## DIAMOND DRILLING \& TRAIL WORK ASSESSMENT REPORT ON THE HD MINERAL PROPERTY

## RECEIVED JUL 112005 <br> Gold Commissioner's Office VANCOUVER, B.C.



OWNERS: JOHN WESLEY MOLL, GLORIA MAY MERKLEY, DANIEL MORICE MERKLEY DRILL CORE LOGGED BY: DARYL J. HANSON. P. ENG. REPORT BY: DANIEL MERKLEY

## Ministry of Energy \& Mines

Energy \& Minerals Division Geological Survey Branch

## ASSESSMENT REPORT TITLE PAGE AND SUMMARY




OWNER(S)

1) _._JOHN WESLEY MOLL 2) DANIEL MORICE MERKLEY GLORIA MAY MERKLEY

MAILING AODRESS
P.O. BOX 1182; HOUSTON, B. C. voJ $1 Z 2$
P.O. BOX 453; HOUSTON, B. C. VOJ $1 \mathrm{Z2}$

OPERATOR(S) [wto paid for the woik]

1) AS ABOVE

MAILING ADDRESS
$\qquad$
$\qquad$

PROPERTY GEOLOGY KEYWORDS (fithology, age, stratigraphy, structure, atteration, mineratization, size and attitude): JURASSIC AGE, HAZELTON GROUP, TELKWA FORMATION, RHYOLITE, ANDESITE, BASALT, CHERT, JASPEROID, JASPER, LIMESTONE, SANDSTONE, DOLOMITE, QUARTZ FELDSPAR PORPHYRY, MICROSYENITE, SILICIFICATION, HEMATITE ALTERATION, ARGILLIC ALTERATION, BORNITE, CHALCOPYRITE, SPHALERITE, GALENA, FLUORITE, TETRAHEDRITE, SILVER, GOLD. REFERENCES TO PREVIOUS ASSESSMENT WORX AND ASSESSMENT REPORT NUMBERS 05020, 09849, 10796, 14157, 15360, 15864, 18360, 18864, 18911, 25891, 26288, 26577, 26887, 27195.

| TYPE OF WORK $\mathbb{N}$ THIS REPORT | EXTENT OF WORK (IN METRIC UNITS) | ON WHICH CLAMMS | PROAECT COSTS APPORTIONED (inct. support) |
| :---: | :---: | :---: | :---: |
| GEOLOGICAL (scale, area) |  |  |  |
| Grourd, mapping |  |  |  |
| Photo interpretation |  |  |  |
| GEOPHYSICAL (line-kitometres) |  |  |  |
| Grount |  |  |  |
| Magnetic |  |  |  |
| Electromegnetic |  |  |  |
| Induced Potarization |  |  |  |
| Radiometric |  |  |  |
| Seismic |  |  |  |
| Other |  |  |  |
| Airbome |  |  |  |
| GEOCHEMICAL <br> (number of samples analysed for ...) |  |  |  |
|  |  |  |  |
| Silt |  |  |  |
| Rock |  |  |  |
| Other |  |  |  |
| DRILLING <br> (total metres; number of holes, size) |  |  |  |
| Non-core |  |  |  |
| RELATED TECHNICAL |  |  |  |
| Sampling/assaying |  |  |  |
| Petrographic |  |  |  |
| Mineralographic |  |  |  |
| Metalurgic |  |  |  |
| PROSPECTING (scale, area) |  |  |  |
| PREPARATORYPPIYSICAL |  |  |  |
| Line/grid (kilometres) |  |  |  |
| Topographic/Photogrammetric (scale, area) $\qquad$ |  |  |  |
| Legal surveys (scale, area) |  |  |  |
| Road, local access (kilometres)/trail |  |  |  |
| Trench (metres) |  |  |  |
| Underground dev. (metres) |  |  |  |
| Other |  |  |  |
|  |  |  |  |

Columbia
B.C. HOME

## Mineral Tities

Mineral Claim
Exploratlon and
Development
Work/Expiry Date
Change
Select Input Method
Select/nput Tenures
Input Lots
Data Input Form
Review Form Data
Process Payment
Confimation

4 Main Menu
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- View Placar Tenures
- MTO Help Tips

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## Mineral Titles Online

Mineral Claim Exploration and Development Work/Expiry Date Change

Recorder: | DANIEL MORICE |
| :--- |
| MERKLEY (118202) |

Submitter:
DANIEL MORICE
MERKLEY (118202)
Effective: 2006/APR/07
Recorded: 2006/APR/07
D/E Date: 2006/APR/07

Your report is due in $\mathbf{9 0}$ days. Please attach a copy of this confirmation page to the front of your report.

Event Number: 4078152

Work Start Date: 2005/SEP/26
Total Value of Work: \$ 4420.00
Work Stop Date: 2005/NOV/13
Mine Permit No: MX-2-194
Work Type: Technical and Physical Work
Physical Items: Labour
Technical Items: Driliing, Road and trail work

Summary of the work value:

| Tenure \# | Claim Name/Property | Issue Date | $\begin{aligned} & \text { Good } \\ & \text { To } \\ & \text { Date } \end{aligned}$ | New Good To Date | $\begin{array}{\|c\|} \hline \text { \# of } \\ \text { Days } \\ \text { For- } \\ \text { ward } \end{array}$ | Area In Ha | Work Value Due | $\begin{gathered} \text { Sub- } \\ \text { mission } \\ \text { Fee } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 516488 |  | 2005/3UL | 006/AP | 2007/APR/21 | 365 | 53. | 243 | \$ 541.60 |

Total required work value: $\$ 4243.75$

| PAC name: | Daniei Merkiey |  |
| :--- | :---: | ---: |
| Debited PAC amount: | $\$$ | 0.00 |
| Credited PAC amount: | $\$$ | 176.25 |
| Total Submission Fees: | $\$$ | 541.60 |
| Total Paid: | $\$$ | 541.60 |

The event was successfully saved.

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## PART I

## DIAMOND DRILLING

## LOCATION AND ACCESS:

The mineral cells comprising the HD mineral property encompass Mount Harry Davis, 5.5 km north of Houston, in west-central British Columbia.

Access to the property is by good road, which is paved for the first few kilometers after departing from Highway 16 east of the village of Houston. Mt. Davis Way departs from Highway 16 and strikes north where it traverses "The North Road" forestry access road and continues north to the mountain top. The portion of road after crossing "The North Road" is gravel and accessible by 2 -wheel drive vehicle when maintained.

A key is required to access the crest of the mountain through a federal government gate.

## HISTORY:

1908-An old claim post is discovered on the east slope of the mountain by Mel McQuatt. The top portion of the post is squared. The name "Fraser" and "1908" are carved into it.

1918 \& 1920's-Paul Tickoles of Smithers, B. C. excavates several test pits and two adits on the mountain. One adit is on the northern slope and the other is at the upper south sector of the mountain

1924-Andrew Martenson and Martin Bellicini-two Houston, B. C. prospectors-sink a 40-foot shaft on the south-east sector of the mountain. A $\log$ cabin is erected near the workings.

1950's \& 1960's-William Merkley and Mel McQuatt-two Houston, B. C. prospectors-prospect around the old workings. William Merkley stakes the "Eagle" claims on the east sector of the mountain.

1960's-Edward Westgarde stakes claims on the southern slopes of the mountain when road construction uncovers copper mineralization. Edward Westgarde and William Merkley option their claims to Molymine Exploration Ltd. The company strips a total of 1737 meters at 38 sites and trenches 440 meters at 13 other locations.

Late 1960's-Texas Gulf Sulphur explores the southern region of the mountain with geological mapping, soil geochemistry, IP and diamond drilling.

1976-Wes Moll and Dan Merkley stake the "Grouse" and "Hilltop" claims after Wes Moll discovers extensive sphalerite mineralization in a road cut on the VOR antenna access road.

1977-Noranda Exploration explores the mineralization discovered by Wes Moll in 1976 with an east-west oriented soil sample survey.

1981 -Endako Mines Division of Placer Development Ltd. options the property from Wes Moll, Gloria Merkley and Daniel Merkley. The ground is restaked by the company with the HD-1, HD-2, HD-3, HD-4 mineral claims prior to performing soil and rock geochemical programs, geological mapping and VLF-EM surveys.

1985-Eldor Resources Ltd. options the property from Wes Moll, Gloria Merkley and Dan Merkley. A gravity survey is completed and trenches and showings are sampled. Two "Winky" drill holes are collared north of the Switchback Zone.

1988-Equity Silver Mines Ltd. options the property from Wes Moll, Gloria Merkley and Dan Merkley. Six diamond drill holes for a total of 776 meters are drilled on copper-silver targets. IP surveys, soil and rock geochemistry and several hundred meters of trenching is also completed by the company.

1993-Teck Exploration Ltd. diamond drills 649 meters in 4 holes of NQ size at the crest of the mountain on the HD-2 claim.

1999-Wes Moll, Bill Merkley and Dan Merkley drill 86.9 meters in 6 holes for core of EX size with an X-Ray drill.

2000 to 2004-Wes Moll, Mary Jean Moll, Bill Merkley and Dan Merkley drill several diamond drill holes of EX size with an X-Ray drill at various sites on the property

## CLAIM STATUS:

The HD mineral property is comprised of 72 cells. With acceptance of this report the property will remain in good standing until April 21, 2007.

The HD mineral claim owners are John Wesley Moll, Daniel Morice Merkley and Gloria May Merkley, all residence of Houston, British Columbia.

The description of the property is as follows:
Property Name Total Contiguous Cells Tenure Number Expiry Date

HD
72
516488
21-April-06
The original mineral tenures-HD-1 (238545), HD-2 (238546), HD-3 (238547), HD-4 (238548)-underwent conversion on 09-Jul-05. The event number is: 4040164.

## PROCEDURE AND DIAMOND DRILL HOLE SUMMARY:

The owners undertook an exploration program of diamond drilling with an X-Ray drill, which produced EX-size core on the HD property during the fall of 2005. One diamond drill hole was completed on the crest of Mount Harry Davis at the Hilltop Zone to explore more than 30 meters of zinc mineralization traversed by a rock cut at the south side of the VOR antenna access road. Previous drilling in the general vicinity by Teck Exploration Ltd. and the owners in following years were not encouraging.

The 2005 drill program on the Hilltop Zone resulted in an important discovery. To the best of the author's knowledge, it is the first discovery in the area of a definitive exhailite horizon. Associated rock units-especially the hanging wall, which hosts massive sulphide clasts - display characteristics of Kuroko deposits found elsewhere in the world, ie: Buchans, Newfoundland, Canada ${ }^{1}$. The exhailite horizon overlays several meters of disseminated honey-coloured, glassy sphalerite mineralization.The sphalerite mineralization is in turn underlain by stringers of pyrite unconformable to the enclosing rock unit, analogous to a "feeder zone" in Kuroko deposits. The lowermost unit in the drill core is volcanic sandstone.
Diamond Drill Hole Summary
Hole Designation Location (GPS NAD83)* Azimuth Inclination ElevationHD05-02 54-27-09.7/126-39-23.4$-90^{\circ} \quad 1156 \mathrm{~m}$

* GPS coordinates with Garmin Etrex
${ }^{1}$ E. A. Swanson, D. F. Strong, J. G. Thurlow, The Buchans Orebodies: Fifty Years of Geology and Mining (The Geological Association of Canada, Special Paper Number 22, 1981, Pg. 130, Plate 2, 15)
DIAMOND DRILL LOG

| Company: John Wesley Moll |
| :--- |
| Project: Harry Davis |
| Core logged by : Daryl J. Hanson |
| Start Date: $\quad$ Finish Date: |


| GPS Northing* |  |
| :---: | :--- |
| GPS Easting* |  |
| GPS Elevation (m) |  |

- UTM NAD 83

| Depth ( t ) |  | Description | $\begin{aligned} & \text { ROCK } \\ & \text { CODE } \end{aligned}$ | STRUCT. |  | ALT'N SCALE ( $1 \cdots 5 \mathrm{MAX}$ ) |  |  |  |  | MINERALIZATION |  |  |  |  | ANALYSES |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S , |  | $\mathrm{S}_{0}$ | $\begin{array}{\|c\|} \hline 2^{5} \\ \text { nemale } \\ \hline \end{array}$ | $\overline{2^{K}}$ <br> k 4 | $\begin{aligned} & 2^{\mathrm{M}} \\ & m \times 0 \\ & \hline \end{aligned}$ | $\begin{array}{c\|} \hline \text { Sil } \\ \text { quate } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \mathrm{Chl} \\ \text { crionte } \\ \hline \end{array}$ | $\begin{aligned} & \hline \% \\ & \mathrm{Py} \\ & \hline \end{aligned}$ | \%$\mathrm{Cp}$ | $\begin{aligned} & \hline \% \\ & \mathrm{Sp} \\ & \hline \end{aligned}$ | \% <br> Po | \% <br> Ga | Recov. \% | Sample <br> Number | Interval (t) |  | $\begin{gathered} \mathrm{Cu} \\ \mathrm{ppm} \\ \hline \end{gathered}$ | $\frac{\mathrm{Pb}}{\mathrm{ppm}}$ | Zn <br> ppm | $\begin{gathered} \mathrm{Ag} \\ \mathrm{ppm} \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{Au} \\ & \mathrm{~g} \AA \end{aligned}$ |
| from | to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | from | to |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.0 | 6.0 | ANDESITIC LAPILLI TUFF | LTa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - med. gy/gr andesitic(?) lapilli tuff |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | -w/ 20\% rounded to angular, med-dk gy lapilli to 15 mm dia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - no mineralization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - no alt'n |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 4.0-4.2: thinly laminated (syngenetic?) pyrite |  |  |  |  |  |  |  |  | 15 |  | ? |  |  |  |  | 4.0 | 4.5 |  |  |  |  |  |
|  |  | 4.3-4.5: thinly laminated pyrite a/a 4.0-4.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.0 | 7.2 | LAMINATED PYRITE | BP |  | 60 |  |  |  |  |  | 30 |  | ? |  |  |  |  | 6.0 | 7.2 |  |  |  |  |  |
|  |  | $-30-50 \%$ thinly laminated, massive pyrite bands w/ $50-70 \% \mathrm{lt}$ gy bands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | of unknown mineralogy ( $\mathrm{H}<5$, barite? ) interleved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - massive pyrite laminae loc. display soft sediment deformation |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.2 | 19.3 | FELSIC ASH-LAPILLI TUFF | A-LTf |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  | 7.2 | 13.0 |  |  |  |  |  |
|  |  | - It gy, wkly brecciated (<5\% matrix) felsic ash-lapillit tuff |  |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  | 13.0 | 19.3 |  |  |  |  |  |
|  |  | -w/ fine grained pyrite matrix surrounding bxia frags |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - possible footwall feeder zone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19.3 | 25.0 | VOLCANIC SANDSTONE | SSv |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - dirty green/br volcanic sandstone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | -w/ 5\% distinctive qtz and opal? blebs (to 2 mm dia) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - massive, no bedding observed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | - no alteration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | EOH @ 25.0 ft . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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## DRILL CORE SECTIONS



BLACK MASSIVE SULPHIDE CLASTS IN DACITE OF HANGING WALL


DIAMOND DRILL CORE SECTIONS OF EXHAILITE HORIZON

## PART II

## TRAIL WORK

## LOCATION AND ACCESS:

The HD mineral cells are located on Mount Harry Davis, 5.5 km north of Houston, B. C., in west-central British Columbia.

Access to the property is by good road, which departs Highway 16 just east of the village of Houston to join Mt. Davis Way road. The road continues to the crest of the mountain where several exploration roads lead away to the east off the main road. The westerly trail of the two worked on the property is situated near the end of an old exploration road shown on the accompanying map (trail work location map). Access to the road in the eastern sector of the property is provided by the main access road, which provides access to the VOR (visual omnirange) antenna. This road is shown on the accompanying trail work location map.

## PROCEDURE:

Three men performed the trail work with two power saws during the fall season of 2005. Two pickup trucks were driven to the nearest locations of the work sites on the main access road; from there, travel was by foot.


## GEOLOGIST'S QUALIFICATIONS

## AUTHORS QUALIFICATIONS

I, Daryl J. Hanson, do hereby certify that:

1. I am a geologist residing at R.R.\#1, Quick East Road, Telkwa, B.C.
2. I am a 1971 graduate of the University of British Columbia with a Bachelor of Applied Science in Geological Engineering.
3. I have practised my profession as a geologist for twenty-four years in the fields of exploration, mining and development.
4. I am a member in good standing of the Professional Engineers and Geoscientists of British Columbia.
5. I have no real or beneficial interest in the Silver Ghost mineral claim.
6. I personally examined the core from the program described in this report.

Respectfully submitted,


Daryl J. Hanson, P.Eng.

## AUTHOR'S QUALIFICATIONS

1, Daniel Merkley, do hereby certify that:
(1) I am a prospector and reside at 3313 Highway 16 E, Houston, B. C.
(2) have more than 40 years of prospecting experience
(3) I prepared this report

Respectfully submitted
Noniel Ines ley
Daniel Merkley

## Prospector

## STATEMENT OF EXPENDITURES

Pickup truck 2 days X \$50 ..... 100.00
Copco drill 2 days X \$35 ..... 70.00
Board 2 men $\mathbf{X} 2$ days $X \$ 30$ ..... 120.00
Mobilization \& demobilization ..... 1200.00
Diamond drilling 25 feet @ $\$ 26$ per foot ..... 650.00
Water pump 2 days $\mathbf{X} \$ 25$ ..... 50.00
Logging core \& Report preparation ..... 530.00Subtotal$\$ 2,720.00$
Trail rehabilitation 3 men $X 2$ days $X \$ 250$ ..... 1500.00
Power saws 2 saws X 2 days $\mathrm{X} \$ 25$ ..... 100.00
Pickup truck 2 days X \$50 ..... 100.00

Subtotal $\$ 1700.00$
TOTAL EXPENDITURES ..... $\$ 4,420.00$

