Technical Report on the Tonkin Project

Located in Eureka County, Nevada, USA Latitude 39°55' 00" N, Longitude 116° 27' 00" W

Prepared for US Gold Corporation 165 So. Union Blvd., Suite 565 Lakewood, CO 80228 USA

by

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

The Tonkin Project is a gold mining property located within the Battle Mountain-Eureka Trend in the Simpson Park Mountains approximately 45 miles northwest of Eureka in Eureka County, Nevada. The property is owned by Tonkin Springs LLC (TSLLC), of which US Gold Corporation (US Gold) owns a 100% interest.

The Tonkin Project is located in the central portion of the Battle Mountain-Eureka (BME) Trend, a northwest trending gold belt in north-central Nevada. The BME Trend extends approximately from the Lonetree Mine on the north to south of the Ruby Hill Mine near Eureka, Nevada, and is subparallel to the Carlin Trend gold belt. The Tonkin Project is located just 8 miles south of the new Cortez Hills discovery, which is controlled by Barrick Gold Corp. The Cortez Hills project has been summarized in the Cortez Joint Venture Technical Report and Qualified Persons Review, October 2005 (prepared by AMEC). The AMEC 43-101 report summarizes inferred mineral resource estimates totaling 6.2 million tons grading 0.05 ounces per ton gold in the Cortez Hills prospect and 4.6 million tons grading 0.323 ounces per ton gold in the Cortez Hills Underground prospect.

The Tonkin Springs property is located on lands administered by the United States Department of the Interior, Bureau of Land Management (BLM), Battle Mountain Field Office, Nevada. The entire property presently covers approximately 37 square miles with a total of 1,445 unpatented lode mining claims and 33 millsite claims that extend approximately 12 linear miles along the central BME trend. This report will focus on 458 claims centered on the Tonkin Project Area, which is located at the southern end of the claim block.

In August of 2005, the property ownership and management changed, shifting the emphasis away from production towards exploration, and defining the property-wide mineral potential by targeting new mineralized zones at depth. In 2007, US Gold retained Ore Reserves Engineering (ORE) to prepare a new estimate of the mineral resource that is based on new geologic interpretation, additional drilling results, and extensive three-dimensional modeling of the gold deposits. The primary purpose of this NI 43-101F1-compliant technical report is to document the updated resource estimate and to recommend future work on the deposit.

ORE has been a contributing author on three previous technical reports, in association with Micon International, Ltd, of Toronto, Ontario, Canada. These were entitled "A Review of the Tonkin Springs Property, Eureka County, Nevada, USA", dated August 2003 (August 2003 Technical Report), and authored by B. Terrence Hennessey, P.Geo., Richard Gowans P. Eng and Alan Noble P.E.; "Technical Report on the Tonkin Springs Project, Nevada, U.S.A", dated May 2004 (May 2004 Technical Report), and authored by Messrs Noble and Gowans. Both of these reports were filed by BacTech Mining Corporation (BacTech), which was at that time the majority owner and operator of TSLLC. Both of these reports were directed towards a



production goal using bio-oxidation technology to recover refractory gold at Tonkin Springs. The third report is entitled "Updated Technical Report on the Tonkin Springs Gold Property, Nevada, USA, dated June 2006 (June 2006 Technical Report). This report, filed by US Gold Corporation, focused on the exploration potential of the Tonkin Springs property rather than on direct development into an operating mine.

1.2 Resource Estimate

The measured + indicated gold resource for the Tonkin Project has increased to 1,447,000 ounces of gold contained in 35.6 million tons with an average grade of 0.041 oz Au/t. This represents an increase of 182,000 ounces of gold compared to the previous estimate of 1,266,000 ounces of gold in a measured+indicated tonnage of 29.7 million tons with an average grade of 0.043 oz Au/t. Most significantly, the measured resource has increased by 644,000 ounces of contained gold. In addition, the inferred resource has increased to 311,000 ounces contained gold in 9.3 million tons averaging 0.033 oz Au/t from 153,000 ounces contained gold in 3.5 million tonnes averaging 0.044 oz Au/t.

The most significant factors in these increases include:

- 1) The geological interpretation has been completely revised based on new field mapping, age dating of rock samples, much better geologic information at depth from a number of new core holes, relogging of historical drill holes, and compilation of the geologic data into a much more accessible, computerized geologic database.
- 2) The improved geologic interpretation was used to build more accurate threedimensional models of the mineralized zones. In addition, because of the better geologic interpretation, more confidence can be placed on the mineral zone interpretations and grade estimations.
- 3) Over 200 new drill holes have been added to the drill-hole database since the previous estimates, which were done in 1996 with revision of the O15 deposit in 2001. One hundred of the new holes were core holes drilled in 2006-2007 by US Gold. These new core holes more than doubled the information from previous holes and provided important new information to increase the geologic understanding of the property. In addition, the new drilling decreased the drill hole spacing and improved the reliability of the resource estimates.

The updated resource estimate for 2008 is summarized and compared to the previous resource estimate from the 2006 report in Table 1-1.



		April	2008 Estin	nate	20	06 Estimat	e	Change 2	008-2006
Resource Class	Area	Tons (1000s)	Grade (oz Au/t)	Ounces (1000s)	Tons (1000s)	Grade (oz Au/t)	Ounces (1000s)	Tons (1000s)	Ounces (1000s)
	South	7,962	0.059	470	2,654	0.066	176	5,308	294
N (Central	762	0.049	37	-	-	-	762	37
Measured	North	10,614	0.029	313	-	-	-	10,614	313
	Total	19,338	0.042	820	2,654	0.066	176	16,684	644
	South	6,252	0.049	309	7,037	0.063	444	(785)	(136)
Indicated	Central	1,725	0.046	79	1,287	0.045	57	438	21
malcaled	North	8,269	0.029	240	18,694	0.031	588	(10,425)	(349)
	Total	16,246	0.039	627	27,018	0.040	1090	(10,772)	(463)
	South	14,214	0.055	779	9,691	0.064	620	4,523	159
Measured	Middle	2,487	0.047	116	1,287	0.045	57	1,200	58
+ Indicated	North	18,883	0.029	553	18,694	0.031	588	189	(36)
	Total	35,584	0.041	1,447	29,672	0.043	1,266	5,912	182
	South	3,109	0.041	126	3,466	0.044	153	(357)	(27)
Inforrad	Middle	1,348	0.042	56	-	-	-	1,348	56
meneu	North	4,833	0.027	129	-	-	-	4,833	129
	Total	9,290	0.033	311	3,466	0.044	153	5,824	158

 Table 1-1

 Summary of April 2008 Resource Estimate and Comparison to 2006 Estimate

1.3 Recommendations

The immediate priority for the Tonkin Project is for US Gold to undertake a metallurgical testing program to evaluate and select the best process option(s) for typical Tonkin mineralization. This testing will focus on vat and heap bio-oxidation of the sulfide materials and is expected to cost \$250,000 for a first phase and \$150,000 for a second phase.

Additional exploration and development drilling targets have been identified, but are not an immediate priority, as follows:

- 1. Exploration drilling would test: 1) the main anticline/syncline trend north of TSP-1 and south of O-15; and 2) gold soil anomalies in Tertiary volcanics and Paleozoic sediments in poorly drilled areas east of the O-15 deposit.
- 2. Development drilling would provide immediate expansion of resources in areas where mineralization has been identified, but where drill holes are too widely spaced for estimation of resources.



2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 Introduction

US Gold Corporation (US Gold) retained Ore Reserves Engineering (ORE) in February 2008, to compile a NI 43-101 Technical Report for the Tonkin Project located in Eureka County, Nevada. The property is owned by Tonkin Springs LLC (TSLLC), of which US Gold Corporation (US Gold) owns a 100% interest.

The primary purpose of this Technical Report is to document the results of a new mineral resource model for the Tonkin Project. This resource model is based on geologic investigations, a new geologic interpretation, additional drilling results, and extensive three-dimensional modeling of the gold deposits. This report also provides a technical summary of the exploration and development activities and results through early 2008.

2.2 Terms of Reference

The authors of this Technical Report are Mr. Alan C. Noble, P.E., Principal Mining Engineer of ORE; Mr. Richard Gowans, Vice President and Sr. Metallurgist of Micon International; and Mr. Steven E. Brown, Chief Geologist of US Gold Corporation. Also contributing to the report, but not listed as authors, are Mr. James Leavitt (geology), Ms. Ruth Buffa (land), and Mr. James Smithson (environmental and permitting).

Mr. Noble is the primary author and is an independent qualified person as defined by NI 43-101. Mr Noble is an engineering consultant in the areas of ore reserve estimation, geostatistics, ore sampling, grade control, mine planning, mining feasibility studies, and acquisitions evaluations. He has over 38 years experience on over 140 deposits throughout the world.

Mr. Noble is responsible for the resource estimate and has reviewed all sections of the report. Mr. Noble has visited the site on numerous occasions starting in 2003 and last visited the property in October 2006. During those site visits, Mr. Noble reviewed drill hole and assay data, drill logs, drill hole survey records, and discussed the geologic model with project geologic staff. Mr. Noble also visited the US Gold offices in Reno two times in 2007 to work with project geologists on the geologic model and two times in 2008 to review the resource model and to work on this report. In August and September 2007, US Gold geologists visited the ORE office in Lakewood, CO three times to work on the geologic model.

Mr. Brown is responsible for documentation of the geologic interpretation and model and for development of the exploration plan. Mr. Brown has been the Senior Geologist and Senior Project Manager at the Tonkin Project since July of 2006. An intimate knowledge of Tonkin's geology was developed by working with drill core and chips, drill logs, assays, and formulation of the geologic model with Project Geologists.



Mr Gowans is a Vice President and Senior Metallurgist with Micon International, Toronto, Ontario, Canada, and has over 27 years experience in the mineral industry, working as a metallurgist and project manager on numerous due diligence assignments, feasibility studies and construction projects, worldwide. Mr Gowans is responsible for the metallurgical section of this report.

2.3 Sources of Information

The report is based on the author(s') familiarity with the project and on review of the published and unpublished geological, geophysical, geochemical, and drilling data obtained from corporate, academic, and government sources.

In preparation of the technical report, the authors have used information owned by US Gold. US Gold has an extensive package of information, that has been amassed over a 30-year production and exploration history. Various companies have worked on the project and the data and reports from these companies were reviewed. Below is a generalized history of the various exploration, development, and mining programs at Tonkin Springs, through 2004.

1966	Lyle Campbell located the Rooster claims after identifying gold bearing jasperoid outcrops.
1966-1981	Claims were optioned by several companies.
1979	Mineral Ventures Inc. Stream sediment survey located several zones of gold anomalies south of Rooster.
1980	Mineral Ventures, Inc. located the Rob claim group and continued exploration.
1982	Precambrian Exploration joint ventured with Mineral Ventures, Inc. completed geologic mapping, rock chip sampling and defined drill targets.
1985- 1999	Silver State Mining optioned the Rob claim group and began production. First gold pour in 1985. In 1986, Silver State Mining optioned the Rooster claim group. In 1987, Silver State Mining staked the Twin Peaks area. In 1989, Silver State discontinued mining. The total investment during this period was approximately \$50 million, including \$31 million for the processing plant and support facilities
1991-1992	Homestake Mining Company purchased 51% and created Tonkin Springs Venture LP (TSVLP). Tonkin Springs Venture completed data compilation, geologic mapping, rock chip sampling, soil sampling, bleg sampling, geophysical surveying and drilled 85,949 feet of reverse circulation (RC), core and mud rotary. In 1992, Homestake terminated the agreement leaving 100% ownership of TSVLP to US Gold Corporation (formally Silver State Mining)
1993-1997	TSVLP sells 60% of Tonkin Springs to Gold Capital forming Tonkin Springs Project Joint Venture (TSPJV). In 1997, Gold Capital becomes wholly-owned subsidiary of Globex Mining Enterpises as part of merger.
1993-1999	TSPJV continued exploration drilling. Globex evaluated a bio-heap recovery process. In 1999, Globex and US Gold terminated the agreement. All assets were placed in Tonkin Springs LLC. (TSLLC)



1999 - 2001	Sudbury Contact Mines Limited (SCML) negotiated an earn-in agreement for a 60% managing interest replacing Gold Capital Corporation. SCML completed data compilation, geochemical sampling and drilling on the project. In 2001, Sudbury Contact Mines Ltd. terminates the agreement transferring all interest to US Gold.
2002-2004	BacTech International optioned the property; feasibility work was conducted evaluating possible production of the near-surface oxide and sulfide resources at Tonkin Springs using bio-oxidation technologies. The project feasibility failed, and the property was returned to US Gold.
2005	US Gold management changed when Rob McEwen bought a controlling interest in the company in mid-2005. Focus has shifted away from near-term, near-surface production to property-wide exploration and development looking for Carlin-style mineralization to depth.
2006-Present	New US Gold management initiated property-wide exploration and resource development work. The project focus includes expansion of the identified resource and exploration looking for new Carlin-style mineralization with the Cortez Hills discovery as at regional guide. A program of metallurgical testing has been initiated to characterize the metallurgical deportment of the gold with the goal of developing and optimizing extraction of gold from the refractory sulfide ores.



3.0 DISCLAIMER

ORE has reviewed and analyzed data provided by US Gold and previous operators of the mine, and has drawn its own conclusions therefrom, augmented by its direct field examination. ORE has not carried out any independent exploration work, drilled any holes or carried out any sampling and assaying. However, the presence of gold in the local rocks is substantiated by the previous exploration and development work completed, and mining history on the property.

ORE has relied upon the data presented by US Gold in formulating its opinion, although all reasonable diligence in checking, confirming, and validating data was exercised. ORE accepts these data as being reasonable.

The various agreements under which US Gold holds title to the mineral lands for this project have not been investigated or confirmed by ORE, although ORE has seen no evidence that the mineral title claims are not valid. The description of the property, and ownership thereof, lease payments, royalties, etc. as set out in this report, are provided for general information purposes only.

The metallurgical, geological, mineralization and exploration technique and results descriptions used in this report are taken from reports prepared by US Gold and Micon (August 2003 and May 2004 Technical Reports).

All currency amounts are stated in US dollars, most frequently expressed in terms of constant first quarter, 2008 value.

Quantities are stated primarily in American Customary units. In some instances SI units, the Canadian and international practice, are used for specific values and engineering constants. Although a detailed list of abbreviations used in this report is provided in Table 3-1 at the end of this section, the most common engineering units used in this report are specified as follows:

- 1. dry short tons (dst, T) and pounds (lb) for weight;
- 2. miles, feet (ft) and inches (in) for distance;
- 3. acres (ac) for area;
- 4. troy ounces (ounces, oz) for precious metal quantities;
- 5. and troy ounces per dry short ton (oz Au/t, opt Au) for gold grades.



Table 3-1List of Abbreviations

	List of Abbreviations
AA	atomic absorption
ADR	Adsorption, desorption and regeneration
ASTM	American Society for Testing and Materials
Au	gold
BLM	Bureau of Land Management
BMRR	Bureau of Mining Regulation and Reclamation
°C	degrees Celsius
CIC	carbon-in-column
CIL	carbon-in-leach
cm	centimetre(s)
cm/s	centimetres per second
cv	cubic vards
d	dav(s)
ĒA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
ft	foot(feet)
ft ²	square foot(feet)
ft ³	cubic foot(feet)
FONSI	Finding of No Significant Impact
g	gram(s)
g/L	grams per litre
gpm	US gallons per minute
g/t	grams per tonne
gal	US gallon(s)
gal/min/ft ²	US gallons per minute per square foot
GPS	global positioning system
HDPE	high density polyethylene
HLP	heap leach pad
h	hour
in	inch(es)
kg	kilogram(s)
lb	pound(s)
lb/f^3	pounds per cubic foot
lb/T	pounds per short ton
L	litre(s)
LPG	Liquid petroleum gas
m	metre(s)
m2	square metre(s)
m^2/s	square metres per second
m3	cubic metre(s)
m ³ /s	cubic metres per second
mg	milligram(s)
mil	thousandth of an inch
min	minute(s)
mm	millimetre(s)
M	Richter magnitude (earthquakes)



	List of Abbreviations
MOU	Memorandum Of Understanding
Moz	Million Ounce(s)
MSHA	Mine Safety & Health Administration
mv	millivolt(s)
MWMP	meteoric water mobility procedure
NaCN	sodium cyanide
NAC	Nevada Administrative Code
NDEM	Nevada Division of Emergency Management
NDEP	Nevada Department of Environmental Protection
NDOM	Nevada Department of Minerals
NDOW	Nevada Department of Wildlife
NDWR	Nevada Department of Water Resources
NSR	Net Smelter Return
OZ	troy ounce(s)
oz/T	troy ounces per short ton
PoO	Plan of Operations
ppm	parts per million
psi	pounds per square inch
psf	pounds per square foot
PVC	polyvinyl chloride
RC	reverse circulation
ROD	Record of Decision
ROM	run of mine
RV	Recreational vehicle
S	second(s)
SARA	Superfund Amendments and Reauthorization Act
SAG	semi-autogenous grinding
SCRS	solution collection and recovery system
sf	square foot
SHPO	State Historic Preservation Office
SI	International System of units
sy	square yard
T, dst	short ton(s) (dry)
T/d	short tons per day
T/h	short tons per hour
T/y	short tons per year
TCLP	toxicity characteristic leachate procedure
t	metric tonnes
wt%	weight per cent
WPCP	Water Pollution Control Permit
у	year
%	per cent
μm	micron(s)
0	degree(s)



4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Tonkin Project is a gold mining property comprised of unpatented lode claims and millsites. The property has an integrated milling facility, trailer park (site accommodation) and support facilities on U.S. Bureau of Land Management land. The property is located in the Battle Mountain - Eureka Trend. The property is located approximately 45 miles northwest of the town of Eureka in Eureka County, Nevada. Figure 4-1 shows the location of the Tonkin Project in relation to the major gold belts of Nevada.

The site is located near the head of the Denay Valley drainage on the eastern slope of the northern Simpson Park Mountains at an elevation of 6,700 ft above mean sea level. The site is accessible by a paved all-weather road, Highway 278, and then approximately 24 miles of county-maintained gravel road into the site.







4.2 Property Description and Ownership

The Tonkin Project is located within the Tonkin Springs Property on lands administered by the United States Department of Interior, Bureau of Land Management ("BLM"), Battle Mountain Field Office, Nevada. Currently, the property comprises a total of 1,445 unpatented lode mining and 33 mill-site claims, all of which total 103.88 km² (36.78 square miles). The property has been surveyed as per the Nevada State legal requirements. The claims are located using the Public Land Survey System of Township (T), Range (R) and Section with reference to the Mount Diablo Base and Meridian (MDBM), in Eureka County, Nevada.

The claims are contiguous with the exception of four claims where the man camp is located. Figure 4-2 shows the 458 claims currently owned or leased by US Gold that are covered in this report. A list of the claims along with BLM serial numbers (NMC) is attached in Appendix A.

For reference, an unpatented lode mining claim is a particular parcel of Federal land that may have potential value for a specific mineral deposit or deposits. It is a parcel for which an individual has asserted a right of possession. This right is restricted to the extraction and development of a mineral deposit. The rights granted by a mining claim are valid against a challenge by the United States and other claimants, only after the discovery of a valuable mineral deposit. A lode claim covers mineralization that is found in place, as opposed to a placer claim, where the mineralization occurs dispersed among particles of sand or gravel. Title to the land underlying an unpatented lode claim is owned by the United States and the claimant has the right only to extract minerals - no land ownership is conveyed to the claimant.

Millsite claims are parcels of property located on Federal land and are used to locate facilities for the processing of mineral deposits. The United States owns the land where millsites are located and the claimant has only the right to use the land - no ownership is conveyed to the claimant.

Of the 1,445 unpatented lode mining claims held by US Gold or its subsidiary companies, 381 are leased from other claimants. The remaining 1,064 lode mining claims and all 33 millsites are held by US Gold or its subsidiaries. US Gold has the right to mine minerals from these claims (unpatented lode claims) and to use the surface for mining-related activities (millsite claims).



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Figure 4-2 Tonkin Project claim map (Source US Gold 2008)

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Obligations that must be met to retain the property include Annual Claim Maintenance fees paid to the BLM (Federal level) of \$125 per claim per year and fees of \$8.50 per claim per year (County/State level). The rates given are current as of 2007 and may change over time. Other obligations include obtaining and maintaining all necessary regulatory permits, as well as lease and option payments to claim owners. The rights to unpatented lode claims and millsites continue on an annual basis so long as all obligations are met to maintain the validity of the claims.

4.3 Site Plan and Property Description

The Tonkin Project includes an established mine infrastructure. It has been a producing mine for 2 periods during its life. Between 1985 and 1988 there was an oxide heap leach operation on site, and in 1989 and 1990, an integrated carbon-in-leach (CIL) / bacterial oxidation plant was commissioned. The plant and associated infrastructure was decommissioned and mothballed in June 1990. Apart from the SAG mill, which has been removed, it is complete and in relatively good condition. A site map of entire project area is shown in Figure 4-3 and a detailed map of the plant and office area is shown in Figure 4-4.

The property presently features several small open pits and stockpile areas, including TSP-1, 2, 3A, 3B, 4, 5, 6E, 7, and the Rooster pit. Most of these disturbances are very small, with the exception of TSP-1, where mining activities focused on the removal of the oxide portion of the gold reserve.

The existing site has the advantage of a well-developed infrastructure and adequate ancillary services and facilities to support the majority of the requirements for the project exploration and development activities. The existing infrastructure that is available includes water supply, storage and distribution, sewage disposal, campsite, fuel storage and distribution, emergency power supply, and power distribution. Existing facilities include an administration building, truck shop, assay laboratory, warehouse, and plant maintenance shop.

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Figure 4-4 Site map for the Tonkin Project Office and Plant Area (Source US Gold 2008, Coordinates UTM Zone 11, NAD27)



4.4 Royalties

There are various royalties connected to the Tonkin Project. These royalties include the following:

Campbell-Simpson 5% royalty:

The Lyle Campbell Trust portion of this royalty was recently purchased by Gold Standard Royalty Corporation. This royalty requires annual advance royalty payments of \$150,000 or the value of 455 ounces of gold at the current gold price. It also includes a production royalty of 5% of the gross sales revenue of gold or silver with the provision for recapture of the total annual advance royalties paid, which total \$3,894,279.46 as of December 31, 2007. The Rooster deposit lies on the claims pertaining to this royalty.

Campbell-Simpson 4% royalty, Pat Canyon lease

The Lyle Campbell Trust of this royalty was also purchased by Gold Standard Royalty Corporation. The lease has a ten year term and is renewable in five year increments, with a sliding-scale Gross Production Royalty ranging from 3% to 4%. This royalty covers claims at the northern portion of the project area (Figure 4-2) and requires an advance royalty payment of \$50,000 or the value of 130 ounces of gold at the current gold price. It also includes a production royalty of 4% of the gross revenue of gold (at \$400 per ounce or greater), silver, platinum, or palladium, with the provision for recapture of annual advance royalties paid, which total \$158,416.90 as of December 31, 2007.

Precambrian Exploration Inc. (PEX) royalties:

First PEX Royalty: Claims affiliated with this are subject to a royalty of 2% of net smelter returns, which becomes payable to Precambrian Exploration, Inc. after \$50 million in gross revenues is realized from the claims. These claims include the current mineralization at TSP-1 pit, O-15, and the other small areas of mineralization on the southern claims of Tonkin Springs. PEX may elect to receive its royalty in the form of gold and silver upon proper notice to TSLLC.

Second PEX Royalty: Certain of the claims that are included in the Tonkin North lease with Campbell/Simpson are also subject to a 1% net smelter return royalty (defined as gross revenues from sales of minerals, less refining costs, transportation costs, severance, production and sales taxes, and sales commissions) payable to Precambrian Exploration Inc. after \$15 million in gross revenues are realized from the claims.



US Exploration 1% royalty:

In 1994, 215 claims covering approximately 4,400 acres adjacent to the Tonkin Project were acquired from an unaffiliated third party, United States Exploration Inc. The claims are subject to a royalty of 1% of net smelter returns for gold when the indexed price of gold is \$350 per ounce or more, and a royalty of 1% of net smelter returns for silver when the indexed price of silver is \$3.50 per ounce or more. No royalties are payable at lower indexed prices.

4.5 Environmental Issues and Environmental Liabilities

The Nevada Division of Environmental Protection (NDEP) is the state agency that administers the reclamation permits, mine permits, and related closure plans for the Tonkin Project. As of the date of this report, there are no outstanding non-compliance orders or violations issued by the NDEP for the Tonkin project. All permits remain in good standing.

Tonkin is located on unpatented mining claims on BLM-managed land, therefore, the BLM is the federal land manager for the Tonkin Springs project. The BLM is responsible for determining the significance of mining-related impacts to the land, surface waters, cultural resources, and wildlife. Since the early 1980's the BLM has approved numerous Plans of Operation (POO) for the project. All of the approved POO's authorized exploration activities and mining operations that have occurred since the 1980s to the present time.

Past mining activities at Tonkin included the construction and operation of a mill facility, a tailings storage impoundment facility, and a heap leach facility. The heap leach facility and the tailings storage impoundment have undergone various reclamation and closure activities in advance of a comprehensive closure plan being prepared for approval by state and federal authorities. The mill facility was last utilized in 1991 and remains in a care and maintenance status.

US Gold's current focus at Tonkin is on exploration. A comprehensive property-wide exploration permit has recently been approved by both the BLM and NDEP. The permit covers the entire area of the project and allows full flexibility in establishing drill sites, subject to limitations such as avoiding cultural sites and wet lands that are not expected to prevent completion of the proposed work.

A 2007 review and update of the Tonkin Mine reclamation liability resulted in an increase in the bonded surety held for reclamation and closure activities. The bond was increased and funded at a total of \$3,768,430. The recent property-wide exploration permit was bonded at a total cost of \$373,127 for the first phase of exploration activities. Subsequent phases will be bonded as the need arises.



4.5.1 Cultural Resources

Exploration operations within the project must avoid significant cultural resources as identified by a qualified, BLM approved archaeologist. The entire project area has been inventoried for cultural resources and all identified resources have been surveyed. During ongoing operations, the BLM will evaluate site-specific drill locations to ensure that cultural resources are avoided. It is not expected that any of the cultural resources found to date would prohibit completion of the recommended work on the project.

4.5.2 Corrective Actions

In April of 2005, a Finding of Alleged Violation and Order (Order) was issued to Tonkin Springs, LLC by the Nevada Division of Environmental Protection (NDEP). The Order required the submittal, NDEP approval, and implementation of Final Permanent Closure Plans for the Tonkin Springs leach pad and the tailings seepage collection pond. In addition, the Order required that a passive, fluid-remediation system for the TSP-1 pit water solution be established if the source of the acid-generation at the pit could not be curtailed.

US Gold provided various plans that implemented all of these action items and began construction activities in 2006 that continued into 2007. A passive water treatment system was installed that captures and neutralizes low pH water before it is ultimately discharged to the tailings impoundment for evaporation. Lastly, US Gold initiated a program to relocate all historic drill holes in the TSP-1 pit that were not abandoned appropriately and, when they were located, reentered and cemented the full depth of the hole. The program resulted in a significant reduction in acid generation. As a result, in May of 2007, the NDEP agreed that the corrective actions required by the FOAV were complete.

4.6 Permits

Tonkin Springs LLC has all of the necessary permits that are required for an ongoing exploration program at the project area. These permits include:

- 1. BLM approval of the Amended Plan of Operation for exploration activities in the project area,
- 2. BLM/NDEP approval of the reclamation plan and bond associated with the exploration activities, and
- 3. A surface disturbance permit issued by the NDEP Bureau of Air Quality.

All of the permits and approvals listed above were received in the first quarter of 2008.



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Tonkin Project is located in the Simpson Park Mountains area approximately 72 km (45 mi) northwest of Eureka in Eureka County, Nevada. The property is accessed from the Nevada State Road 278 by one of two county roads. The county gravel roads to the site are maintained by Eureka County and are periodically graded as required to provide good access.

All the mining claims are unpatented lode claims or mill sites located on federally owned land administered by the BLM. Surface rights applicable to mining claims allow development and extraction from those claims. Certain locations are subject to restrictions or obligations associated with historical Native American cultural sites, however, none of the currently identified mineralized areas are affected by those sites.

5.2 Climate and Physiography

In general, the area is characterized by hot summers and cold winters with monthly average maximum and average minimum temperatures ranging from 82° F (28° C) to 7° F (-14° C). The hottest month is July and the coldest is January. The average annual precipitation on site is estimated to be 11.3 in. Evaporation in the area is significant with the average annual potential evaporation estimated at 62.6 in.

The estimated 24-hour precipitation event for a 100 year return period is 2.8 in.

Wind patterns in the area are generally westerly, but are locally channeled by the north/south orientation of the mountain ranges. The winds in the immediate project area are predominantly westerly to northwesterly.

5.3 Local Resources and Infrastructure

The Tonkin Project is approximately 48 miles northwest from Eureka by road (population approximately 1,600 in county), 85 miles southwest from Elko by road (population approximately 18,000) and 245 miles east from Reno by road (population approximately 200,000).

The property is accessible via paved and gravel all-weather roads. In this part of Nevada there are numerous gold mining operations, and there is a broad selection of chemical and materials suppliers, mining and drilling contractors, and service companies that support the industry. Many of these are based in Carlin, Eureka and Elko. There also exists locally an available source of experienced and qualified labour. The area is serviced by armoured transport companies for pick-up and delivery of gold doré to refineries located in Utah and elsewhere.



Electrical power to the property is via existing 64 kV power lines and a substation on the property. The power lines and substation are owned and maintained by Sierra Pacific Power.

The current water supply system consists of two water wells, one that supplies fresh water to the Labor Camp and one that supplies water to the mine site facilities. The Labor Camp well supplies 110 gpm to a 6000 gal potable water tank as well as an auxiliary 10,000 gal. fire suppression storage tank. This system was renovated and upgraded in 2006 to current NDEP Standards. The minesite water is pumped from a separate well, producing 600 gpm. The water is pumped into a 10,000 gal intermediate tank and then is moved by a transfer pump into a 600,000 gal main storage tank at the mine processing facility. This tank distributes water to the various buildings and facilities within the mine site as well as fire suppression if required. Current water flow requirements for the mine facility are approximately 200 gpm including drilling and other exploration activities.

On site communications were upgraded in 2006 to include Satellite Internet and Voice Over Internet Telephone Service. In addition, a Hand Held Satellite Telephone and a Cellular Telephone With Booster are now in use. Portable two-way radios are also in use, but are only sufficient for communicating on and near the site. Although significantly better than in past years, these systems are not without problems and other types of systems are being evaluated for use at the site.

5.4 Physiography

The Tonkin Project is situated in the Basin and Range Physiographic Province of the western United States. It is located on the eastern slope of the northern Simpson Park Mountains at an elevation of between 6,700 ft above mean sea level up to about 7,600 ft. Topography varies from flat to moderately steep.

Native vegetation in the project area is characterized by sagebrush/bunch grass communities with Sandberg bluegrass, Thuber needlegrass and bottlebrush squirreltail as the dominant species. On the north and east facing slopes fairly dense stands of Pinyon/Juniper exist with little understory of grasses or forbs. Much of the project area had been subjected to considerable grazing pressures from domestic livestock in years past. Consequently, much of the native vegetation has degenerated to what is considered degraded stands of sagebrush with an understory of cheatgrass in the more hilly areas, and halogeton or other annual forbs on the lowlands.

The major lithological units at Tonkin include, from oldest to youngest: Cambrian Secret Canyon, Hamburg, Tybo, and Hales Formations; Ordovician Vinini and Eureka Formations; Devonian Slaven, McColley, Denay, and Devils Gate Formations; Tertiary intrusives and Tertiary volcanics; and Quaternary alluvium and gravels. Groundwater occurs in each unit. Based on previous investigations, the groundwater flow follows topography, with flow being from high elevations to lower topographic elevations in the valleys. Thin layers of alluvial deposits have shallow depth to groundwater. These unconsolidated alluvial deposits make up



the tributaries, Denay and Coils Creeks, which eventually drain to the Humboldt River tributary system.

The seismic rating of the general area used in the design criteria of the processing facility in 1995 is Zone 3, based on the Uniform Building Code (1994).



6.0 HISTORY

Exploration and other mineral-related activities have occurred at the Tonkin Project area since the 1950's. The first claims staked for gold in the area include those located by Homestake Mining Company and an individual prospector in 1966 in the "Rooster" area that is now part of the Campbell-Simpson lease area.

Between 1966 and 1985, several companies including Homestake Mining Company, Placer Amex, American Selco, Chevron Resources, Earth Resources, Freeport Exploration Energy Reserves Group and Mineral Ventures, Inc. (subsequently Precambrian Exploration, Inc. (PEX)) conducted exploration. Their activities included road building, surface sampling and drilling on portions of the property. In 1985 US Gold Corporation (named Silver State Mining Corporation at that time) joint ventured the property with PEX (Tonkin Springs Gold Mining Company {TSGMC}). In 1987, US Gold bought out PEX's interest.

Between 1985 and 1988, TSGMC built and operated an oxide heap leach operation and in late 1989, completed construction of a 1,500 ton-per-day milling facility at the Tonkin Project, designed to process sulphide gold mineralization through the use of bacterial oxidation and cyanidation technology. The plant and associated infrastructure were decommissioned and mothballed in June 1990 (predominantly due to severe liquidity problems). Apart from the SAG mill, which has been removed, the plant is complete and in good condition, and can be put back into production with a minimum of refurbishment. Current expansion of the resource, however, may require relocation of the plant or exclusion of a portion of the resource from ore reserves.

From 1991 to 1999, US Gold joint-ventured the project with various parties, including Homestake Mining Company, Gold Capital Corporation (subsequently a wholly owned subsidiary of Globex Mining Enterprises) and finally Agnico-Eagle Mines Ltd through its Sudbury Contact subsidiary. An outcome of all of these joint ventures was a combination of all the Tonkin Springs assets and properties into Tonkin Springs LLC (TSLLC).

In March 2003, BacTech signed a Letter of Agreement with US Gold to purchase 55% of TSLLC. BacTech issued a feasibility study in May 2004, which recommended open-pit mining and processing of both oxide and sulphide mineralization using proprietary bacterial vat-leach technology. Due to timing and money constraints, BacTech decided not to pursue production at the project, returning the property to US Gold in 2004.

In mid-2005, Mr. Rob McEwen purchased a significant stake in the company, with the previous management team retiring. Under the guidance of new management, the property development has shifted away from production, back into a property-wide exploration focus with the objective of identifying additional Carlin-style mineralization targeting lower plate rocks at depth.



6.1 History of the District

Tables 6-1 provides a summary of the historic "mineral resources" at the property.

		Tonnage ('000s)		Gold Grade		Ounces
Year	Company	(t)	(T)	(g/t)	(oz/T)	Au ('000s)
1990 ¹	Pincock, Allen and Holt	21,269	23,445	1.54	0.045	1,055
1993 ²	Ore Reserves Engineering	9,549	10,526	2.13	0.062	653
1995 ³	Ore Reserves Engineering	27,843	30,692	1.54	0.045	1,368
1996 ⁴	Ore Reserves Engineering	21,622	23,834	1.68	0.049	1,168
2000	Sudbury Contact Mines	29,041	32,013	1.58	0.046	1,460
2004 ⁵	Ore Reserves Engineering, Measured+Indicated	26,943	29,700	1.46	0.043	1,266
	Inferred	3,144	3,466	1.51	0.044	153

Table 6-1					
Historic "Resource" Estimates at the Tonkin Project					

¹ Includes TSP1, TSP2, TSP3, TSP4, F-Grid, O-15 and Rooster.

² Includes TSP1, TSP6, O-15 and Rooster oxides.

³ Full property, 200 ft radius nearest neighbour estimate

⁴ Includes TSP1, TSP6, TSP8, F-Grid, and Rooster.

⁵ NI 43-101 compliant estimate

The historical mineral resources at Tonkin Springs were estimated using various, sometimes undefined codes of reporting and classification. These estimates have frequently been reported as unclassified resources (measured, indicated or inferred) or with measured and indicated resources summed together. As such, they do not comply with NI 43-101. The historical resource estimates are no longer relevant and have been superceded with the current resource estimate, which was completed in early 2008. This resource estimate is discussed in Section 17 of this technical report.



6.2 Historical Production

During 1985 through 1988, approximately 26,029 oz of gold were produced from an oxide heap leach from about 871,000 T of ore. This ore came from an oxide "cap" overlying the current sulphide resource in TSP-1 and several other smaller oxide orebodies in the same vicinity.

In 1989, oxide ore from the "Rooster" deposit was processed through the CIL portion of the mill producing 1,753 oz of gold. In 1990, using the bio-oxidation and CIL circuits of the mill, 2,735 ounces of gold were produced from approximately 70,000 T of sulphide ore mined from the TSP-1 deposit.

A total of approximately 30,517 ounces of gold have been produced at Tonkin Springs to date.



7.0 GEOLOGICAL SETTING

7.1 Regional Geology

The Tonkin Project Area is underlain by Paleozoic marine sedimentary rocks of the Simpson Park and Roberts Creek Mountains. These units were deformed by Antler and Sonoma age orogenies (compressional tectonics). Marine and lacustrine sedimentation resumed in Permian time. In Tertiary time, extensional tectonics dominated with basin development and extensive volcanism. Basin and range, extensional tectonics continue to the present time.

The Tonkin District lies within the Battle Mountain-Eureka mineral belt. This belt is a northwest-southeast trending alignment of mineral deposits, intrusives, and windows of lower plate carbonate rocks, and complicated structures. The Northern Nevada Rift parallels the Battle Mountain-Eureka Belt on the eastern margin of the Tonkin property. The Northern Nevada Rift is a mid-Miocene-aged locus of mafic volcanism.

7.2 Property Geology

The Tonkin Project area is underlain by a sequence of lower Paleozoic rocks, as shown by the tectonostratigraphic section in Figure 7-1.

Cambro-Ordovician Hales Formation (sandy limestones, siltstones, shales and greenstones) and Cambrian Tybo Shale are exposed in an erosional window. The Hales Formation is underlain by the Cambrian Tybo Shale, the Cambrian Hamburg Formation (dolomitic siltstones and shales), and the Cambrian Secret Canyon Formation (calcareous sandstone and siltstone). These units dip gently (10 to 25 degrees) to the east with minor folds. Locally the Ordovician Eureka Quartzite overlies the Hales Formation. The highly deformed, Ordovician Vinini Formation (siltstone, shale, chert, and quartzite) is in apparent thrust contact over the Eureka, Hales, and Tybo formations. Isolated Devonian Devils Gate Limestone blocks and Devonian chert are tectonically emplaced on the Hales Formation and Vinini. At the Rooster gold resource, Devonian cherts (Slaven equivalent?) are tectonically emplaced on top of Vinini, Hales, and Hamburg Formations. Devonian Denay and Devils Gate carbonates are tectonically emplaced on top of the Devonian cherts and the Ordovician Vinini. Mafic sills, dikes and pyroclastic volcanics were emplaced in all of the above units except the Devonian carbonates.

This sedimentary section is intruded locally by Tertiary porphyritic dacitic and andesitic dikes. Tertiary tuffs, ignimbrites, and flows overlie all the above units to the east and west of the mine corridor as shown by the geologic map in Figure 7-2.





Figure 7-1 Tectonostratigraphic section for the Tonkin Project. (Source US Gold 2008)





UTM NAD27, Zone 11)



7.2.1 Stratigraphy

Cambrian Secret Canyon Formation

The Cambrian Secret Canyon Formation was intersected by a 3690' rotary hole drilled by Homestake south of the TSP-5 pit. There is no known outcrop of Secret Canyon in the mine corridor. The Secret Canyon consists of calcareous sandstone, carbonaceous siltstone, shale and is at least 985 feet thick. The environment of deposition is probably platform margin and shelf lagoon.

Cambrian Hamburg Formation

Conformably overlying the Secret Canyon is the Cambrian Hamburg Formation. In the Central Mine area, the Hamburg is at least 1635 feet thick and consists of dolomitic siltstone, carbonaceous siltstone, dolomitic shale, and sandstone. The Hamburg sediments were deposited in a shelf lagoon environment. The dolomitic siltstones of the Hamburg are commonly in direct contact with the Hales Formation along low angle fault surfaces.

Cambrian Tybo Formation

The Cambrian Tybo shale locally overlies the Hamburg dolomites in the mine corridor. The lack of continuous exposure of the Tybo suggests that it was faulted out in many localities. These low angle faults are currently interpreted as thrust faults. The Tybo consists of black, carbonaceous shale, graphitic siltstone, and siltstone that was deposited at the base of the continental slope and a deep basin environment.

Cambro-Ordovician Hales Formation

The Cambro-Ordovician Hales Formation conformably overlies the Tybo Shale and is commonly in fault contact with the underlying Hamburg. The Hales Formation is approximately 800 feet of sandy limestone, calcareous siltstone, mafic tuffs (EMIT), mafic sills (EMI), and minor chert. Mafic sills and tuff beds are thicker and more widespread in the southern area than in the other parts of the project. Mafic volcanics in the central area are mostly tuffs with fewer sills, and are less common than in the Southern area. The mafic sills were emplaced soon after deposition of the Hales sediments.

Ordovician Eureka Quartzite Formation

The Ordovician Eureka Quartzite was placed discontinuously on the Hales Formation. The Eureka Quartzite is up to 200 feet thick and consists of well sorted and rounded quartz sands that represent shoreline strand deposits.


Ordovician Vinini Formation

The Ordovician Vinini Formation is the deep basin time-stratigraphic equivalent to the Eureka Quartzite. The Vinini includes mostly graded siltstone and shale with lesser chert, dirty quartzite, calcareous sandstone, limestone, and mafic igneous units. The Vinini strata are highly contorted and in apparent thrust contact with all the mentioned Paleozoic formations.

Devonian Slaven Chert

Much of the Northern Project Area (Rooster) is underlain by massive to thin-bedded chert with interbedded mudstone (often carbonaceous). The cherts and mudstones are folded intensely. Age determinations by radiolaria on this unit yield Early Devonian ages, suggesting Slaven Formation. The Slaven chert was tectonically emplaced over the Cambrian Hamburg and Tybo Formations. Mafic volcanics are present in the North area but are much less common than in the South or Central areas.

Devonian Denay and/or McColley Canyon Formations

The Devonian carbonates in the northern project area are medium-bedded limestones that consist of carbonate debris flows with abundant intraformational slumps deposited on the continental slope environment. Conodont age determinations yield Middle to Late Devonian ages. The Denay and/or McColley Canyon Formations were tectonically emplaced on top of the Devonian Slaven Chert and all the older Cambrian units described above.

Devonian Devils Gate Formation

The Devonian Devils Gate Limestone is a massive, fossiliferous, platform margin limestone. Reef-building corals such as favosites and stomotoporoids are common in the Devils Gate. The Devils Gate Limestone occurs as tectonically emplaced blocks on the Ordovician Vinini and the Cambro-Ordovician Hales Formations throughout the Tonkin Mine Area.

Permian Garden Pass Formation

Permian in age, this unit is exposed north of the Mine Area. It consists of limestone with clasts of chert and quartzite that were derived from the Vinini. It was deposited during the Antler Orogeny, when a highland existed to the west. Clastic material was being shed eastward onto a carbonate platform during early Permian time. This unit is seen to rest unconformably on Vinini shale.

Tertiary Volcanics

Rhyolitic to dacitic air-fall tuffs, ignimbrites, and local lava flows overly the Paleozoic formations. These volcanics appear to be filling tectonic basins active in Tertiary time. Local rhyolitic, dacitic, and andesitic dikes were encountered in several drill holes.



7.2.2 Structure

The Cambrian units up through the Cambro-Ordovician Hales Formation have been gently folded into broad anticlines and synclines. Folding is best recognized by flexure of the EMI sills and tuffs.

The Ordovician Vinini and Devonian Slaven Chert were highly contorted by complex fold and thrust tectonics. Chert and mudstone beds are commonly tightly folded and truncated by internal thrust faults. This tectonic event is interpreted to be the Roberts Mountains Thrust of Antler age.

Thrust or slide blocks of Devonian limestone and chert were locally emplaced on any Cambrian to Cambro-Ordovician unit. This event postdated the Antler thrusting and predated the Permian.

Extension, high-angle faulting, and volcanism dominated the Early to Middle Tertiary Period. In the area of the gold resources, high angle faulting consists of minor vertical offsets. East of the identified resources major high angle faulting is indicated by thick Tertiary volcanics and suggested by major breaks in the gravity.

Early Tertiary (probably Paleocene to Eocene) basin development (high-angle faulting) was contemporaneous with felsic to intermediate volcanism including dikes. Middle Tertiary (Miocene) was another extensional period that includes formation of the Northern Nevada Rift. Vertical mafic dikes and related lava flows were emplaced east of the Project area in a N10° to 20° west trend. High-angle, northwest-trending faults and fractures in the Tonkin Project area could have occurred at several times in the Tertiary. Extension continued from Miocene to the present allowing for the development of the Basin and Range topography.

7.2.3 Alteration

Alteration on the Tonkin Springs project includes: decalcification; silicification; argillization; calcite redistribution (veining); carbon depletion and remobilization; and iron staining. The currently interpreted paragenesis includes: decalcification; silicification; silica vein-veinlet development; calcification; cinnabar and barite introduction; microfracturing; and carbonization. Calcite appears to be redistributed along structures, some of which are peripheral to and above gold mineralization.

Mafic intrusions and pyroclastics are commonly argillized with abundant leucoxene. Felsic intrusions and pyroclastics are typically sericitized and argillized. Below weathering and oxidation level, the felsic volcanics are locally quartz-sericite-pyrite (QSP) altered.

Sulfide minerals identified are pyrite, arsenopyrite, marcasite, realgar, orpiment, sphalerite, and stibnite. Realgar/orpiment, in particular, is closely associated with the gold mineralization.



Common secondary minerals at Tonkin Springs are goethite, jarosite, scorodite, and variscite. Stratiform and hydrothermal barite is widespread throughout the Tonkin Springs area. The "bedded" stratiform barite is found with the upper plate chert/siltstone/greenstone rock packages and is not genetically associated with gold mineralization. The hydrothermal barite found in jasperoids and fault breccias are locally associated with gold mineralization.





8.0 DEPOSIT TYPES

Mineralization in the Southern and Middle Areas of the Mine Corridor is hosted in Cambro-Ordovician Hales Formation, a time-equivalent to the Comus Formation that hosts the Twin Creeks deposits. Gold mineralization is generally stratiform in all of the lithologic units of the Hales Formation—sandy limestones, calcareous siltstones, shales, and is strongly associated with mafic pyroclastic deposits (EMIT) and mafic sills (EMI). The best gold grades are associated with decalcification and silicification. Spotty gold mineralization occurs in brecciated shales, karst horizons, and EMI contacts in the Hamburg Formation and locally in altered Tertiary dacitic dikes.

In the Southern Project area gold mineralization is generally strongest along a N10W to N15W northerly axis through O-15 and TSP-1. Mineralization along this trend is thicker, has higher gold grades and multiple, stacked zones are common. Moving up-dip to the west, mineralization is generally thinner, lower grade, and is confined to a single significant horizon.

Mineralization in the Rooster Area is hosted mostly by early Devonian Slaven Chert, and underlying Cambrian mudstones. Gold mineralization is commonly associated with the contacts of mafic sills and dikes within the cherts and mudstones. A small, but significant mineralized zone at the top of Rooster Ridge is hosted in Devonian carbonates near the contact with adjacent cherts and mudstones. Although strong silicification associated with Rooster mineralization can make protolith determination difficult, the chert appears to be the principal ore host at Rooster.



9.0 MINERALIZATION

The Tonkin project has been divided into three areas for purposes of resource estimation. These are referred to as:

- 1) South Area, which contains the TSP1, TSP3, TSP6, TSP8, O15, TSP1 South, and O15 North deposits.
- 2) The Central Area, which contains the F-Grid and TSP5 Deep deposits. A mined-out deposit known as TSP5 was located in the area.
- 3) The North Area, which contains the Rooster Deposit.

9.1 South Area

9.1.1 TSP1 Zone

The TSP1 deposit is the largest and most complex of the gold deposits within the Tonkin Project. The TSP1 Main Zone is a 20- to 100-foot thick, 1,000 foot wide by 1,300 foot long, upwardly-arched layer of mineralization that sits immediately below a mafic tuff bed (EMIT). This stratigraphic horizon is gently curved upward into an anticlinal shape, and appears to be the controlling feature for gold mineralization.

The TSP1 Deep Zone is located immediately below the Main Zone and covers approximately the same area. The Deep Zone is flat-lying and sits just above a laterally extensive mafic intrusive sill (EMI) locally called the "lower EMI". The lower EMI is continuous over much of the South Area and is a significant control for gold mineralization. The Main Zone dips to the west and merges with the Deep Zone. The junction of the two deposits is located in a gentle syncline-shaped trough. Gold mineralization continues up-dip to the west for approximately 500 feet, forming the TSP1 West Zone.

The upper part of the TSP1 Main Zone cropped out to the surface, and a small oxidized portion of the deposit was mined during the late 1980's. Other mineralization occurs under the TSP1 Deep Zone, but is currently poorly defined by drilling.

9.1.2 TSP3, TSP6, and TSP8 Zones

Mineralization continues up-dip to the west from the TSP1 West Zone, but becomes thinner and lower grade. This up-dip extension immediately west of the TSP1 West Zone is called the TSP8 Zone. Immediately south of the TSP8 Zone is the TSP6 Zone, which partially connects with the TSP8 Zone. Immediately south of TSP6 is TSP3, which partially connects to TSP6.



All of these zones are associated with the same EMI intrusive sill that controls mineralization in the TSP1 Deep Zone.

9.1.3 O15 Zone

The O15 Zone is the southern-most mineral zone and is located approximately 2,000 feet south of TSP1. Mineralization is stratiform and is associated with an EMI intrusive sill that is likely the same sill that controls mineralization in the TSP1 Deep Zone. The most continuous and highest-grade part of O15 follows a north-south trend that is coincident with a synclinal-shaped trough.

9.1.4 TSP1 South/O15 North Zone

The TSP1 South Zone is the southward extension of the TSP1 Deep Zone. The O15 North Zone is the northward extension to the O15 Zone. Both zones are stratiform and are associated with EMI intrusive sills. The two zones do not connect, but overlap slightly with the TSP1 South Zone sitting about 75-to-100 feet above the O15 zone in the overlapping area.

9.2 Central Area

The Central Area mineralized zones are located approximately 3,000 feet northwest of the TSP1 zone. Mineralization in the Central Area is stratiform and appears to be localized along volcanic, mafic tuff layers (EMIT) rather than intrusive, mafic sills (EMI).

9.2.1 FGrid Zone

The FGrid deposit consists of an upper and a lower mineralized horizon. The east edge of the zone is open and may connect to the TSP5 Deep Zone, which is located down-dip to the east.

9.2.2 **TSP5 Deep**

The TSP5 Deep Zone is a tabular zone of mineralization that has been intersected by only a few deep drill holes. The zone has grade and thickness similar to the TSP1 Deep Zone. Multiple, stacked mineralized zones are indicated just below the TSP5 Deep Zone.

9.3 North Area

Mineralization in the North Area is confined the Rooster Deposit. This deposit is larger, but gold grades are lower and continuity of mineralization is not as strongly defined as the deposits in South and Central Area. A small resource of oxidized mineralization is present at Rooster.

Mineralization in the Rooster Area is hosted mostly by early Devonian Slaven Chert, and underlying Cambrian mudstones. Gold mineralization is commonly associated with the contacts of mafic sills and dikes within the cherts and mudstones. A small, but significant,



mineralized zone at the top of Rooster Ridge is hosted in Devonian carbonates near the contact with adjacent cherts and mudstones.

9.3.1 Rooster West Zone (Rooster Ridge)

The Rooster West Zone sits mid-way up the side of the hill along Rooster Ridge. This mineralization is associated with a small block of Devonian carbonates. Gold grades are strongest within the carbonates, particularly along the west and south edges. Mineralization appears to continue along the bottom of the carbonates, but is poorly defined by drilling and gold grades appear to be much lower than along the edges.

9.3.2 Rooster Central/Northeast Zone

Mineralization continues down the flank of Rooster Hill, starting just east of the West Zone, where it forms a nearly continuous 50-foot to 200 foot thick blanket of mineralization that follows down the slope of the hill for about 1,000 feet to 1500 feet to the east-northeast. Near the bottom of the hill mineralization becomes thicker and may exceed 400 feet.



10.0 EXPLORATION

Exploration activities have taken place in the Tonkin Springs project area dating back to the 1950's and 1960's when prospecting for mercury and barite was active. The first claims staked as a result of exploration for gold include those located by Homestake Mining Company and an individual prospector in 1966 in the Rooster area. The Tonkin property has been known for approximately 40 years to host mercury, barite, and gold mineralization. Consequently, a significant amount of exploration work has been conducted over the decades, mainly focused on shallow oxide and sulfide (refractory) mineralization types. The result of these various exploration programs is a large database of rock samples, soil samples, geologic maps, numerous geophysical surveys and drill data.

10.1 Geochemistry

Rocks

Surface rock samples show that gold is usually found in rocks that have been silicified, decalcified, and contain iron oxides. A total of 743 rock samples were collected with values ranging from <0.005 ppm to 4.49 ppm. Numerous anomalies outside the area of existing mineral resource envelopes are present. Rock samples were collected by US Gold personnel. Surface rock samples are shown graphically in Figure 10-1.

Soils Survey

Soil samples were collected on a 100 by 100 meter grid over 97% of the Project Area, with a 50 by 50 meter grid covering the historic resource areas. Locally, 25 by 25 meter grids were completed to further define drill targets. Soil samples were collected by Western Recon and Mineral Exploration, Inc., North American Exploration, Inc., and US Gold personnel. Approximately 9,240 soil samples were collected and analyzed for gold and trace elements. Gold values ranged from <0.001 ppm to 1.625 ppm. Soil sample results are shown in Figure 10-2.

Of the major metals assayed in the soils program, gold, arsenic, antimony and zinc had positive correlations with known gold resources. Lead, copper and silver correlated poorly, as would be expected in Carlin-style systems.

Biologic Age Determinations

Select surface rock and drill core samples, totaling 106 samples, were collected for conodont and radiolarian biologic age determinations. All biologic age determinations were conducted by Biostragraphy.com. Biologic age determination results are shown in Figure 10-3.



Ore Reserves Engineering

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Figure 10-1

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Rock sample geochemistry results for gold. (Source US Gold 2008)

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Figure 10-3 Biologic Age Determination Results. (Source US Gold 2008)



Drill Sample Geochemistry

Typical Carlin-style system trace elements (arsenic, antimony, and mercury) are associated with the gold mineralization encountered in the 2006-2007 drill program. In the Favo Ridge area, the trace element selenium is present in elevated amounts. Selenium is more commonly associated with volcanic hosted low-sulfidation systems.

10.2 Geophysics

Geophysical surveys undertaken in 2006-2007 comprise gravity, induced-polarization (IP), Magneto-Tellurics (MT) and a ground magnetics survey. Additionally, two airborne magnetic surveys were acquired.

The gravity survey was conducted by Magee Geophysical Services, LLC on a 100 by 150 grid, covering 100% of the Tonkin Project Area. The quality of the gravity data is excellent and has defined the range bounding structures along with numerous subparallel and intersecting structural features.

Over 80 line-kilometers of IP-Resistivity were completed on lines generally 300 meters apart with readings collected every 100 meters on the line. The survey maps chargeability and resistivity to a depth of approximately 200 meters. The survey was conducted by Quantec Geosciences USA Inc. The IP-Resistivity data collected identified anomalous trends containing increased pyritic and/or carbonaceous rock, which are commonly associated with gold in the Tonkin area.

The MT survey was conducted on a 300m by 300m grid and covers approximately 40% of the Tonkin Project Area. The survey was conducted by Quantec Geosciences USA Inc. This survey was used to define structural controls beneath Tertiary volcanic cover northeast of the northern most resource.

A ground magnetics orientation survey was conducted on east-west lines spaced 25m apart with continuous reading along the lines covering 100 line miles and covering 10% of the project area. This survey was conducted only over the southern resource area and provided several detail structural trends within and adjacent to the resource not previously identified.



10.3 Development Drilling Targets

A program of development drilling is proposed to expand the Tonkin Project gold resource by drilling in areas with a high probability of success, as follows:

- In-fill drilling increases the measured and indicated resource by upgrading inferred resources to measured and indicated resources.
- Step-out drilling increases the size of the currently defined deposits by drilling on the margins of the known deposits in areas where mineralization has not been closed-off by barren drill holes.
- Deeper drilling adds new resources by drilling below the currently defined deposits into areas where mineralization has been shown, but where there is too little drilling for the mineralization to be included in the resource estimate.

The development drilling program is designed in two phases. The first phase, consisting of 133 drill holes with an average depth of 560 feet, is designed to target areas believed to contain higher grade mineralization with the greatest probability of increasing resources. The second phase of drilling consists of primarily step-out drilling around the area drilled in Phase 1. A total of 211 drill holes averaging 510 feet depth are included in the Phase 2 drilling program. Each of the Phase 2 holes will be evaluated with respect to the results of Phase 1, and it is likely that not all of the Phase 2 drilling holes will be drilled. The development drilling program is summarized by phase and deposit area in Table 10-1.

		Number	Total	Average
Phase	Area	Holes	Footage	Depth
Phase1	Central	34	26,729	786
	South	55	24,739	450
	North	35	13,600	389
	Total	133	74,233	558
Phase2	Central	80	54,405	680
	South	75	32,283	430
	North	56	21,200	379
	Total	211	107,888	511

Table 10-1Summary of Development Drilling by Phase and Area

Development drilling in the South Area is directed primarily toward drilling deeper to define resources below the lower EMI zones. Secondarily, drilling in the South Area fills in gaps in the current drilling grid and offsets mineral zones that are still open laterally.



Figure 10-4 Development drilling hole locations with drilling priority (Source US Gold 2008) Coordinates UTM Zone11, NAD27



Development drilling in the Central Area is directed primarily toward expansion of the TSP5 Deep Zone. In addition, potential zones of stacked mineralization are targeted by the same holes. The secondary purpose of Central Area drilling is to define the relationship between the FGrid and the TSP5 Deep Zones and to expand the FGrid resource with step-out holes. The final target area for Central Area drilling is south of FGrid and TSP5, where limited drilling indicates possible new zones of mineralization.

Development drilling in the North Area is primarily infill drilling to define the Rooster deposit in greater detail. Step out drilling in the northwest part of the Rooster deposit is done to verify the presence, or absence, of mineralization in a previously undrilled area under the Devonian limestones.

10.4 Exploration Drilling Targets

Several exploration drilling targets have been identified to explore for gold mineralization that is outside of the known mineralized areas, but where the opportunity for new gold resources is strongly indicated by geologic interpretation, geophysical surveys, and geochemical sampling. The recommended drill sites are north of TSP-1, south of O-15, and east of the southern area gold resources and shown in Figure 10-5.

Exploration holes north of the TSP-1 deposit and south of the O-15 deposit are designed to initially test the N10 to 15 degrees west trend of higher and thicker grade gold mineralization associated with anticline and syncline hinge zones along this trend. The proposed holes to the north of TSP-1 will test the anticline-syncline hinge zone primarily in the Hales Formation north to the central project area along a strike length of approximately 1,000 meters (3,400 feet). These holes will also provide additional information on the size and shape of the bottom of the Tertiary Volcanics, which may limit the eastward extent of mineralization in the Hales Formation.

The proposed holes to the south of the O-15 deposit will test the southern extension of the anticline-syncline hinge zone in Hales Formation that has been covered by upper plate Vinini Formation. These wide-spaced holes will test an additional 1,000 meter (3,400 feet) strike length of the anticline-syncline corridor to the south of the O-15 gold deposit.

Exploration holes located to the east and southeast of TSP-1 to O-15 are designed to test gold in soil anomalies in Tertiary volcanics and Paleozoic sediments. These holes will test for gold mineralization in structures that parallel the TSP-1 to O-15 gold trend, in Tertiary volcanics at the surface , as well as down-dropped blocks of Hales Formation.

The 12 hole, 12,000 foot drill program will be evaluated and modified as geologic samples are logged and as assays are received.



Figure 10-5 Exploration drill hole locations (Source US Gold 2008) Coordinates UTM Zone11, NAD27

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11.0 DRILLING

A summary of drilling on the Tonkin Project is listed in Table 11-1. This table shows that most of the deeper drilling was done using reverse-circulation and diamond core drilling methods. A significant number of shallow holes were drilled using percussion and air track drilling before 1990, but these holes generally impact only the near-surface parts of the resource, much of which was mined-out during the 1980's.

The drill hole collar location map in Figure 11-1 shows drill holes with respect to identified gold deposits and the property boundaries. This figure also shows drill hole depth as color-coded symbols.

Available records indicate that all drilling on the property was conducted using reputable drilling contractors under supervision of experienced geologists, and was performed to industry standards at the time of drilling. Some of the drilling methods, however, such as direct-circulation rotary, percussion, and air track drilling may not be reliable if the hole is deeper than about 100 feet. Historic RC drilling may also not be reliable when water flows are high. In the case of the Tonkin Project, it is believed that problematic drill holes are most likely biased low relative to the true gold grades in the sampled areas. Further evaluation of the historical drilling methods is recommended prior to the next update of the model.

Period	Company	Hole Type	Number Holes	Number Assays	Length Assayed	Total Length	Average Length
1966-67	Homestake Mining Co.	Rotary	10	419	2,092	2,147	215
1970-7	American Selco (Amselco)	Rotary	4	204	1,020	1,035	259
		Core	5	248	1,239	1,274	255
1974-75	Chevron Resources	Rotary	10	322	1,610	1,680	168
1976	Placer Amex	Unknown	12	282	2,810	2,810	234
1978-79	Earth Resources	Rotary	15	339	3,390	3,565	238
1980	Freeport Exploration	Unknown	29	1,503	7,515	7,645	264
		RC	50	2,082	10,410	10,770	215
1981-84	Precambrian Exploration	Rotary	88	4,650	23,250	23,325	265
		Unknown	257	11,989	60,430	61,430	239
		Air Track	106	1,063	5,639	5,890	56
		Core	16	784	3,920	4,996	312
1005 00		Percussion	769	23,091	115,450	115,675	150
1985-89	US Gold	RC	441	20,685	103,415	106,115	241
		Rotary	330	7,550	37,750	38,260	116
		Unknown	95	5,598	27,990	28,725	302
		Core	11	788	3,598	3,613	328
1991-92	Homestake Mining Co.	RC	88	7,910	71,280	77,015	875
		Rotary	1	395	3,670	3,690	3,690
1995-98	Gold Capital Corp.	RC	6	110	550	650	108
		Unknown	64	2,287	10,989	13,032	204
		8" Air	7	146	730	735	105
1999-2001	Agnico-Eagle/Suddury Contact	RC	52	3,465	27,830	29,055	559
2002.04	DeeTeel	Core	9	484	2,180	2,275	253
2005-04	BacTech	RC	19	1,078	5,405	5,950	313
2006 2007		Core	100	24,874	110,597	120,230	1,202
2006-2007	US Gold	RC	50	7,989	39,861	40,068	801
		8" Air	7	146	730	735	105
		Air Track	106	1,063	5,639	5,890	56
		Core	141	27,178	121,534	132,388	939
1066 2007	All Companies	Percussion	769	23,091	115,450	115,675	150
1900-2007	An Companies	Rotary	458	13,879	72,782	73,702	161
		RC	706	43,319	258,751	269,623	382
		Unknown	457	21,659	109,734	113,642	249
		Total	2,644	130,335	684,619	711,654	269

Table 11-1Summary of Drilling within the Tonkin Resource Area



Figure 11-1 Tonkin Project drill hole location map. (Source ORE 2008)



12.0 SAMPLING METHOD AND APPROACH

The sampling method and approach used during the different drilling campaigns varied with the different owners and lessees. Procedures adopted for the majority of the samples collected at Tonkin are outlined as follows:

<u>Precambrian Exploration Inc (PEX) (1981-1984)</u>: Drilling was rotary percussion. Cuttings were caught continuously, plus drilling was stopped and the hole blown at the end of each 1.5 m (5 ft) interval. The sample was then split twice in a riffle splitter providing $\frac{1}{4}$ and $\frac{3}{4}$ splits.

<u>US Gold (1985-1989)</u>: Drilling was mostly reverse circulation, but some shallow air-track holes were drilled. Samples were collected with a cyclone on the drill rigs on 1.5 m (5 ft) intervals, and then split to ¹/₄ for assaying.

Homestake (1991-1992): data not available.

Gold Capital (1995-1998): data not available.

Agnico Eagle/ Sudbury Contact (1999-2001): data not available.

<u>BacTech (2003-2004)</u>: Drilling included 9 HQ size (2 1/2") diamond drill holes and 20 reverse circulation holes (5 3/4" diameter). Diamond drill core was cut in half using a diamond saw. Samples were generally 1.5 m (5 feet) long. RC cuttings were collected on 1.5 m (5-foot) intervals which were split in half using a Jones splitter when the samples were dry; wet RC cuttings were split using a rotating wet splitter.

<u>US Gold (2006- present)</u>: Drilling in 2006 consisted of HQ diamond drill holes (2 holes being reduced at depth to NQ) and reverse circulation drill holes. Drill core was ½ split utilizing a diamond-bladed saw. Sample lengths were variable but nominally 5 feet. Sampling of reverse circulation drilling was accomplished on 5-foot intervals using a cyclone and rotating wet splitter.



13.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

13.1 Sample Preparation and Analyses

Sample preparation and analytical practices varied with the different owners and lessees. Procedures adopted for the majority of the samples collected at Tonkin Springs are outlined as follows:

<u>Precambrian Exploration Inc (PEX) (1981-1984)</u>: The sample obtained from the rotary percussion drilling was split twice in a riffle splitter providing ¹/₄ and ³/₄ splits. The ³/₄ split was retained as bulk samples. The ¹/₄ splits were processed using an on-site sample preparation facility, where they were dried, crushed to 1 mm, then split down to 250 grams via riffle splitter. The 250 g samples were sent to the Mikron Laboratory in Wheat Ridge, CO, where they were pulverized by ring pulverizer to minus 200 mesh, digested with aqua regia and analyzed for gold by atomic absorption spectometry. Samples greater than 0.78 g/t (0.025 oz/T) Au were taken to the Aurotech Lab in Wheat Ridge, CO for fire assay. Check assays were reported to have been done, but no report summarizing the results could be located for this review.

<u>US Gold (1985-1989)</u>: The samples collected during drilling were split to ¹/₄ for assaying. The ¹/₄ split was sent to the laboratory (primarily Universal Labs in Reno, NV, and Barringer in Golden, Co and Sparks, NV), where it was crushed to minus 10 mesh, split to 300 grams, and pulverized to minus 250 mesh in a ring pulverizer. Samples were then assayed using a one-assay-ton fire assay. Occasional samples were analyzed using cyanide-soluble atomic absorption assays.

Homestake (1991-1992)

Not available

Gold Capital (1995-1998)

Not available

Agnico Eagle/ Sudbury Contact (1999-2001)

Not available

<u>Bactec (2003-2004)</u>: Samples were dried at the American Assay Labs (Reno, NV) facility until completely dry. The dried samples were then coarse-crushed to 95% -10 mesh using a combination of jaw crusher and roll crusher. The crushed samples were then coarse-ground to minus 80 mesh using a vertical spindle pulverizer. This sample was then split to 300-500 grams which was then pulverized to 90% 150 mesh using a vertical spindle pulverizer.



30-gram aliquots were then assayed for gold using fire assay with atomic absorption finish. A blank and two International Rocklabs standards were used in each batch of 40 samples. In addition, 20% of the data were submitted for re-assay. A total of 13 samples were submitted to ALS Chemex (Sparks, NV) for external checks.

<u>US Gold (2006-present)</u>: Drill samples were prepped and analyzed by ALS Chemex Laboratories and BSI Inspectorate Laboratory. Samples were picked up onsite by ALS Chemex and BSI Inspectorate personnel and transported to their prep facilities in Reno, Winnemucca, and Elko, Nevada. Sample weights were generally 4-6 kg for core and 2-4 kg for reverse circulation cuttings. After drying, samples were crushed to >70% passing 2 mm, then a 250 g split was taken and pulverized to >85% passing 75 microns utilizing a ring-and-puck pulverizer. The pulps were sent to the ALS Chemex fire assay facility in Sparks, Nevada where a 30 g aliquot was assayed by fire assay with an atomic absorption finish (ALS Chemex method Au-AA23). Analyses greater than or equal to 1 ppm Au were re-run as a check. Duplicate pulps were made by ALS Chemex for every twentieth sample and sent to American Assay Laboratory in Sparks for check gold assays (also by fire assay/AA finish). Blanks and standards were inserted in the drill sample shipments every 200 feet of drilling. Clean silica sand was utilized for blank material. Standards were prepared by and purchased from Shea Clark Smith of Minerals Exploration & Environmental Geochemistry with grades of approximately 0.5 ppm and 2 ppm gold.

Trace element analyses were also performed by ALS Chemex in their Vancouver, Canada facility using aqua regia digestion and analysis by ICP-mass spectrometry (method MEMS-41).

13.2 Security

No special procedures were used for security of the samples. This is typical for work completed during the period, 1967 to 1991, which accounts for over 85% of the total drilling.

In 2006 and 2007, samples were maintained in US Gold custody until picked up by Chemex and BSi Inspectorate.



14.0 DATA VERIFICATION

14.1 Drill Hole Database

US Gold initially compiled the drill hole database by on-site staff in the late 1980's. Notes in the files indicate that reasonable procedures were used to enter and check the data. The Homestake drill hole data from 1991 and 1992 were entered by Homestake staff and provided to US Gold as dBase files when Homestake left the property in 1992. Drilling by Gold Capital from 1995 through 1997 was initially entered by Ernie Black of MPH consulting. Data entry for the 1995 drilling was checked against the original lab sheets by Ore Reserves Engineering (O.R.E.).

Drilling by Agnico-Eagle/ Sudbury Contact from 1999 through 2001 was entered by Agnico-Eagle/Sudbury Contact into a Microsoft Access database, which was handed to US Gold when Agnico-Eagle/ Sudbury Contact left the property. The Agnico-Eagle/Sudbury Contact data was verified by O.R.E. by re-entering the assays from the original, electronic spreadsheets that were sent from the assay labs. A total of 78 drill holes were prepared from original laboratory data. Assays for 12 additional drill holes, for which electronic data were not available, were entered manually by O.R.E. from copies of laboratory reports.

The BacTech data, which had not previously been entered into the drill hole database, were entered by Alan Noble of O.R.E. in 2006, from laboratory assay reports in EXCEL format. A total of 28 BacTech holes were added to the data base.

14.2 Drill Hole Collar Location Checks

Drill hole collar elevations were checked by Ore Reserves Engineering (O.R.E.) in 1995 by comparing the drill hole collar elevation to elevations interpolated from the digitized topographic contours. A total of 164 drill holes with more than 6.1 m (20 ft) difference in elevation from the topographic contours were listed and were checked against original survey records by US Gold. Coordinates were corrected for 52 drill holes based on these checks.

Drill hole collar coordinates were further verified by O.R.E. in 2006/2007, by comparing collar elevation against a DTM derived from the June 1996 topographic map (5-foot contour intervals). Differences were resolved based on reviewing collar locations in the historical drill index sheets, drill hole logs, and original drawings showing drill-hole locations.

Further review of collar locations during the current resource estimate identified 13 additional drill holes where the elevation did not match the topography and the assays and geologic log did not match the surrounding drill holes. These holes, which were predominately from the 1997 (6 holes) and 2000 (6 holes) drilling were not used for the resource estimate.



It is possible that the 2000 drill holes were originally surveyed in UTM coordinates and were incorrectly converted to local coordinates. The reason for the coordinate issues for the 1997 holes is unknown.

The 2006 and 2007 US Gold drill holes were surveyed using GPS methods in UTM Zone 11, NAD 1927, and NGVD29 datum. The UTM coordinates were converted to Tonkin Local Grid coordinates using the equations discussed later in Section 17.1.6.

Although the collar location data are believed to be reliable for purposes of resource estimation, further review of the holes drilled after 1997 is recommended.

14.3 Assay Data Entry Checks

14.3.1 Assay Entry Checks 2003

Assay data entry was checked in July 2003 for the pre-1990 drilling by comparing assays in the drill hole database with the original assay sheets from the laboratories. These checks show a data entry error rate of 1.6%. Common differences are transposed digits and shifted decimal points. High-grade samples were frequently entered as a lower number, suggesting that grades were cut, or that a lower, repeat assay was entered. An additional 1.6% of the assays are so similar to the original assay that they appear to be a second assay of the same pulp. Although neither the data entry errors nor the probable rerun assay appear to have significant impact on the resource estimate, further verification of the drill hole database is recommended with the objective of achieving an error rate of less than 0.5%.

14.3.2 Assay Entry Checks 2007

Mine Development Associates (MDA) was contracted in 2007 to further audit the drill hole database. During this audit MDA audited 13.4% of the total data. This audit found significant errors in 1.5% of the audited records, where a significant error was defined as greater than 10% difference in values of 0.03 oz Au/t.

MDA also noted the assaying method that was used for gold content. One hundred forty-six drill holes were identified where the gold assay was done using atomic absorption (AA) with cyanide leach; those holes were removed from the data before resource estimation as cyanide leach is unreliable for refractory sulfide gold ores, such as those at Tonkin.

MDA identified 13,336 intervals in 287 drill holes with a gold assay that was done using an aqua regia digestion followed by an atomic absorption measurement of gold content. While this Aqua Regia-AA is generally reliable for sulfide gold ores, it tends to be slightly lower than fire-assay gold assays because it does not measure gold encapsulated in silica and other minerals that are insoluble in Aqua Regia. In addition, it may also be sensitive to preg-robbing of gold by carbon in the sample. The Aqua Regia-AA assays are considered to be appropriate for resource estimation, but further review is recommended to ensure the reliability of those



assays. These assays represent approximately 10% of the total data used for the resource estimate.

14.4 Assay Comparisons

14.4.1 Repeat Assays

Repeat assays were located from the following three sources:

- 1. Early report by PEX.
- 2. Repeat assays on the assay sheets from 1989 that were located when checking the data entry.
- 3. Check assays report by Agnico-Eagle/ Sudbury Contact.
- 4. Check assay program for US Gold 2006 drilling program is in progress.

Analysis of these data shows good correlation between original and check samples, as shown in Table 14-1. The higher standard deviation for the 1981 samples is caused by a single sample with a grade of 0.005 oz/T Au for the original and 0.048 oz/T Au for the repeat (a possible decimal point shift at the lab). Without this sample, the standard deviation for the 1981 samples is 0.005 oz/T Au rather than 0.014 oz/T Au. Although the number of samples is quite limited, these data indicate an error of about 10% for assay repeats, which is very good for gold assaying.

Data Source	Date	Number Repeats	Average Original (oz/T Au)	Average Repeat (oz/T Au)	Difference (Repeat-Original)	Standard Deviation (Repeat-Original)
Cone Geochem	1981	11	0.024	0.026	-0.002	0.014
Lab Reports	1889	15	0.010	0.009	0.000	0.001
Agnico-Eagle/ Sudbury Contact	2000	142	0.057	0.056	0.001	0.007

Table 14-1Comparison of Check Assay Data

14.4.2 1987 Kappes, Cassidy & Associates

Four bottle roll tests were conducted using cuttings from eleven samples from the Rooster Area. Calculated head assays from the bottle roll tests averaged 0.057 oz/T Au, confirming the drill hole assays which averaged 0.060 oz/T Au. The correlation coefficient (R) between the metallurgical test assays and the original drill hole assays was 99.8%.



14.4.3 2003-2004 BacTech

A total of 207 duplicate assays were available that were above detection limit. The average of the samples was 0.031 oz/T Au for both original and duplicate. The standard deviation of the duplicates was 0.005 oz/T Au, or 15% of the average value. When only samples with both original and duplicate above 0.01 oz/T Au were considered, the average grade was 0.058 oz/T Au and the standard deviation of the duplicates was 11% of the average grade. These data confirm previous results for check assays. Thirteen samples averaging 0.185 oz/T Au were re-assayed at ALS Chemex. The ALS re-assays were 3.5% higher grade than the original, but the difference was not statistically significant.

2006 - 2007 US Gold Check Assay Program

Duplicate pulps were made for every 20th drill sample by ALS Chemex and sent to American Assay Laboratories for gold check assays. Results of the 2006-2007 program have not yet been evaluated.

14.5 Twinned Drill Holes

US Gold Study Testing Reverse Circulation Compared to Conventional (Rotary) Drilling

An undated study was provided by US Gold, which compared the grade and thickness for 21 drill holes drilled by reverse circulation (US Gold) and conventional rotary methods (PEX). This study indicates that the early conventional drilling and reverse circulation drilling are generally comparable, as shown in Table 14-2.

Table 14-2
Results of US Gold Study Comparing Reverse Circulation with Conventional
Drilling

Twin Type	Reverse Circulation Drilling		Conventional Drilling		
	ThicknessGrade(>0.04 oz/T Au)(oz/T Au)		Thickness (>0.04 oz/T Au)	Grade (oz/T Au)	
Undisturbed mineralized zone	140	0.080	175	0.077	
RC hole collared in orebody	200	0.114	180	0.136	
RC hole deeper	90	0.095	85	0.079	
Total	430	0.099	440	0.102	

Twinned Drill Hole Data Comparison (pre-2006 Exploration Program)

An evaluation of twinned holes was completed by Micon International, to compare the effects of different laboratories and drilling methods over time. Drill holes within 4.6 m (15 ft) of each other were used for this study. Assay intervals were paired between holes to adjust for differences in collar elevations and for slight differences in the elevation of mineralized intervals. The results of the twin drill hole study, as summarized in Table 14-3, indicate that there are no significant differences between the US Gold drilling and early (pre-1985) drilling.

Drilling after 1989 is generally lower grade than earlier drilling because of a poor match between drill holes 187512 and 195003. Drill hole 187512 has 27.4 m (90 ft) averaging 5.6 g/t (0.163 oz/T) Au compared to 26.8 m (88 ft) averaging 3.2 g/t (0.093 oz/T) Au for drill hole 195003. These drill holes intersect a high-grade, steeply dipping structure and large differences may be expected if the two drill holes intersect the structure at different elevations. When the 187512/195003 pair is eliminated, assays are comparable for all periods of drilling.

Original	Twin	Number Pairs	Original Au Assay (oz/T)	Twin Au Assay (oz/T)	Difference (Twin-Orig.)	Std. Dev. Difference	t-Test Probability
Before 1985 (pre US Gold)	1985-1989 (US Gold)	1,073	0.0163	0.0163	0.0001	0.0272	7%
Before 1985 (pre US Gold)	After 1989	52	0.0114	0.0108	-0.0006	0.0186	18%
1985-1989 (US Gold)	After 1989	203	0.0397	0.0325	-0.0072	0.0697	86%
1985-1989 (US Gold) ¹	After 1989	182	0.0260	0.0255	-0.0005	0.0408	14%
Before 1989 (All Early)	After 1989	255	0.0339	0.0281	-0.0059	0.0628	86%
Before 1989 (All Early) ¹	After 1989	234	0.0228	0.0222	-0.0006	0.0370	18%
All	Core Hole	144	0.0436	0.0528	0.0092	0.0880	79%

Table 14-3Results of Twinned Drill Hole Comparison

¹ Excludes core twins 187512 and 195003

Micon also found that as part of the BacTech drilling performed during 2003 and 2004, 8 twin holes were drilled at O-15 and TSP1 (not summarized in Table 14-4). These twin holes confirmed the original drilling for 6 of the twins. In two of the twin holes, the mineralized intersection was not as thick as the original intersection. BacTech noted that post-mineral faulting was observed in both of these twins, which could explain the difference. Although during their NI 43-101 review and evaluations, Micon had not conducted independent



sampling and assaying. However, Micon noted that they had personal familiarity with both the property and the regional geology and were therefore confident that the historical sampling data, collected by respected companies, is reliable.

US Gold 2006 Program

Although no drilling was done particularly as a twin study, one core twin (TS06C-01) of a 2001 reverse circulation hole (401008) was done. After abandoning the core hole at less than planned depth, another RC hole was drilled at the same location. In general, the mineralized intervals match well with regards to depth and assay value between the original RC hole (401008) and the core twin (Table 14-4). The newer RC hole (TS06R-01B) consistently contained thinner intervals of lower grade though it had some additional intervals. In general, no consistent trend concerning core and RC drilling was observed based on the three holes from this case. The differences may be related to where the holes cut the mineralized structure.

Hole	Interval	Width	Au, oz/t	
401008	110-130	20'	0.012	
TS06C-01	110-130	20'	0.014	
TS06R-01B	115-120	5'	0.019	
401008	160-210	50'	0.051	
TS06C-01	200-230	30'	0.057	
TS06R-01B	210-215	5'	0.025	
401008	270-400	130'	0.055	
(incl.	340-390	50'	0.099)	
TS06C-01	240-405	165'	0.044	
(incl.	345-385	40'	0.113)	
TS06R-01B	260-380	120'	0.026	
(incl.	365-375	10'	0.074)	
401008	NA			
TS06C-01	445-470	25'	0.041	
TS06R-01B	No significant intercept			
401008	NA			
TS06C-01	No significant intercept			
TS06R-01B	475-490	15'	0.019	
401008	NA			
TS06C-01	No significant intercept			
TS06R-01B	505-520	15'	0.016	
401008	NA			
TS06C-01	No significant intercept			
TS06R-01B	560-575	15'	0.050	

Table 14-4 2006 Twin Holes



15.0 ADJACENT PROPERTIES

The Tonkin Project Area is part of the Battle Mountain-Eureka (BME) Trend, a mineral belt of gold mines located in north central Nevada. In 2006, Nevada produced 6.31 million ounces of gold, the majority of which came from BME Trend and Carlin Trend mines. Nevada's 2006 production of gold, valued at \$3.8 billion, was 81% of the U.S. total and helped make the U.S. the second leading gold producer in the world. Nevada's production contributed 8% of the world's gold production in 2006.

Tonkin Project Area is located 18 miles south-southeast of the Cortez Joint Venture (CJV). The CJV is now 100% controlled by Barrick. The CJV includes (but is not limited to) the Pipeline mine to the north, the original Cortez mine area and the Cortez Hills-Pediment discoveries to the south. Pipeline was the second largest gold mine in Nevada in 2002 with over 1 million oz of gold production. Recent proven and probable reserves for the CJV total approximately 275 million T at 0.040 oz/T gold (Placer Dome, Inc. Cortez Joint Venture Technical Report and Qualified Persons Review, October 2005). Of that, the Cortez Hills deposit totals 33.5 million T at 0.129 oz/T gold. Further to the northwest along the BME Trend is Newmont's Battle Mountain mine complex, including the Phoenix mine which is under construction.

Located about 18 miles north of the Tonkin Project Area is the Buckhorn mine that produced gold during the late 1960's and early 1990's. West of this mine are Barrick's Horse Canyon Mine and ET Blue project. Additional exploration and development work is advancing at both of these properties.

Southeast of the Tonkin Project Area, approximately 11 miles, is the past-producing Gold Bar mine which operated until the mid 1990's. Gold bar is controlled by American Bonanza. The Gold Pick, Gold Ridge, Goldstone, and Cabin Creek gold resources were acquired by US Gold from White Knight Resources and Tone Resources in March of 2007. Further southeast on the BME Trend is Barrick's Ruby Hill mine which, in 2001, had production of 134,747 oz of gold from the West Archimedes deposit. Production from this mine was suspended in 2002. Currently, Barrick is developing the deeper, sulphide East Archimedes deposit, reportedly a 1 M oz gold reserve slated for production in 2008.

The Cortez Joint Venture, Miranda Resources, Bravo Venture, Great American Minerals, and others hold claims in the Tonkin Project area. Most are conducting active exploration programs in the area. US Gold Corporation also controls numerous other claims adjacent to the Tonkin Project Area including the Patty project, which adjoins the Tonkin property on the northeast and is currently joint-ventured to Barrick, who continues to explore the property. As well, exploration work is progressing on Miranda's Red Hill project held in a joint venture with Barrick.



16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineralization at Tonkin Springs consists of mainly carbonaceous shales and siltstones containing fine-grained sulphides. Gold deportment generally occurs as encapsulated in arsenic-rich pyrite with negligible free gold. The sulphide mineralization can be considered refractory with regard to gold extraction. The mineral resources also include a relatively small amount of oxidized material, which occurs near to the surface. The oxidized material responds well to using standard cyanide leaching technology to recover gold, including heap leaching.

The oxide and sulphide mineralization at Tonkin Springs has undergone extensive metallurgical testing over the years. Both Carbon-in-Leach (CIL) and heap leaching of the oxidized material have been investigated. The sulphide mineralization has been the subject of numerous testing programs; technologies explored include CIL, heap leaching, bio-heap leaching, bio-oxidation of ground whole ore, flotation and bio-oxidation of sulphide flotation concentrates.

16.1 Metallurgical Test Work

Test work on coarse oxide mineralization samples demonstrated that reasonable gold extractions could be achieved using cyanide without the need for preoxidation treatment. In column tests performed by Bateman in 1989 and Kappes Cassiday and Associates (KCA) in 1992, it was shown that recoveries of between 61% and 76% would be expected using heap leaching of run-of-mine oxidized material. These results show that reasonable gold recoveries would be expected from oxide material even at quite a coarse size regime.

Bottle roll cyanidation tests on samples of ground oxidized material have indicated that a gold recovery of between 90% and 95% would be anticipated using CIL processing. This serves to further illustrate the ability to achieve high gold recoveries from oxide material using cyanide. Diagnostic leach tests on ground samples have further suggested a range for silica encapsulation for gold of between 3% and 12%, with an average of about 6%. The results from these tests confirmed the expected high gold recoveries using cyanide leaching of oxidized material.

Extensive metallurgical studies on sulphide mineralization, conducted by previous owners, indicate that preoxidation is required to achieve reasonable gold recoveries with cyanidation. Detailed diagnostic leach test work to identify precious metal deportment was performed for BacTech at Lakefield's Oretest laboratory in Perth during 2003. Table 16-1 summarizes the results from this study, which was conducted on both orebody samples and a concentrate produced using Newmont's N2TEC[®] flotation technology.



Table 16-1

Results of Detailed Diagnostic Leach Test Work on Orebody and Concentrate Samples

	Ore Concent		ncentrate	
Gold Association	g/t	Distribution (%)	g/t	Distribution (%)
Readily cyanidable	1.06	20	1.15	2.5
Slow leaching with cyanide	0.16	3	4.66	10
Readily Cyanidable Gold	1.26	23 – 24	10.49	13- 23
Release after dilute nitric acid	3.10	60	3.92	8
Release after conc. nitric acid	0.74	14	31.68	67
Total preg. Robbed	0.04	1	4.68	10
Sulphide Gold	3.84	74- 75	35.6	75- 85
Silicate occluded (fire assay)	0.12	2.3	1.2	2.5
Maximum Extractable Gold	5.1	98	46.09	98

These results confirm the refractory nature of Tonkin Springs material with only about 20% of the gold recoverable by direct cyanidation. Data summarized in Table 16-1 suggests that after sulphide oxidation, high gold recoveries would readily be achievable using cyanide with some improvement occurring if CIL leaching is used. The diagnostic leach test work indicates the presence of a slight preg-robbing component due to organic carbon, and suggests that gold losses increase as the organic carbon content of the material becomes higher.

Previous test work has also demonstrated that the Tonkin Springs material is amenable to bioleaching with good gold recovery being achieved on cyanidation of oxidized residues. A summary of these results is provided in Table 16-2. The sulphide samples used in these studies were finely ground prior to treatment by bioleaching, using either batch or continuous reactors.



Reference	Feed Grade (g/t)	Bioleach Time (h)	Subsequent Gold Extraction (%)
Giant Bay (Dec 1986)	8.88	Not Specified	93
EIMCO (Aug 1988)	3.43	59	90
Coastech (Oct 1988)	7.2	65	92
Coastech (Oct 1988)	4.11	65	90
US Gold (1988/1989	Various	Various	90
BacTech (2003)	5.22	Various	90-94
BacTech (2003)	47.3 (conc.)	Various	90

 Table 16-2

 Summary of Bioleach Stirred Reactor Test Results

An important characteristic of the mineralization is the absence of high quantities of gangue sulphides which, as demonstrated in the above work, results in a comparatively short bioleach time to attain a degree of oxidation, which results in a high gold recovery. This suggests that, technically, the mineralization lends itself well to consideration of either a reactor type leach or a pad-type leach scenario for application of bioleach technology.

Initial efforts to produce a sulphide concentrate from the orebody samples were unsuccessful due to the rapid oxidation of the gold-bearing pyrite during milling and flotation. However, the advent of Newmont's N2TEC[®] flotation technology in 1999 showed that flotation could be successfully used to produce a sulphide concentrate. The results from this initial work indicated that with a 10% to 12% mass recovery, sulphide recoveries of greater than 90% and gold recoveries of about 85% were technically possible. The gold recovery from leaching flotation tailings was about 40% to give an overall recovery of approximately 88% when the gold recovery from bioleach-CIL of concentrate was included.

The recovery versus oxidation relationship indicates that a minimum level of 80% oxidation is required in order to achieve a reasonable gold recovery, and that both ore and concentrate would display similar characteristics with respect to oxidation and gold recovery. These more recent bioleach studies, conducted by BacTech, clearly confirmed the amenability of either a concentrate or an ore to bioleaching processing.

Test work has been conducted previously to examine the possibility of using a heap leach to reduce process and operating costs. In 1994, Gold Capital Corporation, the majority owners of Tonkin Springs at the time, embarked on an extensive test work program to evaluate bioleach heap leaching as a pretreatment for sulphide mineralization, prior to grinding and CIL for gold recovery. Under the direction of Corale Brierley, KCA conducted 40 column leach tests using sulphide material crushed to various sizes. This work clearly demonstrated the amenability of

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Tonkin sulphide mineralization to bioleaching at a variety of crush sizes with relatively short bioleach times in comparison to those associated with a typical bioleach-heap process.

The concept of using vat leaching of crushed sulphide mineralization, where material is stacked in vats and saturated or immersed in leach solution, allows a more controlled leach environment to be imposed than with using heap leaching. A program of column type leaching test work was completed at BC Research, Vancouver, under the direction of Bactech. This process was selected for the BacTech feasibility study issued in 2004.



17.0 MINERAL RESOURCE ESTIMATES

17.1 Data

17.1.1 Topographic Data

Topography is based on a 5-foot contour interval topography mapping in Tonkin Local Grid coordinates that was created using aerial photography dated June 1996. A small extension of the topographic data to the south was manually digitized by ORE in 2001 from 1988 topographic mapping.

17.1.2 Collar Survey Data

The collar survey data for 2,644 drill holes in the project area were exported form the US Gold drill hole data base as Excel spreadsheets.

17.1.3 Down-hole Survey Data

Down-hole surveys generally consist of a single bearing and dip at the collar of the drill hole. US Gold holes drilled in 2007 were surveyed at 50-foot intervals by IDS using a gyroscopic surveying device.

17.1.4 Density Data

A tonnage factor of 12.5 cubic feet/short ton is used for this estimate and is the traditional tonnage factor for the property. The tonnage factor is equivalent to 2.56 tonnes/cubic meter. Recent density data compiled for the Rooster area had an average density of 2.38 t/m^3 for shallow samples above 100 feet depth and 2.62 t/m³ below 100 feet depth.

17.1.5 Data Excluded from the Estimate

All drill holes with AA-cyanide leach as the primary assay were excluded from this estimate (146 holes). Thirteen (13) drill holes were excluded because the collar elevation was higher or lower than topography, and the drill geologic log and assays did not match with surrounding drill holes.

17.1.6 Local Coordinate System to UTM Conversion

Most exploration work and regional exploration is done using UTM Zone 11, NAD 27, NVD 29 metric coordinates with distance and elevation units in meters. All previous resource models and the current resource model have been constructed using the Tonkin Local Grid (TLG), which is a feet-based local grid.



The following conversions are used to convert from the Tonkin Local Grid to UTM and vice versa:

UTM TO TLG

```
YORIGIN = 50000

YORIGIN = 50000

XTLG = (XUTM-XORIGIN)*0.304577347309522

+(YUTM-YORIGIN)*(-0.00198830783052416) + 547944.5344

YTLG = (XUTM-XORIGIN)*(0.00199164650011712)

+(YUTM-YORIGIN)*0.304573464204931 + 50000

ZTLG = ZUTM*0.30480060960122+0.0899
```

Because the UTM north-south axis is not perpendicular to the UTM east-west axis, the above formulae are not equivalent to a simple rotation and a translation of coordinates. Accuracy of the conversion is approximately 1-foot horizontal radius within the project area.

17.2 Block Models

Three block models were used for the resource estimate. Each of the models was created first as a detailed model with a 5-foot or 10-foot bench height. Benches from the detailed model were then combined into 10-foot or 20-foot benches to include mining dilution. Parameters for the models are summarized in Table 17-1. The height of the upper-most block in each vertical stack of blocks is adjusted to clip the block model at the intersection with the topographic dtm surface. The location of the block models with respect to the Tonkin Project area and deposit outlines is shown in Figure 17-1.



Table 17-1
Block Model Size and Location Parameters
(Tonkin Local Grid Coordinates)

				Block Size	Number		
Model	Orientation	Minimum	Maximum	(ft)	Blocks	Length	
South	East-West	46000	50500	20	225	4500	
	South-North	45000	50500	20	275	5500	
	Elevation ¹	6000	7500	5	300	1500	
	Elevation ²	600	2100	10	150	1500	
Central	East-West	44300	48400	20	205	4100	
	South-North	50900	55300	20	220	4400	
	Elevation ¹	6000	7500	5	300	1500	
	Elevation ²	600	2100	10	150	1500	
North	East-West	43000	48000	20	250	5000	
(Rooster)	South-North	57000	62400	20	270	5400	
	Elevation ¹	6300	7900	10	160	1600	
	Elevation ²	6300	7900	20	80	1600	
¹ Detail M ² Diluted N	¹ Detail Model ² Diluted Model						


Figure 17-1 Resource model limits, mineralized zones, and property boundary. (Source ORE 2008, Coordinates Tonkin Local Grid)



17.3 Compositing

Drill holes were composited to 5-foot intervals for the South and Central Models using downhole, length-weighted compositing. A 10-foot composite interval was used for the North Model. A value of "absent" was stored if less than 50% of the interval was assayed.

17.4 Mineral Envelope Models

Cross-sectional plots showing the mineral envelope models are attached in Appendix B.

South and Central Models

Mineral envelope models were developed for each mineral zone in the South and Central Models by drawing cross-sectional interpretations of the mineral zones. Mineral zones were identified based on the generally sharp contact between barren material, for which gold content is generally less than detection limit, and mineralized material, which generally contains more than 0.01 oz Au/t. Mineral zones were connected from hole to hole based on the association of mineralization with the mafic intrusives (EMIs) and mafic tuffs (EMIT). The cross-sectional outlines were then linked from section to section to form three-dimensional wire-frame solid objects. Blocks inside the wireframes were selected and assigned the mineral zone code of the solid that contained the block.

North Model

The 3-dimensional shape of mineralization in the North Area is much more irregular than in the South and Central Areas, so a different approach was used create mineral zones. First, the mineralized zones were identified on the 10-foot composites using the following algorithm:

- 1) If the gold grade was less than 0.002 oz Au/t, the zone was set to unmineralized (0).
- 2) If the gold grade was greater than 0.02 oz Au/t, the zone was set to mineralized (1).

else,

- 3) If the gold grade was greater than 0.005 oz Au/t and the gold grade of either the previous or next interval was greater than 0.008 oz Au/t, the zone was set to mineralized (1).
- 4) If the gold grade was greater than 0.002 oz Au/t and the gold grades of both of the previous and next interval were greater than 0.008 oz Au/t, the zone was set to mineralized (1).
- 5) All other intervals were set to unmineralized (0).



Nearest neighbor assignment was used to assign mineral zone codes to blocks, using the trendmodel method that is discussed later under grade estimation.

17.5 Mineral Trend Models

Because the mineral zones are not planar shapes, but are gently folded and/or offset by minor faulting, estimation using elliptical search methods with a single orientation does not model the mineralization accurately. This problem was solved using a trend surface as follows:

- 1) The trend of the mineralization was interpreted on cross-sections as a line that linked the mineral zones between drill holes. The resulting trend lines are generally parallel to the mineral zones and follow the direction of best visual continuity between drill holes.
- 2) The trend lines were linked to form a dtm surface.
- 3) The "zone elevation" of each composite and each model block was computed by projecting the XY location of the composites and block centers onto the trend dtm surface. The "zone elevation" was computed by subtracting the elevation at trend dtm from the actual elevation of the composite or block. The trend elevation is positive if composite or block is above the trend, and negative if the composite or block is below the trend.
- 4) When resource model grades are estimated, the true elevation is replaced with the "zone elevation" in both composites and blocks. This causes the estimation process to treat the zone surfaces as though they are flat. The true elevation is restored in the blocks after estimation of grade.

Three trend surfaces were created for the South Model. The first was created for the TSP1 Main Zone and follows the upwardly arched shape of that surface. The second trend model was created for the TSP1 North Zone. This zone is a small, north-dipping zone at the north end of TSP1. The final trend surface in the South Model Area was created for those zones that follow parallel to the lower EMI zone. The lower EMI surface provides the trend for the remainder of the mineralized zones in the southern area including: O15, O15 North, TSP3, TSP6, TSP8, TSP1 South, TSP1 West, and TSP1 Deep. In addition, resources outside the wireframed mineral zones were interpolated using the lower EMI Trend surface.

Three trend surfaces were created for the Central Model. Two were created for the FGrid Upper and Lower Zones and one for the TSP5 Deep Zone. Resources outside the wireframed mineral zones were interpolated using the Upper FGrid trend surface.

A single trend zone was created for the North Model. The trend surface follows around the block of Devonian limestones on the upper, western part of the deposit, then follows subparallel to topography going down the hill to the northeast. All resources were interpolated parallel to this single mineralized zone.



The mineralized trend models are shown with the mineralized zones on the cross-sections in Appendix B.

17.6 Oxidation Model (North)

An oxidation model was created for the North Model based on oxidation depth data compiled from the geologic logs. The bottom of oxidation was first interpreted as lines on north-south drill hole cross sections looking west. These lines were then linked to form a triangulated surface. The surface was originally intended to be a DTM surface, but during the interpretation several instances were encountered where a drill hole went from oxides to sulfides, then back to sulfides. This created overhanging features, so the oxidation model was implemented as a three-dimensional wireframe. Oxide blocks were identified in the model by selecting and tagging blocks inside the wireframe as oxidized (1). Blocks outside the oxide wireframe were defaulted to sulfide (0). The total thickness of oxidation is shown graphically in Figure 17-2.



Figure 17-2 Thickness of oxidation shown with 50ft topographic contours - North Model (Source ORE 2008, Coordinates Tonkin Local Grid)



17.7 Basic Statistics

The gold grade distributions were evaluated for composited gold assays by mineral zone using basic statistical summaries, log histograms, and lognormal cumulative frequency plots. The statistics in Table 17-2 show that gold grades outside the mineralized zones are extremely low-grade. This unzoned material averages less than 0.003 oz Au/t, even including the higher-grade, mineralized samples that could not be included in the mineral zone wireframes.

The highest grade zones tend to be aligned along the main O15-TSP1 trend, including (from south to north) O15, O15 North, TSP1 South, TSP1 Main, TSP1 North, and TSP5 Deep. The exception is TSP6, which includes a very high-grade, near-vertical zone of mineralization that is one of the few exceptions to the tabular, relatively flat-lying mineralization on the rest of the Tonkin Project. These zones average 0.07 oz Au/t, over 20 times the average grade of background mineralization.

With the exception of TSP6, those mineral zones west of the O15-TSP1 trend and on the flank of the hill side are about 40% lower grade than the deposits along the main trend. These deposits may be lower grade because of less favorable host rocks and/or increasing distance from the source of the gold mineralization. The TSP1 Deep and TSP1 West zones are along the trend, but are relatively low grade compared to the other zones on the trend. The reason for the lower grade is unclear and should be further studied.

The lowest grade of the mineralized zones is the Rooster Zone in the North Model, which averages 0.024 oz Au/t, or about one-third the grade of the higher grade zones in the South and Central area. Lower grade at Rooster is related to the Devonian chert beds, which appear to be less receptive to gold mineralization.

Coefficients of variation (standard deviation÷mean) range from 0.73 to 1.51 in the mineralized zones. This level of variability is relatively common for gold deposits and is on the low side, considering the small size of the composites (5 ft South and Central, 10 ft North).



Table 17-2
Basic Statistical Summary for Composited Gold Grade
(Sorted by Increasing Gold Grade)

							Log	Log
	Number	Minimum	Maximum	Average	Coef. of	Geometric	Standard	Estimate
Zone	Samples	(oz Au/t)	(oz Au/t)	(oz Au/t)	Variation	Mean	Deviation	of Mean
South Unmineralized	39,584	0.000	0.002	0.001	0.675	0.001	0.525	0.001
Central Unmineralized	12,241	0.000	0.002	0.001	0.693	0.001	0.469	0.001
Rooster Unmin.	10,748	0.000	0.020	0.002	1.283	0.001	0.976	0.002
South No Zone Min.	14,061	0.002	0.684	0.008	2.230	0.005	0.824	0.007
Central No Zone Min.	5,435	0.002	0.320	0.008	2.042	0.005	0.811	0.007
Rooster Mineralized	4,579	0.002	0.295	0.024	0.953	0.017	0.800	0.024
FGrid Upper	222	0.000	0.190	0.029	1.135	0.019	0.839	0.028
TSP8	299	0.000	0.322	0.032	1.101	0.020	1.163	0.038
FGrid Lower	388	0.001	0.603	0.042	1.511	0.025	1.004	0.041
TSP1 Deep	502	0.000	0.403	0.046	1.195	0.028	1.057	0.049
TSP1 West	642	0.000	0.414	0.047	1.221	0.027	1.104	0.050
TSP3	165	0.002	0.228	0.050	0.954	0.031	1.024	0.053
O15	767	0.000	0.515	0.061	1.277	0.029	1.381	0.076
TSP1 South	141	0.001	0.549	0.064	1.157	0.036	1.158	0.071
TSP6	433	0.001	1.101	0.067	1.455	0.033	1.344	0.081
TSP5 Deep	130	0.002	0.217	0.067	0.730	0.048	0.931	0.073
TSP1 Main	2,657	0.000	1.017	0.070	1.010	0.045	1.060	0.080
TSP1N	58	0.001	0.498	0.078	1.416	0.038	1.215	0.080
O15 North	31	0.001	0.426	0.095	0.943	0.053	1.300	0.124





Figure 17-3 Histograms for composited gold grade by mineral zone in the South Model area.



Figure 17-4 Histograms for composited gold grade by mineral zone in the Central and North model areas.

Log-transformed histograms of gold grades, shown in Figures 17-3 and 17-4, are generally bell shaped with a slight asymmetry with more samples on the left side of the curve, suggesting nearly lognormal populations. The asymmetry is likely caused by two or more lognormal populations that have been combined in the wireframed interpretation of the mineralized zones. The lower grade portion of the mixed populations is likely caused (at least in part) by the mixing of barren and mineralized material within a single 5-foot assay interval. A stronger tendency toward bimodal populations is observed for some zones, particularly TSP1 North, O15 North, TSP1 South and TSP3.

The lognormal nature of the grade distributions is further shown by the lognormal cumulative frequency plots in Figures 17-5, 17-6 and 17-7. The plots are constructed with a log-transformed Y-axis and normal probability units on the X-axis; a lognormal grade distribution will plot as a straight line on these plots. The upper portion of most of these graphs plots as straight lines, but there is a sharp downward bend at the lower-grade end of the plots. This downward bending is caused by inclusion of more low-grade samples than would be predicted by a simple lognormal population. The excess low-grade samples represent anomalous low-grade samples inside the mineralized material and are generally only about 1% to 3% of the total samples.



Figure 17-5 Lognormal cumulative frequency plots for composited gold grade in the TSP1 area. (Source ORE 2008)



Figure 17-6 Lognormal cumulative frequency plots for composited gold grade in the west and south of the South Model. TSP1 Main is included for reference purposes. (Source ORE 2008)



Figure 17-7 Lognormal cumulative frequency plots for composited gold grade in the Central and North Model area. The TSP1 Main zone is shown for reference purposes. (Source ORE 2008)

17.8 Variograms

Variograms were compiled using SAGE 2001 variogram analysis software. The SAGE software computes experimental variograms in many directions, then models the overall variogram using least-square fitting. Variograms were computed using the covariogram method and the "zone elevation" was used for the Z-coordinate, so that the variograms followed the shape of the mineralization. The variogram models, summarized in Table 17-3, are all exponential variograms with traditional ranges. The practical range (99% of the sill) is three times the traditional range. Variogram sills are all standardized to unity (1.00) following SAGE conventions. The F-Function, which is the average value of the variogram inside the model blocks was computed for each model area for calculation of the block smoothing ratio (the ratio of the variance of estimate blocks to the variance of samples).

				Rotation	Va	ariogra Range	ım	F-	Block
Variogram	Nugget	Sill	Туре	Z-axis	Х	Y	Ζ	Function	Ratio
TSP1 Main Zone	0.25	0.50	EXP	-13	25.5	12.7	7.9	0.5034	0.4966
AuFA>0.002		0.25	EXP	-13	41.7	251	13.9		
South, Lower EMI Zones, AuFA>0.002	0.25	0.75	EXP	-14	22.8	56.7	12.2	0.4517	0.5483
South No Zone - Mineralized, AuFA>0.003	0.25	0.75	EXP	31	21.7	54.4	12.5	0.4593	0.5407
FGrid - Upper + Lower Zones, AuFA>0.002	0.20	0.80	EXP	34	70	20	10.1	0.4263	0.5737
Central, No Zone - Mineralized, AuFA>0.003	0.20	0.80	EXP	31	98.4	50.1	14.8	0.3149	0.6851
North - All Data,	0.15	0.50	EXP	-54	30	30	30		
Zone Flag		0.35	EXP	-54	397	217	169		
North - Mineralized Zone,	0.40	0.40	EXP	-31	20	50	20	0.5576	0.4424
AuFA>0.000		0.20	EXP	-31	200	31	35		

Table 17-3Summary of Variogram Models

Variograms for the TSP1 Main Zone were computed using only data from that zone. Variograms for those zones paralleling the Lower EMI were computed using the combined data from all the zones in that group (O15, O15 North, TSP1 South, TSP1 Deep, TSP1 West, TSP3, TSP6, and TSP8). The Upper and Lower Zones at FGrid were also combined for variogram modeling. Variograms for both gold grade and the zone flag were computed for the North Area (Rooster) was computed using all data in the model area. Insufficient data were available to compute variograms for TSP1 North and TSP5 Deep Zones. More detailed variogram results are attached in Appendix F.



17.9 Grade Estimation

Grade estimation was done using inverse-distance-power (IDP) estimation and composited drill hole gold assays. The mineral zone models were used to control the shapes of the estimated zones and the trend models were used to provide directional continuity from composites to estimated blocks. A nearest-neighbor (NN) estimation was created in parallel with the IDP model to check the IDP model for overall bias and to compute the smoothing factor for the IDP model. An elliptical search was used for estimation with the Datamine search ellipse expansion method, which expands the search radius until a specified number of composites is within the search ellipse.

The IDP search parameters were initially scaled from the variogram ranges. Other IDP estimation parameters were set based on experience with Tonkin and other gold deposits. All parameters were optimized in a series of trial runs until the block-variance smoothing ratio was approximately the same as that predicted by the variogram. The final IDP search parameters are summarized in Table 17-4.

The comparison between the IDP and NN models, as shown in Table 17-5, demonstrates that the IDP models are generally unbiased relative to the NN models and that the block smoothing factors are in a similar range to those estimated from the variograms. A minor bias is observed in the mineralized blocks outside the wireframed mineral zones, however, for which IDP grade is about 7% lower than NN grades. This slight conservative bias is not considered significant for the overall resource estimate.

O R E

th No Zone - TSP1 Maii TSP1 Nort South Low TSP1 Nort TSP1 Nort TSP1 Nort South Low No Zone A	Zone All Data n th ver EMI Zones n th	Esti- mate							TO THOSE		1 0	חבמורו	INTO A	ne o		Ra	nges f	JL	
th No Zone - TSP1 Main TSP1 Nort South Low TSP1 Nort TSP1 Nort TSP1 Nort Nort Nor Zone N	Zone All Data n th ver EMI Zones n th	E	Rot-	Di	earch stance	#	Compc	I SC	Expand	#Con	sodi	Expand	#Cor	sodu	IDP Rotation	Ar	IDP lisotroj	yc	IDP
th No Zone - TSP1 Maii TSP1 Nort South Low TSP1 Maii TSP1 Nort South Low No Zone M	All Data n th ver EMI Zones n th	1 ype	ation	(X)	(Y) ((Z)	4in M	lax	Factor	Min	Max	Factor	Min	Max	@Z-axis	(X)	(X)	(Z)	Powe
TSP1 Maii TSP1 Nort South Low TSP1 Maii TSP1 Nort South Low No Zone N	n th wer EMI Zones n th	AuNN	31	400	400	40													ı
TSP1 Nort South Low TSP1 Mai TSP1 Nort South Low No Zone N	th ver EMI Zones n th	AuNN	-13	200	400	40													
South Low TSP1 Maii TSP1 Nort South Low No Zone N	ver EMI Zones n th	AuNN	-13	200	400	40													
TSP1 Mai TSP1 Nort South Low No Zone N	th n	AuNN	-14	200	400	40													ı
TSP1 Nort South Low No Zone N	th	AuIDP	-13	100	200	20	5	6	1.5	5	6	2.0	1	6	-13	49	128	16	3.1
South Low No Zone N		AuIDP	-13	100	200	20	2	6	1.5	5	6	2.0	-	6	0	49	128	16	4.5
No Zone N	ver EMI Zones	AuIDP	-14	100	200	20	5	6	1.5	5	6	2.0	1	6	-14	24	113	46	4.0
	Mineralized	AuIDP	31	200	200	20	5	6	1.5	5	6	2.0	1	6	31	43	109	25	2.5
d Mineralize	ed Zones	AuNN	34	400	200	40													ı
No Zone -	Mineralized	AuNN	31	400	200	40													ı
FGrid Upp	ber	AuIDP	34	200	100	20	4	7	1.5	4	7	2.0	1	7	34	140	40	20	4.0
FGrid Low	ver	AuIDP	34	200	100	20	4	7	1.5	4	7	2.0	1	7	34	140	40	20	4.5
FGrid Dee	dć	AuIDP	34	200	100	20	4	7	1.5	4	٢	2.0	1	7	34	140	40	20	4.0
No Zone -	Mineralized	AuIDP	31	200	100	20	4	7	1.5	4	٢	2.0	-	7	31	200	100	30	3.0
th ALL		ZONE	-31	250	200	30													ı
Mineralize	ed Zones	AuNN	-31	250	200	30													ı
No Zone -	Mineralized	AuNN	-31	250	200	30													ı
Mineralize	ed Zones	AuIDP	-31	125	100	15	4	8	1.5	4	٢	2.0	1	8	-31	125	100	15	2.25
Unmineral	lized	AuIDP	-31	125	100	15	4	8	1.5	4	7	2.0	1	8	-31	125	100	15	2.25
es Use TSP1	1 Main paramete	rs for TS	P1 Noi	rth oe at \$	15% Si	=													





					,			
	ID	P Estimate	s	N	N Estimate	S	Ratio	
		Average			Average		of	
	Number	Grade	Relative	Number	Grade	Relative	Averages	Smoothing
Zone	Blocks	(oz Au/t)	Variance	Blocks	(oz Au/t)	Variance	(IDP/NN)	Factor
South Model								
TSP1 Main	22,221	0.0642	0.483	22,221	0.0630	1.002	1.019	0.481
TSP1 North	685	0.0781	0.952	685	0.0765	2.096	1.021	0.454
Lower EMI Zones	87,839	0.0508	0.710	87,839	0.0504	1.553	1.010	0.457
Outside Zones	913,417	0.0082	1.329	913,417	0.0088	2.526	0.934	0.526
All South	1,024,162	0.0131	2.827	1,024,162	0.0136	4.331	0.967	0.653
Central Model								
FGrid Upper	5,780	0.0295	0.649	5,780	0.0288	1.230	1.024	0.528
FGrid Lower	12,040	0.0362	0.962	12,040	0.0354	2.003	1.021	0.480
TSP5 Deep	7,354	0.0611	0.305	7,354	0.0590	0.573	1.036	0.533
Outside Zones	670,517	0.0089	3.590	670,517	0.0096	5.498	0.926	0.653
All Central	695,691	0.0101	3.499	695,691	0.0107	5.219	0.940	0.670
North Model								
Rooster Mineralized	87,574	0.0246	0.381	87,574	0.0244	0.849	1.009	0.448

Table 17-5 Comparison between IDP and NN Models (Measured and Indicated Blocks)

17.10 Resource Classes

Estimated blocks were assigned measured, indicated, and inferred resource classes according to the spacing of the drill holes immediately around each block. Drill hole spacing was measured by point-kriging an indicator flag using a zero-nugget, linear variogram with a slope of one-half (0.5). The indicator flag was set to 1.0 if there was valid gold grade for a composite interval and to absent if gold grade was absent.

The kriging variance from this process is directly proportional to the drill-hole spacing (drilling grid). If the block is inside the drilling grid the maximum kriging variance is 28% of the size of drilling grid. The kriging variance is equal to the distance to the nearest drill hole if the block is outside the drilling grid. Resource categories were assigned according to the rules in Table 17-6.



Maximum Drilling Grid (feet)	Maximum Extrapolation Distance	Resource Class	RCLASS Code		
100	28	Measured	1		
200	56	Indicated	2		
300	84	Inferred	3		
>300	>84	Excluded from Resource	4		
Мо	difiers to Drillin	g Grid Classification			
South Model					
Search Volume > 2		Increase resource class co	de by 2		
Search Volume ≤ 2	and ZONE=4	Increase resource class co	de by 1		
Central Model					
Search Volume > 2		Increase resource class code by 2			
Search Volume ≤2 (Outside Wireframe	and ZONE=4 ed Zones)	Increase resource class code by 1			
Zone=3 (TSP5 Dee	p)	Change RCLASS 1 to 2			
North Model (Roos	ter)				
Search Volume > 1		Increase resource class co	de by 1		

Table 17-6Rules for Assigning Resource Classes

17.11 Diluted Models

The five-foot high blocks in the South and Central Models were averaged into ten-foot high blocks to incorporate mining dilution from open-pit mining. The ten-foot high block was selected to simulate dilution from a mining method similar to that used at the Gold Bar Mine in the 1980's and 1990's, where 20-foot high benches were mined, but each blasthole was sampled on five-foot intervals. Selected portions of the bench were mined as ore and waste using a hydraulic excavator configured as a front-loading shovel, effectively giving a mining bench height between five and ten feet.



The ten-foot high blocks in the North Model were combined into twenty-foot high blocks to incorporate dilution from conventional mining on twenty-foot high benches. The more conventional twenty-foot bench is used for the North Model because the lower grade and more gradational character of the ore/waste contacts in the Rooster deposit does not appear to justify the same level of selective mining as is assumed for the South and Central Models.

When the models are averaged, the two blocks being averaged frequently have different mineral zone and resource class codes. This was resolved by assigning the mineral zone and resource class code of the highest-grade block to the combined block.

The comparison of the various models in Table 17-7 shows that the most significant dilution effect is the volume-variance effect between the NN and IDP models, which introduces a tonnage dilution of 15% to 21% and a slightly smaller dilution of grade. This dilution is entirely caused by the smoothing effects from averaging several samples in the inverse-distance-power estimation.

Dilution from increased bench height is much less significant, generally causing a 2% to 6% reduction in grade and a 3% to 5% reduction in contained ounces of gold. Further evaluation of the bench height is recommended for future resource estimates.



Model	Estimate	Cutoff	Tonnage	oz Au/t	Oz Au
South	5ft NN	0.018	11,253,277	0.0695	782,632
	5ft IDP	0.018	13,661,208	0.0586	800,319
	Difference IDP-N	Ν	2,407,931	-0.0110	17,687
	%Difference		21%	-16%	2%
	5ft IDP	0.018	13,661,208	0.0586	800,319
	10ft IDP	0.018	14,215,501	0.0548	778,940
	Difference 5ft vs 1	0ft IDP	554,293	-0.0038	(21,379)
	%Difference		4%	-6%	-3%
Central	5ft NN	0.018	2,203,533	0.0552	121,610
	5ft IDP	0.018	2,532,523	0.0483	122,210
	Difference IDP-N	Ν	328,991	-0.0069	600
	%Difference		15%	-13%	0%
	5ft IDP 0.018		2,532,523	0.0483	122,210
	10ft IDP	0.018	2,486,758	0.0465	115,631
	Difference 5ft vs 1	0ft IDP	(45,765)	-0.0018	(6,579)
	%Difference		-2%	-4%	-5%
North	10ft NN	0.018	13,890,981	0.0386	536,026
	10ft IDP	0.018	16,761,443	0.0322	539,738
	Difference IDP-N	N	2,870,462	-0.0064	3,712
	%Difference		21%	-17%	1%
	10ft IDP	0.018	16,761,443	0.0322	539,738
	20ft IDP	0.018	16,386,025	0.0315	515,737
	Difference 10ft vs	20ft IDP	(375,418)	-0.0007	(24,001)
	%Difference		-2%	-2%	-4%

Table 17-7 Comparison of NN and IDP Models with Diluted Models



17.12 Resource Summary

Resource cutoffs of 0.018 oz Au/t for sulfides and 0.012 oz Au/t for oxides are used for summarizing resources to maintain continuity with previous estimates. These cutoff grades are equivalent to the internal cutoff grade at \$575 gold price and the breakeven cutoff at \$700 gold price as shown in Table 17-8.

	Sulfide	Oxide (Rooster)
Mining Waste	\$1.15	\$1.15
Mining Ore	\$1.75	\$2.00
Process	\$6.27	\$3.47
G&A	\$1.75	\$1.75
Recovery	80%	80%
Price \$575/oz gold		
Breakeven Cutoff	0.022	0.016
Internal Cutoff	0.018	0.012
Price \$700/oz gold		
Breakeven Cutoff	0.018	0.013
Internal Cutoff	0.015	0.010

Table 17-8
Cutoff Grade and Economic Assumptions for Resource Summaries

Estimated gold resources are summarized by deposit in Tables 17-9 and 17-10, and are compared with the resource estimates from the 2006 technical report in Table 17-11. Measured resources are estimated at 820,000 ounces of contained gold, indicated resources at 779,000 ounces of contained gold, and the total measured plus indicated resource at 1,447,000 ounces of contained gold. The inferred resource is estimated at 311,000 ounces of gold.

Measured resources have increased by 644,000 ounces gold compared to the 2006 estimate while indicated resources have fallen by 463,000 ounces. The net increase in the measured plus indicated resource is 182,000 ounces. The increase in measured resource is largely attributable to the new system of resource classification, which classifies each estimated block according to the local drill hole spacing. A much more subjective method was used for the previous estimate, and only the TSP1 Main Zone was classified as measured. Indicated resources drop because a large proportion of the indicated resource was upgraded to measured, but the total of measured and indicated increases because resources were added by new drilling, a better geologic model, definition of new mineralized zones, and improved resource modeling methods.

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			Measured			Indicated		Total M	leasured+I	ndicated
Mineral	Cutoff	Tons	Grade	Ounces	Tons	Grade	Ounces	Tons	Grade	Ounces
Zone	Grade	(1000s)	(oz Au/t)	(1000s)	(1000s)	(oz Au/t)	(1000s)	(1000s)	(oz Au/t)	(1000s)
South Model										
TSP1 Main	0.018	3,127	0.062	193.3	488	0.051	24.9	3,615	0.060	218.1
TSP1West	0.018	1,312	0.055	71.7	668	0.046	30.9	1,980	0.052	102.6
TSP1 Deep	0.018	949	0.049	46.9	758	0.047	35.9	1,707	0.048	82.8
O15	0.018	1,340	0.066	88.8	1,515	0.062	94.1	2,855	0.064	182.9
TSP1 South	0.018	286	0.066	18.8	334	0.059	19.8	620	0.062	38.7
TSP1 North	0.018	106	0.069	7.4	12	0.062	0.7	118	0.069	8.1
O15 North	0.018	44	0.100	4.4	152	0.094	14.3	196	0.096	18.7
TSP3	0.018	141	0.059	8.3	154	0.042	6.5	295	0.050	14.8
TSP6	0.018	342	0.053	18.1	265	0.036	9.7	607	0.046	27.8
TSP8	0.018	315	0.040	12.5	392	0.041	16.0	707	0.040	28.5
South No Zone	0.018	-	-	-	1,514	0.037	56.0	1,514	0.037	56.0
Central Model										
FGrid	0.018	762	0.049	37.0	660	0.038	24.9	1,422	0.044	61.9
TSP5 Deep	0.018	-	-	-	628	0.061	38.6	628	0.061	38.6
Central No Zone	0.018	-	-	-	437	0.035	15.2	437	0.035	15.2
North Model										
North Sulfide	0.018	5.401	0.031	168.1	6.018	0.030	179.8	11.419	0.030	347.9
Total Sulfide		14.125	0.048	675.2	13.995	0.041	567.2	28,120	0.044	1.242.5
North Oxide	0.012	5.213	0.028	144.7	2.251	0.027	60.1	7,464	0.027	204.7
Total Resource		19,338	0.042	819.9	16,246	0.039	627.3	35,584	0.041	1,447.2

 Table 17-9

 Summary of Measured and Indicated Resource by Mineral Zone



			Inferred	
Mineral	Cutoff	Tons	Grade	Ounces
Zone	Grade	(1000s)	(oz Au/t)	(1000s)
South Model				
TSP1 Main	0.018	72	0.043	3.1
TSP1West	0.018	152	0.035	5.3
TSP1 Deep	0.018	216	0.045	9.7
O15	0.018	339	0.048	16.2
TSP1 South	0.018	149	0.051	7.6
TSP1 North	0.018	-	-	-
O15 North	0.018	170	0.093	15.8
TSP3	0.018	76	0.033	2.5
TSP6	0.018	70	0.035	2.5
TSP8	0.018	215	0.039	8.5
South No Zone	0.018	1,650	0.033	54.9
Central Model				
FGrid	0.018	269	0.034	9.1
TSP5 Deep	0.018	318	0.056	17.8
Central No Zone	0.018	761	0.038	29.3
North Model				
North Sulfide	0.018	3,820	0.027	104.7
Total Sulfide		8,277	0.035	287
North Oxide	0.012	1,013	0.024	24.0
Total Resource		9,290	0.033	311.0

Table 17-10Summary of Inferred Resource by Mineral Zone



		April 2008 Estimate			2006 Estimate			Change 2008-2006	
Resource		Tons	Grade	Ounces	Tons	Grade	Ounces	Tons	Ounces
Class	Area	(1000s)	(oz Au/t)	(1000s)	(1000s)	(oz Au/t)	(1000s)	(1000s)	(1000s)
Measured	South	7,962	0.059	470	2,654	0.066	176	5,308	294
	Central	762	0.049	37	-	-	-	762	37
	North	10,614	0.029	313	-	-	-	10,614	313
	Total	19,338	0.042	820	2,654	0.066	176	16,684	644
Indicated	South	6,252	0.049	309	7,037	0.063	444	(785)	(136)
	Central	1,725	0.046	79	1,287	0.045	57	438	21
	North	8,269	0.029	240	18,694	0.031	588	(10,425)	(349)
	Total	16,246	0.039	627	27,018	0.040	1090	(10,772)	(463)
Measured + Indicated	South	14,214	0.055	779	9,691	0.064	620	4,523	159
	Middle	2,487	0.047	116	1,287	0.045	57	1,200	58
	North	18,883	0.029	553	18,694	0.031	588	189	(36)
	Total	35,584	0.041	1,447	29,672	0.043	1,266	5,912	182
Inferred	South	3,109	0.041	126	3,466	0.044	153	(357)	(27)
	Middle	1,348	0.042	56	-	-	-	1,348	56
	North	4,833	0.027	129	-	-	-	4,833	129
	Total	9,290	0.033	311	3,466	0.044	153	5,824	158

Table 17-11Comparison of April 2008 Estimate to 2006 Estimate



18.0 OTHER RELEVANT DATA AND INFORMATION

There are no other data and information that is relevant to the Tonkin Project.



19.0 INTERPRETATION AND CONCLUSIONS

19.1 Resource Estimate

The measured + indicated gold resource for the Tonkin Project has increased to 1,447,000 ounces of gold contained in 35.6 million tons with an average grade of 0.041 oz Au/t. This represents an increase of 182,000 ounces of gold compared to the previous estimate of 1,266,000 ounces of gold in a measured+indicated tonnage of 29.7 million tons with an average grade of 0.043 oz Au/t. Most significantly, the measured resource has increased by 644,000 ounces of contained gold. In addition, the inferred resource has increased to 311,000 ounces contained gold in 9.3 million tons averaging 0.033 oz Au/t from 153,000 ounces contained gold in 3.5 million tonnes averaging 0.044 oz Au/t.

The most significant factors in these increases include:

- 1) The geological interpretation has been completely revised based on new field mapping, age dating of rock samples, much better geologic information at depth from a number of new core holes, relogging of historical drill holes, and compilation of the geologic data into a much more accessible, computerized geologic database.
- 2) The improved geologic interpretation was used to build more accurate threedimensional models of the mineralized zones. In addition, because of the better geologic interpretation, more confidence can be placed on the mineral zone interpretations and grade estimations.
- 3) Over 200 new drill holes have been added to the drill-hole database since the previous estimates, which were done in 1996 with revision of the O15 deposit in 2001. One hundred of the new holes were core holes drilled in 2006-2007 by US Gold. These new core holes more than doubled the information from previous holes and provided important new information to increase the geologic understanding of the property. In addition, the new drilling decreased the drill hole spacing and improved the reliability of the resource estimates.

19.2 Mineralization and Geology

Gold mineralization at the Tonkin Project is commonly stratiform and strongly bedded. In the Southern and Central areas the primary host unit is the Hales Formation in all of the lithologic units, including sandy limestones, calcareous siltstones, shales, mafic pyroclastic deposits (EMIT), mafic sills (EMI). The best gold grades are associated with decalcification and silicification within and around the contacts of the mafic pyroclastics and sills. Spotty gold mineralization also occurs in brecciated shales, karsted horizons, and EMI contacts in the Hamburg Formation, and locally in altered Tertiary dacitic dikes.



In the Southern and Central areas there are two major horizons of gold mineralzation and several less continuous zones. The calcareous siltstones and sandy limestones near the most continuous mafic sill (the "lower EMI") contain most of the gold over the largest area. The TSP1 Main zone and the mineralization in the Central area is associated with beds of mafic tuff (EMIT).

Gold mineralization in the Rooster Area is hosted by Devonian chert, limestone and underlying Cambrian mudstones. Gold mineralization is also associated with the contacts of mafic sills and dikes within the cherts and mudstones. Jasperoids in the middle of the Rooster ore zones generally contain little gold and may actually show gold depletion. This suggests that silicification maybe post major gold deposition.

The association of gold mineralization to mafic sills and tuffs suggests a genetic relation that is not completely understood. It is unknown whether the receptivity of the Hales sediments is due solely to their lithologic characteristics or was increased by the emplacement of mafic volcanics and sills.

The Cambrian units up through the Cambro-Ordovician Hales Formation have been gently folded into broad anticlines and synclines throughout the project area. Folding is best recognized by flexure of the EMI sills and tuffs.

The Ordovician Vinini and Devonian Slaven Chert have been highly contorted by complex fold and thrust tectonics. Chert and mudstone beds are commonly tightly folded and truncated by internal thrust faults This tectonic event is interpreted to be the Roberts Mountains Thrust of Antler age.

Thrust or slide blocks of Devonian limestone and chert were locally emplaced on any of the Cambrian to Cambro-Ordovician units. This event postdated the Antler thrusting and predated the Permian.

Gold mineralization may have been fed by the generally north-south hinge zones of synclines and anticlines. These hinge zones extend beyond the current drilled area and may extend along the eastern margin of the entire resource area. This represents an exploration target area of approximately 18,000 feet in length by more than 500 feet in width. This anticline-syncline hinge zone may extend over 3,000 feet to the south of the O-15 deposit as well.



20.0 RECOMMENDATIONS

Three areas of continued work are recommended for future development of the Tonkin Project, as follows:

- 1. The immediate priority is for metallurgical testing to evaluate and select the best process option. This testing has a high priority and should be started as soon as possible.
- 2. Exploration drilling to test: 1) the main anticline/syncline trend north of TSP-1 and south of O-15, and 2) gold soil anomalies in Tertiary volcanics and Paleozoic sediments in poorly drilled areas east of the O-15 deposit. This exploration drilling is believed to have excellent potential for discovery of new mineralization, but is a secondary priority and may be deferred while the metallurgical program is being conducted.
- 3. Development drilling to provide immediate expansion of resources in areas where mineralization has been identified, but drill holes are too widely spaced for estimation of resources. This drilling is believe to have excellent potential for expansion of the resources, but may be delayed until after the metallurgical testing has progressed to the pre-feasibility stage.

20.1 Metallurgical Testing Program

A two-phased program is proposed for the next phase of metallurgical testing. This program should be primarily designed to evaluate and to select the best process option(s) for typical Tonkin mineralization, and secondarily to quantify the metallurgical characteristics of the various gold bearing zones found on the property.

The process selection of the sulphide mineralization should focus on the pre-oxidation treatment of bulk crushed material using heap leach or vat leach technology as these processes would likely be the lowest cost options. Vat bio-leaching was the concept selected by the previous owners of the property (BacTech) and the processing costs used in the mineral resource cut-off calculation is based on this technology. However, this is a commercially unproven process and requires more development work.

Bio-leaching of a sulphide concentrate is an alternative process and development sulphide flotation test work is presently being undertaken at SGS Lakefield. It should be noted that this process option, if selected, would result in a significantly higher process operating cost than the one used in the mineral resource cut-off calculation.



Once the best processing option or options have been selected, it is recommended that US Gold systematically test the different ore zones, especially the newer expanded mineral resource areas.

Costs are estimated as follows:

Phase 1-	\$250,000 for developmental, metallurgical laboratory testing focused mainly at vat and heap bio-oxidation followed by cyanide heap leaching.
Phase 2 -	\$150,000 for variability characterization test work.
Drilling -	\$650,000 for 12 holes averaging 500 feet depth with 40% of the drilling done as RC pre-collars and 60% of the drilling done as diamond core tails.

Total Cost is \$1,050,000 including the two phases of metallurgical testing and drilling to provide sample for testing.

20.2 Exploration Drilling Program

Several exploration drilling targets have been identified to explore for gold mineralization that is outside of the known mineralized areas, but where the opportunity for new gold resources is strongly indicated by geologic interpretation, geophysical surveys, and geochemical sampling. The recommended drill sites are north of TSP-1, south of O-15, and east of the southern area gold resources and shown previously in Figure 10-5.

Exploration holes north of the TSP-1 deposit and south of the O-15 deposit are designed to initially test the N10 to 15 degrees west trend of higher and thicker grade gold mineralization associated with anticline and syncline hinge zones along this trend. The proposed holes to the north of TSP-1 will test the anticline-syncline hinge zone primarily in the Hales Formation north to the central project area along a strike length of approximately 1,000 meters (3,400 feet). These holes will also provide additional information on the size and shape of the bottom of the Tertiary Volcanics, which may limit the eastward extent of mineralization in the Hales Formation.

The proposed holes to the south of the O-15 deposit will test the southern extension of the anticline-syncline hinge zone in Hales Formation that has been covered by upper plate Vinini Formation. These wide-spaced holes will test an additional 1,000 meter (3,400 feet) strike length of the anticline-syncline corridor to the south of the O-15 gold deposit.

Exploration holes located to the east and southeast of TSP-1 to O-15 are designed to test gold in soil anomalies in Tertiary volcanics and Paleozoic sediments. These holes will test for gold mineralization in structures that parallel the TSP-1 to O-15 gold trend, in Tertiary volcanics at the surface , as well as down-dropped blocks of Hales Formation.



The 12 hole, 12,000 foot drill program will be evaluated and modified as geologic samples are logged and as assays are received.

20.3 Development Drilling

Development drilling targets have been identified in areas with a high probability for successful expansion of the resource, as follows:

- In-fill drilling increases the measured and indicated resource by upgrading inferred resources to measured and indicated resources.
- Step-out drilling increases size of the currently defined deposits by drilling on the margins of the known deposits in areas where mineralization has not been closed-off by barren drill holes.
- Deeper drilling adds new resources by drilling below the currently defined deposits into areas where mineralization has been shown, but where there is too little drilling for the mineralization to be included in the resource estimate.

The development drilling program is designed in two phases. The first phase, consisting of 133 drill holes with an average depth of 560 feet, is designed to target areas believed to contain higher grade mineralization with the greatest probability of increasing resources. The second phase of drilling consists of primarily step-out drilling around the area drilled in Phase 1. A total of 211 drill holes averaging 510 feet depth are included in the Phase 2 drilling program. Each of the Phase 2 holes will be evaluated with respect to the results of Phase 1, and it is likely that not all of the Phase 2 drilling holes will be drilled. The development drilling program is summarized by phase and deposit area in Table 20-1.

		Number	Total	Average
Phase	Area	Holes	Footage	Depth
Phase1	Central	34	26,729	786
	South	55	24,739	450
	North	35	13,600	389
	Total	133	74,233	558
Phase2	Central	80	54,405	680
	South	75	32,283	430
	North	56	21,200	379
	Total	211	107,888	511

Table 20-1Summary of Development Drilling by Phase and Area



Development drilling in the South Area is directed primarily on drilling deeper to define resources below the lower EMI zones. Secondarily, drilling in the South Area fills in gaps in the current drilling grid and offsets mineral zones that are still open laterally.

Development drilling in the Central Area is directed primarily toward expansion of the TSP5 Deep Zone. In addition, potential zones of stacked mineralization are targeted by the same holes. The secondary purpose of Central Area drilling is to define the relationship between the FGrid and the TSP5 Deep Zones and to expand the FGrid resource with step-out holes. The final target area for Central Area drilling is south of FGrid and TSP5, where limited drilling indicates possible new zones of mineralization.

Development drilling in the North Area is primarily infill drilling to define the Rooster deposit in greater detail. Step out drilling in the northwest part of the Rooster deposit is done to verify the presence, or absence, of mineralization in a previously undrilled area under the Devonian limestones.

20.4 Cost of Recommended Work

A summary of costs for the recommended program of work is shown in Table 20-2.

Phase	Description	Cost
1	Drilling for Metallurgical Sampling, 12 holes, 6,000 feet	\$650,000
	Metallurgical Testing - Phase 1	\$250,000
	Total Phase 1	\$900,000
2	Metallurgical Testing - Phase 2	\$150,000
1+2	Total Phase 1 + Phase 2	\$1,050,000

Table 20-2Summary of Costs by Phase



21.0 REFERENCES

BacTech Technical Report "A Review of the Tonkin Springs Property, Eureka County, Nevada, USA", dated August, 2003.

BacTech Technical Report "Tonkin Springs Feasibility Study, Eureka County, Nevada, USA", dated May, 2004.



22.0 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Tonkin Project" and dated May 16, 2008 was prepared by and signed by the author:



Dated at Lakewood, Colorado, USA Alan C. Noble, P.E. May 16, 2008 Ore Reserves Engineering



23.0 CERTIFICATE OF AUTHORS

Alan Noble

As an author of this report on the Tonkin Springs Property, I, Alan C. Noble, do hereby certify that:

- 1. I am employed by Ore Reserves Engineering, of Lakewood, Colorado, USA;
- 2. This certificate applies to the technical report titled "Technical Report on the Tonkin Project" dated May 16, 2008;
- 3. I hold a Bachelor of Science degree in Mining Engineering from the Colorado School of Mines that was received in 1970;
- 4. I am a registered Professional Engineer in the State of Colorado; as well, I am a member in good standing of the Society of Mining, Metallurgy, and Exploration;
- 5. I have worked as a mining engineering in the minerals industry for 38 years;
- 6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101;
- 7. My most recent visit to the property was on October 10, 2006 for a period of 4 days;
- 8. I am the principal author and am responsible for the preparation for overall content of the technical report.
- 9. I am the author of Section17.0 of the technical report, and prepared the resource estimate that is the subject of that chapter;
- 9. I am independent of US Gold Corporation;
- 10. I previously worked on this property as an independent engineer for various clients including US Gold, BacTech, Gold Capital, Globex, Royal Star Resources, and Agnico-Eagle Mines;
- 11. I have read NI-43-101 and I consider that this report has been prepared in compliance with the instrument;
- 12. As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
- 13. I consent to the filing of the report with any Canadian stock exchange or securities regulatory authority, and any publication by them of the report.

Dated this 16th of May 2008



Alan C. Noble, P.E.



CERTIFICATE OF AUTHOR Steven E. Brown

As an author of this report on the Tonkin Project, I, Steven E. Brown, do hereby certify that:

- 1. I am employed by US Gold Corporation;
- 2. This certificate applies to the technical report titled "Updated Technical Report on the Tonkin Project, Nevada, USA" dated May 16, 2008;
- 3. I hold the following academic qualifications: B Sc. (Geology) Washington State University, 1974.
- 4. I am a registered Professional Geologist in the State of Utah;
- 5. I have worked as an exploration geologist in the minerals industry for over 31 years;
- 6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in 43-101;
- 7. I worked on the property from June of 2006 to date;
- 8. I am responsible for the preparation of Sections 7.0, 8.0 and 10.0, and portions of Sections 4.0, 5.0, 12.0, 13.0, and 15.0 of the technical report;
- 9. I am an employee of US Gold Corporation, for who the report was prepared, therefore I am not an independent qualified person;
- 10. I have read NI 43-101 and I consider this report has been prepared in compliance with the instrument;
- 11. As of the date of this certificate, to the best of my knowledge, information and belief, the technical paper contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
- 12. I consent to the filing of the report with any Canadian stock exchange or securities regulatory authority, and any publication by them of the report.

Dated this 16th day of May, 2008

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Steven E. Brown, PG



CERTIFICATE OF AUTHOR Richard M. Gowans

As an author of this report on the Tonkin Springs Property, I, Richard M. Gowans do hereby certify that:

- 1. I am employed as a Vice President and Senior Metallurgist by, and carried out this assignment for, Micon International Limited, Suite 900, 390 Bay Street, Toronto, Ontario M5H 2Y2, tel (416) 362-5135 fax (416) 362-5763;
- 2. This certificate applies to the technical report titled "Updated Technical Report on the Tonkin Springs Gold Property, Nevada, USA" dated 16 May, 2006;
- 3. I hold the following academic qualifications: B.Sc. (Hons) Minerals Engineering The University of Birmingham, U.K., 1980
- 4. I am a registered Professional Engineer of Ontario (membership number 90529389); as well, I am a member in good standing of the Canadian Institute of Mining, Metallurgy and Petroleum;
- 5. I have worked as a metallurgist in the minerals industry for over 27 years;
- 6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes the management of technical studies and design of numerous metallurgical test work programs and gold processing plants;
- 7. I visited the property during the period June 18 to June 19, 2003;
- 8. I am responsible for the section 16 of the report.
- 9. I am independent of US Gold, other than providing consulting services;
- 10. I previously worked on this property with Micon for clients BacTech and US Gold;
- 11. I have read NI-43-101 and I consider that this report has been prepared in compliance with the instrument;
- 12. As of the date of this certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
- 13. I consent to the filing of the report with any Canadian stock exchange or securities regulatory authority, and any publication by them of the report.

Dated this 16th of May 2006

"Richard M. Gowans" Richard M. Gowans P.Eng.



Appendix A List of Claims for the Tonkin Springs Project



CLAIM_NAME	NMC	CLAIM_NAME	NMC] [CLAIM_NAME	NMC
A 1	695633	DEN 7	810465		P 29	636343
A 2	695634	DEN 8	810466		P 30	636344
A 3	695635	DEN 9	810467		P 31	636345
A 4	695636	DEN 10	810468		P 32	636346
A 5	695637	DEN 11	810469		P 33	636347
A 6	695638	DEN 12	810470		P 34	636348
A 7	695639	DEN 13	810471		P 35	636349
A 195	695827	DEN 14	810472		P 36	636350
A 246	695878	DEN 28	810473		P 37	636351
A 247	695879	DEN 29	636221		P 38	636352
B 3	722672	DEN 30	810474		P 39	636353
C 19	722691	DEN 34	810475		P 40	636354
C 20	722692	DEN 35	810476		P 41	636355
C 23	722695	DEN 36	636228		P 42	636356
C 24	722696	DEN 37	810477		P 43	636357
C 25	722697	DEN 39	810478		P 44	636358
C 26	722698	DEN 40	810479		P 45	636359
C 27	722699	DEN 41	810480		P 46	636360
C 28	722700	DEN 42	810481		P 47	636361
C 29	722701	DEN 43	636235		P 48	636362
C 30	722702	DEN 44	810482	-	P 49	636363
C 31	722703	DEN 46	810483	-	PAT 2	636365
C 35	722706	DEN 47	810484	-	PAT 4	636367
C 36	722707	DEN 48	810485	-	PAT 6	636369
C 37	722708	DEN 49	636241	-	PAT 8	636371
C 38	722709	DEN 50	810486	-	PAT 10	636373
C 39	722710	DEN 52	810487	-	PAT 12	636375
C 40	722711	DEN 53	810488	-	PAT 14	636377
C 41	722712	DEN 54	810489	-	PAT 16	636379
C 42	722713	DEN 56	810490	-	0.27	636380
C 43	722714	DEN 57	810491	-	$\frac{\sqrt{27}}{0.34}$	636381
C 44	722715	FFT 1	636315	-	0.35	636382
C 45	722716	FFT 2	636316	-	\overline{Q} 35	636383
C 45	722717	FET 3	636317		0.37	636384
C 40	722718	Flyboy 7	932775	-	0.38	636385
C 48	722719	Flyboy 8	932776	-	0.39	636386
C 40	722720	Flyboy 9	032777	-	\overline{Q} \overline{J}	636387
C 50	722720	$\frac{11}{00}$	636325	4	0.41	636388
C 51	722721	0.27	636376		$\frac{\sqrt{+1}}{0.42}$	636380
C 52	722722	0.20	636227		0.43	636300
C 53	722724	0.29	636328		0.44	636301
C 54	722724	0.30	636220		0.45	636202
C 55	722726	0.32	636220	-	0.46	636302
C 55	722727	0.32	626221	-	0.47	626204
C 57	122121	0.33	626222	-	0.49	626205
C 59	122128	0.34	030332		<u>Q 48</u>	030393
C 50	722729	0.35	030333	-	<u>V 49</u> D 41	030390
C 59	722721	0.39	626225		<u>K 41</u> D 42	626200
C 00	722722	0 40	030333		<u>K 42</u>	030398
C 01	122132	D 41	030330	-	K 45	030399
DEN 5	810463	P 27	636341	-	K 44	030400
DEN 6	810464	P 28	636342		K 45	636401

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CLAIM_NAME	NMC		CLAIM_NAME	NMC]	CLAIM_NAME	NMC
R 46	636402		ROB 333	150825		ROBR 145	631334
R 47	636403		ROB 410	346730		ROBR 146	631335
R 48	636404		ROB 411	346731		ROBR 187	631336
R 49	636405		ROB 412	346732		ROBR 188	631337
ROB 55	150581		ROB 413	346733		ROBR 189	631338
ROB 56	150582		ROBR 60	631288		ROBR 190	631339
ROB 57	150583		ROBR 62	631289		ROBR 191	631340
ROB 58	150584		ROBR 64	631290		ROBR 192	631341
ROB 59	150585		ROBR 66	631291		ROBR 193	631342
ROB 61	150587		ROBR 68	631292		ROBR 194	631343
ROB 63	150589		ROBR 70	631293		ROBR 195	631344
ROB 65	150591		ROBR 72	631294		ROBR 196	631345
ROB 67	150593		ROBR 74	631295		ROBR 197	631346
ROB 69	150595		ROBR 76	631296		ROBR 198	631347
ROB 71	150597		ROBR 78	631297		ROBR 199	631348
ROB 73	150599		ROBR 80	631298		ROBR 200	631349
ROB 75	150601		ROBR 82	631299	1	ROBR 201	631350
ROB 77	150603		ROBR 84	631300		ROBR 202	631351
ROB 79	150605	1	ROBR 86	631301		ROBR 203	631352
ROB 81	150607		ROBR 113	631302		ROBR 204	631353
ROB 83	150609		ROBR 114	631303	-	ROBR 205	631354
ROB 85	150611		ROBR 115	631304	-	ROBR 206	631355
ROB 109	150613		ROBR 116	631305		ROBR 207	631356
ROB 110	150614		ROBR 117	631306		ROBR 208	631357
ROB 111	150615		ROBR 118	631307		ROBR 209	631358
ROB 112	150616		ROBR 119	631308		ROBR 210	631359
ROB 147	150651		ROBR 120	631309		ROBR 211	631360
ROB 148	150652		ROBR 121	631310		ROBR 212	631361
ROB 149	150653		ROBR 122	631311		ROBR 213	631362
ROB 150	150654		ROBR 123	631312		ROBR 214	631363
ROB 151	150655		ROBR 124	631313		ROBR 215	631364
ROB 152	150656		ROBR 125	631314		ROBR 216	631365
ROB 153	150657		ROBR 126	631315		ROBR 217	631366
ROB 154	150658		ROBR 127	631316		ROBR 218	631367
ROB 183	150676		ROBR 128	631317		ROBR 219	631368
ROB 184	150677		ROBR 129	631318		ROBR 220	631369
ROB 185	150678		ROBR 130	631319		ROBR 261	631370
ROB 186	150679		ROBR 131	631320		ROBR 262	631371
ROB 221	150714		ROBR 132	631321		ROBR 263	631372
ROB 222	150715		ROBR 133	631322		ROBR 264	631373
ROB 223	150716		ROBR 134	631323]	ROBR 265	631374
ROB 224	150717		ROBR 135	631324]	ROBR 266	631375
ROB 225	150718		ROBR 136	631325]	ROBR 267	631376
ROB 226	150719		ROBR 137	631326]	ROBR 268	631377
ROB 227	150720		ROBR 138	631327]	ROBR 269	631378
ROB 228	150721		ROBR 139	631328]	ROBR 270	631379
ROB 257	150750		ROBR 140	631329		ROBR 271	631380
ROB 258	150751		ROBR 141	631330		ROBR 272	631381
ROB 259	150752		ROBR 142	631331		ROBR 273	631382
ROB 260	150753		ROBR 143	631332		ROBR 274	631383
ROB 331	150824		ROBR 144	631333		ROBR 275	631384

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				_		<u>. </u>
CLAIM_NAME	NMC	CLAIM_NAME	NMC		CLAIM_NAME	NMC
ROBR 276	631385	ROBR 360	631426		Summer 3	636427
ROBR 277	631386	ROBR 361	631427		Summer 4	636428
ROBR 278	631387	ROBR 362	631428		Summer 5	636429
ROBR 279	631388	ROBR 363	631429		Summer 7	636430
ROBR 280	631389	ROBR 364	631430		Summer 8	636431
ROBR 281	631390	ROBR 365	631431		Summer 9	636432
ROBR 282	631391	ROBR 366	631432		Summer 10	636433
ROBR 283	631392	ROBR 400	631433		Summer 12	40566
ROBR 284	631393	ROBR 401	631434		Summer 13	636434
ROBR 285	631394	ROBR 402	631435		Summer 14	636435
ROBR 286	631395	ROBR 403	631436		Summer 15	636436
ROBR 287	631396	ROBR 404	631437		Summer 16	636437
ROBR 288	631397	ROBR 405	631438		Summer 17	636438
ROBR 289	631398	ROBR 406	631439		Summer 18	636439
ROBR 290	631399	ROBR 407	631440		T 43	51841
ROBR 291	631400	ROBR 408	631441		TSG 153	636272
ROBR 292	631401	ROBR 409	631442		TSG 154	636273
ROBR 293	631402	ROBR 1001	631443		TSG 155	636274
ROBR 294	631403	ROBR 1002	631444		TSG 156	636275
ROBR 295	636279	ROBR 1003	631445		TSG 157	636276
ROBR 296	636280	ROBR 1004	631446		TSG 158	636277
ROBR 297	636281	ROBR 1005	631447		TSG 159	636278
ROBR 298	636282	ROBR 1006	631448		TSG 160	365200
ROBR 299	636283	ROBR 1007	636267		TSG 161	365201
ROBR 300	636284	ROBR 1008	636268		TSG 162	365202
ROBR 301	636285	ROBR 1009	636306		TSG 163	365203
ROBR 302	636286	ROBR 1010	636307		TSG 164	365204
ROBR 302W	636287	ROBR 1011	636308		TSG 165	365205
ROBR 304E	636290	ROBR 1012	636309		TSG 166	365206
ROBR 335	631404	ROBR 1013	636310		TSG 33	636446
ROBR 337	631405	S 41	636406		TSG 34	636447
ROBR 339	631406	S 42	636407		TSG 35	636448
ROBR 341	631407	S 43	636408		U 35	636449
ROBR 342	631408	S 44	636409		U 36	636450
ROBR 343	631409	S 45	636410		U 37	636451
ROBR 344	631410	S 46	636411		U 38	636452
ROBR 345	631411	S 47	636412		U 39	636453
ROBR 346	631412	S 48	636413		U 40	636454
ROBR 347	631413	S 49	636414	1	V 36	636456
ROBR 348	631414	S 101	636415	1	V 37	636457
ROBR 349	631415	S 102	636416	1	V 38	636458
ROBR 350	631416	S 103	636417	1	V 39	636459
ROBR 351	631417	S 104	636418	1	W 36	51868
ROBR 352	631418	S 105	636419	1	X 88	48956
ROBR 353	631419	S 106	636420	1	X 89	48957
ROBR 354	631420	S 107	636421	1	X 90	48958
ROBR 355	631421	S 107	636422	1	ICE 179	453975
ROBR 356	631422	S 109	636423	1	ICE 181	453977
ROBR 357	631422	S 110	636423	1	ICE 202	453998
ROBR 358	631423	S 110	636425	1	ICE 202	454000
ROBR 350	631/25	Summer ?	636/26	1	ICL 207	707000
NODI 333	031423	Summer 2	030420	J		



Appendix B Cross-Section Plots Showing Mineral Zones and Trend Surfaces































Appendix C Drill Hole Intersections for South Model Area (Vertical Length - oz Au/t Grade)



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
100010	25	70	45.0	0.117	TSP1MAIN	187292	225	255	30.0	0.050	O15
100010	80	85	5.0	0.092	Not Zoned	187293	230	240	10.0	0.046	O15
100010	255	295	40.0	0.083	TSP1DEEP	187294	95	100	5.0	0.021	Not Zoned
100013	315	325	10.0	0.014	TSP1WEST	187294	235	240	5.0	0.040	Not Zoned
100015	630	635	5.0	0.023	Not Zoned	187310	90	95	4.3	0.052	TSP1N
100016	165	200	35.0	0.011	TSP1MAIN	187312	115	120	4.3	0.040	Not Zoned
100016	315	330	15.0	0.071	Not Zoned	187316	140	145	4.3	0.027	Not Zoned
100019	20	50	23.6	0.001	TSP8	187320	185	190	4.3	0.030	Not Zoned
100020	150	210	60.0	0.036	TSP1MAIN	187323	170	250	68.0	0.068	TSP1MAIN
100020	305	335	30.0	0.004	TSP1DEEP	187324	195	275	71.0	0.033	TSP1MAIN
100020	370	390	20.0	0.038	Not Zoned	187325	175	180	4.3	0.028	Not Zoned
100021	80	100	20.0	0.031	TSP1MAIN	187325	185	225	32.3	0.062	TSP1MAIN
100021	290	300	10.0	0.016	TSP1S	187326	105	175	53.8	0.048	TSP1MAIN
100021	510	520	10.0	0.043	Not Zoned	187326	185	235	39.5	0.091	TSP1MAIN
100023	180	190	10.0	0.030	TSP1MAIN	187327	55	160	61.3	0.073	TSP1MAIN
100023	270	290	20.0	0.021	TSP1WEST	187327	170	195	16.4	0.051	TSP1MAIN
100023	310	320	10.0	0.137	TSP1WEST	187327	245	260	7.7	0.033	TSP1MAIN
100023	350	370	20.0	0.075	TSP1S	187328	130	220	42.2	0.053	TSP1MAIN
101006	210	240	30.0	0.101	O15	187329	130	145	9.5	0.074	TSP1MAIN
101008	120	130	10.0	0.042	Not Zoned	187329	155	175	11.8	0.013	TSP1MAIN
101008	230	250	20.0	0.040	O15	187330	145	175	22.4	0.084	TSP1MAIN
101009	200	290	90.0	0.131	O15	187330	180	185	3.8	0.040	Not Zoned
101010	100	140	40.0	0.073	O15	187332	40	95	55.0	0.097	O15
101011	120	130	10.0	0.015	O15	187333	160	175	15.0	0.019	O15
101012	120	140	20.0	0.011	O15	187334	100	145	45.0	0.029	O15
101013	190	200	10.0	0.064	O15	187335	80	90	10.0	0.052	Not Zoned
101014	240	250	10.0	0.011	O15	187338	50	75	25.0	0.043	Not Zoned
101015	180	340	160.0	0.060	O15	187339	45	60	15.0	0.075	Not Zoned
101016	170	250	80.0	0.148	O15	187339	115	120	5.0	0.023	Not Zoned
101017	230	270	40.0	0.089	O15	187339	170	175	5.0	0.031	O15
101018	175	320	145.0	0.070	O15	187340	5	10	5.0	0.021	Not Zoned
101023	120	150	30.0	0.009	O15	187341	140	185	45.0	0.130	O15
182001	0	35	35.0	0.109	TSP1MAIN	187342	145	175	30.0	0.030	O15
182001	40	45	5.0	0.024	Not Zoned	187343	85	90	5.0	0.033	Not Zoned
182001	240	270	30.0	0.026	TSP1DEEP	187343	190	200	10.0	0.058	O15
182002	0	80	80.0	0.074	TSP1MAIN	187346	135	200	65.0	0.079	O15
182002	100	115	15.0	0.028	TSP1MAIN	187347	180	200	20.0	0.034	TSP1S
182003	55	115	60.0	0.095	TSP1MAIN	187348	10	20	10.0	0.024	Not Zoned
182003	180	190	10.0	0.031	Not Zoned	187348	100	105	5.0	0.023	Not Zoned
182004	0	95	95.0	0.065	TSP1MAIN	187349	50	55	5.0	0.021	Not Zoned
182005	5	75	70.0	0.128	TSP1MAIN	187349	180	185	5.0	0.014	TSP1S
182005	100	110	10.0	0.029	Not Zoned	187350	140	155	15.0	0.045	TSP1S
182005	125	130	5.0	0.023	Not Zoned	187351	150	175	25.0	0.022	TSP1S
182005	180	185	5.0	0.041	Not Zoned	187352	125	135	10.0	0.012	TSP1S
182005	265	300	35.0	0.028	TSP1DEEP	187384	85	90	5.0	0.051	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	e From	То	Length	Grade	Zone
182006	0	15	15.0	0.060	TSP8	187385	20	25	5.0	0.033	Not Zoned
182006	200	205	5.0	0.029	Not Zoned	187385	60	70	10.0	0.098	Not Zoned
182006	215	230	15.0	0.023	Not Zoned	187387	90	95	5.0	0.039	Not Zoned
182009	0	45	45.0	0.084	TSP3	187388	65	80	15.0	0.033	Not Zoned
182009	160	165	5.0	0.020	Not Zoned	187391	35	40	5.0	0.052	Not Zoned
182010	20	70	50.0	0.079	TSP3	187391	50	60	10.0	0.080	Not Zoned
182012	40	85	45.0	0.055	TSP3	187394	85	95	10.0	0.068	O15
182012	110	120	10.0	0.070	Not Zoned	187398	0	25	25.0	0.050	O15
182013	35	40	5.0	0.070	Not Zoned	187400	30	75	45.0	0.038	O15
182013	85	120	35.0	0.052	TSP1MAIN	187420	35	40	5.0	0.024	Not Zoned
182013	165	170	5.0	0.014	TSP1MAIN	187421	5	10	5.0	0.026	Not Zoned
182013	265	270	5.0	0.017	TSP1DEEP	187422	5	15	10.0	0.043	Not Zoned
182014	15	25	10.0	0.093	Not Zoned	187424	0	5	5.0	0.021	Not Zoned
182014	70	125	55.0	0.028	TSP1MAIN	187428	0	15	15.0	0.045	Not Zoned
182016	40	45	5.0	0.007	TSP1MAIN	187430	95	100	5.0	0.111	TSP8
182018	0	5	5.0	0.034	Not Zoned	187431	65	100	35.0	0.032	TSP8
182018	20	65	45.0	0.031	TSP1MAIN	187432	80	90	10.0	0.052	TSP8
182019	5	75	70.0	0.077	TSP1MAIN	187433	40	55	15.0	0.076	TSP8
182019	105	110	5.0	0.020	Not Zoned	187434	35	40	5.0	0.087	Not Zoned
182020	10	20	10.0	0.102	TSP1MAIN	187438	85	90	5.0	0.021	Not Zoned
182023	50	135	85.0	0.072	TSP1MAIN	187443	10	15	5.0	0.055	TSP3
182023	150	180	30.0	0.101	TSP1MAIN	187444	75	95	20.0	0.034	TSP6
182024	135	175	40.0	0.087	TSP1MAIN	187445	75	100	25.0	0.071	TSP6
182026	100	170	70.0	0.075	TSP1MAIN	187447	85	90	5.0	0.040	TSP6
182031	135	150	15.0	0.031	TSP1MAIN	187449	25	90	65.0	0.127	TSP6
182032	120	130	10.0	0.038	TSP1MAIN	187450	75	90	15.0	0.061	O15
182032	155	160	5.0	0.023	Not Zoned	187452	0	10	10.0	0.027	O15
182033	110	135	25.0	0.068	TSP1MAIN	187456	15	30	15.0	0.011	O15
182034	45	75	30.0	0.099	TSP1MAIN	187457	50	55	5.0	0.035	O15
182034	75	85	10.0	0.134	Not Zoned	187458	75	85	10.0	0.005	O15
182035	15	115	100.0	0.108	TSP1MAIN	187465	15	20	5.0	0.032	Not Zoned
182037	15	20	5.0	0.017	TSP1MAIN	187465	90	95	5.0	0.036	Not Zoned
182039	0	55	55.0	0.030	TSP1MAIN	187467	5	25	20.0	0.030	Not Zoned
182040	10	35	25.0	0.102	TSP1MAIN	187471	5	35	30.0	0.013	TSP8
182041	70	100	30.0	0.051	TSP1MAIN	187472	15	45	30.0	0.020	TSP8
182043	0	55	55.0	0.098	TSP1MAIN	187473	10	20	10.0	0.012	TSP8
182045	65	95	30.0	0.082	TSP1MAIN	187474	5	20	15.0	0.117	TSP8
182047	0	50	50.0	0.154	TSP1MAIN	187475	0	5	5.0	0.011	TSP8
182049	55	60	5.0	0.025	TSP1MAIN	187508	70	100	30.0	0.044	TSP1MAIN
182053	170	190	20.0	0.073	TSP1MAIN	187508	125	140	15.0	0.112	TSP1MAIN
182056	115	135	20.0	0.048	TSP1MAIN	187509	135	200	65.0	0.156	TSP1MAIN
182059	15	20	5.0	0.035	Not Zoned	187510	0	40	40.0	0.168	TSP1MAIN
183060	25	75	50.0	0.084	TSP1MAIN	187510	65	70	5.0	0.024	Not Zoned
183060	245	275	30.0	0.053	TSP1DEEP	187511	10	105	95.0	0.137	TSP1MAIN
183060	275	280	5.0	0.033	Not Zoned	187512	25	150	125.0	0.133	TSP6



183061 60 80 20.0 0.063 TSP1MAIN 187513 35 80 45.0 0.139 01 183062 125 140 15.0 0.041 Not Zoned 187515 165 170 5.0 0.069 TS 183062 270 285 15.0 0.041 TSP1DEEP 187515 165 170 5.0 0.069 TS 183063 175 225 50.0 0.070 TSP1MAIN 187515 195 210 15.0 0.029 TS 183064 150 240 90.0 0.076 TSP1MAIN 187515 235 240 5.0 0.056 TS 183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 220 235 15.0 0.058 TSP1DEEP 188002 20 25	15 SP1MAIN SP1MAIN SP1WEST SP1MAIN ot Zoned ot Zoned SP1MAIN SP1DEEP SP1DEEP
183062 125 140 15.0 0.041 Not Zoned 187515 165 170 5.0 0.069 TS 183062 270 285 15.0 0.041 TSP1DEEP 187515 165 170 5.0 0.069 TS 183062 270 285 15.0 0.041 TSP1DEEP 187515 165 170 5.0 0.069 TS 183063 175 225 50.0 0.070 TSP1MAIN 187515 195 210 15.0 0.029 TS 183064 150 240 90.0 0.076 TSP1MAIN 187515 235 240 5.0 0.056 TS 183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 205 340 45.0 0.058 TSP1DEEP 188002 115 125	SP1MAIN SP1MAIN SP1WEST SP1MAIN ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183062 270 285 15.0 0.041 TSP1DEEP 187515 165 170 5.0 0.069 TS 183063 175 225 50.0 0.070 TSP1MAIN 187515 195 210 15.0 0.029 TS 183064 150 240 90.0 0.076 TSP1MAIN 187515 235 240 5.0 0.056 TS 183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No	SP1N SP1MAIN SP1WEST SP1MAIN ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183063 175 225 50.0 0.070 TSP1MAIN 187515 195 210 15.0 0.029 TS 183064 150 240 90.0 0.076 TSP1MAIN 187515 235 240 5.0 0.056 TS 183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 220 235 15.0 0.058 TSP1DEEP 188002 20 25 5.0 0.041 No	SP1MAIN SP1WEST SP1MAIN ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183064 150 240 90.0 0.076 TSP1MAIN 187515 235 240 5.0 0.056 TS 183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 295 340 45.0 0.058 TSP1DEEP 188002 115 125 10.0 0.041 No	SP1WEST SP1MAIN ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183064 320 345 25.0 0.030 TSP1DEEP 187516 220 260 33.4 0.049 TS 183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 205 340 45.0 0.058 TSP1DEEP 188002 115 125 10.0 0.041 No	SP1MAIN ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183065 220 235 15.0 0.040 TSP1MAIN 188002 20 25 5.0 0.040 No 183065 205 340 45.0 0.058 TSP1DEEP 188002 115 125 10.0 0.041 No	ot Zoned ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
182065 205 240 45.0 0.058 TSDIDEED 199002 115 125 10.0 0.041 No	ot Zoned SP1MAIN SP1MAIN SP1DEEP SP1DEEP
103003 273 340 43.0 0.036 ISTIDEEP 188002 113 123 10.0 0.041 NO	SP1MAIN SP1MAIN SP1DEEP SP1DEEP
183066 230 250 20.0 0.025 TSP1MAIN 188003 45 55 10.0 0.032 TS	SP1MAIN SP1DEEP SP1DEEP
183066 335 345 10.0 0.037 TSP1DEEP 188004 20 45 25.0 0.166 TS	SP1DEEP SP1DEEP
183067 340 345 5.0 0.020 TSP1DEEP 188004 175 225 50.0 0.027 TS	SP1DEEP
183068 210 230 20.0 0.046 TSP1MAIN 188004 245 250 5.0 0.044 TS	
183068 355 380 25.0 0.038 TSP1S 188005 0 55 55.0 0.078 TS	SP1MAIN
183069 260 285 25.0 0.056 TSP1WEST 188005 90 120 30.0 0.031 No	ot Zoned
183072 10 15 5.0 0.050 Not Zoned 188006 0 15 15.0 0.033 TS	SP1MAIN
183073 5 15 10.0 0.049 Not Zoned 188006 210 235 25.0 0.137 TS	SP1DEEP
183073 190 205 15.0 0.028 TSP1WEST 188007 0 45 45.0 0.075 TS	SP1MAIN
183073 285 305 20.0 0.042 Not Zoned 188008 155 175 20.0 0.015 TS	SP1MAIN
183074 10 15 5.0 0.039 Not Zoned 188008 255 290 35.0 0.069 TS	SP1DEEP
183074 195 215 20.0 0.037 TSP1WEST 188009 0 25 25.0 0.070 TS	SP1MAIN
183075 15 20 5.0 0.030 Not Zoned 188010 170 190 20.0 0.056 TS	SP1MAIN
183076 205 215 10.0 0.030 Not Zoned 188010 210 215 5.0 0.042 No	ot Zoned
183076 235 325 90.0 0.014 TSP1WEST 188011 50 70 20.0 0.096 TS	SP1MAIN
183077 220 240 20.0 0.058 TSP1WEST 188011 120 135 15.0 0.017 TS	SP1MAIN
183078 195 200 5.0 0.029 TSP1MAIN 188012 175 230 55.0 0.034 TS	SP1MAIN
183078 280 295 15.0 0.021 TSP1WEST 188013 0 70 70.0 0.111 TS	SP1MAIN
183079 75 90 15.0 0.042 TSP1MAIN 188014 155 240 85.0 0.046 TS	SP1MAIN
183080 140 145 5.0 0.011 TSP1MAIN 188015 10 50 40.0 0.046 TS	SP1MAIN
183081 155 160 5.0 0.020 TSP1MAIN 188016 35 40 5.0 0.120 No	ot Zoned
183082 10 60 50.0 0.096 TSP1MAIN 188016 75 80 5.0 0.020 TS	SP1N
183082 285 290 5.0 0.035 TSP1DEEP 188016 135 190 55.0 0.038 TS	SP1MAIN
183085 15 20 5.0 0.123 Not Zoned 188017 40 110 70.0 0.103 TS	SP1MAIN
183085 60 70 10.0 0.092 TSP1MAIN 188018 105 110 5.0 0.013 TS	SP1N
183085 275 300 25.0 0.042 TSP1S 188018 140 175 35.0 0.054 TS	SP1MAIN
183086 45 70 25.0 0.025 TSP1MAIN 188018 255 260 5.0 0.015 TS	SP1DEEP
183087 185 215 30.0 0.025 TSP1MAIN 188019 155 175 20.0 0.099 TS	SP1MAIN
183087 230 235 5.0 0.021 Not Zoned 188020 170 210 40.0 0.126 TS	SP1MAIN
183088 75 80 5.0 0.032 Not Zoned 188021 115 130 15.0 0.037 TS	SP1MAIN
183088 125 145 20.0 0.049 TSP1MAIN 188022 170 210 40.0 0.083 TS	SP1MAIN
183089 140 170 30.0 0.062 TSP1MAIN 188023 15 25 10.0 0.029 No	ot Zoned
183089 275 285 10.0 0.015 TSP1DEEP 188023 105 110 5.0 0.024 TS	SP1MAIN
183090 155 190 35.0 0.048 TSP1MAIN 188024 70 85 15.0 0.198 TS	SP1N
183091 45 70 25.0 0.066 TSP1MAIN 188025 85 90 5.0 0.052 No	ot Zoned
183091 155 160 5.0 0.021 Not Zoned 188025 100 125 25.0 0.053 TS	SP1MAIN
183091 295 305 10.0 0.045 TSP1S 188025 190 200 10.0 0.086 TS	SP1MAIN



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
183092	115	140	25.0	0.047	TSP1MAIN	188028	0	20	20.0	0.197	TSP1MAIN
183092	150	155	5.0	0.044	Not Zoned	188029	10	110	100.0	0.100	TSP1MAIN
183094	230	235	5.0	0.022	Not Zoned	188029	120	135	15.0	0.033	Not Zoned
183094	255	270	15.0	0.103	TSP1DEEP	188030	120	175	55.0	0.048	TSP1MAIN
183095	0	5	5.0	0.059	TSP3	188031	20	50	30.0	0.118	TSP1MAIN
183096	245	250	5.0	0.020	Not Zoned	188032	0	20	20.0	0.162	TSP1MAIN
183096	295	305	10.0	0.022	TSP1DEEP	188034	160	210	50.0	0.066	TSP1MAIN
183097	35	45	10.0	0.022	TSP3	188034	390	400	10.0	0.024	Not Zoned
183100	165	180	15.0	0.038	Not Zoned	188034	510	515	5.0	0.053	Not Zoned
183100	285	310	25.0	0.020	TSP1DEEP	188034	550	555	5.0	0.056	Not Zoned
183102	350	355	5.0	0.024	Not Zoned	188034	580	585	5.0	0.044	Not Zoned
183102	460	465	5.0	0.036	Not Zoned	188034	610	615	5.0	0.028	Not Zoned
183102	495	505	10.0	0.025	Not Zoned	188034	625	630	5.0	0.046	Not Zoned
183104	375	380	5.0	0.029	Not Zoned	188034	670	675	5.0	0.022	Not Zoned
183107	10	20	10.0	0.059	TSP3	188034	690	695	5.0	0.033	Not Zoned
183108	145	170	25.0	0.030	TSP1MAIN	188035	40	85	45.0	0.024	TSP6
183109	180	185	5.0	0.032	Not Zoned	188035	160	175	15.0	0.132	TSP6
183112	160	185	25.0	0.150	TSP1MAIN	188035	275	280	5.0	0.039	Not Zoned
183115	130	145	15.0	0.011	TSP3	188036	20	50	30.0	0.089	TSP1MAIN
183116	180	215	35.0	0.032	TSP1MAIN	188037	50	70	20.0	0.090	TSP1MAIN
183116	240	270	30.0	0.050	TSP1WEST	188037	95	115	20.0	0.067	TSP1MAIN
183117	0	15	15.0	0.104	TSP3	188037	150	165	15.0	0.098	TSP1MAIN
183118	195	215	20.0	0.061	TSP1MAIN	188038	0	95	95.0	0.075	TSP1MAIN
183119	65	75	10.0	0.014	TSP3	188039	85	95	10.0	0.031	TSP1MAIN
183120	125	140	15.0	0.037	TSP1N	188039	125	140	15.0	0.022	TSP1MAIN
183120	175	205	30.0	0.068	TSP1MAIN	188040	0	15	15.0	0.036	TSP1MAIN
183122	80	85	5.0	0.015	TSP1N	188041	0	50	50.0	0.059	TSP1MAIN
183122	165	230	65.0	0.034	TSP1MAIN	188042	0	20	20.0	0.142	TSP1MAIN
183122	260	295	35.0	0.025	TSP1DEEP	188043	0	20	20.0	0.127	TSP1MAIN
183122	305	310	5.0	0.021	Not Zoned	188045	0	20	20.0	0.128	TSP1MAIN
183122	345	350	5.0	0.020	Not Zoned	188045	70	75	5.0	0.187	Not Zoned
183123	60	65	5.0	0.019	TSP3	188046	0	20	20.0	0.247	TSP1MAIN
183124	165	185	20.0	0.026	TSP1MAIN	188047	0	20	20.0	0.099	TSP1MAIN
183125	15	20	5.0	0.025	Not Zoned	188047	35	40	5.0	0.021	Not Zoned
183126	205	240	35.0	0.031	TSP1MAIN	188048	15	35	20.0	0.073	TSP1MAIN
183128	250	270	20.0	0.026	TSP1MAIN	188049	70	95	25.0	0.073	TSP1MAIN
183128	280	285	5.0	0.050	Not Zoned	188050	215	230	15.0	0.049	TSP1MAIN
183129	40	50	10.0	0.022	TSP3	188050	295	300	5.0	0.051	TSP1DEEP
183129	80	110	30.0	0.064	TSP3	188051	0	60	60.0	0.051	TSP1MAIN
183130	140	145	5.0	0.114	Not Zoned	188051	230	235	5.0	0.041	TSP1DEEP
183130	220	255	35.0	0.041	TSP8	188052	0	50	50.0	0.032	TSP1MAIN
183132	175	195	20.0	0.014	TSP8	188052	200	215	15.0	0.021	TSP1DEEP
183134	170	175	5.0	0.012	TSP8	188052	230	260	30.0	0.017	TSP1DEEP
183135	40	45	5.0	0.062	Not Zoned	188053	70	75	5.0	0.022	Not Zoned
183135	115	120	5.0	0.043	Not Zoned	188053	115	150	35.0	0.041	TSP1MAIN



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
183136	25	30	5.0	0.020	Not Zoned	188054	185	215	30.0	0.028	TSP1MAIN
183136	175	195	20.0	0.020	TSP8	188055	210	235	25.0	0.105	TSP1MAIN
183137	75	110	35.0	0.074	TSP3	188056	0	25	25.0	0.063	TSP1MAIN
183138	0	5	5.0	0.021	Not Zoned	188056	25	30	5.0	0.057	Not Zoned
183138	195	210	15.0	0.040	TSP8	188056	195	220	25.0	0.010	TSP1DEEP
183139	40	60	20.0	0.057	TSP3	188056	225	230	5.0	0.022	Not Zoned
183140	185	225	40.0	0.040	TSP8	188056	245	265	20.0	0.022	TSP1DEEP
183141	95	120	25.0	0.044	TSP3	188057	35	75	40.0	0.091	TSP1MAIN
183144	245	250	5.0	0.013	TSP8	188057	225	245	20.0	0.025	TSP1DEEP
183144	435	440	5.0	0.038	Not Zoned	188058	160	190	30.0	0.032	TSP1MAIN
183145	25	35	10.0	0.019	TSP6	188059	190	200	10.0	0.049	TSP1MAIN
183145	35	40	5.0	0.010	TSP3	188059	240	245	5.0	0.085	TSP1WEST
183146	380	385	5.0	0.030	Not Zoned	188059	275	280	5.0	0.050	Not Zoned
183146	395	410	15.0	0.033	Not Zoned	188060	210	220	10.0	0.087	TSP1MAIN
183147	75	85	10.0	0.031	Not Zoned	188060	245	270	25.0	0.013	TSP1WEST
183147	135	140	5.0	0.023	Not Zoned	188061	200	220	20.0	0.080	TSP1MAIN
183148	215	235	20.0	0.018	TSP8	188061	230	270	40.0	0.038	TSP1WEST
183150	220	245	25.0	0.035	TSP8	188062	165	215	50.0	0.042	TSP1MAIN
183150	400	405	5.0	0.032	Not Zoned	188063	55	60	5.0	0.091	TSP1N
183151	0	10	10.0	0.048	TSP6	188063	155	240	85.0	0.037	TSP1MAIN
183152	200	235	35.0	0.031	TSP8	188064	55	60	5.0	0.018	TSP1N
183153	15	95	80.0	0.073	TSP1MAIN	188064	235	245	10.0	0.019	TSP1MAIN
183153	110	120	10.0	0.029	Not Zoned	188064	295	300	5.0	0.022	TSP1WEST
183154	10	100	90.0	0.037	TSP1MAIN	188065	120	145	25.0	0.033	TSP1N
183154	310	320	10.0	0.026	TSP1DEEP	188065	175	180	5.0	0.082	Not Zoned
183155	0	70	70.0	0.057	TSP1MAIN	188065	180	185	5.0	0.022	TSP1MAIN
183155	150	160	10.0	0.025	Not Zoned	188065	245	270	25.0	0.045	TSP1WEST
183155	275	305	30.0	0.030	TSP1DEEP	188065	290	300	10.0	0.139	Not Zoned
183156	10	75	65.0	0.099	TSP1MAIN	188066	185	195	10.0	0.039	TSP1MAIN
183156	75	85	10.0	0.033	Not Zoned	188066	210	250	40.0	0.113	TSP1MAIN
183156	295	305	10.0	0.167	TSP1DEEP	188066	250	300	50.0	0.027	TSP1WEST
183157	35	85	50.0	0.118	TSP1MAIN	188069	95	115	20.0	0.047	TSP8
183157	300	305	5.0	0.014	TSP1DEEP	188070	120	145	25.0	0.041	TSP8
183158	55	75	20.0	0.139	TSP1MAIN	188070	165	175	10.0	0.035	Not Zoned
183158	100	115	15.0	0.046	TSP1MAIN	188073	180	225	45.0	0.135	015
183158	155	175	20.0	0.060	TSP1MAIN	188075	70	85	15.0	0.063	Not Zoned
183159	0	5	5.0	0.022	Not Zoned	188076	210	240	30.0	0.042	015
183159	55	65	10.0	0.024	TSP1MAIN	188080	160	210	50.0	0.110	O15
183159	110	130	20.0	0.068	TSP1MAIN	188083	180	185	5.0	0.023	TSP1WEST
183159	180	190	10.0	0.025	TSP1MAIN	188083	265	275	10.0	0.037	Not Zoned
183159	260	290	30.0	0.071	TSP1DEEP	188083	305	310	5.0	0.022	Not Zoned
183160	85	120	35.0	0.054	TSP1MAIN	188083	320	325	5.0	0.022	Not Zoned
183160	290	295	5.0	0.076	Not Zoned	188084	215	230	15.0	0.080	TSP1N
183161	55	110	55.0	0.093	TSP1MAIN	188084	215	285	70.0	0.052	TSP1WEST
183161	120	135	15.0	0.100	TSP1MAIN	188084	305	310	5.0	0.024	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
183162	110	190	80.0	0.070	TSP1MAIN	188085	170	180	10.0	0.014	TSP1N
183162	245	250	5.0	0.024	Not Zoned	188085	255	280	25.0	0.014	TSP1WEST
183163	125	175	50.0	0.061	TSP1MAIN	188086	115	135	20.0	0.080	TSP1N
183164	140	190	50.0	0.047	TSP1MAIN	188086	200	210	10.0	0.085	Not Zoned
183165	160	210	50.0	0.173	TSP1MAIN	188086	225	280	55.0	0.040	TSP1WEST
183165	225	230	5.0	0.022	Not Zoned	188087	245	250	5.0	0.022	TSP1MAIN
183165	245	255	10.0	0.028	Not Zoned	188087	275	310	35.0	0.070	TSP1WEST
183166	160	205	45.0	0.049	TSP1MAIN	188087	345	350	5.0	0.034	Not Zoned
183166	280	305	25.0	0.005	TSP1DEEP	188111	135	140	5.0	0.030	TSP6
183167	150	210	60.0	0.046	TSP1MAIN	188112	185	195	10.0	0.018	TSP6
183168	260	265	5.0	0.018	TSP1DEEP	188113	210	285	75.0	0.052	TSP1WEST
183169	40	80	40.0	0.082	TSP1MAIN	188114	130	155	25.0	0.168	TSP1N
183169	100	115	15.0	0.036	Not Zoned	188114	200	255	55.0	0.030	TSP1WEST
183169	225	250	25.0	0.013	TSP1DEEP	188115	200	205	5.0	0.013	TSP1N
183170	35	55	20.0	0.068	TSP1MAIN	188115	230	275	45.0	0.117	TSP1WEST
183170	205	255	50.0	0.096	TSP1DEEP	188115	290	310	20.0	0.040	Not Zoned
183171	50	55	5.0	0.044	TSP1MAIN	188115	320	325	5.0	0.031	Not Zoned
183172	115	145	30.0	0.033	TSP1MAIN	188115	335	340	5.0	0.041	Not Zoned
183172	250	255	5.0	0.013	TSP1DEEP	188116	250	260	10.0	0.089	TSP1N
183173	160	185	25.0	0.071	TSP1DEEP	188116	250	300	50.0	0.041	TSP1WEST
183173	240	265	25.0	0.034	TSP1DEEP	188117	320	350	30.0	0.014	TSP1WEST
183174	0	75	75.0	0.108	TSP1MAIN	188119	260	265	5.0	0.038	Not Zoned
183174	90	120	30.0	0.031	Not Zoned	188119	295	325	30.0	0.029	TSP1WEST
183174	215	270	55.0	0.021	TSP1DEEP	188129	240	295	55.0	0.075	TSP1WEST
183175	10	60	50.0	0.106	TSP1MAIN	188129	345	350	5.0	0.022	Not Zoned
183175	85	90	5.0	0.020	Not Zoned	188130	230	240	10.0	0.029	TSP1WEST
183175	225	260	35.0	0.056	TSP1DEEP	188134	230	285	55.0	0.020	TSP1WEST
183176	40	135	95.0	0.054	TSP1MAIN	188135	200	220	20.0	0.031	TSP1WEST
183176	275	295	20.0	0.017	TSP1DEEP	188135	235	295	60.0	0.020	TSP1WEST
183177	20	75	55.0	0.058	TSP1MAIN	188136	160	165	5.0	0.053	Not Zoned
183177	225	250	25.0	0.017	TSP1DEEP	188136	205	305	100.0	0.022	TSP1WEST
183178	55	90	35.0	0.090	TSP1MAIN	188137	275	280	5.0	0.015	TSP1WEST
183178	210	215	5.0	0.011	TSP1DEEP	188137	315	320	5.0	0.025	Not Zoned
183179	30	80	50.0	0.040	TSP1MAIN	188138	100	110	10.0	0.070	Not Zoned
183180	15	55	40.0	0.075	TSP1MAIN	188138	230	255	25.0	0.024	TSP1WEST
183180	245	260	15.0	0.018	TSP1DEEP	188138	265	280	15.0	0.047	TSP1WEST
183181	15	20	5.0	0.008	TSP1MAIN	188139	160	170	10.0	0.067	TSP1N
183181	255	260	5.0	0.020	TSP1DEEP	188139	205	245	40.0	0.028	TSP1WEST
183182	0	90	90.0	0.053	TSP1MAIN	188139	420	425	5.0	0.065	Not Zoned
183182	235	260	25.0	0.045	TSP1DEEP	188139	440	470	30.0	0.071	Not Zoned
183182	285	290	5.0	0.024	Not Zoned	188140	240	250	10.0	0.043	TSP1WEST
183184	150	155	5.0	0.011	TSP1MAIN	188142	310	315	5.0	0.012	TSP1WEST
183184	255	290	35.0	0.096	TSP1DEEP	188142	335	340	5.0	0.021	Not Zoned
183185	280	295	15.0	0.039	TSP1DEEP	188146	160	165	5.0	0.031	Not Zoned
183186	0	75	75.0	0.051	TSP1MAIN	188148	225	230	5.0	0.026	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
183186	205	210	5.0	0.022	Not Zoned	188154	250	280	30.0	0.021	TSP1WEST
183186	270	300	30.0	0.035	TSP1DEEP	188154	305	350	45.0	0.047	TSP1WEST
183187	5	90	85.0	0.068	TSP1MAIN	188155	175	180	5.0	0.030	Not Zoned
183187	255	265	10.0	0.033	TSP1DEEP	188155	235	255	20.0	0.057	TSP1WEST
183188	30	35	5.0	0.064	TSP1MAIN	188155	305	380	75.0	0.044	TSP1WEST
183188	195	220	25.0	0.097	TSP1DEEP	188156	260	290	30.0	0.030	TSP1WEST
183188	240	280	40.0	0.031	TSP1DEEP	188157	240	285	45.0	0.038	TSP1WEST
183189	5	90	85.0	0.064	TSP1MAIN	188157	310	335	25.0	0.028	TSP1WEST
183189	105	110	5.0	0.035	Not Zoned	188161	285	290	5.0	0.014	TSP1WEST
183191	10	70	60.0	0.034	TSP1MAIN	188161	330	340	10.0	0.078	TSP1WEST
183191	260	290	30.0	0.034	TSP1DEEP	188162	125	135	10.0	0.103	Not Zoned
183193	20	55	35.0	0.050	TSP1MAIN	188162	240	265	25.0	0.026	TSP1MAIN
183193	220	260	40.0	0.037	TSP1DEEP	188162	305	345	40.0	0.080	TSP1WEST
183193	270	295	25.0	0.060	TSP1DEEP	188163	135	165	30.0	0.037	Not Zoned
183194	285	300	15.0	0.034	TSP1DEEP	188163	230	240	10.0	0.045	Not Zoned
183195	20	75	55.0	0.040	TSP1MAIN	188163	255	280	25.0	0.024	TSP1MAIN
183195	225	245	20.0	0.033	TSP1DEEP	188163	290	325	35.0	0.090	TSP1WEST
183195	255	285	30.0	0.031	TSP1DEEP	188164	155	180	25.0	0.019	TSP1WEST
183196	115	120	5.0	0.030	TSP1MAIN	188165	260	300	40.0	0.122	TSP1WEST
183197	15	85	70.0	0.051	TSP1MAIN	188168	160	165	5.0	0.022	Not Zoned
183197	95	120	25.0	0.051	Not Zoned	188168	255	275	20.0	0.062	TSP1WEST
183197	140	150	10.0	0.027	Not Zoned	188169	150	170	20.0	0.013	TSP1WEST
183197	245	270	25.0	0.079	TSP1DEEP	188169	295	300	5.0	0.031	Not Zoned
183198	115	120	5.0	0.000	TSP1MAIN	188180	120	125	5.0	0.121	TSP1MAIN
183198	165	180	15.0	0.042	TSP1MAIN	188180	335	350	15.0	0.061	TSP1S
183198	205	240	35.0	0.031	TSP1WEST	188181	340	350	10.0	0.049	TSP1S
183198	270	295	25.0	0.042	TSP1DEEP	188182	310	315	5.0	0.014	TSP1S
183199	10	75	65.0	0.051	TSP1MAIN	188183	280	350	70.0	0.130	TSP1S
183199	250	270	20.0	0.052	TSP1DEEP	188190	110	115	5.0	0.017	TSP1MAIN
183200	195	215	20.0	0.033	TSP1MAIN	188190	140	145	5.0	0.035	Not Zoned
183201	175	205	30.0	0.030	TSP1MAIN	188190	230	235	5.0	0.025	TSP1MAIN
183202	185	195	10.0	0.030	TSP1MAIN	188191	50	60	10.0	0.059	TSP1MAIN
183203	180	190	10.0	0.052	TSP1MAIN	188191	275	290	15.0	0.028	TSP1S
183204	150	165	15.0	0.079	TSP1MAIN	188192	135	140	5.0	0.022	TSP1MAIN
183204	295	305	10.0	0.055	TSP1DEEP	188193	60	65	5.0	0.026	TSP1MAIN
183205	125	130	5.0	0.010	TSP1MAIN	188193	290	295	5.0	0.009	TSP1S
183207	260	300	40.0	0.044	TSP1WEST	188195	155	165	10.0	0.031	TSP1MAIN
183209	190	210	20.0	0.034	TSP1DEEP	188195	210	265	55.0	0.049	TSP1MAIN
183209	275	295	20.0	0.079	Not Zoned	188196	190	195	5.0	0.026	TSP1MAIN
183210	270	300	30.0	0.046	TSP1DEEP	188196	320	330	10.0	0.071	TSP1WEST
183211	180	185	5.0	0.039	Not Zoned	188197	195	200	5.0	0.001	TSP1MAIN
183211	280	295	15.0	0.024	TSP1DEEP	188197	275	300	25.0	0.034	TSP1WEST
183212	135	155	20.0	0.044	TSP1MAIN	188198	170	175	5.0	0.065	TSP1MAIN
183213	10	20	10.0	0.000	TSP1MAIN	188198	250	270	20.0	0.024	TSP1WEST
183214	130	170	40.0	0.047	TSP1MAIN	188200	95	125	30.0	0.068	TSP1MAIN



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
183214	295	310	15.0	0.013	TSP1DEEP	188200	160	190	30.0	0.039	TSP1MAIN
183215	255	265	10.0	0.028	TSP1DEEP	188200	340	345	5.0	0.076	Not Zoned
183216	90	95	5.0	0.030	Not Zoned	188201	240	255	15.0	0.029	TSP1MAIN
183216	295	305	10.0	0.023	TSP1DEEP	188201	340	345	5.0	0.016	TSP1DEEP
183217	210	235	25.0	0.066	TSP1DEEP	188202	35	45	10.0	0.021	TSP1N
183218	255	285	30.0	0.093	TSP1DEEP	188202	80	105	25.0	0.185	Not Zoned
183219	40	55	15.0	0.033	TSP1MAIN	188202	195	240	45.0	0.028	TSP1MAIN
183219	105	130	25.0	0.023	TSP1MAIN	188202	280	295	15.0	0.015	TSP1DEEP
183219	280	295	15.0	0.024	TSP1DEEP	188203	225	270	45.0	0.038	TSP1MAIN
183220	220	275	55.0	0.126	TSP1DEEP	188204	135	145	10.0	0.016	TSP1N
183220	295	300	5.0	0.025	Not Zoned	188204	170	210	40.0	0.058	TSP1MAIN
183221	85	120	35.0	0.040	TSP1MAIN	188204	225	245	20.0	0.026	TSP1WEST
183221	160	175	15.0	0.018	TSP1MAIN	188204	295	300	5.0	0.034	Not Zoned
183221	265	270	5.0	0.002	TSP1DEEP	188204	330	340	10.0	0.027	Not Zoned
183222	135	145	10.0	0.033	TSP1MAIN	188205	160	205	45.0	0.064	TSP1MAIN
183223	55	75	20.0	0.011	TSP1MAIN	188205	280	350	70.0	0.019	TSP1DEEP
183224	140	160	20.0	0.046	TSP1MAIN	188206	60	80	20.0	0.142	TSP1N
183224	230	235	5.0	0.038	Not Zoned	188206	280	320	40.0	0.038	TSP1WEST
183225	130	170	40.0	0.049	TSP1MAIN	188207	20	30	10.0	0.033	TSP1N
183228	180	200	20.0	0.050	TSP1MAIN	188207	205	240	35.0	0.038	TSP1MAIN
183228	280	285	5.0	0.014	TSP1WEST	188207	290	315	25.0	0.021	TSP1DEEP
183229	130	135	5.0	0.021	Not Zoned	188207	330	335	5.0	0.042	Not Zoned
183229	150	210	60.0	0.026	TSP1MAIN	188208	45	50	5.0	0.029	Not Zoned
183230	160	195	35.0	0.036	TSP1MAIN	188208	90	95	5.0	0.031	Not Zoned
183233	275	280	5.0	0.013	TSP1DEEP	188208	105	110	5.0	0.022	Not Zoned
183234	165	180	15.0	0.028	TSP1MAIN	188208	155	200	45.0	0.097	TSP1S
183234	230	280	50.0	0.097	TSP1DEEP	188209	35	65	30.0	0.061	TSP6
183235	215	220	5.0	0.023	Not Zoned	188209	100	115	15.0	0.001	TSP6
183235	250	255	5.0	0.026	TSP1DEEP	188209	295	300	5.0	0.022	Not Zoned
183236	215	235	20.0	0.019	TSP1DEEP	189222	125	140	15.0	0.035	O15
183238	220	230	10.0	0.037	Not Zoned	189225	60	85	25.0	0.029	O15
183238	245	265	20.0	0.109	TSP1DEEP	189227	85	110	25.0	0.091	O15
184265	0	15	15.0	0.047	Not Zoned	189228	70	95	25.0	0.045	O15
184266	5	10	5.0	0.025	TSP3	189229	90	105	15.0	0.065	O15
184269	5	10	5.0	0.022	Not Zoned	189233	15	30	15.0	0.136	Not Zoned
184271	5	30	25.0	0.016	TSP8	189233	255	265	10.0	0.033	O15
184275	0	5	5.0	0.011	TSP8	189235	195	200	5.0	0.013	O15
184276	0	25	25.0	0.059	TSP8	189236	75	80	5.0	0.026	Not Zoned
184280	20	40	20.0	0.048	TSP1MAIN	189236	215	255	40.0	0.077	O15
184281	0	55	55.0	0.064	TSP1MAIN	189237	190	195	5.0	0.025	O15
184282	15	50	35.0	0.078	TSP1MAIN	189238	85	155	70.0	0.021	O15
184283	0	50	50.0	0.062	TSP1MAIN	189239	80	95	15.0	0.063	O15
184284	0	50	50.0	0.113	TSP1MAIN	189241	160	225	65.0	0.046	O15
184285	0	50	50.0	0.084	TSP1MAIN	189243	205	220	15.0	0.023	O15
184286	0	55	55.0	0.082	TSP1MAIN	189244	230	260	30.0	0.039	015



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
184287	15	30	15.0	0.031	TSP1MAIN	189246	25	35	10.0	0.047	Not Zoned
184288	5	30	25.0	0.066	TSP1MAIN	189246	190	210	20.0	0.059	O15
184289	0	50	50.0	0.098	TSP1MAIN	189250	180	290	110.0	0.056	O15
184290	10	50	40.0	0.034	TSP1MAIN	189256	205	275	70.0	0.036	O15
184291	15	30	15.0	0.025	TSP1MAIN	189269	150	155	5.0	0.024	Not Zoned
184292	0	40	40.0	0.112	TSP1MAIN	189290	0	30	30.0	0.178	Not Zoned
184293	15	40	25.0	0.027	TSP1MAIN	189291	0	15	15.0	0.070	Not Zoned
184294	15	30	15.0	0.042	TSP1MAIN	189291	25	30	5.0	0.023	Not Zoned
184295	0	60	60.0	0.052	TSP1MAIN	189293	60	65	5.0	0.024	Not Zoned
184296	0	50	50.0	0.029	TSP1MAIN	189293	220	230	10.0	0.037	Not Zoned
184297	40	50	10.0	0.063	TSP1MAIN	189294	25	35	10.0	0.067	Not Zoned
184298	0	50	50.0	0.076	TSP1MAIN	189294	90	95	5.0	0.115	Not Zoned
184299	0	50	50.0	0.034	TSP1MAIN	189295	10	15	5.0	0.028	Not Zoned
184300	0	30	30.0	0.049	TSP1MAIN	189295	105	115	10.0	0.085	Not Zoned
184301	0	40	40.0	0.055	TSP1MAIN	189296	45	60	15.0	0.062	Not Zoned
184302	0	50	50.0	0.060	TSP1MAIN	189297	195	200	5.0	0.026	Not Zoned
184303	10	45	35.0	0.102	TSP1MAIN	189297	225	230	5.0	0.038	Not Zoned
184304	0	55	55.0	0.090	TSP1MAIN	189500	225	250	25.0	0.059	TSP1MAIN
184305	5	40	35.0	0.094	TSP1MAIN	189500	285	310	25.0	0.081	TSP1WEST
184306	0	35	35.0	0.109	TSP1MAIN	189501	235	240	5.0	0.024	Not Zoned
184307	0	40	40.0	0.049	TSP1MAIN	189501	260	270	10.0	0.038	TSP1MAIN
184308	5	50	45.0	0.050	TSP1MAIN	189501	290	330	40.0	0.094	TSP1WEST
184309	10	50	40.0	0.098	TSP1MAIN	189502	225	230	5.0	0.006	TSP1MAIN
184310	25	50	25.0	0.084	TSP1MAIN	189502	265	270	5.0	0.043	Not Zoned
184311	0	40	40.0	0.052	TSP1MAIN	189503	275	300	25.0	0.073	TSP1WEST
185312	30	40	10.0	0.115	Not Zoned	189504	275	280	5.0	0.016	TSP1WEST
185315	20	40	20.0	0.032	TSP3	189504	310	350	40.0	0.014	TSP1WEST
185316	35	65	30.0	0.080	TSP3	189505	250	300	50.0	0.043	TSP1DEEP
185317	30	70	40.0	0.034	TSP3	189506	270	295	25.0	0.131	TSP1MAIN
185318	5	75	70.0	0.058	TSP3	189506	270	350	80.0	0.140	TSP1WEST
185319	30	55	25.0	0.110	TSP3	189507	195	200	5.0	0.050	Not Zoned
185320	45	70	25.0	0.054	TSP3	189507	210	215	5.0	0.326	Not Zoned
185321	60	65	5.0	0.015	TSP3	189507	280	285	5.0	0.023	Not Zoned
185322	0	15	15.0	0.064	TSP3	189508	70	75	5.0	0.021	Not Zoned
185323	5	35	30.0	0.038	TSP3	189508	280	325	45.0	0.036	TSP1WEST
185324	20	35	15.0	0.074	TSP3	189511	65	70	5.0	0.001	TSP1MAIN
185325	20	50	30.0	0.031	TSP3	189512	160	175	15.0	0.061	Not Zoned
185328	0	5	5.0	0.011	TSP3	189512	190	240	50.0	0.044	TSP1DEEP
185330	25	30	5.0	0.119	TSP6	189512	275	285	10.0	0.028	Not Zoned
185333	10	45	35.0	0.176	TSP1MAIN	189513	190	195	5.0	0.022	Not Zoned
185334	25	50	25.0	0.031	TSP1MAIN	189513	250	270	20.0	0.048	TSP1DEEP
185335	5	35	30.0	0.031	TSP1MAIN	189514	0	10	10.0	0.049	Not Zoned
185336	15	60	45.0	0.033	TSP1MAIN	189514	175	180	5.0	0.053	TSP1DEEP
185337	0	60	60.0	0.101	TSP1MAIN	189514	270	280	10.0	0.052	TSP1DEEP
185338	0	60	60.0	0.110	TSP1MAIN	189515	155	175	20.0	0.060	TSP8



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
185339	10	60	50.0	0.096	TSP1MAIN	189516	170	230	60.0	0.054	TSP1MAIN
185340	15	50	35.0	0.053	TSP1MAIN	189516	275	325	50.0	0.033	TSP1DEEP
185341	5	15	10.0	0.087	Not Zoned	189516	340	345	5.0	0.033	Not Zoned
185342	0	5	5.0	0.022	Not Zoned	189519	20	45	25.0	0.054	TSP1MAIN
185342	15	30	15.0	0.058	Not Zoned	189521	25	30	5.0	0.024	TSP1MAIN
185343	15	25	10.0	0.083	Not Zoned	189521	30	35	5.0	0.027	Not Zoned
185344	20	30	10.0	0.024	TSP8	189523	60	65	5.0	0.033	TSP1MAIN
185345	5	20	15.0	0.011	TSP8	189524	255	295	40.0	0.055	TSP1WEST
185346	10	35	25.0	0.029	TSP8	189526	45	50	5.0	0.285	Not Zoned
185347	10	35	25.0	0.018	TSP8	189527	10	20	10.0	0.102	Not Zoned
185348	5	20	15.0	0.093	TSP8	189529	30	35	5.0	0.035	Not Zoned
185349	5	35	30.0	0.035	TSP8	189530	5	25	20.0	0.134	Not Zoned
185350	5	35	30.0	0.023	TSP8	189532	240	270	30.0	0.045	TSP1WEST
185390	0	10	10.0	0.048	Not Zoned	189532	290	385	95.0	0.072	TSP1WEST
185390	30	35	5.0	0.034	Not Zoned	189533	205	245	40.0	0.027	TSP1WEST
185391	10	20	10.0	0.024	Not Zoned	189533	275	305	30.0	0.029	TSP1WEST
185393	0	30	30.0	0.058	Not Zoned	189533	350	365	15.0	0.049	Not Zoned
185395	5	35	30.0	0.042	Not Zoned	189534	35	45	10.0	0.030	Not Zoned
185402	0	5	5.0	0.046	Not Zoned	189536	20	25	5.0	0.039	Not Zoned
185402	5	25	20.0	0.097	TSP6	189537	20	35	15.0	0.052	Not Zoned
185406	10	25	15.0	0.034	Not Zoned	189541	0	10	10.0	0.178	Not Zoned
185459	5	30	25.0	0.073	Not Zoned	189545	85	90	5.0	0.055	Not Zoned
185461	20	30	10.0	0.091	Not Zoned	189548	30	35	5.0	0.084	Not Zoned
185463	10	30	20.0	0.037	Not Zoned	189551	40	45	5.0	0.020	O15
185464	0	5	5.0	0.064	Not Zoned	189553	15	40	25.0	0.022	O15
185469	5	20	15.0	0.014	TSP8	189556	5	10	5.0	0.028	O15
185470	15	20	5.0	0.008	TSP8	189557	25	30	5.0	0.032	O15
185471	25	30	5.0	0.024	TSP8	189559	215	275	60.0	0.027	TSP1WEST
185472	30	35	5.0	0.010	TSP8	189559	315	390	75.0	0.105	TSP1WEST
185473	10	35	25.0	0.030	TSP8	189560	210	260	50.0	0.026	TSP1WEST
185474	25	35	10.0	0.023	TSP8	189560	300	350	50.0	0.012	TSP1WEST
185475	15	20	5.0	0.022	Not Zoned	189561	265	270	5.0	0.031	Not Zoned
185475	20	35	15.0	0.051	TSP8	189562	110	130	20.0	0.064	TSP6
185477	5	20	15.0	0.040	TSP8	189563	50	60	10.0	0.028	Not Zoned
185478	0	25	25.0	0.038	TSP8	189563	210	225	15.0	0.072	TSP8
185479	0	5	5.0	0.046	Not Zoned	189564	185	205	20.0	0.072	TSP8
185479	5	35	30.0	0.020	TSP8	189565	225	245	20.0	0.170	O15
185480	20	40	20.0	0.025	TSP8	189566	140	145	5.0	0.014	O15
185481	25	50	25.0	0.010	TSP8	189567	210	225	15.0	0.016	O15
185485	20	48	28.0	0.013	TSP8	189568	250	265	15.0	0.092	015
185494	40	50	10.0	0.030	Not Zoned	189569	70	75	5.0	0.028	Not Zoned
186502	15	25	10.0	0.030	Not Zoned	189569	150	265	115.0	0.028	O15
186504	5	10	5.0	0.036	Not Zoned	189570	215	285	70.0	0.075	O15
186504	30	35	5.0	0.056	Not Zoned	189571	195	290	95.0	0.066	O15
186507	15	30	15.0	0.044	Not Zoned	189573	170	240	70.0	0.083	015



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
186510	175	180	5.0	0.032	Not Zoned	189575	135	145	10.0	0.012	O15
186513	195	200	5.0	0.024	O15	189576	260	280	20.0	0.023	O15
186514	40	45	5.0	0.028	Not Zoned	189577	35	40	5.0	0.028	Not Zoned
186516	15	70	55.0	0.044	O15	189577	55	60	5.0	0.030	Not Zoned
186517	10	25	15.0	0.020	O15	189578	45	75	30.0	0.034	O15
186536	0	15	15.0	0.038	Not Zoned	189581	195	230	35.0	0.064	O15
186537	20	25	5.0	0.096	Not Zoned	189593	0	40	40.0	0.104	TSP1MAIN
186538	30	35	5.0	0.034	Not Zoned	189595	30	60	30.0	0.095	TSP1MAIN
186540	10	15	5.0	0.024	Not Zoned	189596	0	45	45.0	0.057	TSP1MAIN
186550	25	30	5.0	0.036	Not Zoned	189598	0	25	25.0	0.053	TSP1MAIN
186553	50	55	5.0	0.090	Not Zoned	189604	70	80	10.0	0.068	Not Zoned
186648	80	100	20.0	0.182	TSP1MAIN	189605	50	55	5.0	0.045	Not Zoned
186652	75	85	10.0	0.091	Not Zoned	189607	20	25	5.0	0.023	Not Zoned
186665	265	270	5.0	0.029	Not Zoned	189607	80	85	5.0	0.022	Not Zoned
186667	0	30	30.0	0.007	TSP8	189609	120	125	5.0	0.036	Not Zoned
186669	90	95	5.0	0.021	Not Zoned	189610	0	20	20.0	0.118	Not Zoned
186671	20	30	10.0	0.061	TSP6	189612	45	60	15.0	0.054	Not Zoned
186672	85	95	10.0	0.030	TSP8	189620	25	35	10.0	0.048	Not Zoned
186677	0	30	30.0	0.029	TSP8	189623	245	255	10.0	0.035	Not Zoned
186678	10	20	10.0	0.024	TSP8	189626	15	25	10.0	0.048	Not Zoned
186679	0	20	20.0	0.021	TSP8	189626	215	230	15.0	0.029	Not Zoned
186687	15	25	10.0	0.123	TSP8	189628	30	35	5.0	0.097	Not Zoned
186690	70	85	15.0	0.123	015	189635	200	205	5.0	0.030	Not Zoned
186691	25	45	20.0	0.012	015	195001	135	190	55.0	0.166	TSP1MAIN
186692	20	40	20.0	0.026	015	195002	0	10	10.0	0.029	TSP1MAIN
186693	45	70	25.0	0.031	015	195002	20	85	65.0	0.106	TSP1MAIN
186694	45	55	10.0	0.037	015	195003	25	150	125.0	0.091	TSP6
186695	0	30	30.0	0.034	015	195004	35	80	45.0	0.066	015
186714	80	85	5.0	0.060	Not Zoned	195006	230	270	37.7	0.025	015
186716	60	70	10.0	0.073	Not Zoned	197001	35	65	30.0	0.093	TSP1MAIN
186716	90	100	10.0	0.232	Not Zoned	197002	0	70	70.0	0.075	TSP1MAIN
186717	95	100	5.0	0.034	Not Zoned	197002	185	190	5.0	0.034	Not Zoned
186718	20	25	5.0	0.050	Not Zoned	197002	220	225	5.0	0.047	Not Zoned
186718	65	90	25.0	0.045	Not Zoned	197002	240	245	5.0	0.016	TSP1DEEP
186720	85	90	5.0	0.042	Not Zoned	197002	350	360	10.0	0.034	Not Zoned
186721	80	85	5.0	0.036	Not Zoned	197004	0	10	10.0	0.023	TSP1MAIN
186722	20	25	5.0	0.021	TSP8	197004	195	210	15.0	0.049	TSP1DEEP
186723	20	25	5.0	0.027	Not Zoned	197004	295	300	5.0	0.040	Not Zoned
186724	90	95	5.0	0.022	Not Zoned	197005	0	10	10.0	0.035	TSP1MAIN
186725	10	15	5.0	0.017	TSP8	197008	0	50	50.0	0.066	TSP1MAIN
186727	65	70	5.0	0.019	TSP8	197009	0	55	55.0	0.107	TSP1MAIN
186728	10	30	20.0	0.014	TSP8	197009	210	220	10.0	0.017	TSP1DEEP
186729	5	20	15.0	0.039	TSP8	197010	0	45	45.0	0.118	TSP1MAIN
186731	10	75	65.0	0.001	TSP1MAIN	197011	0	35	35.0	0.078	TSP1MAIN
186731	255	270	15.0	0.078	Not Zoned	197012	0	20	20.0	0.036	TSP1MAIN



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
186731	295	305	10.0	0.004	TSP1DEEP	197012	175	185	10.0	0.046	TSP1DEEP
186734	25	30	5.0	0.022	TSP8	197012	255	260	5.0	0.015	TSP1DEEP
186735	0	10	10.0	0.017	TSP8	197013	145	255	110.0	0.076	TSP1DEEP
186737	90	95	5.0	0.038	Not Zoned	197013	265	275	10.0	0.015	TSP1DEEP
186738	40	45	5.0	0.013	TSP8	197014	20	60	40.0	0.073	TSP1MAIN
186738	60	65	5.0	0.024	Not Zoned	197014	95	100	5.0	0.023	Not Zoned
186739	10	20	10.0	0.018	TSP8	197014	240	255	15.0	0.046	TSP1DEEP
186742	45	50	5.0	0.016	TSP8	197015	5	30	25.0	0.064	TSP1MAIN
186743	10	35	25.0	0.025	TSP8	197016	5	90	85.0	0.085	TSP1MAIN
186756	5	15	10.0	0.016	TSP3	197016	240	245	5.0	0.023	Not Zoned
186760	5	20	15.0	0.053	TSP6	197016	275	290	15.0	0.108	Not Zoned
186760	60	100	40.0	0.038	TSP6	197016	315	320	5.0	0.022	TSP1DEEP
186761	20	35	15.0	0.064	TSP6	197018	95	160	65.0	0.053	TSP1MAIN
186762	35	65	30.0	0.061	TSP6	197019	105	130	25.0	0.027	TSP1MAIN
186762	80	100	20.0	0.014	TSP6	197020	135	155	20.0	0.050	TSP1MAIN
186763	65	95	30.0	0.019	TSP6	197021	135	140	5.0	0.010	TSP1MAIN
186826	15	25	10.0	0.002	TSP8	197022	135	150	15.0	0.075	TSP1MAIN
186828	50	55	5.0	0.028	TSP8	197022	180	195	15.0	0.040	TSP1MAIN
186829	20	25	5.0	0.064	TSP8	197022	230	235	5.0	0.034	Not Zoned
186830	15	30	15.0	0.028	TSP8	197022	235	270	35.0	0.039	TSP1WEST
186831	0	5	5.0	0.037	Not Zoned	197023	105	110	5.0	0.016	TSP1MAIN
186831	20	30	10.0	0.024	TSP8	197025	95	170	75.0	0.070	TSP1MAIN
186832	0	10	10.0	0.027	TSP8	197026	75	180	105.0	0.073	TSP1MAIN
186834	10	35	25.0	0.009	TSP8	197027	0	100	100.0	0.077	TSP1MAIN
186835	0	10	10.0	0.033	TSP8	197028	0	100	100.0	0.058	TSP1MAIN
186872	50	55	5.0	0.016	TSP8	197029	0	70	70.0	0.044	TSP1MAIN
186873	15	30	15.0	0.026	TSP8	197030	0	40	40.0	0.067	TSP1MAIN
186877	10	15	5.0	0.012	TSP8	197031	5	10	5.0	0.099	Not Zoned
186878	20	35	15.0	0.037	TSP8	199001	0	65	65.0	0.075	TSP1MAIN
187001	15	20	5.0	0.014	TSP3	199002	0	20	20.0	0.027	TSP1MAIN
187003	55	60	5.0	0.024	Not Zoned	199003	55	85	30.0	0.058	TSP1MAIN
187004	15	25	10.0	0.020	TSP6	199003	95	100	5.0	0.077	TSP1MAIN
187005	20	100	80.0	0.119	TSP6	199006	0	80	80.0	0.069	TSP1MAIN
187006	15	100	85.0	0.168	TSP6	199006	95	100	5.0	0.023	Not Zoned
187007	35	45	10.0	0.056	TSP6	199008	0	40	40.0	0.083	TSP1MAIN
187008	155	160	5.0	0.044	TSP6	015-03-TH10	195	200	5.0	0.024	O15
187010	25	35	10.0	0.056	TSP6	015-03-TH11	140	155	15.0	0.018	O15
187011	15	40	25.0	0.038	TSP6	015-03-TH12	165	230	65.0	0.039	O15
187011	60	70	10.0	0.027	TSP6	015-03-TH12	260	265	5.0	0.020	Not Zoned
187011	115	175	60.0	0.014	TSP6	015-03-TH14	155	225	70.0	0.066	O15
187012	15	25	10.0	0.026	TSP6	015-03-TH16	340	345	5.0	0.024	Not Zoned
187013	55	100	45.0	0.034	TSP6	015-03-TH2	200	250	50.0	0.019	015
187014	25	65	40.0	0.021	TSP6	015-03-TH2	260	290	30.0	0.021	015
187015	20	35	15.0	0.041	TSP6	015-03-TH3	169	244	75.0	0.097	015
187015	75	95	20.0	0.133	TSP6	015-03-TH4	195	215	20.0	0.106	015



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187016	30	85	55.0	0.040	TSP6	015-03-TH4	325	330	5.0	0.060	Not Zoned
187017	10	35	25.0	0.037	TSP6	015-03-TH5	175	315	140.0	0.061	O15
187018	40	65	25.0	0.056	TSP6	015-03-TH6	160	170	10.0	0.050	O15
187019	40	80	40.0	0.059	TSP6	015-03-TH7	170	175	5.0	0.016	O15
187020	55	70	15.0	0.046	TSP6	015-03-TH8	175	195	20.0	0.055	O15
187020	120	140	20.0	0.061	TSP6	015-03-TH9	145	190	45.0	0.020	O15
187022	70	80	10.0	0.026	TSP6	188057A	35	45	10.0	0.038	TSP1MAIN
187023	75	80	5.0	0.016	TSP6	189590M	0	100	100.0	0.157	TSP1MAIN
187024	10	20	10.0	0.074	TSP6	189591M	0	40	40.0	0.069	TSP1MAIN
187024	65	100	35.0	0.021	TSP6	189592M	0	65	65.0	0.168	TSP1MAIN
187025	0	15	15.0	0.020	TSP6	189594M	35	45	10.0	0.023	TSP1MAIN
187026	20	25	5.0	0.073	Not Zoned	189594M	55	60	5.0	0.022	Not Zoned
187026	65	90	25.0	0.023	TSP6	189597M	0	15	15.0	0.081	TSP1MAIN
187027	75	100	25.0	0.034	TSP6	189600M	0	5	5.0	0.106	TSP1MAIN
187028	80	100	20.0	0.028	TSP6	189601M	5	65	60.0	0.087	TSP1MAIN
187029	75	80	5.0	0.020	TSP6	191001C	0	65	65.0	0.053	TSP1MAIN
187030	20	25	5.0	0.073	Not Zoned	191001C	195	200	5.0	0.031	Not Zoned
187030	70	95	25.0	0.055	TSP6	191001C	270	295	25.0	0.037	TSP1DEEP
187031	5	15	10.0	0.048	TSP6	191001C	715	720	5.0	0.026	Not Zoned
187031	95	100	5.0	0.048	TSP6	191002R	290	300	10.0	0.030	Not Zoned
187033	20	40	20.0	0.090	TSP6	191007R	40	60	20.0	0.037	TSP3
187034	25	45	20.0	0.078	Not Zoned	191007R	100	140	40.0	0.031	TSP3
187035	15	40	25.0	0.060	TSP6	191010R	40	50	10.0	0.039	Not Zoned
187036	10	15	5.0	0.055	Not Zoned	191010R	60	70	10.0	0.035	Not Zoned
187037	25	45	20.0	0.018	TSP6	191010R	80	130	50.0	0.042	TSP1MAIN
187038	15	25	10.0	0.038	TSP6	191010R	320	360	40.0	0.103	TSP1DEEP
187038	50	65	15.0	0.016	TSP6	191010R	400	410	10.0	0.022	Not Zoned
187040	60	85	25.0	0.012	TSP6	191010R	560	570	10.0	0.025	Not Zoned
187040	185	190	5.0	0.022	Not Zoned	191010R	610	620	10.0	0.024	Not Zoned
187043	15	20	5.0	0.028	Not Zoned	191011R	220	230	10.0	0.012	TSP1WEST
187044	5	25	20.0	0.036	Not Zoned	191011R	250	320	70.0	0.024	TSP1WEST
187045	10	35	25.0	0.043	Not Zoned	191011R	360	370	10.0	0.036	Not Zoned
187046	20	30	10.0	0.046	Not Zoned	191011R	520	530	10.0	0.045	Not Zoned
187046	40	45	5.0	0.046	Not Zoned	191013R	20	40	20.0	0.047	Not Zoned
187047	10	15	5.0	0.037	Not Zoned	191013R	210	220	10.0	0.027	O15NORTH
187047	170	175	5.0	0.060	Not Zoned	191017R	60	70	10.0	0.027	Not Zoned
187049	0	10	10.0	0.085	Not Zoned	191017R	550	560	10.0	0.036	Not Zoned
187051	5	20	15.0	0.030	Not Zoned	191035R	150	190	40.0	0.023	O15
187052	0	20	20.0	0.055	Not Zoned	191035R	320	330	10.0	0.022	Not Zoned
187054	185	190	5.0	0.039	Not Zoned	191060R	0	40	25.6	0.044	TSP1MAIN
187055	0	15	15.0	0.284	Not Zoned	191060R	130	230	64.7	0.054	TSP1MAIN
187058	20	25	5.0	0.026	Not Zoned	191060R	380	400	15.6	0.033	TSP1DEEP
187059	15	20	5.0	0.035	Not Zoned	191064R	0	50	43.2	0.079	TSP1MAIN
187062	30	35	5.0	0.076	Not Zoned	191064R	250	260	8.6	0.033	TSP1DEEP
187065	30	35	5.0	0.024	Not Zoned	191064R	340	350	8.3	0.024	Not Zoned



187065 45 50 5.0 0.035 Not Zoned TS06C-08 0 35 23.7 0.019 TSP8 187068 0 5 5.0 0.033 Not Zoned TS06C-08 160 165 3.9 0.058 Not Zoned 187072 5 15 10.0 0.022 Not Zoned TS06C-08 215 230 3.9 0.022 Not Zoned 187073 40 45 5.0 0.025 Not Zoned TS06C-08 315 320 3.9 0.024 Not Zoned 187076 25 30 5.0 0.021 Not Zoned TS06C-08 630 635 3.9 0.008 Not Zoned 187083 60 65 5.0 0.023 TS04C TS06C-16 360 640 1.0 0.015 TSP8 187084 75 80 5.0 0.116 Not Zoned TS06C-16 730 765 23.9 0.069 Not Zoned 187084 75 5.0 0.020 TSP6 TS06C-16 700 820 <th></th>	
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	ed
187112 145 150 5.0 0.031 Not Zoned TS07C-51 665 670 5.0 0.029 Not Zone	ed
187112 195 200 5.0 0.028 Not Zoned TS07R-53 80 105 17.6 0.042 TSP8	
187113 25 35 10.0 0.021 TSP6 TS100 0 20 20.0 0.038 TSP1MA	IN
187113 35 40 5.0 0.002 TSP3 TS100 195 210 15.0 0.002 TSP1DE	EP
187114 55 65 10.0 0.025 TSP6 TS100 230 245 15.0 0.023 TSP1DE	EP
187114 65 70 5.0 0.043 Not Zoned TS101 260 275 15.0 0.018 TSP1DE	EP
187116 70 80 10.0 0.253 TSP1N TS102 0 15 15.0 0.106 TSP1MA	IN
187116 270 300 30.0 0.040 TSP1WEST TS102 190 200 10.0 0.022 Not Zone	ed
187117 190 235 45.0 0.059 TSP1MAIN TS102 210 215 5.0 0.162 TSP1DE	EP
187117 230 295 65.0 0.018 TSP1WEST TS102 240 245 5.0 0.046 Not Zone	ed
187118 175 190 15.0 0.032 TSP1MAIN TS103 0 30 30.0 0.067 TSP1MA	IN
187118 205 215 10.0 0.020 TSP1MAIN TS103 30 35 5.0 0.028 Not Zone	ed
187118 245 250 5.0 0.012 TSP1WEST TS103 235 240 5.0 0.023 Not Zone	ed
187118 290 300 10.0 0.142 Not Zoned TS103 250 260 10.0 0.037 Not Zoned	d
187120 125 130 5.0 0.068 TSP1S TS103 265 280 15.0 0.029 TSP1DE	EP
187121 105 110 5.0 0.018 TSP1S TS103 345 350 5.0 0.034 Not Zone	ed
187122 120 135 15.0 0.091 Not Zoned TS104 175 225 41.3 0.053 TSP1MA	IN
187124 115 120 5.0 0.011 TSP1S TS104 175 185 8.4 0.104 TSP1N	
187126 90 100 10.0 0.025 Not Zoned TS104 280 285 4.1 0.025 Not Zoned	ed
187126 120 125 5.0 0.020 TSP6 TS104 320 330 8.1 0.056 TSP1DE	EP



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187127	130	140	10.0	0.026	TSP6	TS104	360	375	12.7	0.025	Not Zoned
187131	15	20	5.0	0.049	TSP3	TS104	400	405	4.1	0.022	Not Zoned
187131	50	60	10.0	0.012	TSP3	TS104	500	535	28.5	0.124	Not Zoned
187132	65	75	10.0	0.024	TSP3	TS104	735	745	8.9	0.025	Not Zoned
187134	95	120	25.0	0.012	TSP3	TS105	205	225	16.3	0.143	TSP1MAIN
187135	105	110	5.0	0.019	TSP6	TS105	310	330	9.3	0.089	Not Zoned
187144	35	40	5.0	0.046	Not Zoned	TS105	350	360	8.2	0.037	Not Zoned
187147	140	165	25.0	0.039	TSP6	TS105	395	410	12.5	0.125	Not Zoned
187149	20	25	5.0	0.023	Not Zoned	TS105	435	440	4.1	0.061	Not Zoned
187150	170	200	30.0	0.022	TSP1S	TS105	595	600	4.2	0.024	Not Zoned
187151	50	75	25.0	0.066	Not Zoned	TS105	870	880	8.8	0.022	Not Zoned
187152	40	90	50.0	0.105	Not Zoned	TS106	340	345	4.0	0.028	TSP1WEST
187152	160	200	40.0	0.064	TSP1S	TS118	110	115	5.0	0.024	Not Zoned
187159	125	140	15.0	0.013	TSP1S	TS121	210	215	5.0	0.049	Not Zoned
187159	180	200	20.0	0.074	TSP1S	TS121	450	455	5.0	0.039	Not Zoned
187160	20	25	5.0	0.074	Not Zoned	TS125	70	75	3.8	0.021	Not Zoned
187160	70	90	20.0	0.036	Not Zoned	TS125	210	245	29.6	0.085	TSP1S
187160	140	145	5.0	0.015	TSP1S	TS125	245	250	3.8	0.037	Not Zoned
187161	130	165	35.0	0.084	TSP1S	TS125	415	420	3.9	0.107	Not Zoned
187161	155	160	5.0	0.036	Not Zoned	TS125	475	485	7.5	0.056	Not Zoned
187167	175	185	10.0	0.055	Not Zoned	TS128	410	420	10.0	0.058	Not Zoned
187168	185	195	10.0	0.015	TSP1DEEP	TS129	255	270	11.2	0.097	TSP1S
187169	55	65	10.0	0.038	TSP1MAIN	TS129	365	420	45.3	0.148	O15NORTH
187176	45	50	5.0	0.023	Not Zoned	TS132	185	195	7.7	0.021	Not Zoned
187184	40	55	15.0	0.027	Not Zoned	TS132	400	405	4.0	0.056	Not Zoned
187186	155	170	15.0	0.066	Not Zoned	TS133	200	235	26.5	0.159	TSP1MAIN
187187	80	85	5.0	0.062	Not Zoned	TS133	300	305	3.8	0.040	Not Zoned
187187	115	135	20.0	0.106	Not Zoned	TS133	400	405	3.8	0.056	Not Zoned
187187	155	165	10.0	0.058	Not Zoned	TS133	440	445	3.8	0.021	Not Zoned
187187	175	180	5.0	0.028	Not Zoned	TS134	210	220	8.0	0.016	TSP1MAIN
187189	155	185	30.0	0.089	O15	TS134	375	385	8.2	0.058	Not Zoned
187193	160	170	10.0	0.012	TSP3	TS141	265	310	35.2	0.066	O15NORTH
187194	225	235	10.0	0.019	TSP1MAIN	TS142	100	105	3.8	0.030	Not Zoned
187195	260	265	5.0	0.037	TSP1WEST	TS142	160	200	31.6	0.055	TSP1S
187196	160	180	20.0	0.043	TSP1MAIN	TS143	255	265	7.5	0.026	O15NORTH
187196	160	180	20.0	0.043	TSP1N	TS145	235	250	15.0	0.009	015
187196	195	210	15.0	0.025	TSP1MAIN	TS145	365	370	5.0	0.020	Not Zoned
187196	240	295	55.0	0.019	TSP1WEST	TS145	555	565	10.0	0.043	Not Zoned
187197	115	150	35.0	0.109	TSP1S	TS146	140	155	15.0	0.195	Not Zoned
187198	130	140	10.0	0.015	TSP1S	TS146	155	165	10.0	0.003	TSP1N
187199	180	200	20.0	0.086	TSP1S	TS146	200	265	65.0	0.037	TSP1WEST
187200	55	60	5.0	0.022	TSP8	TS146	425	445	20.0	0.075	Not Zoned
187201	95	115	20.0	0.024	TSP8	TS147	280	285	5.0	0.058	TSP1WEST
187202	125	145	20.0	0.033	TSP8	TS147	365	375	10.0	0.110	Not Zoned
187205	15	20	5.0	0.036	TSP6	TS148	245	265	20.0	0.001	TSP1WEST



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187206	75	100	25.0	0.078	TSP8	TS148	305	355	50.0	0.159	TSP1WEST
187206	275	290	15.0	0.032	Not Zoned	TS148	355	360	5.0	0.025	Not Zoned
187207	55	65	10.0	0.016	TSP8	TS148	390	395	5.0	0.022	Not Zoned
187208	160	170	10.0	0.050	Not Zoned	TS52	145	155	10.0	0.020	TSP1MAIN
187208	185	190	5.0	0.048	Not Zoned	TS52	335	345	10.0	0.072	TSP1S
187209	5	15	10.0	0.098	Not Zoned	TS52	515	525	10.0	0.064	Not Zoned
187211	25	80	55.0	0.084	O15	TS52	570	580	10.0	0.025	Not Zoned
187212	100	165	65.0	0.028	O15	TS55	380	385	4.1	0.067	Not Zoned
187214	195	200	5.0	0.018	O15	TS55	675	680	4.2	0.022	Not Zoned
187217	165	250	85.0	0.048	O15	TS59	300	335	28.8	0.086	O15NORTH
187218	0	5	5.0	0.101	Not Zoned	TS63	75	85	10.0	0.065	Not Zoned
187218	95	100	5.0	0.033	Not Zoned	TS63	220	225	5.0	0.013	TSP1S
187219	65	80	15.0	0.015	O15	TS63	310	340	29.9	0.050	Not Zoned
187220	90	95	5.0	0.014	O15	TS63	740	745	5.0	0.021	Not Zoned
187222	50	60	10.0	0.017	O15	TS65	220	240	20.0	0.021	TSP8
187224	160	175	15.0	0.084	TSP1S	TS65	305	310	5.0	0.031	Not Zoned
187225	140	160	20.0	0.034	TSP1S	TS66	115	135	20.0	0.099	Not Zoned
187226	70	75	5.0	0.090	Not Zoned	TS66	230	235	5.0	0.091	Not Zoned
187226	140	150	10.0	0.019	TSP1S	TS68	325	330	4.5	0.100	Not Zoned
187230	40	45	5.0	0.027	TSP1N	TS71	105	110	5.0	0.024	TSP1S
187230	180	260	80.0	0.026	TSP1MAIN	TS71	110	115	5.0	0.043	Not Zoned
187231	135	150	15.0	0.082	Not Zoned	TS77	165	185	20.0	0.109	TSP1MAIN
187231	185	220	35.0	0.024	TSP1MAIN	TS77	245	250	5.0	0.096	Not Zoned
187236	150	200	50.0	0.070	TSP1MAIN	TS77	345	355	10.0	0.109	Not Zoned
187237	120	170	50.0	0.052	TSP1MAIN	TS77	380	385	5.0	0.023	Not Zoned
187238	130	190	60.0	0.132	TSP1MAIN	TS79	290	320	25.4	0.016	TSP3
187239	150	165	15.0	0.088	TSP1MAIN	TS82	255	265	10.0	0.000	TSP1DEEP
187240	130	170	40.0	0.082	TSP1MAIN	TS83	0	5	5.0	0.027	Not Zoned
187241	115	155	40.0	0.087	TSP1MAIN	TS88	210	230	20.0	0.034	Not Zoned
187253	40	70	30.0	0.100	TSP6	TS88	475	480	5.0	0.028	Not Zoned
187255	0	10	7.5	0.052	Not Zoned	TS89	675	680	5.0	0.030	Not Zoned
187255	40	100	38.6	0.160	TSP6	TS90	370	375	4.2	0.022	Not Zoned
187256	35	130	76.6	0.051	TSP6	TS93	430	435	3.7	0.027	Not Zoned
187256	160	200	31.5	0.073	TSP6	TS93	480	485	3.8	0.077	Not Zoned
187257	30	55	24.2	0.083	TSP6	TS93	740	750	6.9	0.046	Not Zoned
187258	15	35	15.3	0.104	Not Zoned	TS98	0	35	35.0	0.051	TSP1MAIN
187258	50	65	11.4	0.079	Not Zoned	TS98	90	95	5.0	0.021	Not Zoned
187258	80	100	15.3	0.014	TSP6	TS98	225	230	5.0	0.050	Not Zoned
187258	125	145	14.6	0.026	Not Zoned	TS98	230	235	5.0	0.132	TSP1DEEP
187258	155	160	3.5	0.034	Not Zoned	TS98	275	295	20.0	0.048	Not Zoned
187260	45	100	42.9	0.081	O15	TS99	0	30	30.0	0.131	TSP1MAIN
187261	35	75	38.1	0.040	015	TS99	80	115	35.0	0.086	Not Zoned
187262	65	100	25.9	0.049	Not Zoned	TS99	225	245	20.0	0.027	TSP1DEEP
187263	50	60	9.4	0.032	Not Zoned	TS99	290	300	10.0	0.040	Not Zoned
187264	115	145	21.0	0.073	Not Zoned	TS99	320	330	10.0	0.029	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187266	105	115	9.1	0.083	Not Zoned	TSP1-03-TH1	225	235	10.0	0.001	TSP1MAIN
187268	80	95	13.6	0.162	Not Zoned	TSP1-03-TH2	175	205	30.0	0.065	TSP1MAIN
187279	10	25	15.0	0.133	O15	TSP1-03-TH3	125	130	5.0	0.035	Not Zoned
187281	170	180	10.0	0.073	Not Zoned	TSP1-03-TH3	130	165	35.0	0.105	TSP1MAIN
187281	230	245	15.0	0.023	TSP1MAIN	TSP1-03-TH4	0	100	100.0	0.136	TSP1MAIN
187281	300	315	15.0	0.043	TSP1WEST	TSP1-03-TH4	115	120	5.0	0.027	Not Zoned
187283	105	120	15.0	0.028	Not Zoned	TSP1-03-TH5	0	45	45.0	0.061	TSP1MAIN
187284	205	210	5.0	0.034	Not Zoned	TSP1-03-TH6	35	40	5.0	0.027	Not Zoned
187289	105	110	5.0	0.036	Not Zoned	TSP1-03-TH6	40	60	20.0	0.061	TSP1MAIN
187292	195	200	5.0	0.026	Not Zoned	TSP1-03-TH7	190	230	40.0	0.009	TSP1DEEP



Appendix D Drill Hole Intersections for Central Model Area (Vertical Length - oz Au/t Grade)


Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
100017	265	310	39.0	0.050	TSP5 Deep	189216	160	200	40.0	0.050	FGrid Lower
100017	325	330	4.3	0.024	Not Zoned	189216	300	305	5.0	0.024	Not Zoned
100018	380	400	16.4	0.059	TSP5 Deep	189216	425	430	5.0	0.038	Not Zoned
100022	230	320	90.0	0.102	TSP5 Deep	189216	455	460	5.0	0.025	Not Zoned
100022	420	470	50.0	0.081	Not Zoned	189217	140	215	75.0	0.085	FGrid Lower
101019	440	450	8.7	0.021	Not Zoned	189217	255	260	5.0	0.021	Not Zoned
101020	330	360	26.0	0.026	TSP5 Deep	189218	30	100	70.0	0.028	FGrid Upper
101020	430	470	34.6	0.039	Not Zoned	189218	185	195	10.0	0.016	FGrid Lower
101021	270	290	20.0	0.029	TSP5 Deep	189218	455	460	5.0	0.022	Not Zoned
101021	410	420	10.0	0.025	Not Zoned	189219	90	100	10.0	0.018	FGrid Upper
181089	80	100	20.0	0.023	FGrid Upper	189219	130	145	15.0	0.012	FGrid Upper
181089	120	130	10.0	0.101	FGrid Upper	189220	30	50	20.0	0.041	FGrid Upper
181089	165	180	15.0	0.027	FGrid Lower	189220	60	80	20.0	0.009	FGrid Upper
181090	55	65	10.0	0.012	FGrid Upper	189220	80	105	25.0	0.022	FGrid Lower
181090	85	95	10.0	0.008	FGrid Upper	189220	150	160	10.0	0.011	FGrid Lower
181090	165	180	15.0	0.020	FGrid Lower	189221	0	10	10.0	0.016	FGrid Upper
181091	70	75	5.0	0.022	Not Zoned	189221	40	60	20.0	0.019	FGrid Lower
181091	140	145	5.0	0.022	Not Zoned	189221	75	80	5.0	0.065	FGrid Lower
184245	135	140	5.0	0.020	FGrid Lower	189221	125	130	5.0	0.040	FGrid Lower
184246	95	105	10.0	0.029	FGrid Upper	189231	165	240	75.0	0.088	TSP5 Deep
184246	150	185	35.0	0.047	FGrid Lower	189232	250	305	38.9	0.032	TSP5 Deep
184247	95	125	30.0	0.017	FGrid Upper	189234	105	140	35.0	0.027	FGrid Upper
184247	150	185	35.0	0.034	FGrid Lower	189234	190	220	30.0	0.072	FGrid Lower
184248	45	60	15.0	0.025	FGrid Upper	189234	290	295	5.0	0.028	Not Zoned
184252	0	10	10.0	0.052	Not Zoned	189240	0	5	5.0	0.018	FGrid Upper
184255	15	35	20.0	0.041	Not Zoned	189242	160	175	15.0	0.057	TSP5 Deep
184257	5	10	5.0	0.023	Not Zoned	189245	75	90	15.0	0.076	FGrid Upper
184258	0	30	30.0	0.050	Not Zoned	189245	150	190	40.0	0.059	FGrid Lower
184260	10	30	20.0	0.032	Not Zoned	189247	85	105	20.0	0.035	Not Zoned
184261	20	35	15.0	0.029	Not Zoned	189247	125	140	15.0	0.025	Not Zoned
184262	40	45	5.0	0.011	FGrid Upper	189247	150	170	20.0	0.021	FGrid Lower
184262	110	115	5.0	0.015	FGrid Lower	189247	185	195	10.0	0.038	FGrid Lower
184279	90	105	15.0	0.020	FGrid Upper	189249	140	210	70.0	0.093	FGrid Lower
184279	140	145	5.0	0.009	FGrid Lower	189251	25	35	10.0	0.014	FGrid Upper
185351	35	45	10.0	0.034	Not Zoned	189251	75	80	5.0	0.012	FGrid Upper
185356	30	40	10.0	0.024	Not Zoned	189251	175	205	30.0	0.017	FGrid Lower
185359	25	30	5.0	0.023	Not Zoned	189252	65	70	5.0	0.020	FGrid Upper
185360	65	75	10.0	0.041	Not Zoned	189252	125	150	25.0	0.028	FGrid Lower



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
185361	40	45	5.0	0.070	Not Zoned	189252	160	200	40.0	0.095	FGrid Lower
185364	5	25	20.0	0.031	Not Zoned	189253	165	200	35.0	0.078	FGrid Lower
185370	10	20	10.0	0.029	Not Zoned	189253	215	220	5.0	0.024	Not Zoned
185371	10	15	5.0	0.052	Not Zoned	189255	0	20	20.0	0.017	FGrid Upper
185372	25	30	5.0	0.068	Not Zoned	189255	55	90	35.0	0.035	FGrid Upper
185373	20	30	10.0	0.063	Not Zoned	189255	100	135	35.0	0.015	FGrid Lower
185378	10	45	35.0	0.079	Not Zoned	189257	155	165	10.0	0.021	FGrid Lower
185434	15	25	10.0	0.031	Not Zoned	189257	185	245	60.0	0.031	FGrid Lower
185435	15	35	20.0	0.055	Not Zoned	189277	180	185	5.0	0.026	Not Zoned
185436	15	48	33.0	0.057	Not Zoned	189283	165	220	55.0	0.094	TSP5 Deep
185440	10	30	20.0	0.028	Not Zoned	189284	5	10	5.0	0.022	Not Zoned
185445	15	30	15.0	0.051	Not Zoned	189284	145	160	15.0	0.019	TSP5 Deep
185446	20	50	30.0	0.086	Not Zoned	189285	205	245	40.0	0.081	TSP5 Deep
186556	10	25	15.0	0.089	Not Zoned	189582	35	55	20.0	0.016	FGrid Upper
186563	185	195	10.0	0.028	Not Zoned	189582	65	115	50.0	0.072	FGrid Upper
186567	65	70	5.0	0.026	Not Zoned	189583	115	135	20.0	0.034	FGrid Upper
186621	75	90	15.0	0.013	FGrid Lower	189584	45	65	20.0	0.027	FGrid Upper
186621	105	160	55.0	0.054	FGrid Lower	189584	150	170	20.0	0.013	FGrid Lower
186622	70	75	5.0	0.010	FGrid Upper	189584	180	185	5.0	0.016	FGrid Lower
186625	70	75	5.0	0.028	Not Zoned	189586	95	135	40.0	0.026	FGrid Upper
186629	50	55	5.0	0.026	Not Zoned	189586	150	190	40.0	0.032	FGrid Lower
186635	30	35	5.0	0.024	Not Zoned	189587	45	60	15.0	0.015	FGrid Upper
186636	100	110	10.0	0.047	Not Zoned	189587	70	75	5.0	0.022	Not Zoned
186782	10	35	25.0	0.086	Not Zoned	189587	115	135	20.0	0.068	FGrid Lower
186799	10	40	30.0	0.063	Not Zoned	189587	165	175	10.0	0.019	FGrid Lower
186801	45	55	10.0	0.038	Not Zoned	189589	5	15	10.0	0.047	FGrid Upper
186802	15	40	25.0	0.028	Not Zoned	189589	200	205	5.0	0.021	Not Zoned
186814	40	45	5.0	0.022	Not Zoned	189589	215	225	10.0	0.060	FGrid Lower
186844	10	15	5.0	0.038	Not Zoned	189602	165	205	40.0	0.040	FGrid Lower
186852	10	20	10.0	0.044	Not Zoned	192093	840	850	10.0	0.026	Not Zoned
186853	15	25	10.0	0.041	Not Zoned	192093	900	910	10.0	0.024	Not Zoned
186856	5	10	5.0	0.021	Not Zoned	480010	10	30	20.0	0.035	Not Zoned
186857	10	20	10.0	0.029	Not Zoned	480011	100	105	5.0	0.028	Not Zoned
186858	0	15	15.0	0.040	Not Zoned	484249	50	55	5.0	0.021	Not Zoned
186861	5	45	40.0	0.036	Not Zoned	484250	0	10	10.0	0.030	Not Zoned
186862	10	40	30.0	0.049	Not Zoned	484251	70	80	10.0	0.024	Not Zoned
186879	0	10	10.0	0.069	Not Zoned	484251	90	95	5.0	0.026	Not Zoned
187246	170	195	17.7	0.019	FGrid Lower	486863	20	25	5.0	0.039	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187246	265	280	10.6	0.029	Not Zoned	486864	55	60	5.0	0.021	Not Zoned
187247	20	25	5.0	0.012	FGrid Upper	487127	5	10	5.0	0.026	Not Zoned
187247	115	120	5.0	0.029	Not Zoned	487129	10	15	5.0	0.025	Not Zoned
187247	155	200	45.0	0.074	FGrid Lower	487130	45	55	10.0	0.029	Not Zoned
187248	80	95	15.0	0.015	FGrid Upper	487131	45	50	5.0	0.044	Not Zoned
187248	120	155	35.0	0.036	FGrid Lower	487132	25	35	10.0	0.071	Not Zoned
187249	30	35	3.5	0.018	FGrid Upper	487132	70	75	5.0	0.024	Not Zoned
187249	90	120	21.2	0.020	FGrid Lower	487133	20	40	20.0	0.027	Not Zoned
187250	15	45	30.0	0.015	FGrid Upper	487133	90	100	10.0	0.027	Not Zoned
187250	70	75	5.0	0.011	FGrid Upper	487134	0	40	40.0	0.047	Not Zoned
187250	110	185	75.0	0.028	FGrid Lower	487134	85	100	15.0	0.042	Not Zoned
187250	215	220	5.0	0.012	FGrid Lower	487135	5	10	5.0	0.024	Not Zoned
187251	50	55	4.3	0.011	FGrid Upper	487135	45	50	5.0	0.023	Not Zoned
187251	100	175	65.0	0.068	FGrid Lower	487135	75	80	5.0	0.021	Not Zoned
187252	5	10	3.5	0.024	FGrid Lower	487136	10	15	5.0	0.022	Not Zoned
187271	40	45	5.0	0.024	FGrid Lower	487136	80	90	10.0	0.043	Not Zoned
187271	120	125	5.0	0.031	FGrid Lower	487137	90	100	10.0	0.026	Not Zoned
187272	65	75	10.0	0.052	FGrid Lower	191003R	110	120	10.0	0.031	Not Zoned
187273	20	50	30.0	0.018	FGrid Upper	191003R	260	300	40.0	0.028	TSP5 Deep
187273	95	110	15.0	0.028	FGrid Lower	191009R	260	290	30.0	0.059	TSP5 Deep
187274	135	175	40.0	0.022	FGrid Lower	191009R	460	470	10.0	0.179	Not Zoned
187275	170	190	20.0	0.016	FGrid Lower	191009R	650	700	50.0	0.051	Not Zoned
187276	70	80	10.0	0.054	FGrid Upper	191016R	90	100	10.0	0.055	FGrid Upper
187276	130	135	5.0	0.024	Not Zoned	191016R	110	160	50.0	0.024	FGrid Upper
187296	10	15	5.0	0.012	FGrid Lower	191016R	280	320	40.0	0.017	FGrid Lower
187297	35	65	30.0	0.034	FGrid Lower	191016R	370	380	10.0	0.039	FGrid Lower
187298	10	25	15.0	0.019	FGrid Upper	191016R	520	530	10.0	0.024	Not Zoned
187298	130	135	5.0	0.008	FGrid Lower	191018R	70	110	40.0	0.024	FGrid Upper
187299	30	35	5.0	0.011	FGrid Lower	191021R	970	980	10.0	0.021	Not Zoned
187300	60	65	5.0	0.011	FGrid Upper	191022R	760	770	10.0	0.022	Not Zoned
187302	55	60	5.0	0.012	FGrid Upper	191023R	370	380	10.0	0.066	Not Zoned
187302	75	85	10.0	0.036	FGrid Upper	191033R	335	340	5.0	0.004	TSP5 Deep
187302	105	110	5.0	0.030	Not Zoned	191033R	510	520	10.0	0.050	Not Zoned
187303	50	55	5.0	0.016	FGrid Upper	191033R	820	830	10.0	0.021	Not Zoned
187305	45	55	10.0	0.014	FGrid Upper	191037R	10	20	10.0	0.021	Not Zoned
187305	180	185	5.0	0.023	FGrid Lower	191043R	740	760	20.0	0.090	Not Zoned
187309	65	70	5.0	0.012	FGrid Lower	191046R	330	340	8.3	0.037	TSP5 Deep
187360	85	100	15.0	0.017	FGrid Upper	191073R	0	10	8.6	0.024	Not Zoned



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
187361	45	50	5.0	0.041	FGrid Upper	191078R	140	150	6.9	0.024	Not Zoned
187361	75	80	5.0	0.006	FGrid Upper	191078R	480	490	6.9	0.022	Not Zoned
187363	45	65	20.0	0.013	FGrid Upper	491028R	10	20	10.0	0.320	Not Zoned
187364	70	80	10.0	0.017	FGrid Upper	491028R	50	60	10.0	0.260	Not Zoned
187365	30	45	15.0	0.038	Not Zoned	491028R	100	110	10.0	0.313	Not Zoned
187366	80	85	5.0	0.050	Not Zoned	TS06C-34	80	85	3.9	0.069	Not Zoned
187378	0	5	5.0	0.048	Not Zoned	TS06C-34	85	90	3.9	0.069	FGrid Upper
187406	45	60	15.0	0.027	FGrid Upper	TS06C-34	120	125	3.9	0.032	Not Zoned
187410	70	75	5.0	0.021	FGrid Upper	TS06C-34	125	195	55.8	0.055	FGrid Lower
187417	155	165	7.1	0.022	FGrid Lower	TS06C-44	150	175	25.0	0.156	FGrid Lower
187417	180	195	10.6	0.020	FGrid Lower	TS06C-44	175	190	15.0	0.039	Not Zoned
187418	35	65	21.2	0.022	FGrid Upper	TS06C-44	190	210	20.0	0.049	FGrid Lower
187418	120	160	28.3	0.052	FGrid Lower	TS06C-47	830	835	4.3	0.022	Not Zoned
187419	15	35	14.1	0.015	FGrid Upper	TS06PC-10	185	190	4.1	0.033	Not Zoned
187419	55	70	10.6	0.016	FGrid Upper	TS06PC-11	330	335	4.1	0.024	TSP5 Deep
187419	100	110	7.1	0.014	FGrid Lower	TS06PC-11	375	385	8.2	0.040	Not Zoned
187419	170	175	3.5	0.011	FGrid Lower	TS06PC-12	60	70	8.4	0.026	Not Zoned
187478	0	5	5.0	0.022	Not Zoned	TS110	500	505	5.0	0.027	Not Zoned
187482	0	5	5.0	0.026	Not Zoned	TS112	715	720	5.0	0.029	Not Zoned
187482	20	25	5.0	0.053	Not Zoned	TS112	760	765	5.0	0.022	Not Zoned
187483	20	25	5.0	0.037	Not Zoned	TS113	495	500	4.8	0.023	Not Zoned
187486	80	85	5.0	0.027	Not Zoned	TS113	770	775	4.8	0.026	Not Zoned
187489	10	15	5.0	0.049	Not Zoned	TS120	605	610	4.0	0.021	Not Zoned
187505	15	20	5.0	0.022	Not Zoned	TS120	745	750	4.1	0.025	Not Zoned
188092	225	235	10.0	0.036	Not Zoned	TS122	595	605	8.0	0.030	Not Zoned
188092	320	325	5.0	0.060	Not Zoned	TS122	765	775	8.1	0.032	Not Zoned
188094	55	65	10.0	0.024	Not Zoned	TS122	830	845	12.2	0.024	Not Zoned
188094	240	250	10.0	0.048	Not Zoned	TS122	855	860	4.1	0.026	Not Zoned
188120	115	120	5.0	0.095	Not Zoned	TS122	885	925	32.9	0.052	Not Zoned
188121	300	310	10.0	0.024	FGrid Lower	TS138	215	230	11.6	0.124	FGrid Upper
188122	50	60	10.0	0.074	Not Zoned	TS139	180	185	3.8	0.021	Not Zoned
188122	90	95	5.0	0.085	FGrid Upper	TS139	195	245	38.6	0.054	FGrid Upper
188124	320	335	15.0	0.017	TSP5 Deep	TS139	415	425	7.9	0.021	FGrid Lower
188170	65	75	7.1	0.078	Not Zoned	TS139	485	500	11.9	0.053	FGrid Lower
188171	190	275	60.1	0.094	TSP5 Deep	TS140	365	395	23.0	0.034	FGrid Lower
188184	15	20	5.0	0.040	Not Zoned	TS140	410	415	3.8	0.021	Not Zoned
188188	440	445	5.0	0.023	Not Zoned	TS140	445	470	19.2	0.029	FGrid Lower
188189	10	15	5.0	0.021	Not Zoned	TS54	190	210	15.9	0.024	FGrid Lower



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
189211	20	25	5.0	0.021	FGrid Upper	TS54	270	275	4.1	0.097	Not Zoned
189211	45	55	10.0	0.011	FGrid Upper	TS56	205	220	11.8	0.034	FGrid Lower
189211	90	120	30.0	0.019	FGrid Lower	TS56	220	225	3.9	0.037	Not Zoned
189211	135	145	10.0	0.015	FGrid Lower	TS57	620	635	12.2	0.086	Not Zoned
189211	185	195	10.0	0.021	FGrid Lower	TS58	200	205	4.9	0.034	FGrid Lower
189212	20	25	5.0	0.028	FGrid Upper	TS76	50	55	5.0	0.000	FGrid Upper
189212	50	60	10.0	0.012	FGrid Upper	TS76	65	80	15.0	0.010	FGrid Upper
189212	175	195	20.0	0.024	FGrid Lower	TS81	440	445	5.0	0.126	Not Zoned
189213	105	190	85.0	0.021	FGrid Lower	TS86	330	335	3.9	0.024	Not Zoned
189213	205	210	5.0	0.010	FGrid Lower	TS86	615	620	4.0	0.047	Not Zoned
189214	180	190	10.0	0.028	FGrid Lower	TS86	920	925	4.2	0.025	Not Zoned
189215	90	100	10.0	0.016	FGrid Upper	TS86	1030	1035	4.2	0.042	Not Zoned
189215	170	195	25.0	0.025	FGrid Lower	TS95	660	670	8.1	0.025	Not Zoned
189216	110	115	5.0	0.014	FGrid Upper	TS95	735	740	4.0	0.024	Not Zoned



Appendix E Drill Hole Intersections for North Model Area (Vertical Length - oz Au/t Grade)



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
400003	0	20	17.3	0.023	NORTH	488034	30	100	70.0	0.035	NORTH
400003	160	190	26.0	0.015	NORTH	488035	0	30	30.0	0.010	NORTH
400003	210	250	34.6	0.021	NORTH	488037	0	40	40.0	0.030	NORTH
401002	40	70	30.0	0.012	NORTH	488039	0	60	60.0	0.031	NORTH
401002	170	180	10.0	0.006	NORTH	488039	80	100	20.0	0.021	NORTH
401002	250	300	50.0	0.009	NORTH	488040	0	70	70.0	0.025	NORTH
401002	340	400	60.0	0.019	NORTH	488041	0	10	10.0	0.007	NORTH
401003	170	180	10.0	0.008	NORTH	488041	40	100	60.0	0.027	NORTH
401006	10	130	120.0	0.013	NORTH	488042	0	100	100.0	0.016	NORTH
401006	220	250	30.0	0.009	NORTH	488043	0	100	100.0	0.067	NORTH
401006	320	330	10.0	0.007	NORTH	488044	0	30	30.0	0.099	NORTH
401006	350	400	50.0	0.017	NORTH	488044	40	80	40.0	0.063	NORTH
401007	130	140	10.0	0.006	NORTH	488045	120	130	10.0	0.007	NORTH
401007	160	170	10.0	0.006	NORTH	488046	90	130	40.0	0.028	NORTH
401007	230	250	20.0	0.007	NORTH	488047	80	100	20.0	0.028	NORTH
401007	260	320	60.0	0.012	NORTH	488048	0	10	10.0	0.007	NORTH
401008	150	220	70.0	0.039	NORTH	488048	40	70	30.0	0.012	NORTH
401008	270	400	130.0	0.055	NORTH	488049	40	70	30.0	0.038	NORTH
401009	0	10	10.0	0.022	NORTH	488051	10	60	50.0	0.015	NORTH
401009	150	160	10.0	0.023	NORTH	488052	90	100	10.0	0.006	NORTH
401009	230	290	60.0	0.040	NORTH	488053	0	20	20.0	0.013	NORTH
401009	310	330	20.0	0.009	NORTH	488053	140	180	40.0	0.015	NORTH
401009	370	400	30.0	0.014	NORTH	488054	90	130	40.0	0.031	NORTH
401014	60	100	40.0	0.024	NORTH	488055	50	90	40.0	0.028	NORTH
401014	110	300	190.0	0.031	NORTH	488057	10	100	90.0	0.034	NORTH
401014	350	360	10.0	0.004	NORTH	488058	60	110	50.0	0.024	NORTH
401014	430	500	70.0	0.015	NORTH	488058	140	150	10.0	0.006	NORTH
467001	0	90	90.0	0.015	NORTH	488058	160	170	10.0	0.007	NORTH
467001	110	220	110.0	0.013	NORTH	488059	60	100	40.0	0.040	NORTH
467001	240	300	60.0	0.011	NORTH	488060	0	10	10.0	0.010	NORTH
467002	80	160	80.0	0.013	NORTH	488061	0	100	100.0	0.028	NORTH
467002	190	250	60.0	0.018	NORTH	488062	0	10	10.0	0.008	NORTH
467002	270	300	30.0	0.012	NORTH	488062	90	100	10.0	0.006	NORTH
467003	0	130	130.0	0.014	NORTH	488063	20	60	40.0	0.014	NORTH
467003	190	250	60.0	0.015	NORTH	488065	20	50	30.0	0.010	NORTH
467004	70	90	20.0	0.026	NORTH	488067	0	10	10.0	0.007	NORTH
467004	100	110	10.0	0.006	NORTH	488068	20	40	20.0	0.015	NORTH
467004	120	130	10.0	0.008	NORTH	488068	170	200	30.0	0.012	NORTH

Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
467004	260	300	40.0	0.013	NORTH	488069	0	30	30.0	0.012	NORTH
467005	0	90	90.0	0.023	NORTH	488069	180	200	20.0	0.013	NORTH
467006	60	90	30.0	0.011	NORTH	488070	80	100	20.0	0.011	NORTH
467006	220	270	50.0	0.009	NORTH	488071	0	10	10.0	0.006	NORTH
467009	0	100	100.0	0.012	NORTH	488072	0	40	40.0	0.022	NORTH
467010	0	40	40.0	0.010	NORTH	488072	70	200	130.0	0.015	NORTH
471001	10	20	10.0	0.022	NORTH	488074	0	60	60.0	0.019	NORTH
471002	10	50	40.0	0.014	NORTH	488074	130	170	40.0	0.023	NORTH
471002	60	70	10.0	0.006	NORTH	488074	180	200	20.0	0.012	NORTH
471003	10	40	30.0	0.023	NORTH	488075	50	110	60.0	0.050	NORTH
474001	0	70	70.0	0.023	NORTH	488075	120	200	80.0	0.034	NORTH
474001	80	90	10.0	0.006	NORTH	488076	0	50	50.0	0.017	NORTH
474001	100	110	10.0	0.006	NORTH	488076	70	100	30.0	0.045	NORTH
474001	150	190	40.0	0.016	NORTH	488077	0	90	90.0	0.030	NORTH
474002	0	40	40.0	0.012	NORTH	488078	10	90	80.0	0.020	NORTH
474005	10	40	30.0	0.022	NORTH	488078	110	140	30.0	0.018	NORTH
474005	240	250	10.0	0.040	NORTH	488079	20	50	30.0	0.025	NORTH
474009	20	60	40.0	0.016	NORTH	488079	60	70	10.0	0.035	NORTH
475001	0	120	120.0	0.038	NORTH	488079	90	190	100.0	0.014	NORTH
475001	160	200	40.0	0.010	NORTH	488080	20	100	80.0	0.031	NORTH
475006	0	50	50.0	0.041	NORTH	488081	10	100	90.0	0.016	NORTH
475006	70	170	100.0	0.018	NORTH	488082	10	100	90.0	0.047	NORTH
475006	180	240	60.0	0.013	NORTH	488083	0	10	10.0	0.007	NORTH
475007	20	40	20.0	0.012	NORTH	488083	20	180	160.0	0.035	NORTH
475007	60	70	10.0	0.007	NORTH	488086	50	60	10.0	0.006	NORTH
475007	130	160	30.0	0.024	NORTH	488089	0	30	30.0	0.023	NORTH
475007	230	270	40.0	0.020	NORTH	488089	60	110	50.0	0.034	NORTH
475008	10	40	30.0	0.035	NORTH	488090	0	10	10.0	0.037	NORTH
475008	50	150	100.0	0.035	NORTH	488090	80	100	20.0	0.021	NORTH
475010	110	120	10.0	0.045	NORTH	488091	70	90	20.0	0.084	NORTH
475010	150	185	35.0	0.020	NORTH	488092	30	60	30.0	0.029	NORTH
476001	0	140	140.0	0.017	NORTH	488093	20	50	30.0	0.023	NORTH
476002	10	30	20.0	0.010	NORTH	488094	40	60	20.0	0.008	NORTH
476002	60	90	30.0	0.010	NORTH	488095	10	30	20.0	0.026	NORTH
476002	140	180	40.0	0.024	NORTH	488096	0	30	30.0	0.010	NORTH
476003	0	50	50.0	0.020	NORTH	488097	0	50	50.0	0.015	NORTH
476004	0	140	140.0	0.038	NORTH	488098	50	170	120.0	0.021	NORTH
476004	170	190	20.0	0.018	NORTH	488098	190	200	10.0	0.006	NORTH

Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
476005	0	60	60.0	0.034	NORTH	488099	120	200	80.0	0.019	NORTH
476005	80	100	20.0	0.015	NORTH	488100	0	50	50.0	0.013	NORTH
476005	130	150	20.0	0.018	NORTH	488100	90	100	10.0	0.008	NORTH
476006	10	40	18.1	0.008	NORTH	488101	0	10	10.0	0.032	NORTH
476006	70	90	12.0	0.015	NORTH	488102	70	100	30.0	0.056	NORTH
476007	0	30	15.0	0.010	NORTH	488103	0	30	30.0	0.017	NORTH
476007	50	250	100.0	0.034	NORTH	488104	110	140	30.0	0.024	NORTH
476007	310	360	25.0	0.028	NORTH	488105	100	180	80.0	0.019	NORTH
476008	0	80	69.3	0.016	NORTH	488106	20	100	80.0	0.039	NORTH
476008	90	120	26.0	0.012	NORTH	488107	0	100	100.0	0.021	NORTH
476009	20	40	20.0	0.013	NORTH	488108	0	80	80.0	0.028	NORTH
476009	190	200	10.0	0.005	NORTH	488108	90	100	10.0	0.006	NORTH
476010	0	30	21.2	0.023	NORTH	488108	110	120	10.0	0.006	NORTH
476011	50	110	52.0	0.015	NORTH	488108	130	170	40.0	0.015	NORTH
476012	70	80	7.1	0.035	NORTH	488109	0	80	80.0	0.018	NORTH
478001	10	160	150.0	0.034	NORTH	488111	90	100	10.0	0.007	NORTH
478002	240	270	30.0	0.023	NORTH	488113	10	100	90.0	0.045	NORTH
478003	60	160	100.0	0.044	NORTH	488115	0	80	80.0	0.016	NORTH
478004	10	20	10.0	0.006	NORTH	488117	20	30	10.0	0.007	NORTH
478004	40	100	60.0	0.023	NORTH	488117	40	50	10.0	0.006	NORTH
478005	0	240	240.0	0.019	NORTH	488123	60	100	40.0	0.012	NORTH
478006	0	20	20.0	0.025	NORTH	488124	0	30	30.0	0.015	NORTH
478006	50	90	40.0	0.008	NORTH	488124	70	80	10.0	0.005	NORTH
478006	180	210	30.0	0.012	NORTH	488124	90	100	10.0	0.006	NORTH
478006	230	240	10.0	0.016	NORTH	488125	0	30	30.0	0.014	NORTH
478006	250	270	20.0	0.009	NORTH	488125	100	120	20.0	0.009	NORTH
478006	280	290	10.0	0.006	NORTH	488126	50	60	10.0	0.008	NORTH
478007	160	170	10.0	0.022	NORTH	488126	80	110	30.0	0.009	NORTH
478007	200	210	10.0	0.006	NORTH	488127	0	90	90.0	0.020	NORTH
478009	50	70	20.0	0.011	NORTH	488128	30	160	130.0	0.037	NORTH
478011	20	50	30.0	0.011	NORTH	488129	0	140	140.0	0.023	NORTH
478011	180	220	40.0	0.009	NORTH	488129	200	240	40.0	0.009	NORTH
478012	20	40	20.0	0.011	NORTH	488129	270	300	30.0	0.009	NORTH
478013	30	100	70.0	0.016	NORTH	488130	50	100	50.0	0.045	NORTH
478015	0	50	50.0	0.016	NORTH	488131	0	150	150.0	0.048	NORTH
478015	70	170	100.0	0.033	NORTH	488131	220	250	30.0	0.022	NORTH
478016	0	10	10.0	0.006	NORTH	488132	0	120	120.0	0.056	NORTH
480027	0	30	30.0	0.010	NORTH	488133	20	90	70.0	0.023	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
481001	130	160	30.0	0.009	NORTH	488133	100	110	10.0	0.007	NORTH
481002	0	80	80.0	0.016	NORTH	488133	120	150	30.0	0.020	NORTH
481002	110	150	40.0	0.009	NORTH	488134	0	160	160.0	0.019	NORTH
481003	20	80	60.0	0.018	NORTH	488135	0	50	50.0	0.013	NORTH
481003	100	130	30.0	0.009	NORTH	488135	120	130	10.0	0.006	NORTH
481005	50	80	30.0	0.026	NORTH	488135	140	180	40.0	0.014	NORTH
481006	30	40	10.0	0.003	NORTH	488138	0	10	7.1	0.006	NORTH
481006	50	80	30.0	0.012	NORTH	488138	90	450	254.6	0.028	NORTH
481006	140	180	40.0	0.019	NORTH	488139	0	60	42.4	0.022	NORTH
481007	10	40	30.0	0.023	NORTH	488139	80	160	56.6	0.023	NORTH
481007	60	100	40.0	0.015	NORTH	488139	170	230	42.4	0.014	NORTH
481009	70	120	50.0	0.016	NORTH	488139	260	290	21.2	0.010	NORTH
481009	130	140	10.0	0.007	NORTH	488139	470	480	7.1	0.005	NORTH
481010	60	100	40.0	0.020	NORTH	488140	0	90	90.0	0.019	NORTH
481010	110	130	20.0	0.014	NORTH	488140	120	150	30.0	0.027	NORTH
481010	170	190	20.0	0.019	NORTH	488141	0	60	60.0	0.014	NORTH
481011	120	140	20.0	0.016	NORTH	488141	100	180	80.0	0.008	NORTH
481011	180	190	10.0	0.007	NORTH	488141	210	220	10.0	0.008	NORTH
481012	30	90	60.0	0.019	NORTH	488142	0	20	14.1	0.009	NORTH
481012	100	110	10.0	0.006	NORTH	488142	50	60	7.1	0.005	NORTH
481012	180	200	20.0	0.011	NORTH	488142	140	170	21.2	0.011	NORTH
481013	30	60	30.0	0.017	NORTH	488143	10	40	21.2	0.013	NORTH
481014	30	40	10.0	0.023	NORTH	488145	0	90	90.0	0.033	NORTH
481014	120	160	40.0	0.010	NORTH	488146	0	140	140.0	0.032	NORTH
481015	10	20	10.0	0.026	NORTH	488147	10	160	150.0	0.032	NORTH
481015	50	80	30.0	0.036	NORTH	488148	0	20	20.0	0.029	NORTH
481016	50	80	30.0	0.044	NORTH	488148	60	160	100.0	0.023	NORTH
481018	0	60	60.0	0.021	NORTH	488149	0	10	10.0	0.022	NORTH
481018	160	170	10.0	0.006	NORTH	488149	30	80	50.0	0.045	NORTH
481020	0	10	10.0	0.007	NORTH	488150	0	20	20.0	0.027	NORTH
481020	90	120	30.0	0.011	NORTH	488150	100	160	60.0	0.011	NORTH
481021	170	200	30.0	0.024	NORTH	489151	0	30	30.0	0.057	NORTH
481022	0	10	10.0	0.007	NORTH	489151	40	80	40.0	0.013	NORTH
481022	20	30	10.0	0.006	NORTH	489151	90	160	70.0	0.012	NORTH
481022	70	80	10.0	0.006	NORTH	489152	0	50	50.0	0.046	NORTH
481023	20	30	10.0	0.006	NORTH	489152	70	120	50.0	0.028	NORTH
481024	0	30	30.0	0.019	NORTH	489152	140	160	20.0	0.011	NORTH
481024	50	100	50.0	0.016	NORTH	489152	180	190	10.0	0.061	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
481024	110	170	60.0	0.020	NORTH	489153	0	90	90.0	0.058	NORTH
481025	0	40	40.0	0.020	NORTH	489153	100	140	40.0	0.016	NORTH
481026	60	110	50.0	0.021	NORTH	489154	60	80	20.0	0.058	NORTH
481026	140	150	10.0	0.003	NORTH	489155	210	220	10.0	0.008	NORTH
481026	160	170	10.0	0.006	NORTH	489155	230	240	10.0	0.007	NORTH
481027	0	30	30.0	0.013	NORTH	489155	250	280	30.0	0.012	NORTH
481027	100	120	20.0	0.014	NORTH	489500	10	20	10.0	0.039	NORTH
481027	170	200	30.0	0.016	NORTH	489501	0	10	10.0	0.007	NORTH
481029	40	80	40.0	0.032	NORTH	489501	50	130	80.0	0.022	NORTH
481029	90	100	10.0	0.006	NORTH	489502	10	60	50.0	0.010	NORTH
481030	200	210	10.0	0.003	NORTH	489503	0	30	30.0	0.026	NORTH
481032	80	90	10.0	0.007	NORTH	489504	0	80	80.0	0.010	NORTH
481032	130	175	45.0	0.031	NORTH	489505	20	120	100.0	0.030	NORTH
481033	50	70	20.0	0.012	NORTH	489506	0	110	110.0	0.042	NORTH
481033	90	110	20.0	0.017	NORTH	489506	150	170	20.0	0.013	NORTH
481034	30	190	160.0	0.025	NORTH	489506	290	300	10.0	0.003	NORTH
481035	0	20	20.0	0.015	NORTH	489507	0	20	20.0	0.079	NORTH
481035	40	70	30.0	0.028	NORTH	489507	30	40	10.0	0.015	NORTH
481035	120	150	30.0	0.015	NORTH	489508	90	130	40.0	0.016	NORTH
481037	0	180	180.0	0.031	NORTH	489509	0	10	10.0	0.006	NORTH
481038	10	60	50.0	0.029	NORTH	489509	120	130	10.0	0.005	NORTH
481038	70	80	10.0	0.003	NORTH	489509	140	150	10.0	0.004	NORTH
481038	90	100	10.0	0.003	NORTH	489509	160	170	10.0	0.002	NORTH
481038	110	240	130.0	0.030	NORTH	489509	180	190	10.0	0.008	NORTH
481039	190	200	10.0	0.015	NORTH	489509	230	250	20.0	0.011	NORTH
481040	0	100	100.0	0.016	NORTH	489510	0	20	20.0	0.008	NORTH
481040	150	300	150.0	0.032	NORTH	489510	40	180	140.0	0.019	NORTH
481041	0	100	100.0	0.020	NORTH	489511	110	140	30.0	0.012	NORTH
481041	120	240	120.0	0.030	NORTH	489511	190	200	10.0	0.008	NORTH
481042	0	10	10.0	0.003	NORTH	489512	0	20	20.0	0.015	NORTH
481044	130	150	20.0	0.021	NORTH	489512	50	170	120.0	0.025	NORTH
481045	0	30	30.0	0.017	NORTH	489513	0	10	10.0	0.007	NORTH
481045	80	90	10.0	0.007	NORTH	489513	90	120	30.0	0.023	NORTH
481045	130	160	30.0	0.010	NORTH	489514	40	140	100.0	0.027	NORTH
481046	0	70	70.0	0.023	NORTH	489516	40	80	40.0	0.031	NORTH
481046	100	110	10.0	0.006	NORTH	489518	30	40	10.0	0.005	NORTH
481047	40	70	30.0	0.034	NORTH	489520	0	60	60.0	0.025	NORTH
481048	0	190	190.0	0.022	NORTH	489522	0	110	110.0	0.018	NORTH

Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
481048	240	280	40.0	0.009	NORTH	489522	290	300	10.0	0.008	NORTH
481049	0	10	10.0	0.007	NORTH	489523	0	120	120.0	0.058	NORTH
481049	20	265	245.0	0.020	NORTH	489524	0	105	105.0	0.045	NORTH
481050	90	285	195.0	0.025	NORTH	489525	0	160	160.0	0.034	NORTH
481051	10	80	70.0	0.016	NORTH	489527	0	150	150.0	0.028	NORTH
481051	140	170	30.0	0.011	NORTH	489528	0	10	10.0	0.013	NORTH
481051	210	220	10.0	0.021	NORTH	489529	0	60	60.0	0.015	NORTH
481051	340	370	30.0	0.011	NORTH	489530	0	80	80.0	0.020	NORTH
481051	390	400	10.0	0.006	NORTH	489531	30	50	20.0	0.012	NORTH
481053	10	50	40.0	0.016	NORTH	489532	10	80	70.0	0.013	NORTH
481053	130	250	120.0	0.036	NORTH	489533	10	20	10.0	0.007	NORTH
481053	280	330	50.0	0.018	NORTH	489535	40	110	70.0	0.019	NORTH
481053	360	430	70.0	0.055	NORTH	489536	20	50	30.0	0.024	NORTH
481053	460	495	35.0	0.016	NORTH	489536	60	140	80.0	0.021	NORTH
481054	0	10	10.0	0.020	NORTH	489536	150	160	10.0	0.031	NORTH
481054	40	290	250.0	0.026	NORTH	489537	0	10	10.0	0.006	NORTH
481054	300	310	10.0	0.023	NORTH	489537	40	130	90.0	0.033	NORTH
481054	340	370	30.0	0.013	NORTH	489537	140	170	30.0	0.020	NORTH
481055	10	20	10.0	0.003	NORTH	489538	20	110	90.0	0.032	NORTH
481055	30	60	30.0	0.018	NORTH	489538	140	180	40.0	0.017	NORTH
481055	80	90	10.0	0.010	NORTH	489539	0	20	20.0	0.014	NORTH
481055	100	180	80.0	0.020	NORTH	489539	40	120	80.0	0.017	NORTH
481055	230	290	60.0	0.011	NORTH	489543	230	260	30.0	0.018	NORTH
481055	330	400	70.0	0.025	NORTH	489543	310	350	40.0	0.011	NORTH
481056	0	10	10.0	0.020	NORTH	489543	390	400	10.0	0.005	NORTH
481056	30	105	75.0	0.027	NORTH	489544	320	330	7.1	0.007	NORTH
481057	0	40	40.0	0.027	NORTH	489544	340	350	7.1	0.005	NORTH
481057	50	300	250.0	0.027	NORTH	489545	230	260	21.2	0.012	NORTH
481057	310	380	70.0	0.017	NORTH	489545	270	300	21.2	0.010	NORTH
481058	90	140	50.0	0.018	NORTH	489549	10	120	110.0	0.034	NORTH
481058	150	160	10.0	0.007	NORTH	489550	50	290	240.0	0.048	NORTH
481058	200	240	40.0	0.013	NORTH	489554	160	180	20.0	0.012	NORTH
481058	250	280	30.0	0.011	NORTH	489554	250	330	80.0	0.011	NORTH
481059	40	80	40.0	0.009	NORTH	489555	170	320	106.1	0.044	NORTH
481059	90	130	40.0	0.023	NORTH	489556	250	290	40.0	0.024	NORTH
481059	170	180	10.0	0.006	NORTH	489557	160	270	77.8	0.022	NORTH
481059	190	360	170.0	0.023	NORTH	489557	300	340	28.3	0.010	NORTH
481060	20	100	80.0	0.020	NORTH	489557	350	360	7.1	0.008	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
481060	190	200	10.0	0.007	NORTH	489558	210	220	10.0	0.003	NORTH
481061	300	380	80.0	0.018	NORTH	489558	230	290	60.0	0.014	NORTH
481061	390	400	10.0	0.006	NORTH	489558	300	330	30.0	0.009	NORTH
481062	130	160	30.0	0.011	NORTH	489559	50	60	7.1	0.003	NORTH
481062	290	340	50.0	0.011	NORTH	489559	70	80	7.1	0.007	NORTH
481062	410	445	35.0	0.012	NORTH	489560	130	170	40.0	0.011	NORTH
481063	20	50	30.0	0.031	NORTH	489561	120	130	10.0	0.007	NORTH
481063	150	220	70.0	0.027	NORTH	489562	30	100	70.0	0.015	NORTH
481063	240	390	150.0	0.025	NORTH	489562	110	200	90.0	0.029	NORTH
481063	420	460	40.0	0.012	NORTH	489563	20	60	40.0	0.022	NORTH
481064	150	180	30.0	0.018	NORTH	489563	70	110	40.0	0.008	NORTH
481064	210	280	70.0	0.016	NORTH	489563	130	140	10.0	0.024	NORTH
481064	310	395	85.0	0.026	NORTH	489564	20	130	110.0	0.019	NORTH
481065	30	285	255.0	0.026	NORTH	489564	140	150	10.0	0.007	NORTH
481066	50	100	50.0	0.012	NORTH	489566	190	200	10.0	0.006	NORTH
481066	130	150	20.0	0.023	NORTH	489567	40	110	70.0	0.035	NORTH
481066	220	260	40.0	0.016	NORTH	489568	90	120	30.0	0.016	NORTH
481066	280	360	80.0	0.029	NORTH	489569	210	230	20.0	0.018	NORTH
481066	370	490	120.0	0.035	NORTH	489569	250	280	30.0	0.029	NORTH
481067	70	380	310.0	0.026	NORTH	489570	180	260	80.0	0.067	NORTH
481067	390	400	10.0	0.006	NORTH	489571	110	190	80.0	0.047	NORTH
481068	410	440	30.0	0.013	NORTH	489572	70	130	60.0	0.024	NORTH
481069	10	30	20.0	0.015	NORTH	489573	80	90	10.0	0.005	NORTH
481069	80	230	150.0	0.023	NORTH	489573	100	150	50.0	0.019	NORTH
481070	180	200	20.0	0.020	NORTH	489574	0	10	10.0	0.006	NORTH
481070	220	270	50.0	0.013	NORTH	489574	40	90	50.0	0.021	NORTH
481070	380	460	80.0	0.011	NORTH	489574	100	150	50.0	0.018	NORTH
481071	0	40	40.0	0.020	NORTH	489575	20	30	10.0	0.005	NORTH
481071	50	300	250.0	0.033	NORTH	489575	70	160	90.0	0.023	NORTH
481072	360	420	60.0	0.024	NORTH	489576	220	260	40.0	0.013	NORTH
481073	0	210	210.0	0.013	NORTH	489577	0	20	20.0	0.032	NORTH
481075	10	20	10.0	0.006	NORTH	489577	50	80	30.0	0.021	NORTH
481079	0	100	100.0	0.017	NORTH	489578	10	80	70.0	0.025	NORTH
481079	160	170	10.0	0.006	NORTH	489579	10	40	30.0	0.014	NORTH
481079	180	230	50.0	0.011	NORTH	489581	0	180	155.9	0.034	NORTH
481079	250	300	50.0	0.017	NORTH	489582	0	190	190.0	0.052	NORTH
481080	50	160	110.0	0.022	NORTH	489583	0	90	90.0	0.035	NORTH
481080	240	270	30.0	0.015	NORTH	489583	100	150	50.0	0.033	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
481080	320	330	10.0	0.006	NORTH	489584	0	200	200.0	0.038	NORTH
481080	390	430	40.0	0.018	NORTH	489585	150	210	60.0	0.011	NORTH
481081	50	130	80.0	0.014	NORTH	489586	0	10	10.0	0.033	NORTH
481081	170	190	20.0	0.019	NORTH	489586	30	190	160.0	0.040	NORTH
484239	10	100	90.0	0.013	NORTH	489587	40	140	100.0	0.022	NORTH
484240	0	20	20.0	0.017	NORTH	489588	0	100	100.0	0.017	NORTH
484241	0	50	50.0	0.011	NORTH	489588	110	120	10.0	0.008	NORTH
484241	60	70	10.0	0.006	NORTH	489589	10	110	100.0	0.033	NORTH
484241	90	110	20.0	0.026	NORTH	489592	0	80	80.0	0.042	NORTH
486891	10	50	40.0	0.035	NORTH	489592	90	110	20.0	0.015	NORTH
486892	0	60	60.0	0.022	NORTH	489594	0	50	50.0	0.043	NORTH
486893	0	80	80.0	0.026	NORTH	489596	0	10	10.0	0.007	NORTH
486894	0	10	10.0	0.007	NORTH	489597	30	60	30.0	0.031	NORTH
486894	40	60	20.0	0.019	NORTH	489600	0	20	20.0	0.028	NORTH
486895	0	30	30.0	0.011	NORTH	489601	0	20	20.0	0.013	NORTH
486895	50	60	10.0	0.007	NORTH	489601	70	120	50.0	0.026	NORTH
486896	0	90	90.0	0.015	NORTH	489602	10	20	10.0	0.004	NORTH
486897	0	70	70.0	0.011	NORTH	489602	30	40	10.0	0.007	NORTH
486897	80	90	10.0	0.008	NORTH	489603	60	100	40.0	0.024	NORTH
486898	10	70	60.0	0.017	NORTH	489604	10	70	60.0	0.021	NORTH
486899	0	40	40.0	0.022	NORTH	489605	60	70	10.0	0.004	NORTH
486899	50	70	20.0	0.014	NORTH	489606	50	70	20.0	0.017	NORTH
486900	0	40	40.0	0.024	NORTH	489607	0	10	10.0	0.006	NORTH
486901	50	80	30.0	0.041	NORTH	489607	20	60	40.0	0.027	NORTH
486902	0	90	90.0	0.041	NORTH	489608	30	50	20.0	0.033	NORTH
486903	20	100	80.0	0.030	NORTH	489608	60	80	20.0	0.009	NORTH
486904	0	60	60.0	0.031	NORTH	495001	50	70	20.0	0.013	NORTH
486905	0	40	40.0	0.023	NORTH	495001	100	170	70.0	0.024	NORTH
486906	10	70	60.0	0.036	NORTH	495001	210	290	80.0	0.018	NORTH
486907	0	50	50.0	0.027	NORTH	495001	350	410	60.0	0.081	NORTH
486908	0	50	50.0	0.020	NORTH	495001	420	449	29.0	0.011	NORTH
486909	0	40	40.0	0.032	NORTH	495002	30	40	10.0	0.006	NORTH
486910	0	30	30.0	0.022	NORTH	495002	60	80	20.0	0.011	NORTH
486910	50	80	30.0	0.014	NORTH	495002	90	140	50.0	0.022	NORTH
486911	0	70	70.0	0.030	NORTH	495002	220	340	120.0	0.035	NORTH
486913	30	40	10.0	0.004	NORTH	495002	380	420	40.0	0.055	NORTH
486914	10	30	20.0	0.020	NORTH	495002	430	560	130.0	0.027	NORTH
486915	10	50	40.0	0.066	NORTH	495002	570	620	50.0	0.010	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
486916	10	20	10.0	0.008	NORTH	495002	630	650	20.0	0.020	NORTH
486918	0	50	50.0	0.029	NORTH	495002	680	700	20.0	0.015	NORTH
486918	60	70	10.0	0.002	NORTH	495002	770	780	10.0	0.005	NORTH
486918	80	90	10.0	0.007	NORTH	495002	790	800	10.0	0.005	NORTH
486919	30	80	50.0	0.069	NORTH	497001	0	150	106.1	0.043	NORTH
486920	0	20	20.0	0.023	NORTH	497003	120	130	7.1	0.007	NORTH
486920	40	50	10.0	0.014	NORTH	497004	90	110	14.1	0.053	NORTH
486921	0	40	40.0	0.020	NORTH	497008	0	20	14.1	0.010	NORTH
486922	40	50	10.0	0.004	NORTH	497008	150	170	14.1	0.018	NORTH
486923	0	20	20.0	0.020	NORTH	497008	220	260	28.3	0.013	NORTH
486924	0	20	20.0	0.011	NORTH	497010	30	60	21.2	0.016	NORTH
486926	0	50	50.0	0.051	NORTH	497011	60	100	40.0	0.016	NORTH
486927	0	50	50.0	0.041	NORTH	497013	40	80	40.0	0.010	NORTH
486928	0	80	80.0	0.029	NORTH	497013	90	100	10.0	0.012	NORTH
486928	90	100	10.0	0.008	NORTH	497014	0	20	14.1	0.021	NORTH
486929	0	30	30.0	0.025	NORTH	497014	30	40	7.1	0.021	NORTH
486929	40	100	60.0	0.015	NORTH	497014	60	70	7.1	0.025	NORTH
486930	0	60	60.0	0.014	NORTH	497016	50	60	7.1	0.005	NORTH
486931	0	30	30.0	0.015	NORTH	497020	120	130	8.7	0.007	NORTH
486932	0	60	60.0	0.019	NORTH	497020	190	200	8.7	0.005	NORTH
486933	0	30	30.0	0.018	NORTH	497021	0	20	17.3	0.015	NORTH
486934	0	50	50.0	0.030	NORTH	497021	80	130	43.3	0.010	NORTH
486935	0	20	20.0	0.019	NORTH	497022	40	100	52.0	0.021	NORTH
486936	0	80	80.0	0.013	NORTH	497022	130	150	17.3	0.019	NORTH
486937	0	10	10.0	0.005	NORTH	497022	190	200	8.7	0.007	NORTH
486937	40	50	10.0	0.006	NORTH	497022	210	220	8.7	0.007	NORTH
486937	90	100	10.0	0.006	NORTH	497023	10	120	95.3	0.030	NORTH
486938	10	40	30.0	0.015	NORTH	475005A	10	20	10.0	0.008	NORTH
486938	90	100	10.0	0.009	NORTH	488114C	260	310	50.0	0.013	NORTH
486939	0	40	40.0	0.016	NORTH	488114C	360	410	50.0	0.015	NORTH
486939	70	100	30.0	0.007	NORTH	488114C	470	480	10.0	0.006	NORTH
486940	0	30	30.0	0.021	NORTH	491004C	120	150	30.0	0.017	NORTH
486940	50	80	30.0	0.019	NORTH	491004C	210	240	30.0	0.012	NORTH
486943	0	20	15.3	0.014	NORTH	491012R	50	70	20.0	0.010	NORTH
486944	0	30	23.0	0.022	NORTH	491056R	10	20	10.0	0.006	NORTH
486945	0	50	38.3	0.022	NORTH	491058R	290	300	10.0	0.007	NORTH
486945	60	90	23.0	0.015	NORTH	491067R	240	260	20.0	0.010	NORTH
486947	0	20	15.3	0.029	NORTH	491067R	290	320	30.0	0.040	NORTH

Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
486947	50	70	15.3	0.019	NORTH	491069R	0	40	30.6	0.027	NORTH
486948	80	90	7.7	0.024	NORTH	491069R	80	90	7.7	0.007	NORTH
486949	0	10	7.7	0.002	NORTH	491069R	180	230	38.3	0.014	NORTH
486949	20	30	7.7	0.008	NORTH	491069R	260	270	7.7	0.002	NORTH
487001	10	30	20.0	0.016	NORTH	491070R	690	710	14.1	0.010	NORTH
487002	20	100	80.0	0.022	NORTH	491071R	110	130	20.0	0.016	NORTH
487003	0	10	10.0	0.005	NORTH	491071R	160	180	20.0	0.016	NORTH
487003	40	50	10.0	0.006	NORTH	491071R	230	240	10.0	0.007	NORTH
487005	40	50	10.0	0.008	NORTH	MT-1	30	190	160.0	0.018	NORTH
487006	30	100	70.0	0.035	NORTH	MT-10	0	50	50.0	0.020	NORTH
487008	20	40	20.0	0.014	NORTH	MT-10	100	130	30.0	0.019	NORTH
487009	0	50	50.0	0.020	NORTH	MT-2	40	50	10.0	0.062	NORTH
487010	0	60	60.0	0.041	NORTH	MT-2	100	260	160.0	0.046	NORTH
487011	20	100	80.0	0.017	NORTH	MT-3	0	140	140.0	0.046	NORTH
487012	20	100	80.0	0.011	NORTH	MT-4	0	150	150.0	0.038	NORTH
487013	60	90	30.0	0.013	NORTH	MT-5	0	50	50.0	0.011	NORTH
487016	0	20	20.0	0.041	NORTH	MT-5	60	70	10.0	0.006	NORTH
487016	60	100	40.0	0.012	NORTH	MT-5	120	190	70.0	0.029	NORTH
487017	0	80	80.0	0.030	NORTH	MT-6	0	80	80.0	0.019	NORTH
487018	60	100	40.0	0.021	NORTH	MT-6	90	140	50.0	0.019	NORTH
487019	60	100	40.0	0.018	NORTH	MT-6	160	170	10.0	0.003	NORTH
487022	60	100	40.0	0.041	NORTH	MT-7	0	60	60.0	0.025	NORTH
487023	0	100	100.0	0.022	NORTH	MT-7	170	180	10.0	0.072	NORTH
487024	0	10	10.0	0.020	NORTH	MT-8	0	50	50.0	0.035	NORTH
487024	80	100	20.0	0.047	NORTH	MT-8	90	110	20.0	0.012	NORTH
487025	20	100	80.0	0.030	NORTH	MT-8	190	200	10.0	0.006	NORTH
487026	30	100	70.0	0.025	NORTH	MT-9	70	100	30.0	0.064	NORTH
487027	40	100	60.0	0.018	NORTH	R-03-TH1	150	160	10.0	0.005	NORTH
487028	0	20	20.0	0.010	NORTH	R-03-TH1	340	350	10.0	0.005	NORTH
487028	30	80	50.0	0.013	NORTH	R-03-TH2	0	240	240.0	0.045	NORTH
487028	90	130	40.0	0.011	NORTH	R-03-TH3	10	120	110.0	0.025	NORTH
487029	0	30	30.0	0.023	NORTH	R-03-TH3	150	240	90.0	0.032	NORTH
487029	80	90	10.0	0.020	NORTH	R-03-TH4	50	90	40.0	0.018	NORTH
487030	0	90	90.0	0.026	NORTH	R-03-TH4	150	160	10.0	0.006	NORTH
487031	50	100	50.0	0.017	NORTH	R-03-TH4	190	200	10.0	0.006	NORTH
487033	0	10	10.0	0.031	NORTH	R-03-TH5	0	30	30.0	0.015	NORTH
487034	10	30	20.0	0.019	NORTH	R-03-TH5	60	70	10.0	0.007	NORTH
487035	0	80	80.0	0.060	NORTH	R-03-TH5	80	90	10.0	0.005	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
487036	40	110	70.0	0.017	NORTH	R-03-TH5	160	180	20.0	0.014	NORTH
487037	0	70	70.0	0.043	NORTH	TS06C-01	110	130	20.0	0.014	NORTH
487037	90	120	30.0	0.015	NORTH	TS06C-01	190	410	220.0	0.041	NORTH
487038	60	100	40.0	0.050	NORTH	TS06C-01	430	470	40.0	0.031	NORTH
487039	40	60	20.0	0.066	NORTH	TS06C-01	610	620	10.0	0.008	NORTH
487040	40	70	30.0	0.026	NORTH	TS06C-04	540	550	9.7	0.007	NORTH
487041	10	30	20.0	0.013	NORTH	TS06C-04	720	730	9.7	0.006	NORTH
487042	150	160	10.0	0.046	NORTH	TS06C-04	740	770	29.2	0.036	NORTH
487045	0	30	30.0	0.014	NORTH	TS06C-21	40	50	9.4	0.007	NORTH
487045	130	150	20.0	0.013	NORTH	TS06C-21	60	70	9.4	0.005	NORTH
487047	10	50	40.0	0.014	NORTH	TS06C-21	240	270	28.3	0.018	NORTH
487052	50	60	10.0	0.008	NORTH	TS06C-21	340	380	37.8	0.010	NORTH
487055	10	20	10.0	0.006	NORTH	TS06C-21	400	480	75.8	0.022	NORTH
487055	90	110	20.0	0.051	NORTH	TS06C-26	150	180	22.1	0.011	NORTH
487057	20	100	80.0	0.038	NORTH	TS06C-26	260	270	7.4	0.008	NORTH
487058	0	80	80.0	0.017	NORTH	TS06C-26	480	530	38.2	0.020	NORTH
487058	90	100	10.0	0.007	NORTH	TS06C-26	690	700	7.7	0.002	NORTH
487059	0	50	50.0	0.034	NORTH	TS06C-29	290	350	49.9	0.040	NORTH
487059	60	70	10.0	0.005	NORTH	TS06C-29	450	520	58.5	0.021	NORTH
487059	80	90	10.0	0.007	NORTH	TS06C-29	560	580	16.8	0.030	NORTH
487060	0	70	70.0	0.024	NORTH	TS06C-40	60	90	28.2	0.035	NORTH
487062	50	100	50.0	0.036	NORTH	TS06C-43	20	30	8.7	0.005	NORTH
487063	0	10	10.0	0.006	NORTH	TS06C-43	40	80	34.6	0.016	NORTH
487063	20	30	10.0	0.007	NORTH	TS06C-43	350	360	8.7	0.027	NORTH
487064	0	10	10.0	0.008	NORTH	TS06C-48	0	10	9.9	0.007	NORTH
487064	30	90	60.0	0.026	NORTH	TS06C-48	40	60	19.7	0.024	NORTH
487065	0	110	110.0	0.024	NORTH	TS06C-48	110	120	9.9	0.006	NORTH
487066	0	20	20.0	0.016	NORTH	TS06C-49	10	20	7.2	0.005	NORTH
487068	0	50	50.0	0.009	NORTH	TS06C-49	270	310	30.4	0.009	NORTH
487069	70	100	30.0	0.017	NORTH	TS06PC-13	120	180	60.0	0.010	NORTH
487070	60	70	10.0	0.008	NORTH	TS06R-01B	0	30	30.0	0.008	NORTH
487071	10	100	90.0	0.014	NORTH	TS06R-01B	120	130	10.0	0.006	NORTH
487072	40	60	20.0	0.024	NORTH	TS06R-01B	220	230	10.0	0.007	NORTH
487072	70	100	30.0	0.026	NORTH	TS06R-01B	250	380	130.0	0.025	NORTH
487073	20	30	10.0	0.005	NORTH	TS06R-01B	470	530	60.0	0.011	NORTH
487073	40	90	50.0	0.010	NORTH	TS06R-01B	560	580	20.0	0.039	NORTH
487074	0	40	40.0	0.011	NORTH	TS06R-02	130	140	8.2	0.006	NORTH
487075	0	50	50.0	0.017	NORTH	TS06R-02	680	690	8.2	0.030	NORTH

Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
487076	10	110	100.0	0.018	NORTH	TS06R-05	460	500	33.8	0.014	NORTH
487077	0	60	60.0	0.024	NORTH	TS06R-05	520	550	25.4	0.015	NORTH
487077	80	90	10.0	0.006	NORTH	TS06R-05	590	720	112.7	0.026	NORTH
487078	0	40	40.0	0.012	NORTH	TS06R-05	760	800	35.2	0.016	NORTH
487079	40	50	10.0	0.008	NORTH	TS06R-06	140	150	9.4	0.008	NORTH
487080	20	60	40.0	0.024	NORTH	TS06R-06	220	260	37.6	0.015	NORTH
487080	70	80	10.0	0.007	NORTH	TS06R-06	370	430	56.4	0.013	NORTH
487080	90	100	10.0	0.007	NORTH	TS06R-14	240	260	17.8	0.007	NORTH
487081	80	100	20.0	0.018	NORTH	TS06R-14	270	340	63.3	0.009	NORTH
487082	50	90	40.0	0.014	NORTH	TS06R-14	420	450	27.8	0.013	NORTH
487083	10	70	60.0	0.010	NORTH	TS06R-27	0	10	8.1	0.007	NORTH
487084	20	50	30.0	0.011	NORTH	TS06R-27	20	30	8.1	0.007	NORTH
487084	80	100	20.0	0.024	NORTH	TS06R-27	50	100	40.9	0.032	NORTH
487085	50	100	50.0	0.025	NORTH	TS06R-27	120	200	67.6	0.018	NORTH
487086	0	110	110.0	0.043	NORTH	TS06R-27	270	330	54.3	0.045	NORTH
487087	0	100	100.0	0.015	NORTH	TS06R-27	360	370	9.2	0.021	NORTH
487088	0	35	35.0	0.012	NORTH	TS06R-27	410	520	104.6	0.022	NORTH
487089	30	50	20.0	0.023	NORTH	TS06R-30	0	160	121.0	0.035	NORTH
487089	60	80	20.0	0.026	NORTH	TS06R-30	170	180	7.9	0.006	NORTH
487090	10	20	10.0	0.008	NORTH	TS06R-30	250	270	16.4	0.013	NORTH
487090	30	100	70.0	0.011	NORTH	TS06R-30	300	380	67.6	0.034	NORTH
487091	40	100	60.0	0.021	NORTH	TS06R-30	480	500	17.3	0.044	NORTH
487092	0	20	20.0	0.008	NORTH	TS06R-30	650	660	9.0	0.005	NORTH
487092	30	50	20.0	0.010	NORTH	TS06R-38	40	80	29.5	0.017	NORTH
487093	30	100	70.0	0.020	NORTH	TS06R-38	150	180	22.5	0.022	NORTH
487094	10	20	10.0	0.008	NORTH	TS06R-38	190	230	30.2	0.010	NORTH
487094	80	100	20.0	0.023	NORTH	TS06R-38	260	320	46.9	0.014	NORTH
487095	0	10	10.0	0.008	NORTH	TS06R-38	480	510	26.1	0.022	NORTH
487097	20	50	30.0	0.019	NORTH	TS06R-38	530	540	8.8	0.024	NORTH
487098	0	40	40.0	0.019	NORTH	TS06R-38	640	670	27.4	0.013	NORTH
487098	50	100	50.0	0.016	NORTH	TS06R-46	30	50	17.3	0.016	NORTH
487100	0	100	100.0	0.019	NORTH	TS06R-46	60	80	17.3	0.006	NORTH
487101	0	10	10.0	0.006	NORTH	TS06R-46	90	130	34.6	0.009	NORTH
487102	10	30	20.0	0.008	NORTH	TS06R-46	160	190	26.0	0.017	NORTH
487103	0	20	20.0	0.018	NORTH	TS06R-46	360	380	17.3	0.015	NORTH
487103	40	90	50.0	0.016	NORTH	TS07C-50	30	70	34.6	0.021	NORTH
487104	70	100	30.0	0.012	NORTH	TS07C-50	210	220	8.7	0.005	NORTH
487105	0	100	100.0	0.029	NORTH	TS107	30	40	6.9	0.028	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
487106	0	70	70.0	0.018	NORTH	TS109	10	160	113.7	0.026	NORTH
487107	30	100	70.0	0.017	NORTH	TS109	200	230	22.8	0.033	NORTH
487108	0	20	20.0	0.011	NORTH	TS109	240	260	15.2	0.013	NORTH
487108	60	100	40.0	0.023	NORTH	TS109	690	700	7.7	0.007	NORTH
487109	0	20	20.0	0.013	NORTH	TS109	710	720	7.7	0.005	NORTH
487109	40	50	10.0	0.006	NORTH	TS114	0	70	60.3	0.053	NORTH
487109	60	100	40.0	0.016	NORTH	TS114	170	230	52.0	0.017	NORTH
487112	20	30	10.0	0.036	NORTH	TS114	240	250	8.7	0.007	NORTH
487115	60	120	60.0	0.020	NORTH	TS114	260	320	52.4	0.016	NORTH
487116	40	70	30.0	0.025	NORTH	TS115	200	230	26.8	0.012	NORTH
487116	90	110	20.0	0.014	NORTH	TS115	360	520	142.7	0.015	NORTH
487117	0	20	20.0	0.011	NORTH	TS116	290	330	30.9	0.025	NORTH
487118	90	130	40.0	0.016	NORTH	TS116	360	390	23.2	0.012	NORTH
487122	120	130	10.0	0.008	NORTH	TS116	400	430	23.2	0.022	NORTH
487126	20	40	20.0	0.041	NORTH	TS117	0	10	7.0	0.026	NORTH
488002	10	50	40.0	0.011	NORTH	TS117	510	540	21.6	0.031	NORTH
488004	20	40	20.0	0.015	NORTH	TS117	550	560	7.2	0.007	NORTH
488006	30	70	40.0	0.116	NORTH	TS117	590	600	7.2	0.005	NORTH
488007	40	50	10.0	0.008	NORTH	TS119	470	490	16.4	0.020	NORTH
488007	70	100	30.0	0.042	NORTH	TS123	620	680	46.7	0.023	NORTH
488009	60	90	30.0	0.048	NORTH	TS123	740	815	59.0	0.028	NORTH
488010	50	100	50.0	0.044	NORTH	TS131	60	70	7.7	0.007	NORTH
488011	0	10	10.0	0.008	NORTH	TS131	230	260	23.3	0.008	NORTH
488011	20	30	10.0	0.022	NORTH	TS131	400	420	16.0	0.016	NORTH
488011	60	70	10.0	0.008	NORTH	TS136	110	120	9.9	0.005	NORTH
488011	80	100	20.0	0.019	NORTH	TS136	130	170	39.7	0.008	NORTH
488012	30	70	40.0	0.043	NORTH	TS136	180	190	9.9	0.007	NORTH
488012	90	100	10.0	0.007	NORTH	TS136	250	290	39.8	0.015	NORTH
488013	0	20	20.0	0.016	NORTH	TS136	390	450	59.7	0.024	NORTH
488013	90	100	10.0	0.071	NORTH	TS136	480	510	29.9	0.023	NORTH
488015	10	60	50.0	0.030	NORTH	TS136	670	680	9.9	0.005	NORTH
488017	20	50	30.0	0.024	NORTH	TS61	340	480	133.5	0.028	NORTH
488017	70	100	30.0	0.011	NORTH	TS61	510	540	28.7	0.014	NORTH
488018	70	90	20.0	0.018	NORTH	TS62	160	170	8.1	0.022	NORTH
488019	0	50	50.0	0.028	NORTH	TS62	200	220	16.3	0.017	NORTH
488019	80	100	20.0	0.014	NORTH	TS67	200	210	9.9	0.025	NORTH
488020	0	50	50.0	0.026	NORTH	TS67	240	280	39.5	0.019	NORTH
488020	80	100	20.0	0.009	NORTH	TS67	320	330	9.9	0.007	NORTH



Hole	From	То	Length	Grade	Zone	Hole	From	То	Length	Grade	Zone
488021	0	60	60.0	0.025	NORTH	TS67	420	470	49.0	0.009	NORTH
488021	90	100	10.0	0.054	NORTH	TS67	500	510	9.7	0.005	NORTH
488022	0	20	20.0	0.023	NORTH	TS67	580	610	29.2	0.009	NORTH
488022	50	80	30.0	0.058	NORTH	TS69	10	20	7.6	0.033	NORTH
488023	20	60	40.0	0.013	NORTH	TS69	160	190	24.2	0.023	NORTH
488024	0	20	20.0	0.008	NORTH	TS72	0	10	7.5	0.022	NORTH
488024	30	80	50.0	0.009	NORTH	TS72	910	920	8.6	0.005	NORTH
488027	200	240	40.0	0.021	NORTH	TS74	0	20	14.3	0.033	NORTH
488028	10	20	10.0	0.005	NORTH	TS75	30	80	46.7	0.015	NORTH
488028	50	60	10.0	0.003	NORTH	TS75	100	110	9.3	0.007	NORTH
488028	70	80	10.0	0.004	NORTH	TS75	410	430	18.8	0.058	NORTH
488029	0	50	50.0	0.013	NORTH	TS84	450	490	34.2	0.014	NORTH
488030	0	30	30.0	0.068	NORTH	TS87	360	590	164.7	0.032	NORTH
488031	10	20	10.0	0.006	NORTH	TS87	600	660	43.3	0.030	NORTH
488031	30	50	20.0	0.118	NORTH	TS94	0	90	84.3	0.018	NORTH
488032	30	80	50.0	0.022	NORTH	TS94	110	140	28.0	0.038	NORTH
488032	90	100	10.0	0.006	NORTH	TS94	170	180	9.3	0.007	NORTH
488033	0	30	30.0	0.049	NORTH	TS94	230	240	9.3	0.008	NORTH
488033	80	100	20.0	0.032	NORTH	TS94	250	300	46.7	0.023	NORTH
488034	0	20	20.0	0.008	NORTH	TS96	170	220	47.9	0.017	NORTH



Appendix F Variogram Models

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.250000 C1 ==> 0.750000

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis $=> 31$		
RH Rotation about the X' axis $=> 0$		
LH Rotation about the Y' axis $==> 0$		
Range along the Z' axis $=> 12.2$	Azimuth $==>90$	Dip ==> 90
Range along the Y' axis $=> 54.4$	Azimuth $=> 31$	Dip ==> 0
Range along the X' axis $=> 21.7$	Azimuth $= > 121$	Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 200 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:

60 Units

















Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.250000 C1 ==> 0.750000

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis $=> -14$		
RH Rotation about the X' axis $=> 0$		
LH Rotation about the Y' axis $=> 0$		
Range along the Z' axis $=> 12.2$	Azimuth $==>90$	Dip ==> 90
Range along the Y' axis $=> 56.7$	Azimuth $==>346$	Dip ==> 0
Range along the X' axis $=> 22.8$	Azimuth $==>76$	Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 200 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:











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Medsystem and Vulcan Rotation Conventions

Nugget => 0.250000C1 => 0.500126C2 => 0.249874

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis => -13RH Rotation about the X' axis => 0LH Rotation about the Y' axis => 0Range along the Z' axis => 7.9Range along the Y' axis => 12.7Range along the X' axis => 25.6Azimuth => 77Dip ==> 0

Second Structure -- Exponential with Traditional Range

LH Rotation about the Z axis => -13RH Rotation about the X' axis => 0LH Rotation about the Y' axis => 0Range along the Z axis => 13.9Range along the X' axis => 41.7Range along the Y' axis => 251.0Azimuth ==> 347 Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 200 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:

30 Units





Structure Number 2

Rose Diagram of Ranges Dipping -0 Degrees Scale:

300 Units






TSP1 Main - No Log - Correlogram - AuFA>0.002





Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.20000 C1 ==> 0.80000

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis $=> 31$		
RH Rotation about the X' axis $=> 0$		
LH Rotation about the Y' axis $=> 0$		
Range along the Z' axis $=> 14.8$	Azimuth $==>90$	Dip ==> 90
Range along the Y' axis $= 50.1$	Azimuth $=> 31$	Dip ==> 0
Range along the X' axis $= > 98.4$	Azimuth $=> 121$	Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 150 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:





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Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.20000 C1 ==> 0.80000

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis $=> 34$		
RH Rotation about the X' axis $=> 0$		
LH Rotation about the Y' axis $=> 0$		
Range along the Z' axis $=> 10.1$	Azimuth $==>90$	Dip ==> 90
Range along the Y' axis $=> 20.0$	Azimuth $=> 34$	Dip ==> 0
Range along the X' axis $=> 70.0$	Azimuth $==> 124$	Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 75 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:











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Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.15000 C1 ==> 0.49578 C2 ==> 0.35422

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis => -54RH Rotation about the X' axis => 0LH Rotation about the Y' axis => 0Range along the Z' axis => 30.0Range along the Y' axis => 30.0Range along the X' axis => 30.0Range along the X' axis => 30.0Azimuth ==> 306 Dip ==> 0Azimuth ==> 306 Dip ==> 0

Second Structure -- Exponential with Traditional Range

LH Rotation about the Z axis => -54RH Rotation about the X' axis => 0LH Rotation about the Y' axis => 0Range along the Z axis => 167.6Range along the X' axis => 396.8Range along the Y' axis => 216.5Azimuth ==> 306 Dip ==> 0Azimuth ==> 306 Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 500 Sample variogram points weighted by # pairs





Structure Number 2

Rose Diagram of Ranges Dipping -0 Degrees Scale:







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Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.40000 C1 ==> 0.40000 C2 ==> 0.20000

First Structure -- Exponential with Traditional Range

LH Rotation about the Z axis => -31RH Rotation about the X' axis => 0LH Rotation about the Y' axis => 0Range along the Z' axis => 20.0Range along the Y' axis => 50.0Range along the X' axis => 20.0Range along the X' axis => 20.0

Second Structure -- Exponential with Traditional Range

LH Rotation about the Z axis ==> -31 RH Rotation about the X' axis ==> 0 LH Rotation about the Y' axis ==> 0 Range along the Z axis ==> 35.0 Range along the X' axis ==> 200.7 Range along the Y' axis ==> 30.7 Azimuth ==> 59 Dip ==> 0 Azimuth ==> 329 Dip ==> 0

Modeling Criteria

Minimum number pairs req'd ==> 300 Sample variogram points weighted by # pairs

Structure Number 1

Rose Diagram of Ranges Dipping -0 Degrees Scale:



Structure Number 2

Rose Diagram of Ranges Dipping -0 Degrees Scale:







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