

INITIAL REPORT
ALVIN SNAPER, P.E.

FOR

ROYAL MINES AND MINERALS CORP.

FLY ASH PROJECT

FEBRUARY 3, 2012

ALVIN SNAPER, P.E
PRESIDENT,
NEO-DYNE RESEARCH INC.
1000 West Bonanza Rd.
Las Vegas, NV 89106

To: K. Ian Matheson
President,
Royal Mines and Minerals Corp.
112 - 2580 Anthem Village Drive,
Henderson, NV 89052

Dear Sir:

In accordance with my consulting contract with Royal Mines & Minerals Corp, (RYMM) dated January 25, 2012. I have enclosed my initial report suitable for persons who have not signed a non disclosure agreement.

ASSIGNMENT:

1. To observe and evaluate RYMM's proprietary "Cholla" process to extract gold from modified fly ash and unmodified fly ash at the Phoenix refinery and from modified water and unmodified water.
2. To review and evaluate a previous Report on the "Cholla" process by Domaro Resources, Inc. and Met-Solve Laboratories authored by Andrew Neale, and Ish Grewal dated February 11, 2011.
3. To review and evaluate RYMM's internal report showing results of 40 tests of cake, from the plant filter press, averaging .69 oz/ton Au. To offer advice on how these results might be improved.
4. To review and evaluate an internal RYMM water study of waters from different locations both inside and outside the State of Arizona. To offer advice on why the different waters combined with the "Cholla" chemistry report different gold recoveries.
5. To advise on the scale up of the "Cholla" process from from 5 tons/hr., to 50 tons/hr., to 100 tons/hr.

2 03 12 1 snaper

CONFIDENTIALITY AGREEMENT:

Prior to the start of the field work a Confidentiality Agreement was signed by all participants to the study.

COST OF STUDY:

The cost of this study is to be \$ 10,000. Payable \$ 5,000 in advance of each of two, two week segments, plus expenses. The assignment started Tuesday, January 31, 2012.

PERSONNEL INVOLVED:

All work for this Report was carried out by myself Alvin A. Snaper, P.E.

QUALIFICATIONS OF ALVIN A. SNAPER: (see Appendix "A")

During 40 years of scientific research and development, my interdisciplinary technology activities have resulted in over 600 patents, products, processes and innovations. (see Appendix "B")

I am a registered professional consulting engineer in the State of California. I graduated from McGill University with a bachelor of science degree in 1950.

1. FIELD DUE DILIGENCE:

On Tuesday, January 31, 2012 I personally obtained a 50 lb + sample of fly ash from the Salt River Materials Group depot in Phoenix. This sample was a representative "chain of custody sample" which was considered "modified" for the purpose of testing. It remained under my control. I took the sample to RYMM's Phoenix refinery where, under my supervision, I observed Mr. Robert Gunnison run a "Cholla" test on 4 modified samples each weighing 1/2 lb. Each sample was leached for 90 minutes. The first stage of the leaching process is to create a solid/liquid slurry of the coal fly ash with modified water and certain chemicals as specified by RYMM. After an appropriate conditioning period the slurry is filtered; the filtrate, the liquid fraction, is discarded. The solid residue is subjected to a thioreau leach. The precious metals are dropped from the thioreau solution using the Chiddy assay procedure. A lead sponge is created. The sponge is fire assayed.

At the conclusion of each fire assay I saw a gold prill on top of the cupel. I observed the weighing of the prills and reviewed the calculations converting the weight of the prill to oz/ton Au.

Blanks were run on the chemicals used in leach. I satisfied myself that there was no contamination in the chemistry by the fact the chemistry remained blank in the subsequent assay.

RESULTS:

The results of the above 90 minute "Cholla" leach on the "chain of custody samples" using modified water and modified chemicals are:

	Au/oz/ton
1.	1.244
2.	.617
3.	1.238
4.	2.204

All of the above pretreatments with the RYMM "Cholla" process were done on .5 lbs of fly ash.

2. PREVIOUS STUDY OF RYMM "CHOLLA" PROCESS:

On February 11, 2011 Andrew Neale, Domaro Resources, Inc. and Ish Grewal, Met-Solve Laboratories, Inc. issued a study (see Appendix "C") which included the following conclusion:

"When the fly ash samples were subjected to the proprietary hydrometallurgical chemical treatment furnished by Royal Mines, measurable gold assays were reported in the solid residue (cake) by SGS laboratories, an accredited analytical lab, using conventional fire assay procedures. The Royal Mines treatment appears to make available to the fire assay previously undetectable gold values from the starting solids."

As part of the above assignment this Report is reviewed.

3. WATER TEST:

I observed a water study completed in RYMM's laboratory on February 2, 2012. This study included using 4 modified samples of Phoenix water and 3 unmodified samples of water. This test was done using the above "Cholla" protocol but using two different samples of water. Two samples of ore were used, the "Chain of Custody" modified fly ash sample and a unmodified sample of fly ash. The tests were run for 90 minutes.

The results of this test are:

Modified Water Sample/Modified Ore	oz/ton Au.
1.	1.244
2.	.617
3.	1.231
4.	2.204

Unmodified Water Sample/Modified Ore Sample	oz/ton Au.
1.	nil
2.	nil
3.	nil

In the early morning of February 1, 2012, Rick Barbosa of RYMM, completed similar experiments. I did NOT witness these experiments however the results were given to me on my arrival to the laboratory. The results as reported by Mr. Barbosa to me are:

Modified Water Sample/Unmodified Ore Sample	
1.	.015
2.	.868

Modified Water Sample/Modified Ore Sample	
1.	1.153
2.	2.536

4. SCALE UP:

I have reviewed the proprietary chemistry in the "Cholla" process and the physical requirements of changing nano gold particles into bulk gold. I have reviewed the equipment presently being used in the 1/2 ton per hour plant in Phoenix and Scottsdale. I have found all of the equipment can be scaled up and is readily available.

CONCLUSION OF INITIAL ENGAGEMENT:

1. In order to maximize precious metals recovered from fly ash using the "Cholla" proprietary chemistry the modified fly ash sample, the residence time, equipment and modified water all play significant roles.
2. Based on observations and reviewing RYMM's proprietary process in the laboratory I agree with the conclusion of the Damon Resources - Met-Solve report dated February 11, 2011 which stated,

"When the fly ash samples were subjected to the proprietary process hydrometallurgical chemical treatment furnished by Royal Mines, measurable gold assays were reported in the solid residue (cake) by SGS laboratories, an accredited analytical lab, using conventional fire assay procedures. The RYMM treatment appears to make available to the fire assay previously undetectable gold values from the starting solids."
3. Based on my observations of test procedures used while I was in the laboratory RYMM's reported results of 40 tests of cake showing gold values averaging .69 oz/ton Au appear to be credible. (see Appendix "D") After reviewing the protocols used for the 40 tests in my opinion these values may be increased by using modified water and modified fly ash.
4. Based on my observations it appears that to maximumize results with the "Cholla" process it may be important to use modified water and modified fly ash.
5. The scaling up of the "Cholla" process does not require any equipment which is not readily available. Based on my examination of the chemistry involved the scaling up of the "Cholla" chemistry should not be a problem.

OPINION:

In my professional opinion RYMM's "Cholla" process is effective in removing previously undetected gold from fly ash. Based on my experience in similar circumstances this process should not be difficult to scale from bench testing to existing 1,000 lb per hour facilities in Phoenix and Scottsdale. Further scale ups should not be a problem.

RYMM presently enjoys a market advantage as they can determine which ash contains extractable gold from previously undetected sources and which ash does not. There are presently more than 600 fly ash producing plants in the United States. There are over 2,000 such plants in China increasing at approximately one per week.

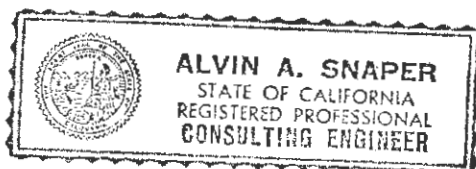
There are a number of advantages for producing gold from this recently discovered source:

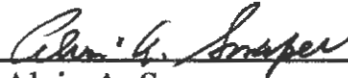
1. Minimum investment capital - mining has already taken place.
2. Availability of product - Ash is available world wide and 80% of it is presently disposed of in land fills.
3. The production process is environmentally "green".
4. A minimum number of new permits are required. The mining permits have already been obtained by the coal miners and generating plants.
5. The extractable gold from fly ash tested in the recent Phoenix experiments appears to be much higher than gold presently being mined from existing gold deposits.

The "Cholla" process may be a paradigm shift in how gold will be produced in the future.

In completing my due diligence at RYMM's facility and preparing this report I have been mindful of the implications of this report and how it may impact the world gold mining industry in the future.

My next assignment is to assist in the scale up of bench of the tests to the existing production facility. A separate report will be issued at that time.




Alvin A. Snaper

APPENDIX A

ALVIN A. SNAPER BACKGROUND

Alvin A. Snaper has been Vice President of Power Technology Inc. since 1996. Mr. Snaper has been the Head of Propless Wind Power Generator of First National Energy Corp. (formerly Capstone International Corp., First National Power Corp.) since December 2003 and serves as the Chairman of Technology Advisory Board. Mr. Snaper has been a Treasurer of FluidicMicrowave Systems, Inc. a Nevada corporation since January 2000. Mr. Snaper has been Vice President of Inventrex Corp. since 1985. Mr. Snaper has joined Capstone International Corp. for developing Proprietary Propless Wind Power Generator in December 2003. Mr. Snaper was the Founder of Advanced Patent Technology, Inc., a public company now known as Balley Technologies, and was its Vice President and Director of Research and Development from 1968 to 1980. He served as Vice President of Development, Treasurer and Secretary of Power Technology Inc. since March 1998. From 1979 to 1983, he served as a Director of American Methyl and Homogenized Fuels Corporation. From 1952 to 1955, he was the Chief Chemist for McGraw Colorgraph Company, a division of the Camation Company. From 1949 to 1951, he was employed by the Bakelite Division of Union Carbide, where he assisted in its development of the pilot plant for plastics manufacture. Mr. Snaper has been a Director of Fluidic/Microwave Systems, Inc., a Nevada corporation since January 2000. Mr. Snaper serves as a Member of Board of Advisors of AmeriChip International Inc. He has been a Director of PowerTek Technologies Corporation, Inc. since 1996. He served as a Director of Power Technology Inc. since March 1998.

APPENDIX "B"

PARTIAL LISTING OF PATENTS, PATENTS PENDING DISCLOSURE AND INVENTIONS IN PROCESS BY ALVIN A. SNAPER

1. ELECTRICAL SWITCH,
U.S. Pat. # 3,223,800
2. ULTRASONIC PROCESS DEGASSER,
U.S. Pat. # 3,266,631
3. ELECTRO-OPTICAL COMPUTER AND DATA
PROCESSING,
U.S. Pat. #3,348,217
4. SOLID STATE SPRAY ATOMIZATION SYSTEM,
U.S. Pat. #3,253,122
5. ULTRASONIC PULVERIZER,
U.S. Pat. # 3,223,337
6. ULTRASONIC MOTOR,
U.S. Pat. # 3,343,010
7. COAXIAL NEGATIVE/POSITIVE PHOTOGRAPHIC FILM,
U.S. Pat. # 3,376,135
8. ELECTROLYTIC IMAGE TRANSFORMER,
U.S. Pat. # 3,439,174
9. COLOR DISPLAY SYSTEM,
U.S. Pat # 3,488,105
10. COLOR PRODUCING SYSTEM,
U.S. Pat. # 3,391,296

11. LENS MAGNIFIER APPARATUS/OPTICAL CRT MONITOR,
U.S. Pat. # 3,366,736
12. FILM PRINTING GATE WITH FLUIDIC CONTROL,
U.S.Pat. # 3,574,460.
13. FIBER OPTIC/FERROELECTRIC MEMORY CORE,
U.S. Pat. # 3,445,656
14. VACUUM ARC DEPOSITION PROCESS,
U.S. Pat. # 3625,848
15. FLUIDIC COOLING MEANS,
U.S. Pat. # 3,628,601
16. TUNEABLE LAMP REFLECTOR AND HOUSING,
U.S. Pat. # 3,628,852
17. MAGNETICALLY SEQUENCED ELECTRICAL SWITCH,
Australian Pat. # 285,605
18. ELECTRO-OPTICAL COMPUTER SYSTEM,
French Pat. # 8,918,744
19. WATER EXTENDED POLYESTER RESIN,
Israeli Pat. # 37288
20. SEQUENTIAL ELECTRICAL SWITCH,
Japanese Pat. # 45-7085
21. WATER EXTENSION OF POLYESTER RESINS,
South Africa Pat. # 71/1137
22. CATHODIC ARC DEPOSITION METHOD AND APPARAT.
Great Britain Pat. # 1,263,830

23. RANDOM ACCESS PLANAR MEMORY,
U.S. Pat. # 3,675,220
24. METHOD AND APPARATUS FOR IMAGE FORMATION
AND TRANSFER,
25. ULTRASONIC TRANSFORMER,
26. SOLID STATE VOLTAGE CONTROL AND FREQUENCY
MODULATOR,
27. ULTRA SONIC LIGHT VALVE
28. VARIABLE FREQUENCY PIEZOELECTRIC
TRANSDUCER,
29. ELECTROLUMINESCENT EXPOSURE DEVICE,
30. ARC DEPOSITION METHOD AND APPARATUS,
31. FLUIDIC CONTROL SYSTEM,
32. PHOTOCROMIC COMPUTATION SYSTEM
33. ULTRASONIC ELECTROPLATING MEANS,
34. SOLID STATE HUMIDITY SENSOR,
35. SOLID STATE KEYBOARD FOR DATA PROCESSING
TERMINALS,
36. FOUR DIMENSIONAL FLUIDIC DEVICES,
37. AUTOMATED ULTRASONIC DRY CLEANING MACHINE
AND CONCEPT,

38. ELECTRICALLY OPERATED AUTOMATIC PIPE CLEANER,
39. FLUIDIC HEATING/COOLING DEVICE FOR MOBILE APPLICATIONS,
40. AUTO-IGNITING WELDING TORCH,
41. ULTRASONIC WELDING METHOD FOR ORDANCE DEVICES,
42. AUTOMATED ph MONITORING SYSTEM,
43. FLUIDIC CHECK VALVE,
44. VORTEX AMPLIFICATION BY FLUIDIC MEANS,
45. PIEZOELECTRIC IGNITION SYSTEM,
46. RADAR DISPLAY COLOR CONVERSION SYSTEM BY OPTICAL MEANS,
47. CHEMOTHERAPY MEANS FOR GALL BLADDER 'PATHOLOGY,
48. ULTRASONIC MEAT TENDERIZER AND APPARATUS,
49. RENAL DIALYSIS APPARATUS FOR PORTABLE USE,
50. QUASI-THREE DIMENSIONAL OPTICAL DISPLAY APPARATUS,

ETC. This is a partial list. If anyone would like the complete list this can be provided.

APPENDIX "C"

**RESULTS OF TESTING PROPRIETARY GOLD
RECOVERY PROCESS**

DOMARO RESOURCES INC.

MET-SOLVE LABORATORIES INC.

To: Ian Matheson, Royal Mines & Minerals

From: Andrew Neale, Domaro Resources, Inc.
Ish Grewal, Met-Solve Laboratories, Inc.

Date: February 11th, 2011

Re: Results from Testing the Royal Mines Proprietary Gold Recovery Process

Assignment: To evaluate a proprietary process supplied by Royal Mines to recover gold from materials not previously thought to contain significant levels of measurable gold.

Confidentiality Agreement: Prior to the start of the test work a confidentiality agreement was signed by all participants in the study. The results of the test work are reported to Royal Mines as per the guidelines of the confidentiality agreement.

Cost of Study: The test work completed at the Met-Solve laboratory was estimated to cost CDN\$10,000 plus the cost of reagents, materials and analytical services.

Personnel Involved: The work was completed with input from, and under the supervision of Andrew Neale and Ish Grewal.

Andrew Neale is a mining industry executive with over 20 years experience in all facets of production, including operations, engineering management, environmental management and government relations. He was previously Vice President - Technical-Services for Freeport McMoRan Copper and Gold in both Indonesia and New Orleans. Andrew has a BSc and MSc in Mineral Processing Engineering from the University of Alberta, and is a registered professional engineer in the province of British Columbia.

Ish has over 19 years experience in the field of extractive metallurgy, mineral processing and research and development. He obtained his BAsC and MASc degrees in Metals and Materials Engineering from The University of British Columbia, and is a registered professional engineer in the province of British Columbia.

Both Andrew Neale and Ish Grewal are independent consultants to Royal Mines, hold no formal position with Royal Mines, and have no financial interests in the outcome of these studies except in regards to the cash compensation they will receive for completing this work. There are no circumstances that could, in the opinion of a reasonable person aware of all relevant facts, interfere with the judgment of either individual regarding the preparation of this memo.

Study: A sample of commercial coal fly ash was purchased by Met-Solve Laboratories from Border Construction Specialties of Phoenix, Arizona and delivered by commercial carrier directly to the Met-Solve laboratory in Burnaby, British Columbia. This product from Border Construction is sourced from Salt River Materials Group of Scottsdale, Arizona and is the same product that has been tested extensively at the Royal Mines and Minerals facilities in Phoenix, Arizona.

Domaro Resources Inc.
4390 Salish Drive, Vancouver, BC, V6N 3M7
Ph: 604-961-6383
E-mail: aneale@yahoo.com

Results of Testing Proprietary Gold Recovery Process

A representative sample of the delivered material was submitted for conventional fire assay for gold content at an accredited analytical lab in Vancouver owned and operated by SGS, one of the world's leading inspection, verification, certification and testing companies.

The feed sample assay as reported by SGS was 0.01 grams per metric ton (gpt) - equivalent to 0.01 parts per million.

Initial Test Work: Two series of test were completed on the coal fly ash as per procedures provided by Royal Mines. A technical representative of Royal Mines spent time in the Met-Solve lab supervising the first series of tests to ensure the appropriate protocols were followed.

The first stage of the process is to create a solid/liquid slurry of the coal fly ash with water and certain chemicals as specified by Royal Mines. After an appropriate conditioning period the slurry is filtered; the filtrate (the liquid fraction) is subject to subsequent processing, the solid residue is not subject to any subsequent processing.

Samples of this solid residue from four separate tests in the first series of tests were submitted to the SGS analytical lab, and returned gold assays of:

0.02 gpt, 0.02 gpt, 0.05 gpt and 0.08 gpt respectively.

These values are significantly higher than those recorded in the original feed sample of 0.01 gpt.

Follow-Up Test Work: A second series of tests were run using identical protocols, but on a larger scale – i.e. 300 grams/test in the first series, 1,200 grams/test in the second series.

Filter Cake Results: Samples of the solid residue (cake) from four separate tests in the second series of tests were submitted in duplicate (i.e. Cut 1 & Cut 2 for the solid residue from each test) to the same analytical lab, and returned gold assays as summarized in the following table.

Sample Name	Sample Description	F.A. Au g/t	F.A. Au oz/ton
84755	Stage 1 cake cut 1	33.60	0.980
84756	Stage 1 cake cut 2	5.24	0.153
84757	Stage 2 cake cut 1	3.33	0.097
84758	Stage 2 cake cut 2	1.48	0.043
84759	Stage 3 cake cut 1	0.81	0.024
84760	Stage 3 cake cut 2	0.53	0.015
84761	Stage 4 cake cut 1	0.42	0.012
84762	Stage 4 cake cut 2	0.98	0.029
84755	Stage 1; cut 1 (dup)	33.44	0.975

Results of Testing Proprietary Gold Recovery Process

The assayed values in these residues are significantly higher than the reported feed grade, with all assays being completed using conventional fire assay techniques. Similarly, they are significantly higher than the reported results from the test of the first series.

Filtrate Results: The filtrates from all tests were subject to the test procedures as outlined by Royal Mines. All tests resulted in no net recovery of gold.

Samples of the filtrate were submitted to the same analytical lab for gold analysis using conventional Atomic Absorption techniques. None of the filtrates showed any significant gold content, using conventional analytical techniques.

Conclusion: When the fly ash samples were subjected to the proprietary hydrometallurgical chemical treatment furnished by Royal Mines, measurable gold assays were reported in the solid residue (cake) by SGS laboratories, an accredited analytical lab, using conventional fire assay procedures. The Royal Mines treatment appears to make available to the fire assay previously undetectable gold values from the starting solids.

Yours Sincerely,

Handwritten signature of Andrew Neale, consisting of a stylized 'A' followed by the word 'for'.

Andrew Neale, P.Eng.
Domaro Resources, Inc.

Handwritten signature of Ish Grewal, consisting of a stylized 'I' followed by 'Grewal'.

Ish Grewal, P.Eng.
Met-Solve Laboratories Inc.

APPENDIX "D"

ROYAL MINES AND MINERALS CORP.
FLY ASH TESTING
HEAD ORE
RESULTS AFTER PRETREATMENT - PHOENIX PLANT

	DATE	2011 OZ/TON AU	TOTAL 5 SAMPLES	AVG 5 SAMPLES
1.	3/7	.723		
2.	3/7	.385		
3.	3/7	tr		
4.	3/8	.172		
5.	3/11	.092	1.372	.249
6.	3/17	1.009		
7.	3/17	.998		
8.	3/17	1.055		
9.	3/21	1.050		
10.	3/24	1.050	5.162	1.032
11.	4/5	.579		
12.	4/12	.875		
13.	4/13	.992		
14.	4/27	.175		
15.	5/4	.045	2.666	.533
16.	5/5	.075		
17.	5/5	.993		
18.	5/17	.192		
19.	6/10	.556		
20.	6/10	.557	2.373	.475

21.	6/10		1.111		
22.	6/16		1.351		
23.	9/2		.570		
24.	9/7		.653		
25.	11/7		.469	4.154	.831
26.	11/8		.755		
27.	11/8		.651		
28.	11/8		.359		
29.	11/9		nil		
30.	11/9		.875	2.640	.528
31.	11/9		nil		
32.	11/11		.661		
33.	11/14		.399		
34.	11/15		.644		
35.	12/16		.375		
	dup	1.018	.696	2.400	.480
36.	12/20		.057		
	dup		.381		.219
37.	12/22		2.056		
	dup		.911	1.483	
38.	12/23		.740		
	dup		.699	.719	
39.	12/28		.943		
	dup		.447	.695	
40.	12/29		.161		
	dup	.504	.332	3.448	.689
TOTAL			24.215/40	24.215	.605 AVG/OZ/TON

The average value of 40 Fly Ash bulk samples treated by the Cholla process is:

.605 oz/ton AU