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June 15, 2016

Mr. Daniel Major, CEO
and Directors
GoviEx Uranium Inc.
999 Canada Place, Suite 654
Vancouver, British Columbia
V6C 3E1

Dear Sir:

Re: Technical Report on the Falea Project, Mali

Roscoe Postle Associates Inc. (RPA) prepared the attached Technical Report on the Falea Uranium, Silver and Copper Deposit, Mali, West Africa for Denison Mines Corp. (Denison) dated October 26, 2015.

RPA understands that on June 13, 2016, GoviEx Uranium Inc. acquired Denison's wholly-owned subsidiary, Rockgate Capital Corp., which holds all of Denison's African-based uranium projects, including the Falea Project in Mali.

Sincerely,

(Signed) "*Deborah A. McCombe*"

Deborah A. McCombe, P.Geo.
President and CEO
On behalf of Roscoe Postle Associates Inc.

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DENISON MINES CORP.

TECHNICAL REPORT ON THE FALEA URANIUM, SILVER AND COPPER DEPOSIT, MALI, WEST AFRICA

NI 43-101 Report

Qualified Person:
Mark B. Mathisen, C.P.G.

October 26, 2015

Report Control Form

Document Title	Technical Report on the Falea Uranium, Silver and Copper Deposit, Mali, West Africa		
Client Name & Address	Denison Mines Corp. 595 Bay Street, Suite 402 Toronto, ON, Canada, M5G 2C2		
Document Reference	Project #2465	Status & Issue No.	FINAL Version
Issue Date	October 26, 2015		
Lead Author	Mark B. Mathisen	(Signed)	
Peer Reviewer	William E. Roscoe David Ross	(Signed)	
Project Manager Approval	David Ross	(Signed)	
Project Director Approval	William E. Roscoe	(Signed)	
Report Distribution	Name	No. of Copies	
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1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by Denison Mines Corp. (Denison) to prepare an updated Technical Report on the Falea uranium, silver, and copper deposit (the Project or the Property) in Mali, West Africa. The purpose of this report is to support the disclosure of an updated Mineral Resource estimate for the Falea Project. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. RPA visited the Property on April 28, 2015.

The Property is located in Mali, West Africa in the Prefecture of Kenieba, District of Kayes. The Property is approximately 350 km west of Bamako, the capital of Mali, and approximately 240 km south of the city of Kayes. The nearest town is Kenieba, which is an 80 km drive north from the Property. The Project is located approximately 80 km to the east of AREVA's Saraya East uranium deposit in Senegal and approximately 13 km along trend from Merrex Gold Inc.'s Siribaya gold deposit.

Denison acquired the Property from Rockgate Capital Corp. (Rockgate) in January 2014. The Property covers an area of 225 km^2, with a core area of approximately 75 km^2, situated on a plateau.

RPA estimated Mineral Resources for the Falea deposit using drill hole data available as of August 5, 2014 (Table 1-1). There has been no drilling on the Property until the effective date of the current Mineral Resource of October 26, 2015. No Mineral Reserves have been estimated at the Project. Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves adopted on May 10, 2014 (CIM definitions) were followed for the Mineral Resource estimate.

TABLE 1-1 MINERAL RESOURCE ESTIMATE – OCTOBER 26, 2015
Denison Mines Corp. – Falea Project

Category	Tonnes (Mt)	U_3O_8 (%)	Cu (%)	Ag (g/t)	U_3O_8 (Mlb)	Cu (Mlb)	Ag (Moz)
Indicated	6.88	0.115	0.161	72.8	17.4	24.4	16.11
Inferred	8.78	0.069	0.200	17.3	13.4	38.7	4.90

Notes:
1. CIM definitions were followed for classification of Mineral Resources.
2. Reported above a cut-off grade of 0.03% U_3O_8, based on a uranium price of US$75/lb.
3. Bulk density is 2.65 t/m^3.
4. Numbers may not add due to rounding.

RPA is not aware of any known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political, or other relevant factors that could materially affect the current Mineral Resource estimate.

CONCLUSIONS

Drilling at the Project from 2007 to 2013 has expanded and delineated the Falea uranium, silver, and copper deposit at the intersection of the Kania sandstone and basal unconformity with a regional fault zone (Road Fault). The Falea deposit is interpreted as an unconformity associated uranium deposit.

The Falea deposit consists of four separate zones known as Bodi, Central, North, and East located approximately 200 m below surface. The Bodi, Central, and North zones occur along a three kilometre long, north-south trending mineralized corridor. The East Zone is located approximately four kilometres to the east of the Central and North zones.

RPA has updated the Mineral Resource estimate for Falea based on 945 diamond drill holes totalling 232,034 m. As of October 26, 2015, RPA estimates an Indicated Mineral Resource of 6.88 million tonnes at 0.115% U_3O_8, 0.161% Cu, and 73 g/t Ag and an Inferred Mineral Resource of 8.78 million tonnes at 0.07% U_3O_8, 0.200% Cu, and 17 g/t Ag using a cut-off grade of 0.03% U_3O_8. These estimates are based on capped uranium, silver, and copper assays.

RECOMMENDATIONS

Denison has budgeted approximately US$338,000 for exploration in 2016 with the aim of increasing the known Mineral Resources at the Falea Project. The proposed work will be focused on the Falea Permit, Bala Permit, and the south of the Madini Permit.

Exploration will include soil sampling and radon surveying, prospecting and mapping, and RC drilling. Drilling will be contingent on results of mapping and soil and radon surveying.

Table 1-2 shows the exploration program and budget proposed by Denison for 2016. RPA concurs with this budget.

TABLE 1-2 2016 EXPLORATION PROGRAM AND BUDGET
Denison Mines Corp. – Falea Project

Proposed Work	Total US$
Soil Geochemical and Radon Sampling	177,700
RC Drilling (2,000 m)	150,217
Community Development	10,000
Total	**337,917**

RPA's recommendations for further drilling at the Property, not included in the 2016 budget, are as follows:

- Drilling on a 25 m by 25 m grid within the Indicated Mineral Resource area of the North Upper and Deep zones to further increase confidence in grade continuity. Drilling should be focused along a profile at 1,360,250N where there is a limited amount of drilling and along the footwall side of the Road Fault in the North Deep Indicated Resource area.

- Drilling on a 50 m by 50 m grid within the Inferred Mineral Resource area of the North Upper and Deep zones to increase confidence in grade continuity.

- Depending on topographic limitations, further infill and exploration drilling within and surrounding the Bodi, North, and Central zones to delineate extensions and establish continuity of the mineralization. A particular focus should be to step out from the Road Fault both to the east and west.

- Further drilling of the East Zone to collect additional geological information as to the extent and continuity of the mineralization.

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

The Property is located in Mali, West Africa. Mali is a landlocked country and borders with Senegal in the west and Guinea in the south. The Falea Property encompasses the village of Falea, which is located in the Prefecture of Kenieba, District of Kayes. The Property is approximately 350 km west of Bamako, the capital of Mali, and approximately 240 km south of the city of Kayes. The nearest town is Kenieba, which is an 80 km drive north from the Property. The Project is located approximately 80 km to the east of AREVA's Saraya East uranium deposit in Senegal and approximately 13 km along trend from Merrex Gold Inc.'s Siribaya gold deposit.

LAND TENURE

The Property comprises three contiguous exploration permits, namely the Falea, Bala, and Madini Permits. The Mineral Resources occurring within the Bodi, Central, North, and East Zones are wholly contained within the Falea Permit. The centre point coordinates of the Falea Permit are 11º17'00"W, 12º17'7.5"N. The total surface area of the Falea Permit in terms of the Exploration Rights is approximately 7,500 ha. The Madini Permit adjoining to the east covers an area of 6,700 ha and the Bala Permit adjoining to the south covers an area of 12,500 ha.

The exploration permits are held under the name of Delta Exploration Mali SARL, a limited liability company, which is a wholly owned subsidiary of Rockgate, which in turn is wholly owned by Denison.

EXISTING INFRASTRUCTURE

The Property has had no significant infrastructure development other than the exploration camp which comprises approximately 20 sleeping huts and several shipping containers converted to bunkhouses accommodating up to 70 people. The camp has its own well and running water, two kitchens, an office and a core logging and storage enclosure. The power is supplied by on-site generators and the fuel needs are met by thirty fuel tanks with a total capacity of 300,000 L of diesel. A light aircraft landing strip is located on the Property.

All supplies are flown or trucked in from surrounding communities. Most of the supplies are shipped in from Bamako due to the greater selection and availability of items. The village of Falea is a good resource for labourers and some fresh food. The nearest town is Kenieba, an 80 km drive north. During the rainy season, road access is limited due to the flooding of the local rivers between Falea and Kenieba.

HISTORY

The Falea area was explored by COGEMA (now AREVA) in the late 1970s and early 1980s. COGEMA conducted an extensive exploration program consisting of 86 widely spaced diamond drill holes to evaluate the prospectivity of a 100 km^2 portion of the Falea basin. Uranium and copper mineralization were found to occur in the lower portion of the basin, identified as the Kania sequence of interbedded conglomerates, sandstones, and black sulphide and stromatolite-rich argillites. Downhole radiometric surveys from COGEMA's diamond drilling program confirmed that all radiometric anomalies occur within the Kania sequence. All subsequent drilling has targeted the Kania Formation.

In 2006, Delta Exploration Inc. (Delta) entered into an agreement with the Government of Mali to explore the Falea Property. Rockgate signed an option agreement with Delta on November 28, 2006. Diamond core drilling started on March 17, 2007 on the Project and, by July 2007, a joint venture came into effect with Rockgate assuming operator status on the Falea Property.

On November 7, 2008, Rockgate signed a letter agreeing to acquire all issued and outstanding shares of Delta and, on February 3, 2009, Delta was de-listed from the TSX Venture Exchange and Rockgate retained its operator status of the property.

In November 2013, Denison acquired control of Rockgate and its mineral property interests in five projects, with the Falea Project being the most significant. On January 15, 2014, Denison completed the acquisition of 100% of Rockgate.

GEOLOGY AND MINERALIZATION

Mineralization at the Property is hosted in the Neoproterozoic to Carboniferous sedimentary sequence of the Taoudeni Basin, a shallow interior sag basin with flat to very shallow dips. The Taoudeni Basin is located over a large portion of the West African Craton between the

Reguibal Shield to the north and the Leo Shield to the south and encircles the Pan-African Belts to the west and east. The Taoudeni Basin is underlain by the Birimian greenstones which have been intruded by uranium-bearing Saraya granites.

The deposition of the Taoudeni Basin sedimentary sequence within the Project area was largely controlled by north-south and east-southeast trending structures. The orientation of the structural trends is coincident with the structural orientations within the Birimian greenstones. A dolerite sill ranging in thickness from a few metres to more than 160 m is present throughout most of the basin, intruding 65 m to 120 m above the Kania sandstone and forming prominent cliffs in the area.

Most of the mineralization at Falea occurs in the flat lying Kania sandstone, which is underlain and overlain by argillaceous units. The Kania sandstone is located near the bottom of the Taoudeni Basin sequence. The mineralization is interpreted as an unconformity type uranium deposit, since it is associated with the unconformity between the Kania sandstone and the underlying Birimian greenstones.

Four main mineralized areas have been identified, the North Zone, the Central Zone, the East Zone, and the Bodi Zone. The North, Central, and Bodi zones are further subdivided into the North Upper and North Deep, the Central Upper and Central Deep, and the Bodi Upper and Bodi Deep areas. The subdivisions of the Upper and Deep areas are based on their positions relative to the cross-cutting Road Fault.

Some of the highest grade uranium mineralization occurs in the Plateau Edge Structure (PES), a northwest trending zone of higher grade uranium-silver-copper mineralization which extends from the southeastern flank of the North Upper Zone, past the Road Fault, to the plateau edge and then parallel to it. Higher grade silver mineralization seems to be related to areas where northeast trending structures intersect the PES.

EXPLORATION STATUS

A versatile time-domain electromagnetic (VTEM) survey including magnetic and radiometrics was completed in March 2015. A small ground follow-up program was completed in June 2015, including soil sampling and radiometric prospecting. No additional exploration activities are planned or scheduled for 2015. Additional exploration drilling is being considered for 2016.

MINERAL RESOURCES

The current Mineral Resource estimate as of October 26, 2015 is summarized in Table 1-1.

RPA developed three-dimensional (3D) wireframe models for each of the mineralized units using Leapfrog Software. The wireframes were constrained for the Bodi, Central, and North zones according to RPA's interpretation of the Road Fault as constructed using 3D point data supplied by Denison personnel. RPA plotted U_3O_8 grade times thickness (GT) for each drill hole in plan and contoured them. The 0.01 m-% contour was used as the outer boundary of the all of the mineralized domains to constrain grade interpolation.

Three dimensional block models were constructed using Vulcan version 8.1.4 Mine Modelling Software. The variables uranium grade (% U), uranium oxide (% U_3O_8), copper grade (% Cu), and silver grade (g/t Ag) were interpolated into blocks using an inverse distance squared (ID^2) algorithm for each mineralized domain. Bulk density varied little between the lithological units with an average value of 2.65 g/cm^3 used to convert volume to tonnage for all mineralized zones and mineralization types.

2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by Denison Mines Corp. (Denison) to prepare a Technical Report on the Falea uranium, silver, and copper deposit, located in Mali, West Africa. The purpose of this report is to support the disclosure of an updated Mineral Resource estimate for the Falea Property. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Denison is a Toronto-based mining company focused on uranium exploration and development in Canada, Mongolia, Mali, Namibia, and Zambia. In Saskatchewan, Canada, Denison owns a 60% interest in the Wheeler Project, which includes the high grade Phoenix deposits; a 22.5% ownership interest in the McClean Lake joint venture, which includes several uranium deposits and the McClean Lake uranium mill, one of the world's largest uranium processing facilities; a 25.17% interest in the Midwest deposit; and a 60% interest in the J-Zone deposit on the Waterbury Lake property. Internationally, Denison owns 100% of the conventional heap leach Mutanga Project in Zambia, an approximate 80% interest in the Dome Project in Namibia, and an 85% interest in the in-situ recovery projects held by the Gurvan Saihan Joint Venture in Mongolia. Denison is listed on the Toronto Stock Exchange (symbol DML) and on the New York Stock Exchange MKT (symbol DNN).

SOURCES OF INFORMATION

This report was prepared by Mark Mathisen, C.P.G., Senior Geologist, RPA. Mr. Mathisen visited the Falea Property on April 28, 2015. Mr. Mathisen visited historic drill sites, camp facilities, reviewed logging and sampling methods, and examined core from several drill holes.

RPA has had discussions with the following Denison personnel:

- Steve Blower, P. Geo Vice President of Exploration, Denison Mines Corp.
- Dale Verran, Technical Director, Denison Mines Corp.
- Sangare Issoumaila, Senior Geologist, Delta Exploration Mali SARL
- Albert Belhomme, Administration, Delta Exploration Mali SARL

All geological and sampling data were provided by Denison. Drilling and geological data were generated during the period May 2007 to March 2014. All field activities are currently managed by Denison.

Specific activities completed by RPA were:

- Site visit and validation of data available for the resource estimate.
- Geological interpretation of mineralized zones.
- Audit of drill hole database and assay certificates.
- Mineral Resource estimation and classification.
- Verification of Mineral Resource estimate.

Mr. Mathisen prepared all sections of this report and is the Qualified Person (QP) for this report. William E. Roscoe, Ph.D., P.Eng., RPA Principal Geologist, and David A. Ross, M.Sc., P.Geo., RPA Principal Geologist, assisted in the review of the Denison database and resource estimate.

The documentation reviewed, and other sources of information, are listed at the end of this report in Section 27 References.

LIST OF ABBREVIATIONS

Units of measurement used in this report conform to the metric system. All currency in this report is United States dollars (US$) unless otherwise noted.

a	annum
A	ampere
bbl	barrels
btu	British thermal units
°C	degree Celsius
C$	Canadian dollars
cal	calorie
cfm	cubic feet per minute
cm	centimetre
cm^2	square centimetre
cpm	counts per minute
cps	counts per second
dia	diameter
dmt	dry metric tonne
dwt	dead-weight ton
°F	degree Fahrenheit
FCFA	West African CFA franc
ft	foot
ft^2	square foot
ft^3	cubic foot
ft/s	foot per second
g	gram
G	giga (billion)
Gal	Imperial gallon
g/L	gram per litre
Gpm	Imperial gallons per minute
g/t	gram per tonne
gr/ft^3	grain per cubic foot
gr/m^3	grain per cubic metre
ha	hectare
hp	horsepower
hr	hour
Hz	hertz
in.	inch
in^2	square inch
J	joule
k	kilo (thousand)
kcal	kilocalorie
kg	kilogram
km	kilometre
km^2	square kilometre
km/h	kilometre per hour
kPa	kilopascal
kVA	kilovolt-amperes
kW	kilowatt
kWh	kilowatt-hour
L	litre
lb	pound
L/s	litres per second
m	metre
M	mega (million); molar
m^2	square metre
m^3	cubic metre
µ	micron
MASL	metres above sea level
µg	microgram
m^3/h	cubic metres per hour
mi	mile
min	minute
µm	micrometre
mm	millimetre
mph	miles per hour
mV	millivolts
MVA	megavolt-amperes
MW	megawatt
MWh	megawatt-hour
oz	Troy ounce (31.1035g)
oz/st, opt	ounce per short ton
pCi	picocuries
ppb	part per billion
ppm	part per million
psia	pound per square inch absolute
psig	pound per square inch gauge
RL	relative elevation
s	second
st	short ton
stpa	short ton per year
stpd	short ton per day
t	metric tonne
tpa	metric tonne per year
tpd	metric tonne per day
US$	United States dollar
USg	United States gallon
USgpm	US gallon per minute
V	volt
W	watt
wmt	wet metric tonne
wt%	weight percent
yd^3	cubic yard
yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by RPA for Denison. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to RPA at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Denison Mines Corp. and other third party sources.

For the purpose of this report, RPA has relied on ownership information provided by Denison. RPA has not researched property title or mineral rights for the Falea Project and expresses no opinion as to the ownership status of the property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

4 PROPERTY DESCRIPTION AND LOCATION

The Property is located in Mali, West Africa. Mali is a landlocked country and borders with Senegal in the west and Guinea in the south. The village of Falea, in the Prefecture of Kenieba, District of Kayes, is located within the property boundaries. The Property is approximately 350 km west of Bamako, the capital of Mali, and approximately 240 km south of the city of Kayes. Kenieba, which is an 80 km drive north from the Property, is the nearest town. The Project is located approximately 80 km to the east of AREVA's Saraya East uranium deposit in Senegal and approximately 13 km along trend from Merrex Gold Inc.'s Siribaya gold deposit (Figure 4-1). The Property comprises three contiguous exploration permits, namely the Falea, Bala, and Madini Permits.

LAND TENURE

The centre point coordinates of the Falea Permit are 11º17'00"W, 12º17'7.5"N. It covers an area of 7,500 ha defined by the coordinates of the four corners as follows:

- POINT A: Intersection between the Parallel 12°20'00"N and the Meridian 11°20'00"W from A to B following the Parallel 12°20'00"N;
- POINT B: Intersection between the Parallel 12°20'00"N and the Meridian 11°14'00"W from B to C following the Parallel 11°14'00"W;
- POINT C: Intersection between the Parallel 12°16'15"N and the Meridian 11°14'00"W from C to D following the Parallel 12°16'15"N; and
- POINT D: Intersection between the Parallel 12°16'15"N and the Meridian 11°20'00"W from D to A following the Parallel 11°20'00"N.

The Madini Permit adjoining to the east covers an area of 6,700 ha and the Bala Permit adjoining to the south covers an area of 12,500 ha. The Property outline is shown in Figure 4-2.

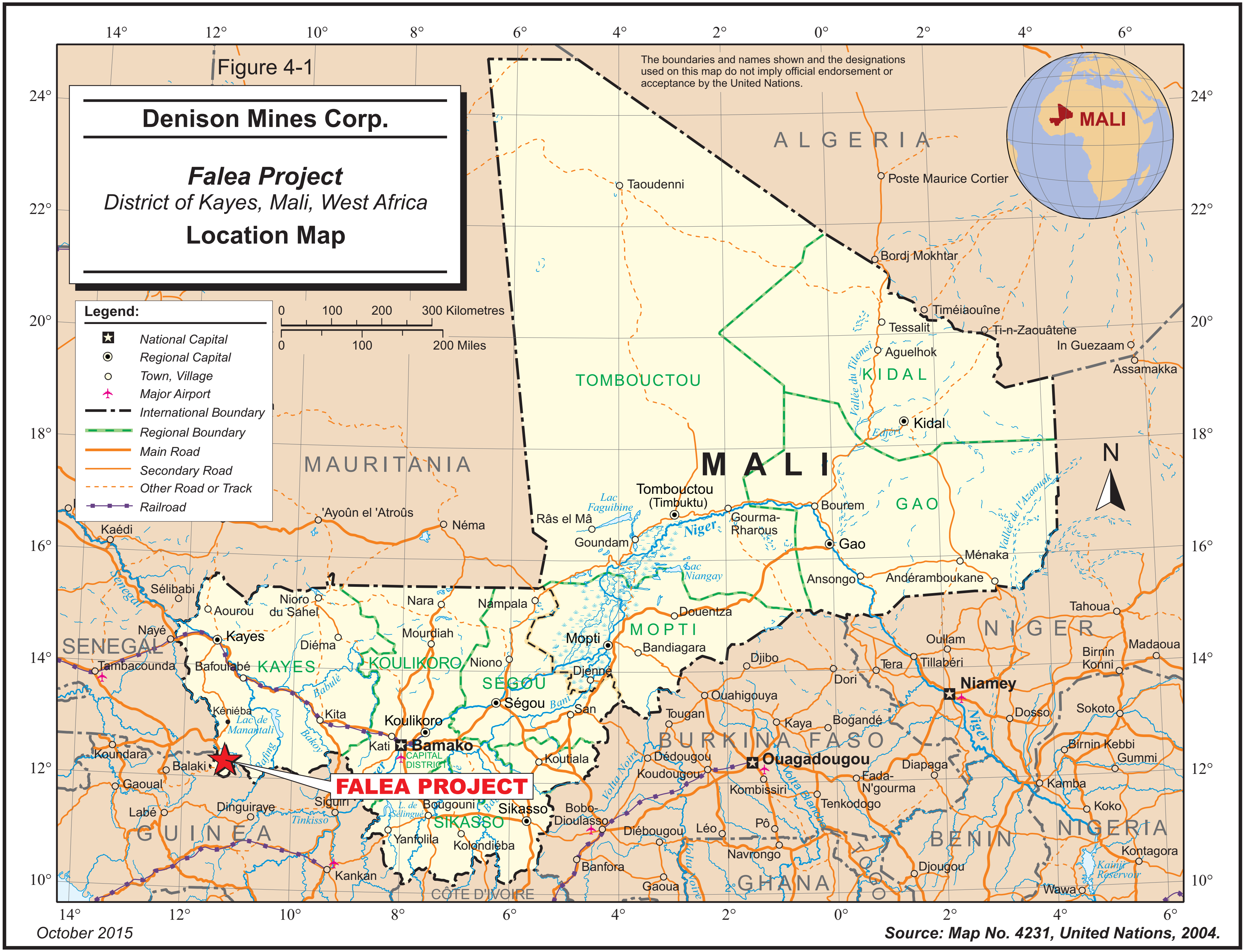
Figure 4-1
Denison Mines Corp.
Falea Project
District of Kayes, Mali, West Africa
Location Map
Legend:
National Capital
Regional Capital
Town, Village
Major Airport
International Boundary
Regional Boundary
Main Road
Secondary Road
Other Road or Track
Railroad
0 100 200 300 Kilometres
0 100 200 Miles
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
MALI
ALGERIA
MAURITANIA
SENEGAL
GUINEA
CÔTE D'IVOIRE
BURKINA FASO
GHANA
TOGO
BENIN
NIGER
NIGERIA
TOMBOUCTOU
KIDAL
GAO
MOPTI
KAYES
KOULIKORO
SÉGOU
SIKASSO
CAPITAL DISTRICT
N
Bamako
Kayes
Ségou
Sikasso
Mopti
Tombouctou (Timbuktu)
Gao
Kidal
Niamey
Ouagadougou
FALEA PROJECT
October 2015
Source: Map No. 4231, United Nations, 2004.

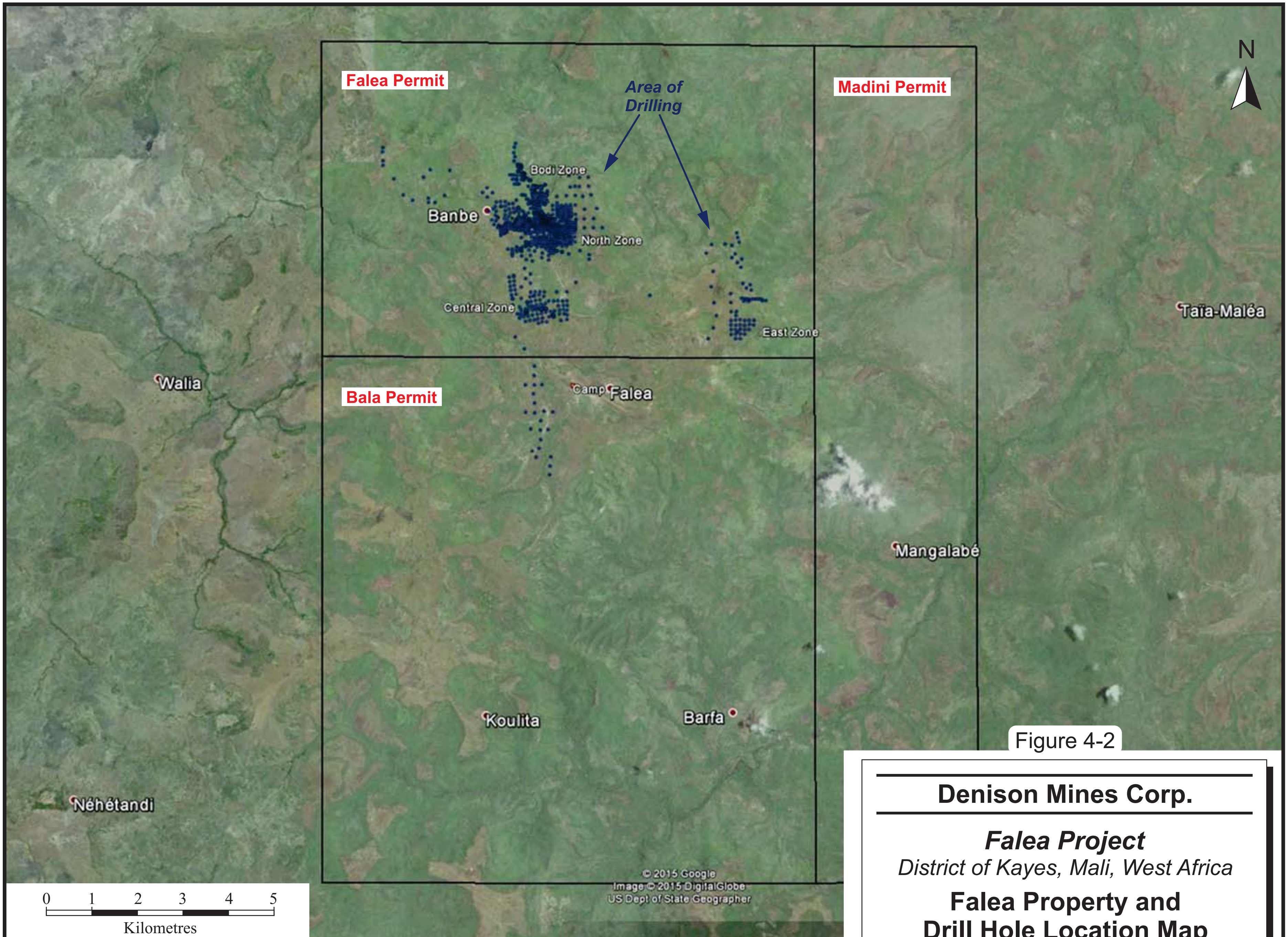

Figure 4-2

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Falea Property and Drill Hole Location Map

October 2015

Source: Google earth, 2015.

www.rpacan.com

MINERAL RIGHTS

The mineral tenure in Mali is governed by the acquisition of exploration permits from the government of Mali.

Exploration permits for the Property are held under the name of Delta Exploration Mali SARL (Delta Mali), a limited liability company, which is a wholly owned subsidiary of Rockgate Capital Corp. (Rockgate), which in turn is wholly owned by Denison.

FALEA PERMIT

The original Falea Permit (PR07/304) was granted on February 19, 2007 by Decree No. 07-0419/MMEE. The permit was valid for Group II minerals (including uranium, silver, and copper). The original permit covered an area of 150 km^2 and was valid for three years, renewable twice.

Delta Mali submitted an application for first renewal of the original Falea exploration permit on February 11, 2010. Renewal of the permit was granted to the company by the Minister of Mines on June, 7, 2010 (Decree No. 10-1601/MM-SG). The renewal was valid for three years, renewable once, and covered an area of 75 km^2. In terms of the old Malian Mining Code, holders of exploration permits were required to reduce the land position of their permits by 50% at each renewal. The remaining 75 km^2 of the original exploration permit area reverted back to the government of Mali.

Delta Mali submitted an application for second renewal of the Falea exploration permit on November, 13, 2012. Renewal of the permit was granted to the company by the Minister of Mines on May, 20, 2013 (Decree No. 2013-2107/MM-SG). The renewal, valid for two years and non-renewable (unless undergoing feasibility study), covered an area of 75 km^2. Under the revised Malian Mining Code (Law No. 2012 015 of February 27, 2012), holders of exploration permits are not required to reduce the land position of their permits upon renewal.

On February 19, 2015, the Falea Permit expired. A new application for the same 75 km^2 area was submitted on February 19, 2015 by Delta Mali, and was awarded on July 9, 2015. The application was submitted in respect of Group IV minerals (which under the new Mining Code covers uranium). Group II minerals (including silver and copper) will be added now that the permit has been awarded.

BALA AND MADINI PERMITS

Upon first renewal of the Falea Permit, the relinquished portion of the property was amalgamated with a portion of the Falea Est claim and an application for that area was submitted to the Ministry of Mines. The Bala Permit (PR11/457) was granted on February 23, 2011 in terms of Decree No. 2011-0562/MM-SG for uranium and Group II minerals (including silver and copper). This permit was valid for a period of three years and covered an area of 125 km^2. Delta Mali also submitted an application for the balance of the former Falea Est claim and the Madini Permit was granted on February 23, 2011 in terms of Decree No. 2011-0563/MM-SG (PR11/458). The 67 km^2 Madini Permit was granted for a period of three years and covered uranium and Group II minerals (including silver and copper).

The Bala and Madini Permits expired on February 23, 2014. First renewal applications were submitted on November 7, 2013. Renewals were granted on June 19, 2014, for the Bala Permit (Decree No. 2014-1711/MM-SG) and on May 23, 2014, for the Madini Permit (Decree No. 2014-1568/MM-SG). Both renewals are valid for a period of two years expiring on February 23, 2016.

In terms of the new Malian Mining Code (Law No. 2012 015 of February 27, 2012), uranium no longer falls within Group II and has been assigned to Group IV. As a result, extension applications were made in respect of the Bala and Madini Permits on August 12, 2014 to have silver and copper (Group II) minerals added to these permits. On December 23, 2014, these extension applications were granted for the Bala and Madini Permits by Decree Nos. 2014-3647/MM-SG and 2014-3923/MM-SG respectively.

STATUTORY REPORTING REQUIREMENTS

In respect of the exploration permits held, Delta Mali is required to submit the documents as listed in Table 4-1 to the National Director of Geology and Mining.

TABLE 4-1 PERMIT REQUIREMENTS
Denison Mines Corp. – Falea Project

Report	Due Date	Description
Provisional Reports	Within 30 days of receiving an exploration permit or by December 1 for the following year	Updated work program and budget
Quarterly Reports	Within 15 days of the end of each calendar quarter; i.e., April 15, July 15, October 15, and January 15	Report on exploration activities
Annual Reports	Within three months of year-end, effectively March 31	Report on exploration activities and expenditure
Renewal Reports	Four months prior to expiry	Reports for the renewal of permits

TAXATION

The granting of mining claims as well as their transfer or renewal are subject to the payment of the rights and taxes as listed in Table 4-2. The exchange rate as of June 29, 2015, is US$1 = FCFA 585.

TABLE 4-2 TAXES
Denison Mines Corp. – Falea Project

Tax Amount	FCFA
Tax for the issuance of an exploration permit independent of its surface area	5,000,000
Tax for the renewal of an exploration permit upon each renewal	5,000,000
Tax for the issuance of an exploitation authorization for a small-scale mine	15,000,000
Tax for the renewal of an exploitation authorization for a small-scale mine	15,000,000
Tax for the issuance of an exploitation permit independent of its surface area for minerals of groups 1 and 2	100,000,000
Tax for the renewal of an exploitation permit for minerals of groups 1 and 2	100,000,000
Tax for the issuance of an exploitation permit independent of its surface area for minerals of groups 3 and 4 - 20,000,000 FCFA	
Tax for the renewal of an exploitation permit 20,000,000 FCFA	
Tax on the capital gain on the sale or the transfer of a mining claim (either for exploration or for exploitation)	10%

SURFACE TAXES (2015 Delta Mali) *

Permit	Amount CFA/km^2	Area (km^2)	Tax Amount (FCFA)
Falea	2,000	75	150,000
Bala	1,500	125	187,500
Madini	1,500	67	100,500

*Surface Taxes of the current year must be paid before the end of the first quarter of that year (before March 31, 2015 for 2015 taxes).

ROYALTIES AND OTHER ENCUMBRANCES

Uranium mining in Mali is subject to a 3% royalty based upon the market value of the mineral produced, payable to the Government of Mali. In addition, an “ad valorem” tax of 1.0% of the value of product sold to refineries or other buyers less any refining expenses and selling costs is payable to the Government of Mali.

RPA has not independently verified the Delta Mali royalty agreement for the Falea Property and is not aware of any royalties due, back-in rights, or other encumbrances by virtue of any underlying agreements.

PERMITTING

All those in possession of mineral title are required to comply with the legal and regulatory requirements in place in Mali relating to the protection of the environment and the cultural heritage. RPA is not aware of any environmental liabilities on the Property.

Denison reports that Delta Mali has all of the required permits to conduct the proposed work on the Falea, Bala, and Madini Permits.

RPA is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

ACCESSIBILITY

The Property is accessed via both air and road from Bamako, the capital of Mali. The majority of supplies for the exploration activities originate from Bamako. The road access is governed by the rainy season when the rivers between Kayes and Bamako become flooded. Access across the river during the rainy season is via canoe. The airstrip on the Falea Property comprises a 1.6 km gravel runway. The airstrip may be accessed year round by small to medium sized fixed wing aircraft. Road access through Kayes is no longer necessary as the new road from Bamako through Kenieba is complete; only the Faleme River poses a significant obstacle to road transport.

Access to drill sites by truck is via the main laterite road and side laterite/bush roads.

CLIMATE

The Falea Property has a subtropical climate. The months from February to June are hot and dry with temperatures ranging from 19°C to 39°C. During the rainy season from June to October, the climate is rainy, mild, and humid. From November to February the temperatures are cooler and dry with warm days and cool nights (15°C range). Rainfall in the rainy season is typically characterized by high intensity events which generate large volumes of run-off. The rainfall in the rainy season is variable, but may attain 350 mm of rainfall, while the dry seasons produce little to no rain. The average rainfall for Bamako, which is located approximately 350 km east of Falea, averages 0 mm in December, and may attain 350 mm in August.

The rainy season results in access difficulties to the Property, as a result of flooding of the local watercourses. Stockpiles of fuel are stored for the June to October rainy season. All other supplies may be brought across the rivers in boats during the rainy season. The exploration activities can therefore occur year round at Falea.

INFRASTRUCTURE

The Property has had no significant infrastructure development other than the exploration camp which comprises approximately 20 sleeping huts and several shipping containers converted to bunkhouses accommodating up to 70 people. The camp has its own well and running water, two kitchens, an office, and a core logging and storage enclosure. The power is supplied by on-site generators and the fuel needs are met by thirty fuel tanks with a total capacity of 300 000 L of diesel. A light aircraft landing strip is located on the Property.

In the immediate vicinity of the Falea Property, manual labour is sourced from the local town of Falea and surrounding communities. The infrastructure in this area is poor. The dominant form of transport for the surrounding communities is pedestrian, bicycle, and motorcycle.

All supplies are flown or trucked in from surrounding communities. Most of the supplies are shipped in from Bamako due to the greater selection and availability of items. The village of Falea is a good resource for labourers and some fresh food. The nearest town is Kenieba, an 80 km drive north. During the rainy season, Kenieba's access is limited due to the flooding of the local rivers between Falea and Kenieba.

PHYSIOGRAPHY

The Falea Property is located in southwestern Mali close to the borders with Guinea and Senegal. The Kenieba district lies in the foothills of the Fouta Djalon Massif (a range of highlands), which is situated in Guinea immediately to the south. The Property consists of a series of small broken hills at the edge of the Fouta Djalon Massif plateau. The plateau in this area lies between 200 MASL and 650 MASL and averages 450 MASL. The terrain is a savannah setting with numerous trees, elephant grass, and bamboo. The area in which the Property is located has areas where deforestation has taken place. Figure 5-1 shows typical topography and vegetation on the Property.

The following vegetation types are reported on the Property:

- Grassland savannah
- Bushed and treed savannah
- Dry woodland
- Gallery forest
- Riverine thicket
- Bamboo thicket

FIGURE 5-1 TOPOGRAPHY AND VEGETATION OF PROJECT AREA

6 HISTORY

PRIOR OWNERSHIP

In 1977, COGEMA, a French atomic energy company, discovered mineralization in the Falea area. Mapping and geochemical exploration progressed from 1978 through to 1980. Eighty-six diamond drill holes were completed during the early 1980s by COGEMA over an approximate area of 100 km^2. Approximately 24,000 m of drilling was completed on a grid spacing varying from 200 m to 800 m. COGEMA ceased exploration on the Property in 1982 due primarily to the falling price of uranium.

In 2006, Delta Exploration Inc. (Delta) entered into an agreement with the Malian government to explore the Property. On November 28, 2006, Rockgate signed an option agreement with Delta. Diamond drilling commenced on March 17, 2007. By July 2007, Rockgate assumed operator status on the Falea Property following the implementation of a joint venture agreement.

Rockgate signed a letter on November 7, 2008, whereby it agreed to acquire all issued and outstanding shares of Delta. On February 3, 2009, Delta delisted from the TSX Venture Exchange and Rockgate retained their operator status. In 2010, the permit for Falea was renewed and in terms of complying with Malian Mining Law, the area was halved

In November 2013, Denison acquired control of Rockgate and its five mineral property interests, with the Falea Project being the most significant. On January 15, 2014, Denison completed the acquisition of 100% of Rockgate.

EXPLORATION AND DEVELOPMENT HISTORY

Uranium, silver, and copper mineralization at Falea was first discovered by COGEMA in the 1970s at the Central Zone. Drilling by Rockgate began in the Central Zone and progressed northward, resulting in the discovery of the North Zone in late 2007 and the high-grade Plateau Edge Structure (PES) in late 2009.

The North Zone discovery was significant because it hosts higher uranium grades than Central Zone in addition to strong silver grades associated with native silver mineralization throughout much of the zone. The PES is a northwest-trending zone of thick, high-grade uranium-silver-copper mineralization running along the northeastern margin of the North Zone. The zone hosts higher grades and thicknesses than North Zone proper and sits adjacent to the plateau edge.

From January to August 2011, 160 diamond drill holes totalling 45,691 m focused on resource definition in the North Zone and initial exploration drilling at Bala, south of Central Zone, East Zone, and Road Fault. The program resumed in October 2011 running through July 2012 and comprised 398 diamond drill holes totalling 88,350 m. Drilling continued to infill and step-out on the North Zone, and expanded north into the Bodi Zone. An additional 44 diamond drill holes were completed at the East Zone and 19 more at the Central Zone as part of an expanded resource definition program.

In October and November 2012, a total of 15,936 m was completed in 66 diamond drill holes located in the Bodi and North Zone areas. Almost all work to date has been completed on the Falea Permit.

Table 6-1 is a summary of the exploration activities that have been carried out on the Falea Property since discovery.

TABLE 6-1 EXPLORATION AND DEVELOPMENT HISTORY
Denison Mines Corp. – Falea Deposit

Date	Activity
1957	The Atomic Energy Commission (France) began researching the potential for uranium mineralization in Mali.
1960	Incidences of uranium mineralization were noted from an aerial survey of the granites of the village of Saraya, Guinea.
1974	Uraninite occurrences noted in the Saraya granite and surrounding sediments.
1975	Based on the results from earlier prospecting, it was decided to complete further study for the possibility of economic uranium mineralization in the area.
1976-1977	Prospecting took place along the east-west fringe of Segou Madina Kouta and detailed prospecting around the Guemedji occurrence.
1976	A permit was solicited for exploration in Mali by COGEMA.
1976-1977	Exploration activities started in southern Mali, Senegal and Upper Volta (now Burkina Faso).
1977	COGEMA, a French atomic energy company, discovered mineralization in the Falea area.
1978-1980	Mapping and geochemical exploration progressed from 1978 through to 1980.
1980-1981	86 diamond drill holes were drilled during the early 1980s by COGEMA over an approximate area of 100 km². Approximately 24,000 m of drilling was completed on a grid spacing varying from 200 m to 800 m.
1982	COGEMA ceased all uranium exploration activities at Falea.
February 2006	Delta Exploration entered into an agreement with the Government of Mali to explore the Falea Area 7.
November 2006	On November 28, 2006, Rockgate signed an option agreement with Delta.
February 2007	Exploration permit awarded to Delta Mali.
March 2007	Drilling commenced targeting the Central Zone. COGEMA had previously reported a resource estimate of 5 million pounds of uranium for this zone.
November 2007	The North Zone was discovered approximately 1.8 km north of the Central Zone.
November 2008	Rockgate signed a letter on November 7, 2008 whereby it agreed to acquire all issued and outstanding shares of Delta.
February 2009	On February 3, 2009, Delta delisted from the TSX Venture Exchange and Rockgate retained its operator status.
May 2009	Golder Associates Ltd. (Golder) prepared the first NI 43-101 Technical Report and a Mineral Resource estimate for the Falea Property.
2010	Social and environmental impact assessments commenced during 2010 and Golder updated the Mineral Resource estimate.
2011	Rockgate mandated Minxcon to update the Mineral Resource estimate based on 442 drill holes.
2012	Minxcon completed updated Mineral Resource estimate.
January 2014	Denison acquired all of Rockgate's interests in the Falea Project.

PREVIOUS RESOURCE ESTIMATES

An initial Mineral Resource estimate and an independent NI 43-101 Technical Report were prepared by Golder in May 2009 and updated in 2011 (Golder, 2011). A total of 1.7 million tonnes of Indicated Resources grading 0.140% U_3O_8, 98 g/t Ag, and 0.19% Cu and 7.8 million tonnes of Inferred Resources grading 0.107% U_3O_8, 66 g/t Ag, and 0.22% Cu were estimated as of January 2011 at a cut-off grade of 0.04% U_3O_8.

Minxcon (Pty) Ltd (Minxcon) prepared an updated Mineral Resource estimate and a supporting NI 43-101 Technical Report dated December 12, 2012 (Minxcon, 2012). Using a cut-off grade of 0.03% U_3O_8, Minxcon estimated Measured and Indicated Mineral Resources, at November 22, 2012, of 15.67 million tonnes grading 0.09% U_3O_8, 0.215% Cu, and 55 g/t Ag, and Inferred Mineral Resources of 15.35 million tonnes grading 0.05% U_3O_8, 0.24% Cu, and 18 g/t Ag.

The above estimates are considered to be historical in nature. All have been superseded by the current Mineral Resource estimate contained in Section 14 of this Technical Report.

PAST PRODUCTION

To date, no production has occurred on the Property and the Property is still in the exploration phase.

7 GEOLOGICAL SETTING AND MINERALIZATION

REGIONAL GEOLOGY

Mineralization at the Project is hosted in the Neoproterozoic to Carboniferous sedimentary sequence of the Taoudeni Basin, a shallow interior sag basin with flat to very shallow dips. The Project is located along the southern edge of the western province of the basin. The Taoudeni Basin is located over a large portion of the West African Craton between the Reguibal Shield to the north and the Leo Shield to the south, encircling the Pan-African Belts to the west and east. The Taoudeni Basin is underlain by the Birimian greenstones which have been intruded by uranium-bearing Saraya granites (Golder, 2009). Figure 7-1 shows the regional geology.

The sedimentary sequence of the Taoudeni Basin comprises the following supergroups:

- Supergroup 1: Middle Neoproterozoic Sandstones and stromatolitic carbonates.
- Supergroup 2: Late Neoproterozoic to Cambro-Ordovician basal tillite, barite-bearing dolomites, marine cherts, and shaly siltstones.
- Supergroup 3: Late Ordovician to Devonian tillites, shales, and fine sandstones and limestones.

The deposition of the sedimentary sequence within the Project area of the Taoudeni Basin was largely controlled by north-south and east-southeast trending structures. The orientation of the structural trends is coincident with the structural orientations within the Birimian greenstones.

A dolerite sill ranging in thickness from a few metres to more than 160 m is present throughout most of the basin, intruding 65 m to 120 m above the Kania sandstone and forming prominent cliffs in the area.

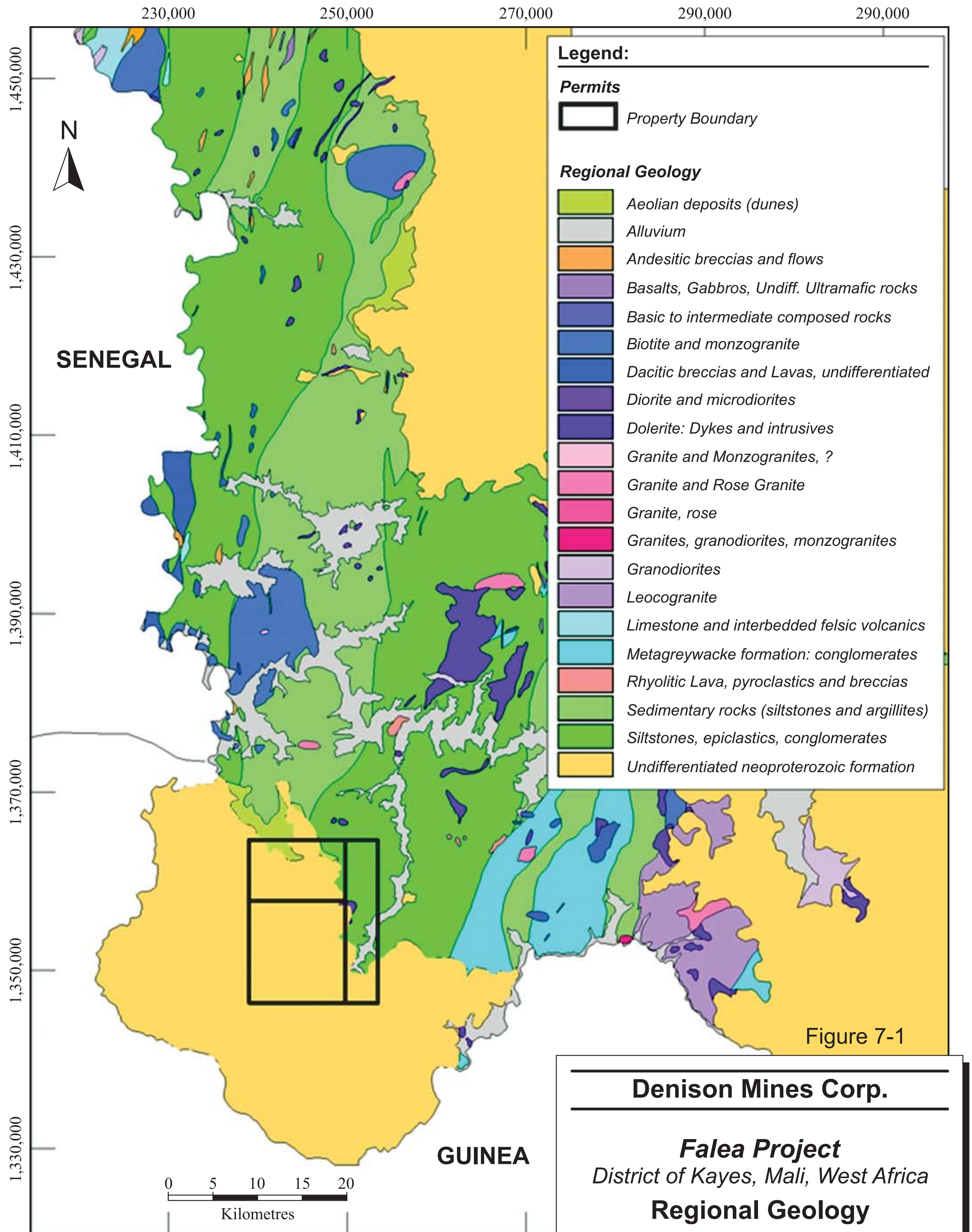

Figure 7-1

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Regional Geology

October 2015 ***Source: Denison Mines Corp., 2015.***

LOCAL AND PROPERTY GEOLOGY

The sedimentary sequence in the vicinity of the Project area comprises alternating units of sandstones, mudstones, and argillites, which can attain a thickness in excess of 300 m (Figure 7-2). The basal sedimentary sequence located above the unconformity with the Birimian greenstones contains the uranium, copper, and silver mineralization and can be up to 30 m thick. The mineralization is typically located within a one metre to four metre thick zone but does reach up to 15 m thick locally.

Four main mineralized zones have been identified: the North Zone, the Central Zone, the East Zone, and the Bodi Zone. The North, Central, and Bodi zones are further subdivided into the North Upper and the North Deep, the Central Upper and Central Deep, and the Bodi Upper and Bodi Deep areas, respectively. The subdivisions of the Upper and Deep areas are separated by the cross-cutting Road Fault.

The North Zone trends predominantly east-west, and the North Upper Zone trends both east-west and north-south. The mineralization of the North Upper Zone is open to the north, east, and south. The mineralized unit appears to be dragged down slightly in towards the Road Fault. The average depth of the North Upper Zone below surface is 180 m to 230 m, whereas the depth below surface of the North Deep Zone averages 255 m to 275 m.

Both the North Deep and North Upper zones have a very shallow dip of five degrees to the west. In the vicinity of the Road Fault, the North Upper Zone's dips vary up to 15^{o}. The North Deep Zone splits into two limbs approximately 150 m west of the Road Fault. The width of the northern limb is approximately 100 m, whereas the width of the southern limb is approximately 500 m. Both limbs have been drilled to the west, south, and northwest.

Based on the current drilling information, the North Upper Zone is approximately 1,000 m long in the east-west direction and approximately 900 m wide in the north-south direction. The North Deep Zone is approximately 600 m in length north-south and 700 m in width east-west.

The Central Zone in general trends east-west and is located one kilometre south of the North Zone. The Central Deep Zone, based on current drill hole data, trends predominantly in the north-south direction, whereas the Central Upper Zone trends predominantly east-west. The average depth below surface of the Central Upper Zone is 280 m, whereas the average depth of the Central Deep Zone is 350 m. Mineralization is open to the north, south, and east. The approximate displacement of the Central Upper and Central Deep areas by the Road Fault varies from 80 m to 100 m. The average dip of the Central Zone is approximately three degrees to the west. There appears to be limited drag down along the Road Fault in the Central Upper Zone, however, this assumption is based on available drill hole data and wireframe interpretation.

Based on the current drilling information, the Central Upper Zone is approximately 1,200 m in length east-west and 700 m in width north-south. The Central Deep Zone is approximately 600 m in length north-south and 200 m in length east-west.

The Bodi Zone is located approximately 450 m north of the North Zone. Based on the current available drilling information, the Bodi Zone is 1,000 m long from north to south and 600 m wide from east to west. The dip varies from flat to five degrees and the average depth below surface is estimated to be 90 m to 185 m.

The East Zone is located approximately 3,500 m east of the North Upper and Central Upper zones. Drill hole data from the 2011/2012 drilling for the East Zone has delineated the extent of the mineralization and provided sufficient data to model the East Zone for the purposes of resource estimation. The mineralization, based on available drill holes, appears to be open to the north, south, east, and west. The dips vary between flat and five degrees to the west. A length of approximately 1,500 m from north to south and a width of approximately 500 m from east to west have been modelled. The approximate depth below surface of the East Zone is 175 m on the south end increasing to 330 m on the north end.

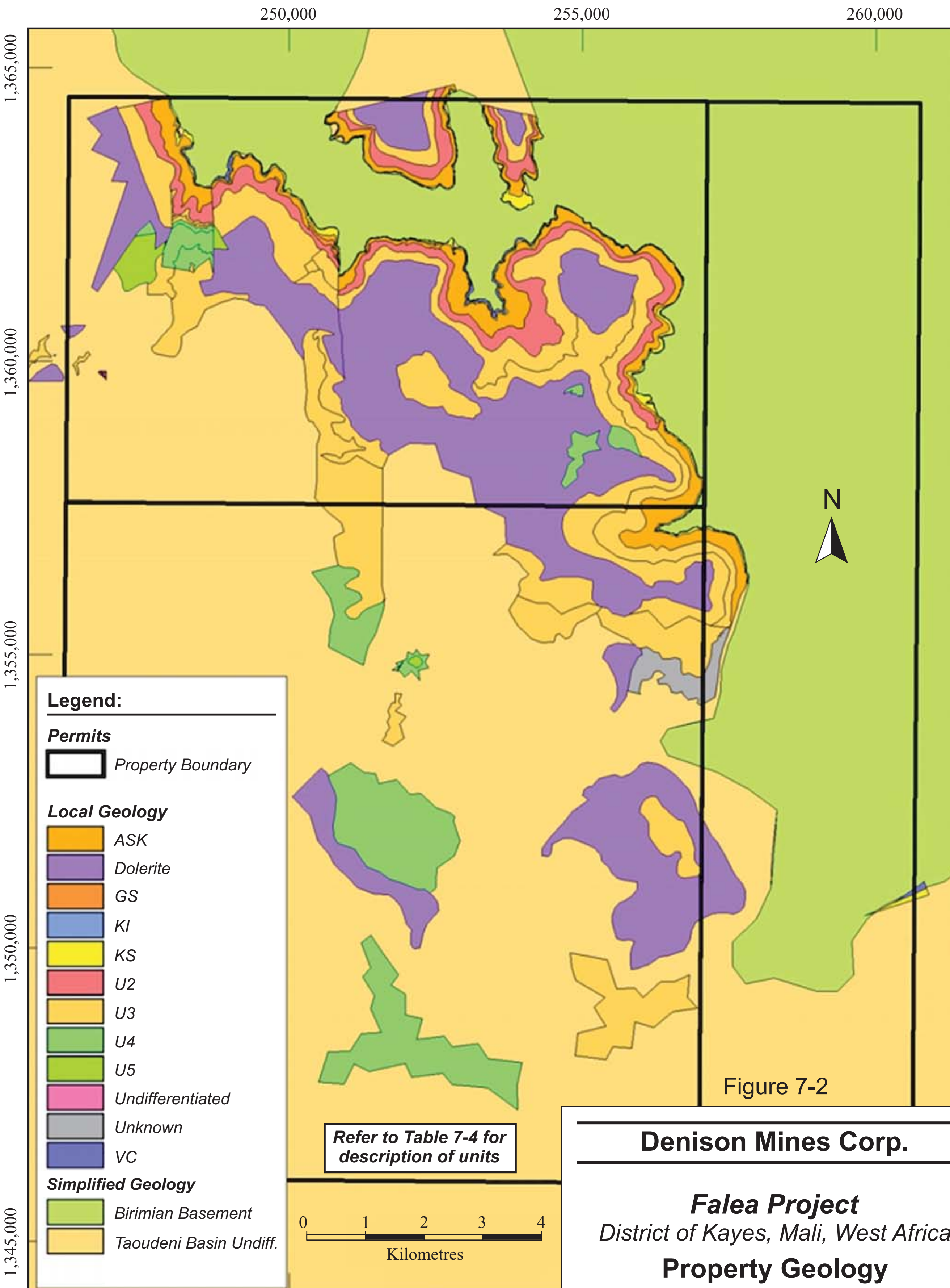

Figure 7-2

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Property Geology

October 2015

Source: Denison Mines Corp., 2015.

STRUCTURE

Within the Project area, the general trend of the structural features is coincident with the north-south, east, and southeast trends of the Birimian greenstones (Figure 7-3). A prominent reverse fault known as the Road Fault cross-cuts the Project area. The Road Fault has a general north-south trend and the vertical displacement varies from 50 m to 100 m. There appears to be limited horizontal movement. A second fault was proposed by the previous owners of the Project to be located between the North/Central areas and the East Zone. This fault is postulated to have a throw of up to 50 m. Following the generation of the wireframes for the mineralized units, smaller scale faults are apparent throughout the Central and North areas.

STRATIGRAPHY

Within the Project area, a sequence of volcanic conglomerates (VC) occur at the base of the Taoudeni Basin, immediately above the Birimian greenstones. The VC are overlain sequentially by the Lower Kania (KI) argillite, Kania sandstone (KS), and the S.A. Kania (ASK) argillite. Most of the uranium-copper-silver mineralization at Falea is hosted by the KS. The Kania sedimentary units are in turn overlain by the Segou sandstones. The stratigraphic column for the area is summarized in Figure 7-4. The stratigraphic nomenclature, as defined by the previous owners, COGEMA, was adopted by Delta and subsequently Denison in order to maintain consistency between the various drilling campaigns.

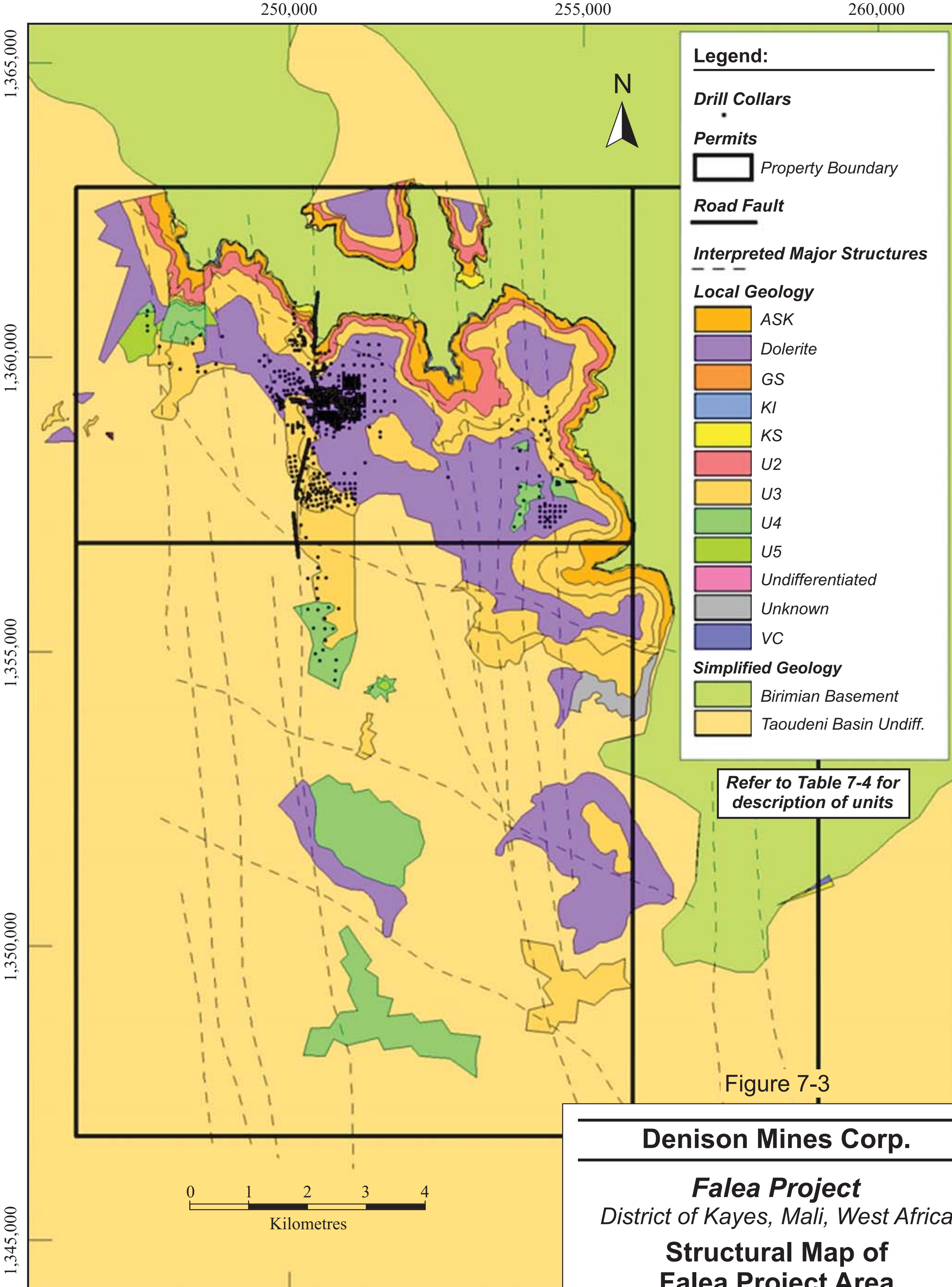

Figure 7-3

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Structural Map of Falea Project Area

October 2015

Source: Denison Mines Corp., 2015.

FIGURE 7-4 STRATIGRAPHY OF THE FALEA PROJECT

Shales and Sandstones	U5		100 m	Blue-grey argillites with whitish patches, discoloured to the top, brown-lilac to the bottom
			60 - 70 m	Fine-grained sandstones with thin and short argillaceous lenses Limy and oolithic, fine to medium-grained sandstones
Limy Argillites	U4		40 - 140 m	Slightly limy reddish argillites Oolithic limy horizon Greenish grey limy and silty argillites with gypsum in the joints
Madina Kouta Sandstones	U3	U3c	50 - 75 m	Fine to medium-grained sandstone with cavities Layers of coarse-graded sandstone with rhyolite and red argillitic fragments Fine-grained sandstone with medium or coarse-grained layers
		U3b	35 - 43 m	Finely stratified argillite with siltstone layers and nodules of anhydrite 3m of characteristic green argillite to the bottom
		U3a	33 - 50 m	Red brown silt-argillite-sandstone alternate layers Alternating layers of fine-grained sandstones, siltstone and argillites Fine to medium-grad sandstones with thin and short argillaceous fragments
Argillites	U2		30 - 43 m	Finely stratified argillite Cauliflower-shaped or fragmented stromatolites Limy horizons, green and grey colors
Segou Sandstone (GS)	U1		11 -22 m	Strongly silicified fine to very fine-grained sandstones Interstratified greenish grey and red brown shales
S.A. Kania (ASK)			3 - 8 m	Grey to green argillites (some red brown horizons). Laminar stromatolite
Upper Kania (KS)			0 - 12 m	Medium to coarse-grained microconglomeratic sandstone (volcanic and shale fragments) Silicified fine to very fine-grained sandstone
Lower Kania (KI)			0 - 8 m	Black sulphide-rich argillite with stromatolites to the bottom
CGT	U0		0 - 10 m	More or less polymictic quartz-rich conglomerate
Falea Volcanics (VC)			0 - 66 m	Reddish rhyolitic volcano-sedimentary material
Birimian				Schists

MINERALIZATION

Most of the mineralization at Falea occurs in the flat lying Kania sandstone, which is underlain and overlain by argillaceous units. The Kania sandstone is located near the base of the Neoproterozoic to Carboniferous Taoudeni Basin, which sits unconformably on top of highly deformed older Proterozoic Birimian metasedimentary and metavolcanic rocks.

The North Zone hosts higher uranium grades than the Central Zone. It also hosts higher silver grades associated with native silver throughout much of the zone. The Plateau Edge Structure (PES) is a northwest trending zone of higher grade uranium-silver-copper mineralization which extends from the southeastern flank of the North Upper Zone, past the Road Fault, and runs parallel to the plateau edge. Some of the highest grade uranium mineralization occurs in this area and is hosted not only in the sandstone but also in the VC unit when in close proximity to a subtle growth fault with displacement typically less than ten metres. Higher grade silver mineralization seems to be related to areas where northeast trending structures intersect the PES (Golder, 2011).

Results of mineralogical studies conducted by Rockgate are summarized as follows:

- The uranium mineralization in the form of pitchblende and coffinite encloses the chalcopyrite mineralization.
- The uraniferous fluids utilized the Kania sandstones due to their porosity and permeability.
- The ASK mudstones and siltstones contain uranium mineralization along the basal portion adjacent to the KS unit.
- The KI argillites also contain uranium mineralization.
- Both ASK and KI contain chalcopyrite.
- The conglomerates of the VC unit can also contain uranium mineralization. Previous literature has stated that the uranium present in the volcaniclastic unit is assumed to be due to local faulting or similar structures that mobilized the uranium into these units, where it was deposited out of solution.
- Copper mineralization is not oxidized despite being present in moderately oxidized formations.
- The silver mineralization is predominantly within the KS unit but can occur in the footwall and hanging wall units to the KS unit.

A report issued by SGS South Africa in March 2010 (SGS, 2010) showed that the sample tested contains the following with regard to mineralization characterization:

- Approximately 77% quartz, 16% muscovite, and 2% chlorite.
- The sulphide component is comprised of approximately 0.6% pyrite, 0.4% chalcopyrite, and traces of other sulphides.
- The uranium phases account for 0.5% of the mass.
- The main uranium minerals are U-oxides (0.20% UO_2 probably hydrated) and U-silicates (0.30% - $U(SiO_4)_{1-x}(OH)_{4x}$ with U-Ti-oxide (0.01% - $(U,Ca)(Ti,Fe)_2O_6$.
- The uranium mineral grains are often large and well liberated.

8 DEPOSIT TYPES

The Falea deposit has been previously postulated to represent a combination of two mineralization events. The first event was similar to sedimentary exhalative (SEDEX) event and the second event was interpreted to be a roll-front deposit, that is, an epigenetic uranium deposit at a redox interface occurring on top of a SEDEX deposit.

In 2011, Rockgate reinterpreted the Falea deposit as an unconformity-associated uranium deposit, using a polymetallic egress model for the geological model. The unconformity at Falea is between the Birimian and overlying sedimentary sequences. The egress model was applied due to the presence of the Road Fault, which could have introduced fluids into the sandstones.

Unconformity-associated deposits are high-grade concentrations of uranium that are located at or near the unconformity between relatively undeformed quartz rich sandstone basins and underlying metamorphic basement rocks (Figure 8-1).

The compositional spectrum of unconformity-associated uranium deposits can be described in terms of monometallic (simple) and polymetallic (complex) end-members on the basis of associated metals. Polymetallic deposits are typically hosted by sandstone and conglomerate, situated within 25 m to 50 m of the basement unconformity. Polymetallic ores are characterized by anomalous concentrations of sulphide and arsenide minerals containing significant amounts of nickel, cobalt, lead, zinc, and molybdenum. Some deposits also contain elevated concentrations of gold, silver, selenium, and platinum-group elements.

Deposits with egress halos (Figure 8-2) include both basement-hosted and sandstone-hosted types, and the alteration ranges between two distinctive end-member types: 1) quartz dissolution + illite; and 2) silicified (Q1 + Q2) + later illite-kaolinite-chlorite+dravite (Jefferson et al., 2007; Golder, 2011).

In RPA's opinion, Falea is an unconformity type uranium deposit.

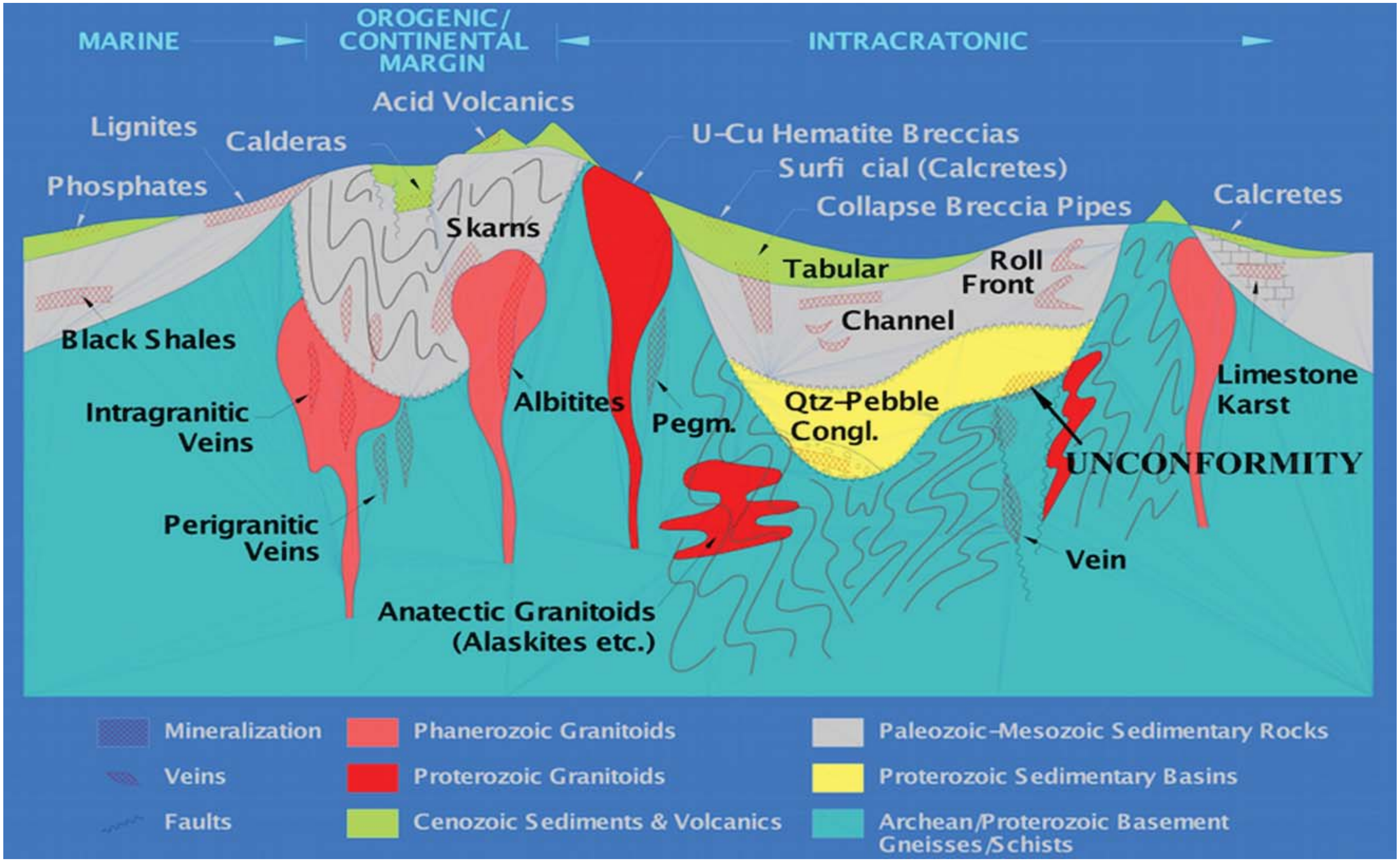

Figure 8-1

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Schematic of
Uranium Deposit Models

October 2015

Source: Cameco Corp.

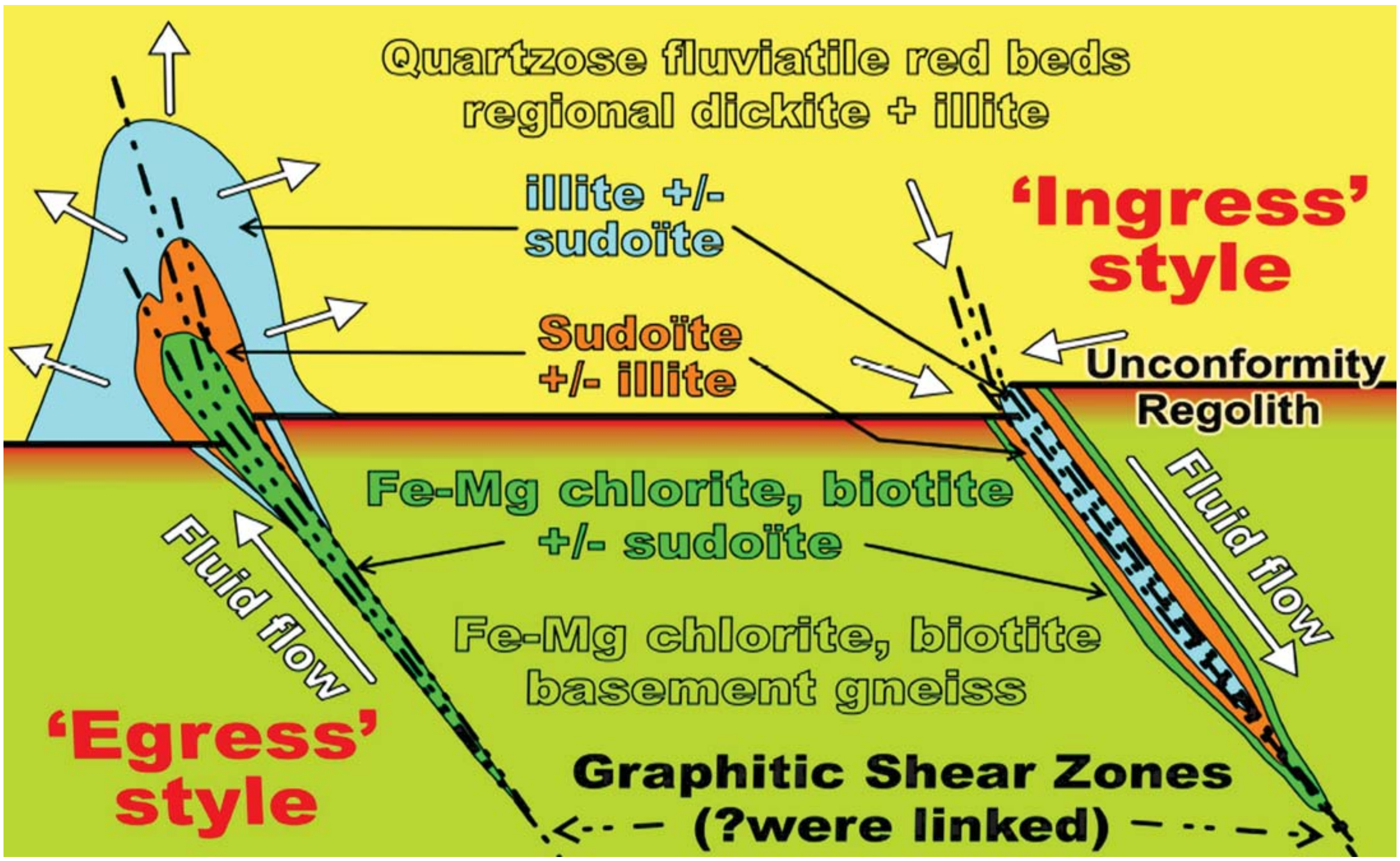

Figure 8-2

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Diagrammatic Explanation of Egress Versus Ingress Style Alteration Zones for Uncomformity Associated Uranium Deposits

October 2015

Source: Jefferson, C.W. et al., 2007.

9 EXPLORATION

With the exception of drilling, exploration work performed on the Property since 2009 by Denison and its now wholly-owned subsidiary Rockgate is summarized in this section. Work completed on the Property and its immediate vicinity by other parties prior to 2009 is summarized in Section 6 of this report.

The mineralized zones are located more than 30 m below surface; hence, surface mapping and surface exploration techniques have not formed an extensive part of the historical and current exploration activities. In 2010, however, Rockgate conducted minor surface mapping of the KS unit along the edge of the PES in order to assist planning of the drilling campaign. Eight grab samples were collected in the mapping campaign but have not been utilized for Mineral Resource modelling. Minor mapping has occurred in the Bodi, Kania, and Zhang regions. The Zhang region is to the west of the North Zone and is termed the Western Deeps area, and does not form part of this Technical Report. Further geological mapping and orientation soil and radon sampling were conducted in 2014 by Denison.

GROUND GEOPHYSICAL SURVEYS

2009 INDUCED POLARIZATION SURVEY

In 2009, Rockgate commissioned Terratec Geoservices of Germany to conduct an Induced Polarization (IP) survey over Falea. It was anticipated that the IP survey would help in the determination of potential targets, primarily metallic sulphides, graphitic and clay-rich zones with which uranium is associated. Upon completion of the survey, Rockgate outlined several potential targets for test drilling. The test drilling resulted in unsuccessful attempts to correlate the IP anomalies to mineralization. Rockgate later abandoned any further IP surveys.

GEOLOGIC MAPPING

In 2010, Rockgate conducted minor surface mapping of the KS unit along the edge of the PES in order to assist planning on the drilling campaign. Eight grab samples were collected in the mapping campaign but have not been utilized for Mineral Resource modelling.

In 2014, Denison contracted Remote Exploration Services (RES), a South African based exploration services company, to undertake geological mapping and an orientation soil and radon survey. The objective of the geological mapping was to validate previous mapping done by Rockgate and to extend mapping coverage of the basal portion of the Taoudeni Basin to the south along the eastern escarpment. Two east-west orientation sampling traverses were completed over the North Zone to test the effectiveness of radon and soil geochemistry over known mineralization. A total of 349 soil samples were collected, including 236 soil samples, 98 termite samples, and 15 field duplicates. A total of 236 orientation radon cups were deployed. An additional 21 cups were deployed over the Kania-East Zone.

AIRBORNE SURVEYS

2011 VTEM

In late 2011, a helicopter borne versatile time-domain electromagnetic (VTEM)-magnetic-radiometric survey was flown over the central part of the Falea Permit, covering all identified mineralized zones except for the Kania-East Zone. A second block was flown over part of the Madini Permit, adjoining to the east, onto the Falea Permit, covering the Kania-East Zone. The second block was, in part, flown to evaluate the gold potential of the Birimian basement within the Madini Permit. The survey comprised 933 line-km at a 100 m line-spacing covering an area of approximately 90 km^2. Several survey products are useful for exploration, including equivalent uranium, which identified some uranium anomalies within the survey area, and apparent resistivity depth slices that highlight the approximate location of the Road Fault.

2015 VTEM

Given the success of the 2011 VTEM survey, and the relatively small area surveyed, Geotech Ltd. performed another, larger helicopter-borne geophysical survey over the Project area between late January and early February 2015 (Geotech, 2015). The survey consisted of helicopter borne EM using the VTEM plus system with a full receiver-waveform streamed data recorded system with Z and X component measurements, a RSI ARGS RSX-5 spectrometer system, and a horizontal magnetic gradiometer using two cesium magnetometers. The survey area was flown in an east to west (N 90° E azimuth) direction, with traverse line spacing of 150 m as depicted in Figure 9-1. Tie lines were flown perpendicular to the traverse lines (N0°E azimuth) and were flown in varying spacing ranging from 2,650 m to 8,000 m. A total of 1,384 line-km of geophysical data were acquired during the survey.

The purpose of the 2015 VTEM, magnetic, and radiometric survey was to complete property-wide airborne survey coverage which would allow for identification of additional exploration targets. Although additional zones of blind mineralization are unlikely to manifest themselves directly in these data sets, the data provides a means to map geology and structure beneath lateritic cover and delineate target areas for drill testing.

A preliminary interpretation of the data has identified:

- Extensions of prospective stratigraphy in the southern portion of the Bala and Madini Permits, which provides confirmation of the limited geological mapping observations in these areas.
- Numerous prospective structures, including possible southern extension of the Road Fault and faults associated with the East Zone.
- Uranium (eU) anomalies evident in the radiometric data.

A total of five initial target areas were identified for field follow-up. A limited follow-up program, including geochemical sampling and radiometric prospecting, was conducted in June 2015. A more detailed interpretation of the 2015 VTEM magnetic and radiometric data is pending.

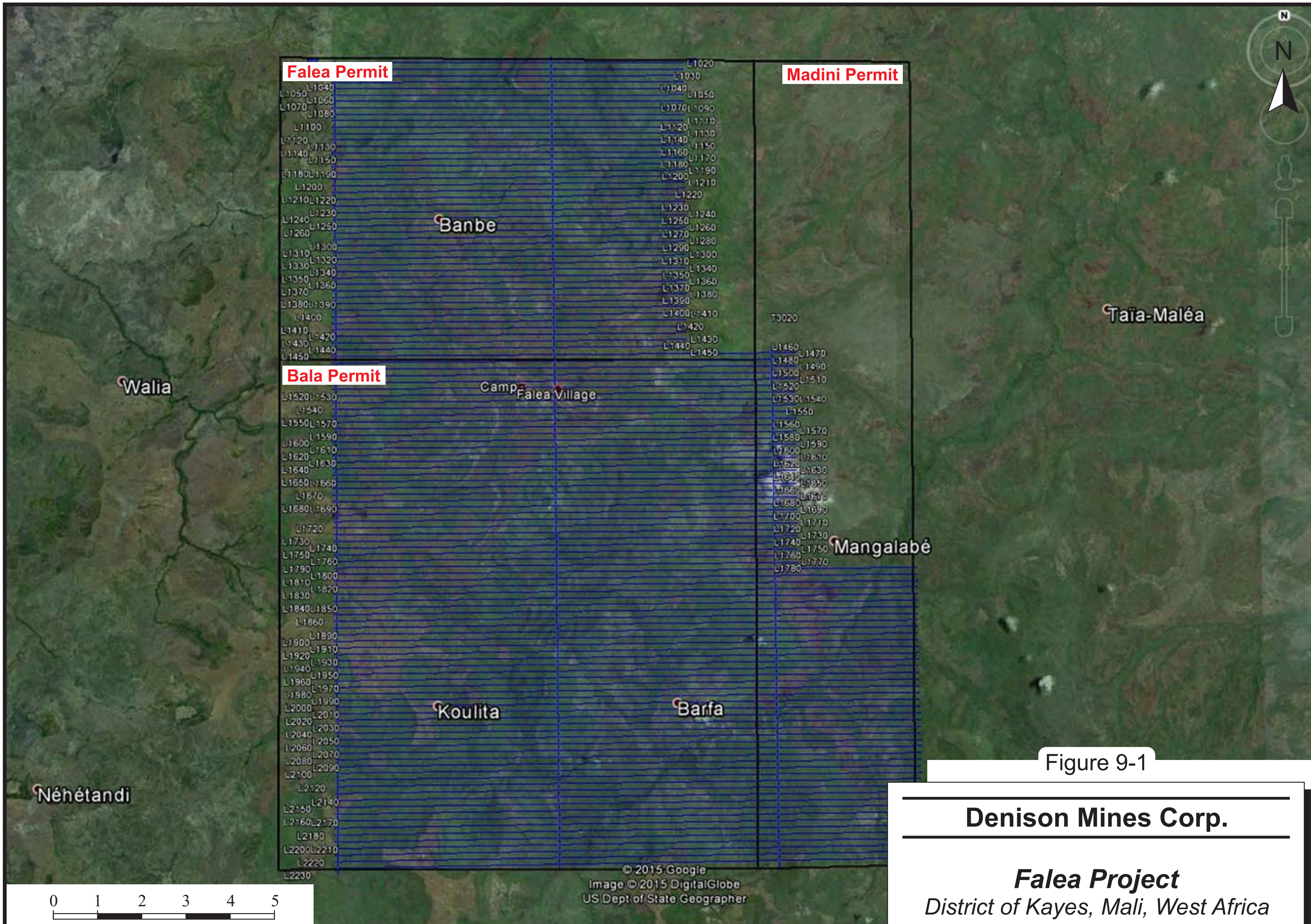

Figure 9-1

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

2015 Falea VTEM Profile Lines

October 2015

Source: Denison Mines Corp./Google earth, 2015.

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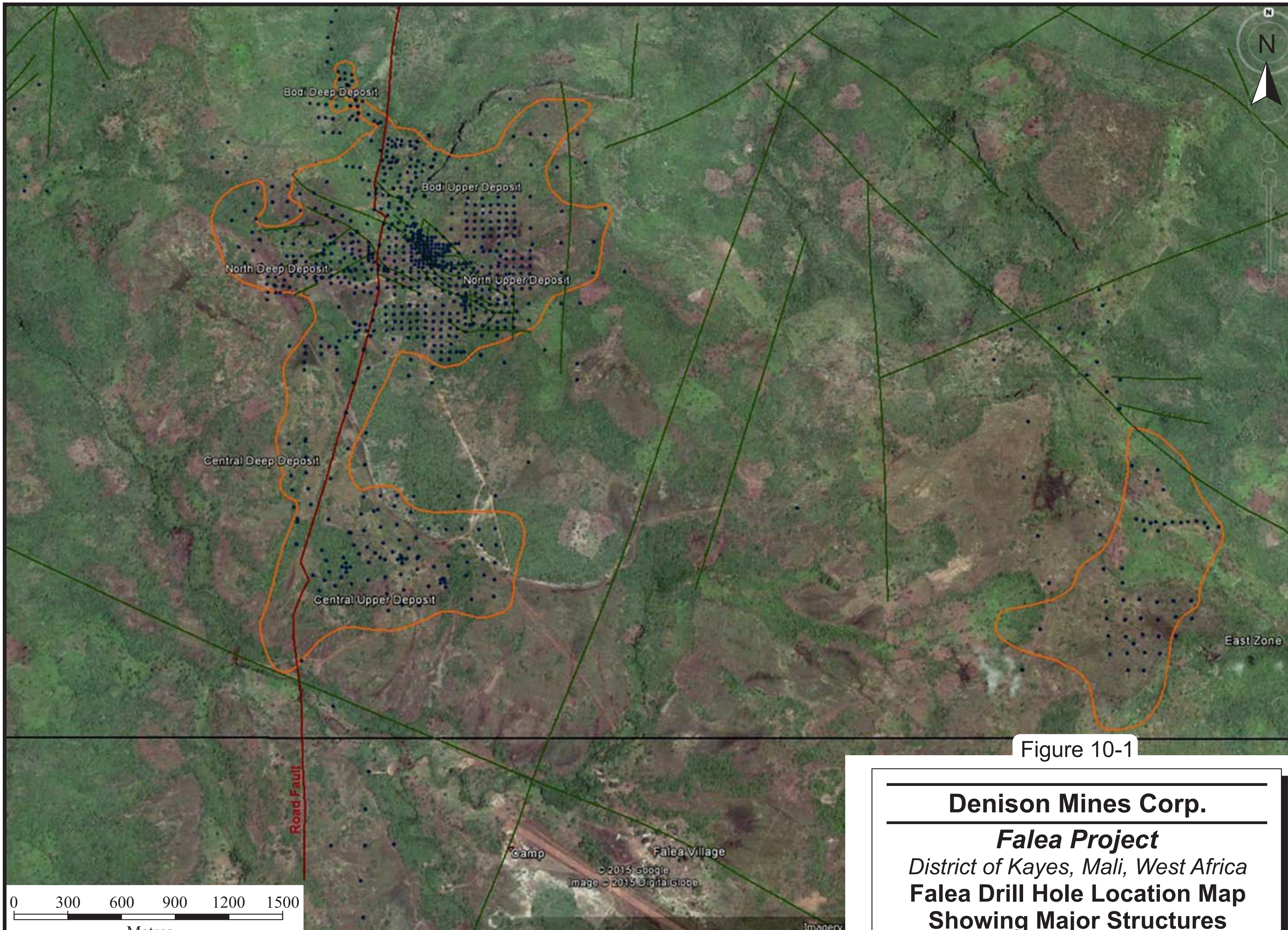
10 DRILLING

As of October 26, 2015, the effective date of the current Mineral Resource estimate, Denison and its predecessor companies had completed 945 drill holes totalling 232,034 m on the Property. Table 10-1 lists the holes by drilling program. Figure 10-1 illustrates the collar locations of the drill holes.

TABLE 10-1 DRILL HOLE RECORDS
Denison Mines Corp. – Falea Deposit

Year	Deposit	# Holes	Total Depth (m)
2007	Falea Central Zone	60	17,304.00
	Falea North Zone	12	3,259.00
2007 Total		**72**	**20,563.00**
2008	Falea Bodi Zone	12	1,445.00
	Falea Central Zone	22	7,319.00
	Falea East Zone	3	1,062.00
	Falea North Zone	40	10,828.00
2008 Total		**77**	**20,654.00**
2009	Falea East Zone	2	745.00
	Falea North Zone	49	11,286.75
2009 Total		**51**	**12,031.75**
2010	Falea Bodi Zone	12	2,190.00
	Falea North Zone	92	20,609.15
2010 Total		**104**	**22,799.15**
2011	Bala Zone	22	8,112.60
	Falea Central Zone	2	819.00
	Falea East Zone	17	5,943.57
	Falea Kania Area	17	3,794.25
	Falea North Zone	167	42,822.24
	Falea Road Fault	3	1,203.00
	Falea Zhang Zone	14	4,316.28
2011 Total		**242**	**67,010.94**
2012	Falea Bodi Zone	92	12,190.87
	Falea Central Zone	19	5,347.72
	Falea East Zone	27	7,771.50
	Falea North Zone	242	57,754.70
2012 Total		**380**	**83,064.79**
2013	Falea Central Zone	5	1,347.00
	Falea North Zone	14	4,563.00
2013 Total		**19**	**5,910.00**
Grand Total		**945**	**232,033.63**



October 2015

Source: Google earth, 2015.

Figure 10-1

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Falea Drill Hole Location Map Showing Major Structures on the Property

RPA

www.rpacan.com

DIAMOND DRILLING

Exploration on the Property was initially carried out by COGEMA between 1976 and 1982. In 2006, Rockgate acquired Delta and initiated exploration drilling in March 2007, which continued intermittently until 2013 with breaks occurring during the rainy season. The initial focus of Rockgate's exploration was to confirm historical mineralization from COGEMA's drilling exploration programs and to expand the mineral zones.

Rockgate completed 396 drill holes in late 2011 and the first half of 2012. Subsequent to the Minxcon (2012) estimate, Rockgate completed 66 drill holes totalling 15,936 m in the autumn of 2012 and 19 drill holes totalling 5,910 m in the spring of 2013. The results of the autumn 2012 and spring 2013 drilling are included in the current Mineral Resource estimate (Section 14). Denison has not completed any drilling since acquiring Rockgate in 2014.

All drilling at Falea is diamond core with the exception of a few holes that were drilled by reverse circulation and diamond core tails to determine if that method would be faster and more cost effective than diamond drilling alone. It was not. Two drilling operators have conducted drilling operations on Falea: BLY Mali S.A. (BLY), a division of Boart Longyear of South Africa, and Foraco Sahel S.A. (Foraco). BLY conducted drilling up to December 2009. In January 2010, Foraco commenced drilling at Falea beginning with drill hole DF-200.

Most holes were initially drilled using HQ-sized casing (63.5 mm inside diameter of core; 60 mm outside diameter) through to the base of the saprolite layer. NQ-sized (47.6 mm inside diameter of core; 75.7 mm outside diameter) drill core was then used to drill to the target depths. Of the total 860 drill holes drilled at Falea, 349 were drilled HQ size, 15 were drilled PQ size (for metallurgical testing), and the remainder were drilled NQ size. All drill holes were completed on the Falea Permit, except for BF-001 to BF022, which were completed on the Bala Permit. The driller logged the rate of drilling, water loss, etc., and handed this information to the Rockgate personnel.

The drill hole collars from 2007 to 2012 were located and recorded using a digital global positioning system (DGPS). Errors were subsequently found for the collar elevations. These elevation errors were corrected through the use of an orthorectified Photosat digital elevation model (DEM). The collar positions for the 2013 drill collars (19 holes) were located and recorded using a handheld Garmin GPSMAP 60CSx instrument.

Downhole surveys were measured using a Reflex EZ-Shot system and were taken at approximately 50 m intervals as well as at the end of the hole.

The orientation and true width of each mineralized zone is described in Section 7 Mineralization. The sample length from the drilling program was typically 0.5 m to 1.5 m, with the majority of samples being one metre long. In general, due to the nearly flat dip of the mineralization, most drill holes (verticals) intersecting the mineralization are representative of 95% to 100% of the true widths. In addition, the thickness of the deposit is between 0.5 m and 15.0 m, allowing numerous samples to be collected from each drill hole intersection in most cases.

DRILL HOLE NOMENCLATURE

The drill holes have a concise naming convention with the prefix “DF” denoting “Drill Falea” followed by the number of the drill hole. The drill holes were planned by the Rockgate personnel.

DRILL CORE SAMPLING

RPA is of the opinion that core recovery is generally very good to excellent, allowing for representative samples to be taken and accurate analyses to be performed. The core quality within the fault zones is typically broken and gougy (rock quality designation, or RQD = 40-70), with the average core recovery in the vicinity of the mineralized units above 90%. Poorer core recoveries have been noted in the saprolite and laterite layers. These two facies are closest to surface and are located between 5 m and 30 m with some occurrences as deep as 66 m below surface. These layers are heavily oxidized and often consist of sand and gravel-sized material.

The core was secured at the drilling site and transported on light vehicles to the base camp in metal core boxes where depth markers were checked and the core was carefully reconstructed. The geologist then marked every metre on the core as well as contact intercepts. The core was logged geotechnically on a run by run basis including the number of naturally occurring fractures, total core recovery, RQD, observed silver and chalcopyrite mineralization, and range of radiometric counts per second. The core was scanned using Radiation Solutions RS-120 scintillometers. Logging and sampling information was entered into a spreadsheet based template which was integrated into the Project digital database.

All drill core was photographed wet with a digital camera before splitting.

Denison/Rockgate maintains a consistent sampling protocol at the Falea Property. The core is marked according to geological units, samples are marked according to scintillometer "counts per second", and then split. The sample intervals are re-marked on the open cut faces of the core. The samples are bagged and labelled by qualified staff. The remaining half core and the unsampled core are stored at the Falea base camp core logging facility in metal trays. The ASK to VC portions are stored in core racks enclosed on three sides and under cover. Denison employs security guards throughout the year to guard the camp, facilities, and core.

The typical sample length is from 0.5 m to 1.5 m, with the vast majority being marked at one metre intervals. The core is marked for splitting and each sample is given a start and end marking. The samples neighbouring the mineralized zones are also sampled.

On site, after marking the samples, each sample was placed in a plastic bag with a unique sample number tag. The same sample number was written on the sample bag. The split core samples were then placed into plastic buckets and shipped to ALS Chemex (ALS) in Bamako. Samples were either trucked to Bamako or shipped on a plane with Rockgate personnel upon their return to Bamako.

All of the drill core is stored on site at the camp area (Figure 10-2).

RPA is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

FIGURE 10-2 FALEA CAMP CORE STORAGE FACILITIES

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

The sample preparation, security, and analytical procedures reported were carried out to an industry standard and the derived database is considered suitable for Mineral Resource estimation. Starting in early 2011, all samples were submitted to ALS Bamako and transferred directly to ALS Johannesburg for preparation and analysis. The ALS Laboratory Group is registered for ISO 9001-2000 and ISO 17025 in North America and ISO 17025 accredited by SANAS (South African National Accreditation System) in Africa for the analytical methods employed on the samples from Falea. The ALS laboratories are independent of Denison.

SAMPLE PREPARATION AND ANALYSIS

PRE-2011 SAMPLE PREPARATION AND ANALYSIS

The information, summarized below, is taken from Golder (2011) and Minxcon (2012).

During 2008, all samples were prepared in Bamako and the 250 g pulps were transported via courier to EcoTech Laboratory Ltd. (EcoTech) in Kamloops, British Columbia, Canada for inductively coupled plasma atomic emission spectroscopy (ICP-AES) for 35 element analysis. X-Ray Fluorescence (XRF) analyses were done by ALS in Vancouver. EcoTech was registered for ISO 9001-2000 by QMI Quality registrars (CDN 52172-01) for the provision of assay and geochemical analytical services. In July 2008, EcoTech was acquired by Alex Stewart Group Ltd., which in turn was acquired by the parent company of ALS Group, in July 2011.

From 2009 to May 2010, Rockgate had samples prepared in Bamako and the 250 g pulps sent to Johannesburg for ICP and XRF analysis, as well as silver assays. In May 2010, Rockgate started having ALS in Bamako ship the split core samples to Johannesburg for all preparation and analysis, with the analysis methods remaining the same.

Course rejects samples were returned to the Property site for long-term storage. The remaining pulp sample, which was left over from the first 250 g pulp, was transported to ALS Vancouver for XRF. In the early stages of the program, a selection of samples were transported to ALS Bamako and then analyzed at ALS Johannesburg. In addition, one shipment of 150 half core samples was sent directly to Eco-Tech from Bamako for analysis (Golder 2011). In 2014, Denison arranged for all the remaining pulps from ALS Johannesburg to be transported to the Property site for long-term storage.

POST-2011 SAMPLE PREPARATION AND ANALYSIS

Starting in early 2011, all core samples received at ALS Bamako were logged into the tracking system and shipped directly to ALS Johannesburg. Upon arrival at ALS Johannesburg, the sample was logged in the tracking system and a bar code label was attached. Samples that were too coarse for the large pulverizing mill were size reduced using jaw crushers before ALS was able to take a representative split sample for further pulverization.

The sample was then weighed, dried, and finely crushed to better than 70% passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. Pulverized samples were split using a riffle splitter. All pulverizing procedures used “flying disk” or “ring and puck” style grinding mills. ALS procedures guaranteed that for most sample types, at least 85% of the material was pulverized to 75 µm (200 mesh) or better. Samples prepared to the appropriate sizes were then transported to ALS Vancouver or EcoTech for further analysis.

The XRF analysis consisted of mixing a finely ground sample powder (10 g minimum) with a few drops of liquid binder (Polyvinyl Alcohol) and then transferring the sample into an aluminum cap. The sample was subsequently compressed in a pellet press under approximately 30 ton/in^2. After pressing, the pellet was dried to remove the solvent and analyzed by wavelength dispersive XRF spectrometry for uranium.

The ICP-AES analysis consisted of a prepared sample (0.25 g) being digested with perchloric, nitric, hydrofluoric, and hydrochloric acids. The residue was topped up with dilute hydrochloric acid and analyzed by ICP-AES. Following this analysis, the results were reviewed for high concentrations of bismuth, mercury, molybdenum, silver, and tungsten and diluted accordingly. Samples meeting this criterion were then analyzed by inductively coupled plasma-mass spectrometry (ICP-MS). Results were corrected for spectral inter-element interferences.

When elements exceeded the upper limits of the ICP-AES, they were passed on to another procedure for higher grade concentrations. ALS Johannesburg followed an “Ore Grade Elements by Four Acid Digestion Using Conventional ICP-AES Analysis” procedure. Assays for the evaluation of high-grade materials were optimized for accuracy and precision at high concentrations. Ultra-high concentration samples (> 15%-20%) may require the use of methods such as titrimetric and gravimetric analysis, in order to achieve maximum accuracy.

A prepared sample was digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water were added for further digestion, and the sample was heated for an additional allotted time. The sample was cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized, and the solution is analyzed by ICP-AES or by atomic absorption spectrometry (AAS).

The laboratory's internal monitoring system inserted quality control samples (reference materials, blanks, and duplicates) on each analytical run, based on the rack sizes associated with the method. The rack size was the number of samples (including quality control samples) in a batch. The blank was inserted at the beginning, standards were inserted at random intervals, and duplicates were analyzed at the end of the batch. Quality control samples were inserted based on the rack sizes specific to the method.

The primary reason for using two techniques was that XRF is a quicker method for returning results. The XRF analytical results were considered suitable in assisting with the exploration program and the ICP-AES results were relied upon for the Mineral Resource estimate. Table 11-1 lists the analytical methods used for the assays included in the Mineral Resource estimation.

TABLE 11-1 ANALYTICAL METHODS EMPLOYED
Denison Mines Corp. – Falea Deposit

Element	Method	Description	Units	Range
Ag	MS61	Ultra-Trace Level Method Using ICP-MS and ICP-AES	ppm	0.01 to 100
Ag	GRA22	Ag by fire assay and gravimetric finish	ppm	5 to 10,000
Ag	CON01	Ag concentrates by fire assay and gravimetric finish	ppm	0.7 to 995,000
Ag	OG62	Ag by HF-HNO_3-$HClO_4$ digestion with HCl leach, ICP-AES, or AAS finish	ppm	1.0 to 1,500
Cu	MS61	Ultra-Trace Level Method Using ICP-MS and ICP-AES	ppm	0.2 to 10,000
Cu	OG62	4 Acid near-total digestion and ICP finish	%	0.01 to 40
U	XRF05	U by pressed pellet, XRF	ppm	4 to 10,000
U	XRF10	U by lithium borate fusion, XRF	%	0.01 to 15
U	MS61	Ultra-Trace Level Method Using ICP-MS and ICP-AES	ppm	0.1 to 10,000

Uranium, silver, and copper were analyzed using various methods. For uranium, XRF10 took precedence over XRF05 which took precedence over MS61. The precedence for silver methods, from lowest to highest, was: MS61, Ag_OG62, Ag_GRA21, Ag_GRA21, then Ag_CON01. The precedence for copper methods, from lowest to highest, was: MS61 then Cu_OG62.

Table 11-2 depicts the borehole IDs, sample IDs, intervals, and data that is missing or has been incorrectly captured. The table also indicates the different analytical methods used over the period 2007 to 2012. The minimum and maximum ranges for the various analytical methods employed were used for the following elements:

- U_ppm
- U_XRF10_%
- U_XRF05
- Cu_ppm
- Cu og2 % >1000ppm
- Ag ppm ME-ICP-61
- Ag MS61
- Ag OG62
- Ag Con01ppm
- Ag CON01ppm

TABLE 11-2 SAMPLE ID WITH ELEMENTAL ANALYSIS RANGE (2012)
Denison Mines Corp. – Falea Deposit

YEAR	Hole ID From	Hole ID To	Including	Sample ID		U_ppm		U_XRF10_%		U_XRF05		Cu_ppm		Cu_OG62		Ag_ppm ME-ICP-61		Ag_MS61		Ag_OG62		Ag_GRA22		Ag_CON01 ppm	
				From	To	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2007	DF-001	DF-055	DI-001	B703051	B703120	10	–	0.01	–	–	–	1	–	0.001	–	0.5	–	–	–	1	–	–	–	–	–
2007	–	–	–	B703121	B703380	10	–	0.01	–	–	–	1	–	0.001	–	0.5	–	–	–	1	–	–	–	–	–
2007	–	–	–	B703301	B703350	10	–	0.01	–	–	–	1	–	0.001	–	0.5	–	–	–	1	–	–	–	–	–
2007	–	–	–	B703381	B703663	10	–	0.01	–	–	–	1	–	0.001	–	0.5	–	–	–	1	–	–	–	–	–
2011	DF-012	DF-120	DI-001	G416901	G416974	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	50	–	–	0.01	100	1	1500	5	–	–	–
2008 (ECOTECH)	DF-056	DF-148	–	G12701	G13000	0.1	2000	0.01	–	4	10000	0.2	10000	–	–	0.1	30	–	–	–	–	–	–	–	–
2008 (ECOTECH)	DF-056	DF-148	–	54001	54280	0.1	2000	0.01	–	4	10000		–	–	–	0.1	30	–	–	–	–	–	–	–	–
2008 (ECOTECH)	DF-056	DF-148	–	7R102301	7R102650	0.1	2000	0.01	–	4	10000		–	–	–	0.1	30	–	–	–	–	–	–	–	–
2008 (ECOTECH)	DF-056	DF-148	–	B702921	B703000	0.1	2000	0.01	–	4	10000		–	–	–	0.1	30	–	–	–	–	–	–	–	–
2008 (ECOTECH)	DF-056	DF-148	–	X54513	x54554	0.1	2000	0.01	–	4	10000		–	–	–	0.1	30	–	–	–	–	–	–	–	–
2009	DF-149	DF-164	–	–	–	–	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2009	DF-165	DF-199	–	–	–	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2010	DF-200	DF-207	–	G862521	G862620	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2010	DF-207	DF-225	–	G862621	G862790	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2010	DF-226	DF-242	–	G862801	G863000	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2010	DF-242	DF-289	–	G402000	G402800	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	1	1500	–	–	–	–
2010	DF-290	DF-303	–	G415001	G415197	0.1	10000	0.01	–	4	10000	0.2	10000	–	–	–	–	0.01	100	–	–	–	–	–	–
2011	DF-304	DF-388	–	G415201	G416900	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2011	DF-388	DF-449	–	G0687001	G0688500	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2011	DF-449	DF-476	–	G0822501	G0823000	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2011	DF-476	DF-523	–	L360001	L360856	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2012	DF-524	DF-584	–	L360861	L362000	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2012	DF-585	DF-759	–	L718001	L720540	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2012	DF-482	DF-483	–	L721901	L721920	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2012	DF-576	–	–	L721921	L721980	0.1	10000	0.01	–	4	10000	0.2	10000	0.001	–	–	–	0.01	100	0.01	–	5	10000	0.7	995000
2009 ALS	–	–	–	G862381	G86419		1000	–	–	–	–	–	–	–	–	–	–	0.01	100	–	–	–	–	–	–
2010	–	–	–	G862381	G862620	0.1	10000	–	–	4	10000	0.2	10000	–	–	0.01	100	–	–	–	1500	–	–	–	–

QUALITY ASSURANCE AND QUALITY CONTROL

Results from the quality assurance/quality control (QA/QC) program are documented in various reports provided by Denison. RPA relied on these reports and the summary of information contained in the Minxcon 2012 Technical Report. In summary, results indicate that the resource database is suitable to estimate Mineral Resources for the Falea deposit.

FIELD SAMPLE QA/QC

The QA/QC field program employed at the Falea Property by Rockgate included a uranium standard, a blank sample, and a pulp duplicate, which was inserted into every batch of 20 samples for submission. At Falea, a sample tag with the word "standard" written on it was inserted into an empty bag, which was included with the batch, and the laboratory then inserted the uranium standard where that bag with the sample tag was in the batch. In addition, the laboratory inserted in-house blanks, standards, and duplicates with each shipment.

The duplicates (pulp) were inserted by ALS Johannesburg after specific samples, at Rockgate's request. Rockgate identified the location of the duplicates based on expected samples containing high levels of uranium mineralization (based on radiation readings from the drill core). The blanks were inserted to test for contamination. The uranium standards were randomly inserted into every batch.

Minxcon was provided with a total of 2,099 results for analysis of quality control samples. The quality control samples are detailed in Table 11-3.

TABLE 11-3 QUALITY CONTROL SAMPLE ANALYSIS RESULTS
Denison Mines Corp. – Falea Deposit

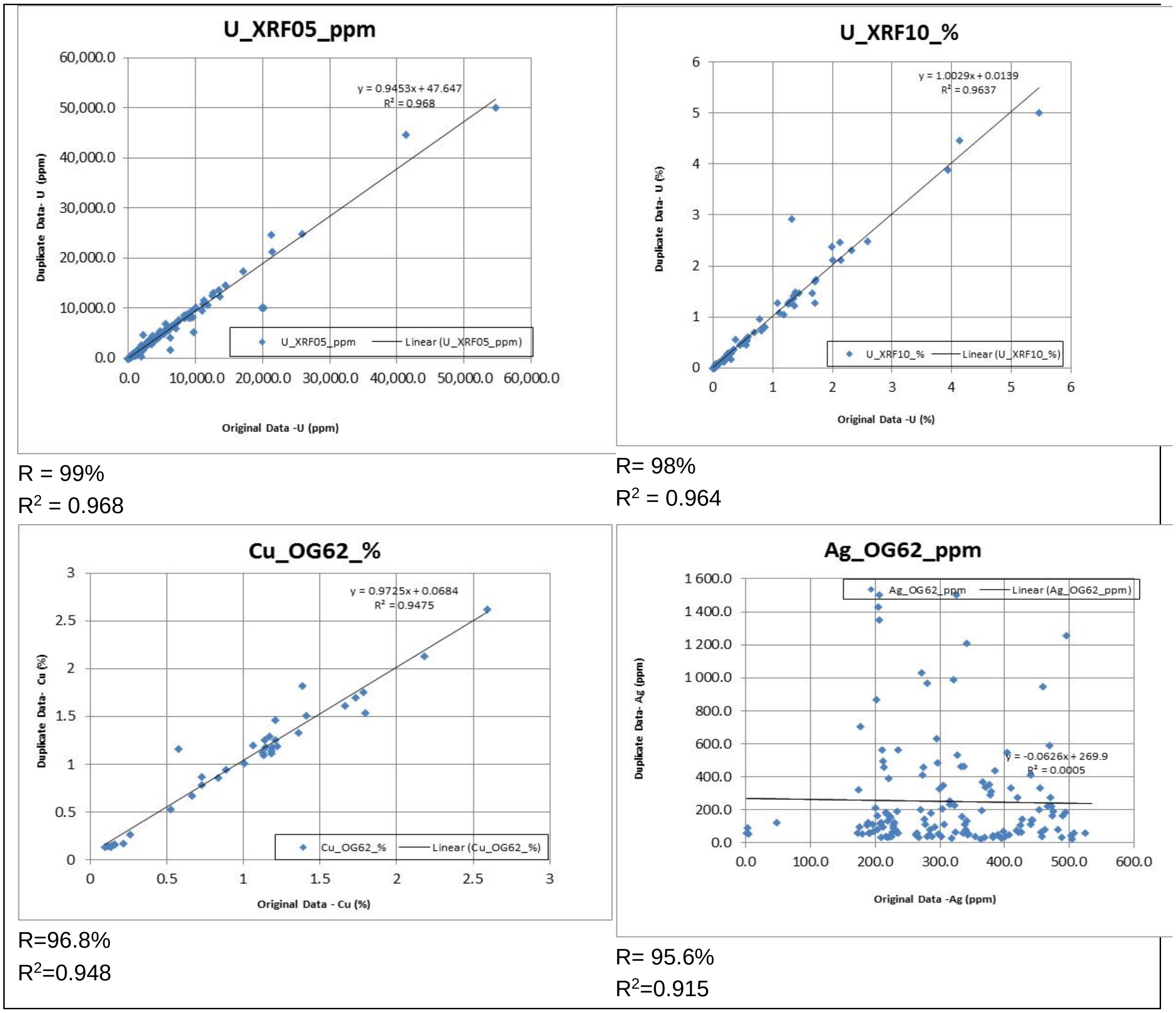
Quality Control Sample Type	Number of Samples
Duplicate Samples	720
Standard Reference Materials	676
Blank Samples	703
Total	**2,099**

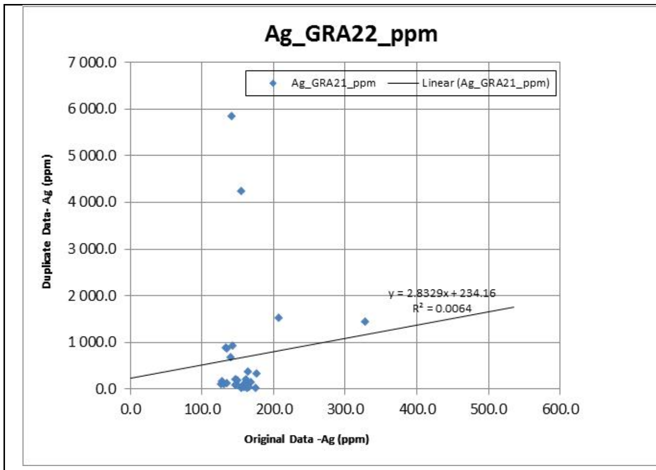
The analytical results of the quality control samples are discussed in the following subsections.

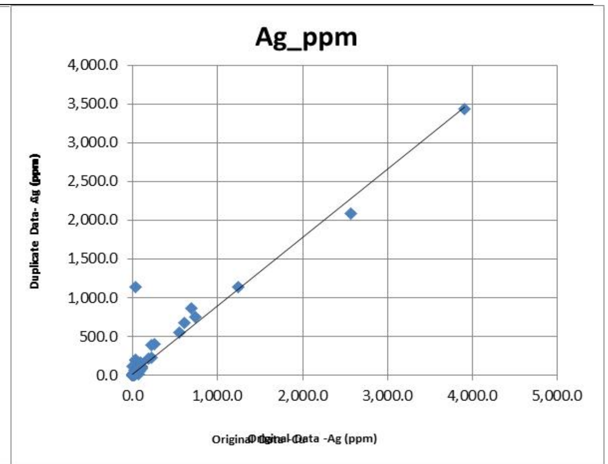
DUPLICATE ANALYSES

A total of 720 duplicate analyses were reviewed by Minxcon. The original results were plotted against duplicate results for each of the analytical methods employed, as illustrated in Figure 11-1.

FIGURE 11-1 SCATTER PLOTS FOR DUPLICATE ANALYSES





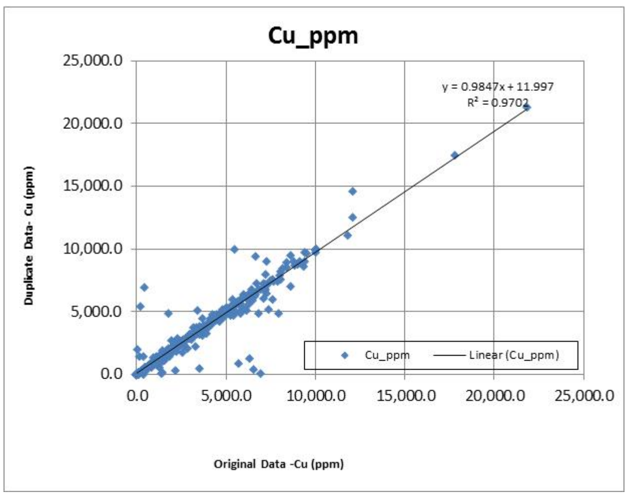


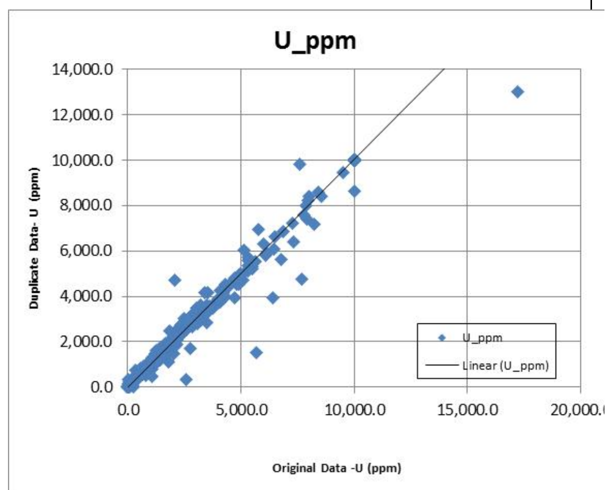
R= 95.9%

R^2 = 0.919

R= 99.4%

R^2=0.988





R= 98.5%

R^2=0.970

R= 96.9%

R^2=0.940

From the above, the Pearson correlation coefficient ('r') for each method of analysis was calculated by Minxcon (Table 11-4). Minxcon used a Pearson correlation coefficient of >0.96 to indicate adequate repeatability (precision).

TABLE 11-4 PEARSON CORRELATION COEFFICIENT FOR DIFFERENT METHODS OF ANALYSES
Denison Mines Corp. – Falea Deposit

Element	Method	Pearson Correlation Coefficient	Conclusion
Ag	MS61	0.994	Results indicate adequate repeatability (precision)
Ag	GRA22	0.959	Results **do not** indicate adequate repeatability (precision)
Ag	CON01		No Data
Ag	OG62	0.956	Results **do not** indicate adequate repeatability (precision)
Cu	MS61	0.985	Results indicate adequate repeatability (precision)
Cu	OG62	0.968	Results indicate adequate repeatability (precision)
U	XRF05	0.990	Results indicate adequate repeatability (precision)
U	XRF10	0.975	Results indicate adequate repeatability (precision)
U	MS61	0.969	Results indicate adequate repeatability (precision)

From the duplicate analyses, two of the analytical methods do not appear to demonstrate adequate repeatability based on duplicate results, however, the results could be indicative of the nugget effect often displayed by precious metal deposits. Duplicate results for the copper and uranium analytical results indicate adequate repeatability for use in the estimation of Mineral Resources for the Project.

STANDARD REFERENCE MATERIALS

Two standard reference materials (SRM) were utilized by ALS, BLA-2 and UTS-3. The SRM UTS-3 was inserted into the sample stream for drill holes DF-149 to DF 441, including BF001 to BF020 drill holes. The SRM BLA-2 was used for drill holes DF-001 to DF-055, and for DFI-001.

Samples for drill holes DF-056 to DF-148 were sent to EcoTech for analysis. EcoTech was registered for ISO 9001-2000 by QMI Quality registrars (CDN 52172-01) for the provision of assay and geochemical analytical services. EcoTech also participated in the Canadian Certified Reference Materials Project (CCRMP) testing program annually. Minxcon did not have any information on the standard used by EcoTech, and no analyses were conducted for the SRMs in these drill holes.

All SRM data examined by Minxcon pertained to uranium standards only, and Minxcon was unable to comment on the accuracy of the copper and silver analyses for the Falea Project.

The uranium SRMs utilized by ALS for the Falea Project were sourced from CCRMP, CANMET Mining and Mineral Sciences Laboratories (Canada), and the certified values are detailed in Table 11-5.

TABLE 11-5 STANDARD REFERENCE MATERIALS
Denison Mines Corp. – Falea Deposit

SRM	Description	Certified Value U (ppm)
BLA-2a	BLA-2a is a sample of ore that was typical of the property of Eldorado Nuclear Limited in Beaverlodge, Saskatchewan, and consists of pitchblende in reddish-brown mylonitized oligoclase saturated with dusty hematite.	4,260 ± 2
UTS-3	UTS-3 is a uranium tailings sample from Eldorado Nuclear Limited, at Beaverlodge, Saskatchewan. The ore consists of pitchblende in reddish-brown oligoclase saturated with dusty hematite. The pyrites in the ore are separated by flotation and are leached with sulphuric acid and sodium chlorate. Uranium is precipitated with magnesium hydroxide and is added to the "pyrite-free" ore. This mixture is leached with carbonate and sulphate, and the tailings are disposed of directly.	513

The results for SRM BLA-2 were plotted on control charts, as illustrated in Figure 11-2.

The two standard deviation value of 2 ppm for the standard BLA-2a was considered too small to demonstrate the accuracy of uranium analysis for samples of such high grade. Hence, only the certified mean value of 4,260 ppm was plotted for this standard, along with the analytical results for SRM samples included in the analytical stream. The analytical results for SRM BLA-2a appear to demonstrate sufficient accuracy for high grade uranium samples.

UTS-3 is a lower grade uranium SRM, and the results for UTS-3 were plotted on control charts, as illustrated in Figure 11-3.

UTS-3 was certified at a mean of 513 ppm, and Minxcon included two control lines at ± 5% of the mean value for this standard. The results appear to be sufficiently accurate, with less than 10 samples displaying anomalous values.

FIGURE 11-2 CONTROL CHART FOR ANALYTICAL RESULTS OF BLA-2

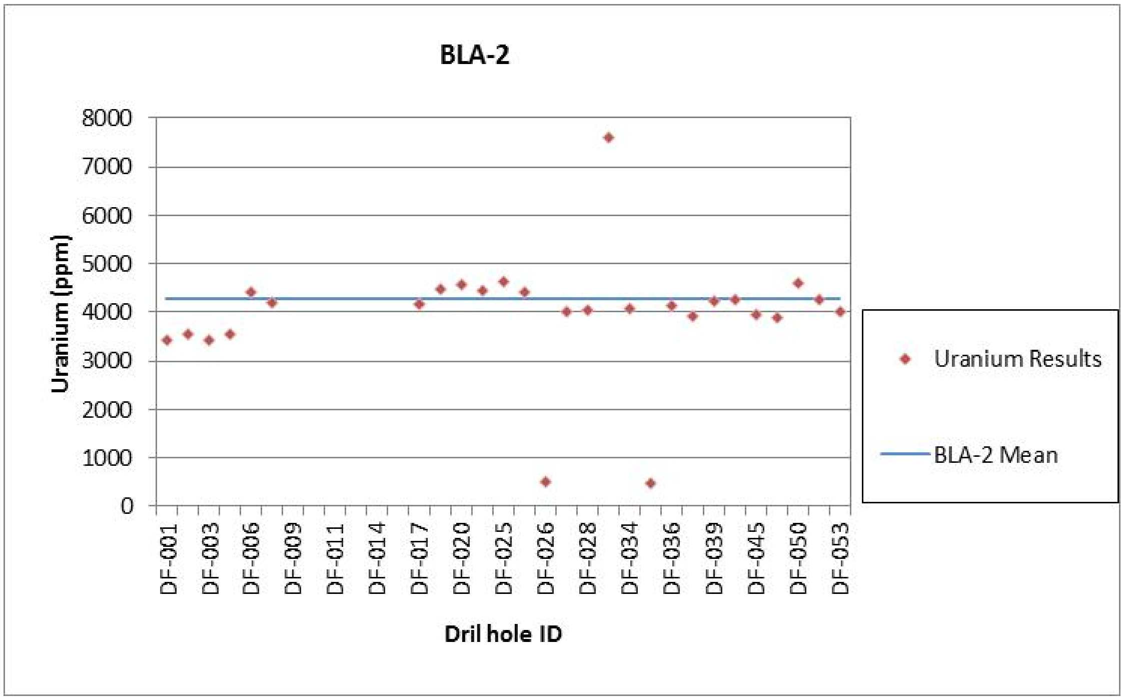
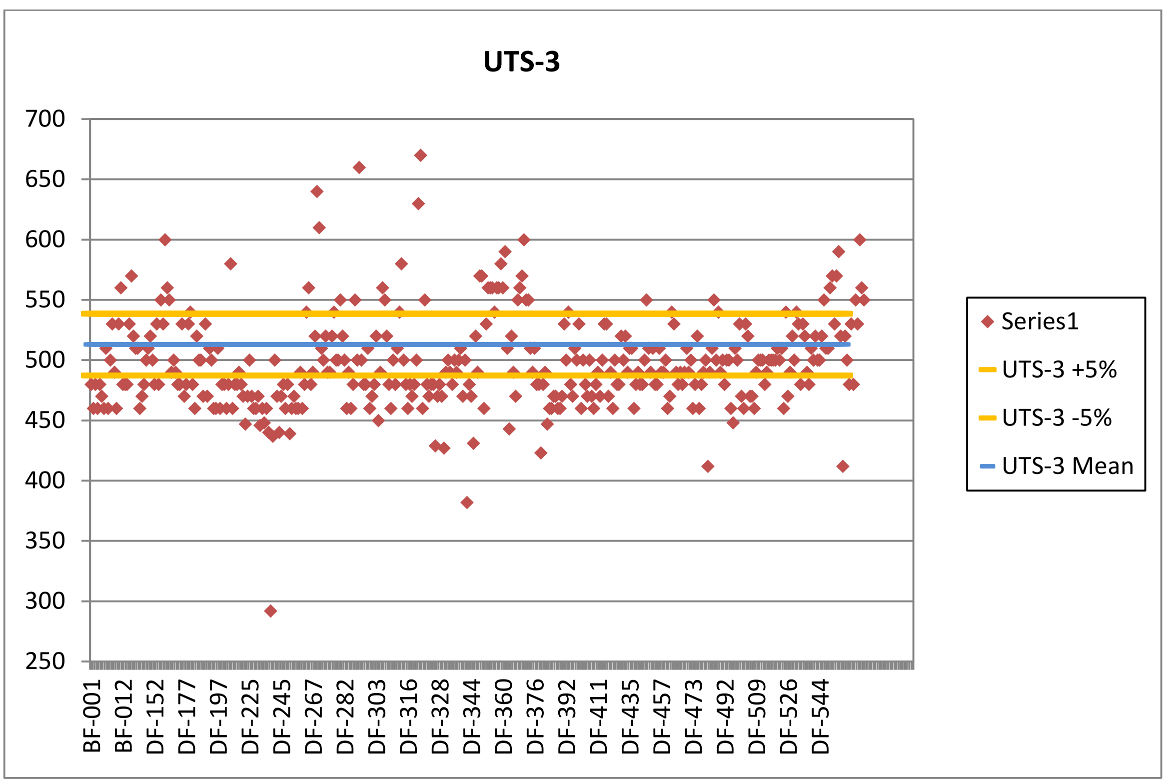


FIGURE 11-3 CONTROL CHART FOR ANALYTICAL RESULTS OF UTS-3



BLANK SAMPLES

A total of 703 blank samples were included in the sample stream. Blank sample materials were obtained in the field from a non-mineralized diabase dyke (dolerite) from the property site. Although five anomalous values (>100 ppm U) were obtained for blank samples analyzed, no significant contamination was evident in the samples (Minxcon, 2012).

SECURITY AND CONFIDENTIALITY

Drill core was delivered directly to the Rockgate uranium core handling facility. After logging, splitting, and bagging, core samples for analysis were stored in plastic buckets and shipped to ALS in Bamako. Samples were either trucked or shipped on a plane to Bamako while in custody of Rockgate personnel

The shipping container was kept under direct supervision of the Rockgate staff. A sample transmittal form was prepared that identified each batch of samples.

ALS considers customer confidentially and security of utmost importance and takes appropriate steps to protect the integrity of sample processing at all stages from sample storage and handling to transmission of results. All electronic information is password protected and backed up on a daily basis. Electronic results are transmitted with additional security features.

After the analyses described earlier in this section were completed, analytical data were securely sent by ALS to Rockgate using electronic transmission. The electronic results were secured using WINZIP encryption and password protection. These results were provided as a series of Adobe PDF files containing the official analytical results and a Microsoft Excel spreadsheet file containing only the analytical results.

In RPA's opinion, the sample preparation, security and shipping and analytical procedures meet industry standards. The QA/QC program as designed and implemented by Rockgate is adequate and the assay results within the database are suitable for use in a Mineral Resource estimate.

12 DATA VERIFICATION

RPA reviewed and verified the resource database used to estimate the Mineral Resources for the Falea deposit. The verification included a review of the QA/QC methods and results, verifying assay certificates against the database assay table, standard database validation tests, and one site visit including drill core review. The review of the QA/QC program and results is presented in Section 11 Sample Preparation, Analyses and Security.

RPA considers the resource database reliable and appropriate to prepare a Mineral Resource estimate.

SITE VISIT AND CORE REVIEW

RPA visited the property on April 28, 2015 while the Project was in stand-by and maintenance mode. RPA visited several drill sites and reviewed all core handling, logging, sampling, and storage procedures.

RPA examined core from several drill holes and compared observations with assay results and descriptive log records made by Rockgate geologists. As part of the review, RPA verified the occurrences of mineralization visually and by way of a handheld scintillometer. Holes reviewed included holes from all four zones: East (DF-457), Bodi (DF-728, DF-744, DF-754), Central (DF-22, DF-36, DF-83), and North (DF-306, DF-249, DF-404, DF-325).

DATABASE VALIDATION

RPA performed the following digital queries. No significant issues were identified.

- Header table: searched for incorrect or duplicate collar coordinates and duplicate hole IDs.
- Survey table: searched for duplicate entries, survey points past the specified maximum depth in the collar table, and abnormal dips and azimuths.
- Lithology, Scintillometer, and Probe tables: searched for duplicate entries, intervals past the specified maximum depth in the collar table, overlapping intervals, negative widths, missing collar data, missing intervals, and incorrect logging codes.

- Geochemical and assay table: searched for duplicate entries, sample intervals past the specified maximum depth, negative widths, overlapping intervals, sampling widths exceeding tolerance levels, missing collar data, missing intervals, and duplicated sample IDs.

INDEPENDENT VERIFICATION OF ASSAY TABLE

The geochemical table contains 12,549 records. RPA verified approximately 1,580 records for gold, copper, and uranium values against 12 different laboratory certificates received directly from Denison. Only a few minor discrepancies due to rounding of values were found.

Based on the data validation by RPA and the results of the standard, blank, and duplicate analyses, RPA is of the opinion that the assay database is of sufficient quality for Mineral Resource estimation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

The following summary of mineralogy and metallurgical testwork commissioned by Rockgate in 2010 is taken from Golder (2011).

In March 2010, Rockgate commissioned SGS South Africa (Pty) Ltd (SGS) to perform mineralogical characterization and deportment analysis of a composite sample from the Falea Project. The Summary and Discussions and Conclusions sections of the SGS report (SGS, 2010) focuses on the liberation characterization, flotation response and/or leaching efficiency in general of the sample, and how this could impact the mineral processing at Falea.

Rockgate submitted a composite sample to SGS which contained a high uranium content at 0.3571% U_3O_8 with silver content at 405 g/t. The copper content was low at approximately 0.16% Cu and the sulphur content of the sample was low at 0.52% S.

The grading analysis completed indicates that uranium, silver, sulphur, and base metals preferentially upgrade into the finer fractions. The silver displays no up- or downgrading in the 106 µm fraction.

The uranium-phases are dominantly U-silicates and U-oxides, both of which are readily leachable by acid leaching. Leach tests indicated approximately 90% dissolution of uranium after 48 hours, however, after six hours, the uranium dissolution was already at 86%. Flotation recovery of uranium is expected to be low, since a significant proportion of the uranium (approximately 42%) is hosted in U-silicates and the uranium-phases are strongly associated with silicate gangue. Preliminary flotation testwork confirmed this with only approximately 50% of the uranium being recovered in 23% of the mass.

The silver is present as native silver and silver-sulphide. Both minerals will dissolve in a cyanide solution, however, the silver-sulphide (acanthite) dissolves at a much slower rate than native silver. Only 77.56% of the silver was dissolved after 48 hours during the leach testwork. The leach kinetics may be improved by employing a stronger cyanide solution, however, the presence of chalcopyrite and pyrite may increase ferricyanide consumption. Due to the very fine-grained nature of the silver-phases, it is expected that finer grinding (to approximately 80% -65 µm) will improve silver recoveries. It is recommended that further testwork be conducted in order to optimize silver leach recovery.

Copper is present in low concentrations (approximately 0.16%). Copper is predominantly hosted by chalcopyrite and lesser chalcocite/covellite. A small amount of copper is also hosted in a silver-sulphide phase. Since chalcopyrite is not acid soluble, the acid leach recovery of copper is poor (approximately 17% after 48 hours), however, at a grind of 80% -75 µm, chalcopyrite is well liberated (>90% liberated and high middlings). Pyrite, the main sulphide mineral, exhibits similar degrees of liberation at this grind. Therefore, sulphide and copper recovery by flotation is expected to be high. Preliminary flotation tests indicated approximately 95% copper recovery with a mass pull of 11%, resulting in a copper grade of approximately 1.7%. Cleaning of this rougher concentrate to achieve the required saleable grades appears possible.

A possible effective process route will be:

a. Fine grinding of the ore (80% -75 µm to 80% -65 µm)
b. Uranium recovery by acid leaching
c. Neutralization
d. Silver recovery by cyanide leaching (optimal leach parameters still to be determined)
e. Sulphide flotation to recover most of the remaining copper and possibly also some of the remaining silver

In March 2011, the Australian Nuclear Science and Technology Organisation (ANSTO) was appointed to complete the metallurgical testwork for the Falea Property. The following summary of mineralogy and metallurgical testwork commissioned by Rockgate is taken from Rockgate's 2013 Annual Information Form.

The Falea deposit is polymetallic, containing significant quantities of uranium, silver, and copper. The uranium is present as an oxide (U_3O_8) and is leachable with either acid or alkaline. The silver is present as either elemental or sulphide. The copper is present as both leachable and non-leachable (refractory) forms in varying proportions.

The initial phase of work consisted of the following:

- Acid leaching of milled ore
- Acid leaching of flotation tailings
- Alkaline leaching of milled ore
- Alkaline leaching of flotation tailings
- Solid/liquid separation by settling or filtration
- Flotation of ore and acid leached tailings

From the results of the initial phase of the testwork, two potential flowsheets were identified. In Flowsheet 1, it was proposed that an oxidative acid leach be conducted on the ore, followed by flotation on the neutralized residue. In Flowsheet 2, the first step would be flotation of the ore and then an oxidative leach on both the flotation concentrate and the flotation tails.

Both flowsheets demonstrated that uranium, and the contained silver and copper, could be extracted economically. Although Flowsheet 2 was more complex than Flowsheet 1, it was more flexible and was likely to give a higher product yield and reduce reagent consumptions. A trade-off study indicated that the alkaline process route would make significant reductions in operating costs and so this flowsheet was selected for further study. To prepare the pilot plant for bulk testing, the best configuration of the alkaline circuit was investigated. The objectives of this configuration study were:

- Identify options to reduce the risk associated with carbonate losses.
- Identify the operating cost differential between options.
- Highlight capital cost differentials between options.
- Quantify risk and uncertainty.

Four configuration alternatives were identified:

- Leach – Resin-in-Pulp (RIP) – Sodium Diuranite (SDU)
- Leach – Counter Current Decantation (CCD) – Ion Exchange (IX) – SDU
- Leach – CCD – SDU
- Leach – Solid/Liquid (S/L) Separation

Subsequent work indicated that the most suitable process would be leach – CCD – IX – SDU.

The testwork indicated an overall recovery of 90% uranium, including 99% recovery from the sulphide concentrate, using MgO as the precipitant. The precipitated uranium is recycled to the alkali circuit. Overall silver recovery of 88% has been achieved, including 97% silver recovery in the cyanide leach. Overall copper recovery of 73.5% has also been achieved, including 90% recovery from solvent extraction from the float concentrate.

The results of the trade-off study and the process flowsheet were most recently reported by DRA Mining (Pty) Ltd (DRA) in an Internal Economic Study prepared for Rockgate (DRA, 2014).

14 MINERAL RESOURCE ESTIMATE

RPA estimated Mineral Resources for the Falea deposit using drill hole data available as of August 5, 2014. The effective date of this resource estimate is October 26, 2015 since there has been no drilling since 2013. Results are summarized in Table 14-1. Details of the estimation methodology follow.

TABLE 14-1 MINERAL RESOURCE ESTIMATE – OCTOBER 26, 2015
Denison Mines Corp. – Falea Project

Category	Tonnes (Mt)	U_3O_8 (%)	Cu (%)	Ag (g/t)	U_3O_8 (Mlb)	Cu (Mlb)	Ag (Moz)
Indicated	6.88	0.115	0.161	72.8	17.4	24.4	16.11
Inferred	8.78	0.069	0.200	17.3	13.4	38.7	4.90

Notes:
1. CIM definitions were followed for classification of Mineral Resources.
2. Reported above a cut-off grade of 0.03% U_3O_8, based on a uranium price of US$75/lb.
3. Bulk density is 2.65 t/m^3.
4. Numbers may not add due to rounding.

RPA is not aware of any known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political, or other relevant factors that could materially affect the current Mineral Resource estimate.

RESOURCE DATABASE

Historically, the drill hole information, such as geological units, collars, sample and survey results, were entered into Microsoft Excel worksheets which were imported into a Microsoft Access database. This was undertaken by the Rockgate personnel. GeoQuest Ltd. (GeoQuest), an independent consultancy, was responsible for the establishment of the Access database and trained the Rockgate personnel in the use of the database.

The Falea Project includes drilling results from 2007 to 2013, which comprise 945 diamond drill holes totalling 232,034 m. The following data files were supplied to RPA:

- Drill hole collar position data (electronic format)
- Downhole in-hole survey data (hard copy and electronic format)

- Sample assays (electronic format)
- Downhole lithology data (electronic format)
- Downhole stratigraphic data (electronic format)
- Block Model Output and Wireframes

Upon completion of the initial data processing, RPA uploaded the borehole data into Vulcan software. Table 14-2 lists details of the Vulcan database used for the Falea Mineral Resource estimate.

TABLE 14-2 VULCAN DATABASE RECORDS
Denison Mines Corp. – Falea Deposit

Table Name	Number of Records
Collar	945
Survey	5,337
Stratigraphy	10,946
Assay Values	12,542
Block Model 1m Composites	15,358

The overall drill hole grid spacing at Falea is approximately 50 m by 50 m. In places, the average drill hole grid is 25 m by 25 m.

Section 12, Data Verification, describes the verification steps carried out by RPA. In summary, no discrepancies were identified and RPA is of the opinion that the drill hole database is valid and suitable to estimate Mineral Resources for the Falea deposits.

GEOLOGICAL INTERPRETATION AND 3D SOLIDS

RPA constructed three-dimensional (3D) wireframe grade models for the Falea deposit based on results of several surface diamond drilling campaigns from 2007 to 2013. To date, four main mineralized areas have been identified: the North Zone, the Central Zone, the East Zone, and the Bodi Zone. The North, Central, and Bodi zones are further subdivided into the North Upper and North Deep, the Central Upper and Central Deep, and the Bodi Upper and Bodi Deep areas. The subdivisions of the Upper and Deep areas are based on their positions relative to the cross-cutting Road Fault (Figure 14-1).

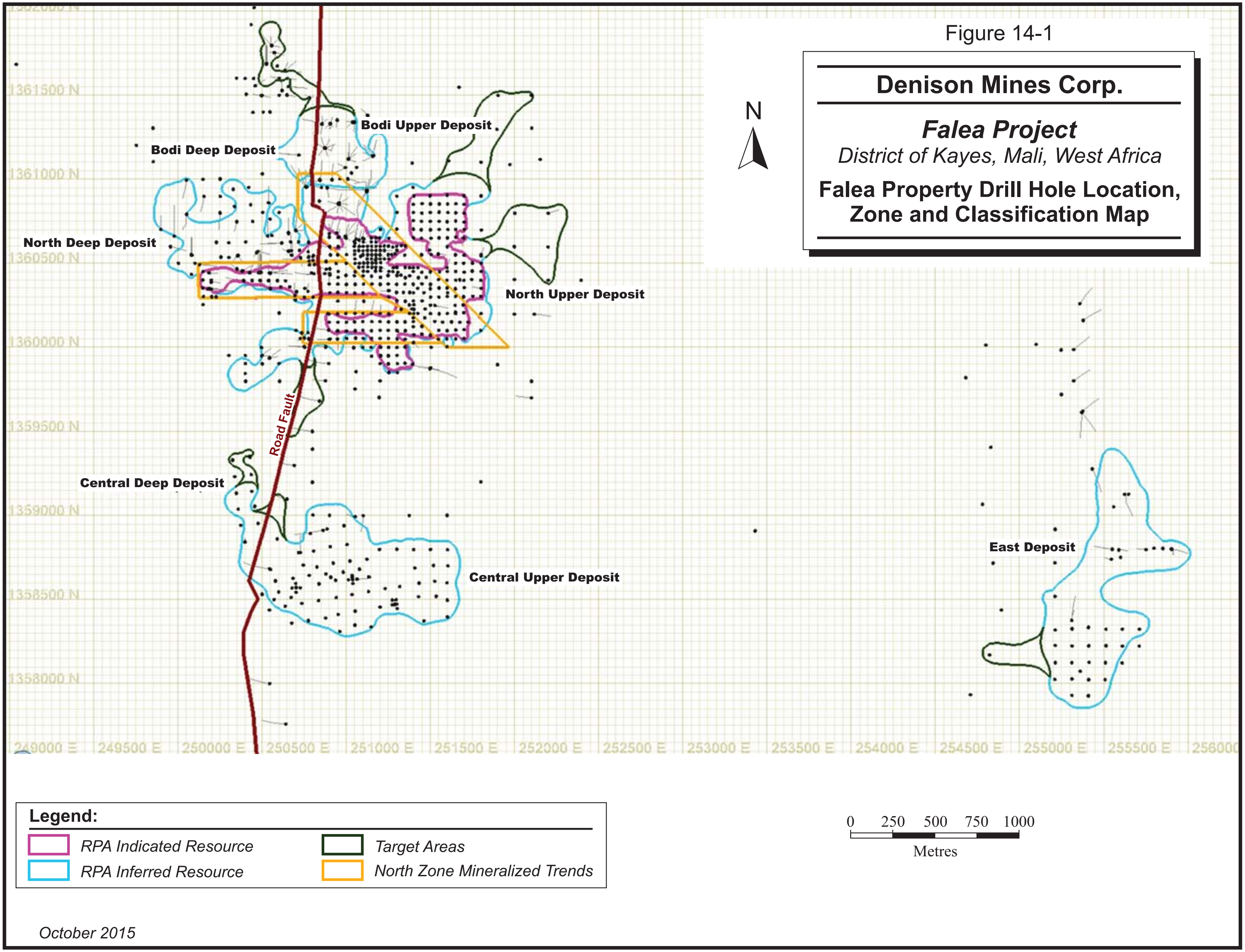


Figure 14-1

Denison Mines Corp.

Falea Project

District of Kayes, Mali, West Africa

Falea Property Drill Hole Location, Zone and Classification Map

www.rpacan.com

RPA developed 3D wireframe models for each of the ASK, KS, KI, and VC lithological units using implicit modelling routines in Leapfrog Software. The wireframes were constrained for the Bodi, Central, and North zones according to RPA's interpretation of the Road Fault as constructed using 3D point data supplied by Denison personnel. RPA plotted U_3O_8 grade times thickness (GT) for each drill hole in plan and contoured them. The 0.01 m-% contour was used as the outer boundary of the mineralized domains for the Bodi, Central, and North zones to constrain grade interpolation. The East Zone was also modelled in the same manner.

BASIC STATISTICS

Assay values located inside the wireframe models were exported for statistical analysis. Results were used to help verify the modelling process. Basic statistics by domain are summarized in Table 14-3.

TABLE 14-3 STATISTICS OF RESOURCE ASSAY DATA
Denison Mines Corp. – Falea Deposit

Descriptive Statistics	% U_3O_8	g/t Ag	% Cu
Number of samples:	12,664	12,494	11,548
Minimum:	0.01	0.01	0.00
Maximum:	6.45	1,7932.50	2.59
Average:	0.13	20.00	0.12
Standard deviation:	0.31	199.20	0.21
Variance:	0.10	3,9681.70	0.05
Coef. of variation:	2.36	9.96	1.78
Q1:	0.02	0.20	0.00
Median:	0.04	0.75	0.03
Q3:	0.11	3.35	0.15

TREATMENT OF HIGH GRADE VALUES

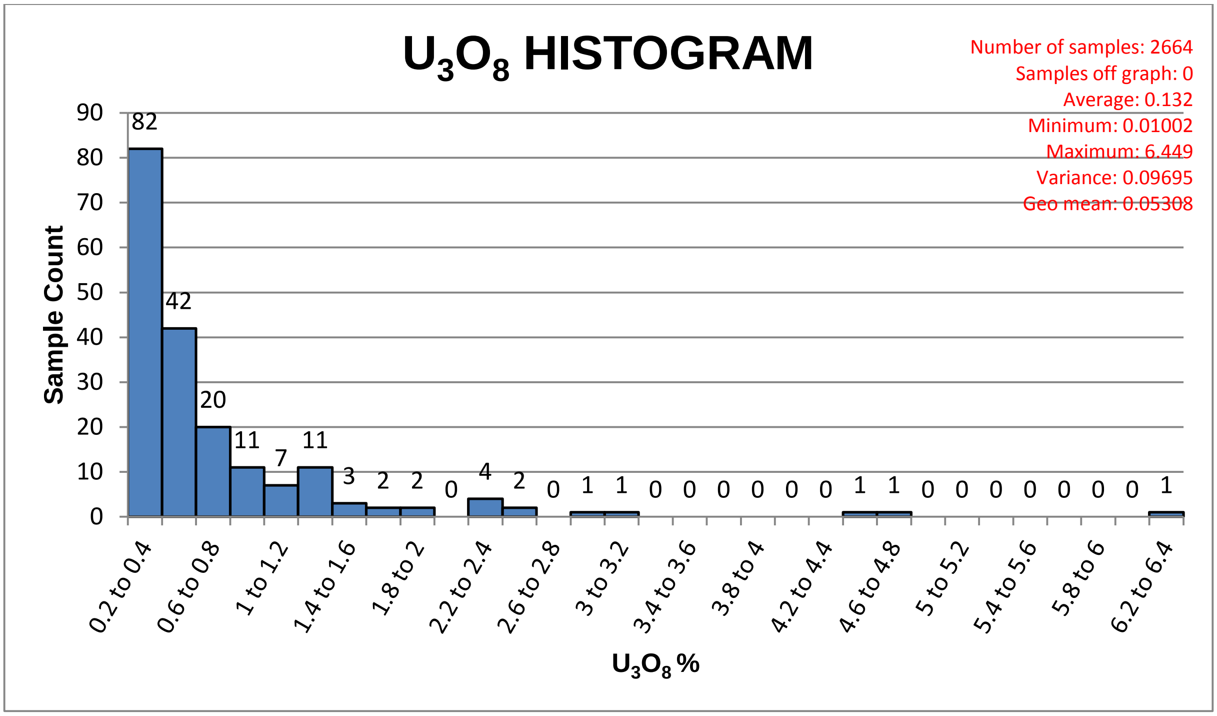
Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut or cap them at a specific grade level. In the absence of production data to calibrate the cutting level, inspection of the assay distribution can be used to estimate a "first pass" cutting level.

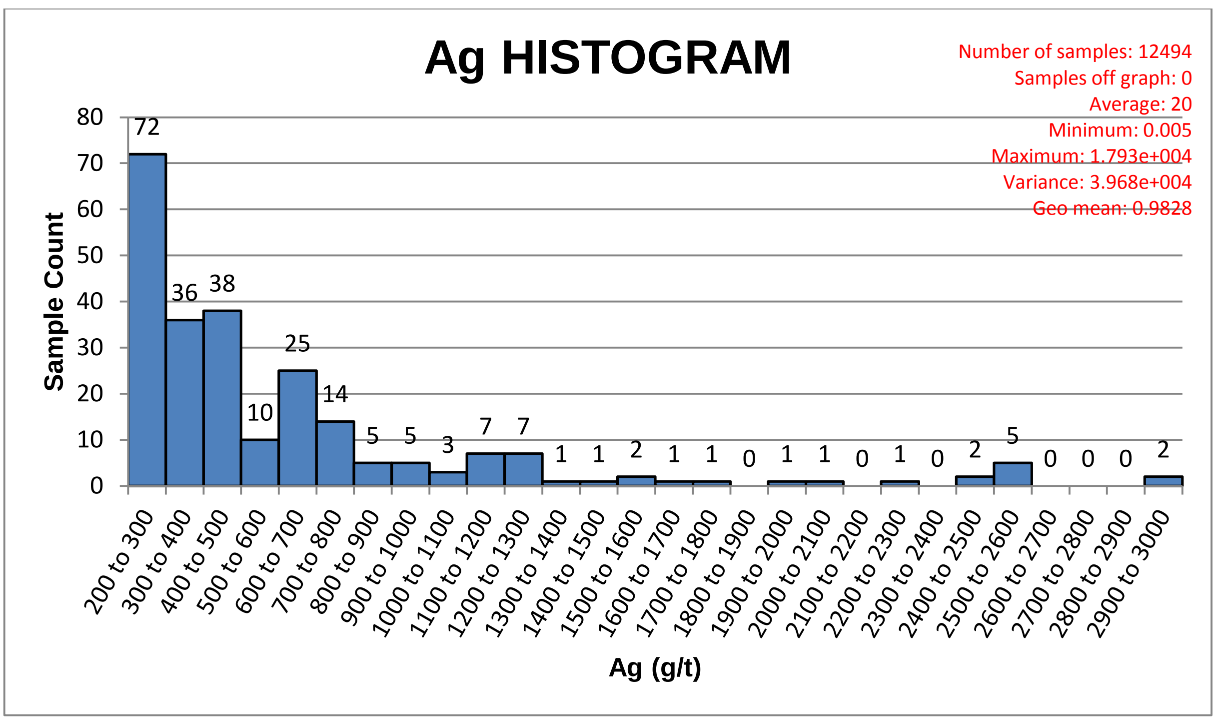
Review of the resource assay histograms within the wireframe domains (Figure 14-2) shows a small number of apparent high grade outliers which were capped prior to compositing. Table 14-4 lists the capping values for each element. These values constitute a small change from the Minxcon (2012) capping values, but in any case the capping has little effect on the grade model results.

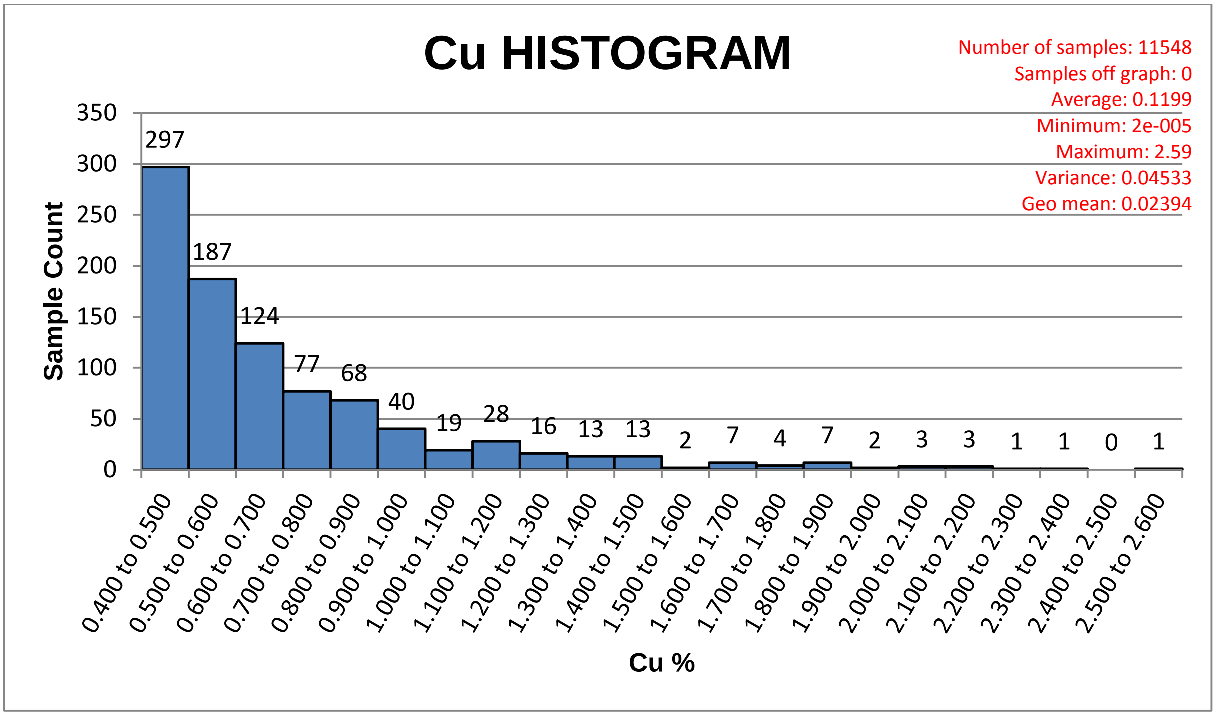
TABLE 14-4 CAPPING VALUES PER ELEMENT
Denison Mines Corp. – Falea Deposit

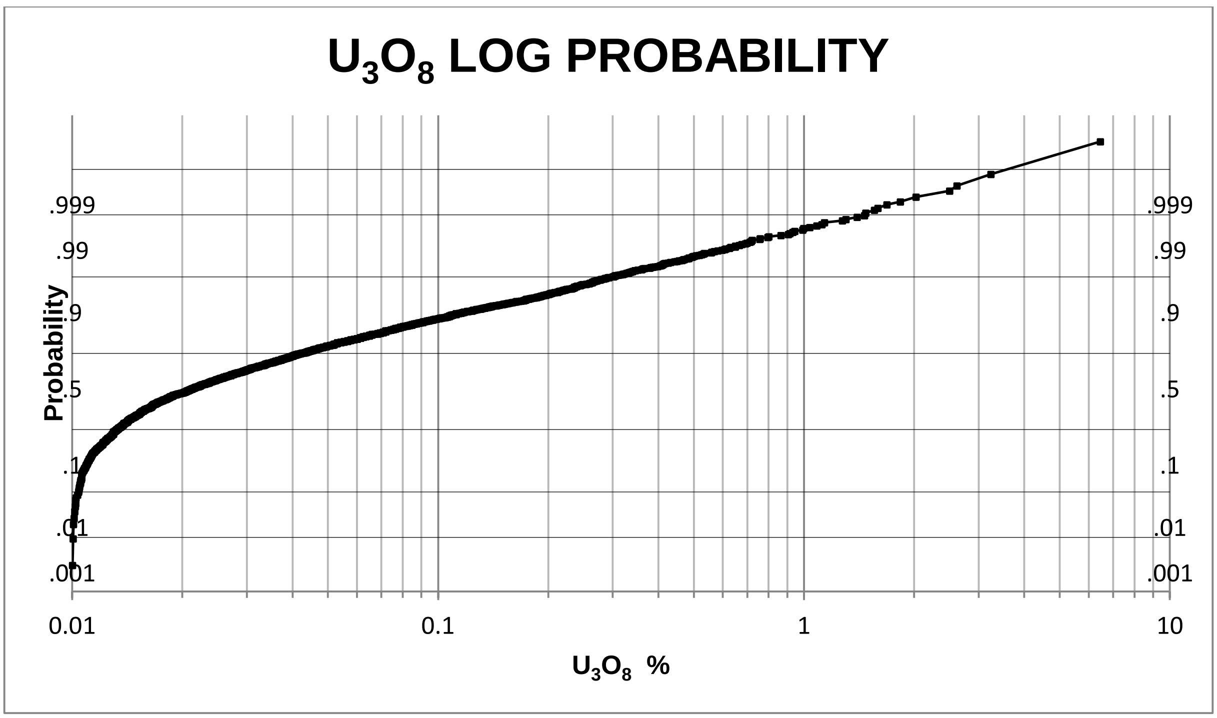
Variable	RPA Cap Value	Total # Assays	Total # Capped Assays	% Capped	MINXCON Cap Value (Average)
U_3O_8 (%)	2.00	11,548	13	0.11%	2.67
Ag (g/t)	1,000	12,494	37	0.30%	1,106.25
Cu (%)	1.50	12,540	31	0.25%	1.77

FIGURE 14-2 HISTOGRAMS FOR U_3O_8, AG AND CU AND LOG PROBABILITY PLOT FOR U_3O_8






Cu HISTOGRAM
Number of samples: 11548
Samples off graph: 0
Average: 0.1199
Minimum: 2e-005
Maximum: 2.59
Variance: 0.04533
Geo mean: 0.02394
Sample Count
350
300
250
200
150
100
50
0
297
187
124
77
68
40
19
28
16
13
13
2
7
4
7
2
3
3
1
1
0
1
0.400 to 0.500
0.500 to 0.600
0.600 to 0.700
0.700 to 0.800
0.800 to 0.900
0.900 to 1.000
1.000 to 1.100
1.100 to 1.200
1.200 to 1.300
1.300 to 1.400
1.400 to 1.500
1.500 to 1.600
1.600 to 1.700
1.700 to 1.800
1.800 to 1.900
1.900 to 2.000
2.000 to 2.100
2.100 to 2.200
2.200 to 2.300
2.300 to 2.400
2.400 to 2.500
2.500 to 2.600
Cu %


U3O8 LOG PROBABILITY
Probability
.999
.99
.9
.5
.1
.01
.001
0.01
0.1
1
10
U3O8 %

COMPOSITES

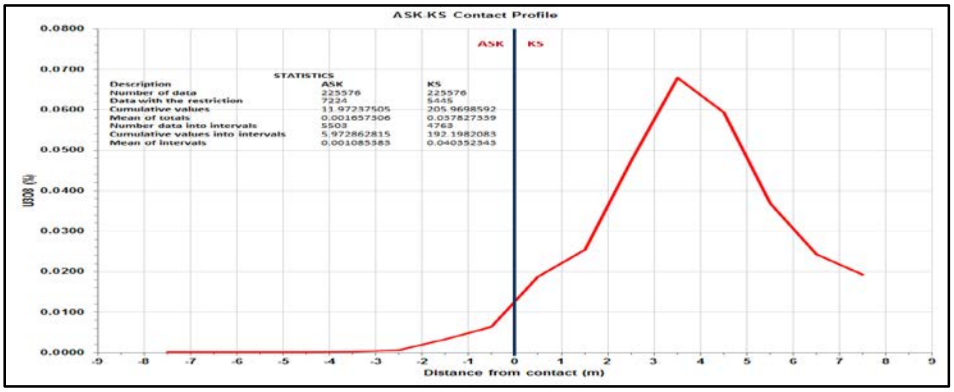
RPA composited assays on one metre run-length intervals using hard boundaries for each wireframe after reviewing the contact plots (Figure 14-3), which indicate an abrupt change in average grade or variability at the contact between some rock types. The composites were not density weighted as analysis of the assay data indicated that the density values were relatively constant between the various geological units. Compositing was restricted to within the wireframe models. Assays were capped prior to compositing. Composites less than 0.5 m, located at the bottom of the mineralized intercept, were added to the previous interval in the same geologic domain.

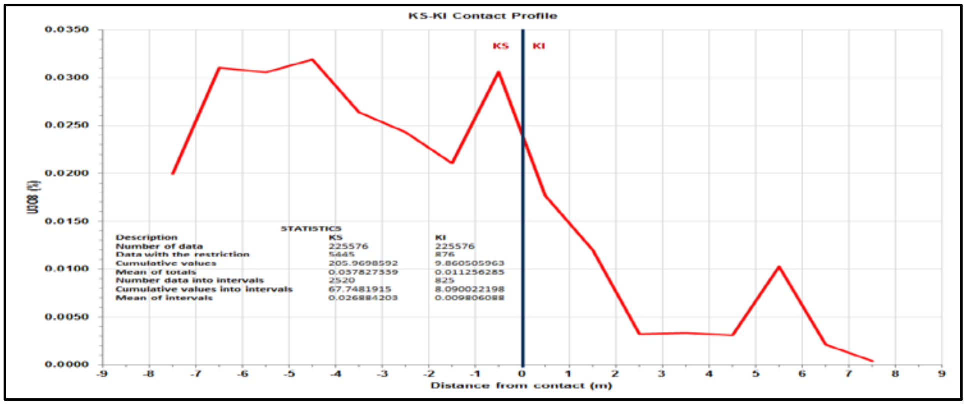
VARIOGRAPHY

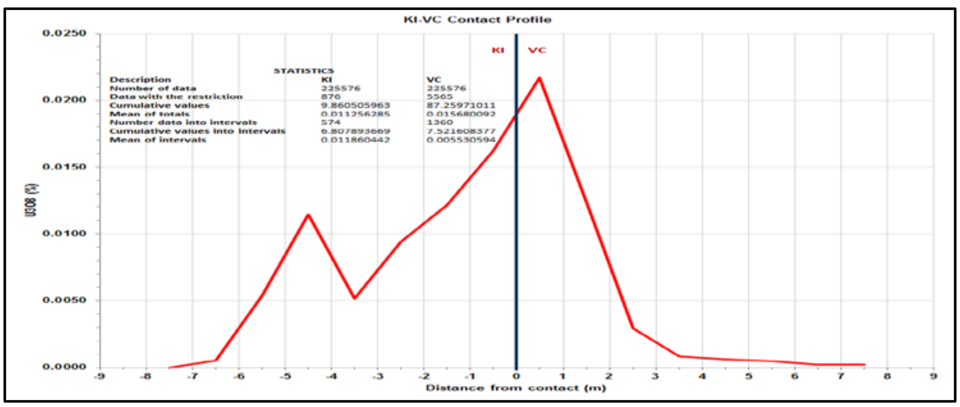
RPA prepared variograms of uranium, copper, and silver grade along a northwest-southeast strike direction in the higher grade corridor of the North Upper Zone (Figure 14-4). Variograms were of fair quality considering the limited number of composite data. The variograms suggest approximate ranges for the North Upper domain of 2.5 m downhole, 55 m along strike, and 35 m or less across strike. These ranges were used to derive search parameters for block grade interpolations.

RPA also visually reviewed and contoured the drill hole results to identify trends of higher grade mineralization.

FIGURE 14-3 FALEA CONTACT PLOTS







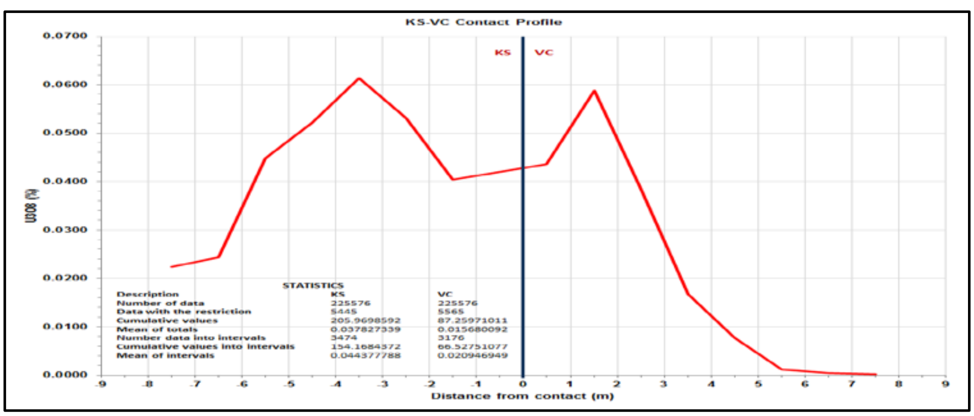
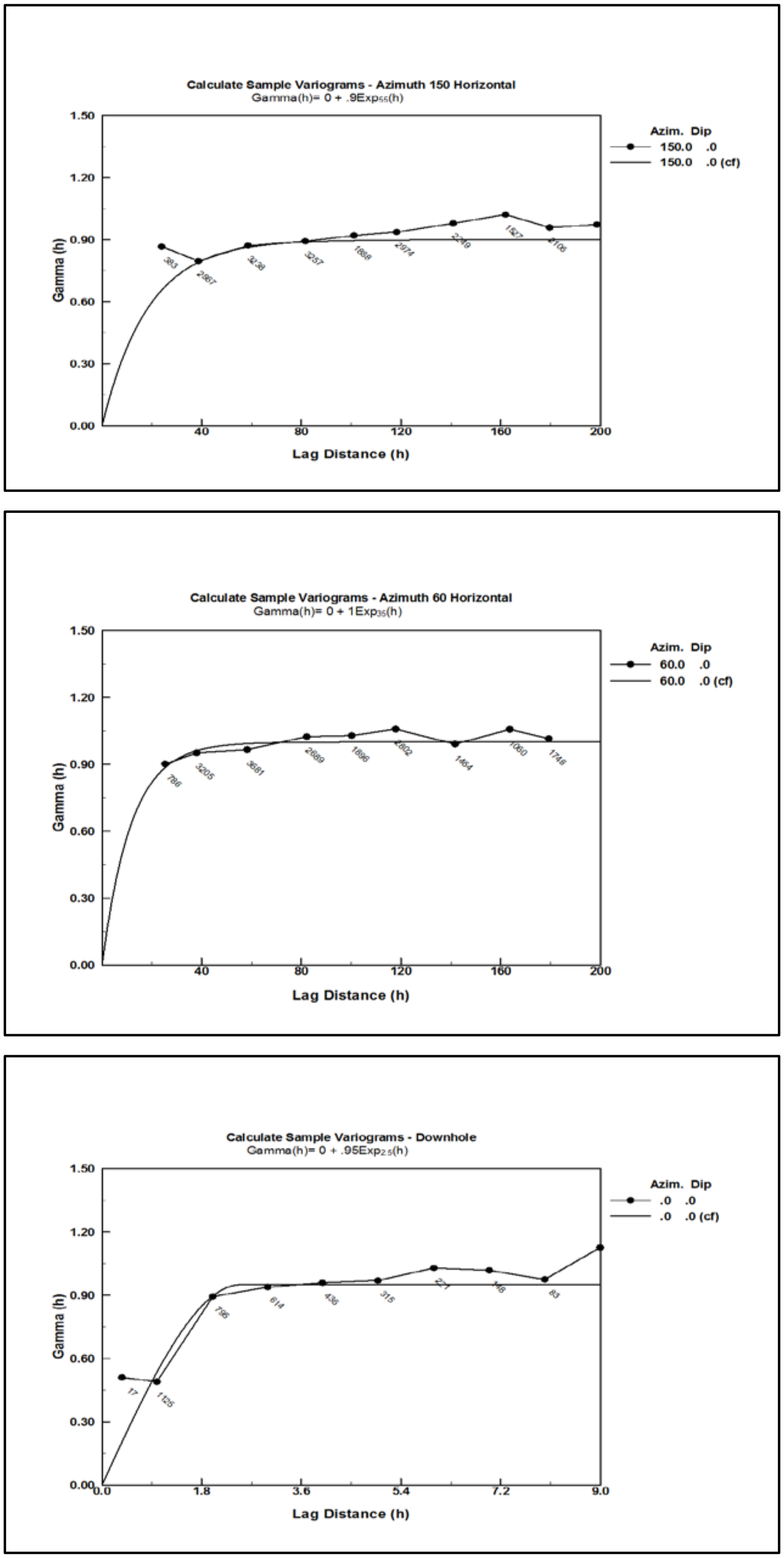


FIGURE 14-4 NORTH UPPER ZONE VARIOGRAMS



DRY BULK DENSITY

Bulk density is used to convert volume to tonnage and, if necessary, to weight the block grade estimates. The available density values for the assay data were reviewed by RPA. It was determined in previous studies that the density values varied little between the lithological units with an average density value of 2.65 g/cm^3. Upon review, RPA accepted the results and applied a value of 2.65 g/cm^3 (equivalent to 2.65 t/m^3) to all mineralized zones and rock types.

INTERPOLATION PARAMETERS

Three dimensional block models were constructed by RPA using Vulcan version 8.1.4 Mine Modelling Software. The variables uranium grade (% U), uranium oxide (% U_3O_8), copper grade (% Cu), and silver grade (g/t Ag) were interpolated into blocks using an inverse distance squared (ID^2) algorithm for each mineralized domain. Density (den), tonnes, and topo (air=0) were also calculated for each block. Hard boundaries were employed at domain contacts so that composites from within a given domain could not influence block grades in other domains.

RPA determined that the 10 m by 10 m by 2 m block size provided the best results for modelling the individual mineralized units, which differs on the Z-axis from the 10 m by 10 m by 1 m block size used in the Minxcon (2012) resource estimation. A whole block approach was used whereby the block was assigned to the domain where its centroid was located.

The interpolation strategy involved setting up search parameters in four passes for each zone domain. Both anisotropic (60 m by 30 m by 5 m) and horizontally isotropic (50 m by 50 m by 5 m) search ellipses were used, but the anisotropic search ellipses were limited to the North Zone area with the major axis oriented parallel to the dominant northwest-southeast and east-west trends. Each successive pass increased from the first pass major (X) and semi-major (Y) dimensions by a factor of two (second pass), three (third pass), and four (fourth pass). The semi-major axis was oriented horizontally, normal to the major axis, and the minor axis was vertical. For the third and fourth passes, the minimum and maximum numbers of composites were also reduced. Table 14-5 provides details of the estimation parameters for each mineralized zone.

TABLE 14-5 BLOCK MODEL ESTIMATION PARAMETERS
Denison Mines Corp. – Falea Deposit

ID	Variable	Value	Orientation	Major	Semi	Minor	dh_#	min_#	max_#
e_1	est_flag_id	1	0	50	50	5	2	4	12
e_2	est_flag_id	2	0	100	100	5	2	4	12
e_3	est_flag_id	3	0	150	150	5	10	1	3
e_4	est_flag_id	4	0	200	200	5	10	1	3
b_1	est_flag_id	1	0	50	50	5	2	4	12
b_2	est_flag_id	2	0	100	100	5	2	4	12
b_3	est_flag_id	3	0	150	150	5	10	1	3
b_4	est_flag_id	4	0	200	200	5	10	1	3
c_1	est_flag_id	1	0	50	50	5	2	4	12
c_2	est_flag_id	2	0	100	100	5	2	4	12
c_3	est_flag_id	3	0	150	150	5	10	1	3
c_4	est_flag_id	4	0	200	200	5	10	1	3
n_1	est_flag_id	1	0	50	50	5	2	4	12
n_2	est_flag_id	2	0	100	100	5	2	4	12
n_3	est_flag_id	2	0	150	150	5	10	1	3
n_4	est_flag_id	2	0	200	200	5	10	1	3
ndew_1	est_flag_id	1	90	60	30	5	2	4	12
ndew_2	est_flag_id	2	90	120	60	5	2	4	12
ndew_3	est_flag_id	3	90	180	90	5	2	2	6
nuew_1	est_flag_id	1	90	60	30	5	2	4	12
nuew_2	est_flag_id	2	90	120	60	5	2	4	12
nuew_3	est_flag_id	3	90	180	90	5	2	2	6
nunw_1	est_flag_id	1	150	60	30	5	2	4	12
nunw_2	est_flag_id	2	150	120	60	5	2	4	12
nunw_3	est_flag_id	3	150	180	90	5	2	2	6

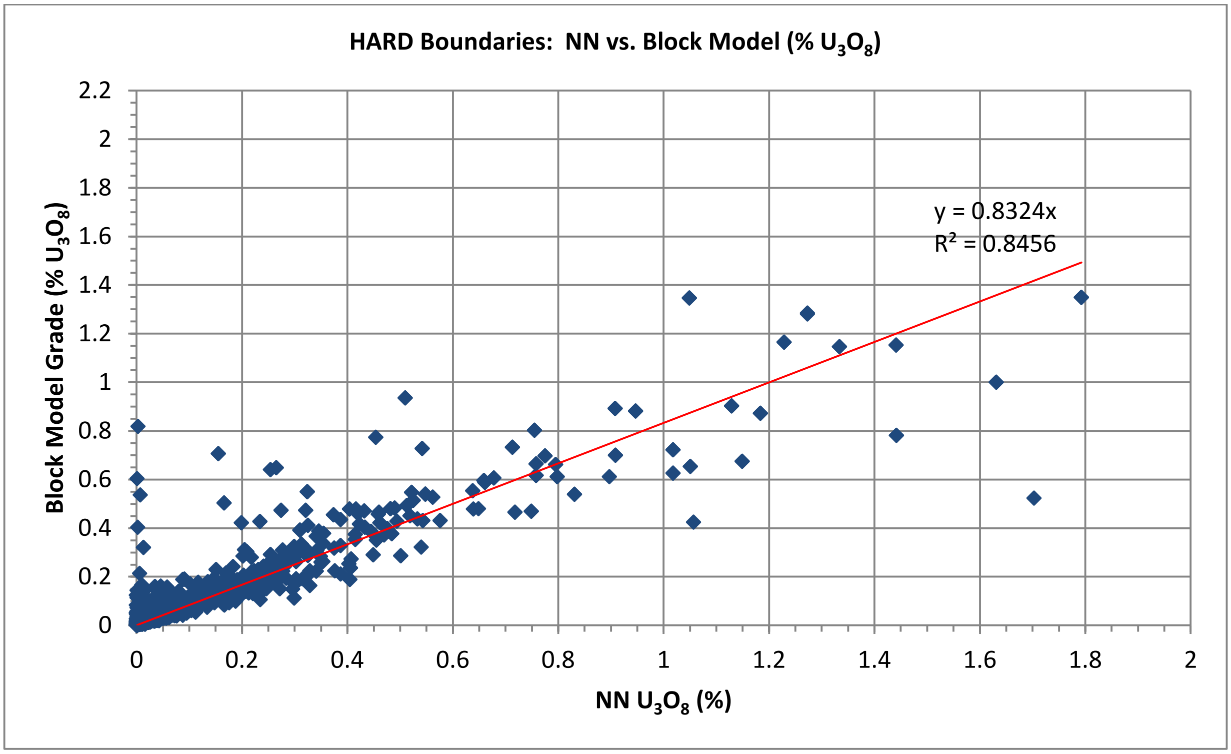
Notes:
ID code Nomenclature:
e = East Deposit
b = Body Deposit
c = Central Deposit
n = North Deposit (d = deep, u = upper, ew = east-west trend, nw = northwest trend)
1-4 = estimation pass
Example – ndew_1 = North Deep E/W trend estimation 1st pass

BLOCK MODEL VALIDATION

RPA validated the Falea deposit block models with the following checks:

- Comparison of domain wireframe volumes with block volumes. The two sets of volumes checked closely.
- Visual comparison of composite grades with block grades. The visual check showed a close correlation.
- Comparison of block grades with composite grades used to interpolate grades. The average block model grade was 5% lower than the average grade of the composites, which is considered acceptable.

FIGURE 14-5 BLOCK MODEL VS. NEAREST NEIGHBOUR PLOT FALEA VARIOGRAMS



In RPA's opinion, the estimation methodology is consistent with standard industry practice and the Falea deposit block model is reasonable and acceptable.

CUT-OFF GRADE

RPA estimated a resource cut-off grade of 0.03% U_3O_8 from the following inputs and assumptions:

- Underground mining by room and pillar methods at a rate of 4,000 tpd
- Metallurgical recovery of 90%
- Uranium price of $75/lb U_3O_8, based on independent long-term forecasts
- Royalty of 3%
- Operating cost of $48 per tonne, consisting of:
  - $30 per tonne Mining
  - $10 per tonne Processing
  - $8 per tonne G&A

For the purposes of cut-off grade estimation, no revenue has been assumed for copper or silver.

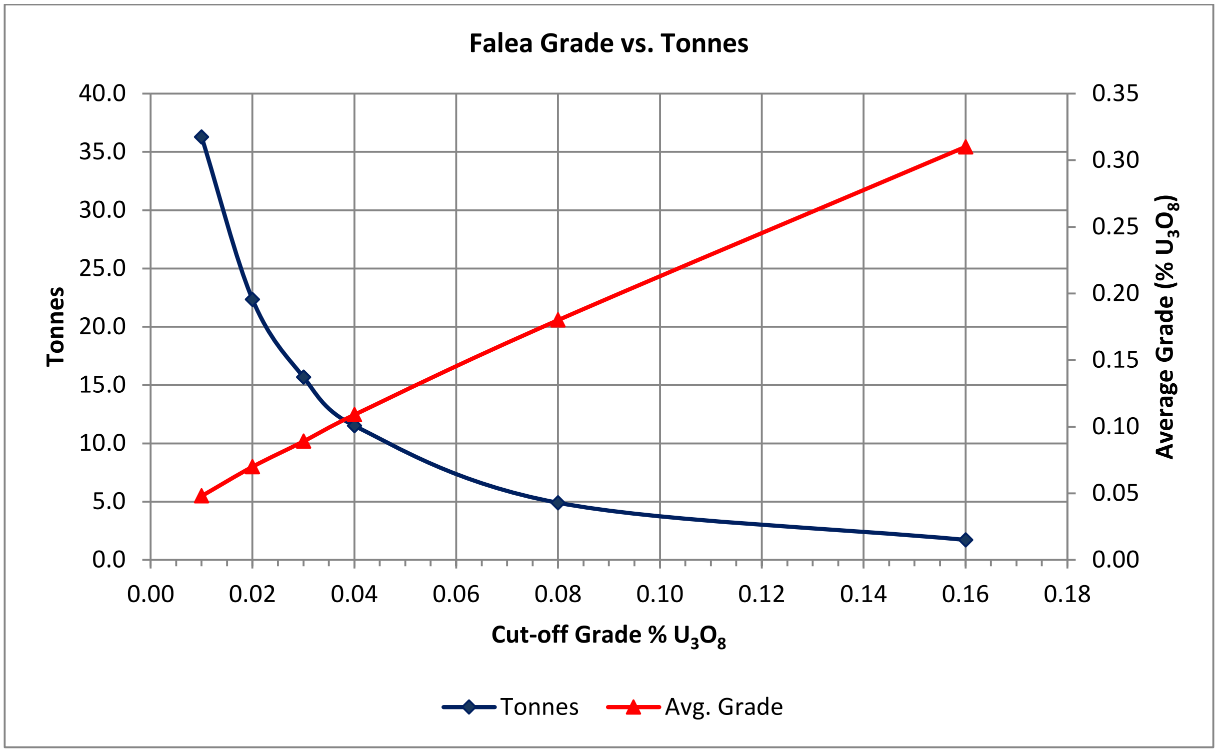
CLASSIFICATION

The blocks in the Falea grade model are classified as Indicated and Inferred based on drill hole spacing and apparent continuity of mineralization (Figure 14-1).

The classification of Indicated is based on drill hole density and good grade continuity along strike and is appropriate in RPA's opinion for a portion of the North Upper and Deep deposits. The drill hole spacing in the Indicated portion of the Mineral Resource is approximately 50 m by 50 m, with some infill drilling near the central portion of the area being 25 m by 25 m. The remaining areas are classified as Inferred due to the uncertainty of grade continuity and the small number of drill holes.

Figure 14-6 shows the sensitivity of the grade model results to cut-off grade. It can be seen that there is some sensitivity of the tonnes and grade to cut-off grade which is typical of low grade uranium deposits. Indicated and Inferred blocks are plotted together in Figure 14-6 for illustrative purposes only, and not for resource reporting purposes.

FIGURE 14-6 GRADE VS. TONNAGE CURVE



Indicated and Inferred Mineral Resources at the Falea deposit are listed by zone in Table 14-6 at a cut-off grade of 0.03% U_3O_8 with an effective date of October 26, 2015.

TABLE 14-6 MINERAL RESOURCE ESTIMATE BY ZONE – OCTOBER 26, 2015
Denison Mines Corp. – Falea Deposit

Category	Deposit	Tonnes (Mt)	U_3O_8 (%)	Cu (%)	Ag (g/t)	U_3O_8 (Mlb)	Cu (Mlb)	Ag (Moz)
Indicated	North Deep	1.36	0.142	0.188	108.7	4.278	5.6	4.76
	North Upper	5.53	0.108	0.154	63.9	13.1	18.8	11.35
Total Indicated		**6.89**	**0.115**	**0.161**	**72.8**	**17.4**	**24.4**	**16.11**
Inferred	Bodi Deep	0.14	0.065	0.198	6.1	0.2	0.6	0.03
	Bodi Upper	0.58	0.093	0.213	6.2	1.2	2.7	0.11
	Central Deep	0.16	0.058	0.139	4.5	0.2	0.5	0.02
	Central Upper	3.27	0.057	0.207	8.1	4.1	15.0	0.85
	East	1.59	0.045	0.263	4.2	1.6	9.2	0.21
	North Deep	2.12	0.085	0.154	37.3	4.0	7.2	2.54
	North Upper	0.94	0.102	0.173	37.5	2.1	3.6	1.13
Total Inferred		**8.79**	**0.069**	**0.200**	**17.3**	**13.4**	**38.7**	**4.90**

Notes:
1. CIM definitions were followed for classification of Mineral Resources.

2. Reported above a cut-off grade of 0.03% U_3O_8, based on a uranium price of US$75/lb.
3. Bulk density is 2.65 t/m^3.
4. Numbers may not add due to rounding.

The current RPA Mineral Resource estimate differs from the Minxcon (2012) estimate primarily in classification. The Minxcon (2012) total Measured and Indicated Resources are approximately the same as the RPA Indicated and Inferred Resources combined. The Minxcon (2012) Inferred Mineral Resources extend beyond the limits of RPA's Inferred Mineral Resources.

15 MINERAL RESERVE ESTIMATE

There is no current Mineral Reserve estimate on the Falea Property.

16 MINING METHODS

This section is not applicable.

17 RECOVERY METHODS

This section is not applicable.

18 PROJECT INFRASTRUCTURE

This section is not applicable.

19 MARKET STUDIES AND CONTRACTS

This section is not applicable.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Denison has not reviewed any environmental studies or carried out any due diligence on the permitting and social and community aspects of the Property. RPA, however, has reviewed information contained in Rockgate's 2013 Annual Information Form. Based on this information, RPA is unaware of any environmental and social and community impacts that would negatively impact on the Mineral Resources for the Property.

ENVIRONMENTAL STUDIES

Following the completion of an early Environmental and Social Impact Assessment (ESIA) Baseline Surveys Report by Golder Associates in February 2011, SRK Consulting South Africa (PTY) Ltd. (SRK) was retained to continue and expand upon the baseline social and environmental studies.

The Ministry Environmental Department (MED) is fully engaged in the Stakeholder Process and has issued a "Terms of Reference" (TOR) document to serve as conditions of an Environmental Permit covering SRK's ESIA and baseline studies. The TOR was made final just prior to the Coup in March 2012. At the request of the MED, Rockgate has utilized the services of an intermediary consultant to facilitate this process. In addition to the recitation of Malian and World Bank Standards, the TOR requires both Environmental and Social Management Plans. The Environmental Management Plan is in place and the Social Management Plan has been tasked to SRK. The Ministry and Agence Nationale de la Radioprotection (AMARAP) visited site in February 2012 as an element of the TOR finalization process. AMARAP is the authorizing agency in Mali for safe handling of radioactive materials and is the recognized agency for such legislation by the International Atomic Energy Agency (IAEA). IAEA has been working with AMARAP and has approved the content of a Draft Decree pertaining to Licensing of Uranium and Thorium Mining and Processing Facilities in Mali. In July, 2011, the AMARAP decree was reported to Rockgate as Mali's independently developed regulation. These regulations have been reviewed and conform with the IAEA model *"Best Practice in Environmental Management of Uranium Mining"* of 2010. In February 2012, Rockgate suggested to AMARAP the inclusion of more prescriptive information relating to the requirements for facility construction and tailing closure. Rockgate has suggested that the Tanzanian Regulations provide an acceptable platform for those requirements. AMARAP agreed that it would consider Rockgate's suggestions.

With the restoration of political order in Mali in early spring 2013, Rockgate resumed drilling activity. Senior management visited the site and Bamako in late April and early May 2013 to discuss ongoing issues with the Government. Discussion continued with AMARAP on the preparation of the Uranium Convention. A final draft red-lined document had been prepared and this was accepted by AMARAP during the visit. AMARAP stated that it was their intention to have this legislation passed as a Decree prior to the election scheduled for July 28, 2013.

A plan for ESIA/Baseline Studies and TORs was developed in June 2011 and baseline studies of surface water and monthly monitoring of local stream flow/quality were initiated with radiological information being collected on two samplings as planned.

Following review of the site environmental management features and systems, Rockgate prepared an Environmental Management Plan (EMP) for exploration activity. In response to plan components, Rockgate improved its sewage disposal facility, grey-water management, and solid waste facilities. Radiological measurements in the core area indicated readings which would predict exposures at less than 10% of international standards, suggesting that radiation monitoring would not be necessary at that time. However, Rockgate has included measurements in the core area in its EMP plan and AMARAP has been informed. The EMP should be reviewed by Denison for completeness as an element of its future work.

Groundwater hydrology work was to be initiated in July 2012 with the installation of several piezometers to determine potential mine inflow and the direction/rate of groundwater movement. This information is critical with regard to mine dewatering, process water availability, water storage requirements, and evaporation pond capacities. Piezometer installation was not completed on schedule due to difficulties encountered in acquiring (and transporting across the river) an adequate compressor for evacuation of water from site boreholes.

Active air quality monitoring stations were installed at the camp, and passive devices were placed at several remote locations in March 2012. In addition, an air monitoring protocol was developed for continued active particulate monitoring and passive measurement of sulphur/nitrogen gases.

SOCIAL OR COMMUNITY REQUIREMENTS

Biodiversity and Social Studies were conducted in February 2012 and camp air quality monitoring was initiated in mid-March 2012. Biodiversity studies recommenced in November 2012 following the end of the rainy season.

Community meetings between the village of Falea, Rockgate management, and SRK representatives have been held regularly since the initiation of the exploration project. The community has been supportive of the Project. Since the start of work at Falea, and in response to the community's needs, Rockgate has, among other initiatives, repaired village water pumps, provided books and educational and sporting goods supplies for the school, repaired the village generator, and provided medical supplies for the medical centre. Rockgate has also provided needed transport for medical emergencies in the village.

21 CAPITAL AND OPERATING COSTS

This section is not applicable.

22 ECONOMIC ANALYSIS

This section is not applicable.

23 ADJACENT PROPERTIES

There are no adjacent properties to the Falea Project.

24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

Drilling at the Project from 2007 to 2013 has expanded and delineated the Falea uranium, silver, and copper deposit at the intersection of the Kania sandstone and basal unconformity with a regional fault zone (Road Fault). The Falea deposit is interpreted as an unconformity associated uranium deposit.

The Falea deposit consists of four separate zones known as Bodi, Central, North, and East located approximately 200 m below surface. The Bodi, Central, and North zones occur along a three kilometre long, north-south trending mineralized corridor. The East Zone is located approximately four kilometres to the east of the Central and North zones.

RPA updated the Mineral Resource estimate for Falea based on 945 diamond drill holes totalling 232,034 m. As of October 26, 2015, RPA estimates an Indicated Mineral Resource of 6.88 million tonnes at 0.115% U_3O_8, 0.161% Cu, and 73 g/t Ag and an Inferred Mineral Resource of 8.78 million tonnes at 0.07% U_3O_8, 0.200% Cu, and 17 g/t Ag using a cut-off grade of 0.03% U_3O_8. These estimates are based on capped uranium, silver, and copper assays.

26 RECOMMENDATIONS

Denison has budgeted approximately US$338,000 for exploration in 2016 with the aim of increasing the known Mineral Resources at the Falea Project. The proposed work will be focused on the Falea Permit, Bala Permit, and the south of the Madini Permit.

Exploration will include soil sampling and radon surveying, prospecting and mapping, and RC drilling. Drilling will be contingent on results of mapping and soil and radon surveying.

Table 26-1 shows the exploration program and budget proposed by Denison for 2016. RPA concurs with this budget.

TABLE 26-1 2016 EXPLORATION PROGRAM AND BUDGET
Denison Mines Corp. – Falea Project

Proposed Work	Total US$
Soil Geochemical and Radon Sampling	177,700
RC Drilling (2,000 m)	150,217
Community Development	10,000
Total	**337,917**

RPA's recommendations for further drilling at the Property, not included in the 2016 budget, are as follows (Figure 26-1):

- Drilling on a 25 m by 25 m grid within the Indicated Mineral Resource area of the North Upper and Deep zones to further increase confidence in grade continuity. Drilling should be focused along a profile at 1,360,250N where there is a limited amount of drilling and along the footwall side of the Road Fault in the North Deep Indicated Resource area.

- Drilling on a 50 m by 50 m grid within the Inferred Mineral Resource area of the North Upper and Deep zones to increase confidence in grade continuity.

- Depending on topographic limitations, further infill and exploration drilling within and surrounding the Bodi, North, and Central zones to delineate extensions and establish continuity of the mineralization. A particular focus should be to step out from the Road Fault both to the east and west.

- Further drilling of the East Zone to collect additional geological information as to the extent and continuity of the mineralization.

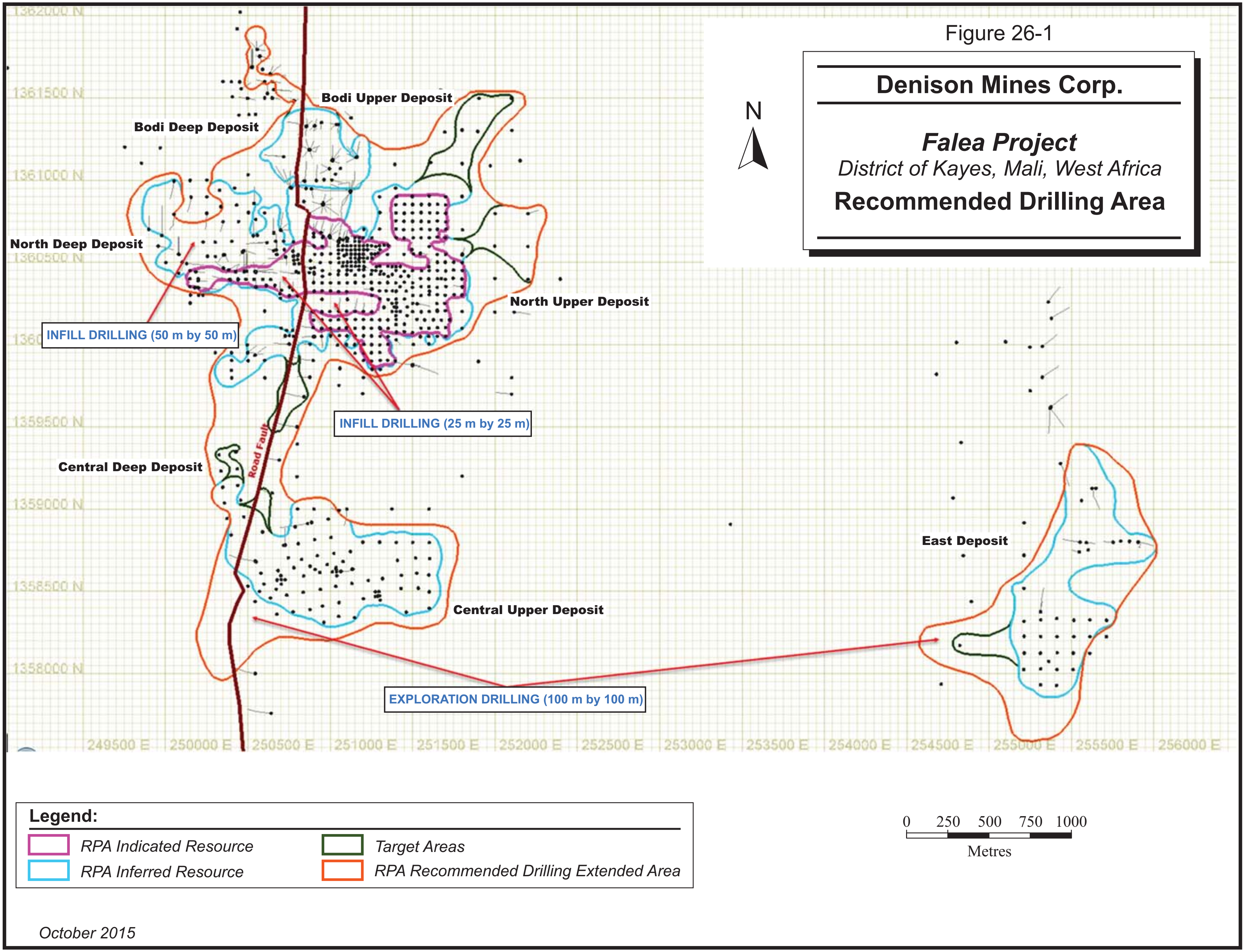


Figure 26-1
Denison Mines Corp.
Falea Project
District of Kayes, Mali, West Africa
Recommended Drilling Area
N
Bodi Upper Deposit
Bodi Deep Deposit
North Deep Deposit
North Upper Deposit
Central Deep Deposit
Central Upper Deposit
East Deposit
Road Fault
INFILL DRILLING (50 m by 50 m)
INFILL DRILLING (25 m by 25 m)
EXPLORATION DRILLING (100 m by 100 m)
1361500 N
1361000 N
1360500 N
1359500 N
1359000 N
1358500 N
1358000 N
249500 E
250000 E
250500 E
251000 E
251500 E
252000 E
252500 E
253000 E
253500 E
254000 E
254500 E
255000 E
255500 E
256000 E
Legend:
RPA Indicated Resource
RPA Inferred Resource
Target Areas
RPA Recommended Drilling Extended Area
0 250 500 750 1000
Metres
October 2015

27 REFERENCES

DRA Mining (Pty) Ltd (February 2014). Falea Uranium – Internal Economic Study, prepared for Rockgate Capital Corp.

Geotech Ltd. (April 2015). Report on a Helicopter-Borne Versatile Time-Domain Electromagnetic (VTEMplus), Horizontal Magnetic gradiometer and Gamma-ray Spectrometry Geophysical Survey, Falea 2014/2011 Survey Area, 28 p.

Golder Associates Ltd. (February 2011). January 2011 Technical Report and Resource Estimate Update, Falea Property, Prefecture of the Kenieba, District of Kayes, Republic of Mali, prepared for Rockgate Capital Corp.

Jefferson, C.W., Thomas, D.J., Gandhi, S.S., Ramaekers, P., Delaney, G., Brisbin, D., Cutts, C., Quirt, D., Portella, P., and Olson, R.A. (2007). Unconformity associated uranium deposits of the Athabasca Basin, Saskatchewan and Alberta, *in* Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, pp. 273-305. Also *in* Jefferson, C.W. and Delaney, G. eds., EXTECH IV: Geology and Uranium Exploration Technology of the Proterozoic Athabasca Basin, Saskatchwean and Alberta, Geological Survey of Canada Bulletin 588, pp. 23-67.

Minxcon (Pty) Ltd (December 2012). An Independent Technical Report on the Mineral Resources of Falea Uranium, Copper and Silver Deposit, Mali, West Afrcia, prepared for Rockgate Capital Corp.

Rockgate Capital Corp. (July 2013). 2013 Annual Information Form.

SGS South Africa (PTY) Ltd. (SGS) (March 2010). General Mineralogical Characterisation and Uranium-Silver Deportment Analysis of a Composite Uranium-Silver Ore Sample from Falea Project, Mali, 67p.

SRK Consulting (December 2011). Falea Uranium Project Concept Study, 175 p.

28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Falea Uranium, Silver and Copper Deposit, Mali, West Africa" and dated October 26, 2015 was prepared and signed by the following author:

(Signed & Sealed) "*Mark B. Mathisen*"

Dated at Lakewood, CO
October 26, 2015

Mark B. Mathisen, C.P.G.
Senior Geologist