HAR - CRAFT C MERTH	No INIC BOAS	Susceptability	
28	 Construction Construction Construction Construction Construction Construction 		2810 - 282.97 m. Iron Fourintion: Cher breacts with chlorite, chlorite magnetice pyrtholite content						1009 83 66	
			210,97-21726 m; is on Fernantian: Chert introbedial with chlorise magnetice pytholise beds (up to 34cm thick) and magnetice bads	Reg	ch>ch1:mt-po>mt	34		š	78 4	
28									225.6	
- »									2037	
28	*								280 9	
- 3	7			L.	ab mat			,	51 59	
28			ан		sar' Ma				292 9	
		288.88 - 292.35	1985 596 - 197. 35 m; iron Fernantien: With cury stribed	la:	ch > ch-mt > mt	•	60	12	251	
- 29)						1		96 17	

D-10	1 ist stores	Ex-sta	Densdering	Iron Formation Beddleg		the Man chart hads	St. Mr. Sada	Magnetic	
Depa	LITEROD	Sample	Description	Type	Mineralogy	Thickness	To ME - CRET DEGI	*** ASC 6 (98.)	Susceptability
291									(355
292	0.110.000		292.35 - 394,1 av. Die base:						1603
293									95 11
235	<u>11178</u>	294.1 - 296.88	294, (-SORU) en ; (ron Feranation))	Reg	¢ b -mt≥mt≥ch	1 50	75	13	3162
230					,				1105
297		396.88 - 299.66							58.6
- 293 -									1093
299									217)

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0.00	1.1.1	a Province Inc.	Development		Ir on Formation Bodding		% Mt - chert beds % A	Si Michaela	Magnetic
Depen	Chundogy	Sample	L'rescriptions,	Type	Miner al ogy	Thickness	70 Mill - Cherrieds	A MILE DEL	Susceptability
		299.66 - 302.44			1-122				
		COOPER OF OR							
30									2115
- ~ ~									
F									
h-									
F									
- 10									1.79.5
30	6								1.300
-									
F									
L-		302.44 - 305.23							
-		Contraction of the							and the second sec
30	3	and the first of the little							781.8
L									
L		WE TANK DO NO							
C		100 The 100 The 100 The							1979/201
30-	•	1.14							2768
		THE REAL PROPERTY OF							
r		and the second second							
F		25 M 2 / 43 M							
۳-		1 1 1 2 - Carlo							
30	s	1							1566
F		A State of the second second							
F		306 21 - 309 0							
-		342-20 - 508-0							
20.									1593
- 30.	1								1000
h~									
F									
-									
H									2477
- 10									00/3
F									
F									
L									
									122
3G.	5								1422
		308.0 - 310.38	308.0 - 312.72 m; Iron Formation: Possible *E-type*	Reg	ch-mi2>mi2>ch	3.5	75	28	
				1					
		States and the second							
E	1	A CONTRACT OF		1					
30	2	A CONTRACTOR OF A	1	1					2000
	1	and the second second							
		and the second second	1						
r				1					
F									
F 31		19 光明 19 11 日							3339

Durath	Link of our	Sec. 1		Iron Formation Bedding			By Mr. shout hads	Sc Att hands	Magnetiz	
Vepus	CTURBE ST.	setuctions	Deta ili dati	Type	Mineralogy	Thickness	an inter einer offens	TO MIC COUS	Sosceptability	
-										
E I		and the second second								
-		310.36 - 312.72								
									1.11	
311									1199	
-									1	
-									8	
- 112									826	
- ···										
313	是對這個主義		312,72 - 313-21 m: Diabaset	f I					994	
	11 10 12 13 12									
H I			313.21 - 314.48 m: iron Formation: Chert brecci a with chiorite coment, manor magnetite							
- I										
314									40.12	
E										
		314.48 - 317.30	314.48 - 317.39 m; Lron Farmation:	Max	ch>ch-mt>mt>ch-nl	4 00	15	7	2012 2 22	
315									1338	
E I		A State of the second			1				1	
-		C. C							5	
310		M AND THE M							123	
		A LAND AND A LAND								
		1								
		THE FERS								
-		1. A.							122.2	
- 317		and some state of the							1723	
E I	1	The state of the								
- I		PERMIT AND PORT	317.30-318.01 m: Diabase With chlorite a upper contact							
-		100 - 10 - 10 - 10 - 10 - 10 - 10 - 10								
318		A State States							23 76	
		318.01 - 320.78	318.01 - 326.32 wi: bron Formation:	lu,	ch mt>ch>mt>ch al	4	75	10		
F 1										
H									200.9	
F 31									3076	
F										
r										
320									978.4	

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12	(10) 1		Denterter		It on Formotion Bedding % M		the Mr. chart hade	No Mtheals	Magnetic
Depth	Lithelogy	Samper		Type	Mineralogy	T birkness	The providence of the	ie alteres	Susceptability
E									
321		300.78 - 323.55							351.4
Ē									
322									9425
Ē									148.3
E 323									146.3
E 324		323.55 - 326.32							405 1
F									
- 325									1043
Ē									
326									589 9
È		326.32 · 329.14	326.32 - 331.97 m; ir on Fermation:	Mix	ch-mt>ch >mt	3 SO			
- 327									835
E									1047
E									
329									412.8
È		329.14 - 331.97							
- 330									735 1

					tron Formation Bedding			Sa Mill chert heds	% Milheda	Magnetic	
1	repth	Lithelegy	Sample	Descriptions	Type	Mineralogy	T bickness	St All - Light beds	THE AVEL DEBLY	Susceptability	
	331									928-1	
<u>iilii</u>	332		331.97-333.83	331,57- 333-83 m; iron Fermation:	Reg	ch-mr2>da-mr>mr>da	0,5	85	15	403.6	
	333						í esta d			1912	
1111	334		333.83 - 337.14	333.83 - 350.37 m; trob Formation:	Reg	ch>ch-rat>mt	0 50	60	IU	757.8	
	336					1				426 5	
THE	337									1431	
	338		337.14 - 540.46							422 9	
	339									1 286	
F	340									4873	

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Depth	Lithday	Sample	Description	Type	Mineralogy	Thickness	the Mar - chert beds	% Mt beds	Susceptability
-						_			
E .		340.46 - 343.77							
- 31									393.7
F									
F									
F									1262
									1474
F	[
E									
- **	5								91.7
F									
E				4					1000
- 344		343.77 - 347.07							994 6
E		1.00							
F									
- 345		1 - 1 - 2 8							1266
E									
F									
346							ĺ		7427
-									
F		1.125							
- 317		and the second							600 2
F		21202 160 17							
E.		547.07-350.57							
- us									7767
									10000
-									
F									
E **									6811
F									
E									
1 240									14.10

Drill Hole No. DDH-10-01 Total Depth 446 meters

89
- 120	2102000				Ir on Formation Boddies		The second second	0.0000000000000000000000000000000000000	Mametic
Depth	Lithmon	Sample	Descaring cliam	Type	Mineralogy	Ibickpear	% - Mat-chartbada	Wo Mitheads	Susceptability
- ·				1	1			ſ	
					and the second sec			0.00	
H-		350.57 - 353.68	33U37-36444 m; pros 7 or marker:	MUX	CD > DD > CD - SU	4		17	
		the second second second		1					
351		Tanger Street Labor							616.2
		Part Market Res Arts							
-									
-		A CONTRACTOR OF							
		and the second second							
352						8			104 8
-		1. The second							
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-		2 1 2 March 19 10				[
		the second second							
Г						1	2	[
L 353						9	· · · · · · · · · · · · · · · · · · ·		1367
		A CONTRACTOR OF THE OWNER							130
H I	1								
		353.18 - 356.0							
L (54									8.105
									201.0
				f I					
F 83									1 773
- ···									1.000
-									
- 154									150.9
F	1							1	160.5
H		33011-3581							
				1 1					
E I									
						1			
1 152									
- "		10 State 70 10 St							437.2
-		A second second							
L.		A REAL PROPERTY OF							
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)								
E 100				1					010.0
		and the second second							1101
H I									
L		- S							
		Long College and College							
- 150		142 9. 161 61							2005
H ""				1 (1 1	397 7
E I									
F									
300									1.04

Denth	1 hb ala are	Samala	Durahata	Ir on Formation Bedding		the hit - chart hads the Mith	E Mixed.	Magnetic	
Deput	Charlenge	Deliningee	U vista di la	Type	Mineralogy) hickness	A AR THE CORD	Se price dest	Susceptability
									168.5
- 362		361.61 - 364.44							531.6
26.									452
- 304									375 7
- 363			364.44 - 365.94 es: Ir on Formation: Chert with chlorite magnetic pyrcholite beds overlying im thick massive chert whi it's bed						276
- »«		365.94 - 368.96	3435.94 - 3485.95 m; troe Farmation:	re x	ch-mt>ch-n1>mt>ch	g	30	20	458.4
- 367									660 3
365									698 3
- 365			508.96 - 509.45 m; ir co Formatian: "Ciert with chlerite-magnetice synthetize beds :						628
370			3/0P-#5 - 3/0P-99 m; Iron Formation:	reg	ch-al>mt>ch-mt>ch	G 5	15	25	522.8

0	I tak always	6	P and a distance of the second s	1	Ir on Formation Bedding				Magnede
Uepua	Cuyaco	sampse	Description	Type	Mineralogy	Thickness	76 MI - CLART DALS	79 /11 0 (81)	Susceptability
-			349.99 - 370.37 m; is an Formation: Chest with chlorite-magnetite-pyrtholite beds	T					
F							122		
-		370.37 - 372.7	370.37 - 375.10 m; from Formation:	TIFX	ch-sil>ch-mt>ch>mt		30	7	
-									
371									234 7
F									
-									
H 1									
- 17/									25.2.9
"									4/47
-									
-									
				1					
F 373		372.7 - 375.10							585.9
									100000000
		and the second second							
E									
374									365 0
-		State -							
E I		1							
						1			
F				1					20 m m
- 51%									188.8
F 1		176 10 177 10	170 10 171 19 ms have Executed on Depublic 15 cm st		ch antipatrah seh mi		~ ~ ~	34	
-		313.10 - 37 1.18	p (s, ds - s /s, takint, g dig r takina manine rosanter e 4 ppe		Culture une cule cue su	2			
۲ H									
376									1103
E									
C									
E I									
372									810 8
-									
-		377.18 - 379.43	377. 18 - 384.54 m; bron Formation: Includes short interval (380 3 381 1) of possible "E type"						
F 1)				ļ
- 172									840 3
- "		and the second							540.5
-						1 1			
F			1						
		and the second second	1						
379		A DESCRIPTION	1						834 5
		100	1	1					
E I		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1						
			1						
H	1	379.63 - 382.08	1						
330									6363

Dents	Litheleov	Compile	Description		Ir on Formation Bedding		the Man chart hads	No. Mr. Sandy	Magnetic
	Cartille B	34 Million		Type	Mineralogy	Therkoorsi	The JAM - CAMPA DIRUS	TH AVE BORL	Star op tability
-									
E I									
- I					ſ				
H									
- 301				ļ į					2920
-									
- 1									
F 382									+175
-		382.08 - 384.55							
		101 201 - E.S.							
C		CALL VIEW							
333		A CONTRACTOR OF A							1567
		1.126.2010.001							
		Second States		¢					
-		STORE STREET, N							
- 184		10.000 2000							
F		CONTRACTOR OF A							641.3
E I				(I					
F I									
L I		384.55 - 387.46	384-55 393-30 m; (ran Farmation;	0.8	ch > ch mt >mt > ch nl	10.00	10	10	
184									376 2
E									
- I					J				
~									CONTRACT OF A
									640.5
F 1									
387									1186
<u> </u>									
-									
		387.40 - 390.38							
- 388		Charles States							6556
F I									
F		The state of the							
F									
389		State of the second second							187
		State of State							1.47
E I		all the second second							
E I		1.200 1000							
L		WILLIAM AND							
390		and the second second second							9455

Dents	1 ab atoms	Famala	Description		Ir an Formation Bedding		to Mr. churt hads	So All hods	Magnetic
Depus	Crosses	ounque		Type	Mineralogy	"I blic icn esti			Susceptability
-									
		390.36 · 393.3							
391									\$33.5
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÷.									
392									1 364
_									
-									
- 1									
393									399 5
_									
_					at an Dan Date		10	40	
-		303-30256	Sector water to be the manual	4446	Call Ante and the Las		~		
394								1	935 7
_									
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395									820 8
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-		104 58 . 107 84				ſ			
196		30.000 30 1.00							481 2
_									
-									
397									404 4
_									
_									
-									
398									1314
		397.86 - 400.15							
-									
-									
399									1276
-									
-									
400									1879

Denth	1 (thologe)	Famila	to-set and set	Ir on Farnastien Bedding		to Mit chart bada the	S. Maximut.	Magnetic	
Linkin	C.C.C.C.	aariipek	1/ijod ibritan	Type	Mineralogy	Theickness	To the Cline Conga	Den leht a den t	Susceptability
F		400.15 - 403.36	400.15 - 413.0 m: Iron Formation:	teg	cp.mt>mt>ch	1	55	35	
- - ∗01									1 1 2 0
- 402									1704
E 403									1283
- 404		403.36 - 406.57							1625
- 405									995.8
- 400									1279
- 407		406.57 - 409.79							1051
402									1155
409						4			8351
-		400.70 - 413.0							621.8

1.20		12	2 2		ir on Formation Bedding		Shall rhert bads Shall be	W. Mr. bada	Magnetic	
De	peth	Lith alogy	Sample	Description	Type	Mineralogy	Thickness	The Part - Children Colours	THE WIT DESIGN	Susceptability
يدلدينا	411									1109
mulu	412									1621 899 o
hundha	414		413.0 - 416	41.0.00 - 435 m: icon Fernandiae: With comprisons manyse ("netablic") magnetize best, some magnetize best in this interval have a percel arow approximation (possibly ultra fine grunned or very pure magnetize), with minor hemistic/paper, some of the interbedded black zones are probably elignomelane.	reg	ch-mt*mt* ch	1	60	35	6474
ulu	413									788 7
huntu	410		4160-4190							1812 639 I
uluu	418									1814 849 3
	420		419.0 - 422.0							761 1

Ormeth	1 leb June	Constants	Development	Iron Formation Bedding		To Mit-chart bads No Alt F	No. 3 U. bards	Magnetic	
L'angela	Citit and &	antichen	Ustrajula	Туре	Mineralogy	Thirknew	An 148 - Cimit C Diluft	THE MILL DISC.	Susceptability
- ⁴²¹									1770
- 422 -		421.0 - 425.0							1090
423									833 (
424									1843
425			425.0 - 428.18 m; Volcande Rocka	G					21 71
426									34 39
427									
428				1					
424			428,13 - 434 99 m; Iran Formadon: Interbedded chert magnetite and suic are beds, magnetite content decreasing downward.						
- 430									

	25.2.2	10 Y	0.27	Iran Farmadan Bedding		To Mil - cherri besia To Alt besi:		Magnetic	
Depth	Lithelagy	Sample	District dat	Туре	Atiseralogy	I bickness	A AM STREET WAD	it all the	Susceptability
Depth 	Litaelogy	Sample	Drachytian 454.99 - 440.0 m; Fragmenskal Velcanic Rocku:	1200	iren Formacion Bedding Mineralogy	Thickness	+ Mirrihert bedi	Ye Mi beak	Magnetic Surceptablity
437 438 438 439									

Dent	1 Jak at an	Consta	Duradada	Jreet Formation Bedding % Mit-ch Type Minoraleer Thickness			A Mar A water	- MILL-4-	Magnatis
Copia	L'ALL MOSA	senther	Dates that m	Type	Mineralog	Thickness	The state of character of the state	74 /YEL 0 840 A	Susceptability
-						2002 0			
				(
441									
100									
442									
E									
F									
44 3	1. State 1. State 1.			1 1					
E									
1.00									
414									
]					
445									
-	(1993) (1993) (1993)								
-									
-	1.								
440									
-			4-d B m. EOH.						
E									
-				1 1					
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