

Morgan Hill Limestone Property  
Elko County, NV

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Introduction

The Morgan Hill property lies within sections 16, 20, 30 T37N R58E, located approximately 25 miles east of Elko, Nevada. The property consists of 84 MH lode mining claims that are situated about five miles north of Interstate 80 and the Union-Pacific rail line. The property is accessed via the River Ranch Exit, proceed two miles west through the subdivision then two miles north to Smith Creek then another two miles west to the SE corner of Section 30. The claims cover BLM lands within the private land "checkerboard" found within a 20 mile radius of the transcontinental railroad. The MH claims cover a NE trending package of Paleozoic sediments which include a block of favorable massive limestone (mls) that has a two mile strike length; this limestone exceeds 500' in thickness. A total of 32 rock samples were collected from several different lithologies for chemical analysis.

It is recommended that 1) the geologic mapping and sampling be extended to the NE of Morgan Hill, 2) additional lands be acquired along strike to the NE and SW as lands are available, 3) negotiations are initiated with local land owners for drill rig access, water, and possible process plant siting.

Geologic Mapping

Geologic mapping was completed at a scale of 1"=500' (1:6000) during the week of August 11-16, 2008; the last two days of mapping and sampling were assisted by Keith Cox.

Devonian Devil's Gate Limestone

The dominant lithology at Morgan Hill is the Devonian age Devil's Gate Limestone (Dd). The Devil's Gate Limestone is typically a massive, thickly bedded grey micritic limestone that forms ridges and hilltops, the Dd contains very few recognizable fossils with the most noticeable being "spaghetti bed" stromatolites. Dd overlies the Devonian Nevada Formation (Dn) which usually contains thinner bedded (laminated) dark to light grey colored limestones and dolomites; however, very few dolomites were mapped on the property. For this mapping project the Devil's Gate and the Nevada Formations were lumped together as Dd/Dn because the dominant lithologies were massive limestones (mls) thus making the separation of these units difficult. The combined thickness of the Dd/Dn limestone package exceeds 500' and may exceed 1000' because the bottom contact was not mapped.

The Dd/Dn limestone beds strike to the NE and dip moderately (25-50 degrees) to the NW, bedding steepens to near vertical along the western outcrop margin (see A-A', B-B' sections). The Dd/Dn limestone bodies are cut by minor NW trending high angle faults.

#### Mississippian Tripon Pass Formation

Overlying the Devonian carbonate section is a transitional assemblage belonging to the Mississippian Tripon Pass Formation (Mtp). The base of this package is marked by a distinctive cherty limestone (ctls) bed that ranges from 20 to 80' in thickness and averages 40-50% chert content. This cherty member is overlain by a thin bedded platy weathering argillaceous limestone (pls) that weathers to float covered slopes. The pls unit lies to the west of the ctls and very often has steep bedding and has an exposed thickness of +200'.

#### Mississippian Chainman Shale/Diamond Peak Formations

Uncomfortably overlying the Mtp and Dd/Dn formations is the overlap assemblage of the Mississippian Chainman Shale and Diamond Peak Formations (Mc/Mdp). These formations are characterized by rusty brown colored siltstones, sandstones and conglomerates with minor argillaceous limestone beds. The Mc/Mdp lithologies border the Dd/Dn limestones to the west and east. The eastern unconformity contacts are marked by silicified jasperoid bodies, the contact observed south of Morgan Hill has a dip of about 45 degrees to the SE (Section B-B'). The Mc/Mdp formation exceeds 1000' in thickness.

#### Permian Gerster-Phosphoria Formation

Overlying the Mc/Mdp clastic facies is the Permian Gerster-Phosphoria (Pgp) formation. The Pgp is a ridge forming sequence characterized by cherty limestones and thickly bedded impure bioclastic limestones. The Pgp units extend to the east of the property and are exposed in quarry pits found in Section 22.

#### Geochemical Sampling

A total of rock samples were collected from mainly micritic limestones of the Dd/Dn formation. Approximately 3-5 pound samples were taken by chopping chunks of limestone off the outcrop being careful to remove all caliche and weathered surfaces. Virtually all limestone samples contained minor amounts of calcite veining (1-5%) and traces of iron oxides (hematite). Rock sample locations and descriptions are found in table 1.

Table 1.		Morgan Hill Rock Samples SS-KC Aug 2008				
<u>Sample No.</u>	<u>East UTM</u>	<u>North UTM</u>	<u>Rock Type</u>	<u>Formation</u>	<u>Calcite %</u>	<u>FeOx %</u>
MHRX-101	629351	4548429	mls	Dd/Dn	2-3%	tr. Hem
MHRX-102	629413	4548404	mls	Dd/Dn	1-2%	tr. Hem
MHRX-103	629241	4548360	mls	Dd/Dn	2%	tr. Hem
MHRX-104	629394	4548298	mls	Dd/Dn	2-3%	tr. Hem
MHRX-105	629094	4548293	lam mls	Dd/Dn	1%	0
MHRX-106	629190	4548380	jasperoid	Dd/Dn	tr	hem+jar
MHRX-107	629014	4548136	mls	Dd/Dn	1%	0
MHRX-108	629535	4548598	mls	Dd/Dn	2%	tr. Hem
MHRX-109	630241	4548484	bio ls, chert	Pgp	2-3%	1% jar
MHRX-110	629797	4548802	mls	Dd/Dn	3%	tr. Hem
MHRX-111	629953	4549091	mls	Dd/Dn	1-2%	tr. Hem
MHRX-112	630285	4549485	mls	Dd/Dn	2-3%	0
MHRX-113	629903	4549224	pls	Mtp	tr	tr. Hem
MHRX-114	630400	4549867	mls	Dd/Dn	1%	0
MHRX-115	630888	4550722	mls	Dd/Dn	tr	tr. Hem
MHRX-116	630901	4550756	mls	Dd/Dn	2-3%	0
MHRX-117	630842	4550526	mls	Dd/Dn	1-2%	tr. Hem
MHRX-118	630841	4550500	mls	Dd/Dn	1-2%	0
MHRX-119	630841	4550461	mls	Dd/Dn	2%	1% hem
MHRX-120	630801	4550430	mls	Dd/Dn	tr	tr. Hem
MHRX-121	630787	4550384	mls	Dd/Dn	2-3%	tr. Hem
MHRX-122	630726	4550261	mls	Dd/Dn	1-2%	0
MHRX-123	630931	4550276	mls	Dd/Dn	tr	tr. Hem
MHRX-124	630929	4550214	mls	Dd/Dn	3-5%	tr. Hem
MHRX-125	630952	4550175	mls	Dd/Dn	3-5%	tr. Hem
MHRX-126	630981	4550137	mls	Dd/Dn	5%	1% hem
MHRX-127	631010	4550102	mls	Dd/Dn	3%	1% hem
MHRX-128	631180	4550279	mls	Dd/Dn	2-4%	tr. Hem
MHRX-129	631151	4550303	mls	Dd/Dn	1-2%	tr. Hem
MHRX-130	631115	4550341	mls	Dd/Dn	2-4%	tr. Hem
MHRX-131	631046	4550405	mls	Dd/Dn	2-3%	tr. Hem
MHRX-132	631031	4550429	mls	Dd/Dn	1-2%	tr. Hem

Previous Exploration Activity

Evidence of previous exploration activity consists of numerous older PVC and wood 2"X2" claim posts, a few aluminum sample tags and eight drill holes. All drilling sites and roads have been reclaimed, it appears as though most drilling had been conducted by track mounted drill rigs. Drilling was completed for two different reasons; holes to the south were collared in the Mc/Mdp formation near jasperoid bodies while holes to the north were directed at limestone deposits.

Table 2. Morgan Hill drill hole locations

Hole number	UTM east	UTM north	Direction	Angle	Target?
MRHC-1	629488	4548303	Vert?		Lower Mc/Mdp
MRHC-2	629979	4548508	Vert?		Lower Mc/Mdp
MRHC-4	630463	4549385	Vert?		Lower Mc/Mdp
PH-27	630175	4549604	S40E	-45	Feox pit in Dd/Dn
DH-A	630821	4550044	Vert?		Dd/Dn
DH-B	631033	4550433	S45E	-45	Upper Dd/Dn
DH-C	630934	4550285	S45E	-45	Upper Dd/Dn
DH-D	~630850	~4550200	~SE	~-45	Upper Dd/Dn

### Summary and Recommendations

The Morgan Hill property contains a very significant deposit of micritic limestone within the Devonian Devil's Gate and Nevada Formations. This block of carbonates exceeds two miles in strike length and 500' in thickness. Sample results are awaited to determine the chemical content.

Recommendations for the property include:

1. Continue geologic mapping and sampling to the NE through Morgan Hill and on into Sections 9 and 10 to determine the northern extent of the limestone deposits.
2. Complete geologic reconnaissance to the SW looking for additional blocks of favorable limestones (Devil's Gate Formation), check land status.
3. Acquire mineral rights via claim staking in Section 10 and 20 (NW corner).
4. Determine land ownership in sections 17, 19, 21, and 29 to look at the feasibility of acquiring ground that contains portions of the mapped limestone deposit.
5. Begin land acquisition in the area of the River Ranch Estates private subdivision located between Morgan Hill and I-80 for drill rig access, water rights and possible plant siting.
6. Look at different access routes to the property from the SW via Halleck exit or Elberz exit to make shorter access to Elko.

Included information:

1"=500' geologic mapping sheets (2 sheets, Section 16, Section 20)

1:24,000 claim map for Sections 16, 20, 30

Morgan Hill Lithologic Column

Cross sections A-A' (Sec. 20), B-B' (Sec. 16)

Morgan Hill Rock Samples  
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<u>Sample No.</u>	<u>East UTM</u>	<u>North UTM</u>	<u>Rock Type</u>	<u>Formation</u>	<u>Calcite %</u>	<u>FeOx %</u>	<u>CaO</u>	<u>MgO</u>	<u>SiO2</u>
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