

When Recorded Return To:  
Construction Notice Services, Inc.  
PO Box 22001  
Phoenix, AZ 85028  
(602) 493-2042

DOC# 224436

06/14/2013

02:44PM

**Official Record**

Requested By  
CONSTRUCTION NOTICE SERVICES

Eureka County - NV

Mike Rebaleati - Recorder

Page: 1 of 30 Fee: \$68.00

Recorded By FS RPTT: \$0.00

Book- 0550 Page- 0191



0224436

**NOTICE OF MECHANICS' LIEN**  
(NRS 108-226)

NOTICE IS HEREBY GIVEN THAT: Pursuant to the provisions of the Nevada Statutes, Risun Technologies, LC, with its principal place of business located at: 357 West 6160 South, Murray, UT 84107 and telephone number (801) 305-4240, hereafter referred to as "Claimant" (whether singular or plural), claims a lien upon the real property and any buildings, improvement or structures thereon, described in Paragraph Six (6) below, and states the following:

(1) That demand of Claimant after deducting all just credits and offsets, is \$85,005.70, together with interest thereon at the rate of 10% per annum from December 4, 2012. That the Claimant did timely supply its Notice of Right to Lien and Request for Receipt of Notice of Completion on March 21, 2013.

(2) That the name of the owner(s) or reputed owner(s) of said property is(are): Janelle Dietrich, whose address is: 362 Elges Way, Sparks, NV 89431 and American Vanadium US, Inc., whose address is 2778 Spokane Creek Road, East Helena, MT 59635 and 800 Pender Street, Suite 910, Vancouver, BC Canada V6C 2V6.

(3) That Claimant did from December 4, 2012 to April 30, 2013 supply engineering services to the project/land, See contract as Exhibit B, incorporated by reference hereto. The materials and or labor consist of Engineering Services to the project of Gibellini Vanadium Mine, for construction, alteration or repair of said building, land improvements or structures, which labor or materials, or both of them were in fact used in the construction and or alteration of the land improvements, the location of which set forth in Paragraph Six (6) below.

(4) Claimant furnished work and materials under contract with, or at the request: Scotia International of Nevada whose address is: 4455 S. 700 E., Suite 300, Salt Lake City, UT 84107.

(5) The terms, time given and conditions of the contract are: Net 30.

(6) That the property upon said lien is sought to be charged is situated in the City of Eureka, County of Eureka, State of Nevada, commonly known as: Gibellini Vanadium Mine, whose location is Gibellini Hill – about 25 miles South of the town of Eureka – accessed Westward by a dirt road from US 60, Eureka County, Nevada.

(Continued on Page Two)



COPY

EXHIBIT A



224436

Book: 550 06/14/2013  
Page: 193 3 of 30

DOC # 0216862

03/02/2011 01:31 PM  
Official Record  
Recording requested by  
AMERICAN VANADIUM

Eureka County - NV  
Mike Rebaletti - Recorder  
Fee: \$20.00 Page 1 of 7  
RPT: Recorded By: FES  
Book- 512 Page- 0375

AFTER RECORDING, PLEASE RETURN TO:  
American Vanadium US Inc.  
Attn: Alan Branham  
2778 Spokane Creek Road  
East Helena, MT 59635

*The undersigned affirm that this document  
contains no Social Security Numbers*



0216862

### RATIFICATION OF MINERAL LEASE AGREEMENT

THIS RATIFICATION OF MINERAL LEASE AGREEMENT ("Ratification") is made as of the 1st day of March, 2011 ("Effective Date") by and between JANELLE DIETRICH, a widow whose address is 362 Elges Way, Sparks, Nevada 89431-1343 ("Owner"), and AMERICAN VANADIUM US INC., a Nevada corporation whose address for purposes of this Ratification is Attn: Alan Branham, 2778 Spokane Creek Road, East Helena, Montana 59635 ("Lessee").

#### RECITALS

A. Effective as of March 1, 2006, Owner, together with Kenneth Campbell and Jacqualeene Campbell, as lessors, entered into a Mineral Lease Agreement with Alan David Branham as lessee (the "Lease"). A memorandum of the Lease was recorded in the official records of Eureka County as File No. 204440 in Book 434 at page 349. The Lease covered the unpatented mining claims described in *Exhibit A* hereto, including any amendments or relocations thereof and all ores, minerals, surface and mineral rights and all water rights and improvements, easements, licenses, rights-of-way, permits and other interests appurtenant thereto (the "Original Claims").

B. Effective as of May 1, 2006, Alan David Branham, as lessee, assigned all of his rights, title and interest in and to the Lease and the Original Claims to RMP Resources Corp., a Nevada corporation, by virtue of an Assignment recorded in the official records of Eureka County as File No. 204750 in Book 436 at page 116.

C. Effective as of December 17, 2010, RMP Resources Corp. changed its corporate name to American Vanadium US Inc.

D. Effective as of February 20, 2011, Kenneth Campbell and Jacqualeene Campbell conveyed to Janelle Dietrich, a widow, all of their rights, title and interest in and to the Original Claims and assigned to Janelle Dietrich all of their rights, title and interest under the Lease, by

AVI-003-1.doc

1



224436

Book: 550 06/14/2013  
Page: 194 4 of 30

virtue of a Quitclaim Deed and Assignment of Lease recorded in the official records of Eureka County as Document No. 0216804 in Book 512 at page 311.

E. Thereafter, Janelle Dietrich, as the sole owner of the Original Claims, abandoned all of the Original Claims by virtue of a Notice of Abandonment of Mining Claims dated February 22, 2011 but effective as of the dates and times set forth therein, which notice is recorded in the official records of Eureka County as Document No. 0216805 in Book 512 at page 315, in order to replace the Original Claims with new claims.

F. On February 21-24, 2011, Janelle Dietrich located new mining claims (the "Replacement Claims") to replace the Original Claims. The Replacement Claims, which are described in *Exhibit B* hereto, cover substantially the same ground as the Original Claims covered. The work of locating the Replacement Claims was conducted by American Vanadium US Inc., as lessee, on behalf of the lessor, Janelle Dietrich, as authorized by Section 1.H of the Lease.

G. Janelle Dietrich, as lessor, and American Vanadium US Inc., as lessee, desire to confirm in this Ratification that the Lease remains in full force and effect and in good standing, covering now the Replacement Claims instead of the Original Claims, and to provide public notice of such facts through the execution and recordation of this Ratification.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and set forth in the Lease, and for other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, the parties hereto, incorporating the Recitals set forth above, agree as follows:

1. Ratification of Lease. The parties affirm and ratify the ongoing existence and good standing of the Lease without interruption in the term or effectiveness thereof, and acknowledge that the Lease now covers the Replacement Claims rather than the Original Claims.

2. Multiple Counterparts. This document may be executed in multiple counterparts and all counterparts taken together shall be deemed to constitute one and the same instrument.

IN WITNESS WHEREOF, Owner and Lessee have executed this Ratification on the dates set forth in the acknowledgements below but effective as of the Effective Date.

Owner:

  
JANELLE DIETRICH

Lessee:

AMERICAN VANADIUM US INC., a  
Nevada corporation

By

  
William J. Radvak, President

AVI-003-1.doc

2

0216862 Book 512 03/02/2011  
Page: 376 Page: 2 of 7



224436

Book: 550 06/14/2013  
Page: 195 5 of 30

STATE OF NEVADA )  
COUNTY OF Washoe ) ss.

On this 2nd day of March, 2011, personally appeared before me, a Notary Public, JANELLE DIETRICH, who acknowledged that she executed the above instrument.

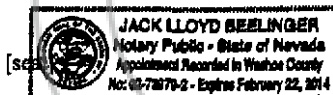


My commission expires:  
2-22-2014

Jack Beelinger  
NOTARY PUBLIC, residing at  
RENO NEVADA

STATE OF NEVADA )  
COUNTY OF Washoe ) ss.

On this 2nd day of March, 2011, personally appeared before me, a Notary Public, William J. Radvak, the President of AMERICAN VANADIUM US INC., a Nevada corporation, who acknowledged that he executed the above instrument on behalf of said corporation.



My commission expires:  
2-22-2014

Jack Beelinger  
NOTARY PUBLIC, residing at  
RENO NEVADA

AVI-003-1.doc

3

0216862 Book 512 03/02/2011  
Page: 377 Page: 3 of 7



224436

Book: 550 06/14/2013  
Page: 196 6 of 30

*Exhibit A*

Original Claims

41 unpatented lode mining claims located in Eureka County, Nevada, as described more particularly below.

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Claim Name</u>	<u>BLM Serial No. (NMC)</u>
15N	52E	2	Black Hill #1	82892
16N	52E	34	Black Hill #2	82893
16N	52E	34	Black Hill #3	82894
15N	52E	2	Black Hill #4	82895
15N	52E	2	Black Hill #7	82896
15N	52E	2	Black Hill #8	82897
15N	52E	2	Black Hill #9	82898
15N	52E	3	Black Hill #10	82899
15N	52E	2	Black Iron #1	82900
16N	52E	34	Black Iron #3	82901
15N	52E	2	Black Iron #4	82902
15N	52E	2	Black Iron #5	82903
15N	52E	2	Black Iron #6	82904
15N	52E	2	Flat #1	82905
15N	52E	2	Flat #2	82906
15N	52E	2	Flat #5	82907
15N	52E	2	Flat #10	82908
15N	52E	2	Flat #11	82909
15N	52E	1	Flat #12	82910
15N	52E	1	Flat #13	82911
16N	52E	35	Mangmose #3	82912
16N	52E	35	Rattler #1	82913
16N	52E	35	Rattler #2	82914
16N	52E	35	Rattler #3	82915
16N	52E	26	Rattler #4	82916
15N	52E	35	Rift #1	82917
15N	52E	26	Rift #2	82918
15N	52E	35	Rift #3	82919
15N	52E	26	Rift #4	82920
15N	52E	2	Clyde #1	82921
16N	52E	35	Clyde #2	82922
16N	52E	35	Clyde #3	82923
16N	52E	35	Clyde #4	82924
16N	52E	35	Clyde #5	82925
16N	52E	35	Clyde #6	82926
15N	52E	1	Clyde #7	82927

AVI-003-1.doc

4

0216862 Book 512 03/02/2011  
Page: 378 Page: 4 of 7



224436

Book: 550 06/14/2013  
Page: 197 7 of 30

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Claim Name</u>	<u>BLM Serial No. (NMC)</u>
16N	52E	35	Clyde #8	82928
15N	52E	2	Black Hill #11	793247
15N	52E	2	Black Hill #12	793248
15N	52E	2	Black Hill #13	793249
15N	52E	2	Black Hill #14	793250

AVI-003-1.doc

5

0216862 Book: 512 03/02/2011  
Page: 379 Page: 5 of 7



224436

Book: 550 06/14/2013  
Page: 198 8 of 30



*Exhibit B*

Replacement Claims

The following 40 unpatented lode mining claims located within Sections 1, 2 and 3, T15N, R52E, and Sections 26, 34, 35 and 36, T16N, R52E, MDM, Eureka County, Nevada:

<u>BLM SERIAL #</u>	<u>CLAIM NAME</u>	<u>COUNTY BOOK - PAGE</u>
NMC1038844	Black Iron 1-N	512-326
NMC1038845	Black Iron 3-N	512-327
NMC1038846	Black Iron 4-N	512-328
NMC1038847	Black Iron 5-N	512-329
NMC1038848	Black Iron 6-N	512-330
NMC1038849	Flat 1-N	512-331
NMC1038850	Flat 2-N	512-332
NMC1038851	Flat 10-N	512-333
NMC1038852	Flat 11-N	512-334
NMC1038853	Flat 12-N	512-335
NMC1038854	Flat 13-N	512-336
NMC1038855	Manganese 3-N	512-337
NMC1038856	Rattler 1-N	512-338
NMC1038857	Rattler 2-N	512-339
NMC1038858	Rattler 3-N	512-340
NMC1038859	Rattler 4-N	512-341
NMC1038860	Rift 1-N	512-342
NMC1038861	Rift 2-N	512-343
NMC1038862	Rift 3-N	512-344
NMC1038863	Rift 4-N	512-345
NMC1038864	Clyde 1-N	512-346
NMC1038865	Clyde 2-N	512-347
NMC1038866	Clyde 3-N	512-348
NMC1038867	Clyde 4-N	512-349
NMC1038868	Clyde 5-N	512-350
NMC1038869	Clyde 6-N	512-351
NMC1038870	Clyde 7-N	512-352
NMC1038871	Clyde 8-N	512-353
NMC1038872	Black Hill 1-N	512-318
NMC1038873	Black Hill 2-N	512-319
NMC1038874	Black Hill 3-N	512-320

Page 1 of 2

AVI-003-1.doc

6

0216862 Book: 512 03/02/2011  
Page: 380 Page: 6 of 7



224436

Book: 550 06/14/2013  
Page: 199 9 of 30

**BLM  
SERIAL #**

NMC1038875  
NMC1038876  
NMC1038877  
NMC1038878  
NMC1038879  
NMC1038880  
NMC1038881  
NMC1038882  
NMC1038883

**CLAIM  
NAME**

Black Hill 4-N  
Black Hill 7-N  
Black Hill 8-N  
Black Hill 9-N  
Black Hill 10-N  
Black Hill 11-N  
Black Hill 12-N  
Black Hill 13-N  
Black Hill 14-N

**COUNTY  
BOOK - PAGE**

512-321  
512-322  
512-323  
512-324  
512-325  
512-354  
512-355  
512-356  
512-357

[End]

Page 2 of 2

AVI-003-1.doc

7

021686Z Book 512 03/02/2011  
Page: 381 Page: 7 of 7



224436

Book: 550 06/14/2013  
Page: 200 10 of 30

COPY

**EXHIBIT B**



224436

Book: 550 06/14/2013  
Page: 201 11 of 30



357 West 6160 South • Murray, Utah 84107 • (801) 281-2929 • Fax: (801) 281-8787

January 16, 2012

Scotia International of Nevada  
Warren D. Barber  
President  
740 East 3900 South  
Salt Lake City, Utah 84107-2181

Reference: ADDENDUM 01 Gibellini Project, Civil, Structural, Engineering Services Proposal  
Risun Technologies Job Number:  
• Steel Design SC111111  
• Foundation Design SC111112

Dear Warren,

We are pleased to provide a lump sum proposal for additional engineering services being requested in the crusher area of the Gibellini Project. This letter is an addendum to the previous bid letter sent on December 19, 2011. General provisions stated in the previous letter apply to engineering services being stated here.

We have been asked to bid the Concrete Foundation and Structural Steel engineering and design for the crusher area. These tasks include structural steel design, concrete foundation design, crusher support concrete design and conveyor foundation design. The specific engineering tasks are broken out as follows:

**Structural Steel Design:**

- Hopper/Transfer Structure design
- Magnet Structure design
- Screening/Crushing Structure design
- CV004/CV005 Transfer Structure design
- Agglomerator Support Structure design
- CV007/CV009 Transfer Structure design

**Concrete Foundation Design:**

- Hopper/Transfer Structure foundation design
- Magnet Structure foundation design
- Screening/Crushing foundation design
- Crusher Support concrete and foundation design
- CV004/CV005 Transfer foundation design
- Agglomerator Structure foundation design
- CV007/CV009 Transfer Structure foundation design
- CV001 Bent and Take-up Structure foundation design
- CV004 Bent and Take-up Structure foundation design



224436

Book: 550 06/14/2013  
Page: 202 12 of 30

Page 1 of 3

- CV005 Bent and Take-up Structure foundation design
- CV006 Bent and Take-up Structure foundation design
- CV007 Bent and Take-up Structure foundation design
- CV009 Bent and Take-up Structure foundation design
- Compressor Room Masonry notes and design
- Hopper Approach Slab design

The following is an estimated budget and drawing count.

<b>Structural Steel:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Crusher Area	14	265	325	\$48,225.00

<b>Concrete Fdn:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Crusher Area	28	385	400	\$64,650.00

Our proposal is clarified by the following:

- We expect to receive certified conveyor loads/reactions from the conveyor subcontractor. This would include all gravity, vertical and horizontal reactions as a result of the equipment, material snow wind and seismic loads. We will use these reactions as the foundation design loads. We expect that all conveyors will have vertical take-up assemblies with simple structural reactions for foundation design. If the conveyor has a horizontal take-up which requires bend pulley support. The foundation design hours will need to be modified to accommodate the additional design time required.
- We exclude conveyor structural and mechanical engineering.
- Concrete Foundation/Structural Steel design criteria will be based upon the State of Nevada requirements and information received from the client.
- Equipment loads will be assumed in the event that certified equipment drawings are not available at the time of design. Engineering drawings will include holds for certified information not available at the time of design.

We specifically exclude

- Items previously excluded in the December 19, 2011 proposal.
- The mechanically stabilized earth wall. This is a specialty engineering item in which we cannot compete. This will be by others.

#### **Schedule:**

We recommend the following schedule of man power to be included in your overall schedule of the project. We have begun these tasks.

1. Crusher Area Structural Engineering, One Man,	7 weeks	Predecessor 4, 4 weeks
2. Crusher Area Civil Engineering, One Man	10 weeks	Predecessor 3
3. Crusher Area Civil Designer, One Man	10 weeks	Precedes 2 by 3 weeks
4. Crusher Area Structural Designer, One Man	8 weeks	Precedes 3 by 4 weeks

All information provided by others is to be provided at the start of the project. This becomes the design basis. Changes to the design basis constitute a change of scope. This proposal becomes the basis of our engineering



224436

Book: 550 06/14/2013  
Page: 203 13 of 30

Page 2 of 3

contract. Those items excluded may be included at a later date as directed by Scotia. Such change will be considered a change of scope item. All changes of scope will be evaluated as to additional or removal to scope, schedule and budget. All change of scope items will be approved in writing prior to beginning of scope change work.

Please indicate acceptance of these terms by giving written notice to proceed.

Please call with questions or comments.

Best Regards,

W.J. (Bill) Whitney, Jr., PE.  
President

Cc: Michael Drozd  
Pete Marron  
Laurel Hogarth



224436

Book: 550 06/14/2013  
Page: 204 14 of 30

Page 3 of 3



357 West 6160 South • Murray, Utah 84107 • (801) 281-2929 • Fax: (801) 281-8787

December 19, 2011

Scotia International of Nevada  
Warren D. Barber  
President  
740 East 3900 South  
Salt Lake City, Utah 84107-2181

Reference: Gibellini Project, Electrical Engineering Services Proposal  
Risun Technologies Job Number: 111113

Dear Warren,

We are providing this letter to identify the scope of work and budget for the Electrical Engineering for the Gibellini Project. Our proposal is based upon the following base hourly rates. Overtime if required will be billed at 1.5 x the base hourly rate:

- Senior Engineer \$95.00/hr
- Staff Engineer \$85.00/hr
- Senior Designer \$80.00/hr
- Designer \$65.00/hr
- Clerical \$55.00/hr

### **Electrical Scope of Work**

#### General Site

Provide Electrical Power Distribution System design for delivery of power from the Main Substation secondary terminations to the Electrical Rooms located in the following areas:

1. Crusher Area
2. Process Area
3. Mine Facilities Area.

Deliverable Items include calculations and drawings for the main power system duct bank from the substation to the three indicated area as well as to the water tank area. Electrical single line, layouts and lighting layouts for the Main gate and water tanks are included in the area. Arc Flash



224436

Book: 550 06/14/2013  
Page: 205 15 of 30

Page 1 of 6

study , Protective Device Coordination and Main Power System Voltage Calculations are included.

### Crusher Area

Provide Electrical Power Distribution from the Crusher Area Electrical Room to the equipment in this area. Deliverable items include electrical single lines, layouts, MCC specifications and elevations, electric room, grounding and lighting layouts for connection to the following equipment:

(Design of electrical control is not included for this equipment. It is assumed that control function are provided by the respective manufacturer or supplier and interface with distribution equipment in the Crusher Electrical Room)

3113-AM-001	Agglomerator
3113-CV-006	Agglomerator Feed Conveyor
3113-CV-007	Agglomerator Discharge Conveyor
3113-MS-001	Self Cleaninf Magnet
3113-MD-001	Metal Detector
3121-CV-011	Grass Hopper Conveyor No.1
3121-CV-012	Grass Hopper Conveyor No.2
3121-CV-013	Grass Hopper Conveyor No.3
3121-CV-014	Grass Hopper Conveyor No.4
3121-CV-015	Grass Hopper Conveyor No.5
3121-CV-016	Grass Hopper Conveyor No.6
3121-CV-017	Grass Hopper Conveyor No.7
3121-CV-018	Grass Hopper Conveyor No.8
3121-CV-019	Grass Hopper Conveyor No.9
3121-CV-020	Grass Hopper Conveyor No.10
3121-CV-021	Grass Hopper Conveyor No.11
3121-CV-022	Grass Hopper Conveyor No.12
3121-CV-023	Grass Hopper Conveyor No.13
3121-CV-024	Grass Hopper Conveyor No.14
3121-CV-025	Grass Hopper Conveyor No.15
3113-CV-009	Secondary Overland Conveyor
3113-CV-026	Heap Pad Transverse Conveyor
3113-CV-027	Heap Pad Pull Back Conveyor
3113-CV-028	Heap Pad Radial Extendable Stacker Conveyor
3323-PU-71	Agglomerator Acid Pump No. 1
3323-PU-72	Agglomerator Acid Pump No. 2
3113-FE-006	Hopper Discharge Feeder
3113-CV-001	Screen Feed Conveyor
3113-CV-002	Screen Oversize Reject Conveyor
3113-CR-001	Cone Crusher
3113-CV-004	Crusher Discharge Conveyor



224436

Book: 550 06/14/2013  
Page: 206 16 of 30

Page 2 of 6



Lighting design and layout drawings will be provided for the truck loading hopper, crusher and agglomerator areas.

Process Area

Deliverable items include electrical single lines, layouts, MCC specifications and elevations, electric room, power distribution schedules, grounding and lighting and receptacle layouts for the following:

- Process Office and Lab Building
- Process Building Office Area
- Product Storage Building

Specification of the PLC/HMI system is included. Specific details including I/O description, count and tag names are excluded from this scope.

Design of the standby generator / transfer switch is included.

Electrical power distribution and control design and drawings for the following equipment are included:

- 3246-PU-004 Submersible PLS Pump No. 1
- 3246-PU-005 Submersible PLS Pump No. 2
- 3323-PU-070 Acid Area Sump Pump
- 3246-PU-010 Preg Pump No. 1
- 3246-PU-011 Preg Pump No.2
- 3246-PU-012 Oxidation Tank Feed Pump No.1
- 3246-PU-013 Oxidation Tank Feed Pump No.1
- 3246-PU-014 AMV Precipitation Tank Feed Pump No.1
- 3246-PU-017 AMV Precipitation Tank Feed Pump No.1
- 3246-PU-015 Barren Organic Pump No. 1
- 3246-PU-016 Barren Organic Pump No. 2
- 3246-AG004 Reduction Tank Agitator
- 3246-AG020 Reduction Tank Pump No. 1
- 3246-AG021 Reduction Tank Pump No. 2
- 3245-MX001 Solvent Extraction Mixer Settler No.1
- 3245-MX002 Solvent Extraction Mixer Settler No.2
- 3245-MX003 Solvent Extraction Mixer Settler No.3
- 3245-MX004 Solvent Extraction Mixer Settler No.4
- 3313-PU-025 Loaded Organic Pump No. 1
- 3313-PU-025 Loaded Organic Pump No. 2
- 3246-PU-030 Raffinate Transfer Pump No. 1
- 3246-PU-031 Raffinate Transfer Pump No. 2
- 3246-PU-032 Coalescer Organic Pump No. 1



3246-PU-033 Coalescer Organic Pump No. 2  
 3246-PU-027 Coalescer Aqueous Pump No. 1  
 3246-PU-028 Coalescer Aqueous Pump No. 1  
 3246-PU-035 PLS Pump No.1  
 3246-PU-036 PLS Pump No.2  
 3313-MX006 Stripping Mixer Settlers No.1  
 3313-MX007 Stripping Mixer Settlers No.2  
 3313-MX008 Stripping Mixer Settlers No.3  
 3313-MX009 Stripping Mixer Settlers No.4  
 3246-PU-040 Barren Organic Pump No. 1  
 3246-PU-041 Barren Organic Pump No. 2  
 3246-PU-49 Barren Strip Solution Pump No. 1  
 3246-PU-50 Barren Strip Solution Pump No. 2  
 3246-PU-51 Solvent Extraction Area Sump Pump  
 3246-PU-52 Strip Settler Area Sump Pump  
 3323-PU-053 Kerosene Transfer Pump No. 1  
 3323-PU-054 Kerosene Transfer Pump No. 2  
 3323-PU-055 Oxidant Pump No. 1  
 3323-PU-056 Oxidant Pump No. 1  
 3323-PU-057 Ammonia Feed Pump  
 3323-PU-058 Precipitation Flocculent Area Sump Pump  
 3323-PU-059 Agglomerator Flocculent Area Sump Pump  
 3313-AG026 Precipitation Tank Agitator  
 3313-TH-001 Precipitate Thickener  
 3313-PU-060 Precipitate Thickener Underflow Pump No. 1  
 3313-PU-061 Precipitate Thickener Underflow Pump No. 2  
 3313-PU-065 Centrifuge Underflow Pump No. 1  
 3313-PU-066 Centrifuge Underflow Pump No. 2  
 3313-PU-080 Product Solution Pump No. 1  
 3313-PU-081 Product Solution Pump No. 2

Electrical power distribution system design and drawings for the following equipment are included. It is assumed that control function are provided by the respective manufacturer or supplier and interface with distribution equipment in Process Area MCC

3246-CN001 Stripping / Settler Area Crane No. 1  
 3246-CN001 Stripping / Settler Area Crane No. 2  
 3323-PK-004 Iron Mix system  
 3313-FL-001 Organic Clay Filter  
 3323-PK-006 Clay Precept System  
 3323-VE-001 Ammonia Vaporizer  
 3313-CG001 Centrifuge  
 3113-FN-001 Multi Hearth Furnace



224436

Book: 550 06/14/2013  
Page: 208 18 of 30

Page 4 of 6

3313-PK-012 Precipitate Dryer Package  
3313-XX002 Casting Wheel  
3313-FE-005 Rotary Vane Feeder  
3313-PK-010 Packaging Equipment  
3313-CN003 Casting Area Crane

#### Mine Facilities Area

Deliverable items include electrical single lines, layouts, MCC specifications and elevations, electric room, power distribution schedules, grounding and lighting and receptacle layouts for the Truck Shop, Truck Shop Office Area, Truck Wash, and Warehouse. Electrical power distribution system design and drawings for the following equipment are included. It is assumed that control function are provided by the respective manufacturer or supplier and interface with distribution equipment in the Truck Shop Electrical Room:

(These items are not show on the Equipment List)

Water Reclamation Package

2 – Sump Pumps

3 – Air compressor packages

#### **Exclusions**

- Water System

The water pumping system shown on drawing D-166369-N-0005 is excluded. Equipment for the water system is not included in the Equipment List. Locations for the water pumps are not provided with the project information.

- Instrumentation

All instrumentation specification, enclosure, loop, termination or motor control interface drawings are excluded.

- PLC System

PLC Programming, I/O Count, tag name determination, enclosure design, termination and loop drawings are excluded. Review and/or PE Stamping of PLC/instrumentation drawings is excluded.

- Substation

All electrical work “upstream” of the Main Substation secondary connections is excluded.

- Fuel Storage Area

All electrical work for the Fuel Storage area is excluded.

- P&ID Review

No review of customer provided P&ID's in included.



224436

Book: 550 06/14/2013  
Page: 209 19 of 30

Page 5 of 6

**Costs**

<u>Electrical</u>	<u>Drawings</u>	<u>Eng Hrs</u>	<u>Des Hrs</u>	<u>Estimated budget</u>
General Site	13	155	235	\$34,700.00
Crusher Area	15	152	290	\$39,090.00
Process Area	59	351	815	\$102,620.00
Mine Facilities	22	165	390	\$48,825.00
	Reports			
Other	3	160	30	\$17,750.00
Total		983	1760	\$242,985.00

**Schedule**

It is anticipated that the Electrical portion of this project can be completed with a staff not to exceed two engineers and four designers in a time frame of 12 to 14 weeks. This is dependent on the receipt of design data prior to the commencing work on the portion of work for which the data is necessary.

A more detailed schedule with successor/predecessor constraints will follow.

All information provided by others is to be provided at the start of the project. This becomes the design basis. Changes to the design basis constitute a change of scope. This proposal becomes the basis of our engineering contract. Those items excluded may be included at a later date as directed by Scotia. Such change will be considered a change of scope item. All changes of scope will be evaluated as to additional or removal to scope, schedule and budget. All change of scope items will be approved in writing prior to beginning of scope change work.

Please indicate acceptance of these terms by giving written notice to proceed.

Please call with questions or comments.

Best Regards,

W.J. (Bill) Whitney, Jr., PE.

President

Cc: Michael Drozd  
Pete Marron  
Laurel Hogarth



224436

Book: 550 06/14/2013  
Page: 210 20 of 30

Page 6 of 6



357 West 6160 South • Murray, Utah 84107 • (801) 281-2929 • Fax: (801) 281-8787

December 19, 2011

Scotia International of Nevada  
Warren D. Barber  
President  
740 East 3900 South  
Salt Lake City, Utah 84107-2181

Reference: Gibellini Project, Civil, Structural, Engineering Services Proposal  
Risun Technologies Job Number:  
• Structural SC111111  
• Civil SC111112

Dear Warren,

We are pleased to provide a lump sum proposal for engineering services for the Gibellini Mine Civil, Structural, disciplines as listed below. Our proposal and schedule is based upon the information received in the M drawings found on the FTP site as of 11/24/2011. Our proposal is based upon the following base hourly rates. Overtime if required will be billed at 1.5 x the base hourly rate:

- Senior Engineer \$95.00/hr
- Staff Engineer \$85.00/hr
- Senior Designer \$80.00/hr
- Designer \$65.00/hr
- Clerical \$55.00/hr

The following budgets are based upon straight time rates. If the schedule is compressed, the costs listed below may be increase. That increase may be estimated as/if needed. Our estimated budget and schedule is listed by Discipline then by general project areas. The list of clarifications and exclusions apply generally for all areas unless noted otherwise.

<b>Structural:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Process Area	7	95	80	\$14,550.00
Mine Facility Area	9	116	106	\$18,390.00
Crusher Area	2	40	40	\$6,600.00
Total:	18	251	226	\$39,540.00

<b>Civil:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Process Area	25	370	405	\$63,675.00
Mine Facility Area	25	391	406	\$65,640.00
Crusher Area	0	0	0	\$0.00
Total	50	761	811	\$129,315.00



Specifically we have identified the following design tasks grouped by Discipline:

**Structural/Civil:**

- Develop site design criteria for foundation design
- Develop standard drawings and notes based upon a previous Scotia Project.
- Weekly project meetings. (2 man hours per week bid)
- Create building elevation drawings with specific building design requirements and preliminary column reactions for foundation design.
- Create site pad drawings and foundation drawings indicating plan location, section and details based upon preliminary design loadings. These drawings will indicate information required to remove holds.
- Create calculation package.
  - Structural modeling as needed to determine column reactions
  - Foundation design.
  - Engineering design details.
  - Anchor Bolt design.
- Create Engineering Drawings for review and approval.
- Create "For Construction" level drawings (with Holds).
- Provide professional engineering stamp/seal (with Holds).

**Major Mine Facilities identified in estimate scope of work:**

- Structures
  - Mine Office (To determine foundation loads only)
  - Truck Wash Walkways
  - Mist Barrier Walls
  - Small Jib Crane
  - Truck Shop Building (To determine foundation loads only)
  - Truck Shop Building Crane and Runways (To determine foundation loads only)
  - Truck Shop Mezzanine (To determine foundation loads only)
  - Warehouse Building (To determine foundation loads only)
  - Process Building (To determine foundation loads only)
  - Process office/lab building (To determine foundation loads only)
  - Product storage building (To determine foundation loads only)
  - Electrical building structure (To determine foundation loads only)
- Foundation/ Pads
  - Hazardous storage area pad
  - Tire changing pad
  - Lay-down Area
  - Mine office building slab and foundations
  - Truck wash slab/drain and foundation
  - Truck wash tank foundation
  - Truck wash settling and reclaim area
  - Small truck wash area
  - Truck Shop building and crane foundations
  - Truck shop mezzanine concrete
  - Truck shop slab
  - Truck shop masonry walls
  - Warehouse slab, ramp and foundations



224436

Book: 550 06/14/2013  
Page: 212 22 of 30

Page 2 of 5

- Site bollards
- Process office/lab bldg foundations
- Process building fdns
- Backup generator pad
- Rafinate tank foundation
- Reduction tank foundation
- Product storage building foundations
- Kerosene holding tank foundation
- Ammonia storage tank fdns
- H2SO4 hold tank foundation
- Compressor area slab/foundation
- Process building interior tank foundations (six total)
- Electrical building foundations

Our proposal is clarified by the following:

- We specifically exclude
  - Road design
  - Storm water/site design
  - Fire water piping interior or exterior to buildings
  - Water pipe engineering and design
  - All Conveyor and conveyor support design
  - All Conveyor foundation design
  - Tank general Arrangement for tank design and fabrication
  - Hopper design, checking and drawings
  - Tank design and checking
  - Chute work design
  - Building/Platform and Frame structural engineering, drafting, design and checking.
  - All Pond design
  - Leach fields
  - Sewer and septic tank design
  - Field visit and expense
  - Electrical Discipline
  - Architectural Discipline
    - Building floor plan and elevations.
    - Reflected ceiling plans.
    - Restroom/kitchen/break room elevation/details.
    - Door/window schedules.
    - Interior stair details.
    - Code analysis.
    - HVAC plans, elevation and details for each building.
    - Plumbing plan, section and details inside building foot print.
  - Shop Drawing Review and Approval.
  - As Built Drawings.
  - Interior or Exterior pipe/electrical/cable supports.
  - Value Engineering and Constructability Review.
  - Creating Construction Specifications.
  - Creating Bid Packages.
  - Bid Tabulation and Review.
  - Containment calculation creation, review, stamping.



224436

Book: 550 06/14/2013  
Page: 213 23 of 30



- Permitting activities other than stamped calculations and drawings
- Major Mine Facilities Structural/Civil Engineering Services identified not in scope of work:
  - Solvent extraction/stripper frames
  - Process building mono rail
  - Electrical substation frames
  - Crusher hopper and transfer structure
  - Crusher Area Mechanically Retained wall
  - Apron feed chute
  - Magnet structure
  - Screening/crushing/transfer structure
  - Agglomerator structure
  - Electrical Building Structure
  - Electrical gen. pad
  - Fuel Storage area foundation and curb wall
  - Monorail foundations
  - Substation frame, switch and trans foundation
  - Crusher hopper and transfer structure foundations
  - Magnet structure foundations
  - Screening/crushing/transfer structure foundations
  - Agglomerator structure foundations
  - Crusher Hopper Approach Slab
  - Crusher Mechanically retained wall
  - Acid Containment area curb-wall and fdns
- Tank GA
  - Fuel Storage Tanks
  - Truck Wash water Storage Tanks
  - Process Interior Tank
  - Acid Tanks
- Any item not mention specifically above
- The soil/geotechnical engineering and report is by others
- Site/project layout will be based upon the AMEC drawings received at bid time.
- The project design criteria will be developed from the preliminary design criteria produced by AMEC and located on their website.
- We will certify and professionally stamp civil/structural calculations and drawings that we have provided. The stamping and certification of Civil/Structural, Mechanical, Architectural, Process calculations/drawings created by other is excluded from our scope of work.

#### **Schedule:**

We recommend the following schedule of man power to be included in your overall schedule of the project. We have begun these tasks.

1. Process Area Structural, One Man,	4 weeks	
2. Process Area Civil Engineering, One Man	10 weeks	Predecessor 1
3. Process Area Civil Design, One Man	10 weeks	Predecessor 1
4. Mine Area Structural, One Man	4 weeks	
5. Mine Area Civil Engineering, One Man	10 weeks	Predecessor 4
6. Mine Area Civil Design, One Man	10 weeks	Predecessor 4
7. Crusher Area Civil/Structural, One Man	3 weeks	Predecessor 6



224436

Book: 550 06/14/2013  
Page: 214 24 of 30



All information provided by others is to be provided at the start of the project. This becomes the design basis. Changes to the design basis constitute a change of scope. This proposal becomes the basis of our engineering contract. Those items excluded may be included at a later date as directed by Scotia. Such change will be considered a change of scope item. All changes of scope will be evaluated as to additional or removal to scope, schedule and budget. All change of scope items will be approved in writing prior to beginning of scope change work.

Please indicate acceptance of these terms by giving written notice to proceed.

Please call with questions or comments.

Best Regards,

W.J. (Bill) Whitney, Jr., PE.  
President

Cc: Michael Drozd  
Pete Marron  
Laurel Hogarth



224436

Book: 550 06/14/2013  
Page: 215 25 of 30

Page 5 of 5



357 West 6160 South • Murray, Utah 84107 • (801) 281-2929 • Fax: (801) 281-8787

September 27, 2012

Scotia International of Nevada  
Warren D. Barber  
President  
740 East 3900 South  
Salt Lake City, Utah 84107-2181

Reference: Gibellini Project Addendum, Civil, Structural, Architectural, Electrical Engineering Services Proposal. Risun Technologies Job Number:

- Structural SC111111
- Civil SC111112
- Electrical SC111113
- Architectural SC111114

Dear Warren,

We are pleased to provide a lump sum proposal for engineering services previously excluded from our scope of work for the Gibellini Mine Civil, Structural, Electrical and Architectural disciplines as listed below. Our proposal and schedule is based upon the information received and discussed with Pete Marron and David Halverson.

Our proposal is based upon the following base hourly rates. Overtime if required will be billed at 1.5 x the base hourly rate:

- Senior Engineer \$95.00/hr
- Staff Engineer \$85.00/hr
- Senior Designer \$80.00/hr
- Designer \$65.00/hr
- Clerical \$55.00/hr

The following budgets are based upon straight time rates. If the schedule is compressed, the costs listed below may be increased. That increase may be estimated as/if needed. Our estimated budget and schedule is listed by Discipline then by general project areas. The list of clarifications and exclusions apply generally for all areas unless noted otherwise. Previous exclusions not modified herein remain outside our scope of work.

**Addendum Scope of Work:**

**General: (Applies to all areas and disciplines)**



- Create approximately 110 specifications for items specified in the Specification Production Matrix 20120808 created by Scotia. We will purchase SpecTEXT software and format these specifications as directed by email received on August 20, 2012.
- Professional Engineer Review and Stamping of the architectural drawings, basic engineering structural steel drawings, electrical and concrete drawings applies to drawings created by Risun Technologies.

#### **Structural:**

- Process Area:
  - Create MCC Building general arrangement drawing suitable for pre-engineered metal building vendor bid. This drawing will show the general dimensions for the building, the design criteria and column layout.
  - Design two (2) bridge cranes that will hang from the process building structural steel. These cranes will service the Solvent Extraction tanks and the Stripping/Mixing/Settler tanks area.
  - Check Scotia Provided Solvent Extraction Platform Drawings. Drafting services excluded.
  - Check Stripping/Mixer/Settler Platform Drawings. Drafting services excluded.
- Mine Facilities Area:
  - Truck Shop double girder bridge crane and trolley drafting and design.
  - Bridge crane runway drafting and design
- Crusher Area:
  - Hopper Drafting and Design
  - Grizzly Drafting and Design
  - Agglomerater frame check (No drafting.)
- Administration/Entrance Area:
  - Create Off site pump house Building general arrangement drawing suitable for pre-engineered metal building vendor bid. This drawing will show the general dimensions for the building, the design criteria and column layout.
  - Create guard house building general arrangement drawing suitable for pre-engineered metal building vendor bid. This drawing will show the general dimensions for the building, the design criteria and column layout.

#### **Concrete:**

- Process Area:
  - Provide Foundation drawings for the MCC Building. The drawings include plan section and details.
  - Provide Foundation drawings for three (3) onsite electrical transformers.
  - Provide a containment calculation check of areas where contact water and process water are present. The containment calculations will be done by others.
  - Bridge Crane civil/foundation drawings are excluded from this scope.
- Mine Facilities Area:
  - Fuel Station/Storage Area concrete drafting and design.
  - Provide a containment calculation check of areas where contact water and process water are present. The containment calculations will be done by others.
- Crusher Area:
  - Acid tank area concrete drafting and design.



- Flocculation system foundation design and drafting.
- Mechanically retained wall is outside our scope of work.
- Administration/Entrance Area:
  - Guard shack foundation design and drafting
  - Three (3) off site pump house foundation drafting and design
  - Scale foundation drafting and design

#### **Architectural:**

Architectural drawings will be created for the Truck Shop, Process Building, Process MCC Building, Process Storage Building, Mine Office Building, Warehouse Building and Guard House. These drawings will include, as needed:

- Create building floor plan and elevations.
- Create reflected ceiling plans.
- Create restroom/kitchen/break room elevation/details.
- Create door/window schedules.
- Provide interior stair details (if needed.)
- Provide code analysis.
- Provide HVAC plans, elevation and details for each building.
- Provide plumbing plan, section and details inside building foot print. Sewer/septic tank design is excluded from our scope of work.

#### **Electrical:**

- Provide electrical design for Pump Stations, Fish Creek Pipe Line (Based on Three Pump Stations)
  - Electrical One-Line Diagrams
  - Control Schematics
  - Building Electrical Layout Drawing
  - Distribution Panel Schedules
  - Grounding Layout and Details
- Instrumentation cable and wiring Layout, Routing and Cable Schedules.
- Electrical design, Schematic Diagrams, Motor Control System Connection Diagrams etc. cannot be complete until Risun receives 1) Final Piping and Instrumentation Diagrams, 2) Control Philosophy 3) Material Handling Safety Requirements.

<b>General:</b>	<b>Task</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Create Spec.	1	280	0	\$29,200.00

<b>Structural:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Process Area	5	159	60	\$18,810.00
Mine Facility Area	8	174	120	\$24,660.00
Gate/Offsite Area	4	79	45	\$10,485.00
Crusher Area	5	153	70	\$19,020.00
Total:	22	565	295	\$72,975.00





357 West 6160 South • Murray, Utah 84107 • (801) 281-2929 • Fax: (801) 281-8787

December 19, 2011

Scotia International of Nevada  
Warren D. Barber  
President  
740 East 3900 South  
Salt Lake City, Utah 84107-2181

Reference: Gibellini Project, Electrical Engineering Services Proposal  
Risun Technologies Job Number: 111113

Dear Warren,

We are providing this letter to identify the scope of work and budget for the Electrical Engineering for the Gibellini Project. Our proposal is based upon the following base hourly rates. Overtime if required will be billed at 1.5 x the base hourly rate:

- Senior Engineer \$95.00/hr
- Staff Engineer \$85.00/hr
- Senior Designer \$80.00/hr
- Designer \$65.00/hr
- Clerical \$55.00/hr

### **Electrical Scope of Work**

#### **General Site**

Provide Electrical Power Distribution System design for delivery of power from the Main Substation secondary terminations to the Electrical Rooms located in the following areas:

1. Crusher Area
2. Process Area
3. Mine Facilities Area.

Deliverable Items include calculations and drawings for the main power system duct bank from the substation to the three indicated area as well as to the water tank area. Electrical single line, layouts and lighting layouts for the Main gate and water tanks are included in the area. Arc Flash



224436

Book: 550 06/14/2013  
Page: 205 15 of 30

Page 1 of 6

<b>Civil:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Process Area	4	108	40	\$12,720.00
Mine Facility Area	2	78	30	\$9,270.00
Gate/Offsite Area	5	108	60	\$14,220.00
Crusher Area	3	78	40	\$10,020.00
Total	14	372	170	\$46,230.00

<b>Electrical:</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Pump Stations	15	70	240	\$28,010.00
Instrumentation & Tel/Data System Cable Routing	18	76	256	30,000.00
Total	33	146	496	\$58,010.00

<b>Arch./Mech./Plumb.</b>	<b>Drawings</b>	<b>Eng Hrs</b>	<b>Des Hrs</b>	<b>Estimated Budget</b>
Process Area	52	159	345	\$40,185.00
Mine Facility Area	14	135	283	\$33,375.00
Gate/Offsite Area	40	220	333	\$44,775.00
Crusher Area	0	0	0	\$00,000.00
Total	106	514	961	\$118,335.00

Our proposal is clarified by the following:

- We specifically exclude the following civil/Structural items:
  - Shop Drawing Review, Concrete and Steel.
  - Storm water/site design
  - Sewer/Septic tank Design and Drafting
  - Fire water piping interior or exterior to buildings
  - Water pipe engineering and design
  - All Conveyor and conveyor support design
  - Tank design and checking
  - Chute work design
  - All Pond design
  - Leach fields
  - Mechanically retained wall design and specification
  - Field visit and expense
  - Permitting activities other than stamped calculations and drawings
  - The soil/geotechnical engineering and report is by others
  - Site/project layout will be based upon the drawings that we have received from Scotia.
  - Any item not mention specifically above
- We specifically exclude the following Electrical items:
  - Additional Process Building Electrical is not included in this proposal. Modifications to Electrical One Line Diagrams, additional schematics, layout drawings, schedules etc may be added at a later date when necessary information becomes available.
  - Power and control layout and design for grasshopper conveyors.

