KAYSERİ HİMMETDEDE BÖLGESİNDE YIĞIN LİÇİ (HEAP LEACH) YÖNTEMİ KULLANILARAK GERÇEKLEŞTİRİLECEK OLAN "HİMMETDEDE ALTIN MADENİ TESİSİ YAPIM PROJESİ BEDELİ"NE İLİŞKİN DEĞERLEME RAPORU

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Koza Altın İşletmeleri Anonim Şirketi
Yönetim Kurulu'na

Sermaye Piyasası Kurulu'nun "Sermaye Piyasası Kanunu'na Tabi Olan Anonim Ortaklıkların Uyacakları Esaslar Hakkında Seri: IV No: 41 sayılı Tebliğ uyarınca, Sermaye Piyasasında Uluslar arası Değerleme Standartları hakkında Seri:VIII No:45 Tebliğ ve bu Tebliğ'de değişiklik yapan Seri:VIII No:48 sayılı Tebliğ'de belirtilen standartlar uyarınca Koza Altın İşletmeleri Anonim Şirketi'nin "Himmetdede bölgesinde yapılacak olan ve Yığın Liçi yöntemi ile çalışacak altın tesisine" ilişkin Proje Bedeli Değerleme raporu ekte bilgilerinize sunulmuştur.

Proje'nin adil ve makul bedelinin değerlemesinde "Emsal Karşılaştırma Yaklaşımı" esas alınmıştır. Bu yaklaşımı desteklemek üzere, konuyla ilgili bağımsız uzman kuruluşlarca hazırlanan raporlara dayanılarak Şirket tarafından yapılan çalışmalara başvurulmuştur.

Yukarıda bahsedilen değerleme standartları esas alınmak suretiyle yapılan değerleme çalışmasında, Proje bedelinin 130.500.000 ABD Doları ile 143.000.000 ABD Doları arasında olmasının adil ve makul olduğu sonucuna ulaşılmıştır.

Saygılarımızla,

İstanbul,
10 Ağustos 2012

Denet Bağımsız Denetim
Yeminli Mali Müşavirlik A.Ş.

Haluk KAPTANOĞLU
Sorumlu Ortak Baş Denetçi

1. ÖZET

Koza Altın İşletmeleri Anonim Şirketi (Koza Altın), Kayseri Himmetdede bölgesinde Yığın Liçi yöntemiyle çalışacak altın tesisi (Proje) yaptırmaya karar vermiştir.

İK Akademi İnşaat Proje ve Taahhüt Anonim Şirketi (İK Akademi), Proje'ye ilişkin olarak Koza Altın tarafından yapılan ihalenin katılımcılarından biri konumundadır.

Koza Altın, söz konusu Proje'yi, İK Akademi'ye bir bedel karşılığında yaptırmayı düşünmektedir.

İK Akademi, Türkiye Muhasebe Standartları (TMS) ve Uluslararası Muhasebe Standartları (UMS) uyarınca Koza Altın'ın ilişkili kişisi konumundadır.

Bu kapsamda olmak üzere, Sermaye Piyasası Kurulu'nun "Sermaye Piyasası Kanunu'na Tabi Olan Anonim Ortaklıkların Uyacakları Esaslar Hakkında Seri: IV No: 41 sayılı Tebliğ uyarınca, Sermaye Piyasasında Uluslar arası Değerleme Standartları hakkında Seri: VIII No:45 Tebliğ ve bu Tebliğ'de değişiklik yapan Seri:VIII No:48 sayılı Tebliğ'de belirtilen standartlar uyarınca Proje Bedeli Değerleme çalışmaları tarafımızdan yapılmış olup, bu çalışmada kullanılan yöntem ve çalışma neticelerine ilişkin özet bilgiler aşağıda yer almaktadır.

Değerlemeye konu olan Proje, Yığın Liçi yöntemiyle çalışacak altın tesisi projesidir. İşin niteliği, anahtar teslimi esasına göre; tesisin uygulama ve detay mühendislik projeleri, kırma-eleme, boyut sınıflandırma, yığın liçi ve çözeltiden altın/gümüş külçe üretimi ile bu ünitelere hizmet verecek tüm altyapıyı kapsamaktadır. Yığın Liçi yöntemi, geçirimsiz bir zemin üzerinde hazırlanan bir yığın üzerine uygun bir çözücü gönderilerek (yağmurlama, boru ağı vb. sistemlerle) kazanılması düşünülen bileşeni çözeltiye alma işlemidir. Bu Proje'nin gerçekleştirileceği alan, İç Anadolu Bölgesi'nde Kayseri'nin kuzeybatısına 35 km uzaklıkta, D260 yolu boyunca uzanan Himmetdede Köyü'nün bitişiğinde yer almakta olup, Proje kapsamındaki tesisin yıllık ortalama 6.000.000 ton cevher işleme kapasitesinde olması beklenmektedir.

Proje'nin özellikleri nedeniyle değerleme çalışmasında, emsal karşılaştırma yöntemi'nin uygun sonuç vereceği düşünülmüştür. Ancak, az sayıda karşılaştırılabilir emsal bulunması nedeniyle, emsal karşılaştırma yöntemi ile tespit edilen bedeller, bağımsız uzman kuruluş raporları, Şirket tarafından projeye ilişkin olarak yapılan çalışmalar ve ihale neticeleri tarafından desteklenmiştir.

Yukarıda izah edilen yöntem ile yapılan değerleme çalışmalarımızın neticeleri aşağıda özet olarak bilgilerinize sunulmuştur:

- Dış emsallerden yararlanılarak tespit edilen emsal tesislerin yapım bedelinin 130.989.000 ABD Doları - 169.528.336 ABD Doları arasında olduğu,
- İhaleye sunulan tekliflerden, söz konusu tesisin yapım bedelinin 130.500.000 ABD Doları - 143.000.000 ABD Doları arasında olduğu,
- Bağımsız uzman kuruluşlar tarafından yapılan ile Şirket tarafından yapılan çalışmalara göre tesisin yapım bedelinin 156.328.296 ABD Dolar olarak öngörüldüğü,

tespit edilmiştir.

Tüm bu veriler dikkate alındığında, ihaleye katılan firmaların vermiş olduğu tekliflerin, Şirket yetkililerince hazırlanmış olan fizibilite raporunda ve dolayısıyla uluslar arası bağımsız uzman kuruluş raporunda öngörülen maliyet hesaplarına, dış emsallere uygun olduğu kanaatine varılmıştır. Dolayısıyla, alınan teklif bedellerinin, mevcut piyasa koşulları altında Projenin adil ve makul değerini temsil etmekte olduğu tespit edilmiştir.

Buna göre, Koza Altın İşletmeleri Anonim Şirketi'nin "Himmetdede bölgesinde yapılacak olan ve Yığın Liçi yöntemi ile çalışacak altın tesisine" ilişkin olarak "Emsal Karşılaştırma Yaklaşımı" esas alınarak ve bağımsız uzman kuruluşlar tarafından hazırlanan raporlar, Şirket tarafından yapılan çalışmalar ve ihale usulüyle toplanan teklifler incelenerek yapılan değerleme çalışmasında; Şirket'in Himmetdede bölgesinde yaptıracağı altın tesisine ilişkin olarak Proje Bedelinin 130.500.000 ABD Doları ile 143.000.000 ABD Doları arasında olmasının adil ve makul olduğu sonucuna ulaşılmıştır.

Saygılarımızla,

2. RAPORUN KONUSU

Bu raporun konusu, Koza Altın İşletmeleri Anonim Şirketi ("Şirket") tarafından "Himmetdede bölgesinde yapılacak olan ve Yığın Liçi yöntemi ile çalışacak altın tesisinin" "Emsal Karşılaştırma Yaklaşımı" kapsamında adil ve makul bedelinin belirlenmesidir.

Şirket tarafından, söz konusu tesisin yapım işini üstlenecek firmanın belirlenmesi amacıyla bir ihale düzenlenmiş olup, ihaleye katılan firmalar arasında en uygun fiyat teklifi, "Şirket'le ilişkili taraf olan İK Akademi İnşaat Proje ve Taahhüt Anonim Şirketi ("İK Akademi") tarafından verilmiştir.

Şirket'in yaptıracağı altın tesisi Rapor'umuzun izleyen bölümlerinde "Himmetdede Projesi veya Proje" olarak anılmıştır.

Değerleme çalışması, 02-10 Ağustos 2012 döneminde Koza Altın ve Şirketimiz ofisinde yürütülmüştür.

Yapılan değerleme çalışmasında:

- Emsal karşılaştırma yöntemi kapsamında, Türkiye'de üçüncü kişiler tarafından inşa edilen aynı mahiyetteki (yığın liçi yönteminin kullanıldığı) altın tesisleri ile ilgili olarak hazırlanmış fizibilite raporları ile birlikte,
- Tesisin kurulması ile ilgili tahmini maliyetlerin neler olacağının tespitine yönelik olarak, uluslararası bağımsız uzman kuruluşlar tarafından hazırlanan raporlara dayanılarak Şirket yönetimi tarafından hazırlanan ön fizibilite raporu,
- Tesisin yapım işini üstlenecek firmanın belirlenmesi için Şirket tarafından düzenlenen ihaleye ilişkin şartname ve diğer ihale evrakları ile ihale neticeleri,
- Konuya ilişkin olarak Şirket'ten temin edilen diğer bilgi ve belgeler,

esas alınmıştır.

3. ŞİRKET ve İLİŞKİLİ TARAF HAKKINDA BİLGİLER

3.1. Koza Altın İşletmeleri A.Ş. Hakkında Genel Bilgiler

Ovacık altın yatağı, Eurogold Madencilik A.Ş.'nin Ege Bölgesi'nde yürüttüğü arama çalışmaları sonucunda 1989 yılında keşfedilmiş olup, bu Şirketin adı, Normandy Mining Ltd. tarafından satın alınması neticesinde Normandy Madencilik A.Ş. (" Normandy Madencilik") olarak değiştirilmiştir.

3 Mart 2005 tarihinde ise Koza İpek Holding A.Ş.'nin ("Koza İpek Holding") bağlı ortaklığı olan ATP İnşaat ve Ticaret A.Ş. ("ATP") tarafından, Normandy Madencilik'in hisselerinin tamamı Autin Investment'dan satın alınmış olup, bu satın alma işleminin ardından, 29 Ağustos 2005 tarihinde şirketin adı Koza Altın İşletmeleri A.Ş. ("Koza Altın" ya da "Şirket") olarak tescil edilmiştir.

Şirketin merkez adresi, Necatibey Caddesi No:56/B Demirtepe/Ankara, Türkiye'dir.

Şirketin faaliyetleri; maden tesisi kurma ve işletme ile maden arama, çıkarma ile çıkarılan madenlerin ticareti olmak üzere üç ana başlık altında toplanabilir.

Şirket'in faaliyetine devam eden dört adet altın madeni sahası bulunmakta olup bunlar aşağıda listelenmiştir.

- Ovacık Bergama - İzmir
- Çukuralan - İzmir
- Kaymaz - Eskişehir
- Mastra - Gümüşhane

Şirket, altın madenlerinin işlenmesi, Türkiye'de altın madenin aranması ve devam eden projeleri ile altın maden sahalarının geliştirilmesi ve dahili ticari faaliyetleri ile sektörde yerini korumaktadır.

30 Haziran 2012 tarihi itibariyle Şirket'in ana ortakları aşağıdaki tabloda belirtilen gerçek kişilerdir:

ORTAKLAR	KOZA ALTIN İŞLETMELERİ A.Ş.		
	1 Hisse Değeri		0,01 TL
	His Ad	%	TL
KOZA-İPEK HOLDİNG A.Ş.	3.811.466.421	24,99	38.114.664,21
İPEK DOĞAL ENERJİ KAYNAKLARI ARAŞTIRMA VE ÜRETİM A.Ş.	-	-	-
KOZA ANADOLU METAL MAD.İŞL.A.Ş.	-	-	-
ATP İNŞAAT VE TİCARET A.Ş.	6.863.533.496	45,01	68.635.334,96
MELEK İPEK	20	0,00	0,20
HAMDİ AKIN İPEK	20	0,00	0,20
CAFER TEKİN İPEK	20	0,00	0,20
PELİN İPEK	20	0,00	0,20
İSMET KASAPOĞLU	3	0,00	0,03
KOZA ALTIN İŞLETMELERİ A.Ş.	-	-	-
ORTAKLAR TOPLAMI	10.675.000.000	70,00	106.750.000,00
HALKA ARZ	4.575.000.000	30,00	45.750.000,00
TOPLAM SERMAYE	**15.250.000.000**	**100,00**	**152.500.000,00**

Şirketin 31 Aralık 2011 tarihi itibariyle Mali Tabloları aşağıdaki gibidir:

- Şirketin 31.12.2011 tarihi itibariyle solo bilançosu aşağıdaki gibidir:

	31 Aralık 2011 (TL)
Dönen Varlıklar	
Nakit ve nakit benzerleri	568.959.063
Ticari alacaklar	(9.631)
Stoklar	56.625.873
İlişkili taraflardan alacaklar	4.627.981
Diğer alacaklar	19.027.276
Toplam Dönen Varlıklar	649.230.562
Duran Varlıklar	
İştirakler	14.737.642
Maddi Duran Varlıklar	
Birikmiş Amortismanlar tenzil edildikten sonra	201.742.669
Maddi Olmayan Duran Varlıklar	
Birikmiş Amortismanlar tenzil edildikten sonra	15.924.403
Diğer duran varlıklar	166.818.614
Ertelenmiş Vergi Alacağı	9.727.315
Toplam Duran Varlıklar	408.950.643
TOPLAM AKTİFLER	1.058.181.205

- Şirket'in 31.12.2011 tarihi itibariyle solo bilançosu aşağıdaki gibidir (devamı):

PASİF	31 Aralık 2011 (TL)
Kısa Vadeli Yabancı Kaynakları	
Finansal Borçlar	
Ticari Borçlar	29.966.958
İlişkili Taraflara Olan Borçlar	323.309
Peşin Ödenecek Vergi ve Fonlar	39.808.455
Borç Karşılıkları	12.742.944
Diğer Ticari Borçlar	18.240.599
Diğer Finansal Yükümlülükler	6.138.402
Toplam Kısa Vadeli Yabancı Kaynaklar	121.906.300
Uzun Vadeli Yabancı Kaynaklar	
Finansal Borçlar	7.265.000
Uzun Vadeli Ticari Borçlar	14.737.642
Diğer	38.804.019
Çalışanların Faydalarına İlişkin Karşılıklar	2.370.440
Toplam Uzun Vadeli Yabancı Kaynaklar	63.177.102
Özkaynak	
Sermaye	156.078.596
Yasal Yedekler	57.923.393
Olağandışı Yedekler	226.786.825
Dönem Karı	460.492.829
Birikmiş Zararlar	(28.183.839)
Toplam Özkaynak	873.097.804
Toplam Yükümlülükler ve Özkaynak	1.058.181.206

- Şirketin 31.12.2011 tarihi itibariyle solo gelir tablosu aşağıdaki gibidir:

	31 Aralık 2011 (TL)
SÜRDÜRÜLEN FAALİYETLER	
Satış Gelirleri (net)	805.798.598
Satışların Maliyeti (-)	(191.960.629)
BRÜT ESAS FAALİYET KARI	613.837.969
Pazarlama, Satış ve Dağıtım Giderleri (-)	(2.020.154)
Genel Yönetim Giderleri (-)	(43.128.963)
Araştırma ve Geliştirme Giderleri (-)	(26.532.294)
Diğer Faaliyet Gelirleri	1.891.514
Diğer Faaliyet Giderleri (-)	(17.506.275)
FALİYET KARI / (ZARARI)	526.541.798
Finansman Gelirleri	69.881.431
Finansman Giderleri (-)	(36.779.484)
SÜRDÜRÜLEN FAALİYETLER VERGİ ÖNCESİ KARI / (ZARARI)	559.643.745
- Dönem Vergi Gelir / (Gideri)	(99.883.961)
- Ertelenmiş Vergi Gelir / (Gideri)	733.045
SÜRDÜRÜLEN FAALİYETLER DÖNEM KARI / (ZARARI)	460.492.829
Diğer kapsamlı kar / (zarar)	-
TOPLAM KAPSAMLI GELİR	460.492.829
Hisse Başına Kazanç / (Kayıp)	30,2

3.2. İk Akademi İnşaat Proje ve Taahhüt Anonim Şirketi Hakkında Genel Bilgiler

"Koza İpek Madencilik Sanayi ve Ticaret Anonim Şirketi" olan şirket unvanı, 25 Ocak 2012 tarihinde " İk Akademi İnşaat Proje ve Taahhüt Anonim Şirketi" değiştirilmiş olup, bu husus 30 Ocak 2012 tarihli Ticaret Sicil Gazetesi'nde ilan edilmiştir.

İK Akademi'nin faaliyetleri, her türlü inşaatı yapmak ve mühendislik projelerinin içinde yer almak olmak üzere, iki ana başlık altında toplanabilir.

İK Akademi'nin merkezi, Uğur Mumcu Mahallesi Fatih Sultan Mehmet Bulvarı (İstanbul Yolu) 10.km No:310 Koza İpek Merkez Binası Batıkent Ostim/Ankara'dadır.

30.06.2012 tarihi itibariyle İK Akademi'nin dolaylı ortaklık yapısını gösteren tablo aşağıdaki gibidir:

ORTAKLAR	KOZA - İPEK EĞİTİM SAĞLIK HİZMET YARDIM VAKFI			ALTIN KOZA ÜNİVERSİTESİ			İK AKADEMİ İNŞAAT İNŞAAT PROJE VE TAAHHÜT A.Ş.		
	1 Hisse Değeri		1,00 TL	1 Hisse Değeri		1,00 TL	1 Hisse Değeri		1,00 TL
	Hs Ad	%	TL	Hs Ad	%	TL	Hs Ad	%	TL
KOZA-İPEK HOLDİNG A.Ş. (KURUCU HİSSE)	250.000	29,41	250.000	250.000	29,41	250.000	-	-	-
ATP İNŞAAT VE TİCARET A.Ş.	250.000	29,41	250.000	250.000	29,41	250.000	-	-	-
ALTIN KOZA ÜNİVERSİTESİ	-	-	-	-	-	-	499.990	100,00	499.990
KOZA İPEK EĞT.SAĞLIK HİZM.YARD.VAKFI	-	-	-	-	-	-	4	0,00	4
MELEK İPEK	25.000	2,94	25.000	25.000	2,94	25.000	-	-	-
HAMDİ AKIN İPEK	25.000	2,94	25.000	25.000	2,94	25.000	-	-	-
CAFER TEKİN İPEK	25.000	2,94	25.000	25.000	2,94	25.000	-	-	-
PELİN ZENGİNER	25.000	2,94	25.000	25.000	2,94	25.000	-	-	-
ALİ SERDAR HASIRCIOĞLU	-	-	-	-	-	-	2	0,00	2
ORHAN SELÇUK HASIRCIOĞLU	-	-	-	-	-	-	2	0,00	2
ŞABAN AKSOYEK	-	-	-	-	-	-	2	0,00	2
KOZA ALTIN İŞLETMELERİ A.Ş.	250.000	29,41	250.000	250.000	29,41	250.000	-	-	-
ORTAKLAR TOPLAMI	850.000	100,00	850.000	850.000	100,00	850.000	500.000	100,00	500.000
HALKA ARZ	-	-	-	1	0,00	1	-	-	-
TOPLAM SERMAYE	850.000	100,00	850.000	850.001	100,00	850.001	500.000	100,00	500.000

İK Akademi'nin 30.06.2012 tarihi itibariyle Vergi Usul Kanunu'na göre hazırlanan mali tabloları aşağıdaki gibidir.

- Şirketin 30.06.2012 tarihi itibariyle solo bilançosu aşağıdaki gibidir:

	30 Haziran 2012 (TL)
Dönen Varlıklar	
Hazır Değerler	52.634
Diğer alacaklar	4.249
Yıllara yaygın inşaat ve onarım maliyetleri	15.174.884
Gelecek aylara ait giderler ve gelir tahakkukları	42.613
Diğer dönen varlıklar	1.827.771
Toplam Dönen Varlıklar	17.102.152
Duran Varlıklar	
Ticari alacaklar	17.240
Maddi Duran Varlıklar	
Birikmiş Amortismanlar tenzil edildikten sonra	365.342
Maddi Olmayan Duran Varlıklar	
Birikmiş Amortismanlar tenzil edildikten sonra	67.419
Gelecek yıllara ait giderler ve gelir tahakkukları	19.520
Toplam Duran Varlıklar	469.521
TOPLAM AKTİFLER	17.571.673

- Şirket'in 30.06.2012 tarihi itibariyle solo bilançosu aşağıdaki gibidir (devam):

PASİF	30 Haziran 2012 (TL)
Kısa Vadeli Yabancı Kaynakları	
Ticari Borçlar	3.066.164
Diğer Borçlar	95.254
Alınan Avanslar	14.147.464
Ödenen Vergi ve Diğer Yükümlülükler	104.860
Toplam Kısa Vadeli Yabancı Kaynaklar	17.413.742
Özkaynaklar	
Ödenmiş Sermaye	166.668
Geçmiş Yıllar Zararları (-)	(7.508)
Dönem Net Karı (Zararı)	1.229
Toplam Özkaynak	157.931
Toplam Yükümlülükler ve Özkaynak	17.571.673

- Şirketin 30.06.2012 tarihi itibariyle solo gelir tablosu aşağıdaki gibidir:

	30 Haziran 2012 (TL)
SÜRDÜRÜLEN FAALİYETLER	
Satış Gelirleri (net)	-
Satışların Maliyeti (-)	-
BRÜT ESAS FAALİYET KARI	-
Genel Yönetim Giderleri (-)	(6.355)
FALİYET KARI / (ZARARI)	(6.355)
Diğer Faaliyetlerden olağan gelir ve karlar	5.637
Diğer Faaliyetlerden olağan gider ve zararlar	(508)
OLAĞAN KAR VEYA (ZARAR)	(1.226)
OLAĞANDIŞI GELİR VE KARLAR	3
OLAĞANDIŞI GİDER VE ZARARLAR (-)	(6)
DÖNEM KARI VEYA (ZARARI)	(1.229)
DÖNEM NET KARI VEYA (ZARARI)	(1.229)

3.3. Şirket ve İK Akademi Arasındaki İlişki

Ortaklık bilgilerinden görüleceği üzere, Şirket ortaklarının bir kısmı aynı zamanda İK Akademi'nin de ortaklarıdır. Her iki şirket aynı şirketler grubu bünyesinde yer almaktadır.

Türkiye Muhasebe Standartları (TMS) ve Uluslararası Muhasebe Standartları (UMS) uyarınca Koza Altın'ın ilişkili kişisi konumundadır.

4. PROJEYE İLİŞKİN BİLGİLER

Şirketin Himmetdede Projesi kapsamında üç adet işletme ruhsatı bulunmaktadır (Ek.1 Himmetdede Projesi Ruhsatları).

Şirket tarafından 2008 yılında keşfi yapılan Kayseri Himmetdede projesi için sürdürülmüş olan arama ve geliştirme çalışmaları sonucunda 31.12.2011 tarihi itibariyle toplam 816.000 ons altın kaynağı (resource) hesaplanmıştır. Tespit edilen kaynağın rezerve dönüştürülmesi için yürütülen detaylı fizibilite çalışmaları neticesinde toplam 567.000 ons altın rezervi (reserve) hesaplanmıştır.

Şirket, tespit edilen rezervden altın çıkarmak için Himmetdede Altın Madeni Projesi'ni hayata geçirmek istemektedir. Şirket, bu proje ile yığın liçi yöntemi ile altın çıkarmayı hedeflemektedir. Yığın liçi yöntemi düşük tenörlü madenlerden cevher çıkarmaya yarayan bir maden çıkarma metodudur. Altın tesisi yapımı Projesi, mevcut temel mühendislik verilerinden yola çıkılarak "anahtar teslimi esasına göre; Tesisin uygulama ve detay mühendislik projeleri, kırma-eleme, boyut sınıflandırma, yığın liçi ve çözeltiden altın/gümüş külçe üretimi ile bu ünitelere hizmet verecek tüm altyapıyı" kapsamaktadır.

Yığın liçi, geçirimsiz bir zemin üzerinde hazırlanan bir yığın üzerine uygun bir çözücü gönderilerek (yağmurlama, boru ağı vb. sistemlerle) kazanılması düşünülen bileşeni çözeltiye alma işlemidir.

Yığın hazırlanmadan önce malzemenin boyut küçültme, şlam atma vb. ön işlemlerden geçirilmesi durumundaki uygulamaya hazırlıklı yığın liçi, malzemenin herhangi bir ön hazırlık işlemine tabi tutulmaması durumundaki uygulamaya da doğrudan yığın liçi adı verilmektedir.

Himmetdede Projesi'nin gerçekleştirileceği alan, İç Anadolu Bölgesi'nde Kayseri'nin kuzeybatısına 35 km uzaklıkta, D260 yolu boyunca uzanan Himmetdede Köyü'nün bitişiğinde yer almaktadır. Bu alan, geniş tepelerin düşük yükseklikte olduğu bir bölgede yer almakta olup, Proje 1.200 metre yüksekliğinde konumlandırılmıştır.

Himmetdede Projesi bir açık ocak yığın liçi projesidir. Bu bölgeden çıkarılan cevherler, yığın liçinin standardı gereği göre üç aşamaya tabi tutulduktan sonra işlenecektir. Bu aşamalar;

- Cevherin karadan çıkarılıp taşıyıcılar yardımıyla yığın yataklarına taşınması,
- Cevherin istiflenmesi,
- Karbon aşamasıdır.

Bu üç aşama neticesinde, nihai ürün olan altın elde edilmektedir. Bu tesisle birlikte ilk yıl için ortalama 6.000.000 ton cevher çıkarılması beklenmektedir.

5. DEĞERLEME ÇALIŞMALARI

5.1. KULLANILAN YÖNTEM

Proje'nin özellikleri nedeniyle değerleme çalışmasında, emsal karşılaştırma yöntemi'nin uygun sonuç vereceği düşünülmüştür. Ancak, az sayıda karşılaştırılabilir emsal bulunması nedeniyle, emsal karşılaştırma yöntemi ile tespit edilen bedeller, bağımsız uzman kuruluş raporlarına dayanılarak Şirket tarafından projeye ilişkin olarak yapılan fizibilite çalışmaları ve ihale neticeleri tarafından desteklenmiştir.

5.2. TAHMİNİ PROJE MALİYET HESAPLAMASI

Projenin tahmini maliyetleri detaylı olarak hesaplanmış olup, Şirket yetkililerince hazırlanan ön fizibilite raporlarında gösterilmiştir (Ek.2 Koza Gold Company Himmetdede Prefisibility Draft).

Tesise ilişkin fizibilite raporlarının hazırlanması esnasında, Proje'nin maliyet unsuru olarak aşağıdaki safhaların maliyetleri dikkate alınmıştır:

- Çevre düzenlemesi
- Altyapı düzenlemesi
  - Taşımacılık ve Servis yolu
  - Su Tedariki
  - Elektrik Tedariki
- İnşaat İşleri
  - İşleme Tesis Bölümleri İnşaatı
  - Yönetim Ofisleri
  - Ofis ve Laboratuarlar
- Açık Ocak
  - Kazı işleri
  - Yükleme
  - Taşımacılık
  - Depolama
- Cevherin İşlenmesi ve Zenginleştirilmesi
- Üretimin Durdurulması
  - Bakımı
  - Yeniden Çalıştırılması

Söz konusu fizibilite raporlarında yer verilen toplam tahmini maliyetlerin belirlenmesinde, SRK Consulting (U.S.) Inc. ve Metso şirketlerinin yapmış olduğu çalışmalardan yararlanılmıştır.

Tahmini maliyet, aşağıdaki unsurlar dikkate alınarak hesaplanmıştır:

- Süreç dizayn kriteri
- Proje akış diyagramı
- Teknik ekipman listesi
- Yerleşim planı
- Satıcılardan sorgulanan maliyet hesaplamaları
- Çıkartılacak yığın kapasitesi

Söz konusu raporda, maliyet hesaplamalarında aşağıdaki unsurları dikkate alınmamıştır:

- Kazma maliyetleri
- Şirket faaliyet giderlerde projeye düşen paylar
- Teşvikler
- Yabancı para çevrim farkı
- Faiz ve finansman maliyetleri
- Siyasi değişimler

Tüm maliyet hesaplamaları yapılırken, Proje boyunca döviz kurunun aşağıdaki gibi olacağı varsayılmıştır:

Bölge	Döviz Cinsi	Dolar Karşılığı
Türkiye	TRY	0,60$
Avrupa	EURO	1,25$

Şirket tarafından hazırlanan ve Ek.2'de yer alan fizibilite raporunda, tahmini proje maliyeti 156.328.296 ABD Doları olarak hesaplamıştır.

5.3. EMSAL PROJE MALİYETLERİ

Yığın Liçi yöntemiyle işletilecek olan tesisin inşası ile ilgili olarak, Şirket içinde emsal bulunup bulunmadığı, daha önce inşa edilmiş tesislerin Proje kapsamında inşa edilecek tesise emsal olup olamayacağı araştırılmıştır. Şirket'in mevcut tesislerinde uygulanan üretim tekniklerinin, Proje'de öngörülen üretim tekniğinden tamamen farklı olduğu ve üretim tekniğindeki bu farklılığın, üretim tesisi maliyetleri üzerinde doğrudan bir etkisi olduğu görülmüştür. Bu çerçevede, Şirket'in mevcut üretim tesislerinin inşasına ilişkin maliyetlerin, Proje kapsamındaki tesise emsal olamayacağı neticesine varılmıştır.

Yukarıda izah edildiği üzere, iç emsal bulunamamış olup dış emsal araştırılmıştır. Araştırmalar neticesinde, Proje kapsamında inşa edilecek tesiste kullanılacak üretim tekniğini, Türkiye'de hali hazırda kullanmakta olan iki tesis bulunduğu tespit edilmiştir.

Bu raporda dış emsal olarak kullanılacak olan bu tesisler Eldorado Gold ve Anatolia Minerals Development Limited şirketleri tarafından yaptırılmış olup, bu tesisler ile ilgili fizibilite raporları sırasıyla 2004 ve 2008 yıllarında hazırlanmıştır. Bu tesisler de yığın liçi yöntemi ile üretim yapan tesislerdir. Söz konusu tesisler ile Proje kapsamındaki tesis arasında bir takım farklılıklar olmakla birlikte, bu farklılıkların maliyetler üzerinde majör bir etkisi olmayacağına kanaat getirilmiş ve bu tesislerin fizibilite raporlarında yer verilen maliyet bilgileri dış emsal olarak kullanılmıştır.

Proje'deki tesis ile benzer özelliklere sahip bu iki tesise ilişkin olarak 2004 yılında Eldorado Gold, 2008 yılında Anatolia Minerals Development Limited tarafından hazırlanmış fizibilite raporları, Raporumuzun ekinde (Ek.3, Ek.4) yer almakta olup, bu raporlarda yer verilen tahmini maliyetler aşağıdaki gibidir:

- Eldorada Gold "Kışladağ Projesi" 2004

Tanım	Fizibilite Çalışması		
	Başlangıç Sermayesi Maliyeti (000 ABD Doları)	Geliştirme için ilave Maliyet (000 ABD Doları)	Devamlığı sağlamak için gerekli Maliyet (000 ABD Doları)
Altyapı	9,352	812	-
Kırma	10,875	8,134	-
Nakil	3,572	1,147	-
Yığın liçi yatakları ve havuzları	4,746	429	15,031
ADR tesisatı	3,26	26	-
Atık	327		-
Madencilik	381	25,829	14,778
Kapama Maliyeti			7,4
Ara Toplam-Direkt Maliyetler	**32,513**	**36,377**	**37,209**
EPCM	3,908	949	-
İnşaat için gerekli dolaylı Maliyet	2,749	663	-
Nakliye	946	533	-
Şirket faaliyet giderlerinde projeye düşen paylar	7,537	-	-
Yedekler	1,825	-	-
İlk Dolgu Maliyeti	118	-	-
Gümrük ve vergiler			-
Ara Toplam-Endirekt Maliyetler	17,083	2,145	-
Şarta bağlı maliyetler	4,777	885	-
Toplam	**54,373**	**39,407**	**37,209**
Toplam Proje Bedeli	**130,989**		

- Anatolian Minerals Development Limited "Çöpler Projesi" 2008

Yatırım Maliyeti Özeti	
Tanım	**(000 ABD Doları)**
Kazı Maliyetleri (30 Haziran 2008 tarihi itibariyle)	30.892
İnşaat için gerekli dolaylı Maliyet	51.443
Teknik Ekipman	23.805
İşin Devamı İçin yatırılan çalışma sermayesi	32.961
Proje Dolaylı Maliyet	23.311
Şarta bağlı maliyetler	7.116
Toplam	**169.528**

Dış emsal karşılaştırılmasında, yapılan fizibilite çalışmalarında emsal tesislerin bedelinin 130.989.000 ABD Doları ile 169.528.336 ABD Doları arasında olduğu anlaşılmıştır.

5.4.İHALEYE KATILAN ŞİRKETLERİN TEKLİF ÖZETLERİ

Şirketin, Himmetdede bölgesinde yapılacak olup "Yığın Liçi" yöntemi ile çalışacak altın tesisine ilişkin olarak detaylı bir şekilde hazırlanan ihale şartnamesi Ankara'nın önde gelen inşaat firmalarına gönderilmiş ve söz konusu firmalardan ihale şartnamesine uygun olarak teklifler alınmıştır. İhale şartnamelerinden, İdari Şartname ve Genel Teknik Şartname ve İhaleye katılan şirketlerin sundukları teklifler Raporumuzun 5, 6 ve 7 no.lu eklerinde yer almaktadır.

İhalede teklif veren şirketlerden sadece İK Akademi, ilişkili taraf olarak değerlendirilebilir bir şirkettir.

İhaleye katılan şirketler ve söz konusu şirketlerin ihaleye sundukları teklifler (Ek.7; İhaleye Katılan Şirketlerin Sundukları Teklifler) aşağıdaki gibidir:

	LOTUS MÜH. PLAN. İNŞ. MÜH. ENERJİ MAD.VE TAŞIMACILIK A.Ş.	ENDER MÜH. İNŞ.VE TİC. A.Ş.	İLCİ İNŞ.SAN. VE TİC. A.Ş.	İK AKADEMİ İNŞ.PROJE VE TAAH. A.Ş.
Altyapı	6.430.000	5.945.000	6.300.000	5.950.000
CIC ve Ayırıcı Ekipman	9.000.000	7.869.000	8.000.000	7.750.000
Kırma tesisi	44.950.000	42.017.000	41.480.000	40.150.000
Yığın Liçi Yatağı	63.100.000	59.000.000	58.200.000	55.750.000
Elektrik ve Otomasyon	2.450.000	2.350.000	2.250.000	2.500.000
Endirekt Maliyetler	17.070.000	16.819.000	15.770.000	18.400.000
Toplam (ABD Doları)	**143.000.000**	**134.000.000**	**132.000.000**	**130.500.000**

Yukarıda yer alan ihaleye sunulan tekliflerden, tesisin bedelinin 130.500.000 ABD Doları ile 143.000.000 ABD Doları arasında bir bedelle ihale edilebileceği ve en düşük teklifin İK Akademi tarafından verildiği anlaşılmıştır.

6. DEĞERLENDİRME

Yukarıdaki bölümlerde detaylarına yer verildiği üzere, Şirket'in Himmetdede bölgesinde yapılacak olan ve Yığın Liçi yöntemi ile çalışacak altın tesisine ilişkin olarak iç ve dış emsaller araştırılmış, bağımsız uzman kuruluş raporlarına dayanılarak Şirket tarafından yapılan çalışmalar incelenmiş ve Şirket tarafından ihale usulüyle toplanan teklifler değerlendirilmiştir.

Buna göre;

- Dış emsallerden yararlanılarak tespit edilen emsal tesislerin yapım bedelinin 130.989.000 ABD Doları - 169.528.336 ABD Doları arasında olduğu,
- İhaleye sunulan tekliflerden, söz konusu tesisin yapım bedelinin 130.500.000 ABD Doları - 143.000.000 ABD Doları arasında olduğu,
- Bağımsız uzman kuruluşlar tarafından hazırlanan raporlara dayanılarak Şirket tarafından yapılan fizibilite çalışmalarına göre tesisin yapım bedelinin 156.328.296 ABD Doları olduğu,

tespit edilmiştir.

Tüm bu veriler dikkate alındığında, ihaleye katılan firmaların vermiş olduğu tekliflerin, bağımsız uzman kuruluşlarca hazırlanan raporlara dayanılarak Şirket yetkililerince hazırlanmış olan fizibilite raporunda öngörülen maliyet hesaplarına ve dış emsallere uygun olduğu tespit edilmiştir.

Alınan teklif bedellerinin, mevcut piyasa koşulları altında Projenin adil ve makul değerini temsil etmekte olduğu kanaatine varılmıştır.

Sonuç olarak, Projenin adil ve makul bedelinin 130.500.000 milyon ABD Doları ile 143.000.000 milyon ABD Doları aralığında olduğu kanaatine varılmıştır.

7. SONUÇ

Sermaye Piyasası Kurulu'nun "Sermaye Piyasası Kanunu'na Tabi Olan Anonim Ortaklıkların Uyacakları Esaslar Hakkında Seri:IV No:41 sayılı Tebliğ uyarınca, Sermaye Piyasasında Uluslararası Değerleme Standartları hakkında Seri:VIII No:45 Tebliğ ve bu Tebliğ'de değişiklik yapan Seri:VIII No:48 sayılı Tebliğ'de belirtilen standartlar uyarınca Koza Altın İşletmeleri Anonim Şirketi'nin "Himmetdede bölgesinde yapılacak olan ve Yığın Liçi yöntemi ile çalışacak altın tesisine" ilişkin olarak "Emsal Karşılaştırma Yaklaşımı" esas alınarak ve bağımsız uzman kuruluşlar tarafından hazırlanan raporlara dayanılarak Şirket tarafından yapılan çalışmalar ve ihale usulüyle toplanan teklifler incelenerek yapılan değerleme çalışmasında; Şirket'in Himmetdede bölgesinde yaptıracağı altın tesisine ilişkin olarak Proje Bedelinin 130.500.000 ABD Doları ile 143.000.000 ABD Doları arasında olmasının adil ve makul olduğu sonucuna ulaşılmıştır.

EKLER

Ek.1: Himmetdede Projesi İçin Mevcut Ruhsatlar

Ek.2: Koza Gold Company Himmetdede Prefisibility Draft

Ek.3: Eldorado Gold, Kışladağ Projesi Fizibilite Raporu

Ek.4: Anatolia Minerals Development Limited, Çöpler Projesi Fizibilite Raporu

Ek.5: Koza Altın İşletmeleri A.Ş. Tarafından Yapılan İhaleye İlişkin İdari Şartname

Ek.6: Koza Altın İşletmeleri A.Ş. Tarafından Yapılan İhaleye İlişkin Genel Teknik Şartname

Ek.7: İhaleye Katılan Şirketlerin Sundukları Teklifler

T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI

İLİ :	KAYSERİ
İLÇESİ :	MERKEZ
KÖYÜ :	HİMMETDEDE
RUHSAT NUMARASI :	20057516
RUHSAT GRUBU :	IV. GRUP
YÜRÜRLÜĞE GİRİŞ TARİHİ :	16.08.2011
RUHSATIN BİTİM TARİHİ :	16.08.2021
ERİŞİM NUMARASI :	3076732
RUHSAT ALANI :	1986.49 Hektar
RUHSAT SAFHASI :	İşletme
RUHSAT SAHİBİ :	KOZA ALTIN İŞLETMELERİ A.Ş.
T.C. KİMLİK NO :	
VERGİ DAİRE VE NO :	Kavaklıdere V.D.Bşk. 3810044116
ADRES :	İSTANBUL YOLU 10. KM. NO:310 BATIKENT YENİMAHALLE / ANKARA

PAFTALAR : k34a1

P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X
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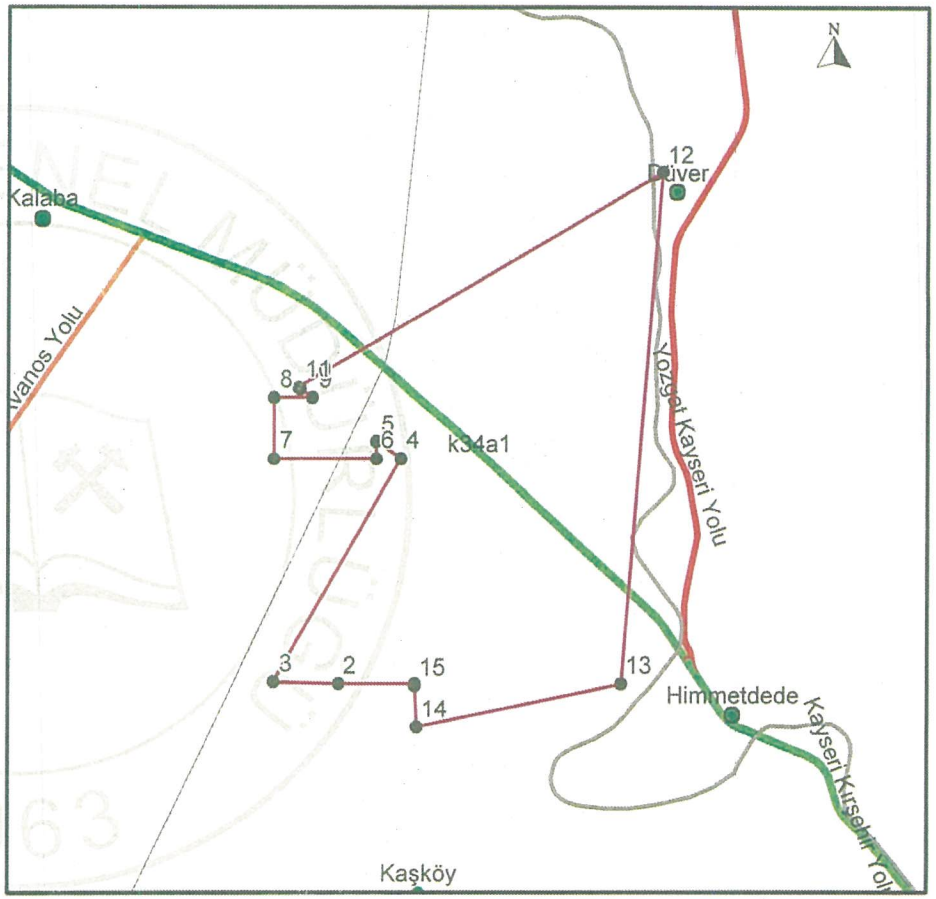
1	2	677044	4309027	1	12	681000	4315250								
1	3	676250	4309050	1	13	680502	4309021								
1	4	677800	4311750	1	14	678000	4308500								
1	5	677500	4311960	1	15	677975	4309000								
1	6	677500	4311750												
1	7	676250	4311750												
1	8	676250	4312500												
1	9	676720	4312500												
1	10	676564	4312609												



Ölçek : 1/90000

Çıktı Mapinfo Yazılımı ile üretilmiştir

ENERJİ VE TABİİ KAYNAKLAR
BAKANI a.
Ahmet ALSAÇ
Daire Başkanı

T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI

İLİ : KAYSERİ
İLÇESİ : MERKEZ
KÖYÜ : ELMALI
RUHSAT NUMARASI : 20057514
RUHSAT GRUBU : IV. GRUP
YÜRÜRLÜĞE GİRİŞ TARİHİ : 06.07.2011
RUHSATIN BİTİM TARİHİ : 06.07.2021
ERİŞİM NUMARASI : 3076734
RUHSAT ALANI : 1999.51 Hektar
RUHSAT SAFHASI : İşletme
RUHSAT SAHİBİ : KOZA ALTIN İŞLETMELERİ A.Ş.
T.C. KİMLİK NO :
VERGİ DAİRE VE NO : Kavaklıdere V.D.Bşk. 3810044116
ADRES : İSTANBUL YOLU 10. KM. NO:310 BATIKENT YENİMAHALLE / ANKARA

PAFTALAR : k34a1,j34d4

P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X
1	1	675000	4316710												
1	2	675000	4319000												
1	3	682000	4319000												
1	4	681000	4315250												

ENERJİ VE TABİİ KAYNAKLAR BAKANI'a
Ahmet ALSAÇ
Daire Başkanı

T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI

İLİ :	KAYSERİ
İLÇESİ :	MERKEZ
KÖYÜ :	AKARCA
RUHSAT NUMARASI :	20057515
RUHSAT GRUBU :	IV. GRUP
YÜRÜRLÜĞE GİRİŞ TARİHİ :	06.07.2011
RUHSATIN BİTİM TARİHİ :	06.07.2021
ERİŞİM NUMARASI :	3076733
RUHSAT ALANI :	1998.74 Hektar
RUHSAT SAFHASI :	İşletme
RUHSAT SAHİBİ :	KOZA ALTIN İŞLETMELERİ A.Ş.
T.C. KİMLİK NO :	
VERGİ DAİRE VE NO :	Kavaklıdere V.D.Bşk. 3810044116
ADRES :	İSTANBUL YOLU 10. KM. NO:310 BATIKENT YENİMAHALLE / ANKARA

PAFTALAR : k34a1,k33b2

P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X
1	1	675000	4316710												
1	2	681000	4315250												
1	3	676550	4312620												
1	4	676000	4313000												
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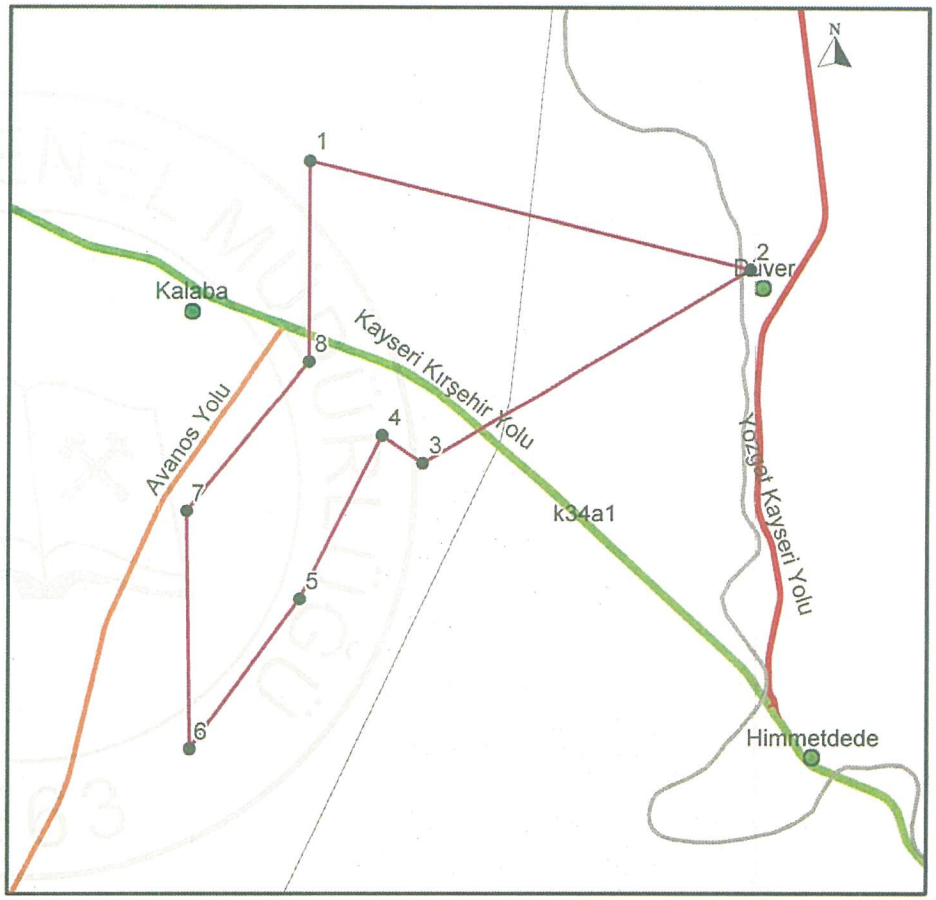

Ölçek : 1/100000

ENERJİ VE TABİİ KAYNAKLAR
BAKANI a/
Ahmet ALSAÇ
Daire Başkanı

HIMMETDEDE PROCESS PLANT PREFEASIBILITY REPORT

DRAFT

GROUP METALLURGY

6/14/2012

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1.GENERAL INFORMATION

1.1 Summary

Koza gold company is the first gold company with national capital.This Himmetdede project which is one of the biggest project of Koza Gold Company will be fourth operation in company organization. This project will become fact in Himmetdede which is 44 km far away from Kayseri.

1.2 Introduction

The Himmetdede Project is located in central Anatolia approximately 35 kilometers (km) northwest of Kayseri, along road D260, and adjacent to the village of Himmetdede. The Project is located at an elevation of approximately 1,200 meters (m) and the project rises approximately 200 m above the village. The project is in an area of low relief with broad rolling hills in Central Anatolia between Ankara and Kayseri.

1.3 Process Plant Description

The project is open pit heap leach project.Himmetdede ore will be processed in a standard heap leach facility containing a three stage crushing plant,an overland conveynor to the heap leach pad,mobile conveynors and a stacker for placing the ore and a carbon adsorption facility (ADR plant) for recovering the gold.The carbon will be treated on site in a refinery and the final product will be a gold doré bar.

The initial design capacity will be 6,000,000 dry tonnes of ore per annum for the first years of operation.

1.4 Infracture and Service

Infracture work listed below :

- Landscape work
- Substructure work
  - Transportation and Service Roads
  - Water Supply
  - Electricity Supply

1.5 Capital Cost Estimate

Total project capital costs is approximately 157 M US$. Detailed capital cost estimate can be seen in 5th chapter.

1.6 Operation Cost Estimate

Detailed explanation about operation cost estimate is in chapter 6th.

1.7 Project Implementation Plan

- Landscape Work
- Substructure Work
  - Transportation and Service Roads
  - Water Supply
  - Electricity Supply
- Construction Work
  - Process Plant Units Construction
  - Management Offices
  - Offices and Laboratories

- Open Pit
  - Drilling and Blasting
  - Loading
  - Transport
  - Storage
- Mineral Process and Enrichment
- Shotdown
  - Dismantlement
  - Reclaimation

2 INTRODUCTION AND PROJECT BACKGROUND

2.1 Project History

August 2005 :	Koza Gold Company received the Exploration Licence.
2006:	Koza Gold Company started the exploration.
2011:	Mining Deparment took project over from Exploration deparment.
2012:	Metallurgical test work was completed.

2.2 Location

The Himmetdede Project is located in central Anatolia approximately 35 km northwest of Kayseri along road D260, and adjacent to the village of Himmetdede. The Project is located at an elevation of approximately 1,200 meters (m) and the project rises approximately 200 m above the village.

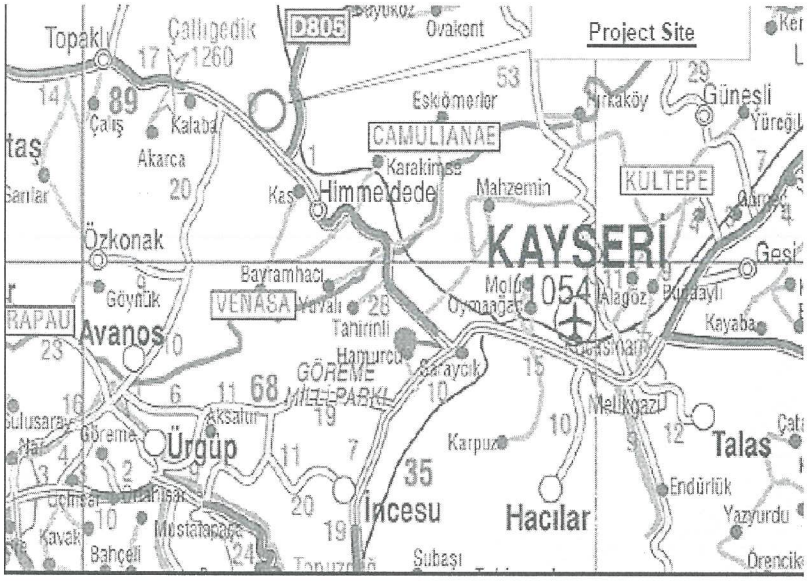


Figure 2.2.1 Regional Location Map

2.3 Site Description

The project is in an area of low relief with broad rolling hills.

2.4 Climate

In summer, wheather is hot and dry on the other hand in winter , wheather is cold and wet as continential climate at Himmetdede-Kayseri Region.

Table 2.4.1 Meteorological Data

Temperature (Celcius)													
Parameter	January	February	March	April	May	June	July	August	September	October	November	December	annual average
Average Temperature	-2,1	0	5	10,7	14,9	19,1	22,5	21,9	17,1	11,5	4,8	-0,1	10,4
Average Max.Temperature	3,8	6	11,8	17,6	22,2	26,6	30,6	30,5	26,6	20,3	12,4	5,8	21,2
Average Min.Temperature	-7,2	-5,3	-1,4	3,4	6,6	9,7	12,	11,4	7,3	3,6	-1,3	-5	16,4
Max.Hottest days	9	14	28	23	23	5	30	8	2	1	1	1	17,9
Hottest Year	1971	2010	2001	2008	1995	2006	2000	1987	2003	1999	1979	1990	
Max Temperature	17,8	20,1	26,6	31,2	33,4	36	40,7	40	36	32,6	24,8	21	12,1
Min.Coldest Days	18	3	4	1	7	6	31	31	26	30	25	27	
Coldest Year	1972	1974	1985	1981	1978	1978	1979	1970	1983	1973	1973	2002	30
Min.Temperature	-31,4	-31,2	-28,1	-11,6	-5,5	-0,4	3,7	1,4	-2,5	-12,2	-17,3	-25,5	7,3
Rainfall													
Parameter	January	February	March	April	May	June	July	August	September	October	November	December	annual average
Total Average Rainfall (mm)	32	32,3	41,8	57,3	53,7	37,8	11,9	6,2	11,7	33,3	35,7	38,4	32,7
Max. Rainfall (mm)	36,7	25,5	29,6	47,2	51,8	51,2	39,6	35,6	19,4	38,3	36,5	26	36,5
Evaporation													
Parameter	January	February	March	April	May	June	July	August	September	October	November	December	annual average
Average Open Surface Eva.(mm)	-	-	0,5	59,2	130,8	176,1	221	202,2	139,7	69,3	2,3	-	83,4
Max.Open Surface Eva.(mm)	-	-	3,8	16,2	13,2	17,5	18,2	13,3	14,5	13,3	4,6	-	9,6
Relative Humidity													
Parameter	January	February	March	April	May	June	July	August	September	October	November	December	annual average
Average Moisture (%)	76,3	73,1	66,9	62,9	61,1	55,8	50,6	51,2	55,2	64,2	71,4	76,7	63,8
Min. Moisture (%)	13	8	2	3	4	4	6	4	4	5	13	4	5,8

2.5 Sesimicity

SRK undertook a review of the United States Geological Services (USGS) Seismic Hazard Setting Map (USGS,2008), which provides an estimate of the peak ground acceleration (PGA) with a 10% chance of exceedance in 50 years. Ground accelaration resulting from the Maximum Credible Earthquake (MCE) was estimated from the map as approximately 0,20 g.

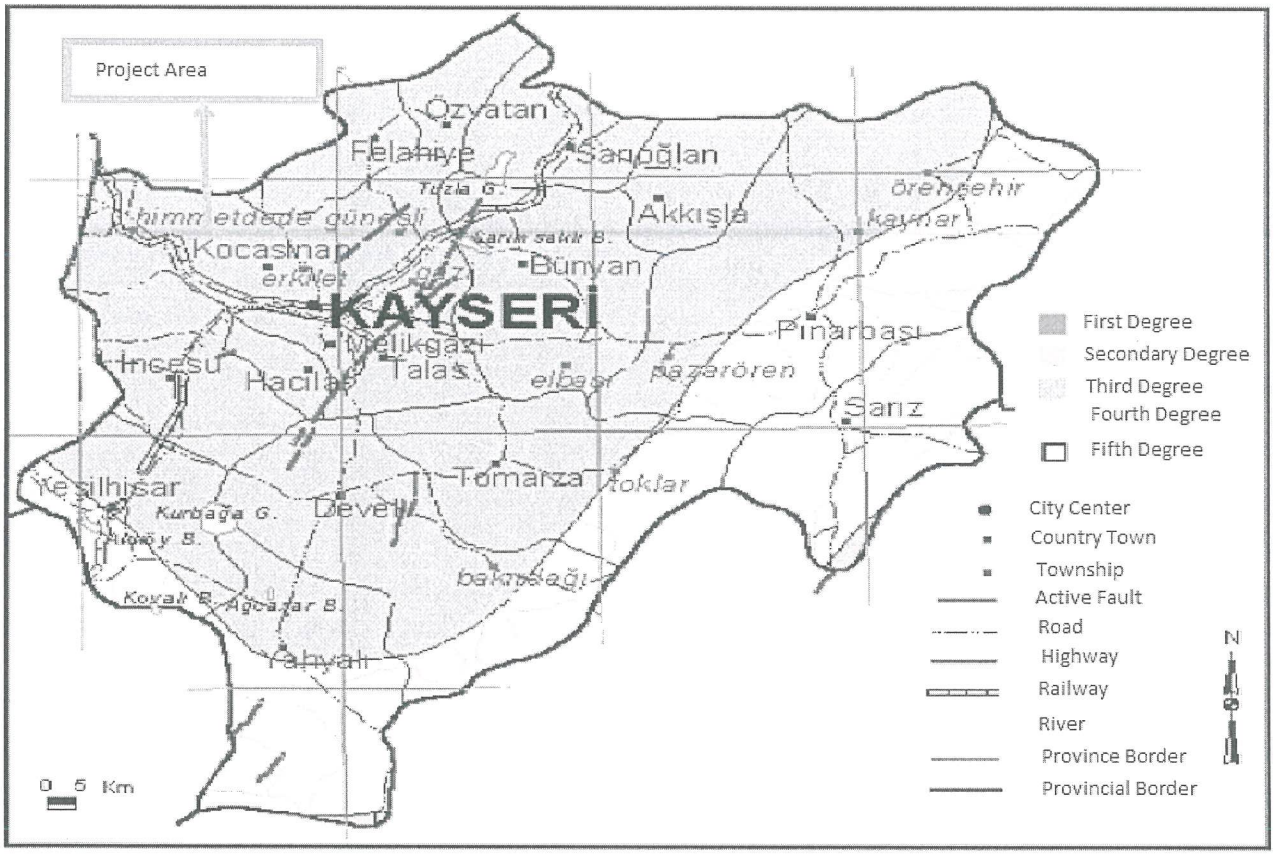


Figure 2.5.1 Seismicity Map

3 FLOWSHEET DEVELOPMENT AND PROCESS PLANT DESCRIPTION

3.1 Introduction

Heap leaching for gold and silver recovery is a fairly simple process that eliminates many complicated steps needed in conventional milling. A "typical" precious metal heap leaching operation consists of placing crushed ore on an impervious pad.A dlitue sodium cyanide solution is delivered to the heap,usually by sprinkling or drip irrigation.The solution trickles through the material,dissolving the gold and silver in the rock.The pregnant (gold bearing) solution drains from the heap and is collected in a large plastic-lined pond.

Pregnant solution is then pumped through tanks containing activated charcoal at the process plant,which absorbs the gold and silver.The now barren cyanide solution is pumped to a holding basin, where lime and cyanide are added to repeat the leaching process.Gold bearing charcoal is chemically treated to release the gold and is reactivated by heating for future use.The resultant gold bearing strip solution,more concentrated than the original pregnant cyanide solution, is treated at trhe process plant to produce a dore,or bar of impure gold.The dore is then sold or shipped to a smelter for refining.

One of the problems associated with heap leaching is low gold recovery.Commonly untreated ore will yield about 70 percent or less of the contained gold.Crushing the ore will increase recovery,but it also increases production costs. At some mines,the ore must be agglomerated, or roasted to increase recovery.gold recovery can be usually increased by crushing,grinding,vat leaching, agglomeration, roasting, chemical pretreament, or wetting, depending on the ore.Geold recoveries of over 95 percent are possible with cyanide leaching.The value of the additional gold recovered must be compared with the increasing processing costs to determine the most cost effective method.

3.2 Design Criteria Summary

In summary,the following significant aspects of ore mineralogy and metallurgy have determined the development of the process design philosophy :

- Ore abbrasiveness and crushability is medium.
- Optimum crushing size is -30 mm
- Open pit heap leach project is suitable for these project beacuse of low grade and high reserve.
- Crushing circuit capacity determined 1100 tph.
- Because of clay content agglomeration required.

Crushing Operating Schedule	hours / day	24
	days / year	360
Design Crushing Rate	tons/ hour	1100

Crushing tonnage	tonnes/ year	6 Million
	tonnes / day	11000
Annual availability	days / annum	360 days / annum

Table 3.2.1 Key Design Criteria

3.3 Plant Design Basis

In crushing stage, after primary crushing two vibrating screens are used for classification purpose and three vibrating screens (2 units operating) are used after secondary crushing stage. Screening efficiency is taken as 97-98 % for modular screen and 90% for fine screening. The product size is 10 mm at crushing stage.

Two apron feeders are used at crushing stage , which are suitable for clayey material.

An additional feed conveyor is used to transfer crushed material (-10 mm) to the HLP (heap leach pad) conveyor system.

Samples of 32 mm and 9.5 mm nominal material (P80) for the Project have been provided to McClelland Laboratories, Inc. (McClelland) from Sparks, Nevada for metallurgical and crushing testing. Core photographs from a typical drillhole showed a high clay content, and the highly fractured appearance suggests that the ore will require agglomeration.

Ore characteristics can be seen below :

Ore Specific Gravity	ton / m^3	2,63
Design Head Grade (Au)	gram/ ton	0,75
Crushability	%	38 (-1.6 mm)
Abbrasiveness	gram/ ton	700
Ore Specific Gravity	ton / m^3	2,63
Design Head Grade (Au)	gram/ ton	0,75

Crushability and abbrasiveness test were made by core samples supplied by Koza to Metso Minerals, Tampere Testing laboratory.

Classification	Bond Work Index [kWh/t]	Crushability [%]
very easy	0-7	50-
easy	7-10	40-50
medium	10-14	30-40
difficult	14-18	20-30
very difficult	18-	10-20

	Abrasiveness tests	
Classification	French Abrasiveness [g/ton]	Abrasion Index
non abrasive	0-100	0-0.1
slightly abrasive	100-600	0.1-0.4
medium abrasive	600-1200	0.4-0.6
abrasive	1200-1700	0.6-0.8
very abrasive	1700-	0.8-

As can be seen from the table Himmetdede gold ore's crushability and abbrasiveness is medium.

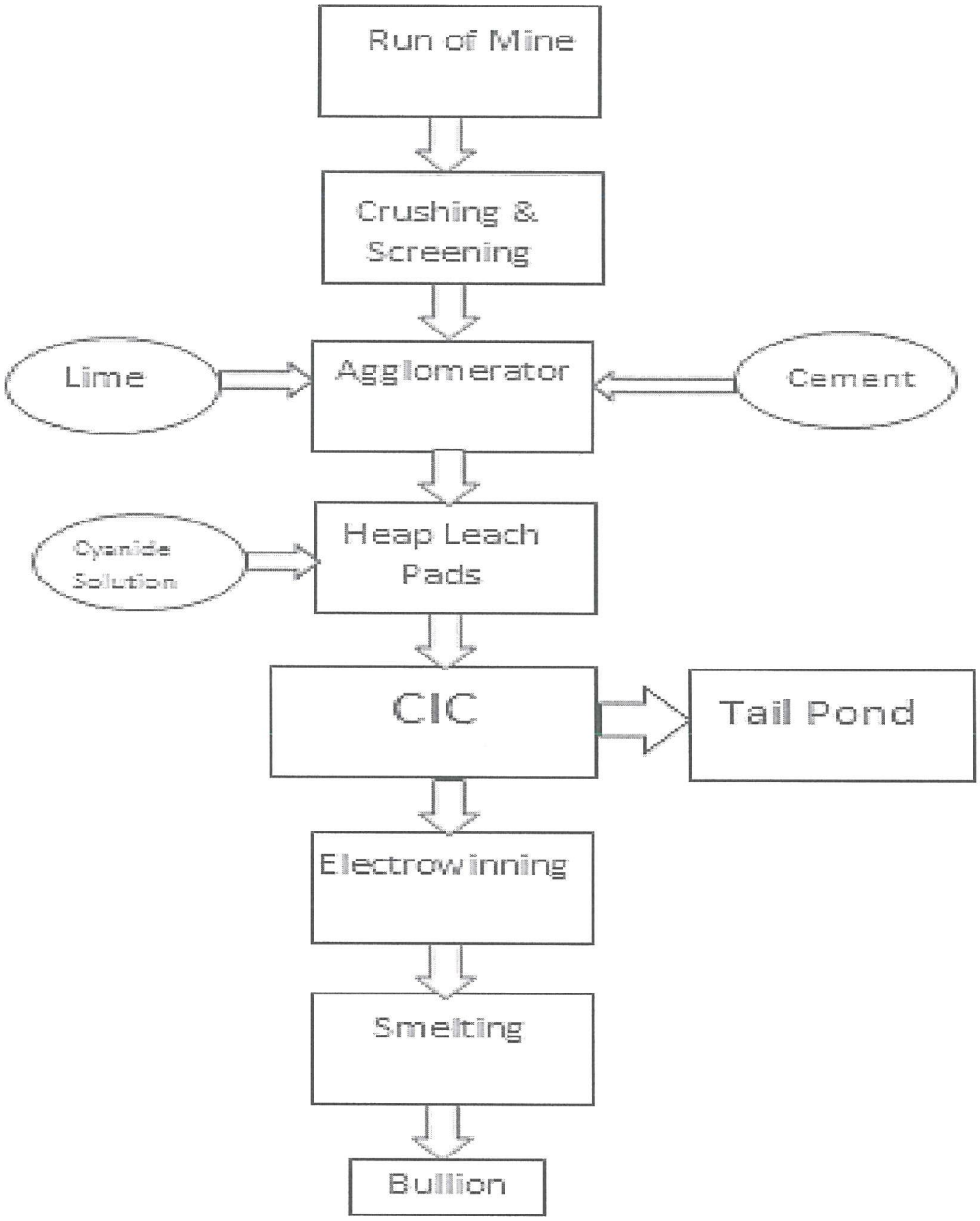


Figure 3.3.1 Plant Blok Flow Diagram

Mclalland Colunm test results are down below :

Table 3.3.1 Metallurgical Test Results

Composite	Test No.	Feed Size Mm	Leach/Rinse Time, days	Solution Applied mt/mt ore		Au Rec. %
				Leaching	Rinsing	
C-1	P-1	80%-32mm	93	5,8		**83,2**
C-1	P-7	80%-9.5mm	93	5,9		**88,2**
C-2	P-2	80%-32mm	81	3,7		**88,9**
C-2	P-8	80%-9.5mm	92	4,5		**88,8**
C-3	P-3	80%-32mm	81	3,8		**96,0**
C-3	P-9	80%-9.5mm	92	3,8		**87,5**
C-4	P-4	80%-32mm	81	3,7		**69,7**
C-4	P-10	80%-9.5mm	92	3,8		**68,4**
C-5	P-5	80%-32mm	81	3,8		**82,0**
C-5	P-11	80%-9.5mm	92	3,7		**82,8**
C-6	P-6	80%-32mm	81	3,8		**64,3**
C-6	P-12	80%-9.5mm	92	3,7		**72,4**

3.4 Flowsheet Development

Crushing& Screening Flowsheet is developed by METSO based on 30 % clay content of ore. The crushed product (-10 mm) is transferred to the agglomeration unit with cement and lime.

The agglomeration drum includes a drumshell which rests on four rubber roller assemblies. The rubber rollers are located on both sides and drive the drum. The thrust roller restrains the drum from moving axially. The rubber roller assemblies and the thrust roller are mounted to a rigid frame. The inside diameter of the drum is 3680 mm and the length is 8000 mm.

Ll is made of 15 mm steel plate. The parts of the shell which press on the rubber rollers have the plate thickness 35 mm, after machining. The shell is equipped with a number of stiffening rings. The drum is inside lined with 5 mm rubber cloth for acid protection.

The agglomeration drum is inside lined with 15 mm thick rubber plates, type FlexBack. The rubber plates are attached to the drum by lifters 100 x 75 mm.

The agglomeration drum has four identical rubber roller assemblies. A shaft is fastened to the rim by locking elements and supported in plummer blocks with roller bearings. The roller assemblies on both sides are connected to each other by floating shaft. Same number of rubber rollers in each roller assembly.

The thrust roller restrains the drum from axial movement. The outside diameter of the thrust roller is covered with polyurethane. The roller is supported by spherical roller bearings, to a fixed shaft which is bolted to the frame.

The agglomeration drum is driven by the rubber roller assemblies on both sides. Each drive consists of a 75 kW Acmotor, elastic coupling and shaft mounted speed reducer. The motor is flanged to the speed reducer. The drives are identical on both sides. The speed of the drum is 5.6 rpm, but can be varied by frequency converter.

A number of spray nozzles are located in the drum. Stainless steel pipes lead the liquids into the drum.

Nominal inclination of the agglomeration drum is 4.6°, but can be varied by changing spacers/shims between drum frame and supporting frame.

The elution circuit is designed to elute 4 t of carbon on a batch basis every days

3.5 Process Description

Crushing process will be occuried by three stage crushing plant.Final product will be P80=10 mm.Final product from crushing&screening circuit will be transfered to agglomeration stage. Cement and lime will be added before agglomeration.Agglomerated ore will be transported to the heap leach pad by an overland conveynor and a series portable conveynors and a radial stacker will place the ore onto pad.

The leach cycle,based on testwork, is 90 days and the solution application rate will be 12 litres pre hour per square meter of crushed ore.There will be 7,500 m^3 process ponds installed to contained heap leach solutionsThe process ponds will have a have double HDPE liner and will be fitted with leak detection pumps.The pond surface will be covered with floating 100 mm diameter HDPE plastic balls in order to prevent bird access.

The gold adsoprtion facility will consist of 6 CIC tanks and carbon column.Gold from the heap solutions will be loaded onto the activated carbon and the carbon will be removed periodically for treatment.The gold will be recovered from the carbon in a standard process consisting of stripping,electrowinning and smelting.

3.6 Reagents and Service Description

Reagents	Intended Use
Sodium Cyanide (NaCN)	It is main reagent in the leach and elution solution.
Lime (Calcium Oxide)	It is used for agglomeration and pH adjustment
Sodium Hydroxide (NaOH)	It is used for pH adjustment in leach and elution solution.
Hydrochloric Acid (HCl)	It is used for loaded carbon wash.
Active Carbon	It is used for separating Gold-Cyanide Complex from solution.

Tables 3.6.1 Reagents

3.7 Plant Layout

The Himmetdede metallurgical plant has been design to treat 6 M t per year of run-of-mine gold ore to produce a doré bullion.

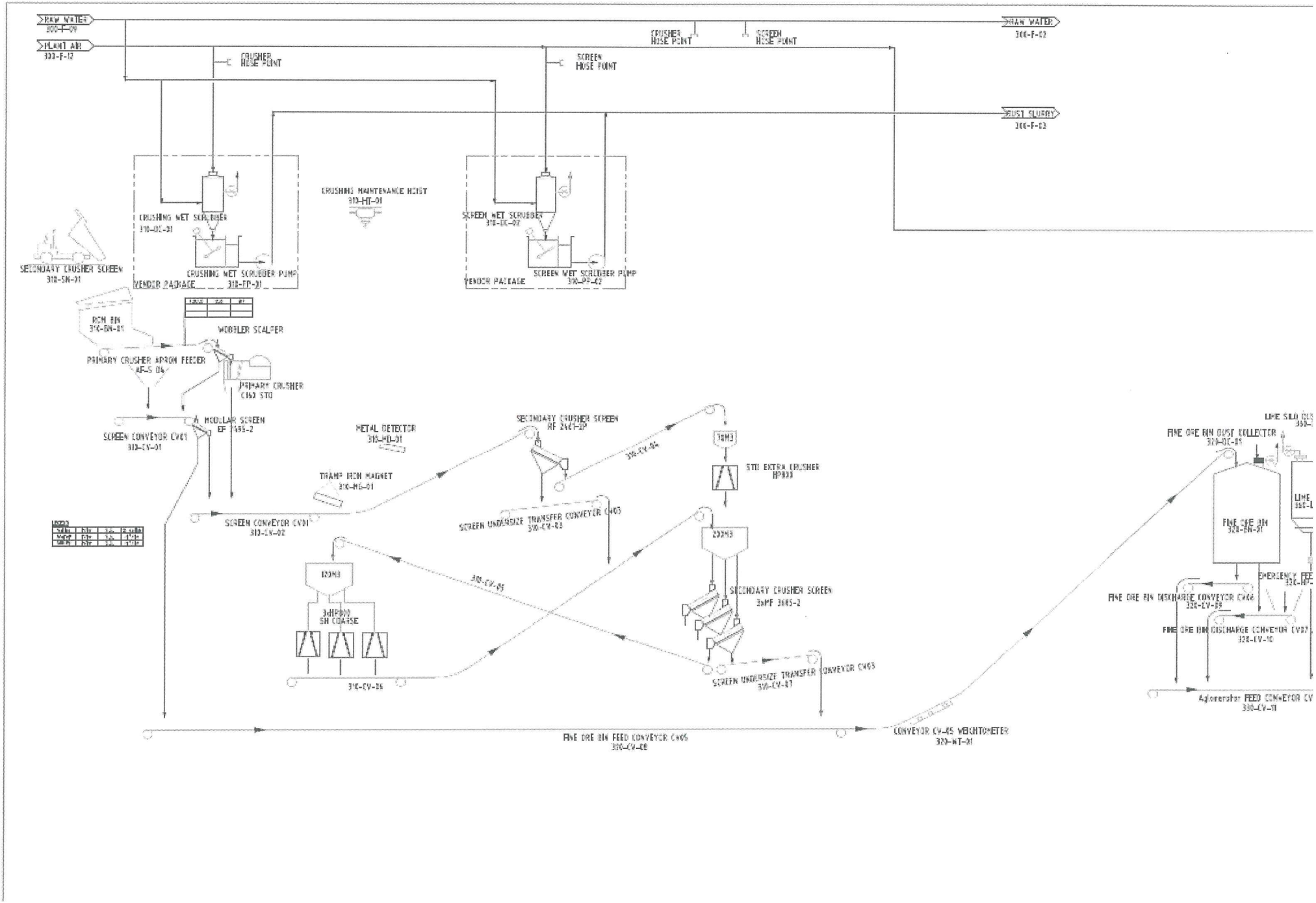
Office accomodation for the plant manager and plant foremen has been incorporated into the general administration building as has the assay

laboratory. Water tanks for process water, potable water and fire water are located adjacent to the plant.
A site layout plan for the metallurgical plant is shown in Appendix.

3.8 Control Philosophy

All units and equipments in process plant will be monitored and controlled by Citect PLC System.

APPENDIX 3.1 FLOWSHEETS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SCREEN HOSE POINT
CRUSHER HOSE POINT
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300-F-03
DUST SLURRY
300-F-03
CRUSHING WET SCRUBBER
310-DC-01
CRUSHING WET SCRUBBER PUMP
VENDOR PACKAGE 310-EP-01
CRUSHING MAINTENANCE HOIST
310-HT-01
SCREEN WET SCRUBBER
310-DC-02
SCREEN WET SCRUBBER PUMP
VENDOR PACKAGE 310-EP-02
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310-SN-01
ROM BIN
310-BN-01
WOBBLER SCALPER
PRIMARY CRUSHER APRON FEEDER
AF-S 06
PRIMARY CRUSHER
C160 STD
SCREEN CONVEYOR CV01
310-CV-01
MODULAR SCREEN
EF 5895-2
METAL DETECTOR
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TRAMP IRON MAGNET
310-MG-01
SECONDARY CRUSHER SCREEN
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310-CV-02
SCREEN UNDERSIZE TRANSFER CONVEYOR CV03
310-CV-03
310-CV-04
STD EXTRA CRUSHER
HP800
SECONDARY CRUSHER SCREEN
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SCREEN UNDERSIZE TRANSFER CONVEYOR CV05
310-CV-07
310-CV-05
3xHP800
SH COARSE
310-CV-06
FINE ORE BIN DUST COLLECTOR
320-DC-01
FINE ORE BIN
320-BN-01
FINE ORE BIN DISCHARGE CONVEYOR CV06
320-CV-09
FINE ORE BIN DISCHARGE CONVEYOR CV07
320-CV-10
EMERGENCY FEE
320-HP-
Agglomerator FEED CONVEYOR CV
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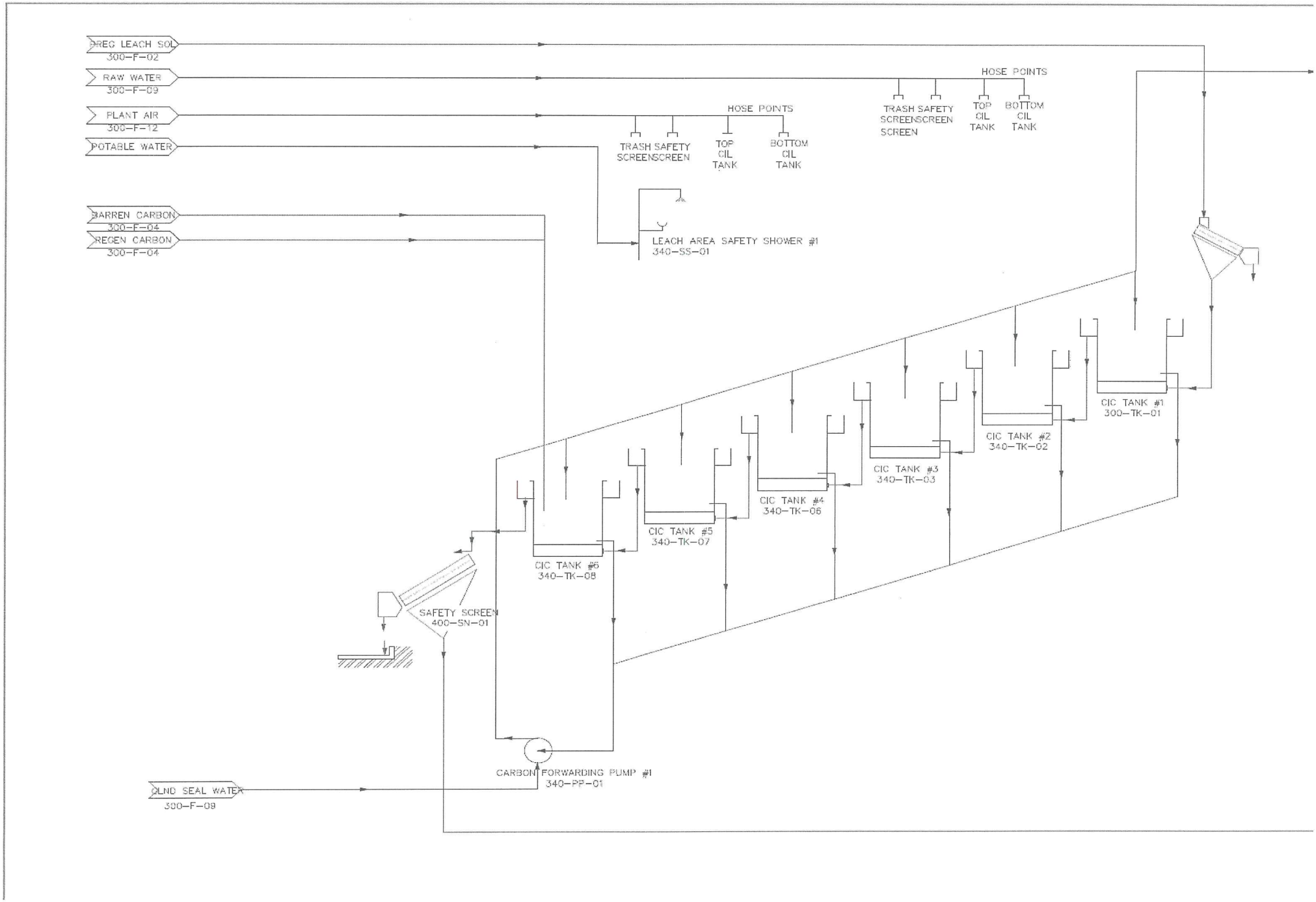
320-CV-08
CONVEYOR CV-05 WEIGHTOMETER
320-WT-01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RAW WATER
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PLANT AIR
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POTABLE WATER
BARREN CARBON
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300-F-04
HOSE POINTS
TRASH SCREEN
SAFETY SCREEN
TOP CIL TANK
BOTTOM CIL TANK
HOSE POINTS
TRASH SCREEN
SAFETY SCREEN
TOP CIL TANK
BOTTOM CIL TANK
LEACH AREA SAFETY SHOWER #1
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CIC TANK #1
300-TK-01
CIC TANK #2
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CIC TANK #3
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340-TK-06
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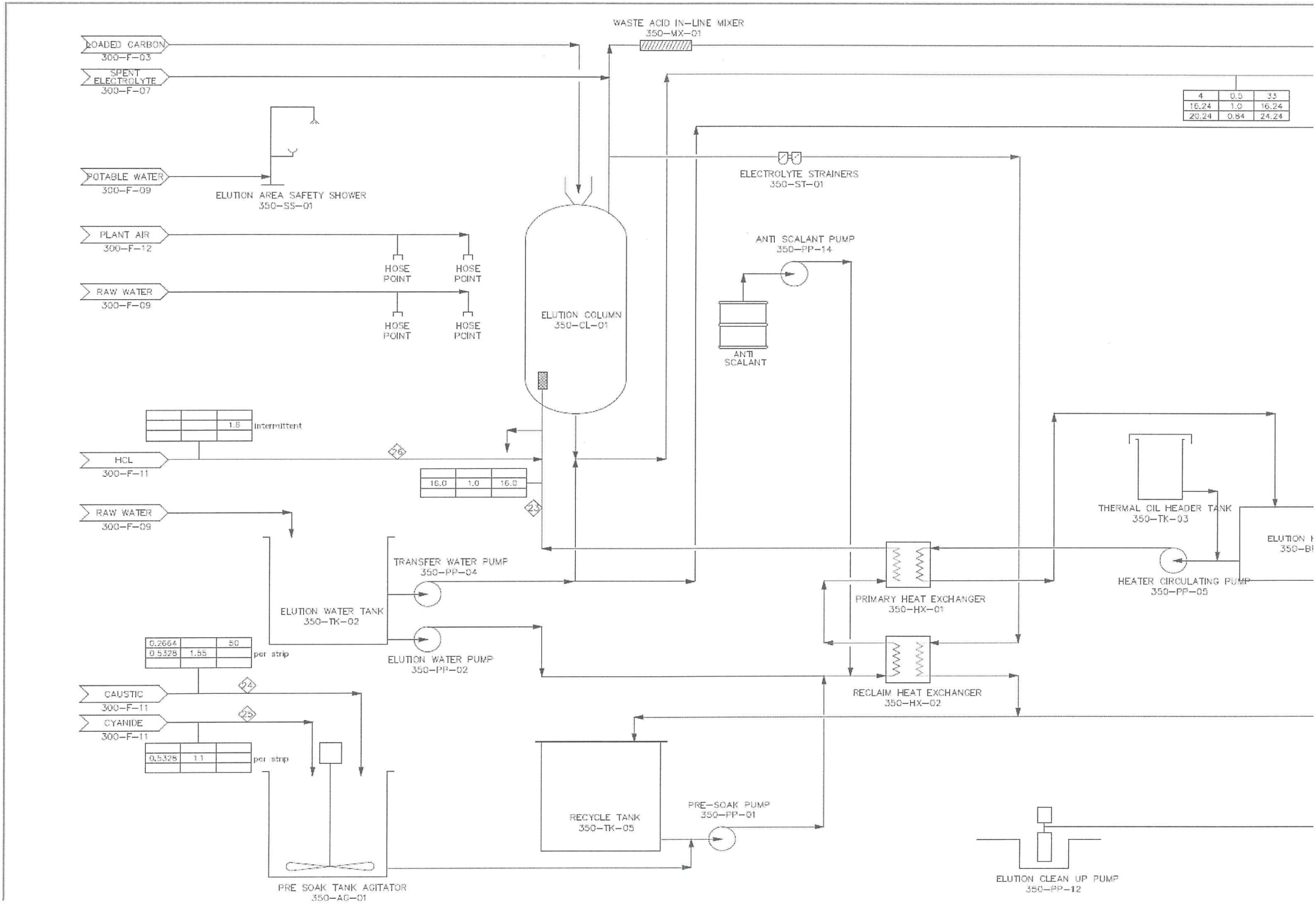
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350-SS-01
PLANT AIR
300-F-12
HOSE POINT
HOSE POINT
RAW WATER
300-F-09
HOSE POINT
HOSE POINT
ELUTION COLUMN
350-CL-01
ELECTROLYTE STRAINERS
350-ST-01
ANTI SCALANT PUMP
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0.5
33
16.24
1.0
16.24
20.24
0.84
24.24
1.8
intermittent
HCL
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26
16.0
1.0
16.0
23
RAW WATER
300-F-09
TRANSFER WATER PUMP
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ELUTION WATER TANK
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ELUTION WATER PUMP
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0.2664
50
0.5328
1.55
per strip
24
CAUSTIC
300-F-11
25
CYANIDE
300-F-11
0.5328
1.1
per strip
PRE SOAK TANK AGITATOR
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RECYCLE TANK
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PRIMARY HEAT EXCHANGER
350-HX-01
RECLAIM HEAT EXCHANGER
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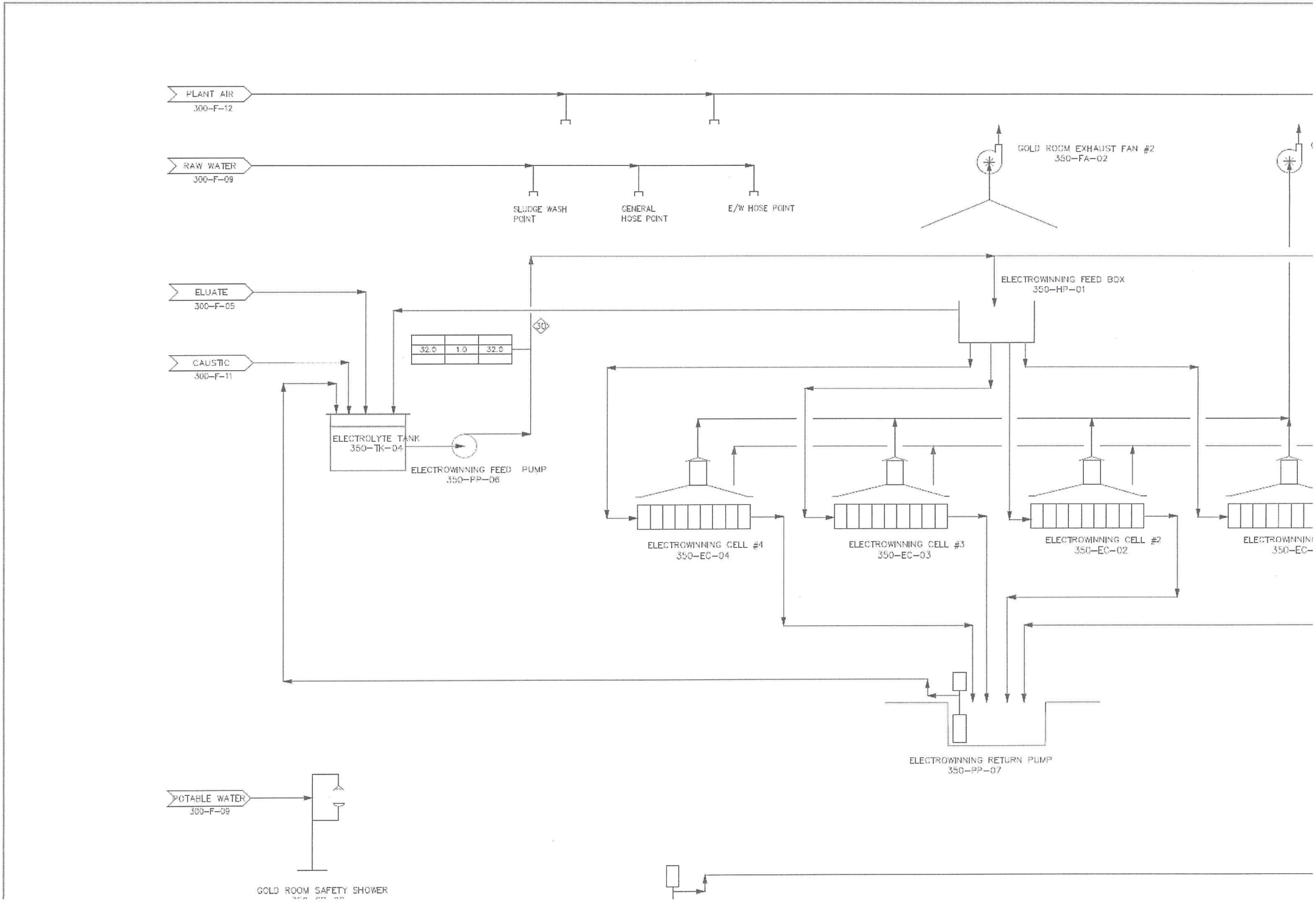
HEATER CIRCULATING PUMP
350-PP-05
ELUTION CLEAN UP PUMP
350-PP-12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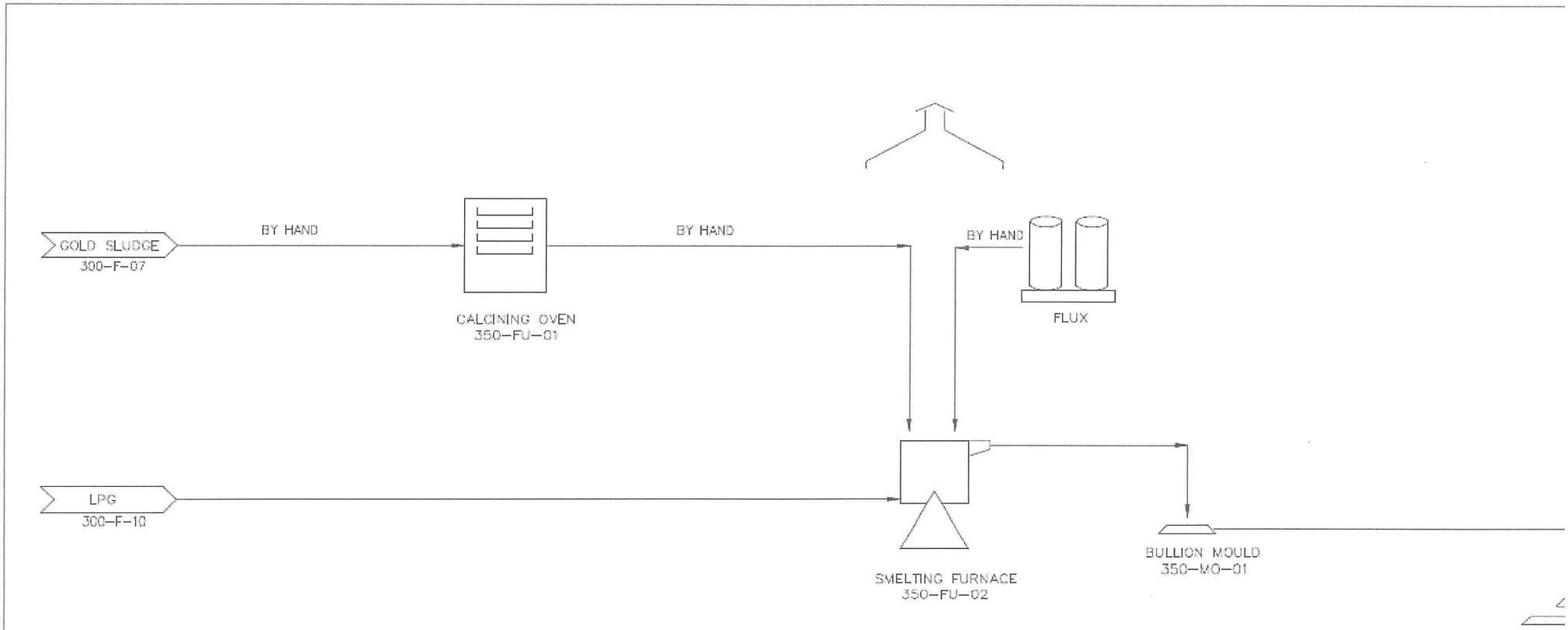
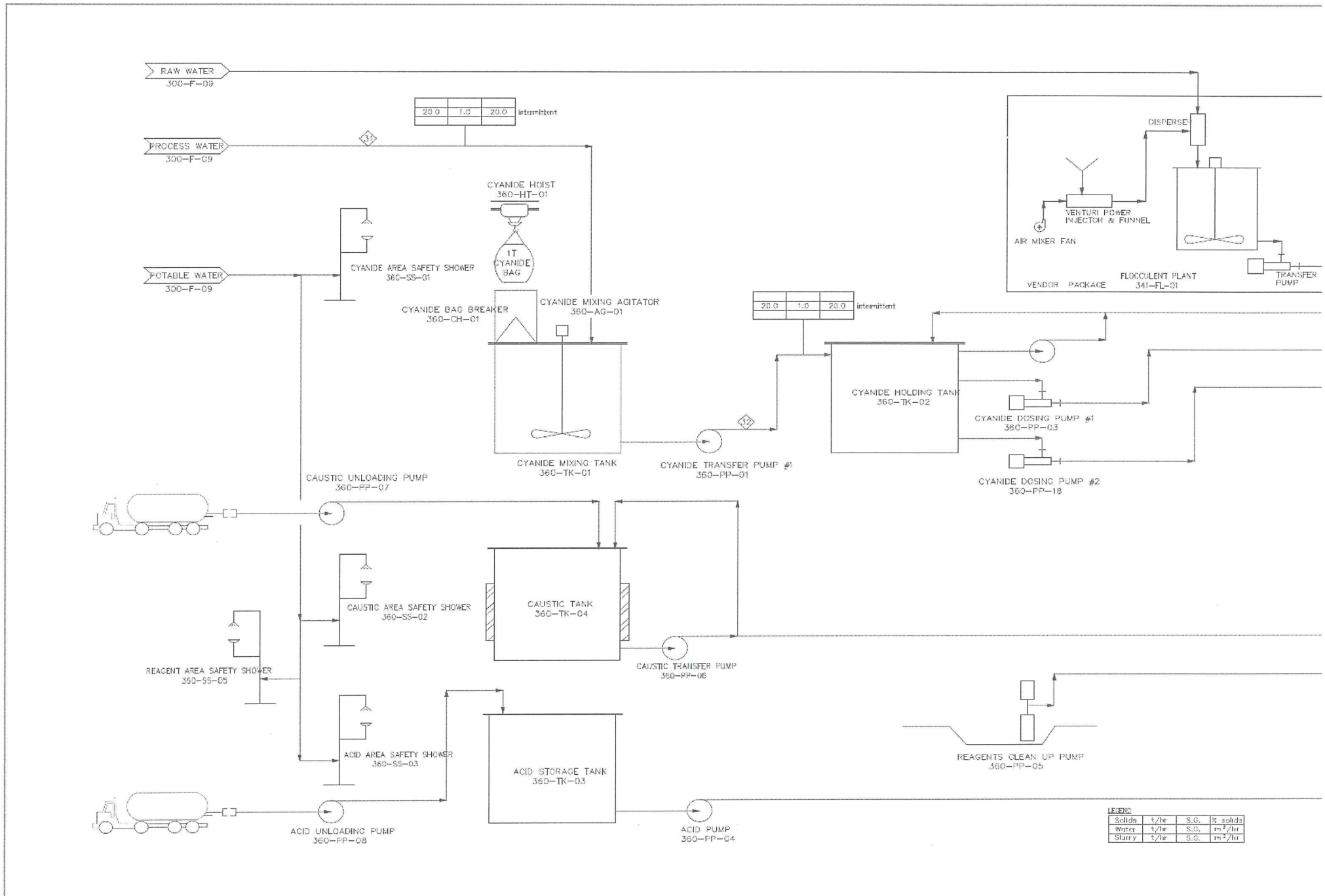
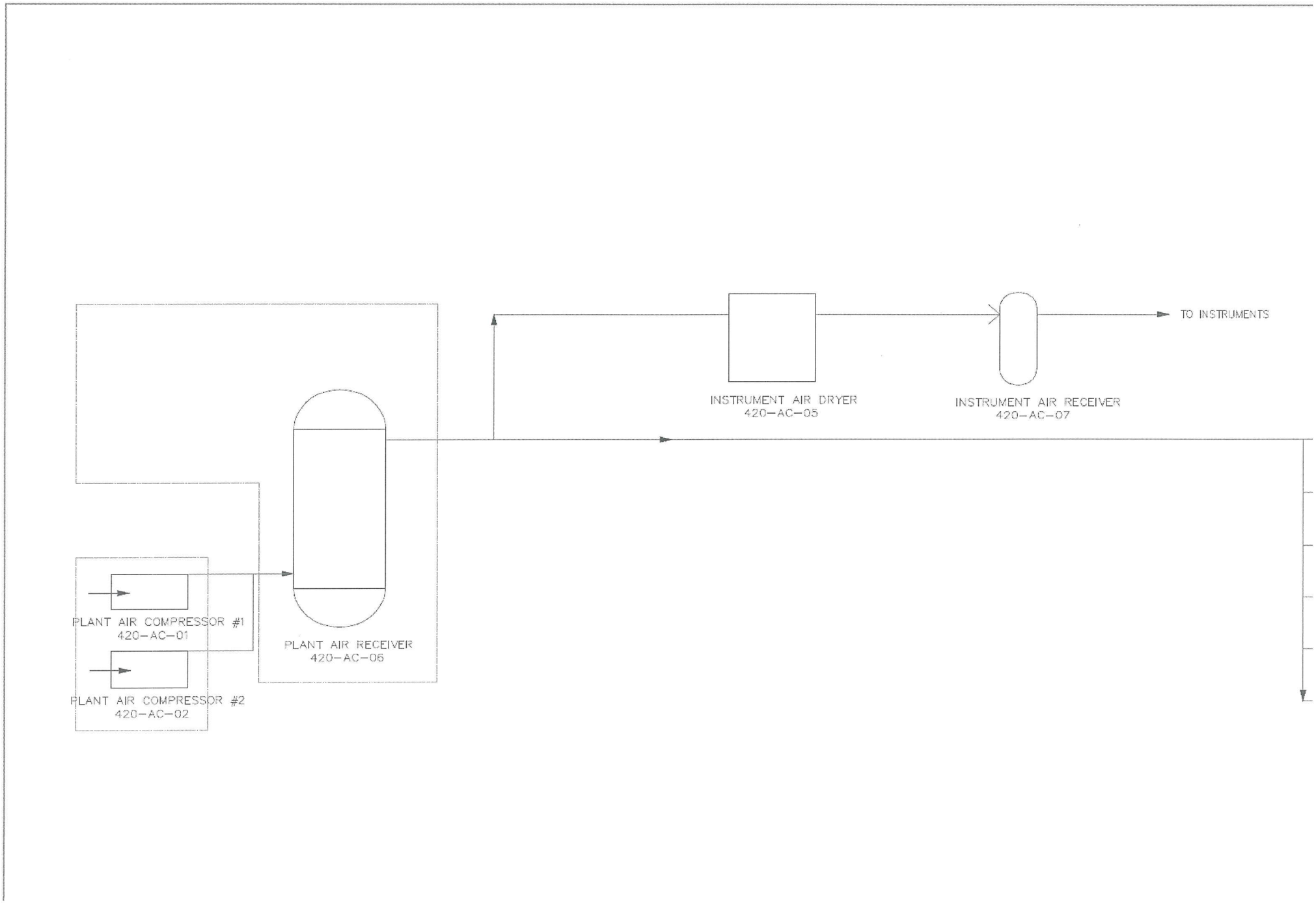
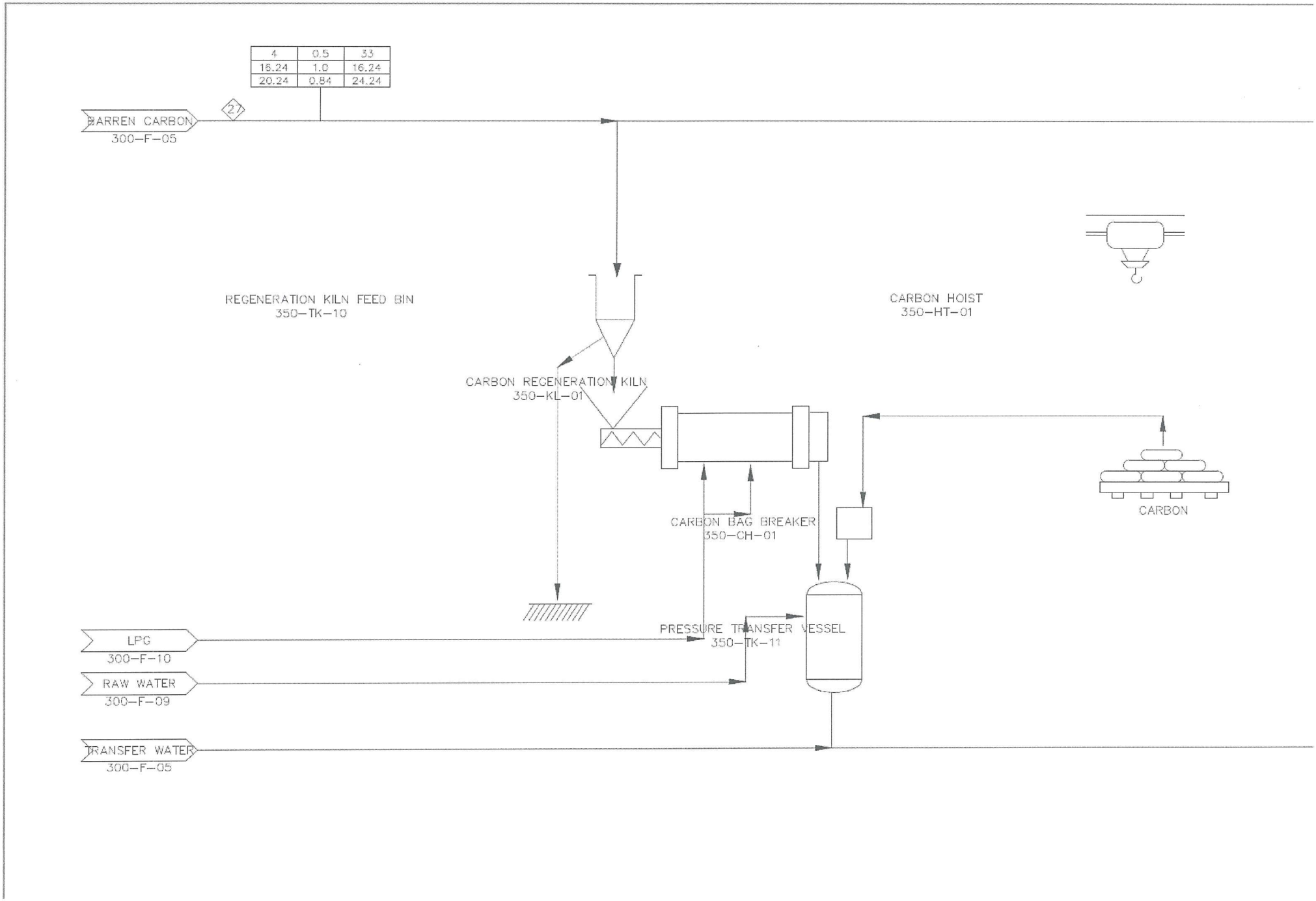
1.0
32.0
ELECTROLYTE TANK
350-TK-04
ELECTROWINNING FEED PUMP
350-PP-06
ELECTROWINNING CELL #4
350-EC-04
ELECTROWINNING CELL #3
350-EC-03
ELECTROWINNING CELL #2
350-EC-02
ELECTROWINNING RETURN PUMP
350-PP-07
POTABLE WATER
300-F-09
GOLD ROOM SAFETY SHOWER


GOLD SLUDGE
300-F-07
BY HAND
CALCINING OVEN
350-FU-01
BY HAND
BY HAND
FLUX
LPG
300-F-10
SMELTING FURNACE
350-FU-02
BULLION MOULD
350-MO-01


RAW WATER
300-F-09
PROCESS WATER
300-F-09
POTABLE WATER
300-F-09
20.0 1.0 20.0 intermittent
CYANIDE HOIST
360-HT-01
1T CYANIDE BAG
CYANIDE AREA SAFETY SHOWER
360-SS-01
CYANIDE BAG BREAKER
360-CH-01
CYANIDE MIXING AGITATOR
360-AG-01
CYANIDE MIXING TANK
360-TK-01
CYANIDE TRANSFER PUMP #1
360-PP-01
20.0 1.0 20.0 intermittent
CYANIDE HOLDING TANK
360-TK-02
CYANIDE DOSING PUMP #1
360-PP-03
CYANIDE DOSING PUMP #2
360-PP-18
DISPERSER
VENTURI POWER INJECTOR & FUNNEL
AIR MIXER FAN
VENDOR PACKAGE
FLOCCULENT PLANT
341-FL-01
TRANSFER PUMP
CAUSTIC UNLOADING PUMP
360-PP-07
CAUSTIC AREA SAFETY SHOWER
360-SS-02
CAUSTIC TANK
360-TK-04
CAUSTIC TRANSFER PUMP
360-PP-06
REAGENT AREA SAFETY SHOWER
360-SS-05
ACID AREA SAFETY SHOWER
360-SS-03
ACID STORAGE TANK
360-TK-03
ACID UNLOADING PUMP
360-PP-08
ACID PUMP
360-PP-04
REAGENTS CLEAN UP PUMP
360-PP-05
LEGEND
Solids t/hr S.G. % solids
Water t/hr S.G. m³/hr
Slurry t/hr S.G. m³/hr


TO INSTRUMENTS
INSTRUMENT AIR DRYER
420–AC–05
INSTRUMENT AIR RECEIVER
420–AC–07
PLANT AIR RECEIVER
420–AC–06
PLANT AIR COMPRESSOR #1
420–AC–01
PLANT AIR COMPRESSOR #2
420–AC–02


4 0.5 33
16.24 1.0 16.24
20.24 0.84 24.24
27
BARREN CARBON
300–F–05
REGENERATION KILN FEED BIN
350–TK–10
CARBON REGENERATION KILN
350–KL–01
CARBON HOIST
350–HT–01
CARBON
CARBON BAG BREAKER
350–CH–01
PRESSURE TRANSFER VESSEL
350–TK–11
LPG
300–F–10
RAW WATER
300–F–09
TRANSFER WATER
300–F–05

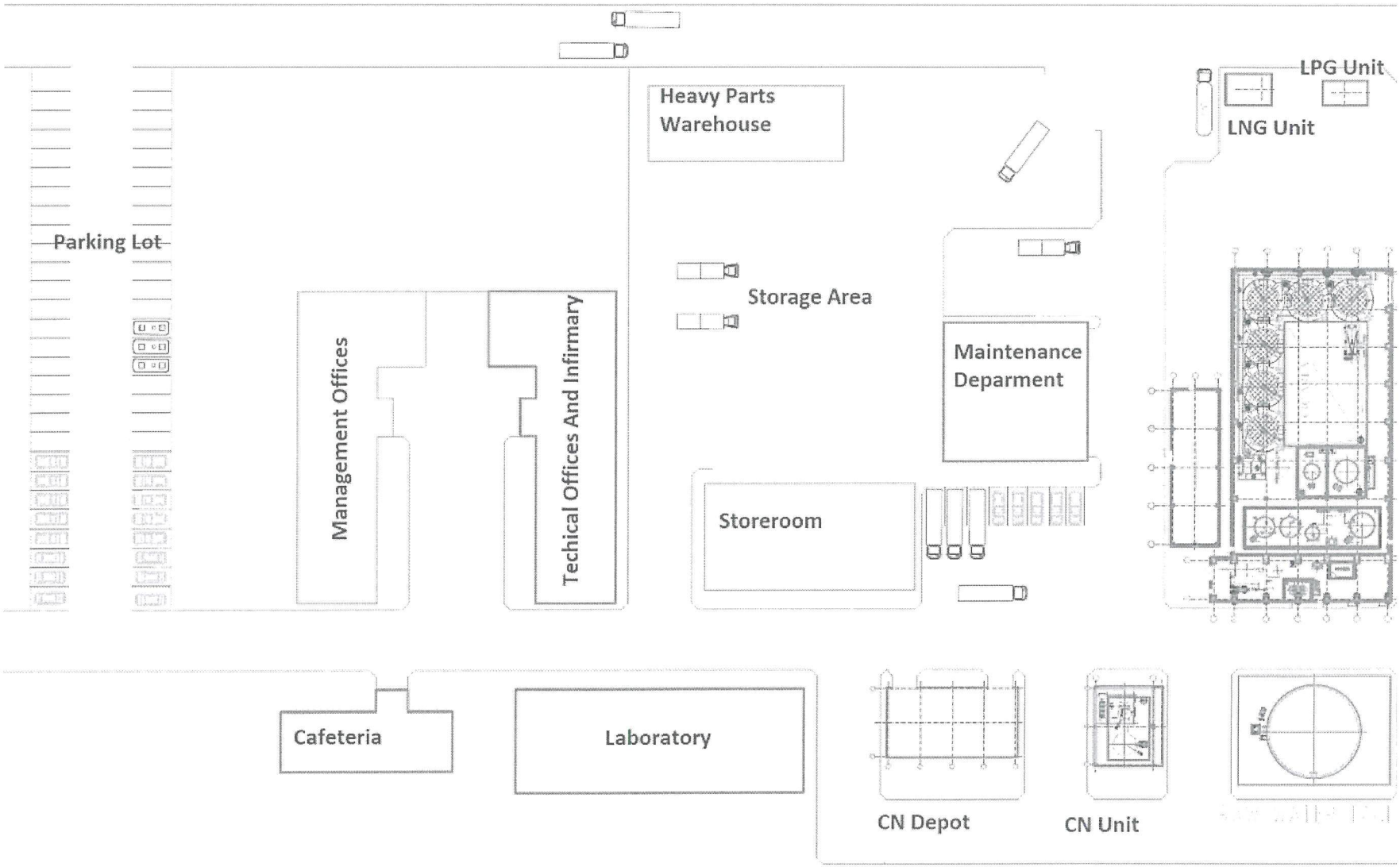
APPENDIX 3.2 MASS BALANCE

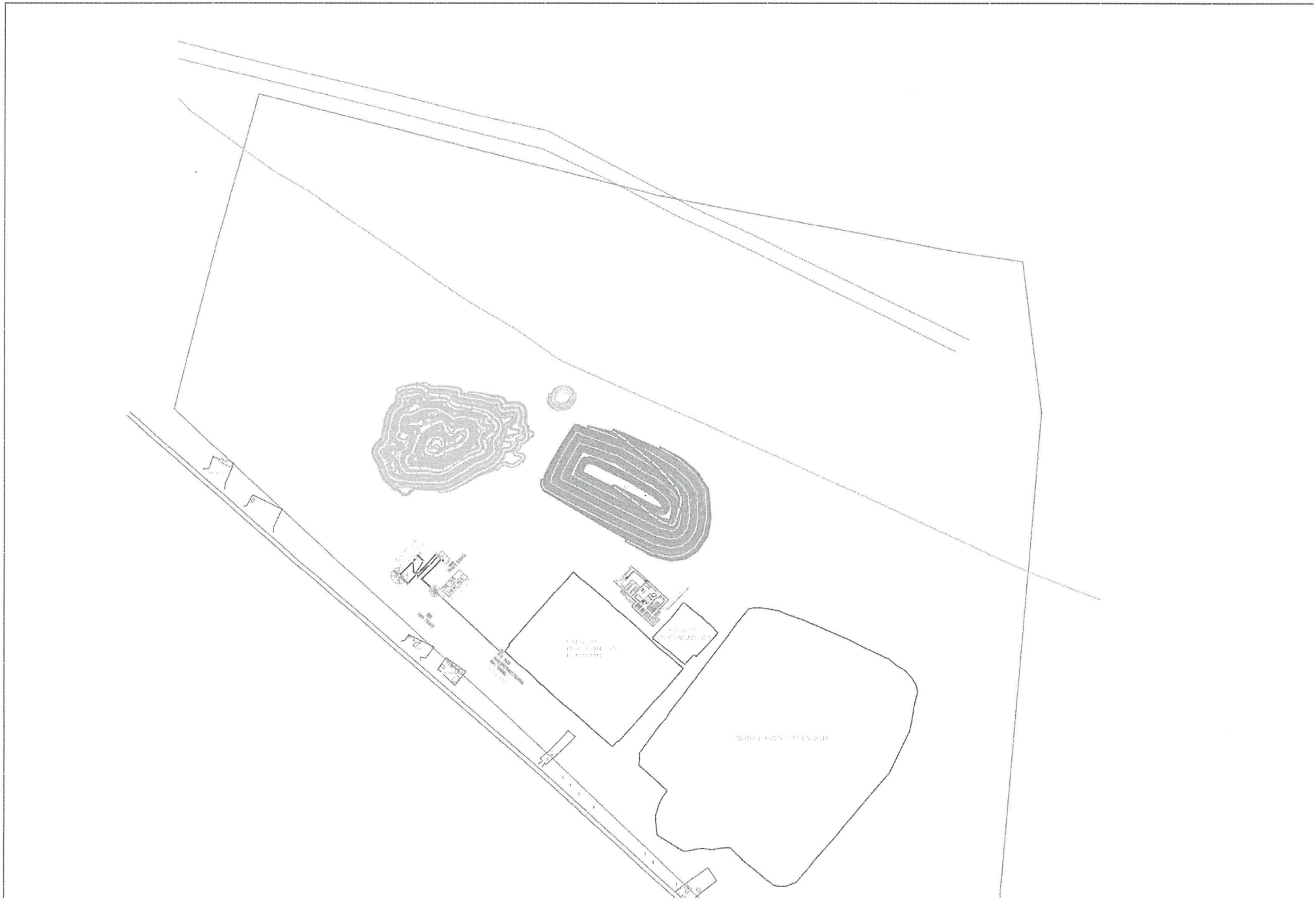
Crusher Feed	t/ h	1100
Jaw Crusher Feed	t/ h	604
Modular screen Undersize	t/h	231
Modular screen Oversize	t/h	265
Secondary Crusher Feed	t/ h	505
Tertiary Crusher Feed	t/ h	1330
Last Stage Screening Feed	t/ h	2198
Last Stage Screening Undersize	t/ h	868
Agglomeration Circuit Feed	t/ h	1100
Heap Leach Feed	t/ h	1100
Heap Leach Reclaim Feed	t/ h	1100
Spent Ore Facility Feed	t/ h	1100

APPENDIX 3.3 WATER BALANCE

Water Balance	Normal Condition		Maximum Water Demand Condition	
	m^3/hour	L/sec	m3/hour	L/sec
Water Input				
Fresh water input	81	23	170	47
Rain				
Heap Leach Area	14	4	3	1
Waste Areaı	46	13	9	3
Ponds	1	0	0	0
Ore Moisture	13	3	21	6
Water input from Reagents	4	1	5	2
Total	**158**	**44**	**209**	**58**
Water Output				
Evoporation				
Heap Leach Areaı	24	7	27	8
Waste Areaı	80	22	90	25
Ponds	2	0	4	1
Watering,Greening , Washing etc.	11	3	17	5
Water Remains in Waste	42	12	71	20
Total	**158**	**44**	**209**	**58**

APPENDIX 3.4 PLANT LAYOUTS





APPENDIX 3.5 EQUIPMENT LIST

Crushing & Screening Circuit	**Power(kW)**
Primary Apron Feeder D6 2000*10500	55
By-pass Revesible Apron Feeder D4 1700*5000	15
Primary Grizzly LH2148-1g	75
C160 Jaw Crusher	200
EF 2496-2(modular Screen)	154
EF 2496-2(modular Screen)	154
Reclaim Apron Feeder AF5-D4-48*6,1	176
Secondary Scalping RF Screen 2448-2p	120
Electromechanical Vibrating Feeder	4,4
GP500S Secondary Cone Crusher	630
Electromechanical Diverging Feeder LH 1.6/2.6*4,8	148
Tertary Product Screen MF 3073-2	220
HP500 Cone Crusher	1420
Primary MMD Sizer	400
Secondary MMD Sizer	250
Ex-work Total	**4021,4**

AGGLOMERATOR		
Diameter, inside	mm	3680
Lenght	mm	8000
Speed, nominal	rpm	5.6
Slope	o	4.6
Motor	kW	2 X 75
Design Throughput	m/ h	450
Bulk density	t/ m^3	1.5
Retention time	min	1.5
CIC - ELUTION – CARBON REGENERATOR		
Elution type		AARL
Operating Schedule	hours / days days / year	8 360
Number of elution columns		1
Material of construction		Mild steel
Number of CIC tanks		6
Carbon Batch size	ton	4
Design Carbon Volume per batch	m^3	8
CIC tank diameter	m	5
CIC tank height	m	2.5
Acid wash HCL concentration	%	3
Strip duration	Hour	8
Elution temperature	°C	110
Number of carbon kilns		1
Carbon kiln type	Horizontal	LNG heated
Carbon Kiln feed rate	kg / hour	250
Regeneration temperature	°C	750
Proportion of carbon regenerated	%	50

ELECTROWINNING		
Operating Schedule	hours/ day	16
Treatment rate		Every day
Elution method		AARL
Electrowinning cells		Two cells
Electrowinning cell model	FLSmidth / Summit Valley Tecnologies	100 EC26
Number of Anodes		28
Number of Cathodes		26
Cathode style		Steel wool
Smelting furnace	Inductotherm	Crucible Melting Furnace

4 INFRASTRUCTURE AND SERVICES

4.1 Site development and Roads

In Himmetdede project,existing roads will be use and new roads construction are not point at issue.Improvement progress in existing roads will be stage.

The frontage and service roads which connects the units to each other will be constructed in the mine site.Service roads will be wide enough that heavy construction equipment can work.

4.2 Power Supply

Energy requirements will be supplied from closest transformer station by line.Besides, for offices and process plant will have generators.

4.3 Power Distribution

Main transformer's specification :

- 34.5 kV-6.6 kv 6300 kVa

Unit	kVa
100 Crushing Circuit	2500
200 Lime & Cement Silo	1000
300 Agglomerator	1000
600 Elution	1500

4.4 Accomadation Village

In Himmetdede Project, approximately 300 people will be employed.Most of the employe will be hired from closest villages.There will be no social residence or guest house in the mine site.Also temporary construction camp will be constructed for workers.

4.5 Mine Infrastucture

Mine infrastructure and preparation period planned 1 year.Schedule of mine infrastructure listed down below :

- Stripping and storing of soil in the project field
- Construction of roads,water line,eletricity line,storage tanks,main mine transformer station, barrier,sewage system and other buildings (labs,technic and management offices)
- Construction of Crushing & Screening buildings
- Preparation of Open Pit
- Construction of canals in the Heap Leach area
- Preparation of leach pad area before production and bedding of liners
- Construction of liners system for Waste Storage Facility.

4.6 Administration and Plant Site Buildings

Project Manager which is resposible of whole progress was nominated in April 2012.

Himmetdede Plant Size

Units	**Area (m^2)**
The EIA Area	10.369.167
Open Pit	261.145
Heap Leach Plant	554.840
Waste Storage Area	1.123.612
Gangue Storage Area	295.850
Pregnant Solution Pond	2.500
Rinse Pond	2.500
Storm Pond	14.400
ADR Units	859
Storage and Inventory Area	410
Office Buildings-1	4.692

Units	Area (m^2)
Office Buildings-2	5.534
Stockpile	24.173
Conveynor	30.679
Vegetable soil Storage Area	10.730

Table 4.6.1 Himmetdede Plant Size

4.7 Laboratory

Process plant and environment deparment samples will be analyzed in Himmetdede Analyze Laboratory.

The analyze which will be committed in the laboratory listed down below:

- Multi-element analyze (ICP)
- Gold,Silver,Iron,Copper and Cobalt analyze (AAS)
- Total Cyanide Analyze
- Sulphide Analze

4.8 Workshops

There will be 2 workshops in Himmetdede Project.

- Open Pit Mine Workshop
- Process Plant Workshop

4.9 Potable Water Supply

In this project, potable water requirements supplied with 5 gallon bottled water.Other water requirements such as general use and process water will be supplied from closest wells.

4.10 Waste Water and Sewage Treatment

Domestic waste water will be pumped Sewage Treatment Plant.Sewage treatment plant will have 50 m^3/day capacity.

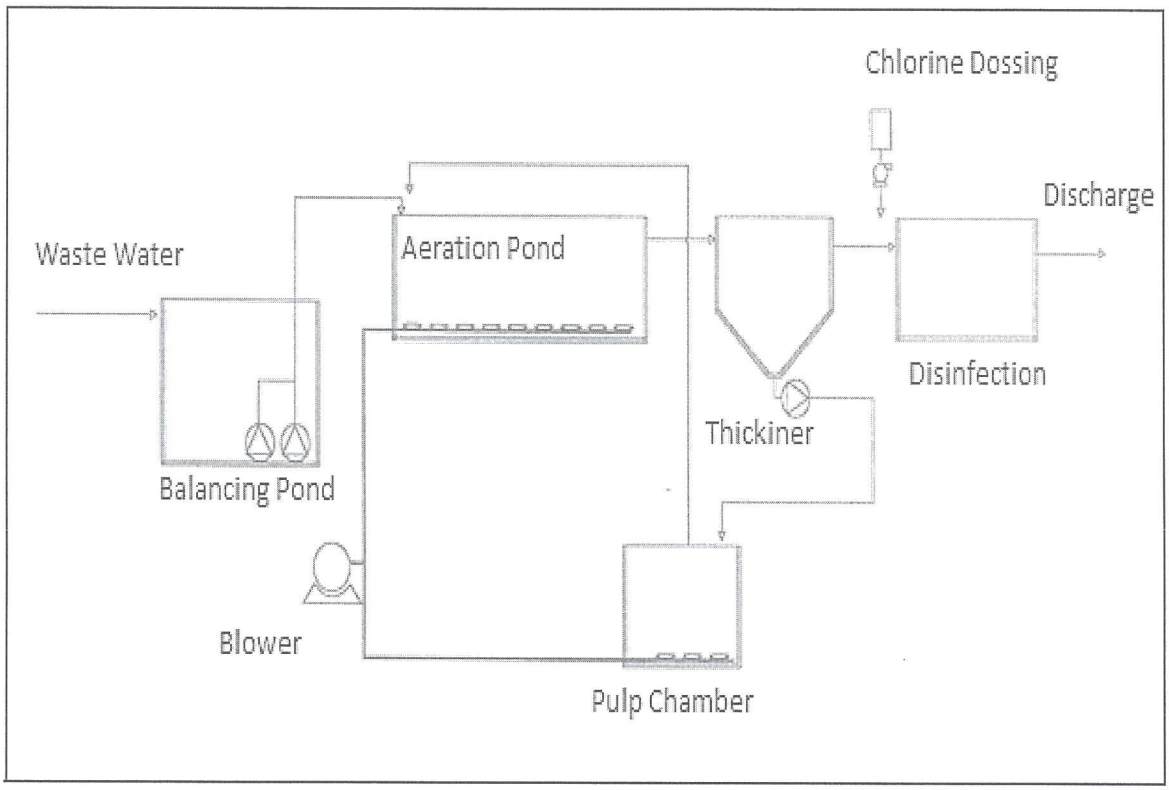


Figure 4.10.1 Sewage Treatment Plant Flowsheet

4.11 Communications

Commincations substructure will be made by Turk Telekom.For this project fiber optic cable will be used.For internal comminucations, operators and engineers will use walkie talkie.

4.12 Plant Light Vehicles and Mobile Equipment

Equipment	Amount
Tractor	1
Fork lift	1
Off-road Pick-up	4
Telescopic Forklift	1
Loader	1

Table 4.13 Plant Light Vehicles and Mobile Equipment Requirements

4. 13 FIRE PROTECTION

There will be enough fire extinguisher in mine site and their maintence will be provided properly.

There will be additional water tanks which can be used in emergency situtations.

4.14 FUEL SUPPLY, STORAGE AND DISTRIBUTION

Natural gas will be used in Desorptions,carbon activation,producing mold and offices.For this purpose there will be 10 m^3 LNG gas tank.In this project 95 m^3 LNG will be consumed in a year.

There will be 20 tonnes diesel tank which used in both construction and project.Fuel requirements of vehicles and construction equipments will be supplied from oil tankers.

4.15 TRANSPORT AND LOGICTICS

All employee will be transfered by public transport vehicles, passenger vehicles and off-road vehicles.

Kayseri has advenced industry.This city has road,rail ways and air ways connections to other cities.Kayseri can be counted as Logictics center.

5. CAPITAL COST ESTIMATE

5.1 Summary

Total project capital costs is approximately 157 M US$.

5.2 Estimate Organisation

The estimate is based on the following data :

- Process design criteria
- Process flow diagrams with mass balance
- Mechanical equipment list
- Site/Plot plans and layout model
- Budgetary quatations from vendors
- Earhwork quantity take-offs from general arrangement models and sketches

The following items are not included in the capital estimate :

- Sunk costs,to be incurred prior to the completion of a positive feasibility study, i.e. exploration drilling,sample preparation,metallurgical testwork,feasibility study,EIA etc
- Owner's corporate costs
- Allowance for special incentives, based on schudule,safety, etc;
- Foreign currency exchange rate fluctutations
- Interest and financing costs
- Risk due to political upheaval,goverment policy changes,labor disputes,permitting delays, weather delays for any force majeure occurrences.

5.3 Currency

Country/Zone	Currency	Equivalent
Turkey	TRY	0,60 $
Euro	Euro	1,25 $

5.4 Base Date

Metso Company proposal recieved 8 June 2012.

5.5 Taxes and Duties

The taxes payable to the goverment of Turkey include:

- 20 percent income tax on net profit
- Tax credit based on 45 percent of hard assets
- Tax credit of 80 percent of the taxes due.

5.6 Contingency

There is no contingency calculations in Capital Cost Estimate.

5.7 Direct Cost Development

HIMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS	
Main Powerline	1.188.640
Water Supply	839.040
Transportation and Service Roads	629.280
Hedge and Barriers	419.520
Ligthing	349.600
Security	279.680
Offices and Buildings	978.880
Engineering	839.040
Earthworks	1.468.320
Total ($)	**6.992.000**

Table 5.7.1 Himmetdede Process Plant Infrastructure Costs

HIMMETDEDE CIC & REAGENTS PLANT CAPITAL COSTS	
CIC Plant Equipments	2.808.283
Reagents Equipments	148.032
Concrete and Steel Construction	3.150.000
Electricity Automation	1.800.000
Engineering	440.000
Project Management	350.000
Material Packing	91.118
Mechanical Supervision	350.000
Electrical Supervision	11.817
Total $	**9.149.250**

Table 5.7.2 Himmetdede CIC & Reagents Plant Capital Costs

HIMMETDEDE CIC PLANT EQUIPMENT COSTS			
	Qty	Unit Price	Price ($)
Pre-Soak Agigator ECL-M5P-75	1	4.095	4.095
Fire Tube/Atmospheric Eilution Heater	1	85.714	85.714
Carbon Bag Breaker	1	5.207	5.207
Regeneration Kiln Feed Chute	1	10.414	10.414
Elution Colunm	1	102.857	102.857
Acid Wash Colunm	1	72.321	72.321
Electrowinning Cells + Reftifiers	1	968.858	968.858
Axial Flow Duct (Gold Room Exhaust Fan)	3	4.500	13.500
Pressure Barrel filter (cathode sludge filter)	1	6.862	6.862
Calcine Oven	1	36.075	36.075
Smelting Furnace	1	36.139	36.139
Electrolyte Return Hopper	1	1.953	1.953
Abus Electric Lift and Travel (Carbon Hoist)	1	9.994	9.994
Abus Electric (Gold Room Hoist)	2	8.775	17.550
Heat Exchangers	2	43.875	87.750
RK200/250HR Carbon Regeneration Kiln	1	1.189.500	1.189.500
Bullion Mould	1	975	975
Seepex Mono Pump Positive Disp.(pre-soak)	1	964	964
Seepex Mono Pump Positive Disp.(elution water)	1	8.348	8.348
Centrifugal (transfer water pump)	1	7.876	7.876
Centrifugal (heater circulating pump)	1	2.853	2.853
Centrifugal (Electro winning pump)	1	14.479	14.479
Centrifugal (Electro winning return pump)	1	7.152	7.152
Warman vertical spindle (elution cleanup pump)	1	7.152	7.152
Warman vertical spindle (gold room cleanup pump)	1	22.146	22.146
Diaphgragm (Anti Scalant Pump)	1	22.146	22.146
Carbon Regeneration Kiln Scrubber Pump	1	383	383
Electrolyte Strainers	1	3.964	3.964
Pre-Soak Tank	1	6.371	6.371
Elution Water Tank	1	3.876	3.876
Thermal Oil Heater Tank	1	10.356	10.356
Electrolyte Tank	1	10.349	10.349
Recycle Tank	1	10.349	10.349
Regeneration Kiln Feed Bin	1	3.236	3.236
Carbon Transfer Vessel	1	13.191	13.191
Electrowinning Feed Tank	1	3.327	3.327
Total ($)			**2.808.283**

Table 5.7.3 CIC Plant Equipment Costs

HIMMETDEDE PROCESS PLANT REAGENTS EQUIPMENT COSTS			
Equipment	**Qty**	**Unit Price**	**Price ($)**
Lighting (Cyanide Mixing Agigator)-ECL-M5Q-220	1	3.984	3.984
Transmin (Bin Activator)+Rotary Valve(Lime Feeder)	1	39.228	39.228
Cyanide Bag Breaker	1	2.670	2.670
Clyde Jaques Reverse Pulse Vent Bag (Lime Silo Dust Collector	1	23.067	23.067
Abus Electric Lift and Travel (Cyanide Hoist)	1	5.125	5.125
Lime Silo	1	8.204	8.204
Centrifugal (Cyanide Transfer Pump)	2	1.264	2.528
Seepex Mono Positive Displacement (Cyanide Dosing Pump)	2	2.061	4.123
Peristaltic Acid Pump	1	4.944	4.944
Warman Vertical Spindle (Caustic Area Clean Up Pump)	1	11.357	11.357
Centrifugal (Caustic Transfer Pump)	1	3.841	3.841
Magnetic Drive (Caustic Unloading Pump)	1	1.980	1.980
Magnetic Drive Pump (Acid Unloading Pump)	1	1.980	1.980
Warman Vertical Spindle (Cyanide Area Clean Up Pump)	1	11.357	11.357
Diaphragm Pump-Sulphamic	1	609	609
Acid Pump- HCl-340TK12 Feed Pump No.1	1	1.785	1.785
Acid Pump -HCl-340TK12 Feed Pump No.2	1	1.785	1.785
Cyanide Mixing Tank	1	1.484	1.484
Cyanide Holding Tank	1	2.888	2.888
Acid Storage Tank	1	7.788	7.788
Caustic Tank	1	7.307	7.307
Total ($)			**148.032**

Table 5.7.3 Himmetdede Process Plant Reagents Equipment Cost

HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS				
	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530
3	Primary Grizzly LH2148-1g	1	540.459	540.459
4	C160 Jaw Crusher	1	577.048	577.048
5	EF 2496-2(modular Screen)	1	582.884	582.884
6	EF 2496-2(modular Screen)	1	582.884	582.884
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250
9	Electromechanical Vibrating Feeder	2	8.542	17.084
10	GP500S Secondary Cone Crusher	2	492.008	984.016
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000
13	HP500 Cone Crusher	4	487.552	1.950.206
14	Engineering	1	37.500	37.500
15	Mechanical Project Management	1	37.500	37.500
16	Mechanical Supervision	1	37.316	37.316
17	Mechanical Commisionning	1	30.633	30.633
18	Agglomerator	3	1.225.000	3.675.000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750
	Total ($)			**16.285.938**

HIMMETDEDE CRUSHING PLANT STEEL CONSTRUCTION, CONVEYING AND ELECTRICITY COSTS		
1	Steel construction	13.908.032
2	Conveyors	9.203.845
3	Electiricity Automation	4.826.905
3	Engineering	1.227.179
4	Project Management	1.022.649
5	Material Packing	204.530
6	Mechanical Supervision	2.155.745
7	Electrical Supervision	22.989
Total ($)		**32.571.875**

HIMMETDEDE CRUSHING CIRCUIT COSTS		
1	Steel construction,conveying and electricity	32.571.875
2	Equipment Costs	16.285.938
Total ($)		**48.857.813**

Table 5.7.4 Himmetded Crushing Circuit Cost

HIMMETDEDE OHLP CAPITAL COSTS					
	Item	Units	Unit Cost		
100	Site Preparation				$ 2.029.301
110	Mobilization and Demobilization	ls	10%	$ 631.721	$ 1.579.301
120	Clear and Grub	ha	$ 10.000	$ 180.000	$ 450.000
200	Earthworks				$ 3.641.113
210	Overexcavation	m^3	5,00 TL	$ -	$ -
220	Compacted Fill: Regrading	m^3	5,00 TL	$ 1.000.000	$ 2.500.000
230	Subgrade Preparation	m^3	0,25 TL	$ 34.265	$ 85.663
240	Soil Liner	m^3	10,00 TL	$ 411.180	$ 1.027.950
250	Single Anchor Trench	m^2	5,00 TL	$ 10.000	$ 25.000
251	Double Anchor Trench	m^3	12,50 TL	$ 1.000	$ 2.500
260	Blasting	lm	5,00 TL	$ -	$ -
300	Geosynthetics				$ 2.412.400
310	2.0mm HDPE Geomembrane	m^3	7,00 TL	$ 924.000	$ 2.310.000
320	1.5mm HDPE Geomembrane	m^3	6,00 TL	$ 24.000	$ 60.000
325	1.5mm HDPE Geomembrane (Double) and Drain Net		16,00 TL	$ 16.960	$ 42.400
400	Overliner				$ 8.910.000
410	Overliner	m^3	$ 15,00	$ 3.564.000	$ 8.910.000
500	Piping				$ 379.500
510	Drainage Piping	m^2	$ 1,15	$ 132.825	$ 379.500
700	Miscellaneous Mechanical Equipment				$ 30.000.000
710	Fixed Conveyor	lm	$ 2.600	$ 1.956.500	$ 5.590.000
720	Rail tripper	ls	$ 750.000	$ 262.500	$ 750.000
730	Mobile Stacking Conveyor w/ tripper	ls	$ 5.700.000	$ 1.995.000	$ 5.700.000
740	Bucket wheel	ls	$ 3.000.000	$ 1.050.000	$ 3.000.000
750	Mobile Reclaim Conveyor w/ hopper	ls	$ 5.200.000	$ 1.820.000	$ 5.200.000
760	Rail Hopper	ls	$ 500.000	$ 175.000	$ 500.000
761	N/A	ls	$ 1.000.000	$ -	$ -
765	Grasshopper	ls	$ 220.000	$ 924.000	$ 2.640.000
770	Conventional Stacker	ls	$ 850.000	$ 297.500	$ 850.000
780	20 t Truck	ea	$ 325.000	$ -	$ -
781	958 Loader	ea	$ 730.000	$ -	$ -
782	12M Grader	ea	$ 320.000	$ -	$ -
783	20m3 Water truck	ea	$ 380.000	$ -	$ -
784	D7 Dozer	ea	$ 570.000	$ 199.500	$ 570.000
790	Overland Conveyor	lm	$ 2.600	$ 1.820.000	$ 5.200.000
800	Spent Ore Facility				$ 13.866.600
810	Spent Ore Regrading	ls	10%	$ 504.240	$ 1.260.600
820	Spent Ore Soil Liner	m^3	10,00 TL	$ 1.375.200	$ 3.438.000
830	Spent Ore Geomembrane	m^2	5,00 TL	$ 2.292.000	$ 5.730.000
840	Spent Ore Overliner	m^3	5,00 TL	$ 1.375.200	$ 3.438.000
900	Construction and Engineering				$ 7.348.670
910	Engineering	ls	2%	$ 306.195	$ 1.224.778
920	CM	ls	5%	$ 765.486	$ 3.061.946
930	Owner Costs	ls	5%	$ 765.486	$ 3.061.946
	Total ($)				**$ 68.587.583**

Table 5.7.5 Himmetdede OHLP Capital Costs

HIMMETDEDEPROCESS PLANT PROJECT INDIRECT COSTS	
Construction Indirect	1.700.000
Insurance	1.500.000
Spare Pats (VAT)	3.500.000
First Fills	900.000
EPCM Services	7.750.000
Engineering QA/QC	1.500.000
Plant Mobile Equipment	800.000
Consultants	750.000
Commissioining & Start-Up	650.000
Freight	1.500.000
Total ($)	**20.550.000**

Table 5.7.6 Indirect Costs

5.8 General Cost Development

HIMMETDEDE PROCESS PLANT CAPITAL COST		
Infrastructure	Koza	6.992.000
CIC & Reagent Plant	Koza	9.149.250
Crusher Plant	Metso	48.857.813
Heap Leach Pad	SRK	68.587.583
Electricity/ Automation	Koza	2.191.650
Indirect Costs	Koza	20.550.000
Total ($)		**156.328.296**

Table 5.8.1 General Capital Costs

6.OPERATING COST ESTIMATE

6.1 Summary

Oparating costs includes labor salary, electricity, reagents, maintenance, crushing, heap loading/unloading and other estimated costs.

6.2 Units of Measure

All calculations are based on metric system.

6.3 Basis of Estimate

Crushing Circuit design and operating cost estimate was estimated on basis of Metso Metallurgical test work.

Agglomeration operation costs are calculated on basis of McClleland Laboratories test results.Also reagent consumptions are based on McClleland metallurgical testwork result.

CIC circuit operatin costs are estimated on basis of stripping number and average consumption during the desorption.

6.4 Estimating Method

McClleland labaroties also calculated the consumption of lime and cement for agglomeration for optimum crushing size.

Cyanide consumption are estimated on basis of tonage and colunm tests results which was actualized by McClleland laboratories

All reagents consumptions are estimated on basis of stripping number and average reagent consumption during the desorption.

List of employee who will work in the process plant,laboratory and maintanance department listed below :

Process Plant	
Mill Superintendent	1
Chief metallurgist	1
Shift engineer	4
Operators	42
Subtotal	**48**
Laboratory	
Chemist	2
Operators	8
Subtotal	**10**
Maintenance	
Group Chief	1
Planning Responsible	1
Electricity Chief	1
Electricity Engineer	1
Electricity Operators	7
Mechanical Chief	1
Mechanical Engineer	1
Mechanical Operators	15
Construction Foreman	1
Construction Worker	2
Contruction Draftsman	1
Subtotal	**32**
Total	90

Table 6.4.1 Process Plant,Laboratory and Maintenance Manning

6.5 Process Plant Operating Cost

Process Operation Costs		
	US$/t	Yearly Cost US$ ('000)
Total Labor	0,174	1.015
Crushing *	0,472	2.833
Heap Loading/Unloading**	1,690	10.140
NaCN ***	0,450	2.700
Lime	0,136	816
Cement	0,128	765
HCl	0,004	27
Caustic	0,007	40
LNG	0,017	100
Electricity	0,033	200
Other Estimated Costs (%9)	0,330	1.980
Maintenance	0,250	1.500
Total	3,691	22.116

Table 6.5.1 Operating Cost Estimate of Process Plant

- * Provided by Koza,but added $0,25/t to crushing to allow for tertiary stage of crushing
- ** Developed by SRK
- *** %50 of average colunm Consumption

Equip.	Consumption KWh 1000saat	Electrical Cost 1KWh = 0.1 EUR	Wear parts	# of parts used (1000 hours)	Approx. Wearing costs (1 set)	Cost (1000 hours)	Maintenance & Labor cost	Estimated Total Costs (EURO) (1000 h)
AF1600	55000	5500		0,2	15000	3000	2500	11000
VG745-3V	9039	903,9	Grizlly	3	612	1836	1794	4533,9
C160	151448	15144,8	Fixed Jaw	0,5	13302	6651	14800	41431,7
			Movable Jaw	0,4	10728	4291,2		
			Upper Cheek Plate	0,1	1838	183,8		
			Lower Cheek Plate	0,3	1203	360,9		
EF2496-2	26989	2698,9	Trellex PCO Panels	0,2	17385	3477	2801	12270,9
			Woven wire Panels	2	1647	3294		
HP800	306251	30625,1	Liner set	0,8	29677	23742	24000	78366,7
RF2461-2	27732	2773,2	Trellex LS Panels	0,3	11895	3568,5	2801	11521,7
			Trellex LS Panel	0,2	11895	2379		
MF3685-2	27732	2773,2	Trellex LS Panel	0,3	11895	3568,5	2801	11521,7
			Trellex LS Panels	0,2	11895	2379		
MF3685-2	27732	2773,2	Trellex LS Panels	0,3	11895	3568,5	2801	11521,7
			Trellex LS Panels	0,2	11895	2379		
HP800	209681	20968,1	Liner set	0,6	29677	17806	24000	62774,3
HP800	209681	20968,1	Liner set	0,6	29677	17806	24000	62774,3
HP800	209681	20968,1	Liner set	0,6	29677	17806	24000	62774,3
TOTAL	1260966	126096,6						**370491,2**

Table 6.5.2 Crushing Circuit Operating Cost Estimate Summary

Agglomeration operating costs are calculated on basis of McCllelland Laboratories test results.

Test	Feed Size (mm)	Lime Added	Cement Added	Unit consumption $/ton (Lime)	Unit consumption $/ton (Cement)
No.	mm	kg/mt ore	kg/mt ore		
P-1	80%-32mm	2,2	2	0,176	0,15
P-7	80%-9.5mm	2,2	2	0,176	0,15
P-2	80%-32mm	2	2	0,16	0,15
P-8	80%-9.5mm	2	2	0,16	0,15
P-3	80%-32mm	1,8	2	0,144	0,15
P-9	80%-9.5mm	1,8	2	0,144	0,15
P-4	80%-32mm	1,4	1	0,112	0,075
P-10	80%-9.5mm	1,4	1	0,112	0,075
P-5	80%-32mm	1,9	2	0,152	0,15
P-11	80%-9.5mm	1,9	2	0,152	0,15
P-6	80%-32mm	1,6	1	0,128	0,075
P-12	80%-9.5mm	1,6	1	0,128	0,075
			Average	**0,15**	**0,13**

Table 6.5.3 Cement and Lime Operation Cost Summary

CIC circuit operating costs are estimated on basis of stripping number and average reagent consumption during the desorption :

Reagents	Estimated Yearly Costs (US$)*
Hidrochloric acid consumption*	26667
Caustic Consumption	40000
LNG consumption	100000
Electricity consumption	200000
Other estimated costs	66667
Total Estimated costs	500000

Table 6.5.3 Other Consumptions Summary

*Hidrochloric acid consumption is calculated 800 kg acid / strip

*Calculations are done 1US$= 1.8 TL

*Electicity costs will be lower than calculated due to few pump used in CIC.

		Feed	NaCN
	Test	Size	Consumed,
Composite	No.	mm	kg/mt ore
C-1	P-1	80%-32mm	1,06
C-1	P-7	80%-9.5mm	1,07
C-2	P-2	80%-32mm	0,54
C-2	P-8	80%-9.5mm	1,06
C-3	P-3	80%-32mm	0,49
C-3	P-9	80%-9.5mm	0,75
C-4	P-4	80%-32mm	0,50
C-4	P-10	80%-9.5mm	0,60
C-5	P-5	80%-32mm	0,55
C-5	P-11	80%-9.5mm	0,69
C-6	P-6	80%-32mm	0,33
C-6	P-12	80%-9.5mm	0,60

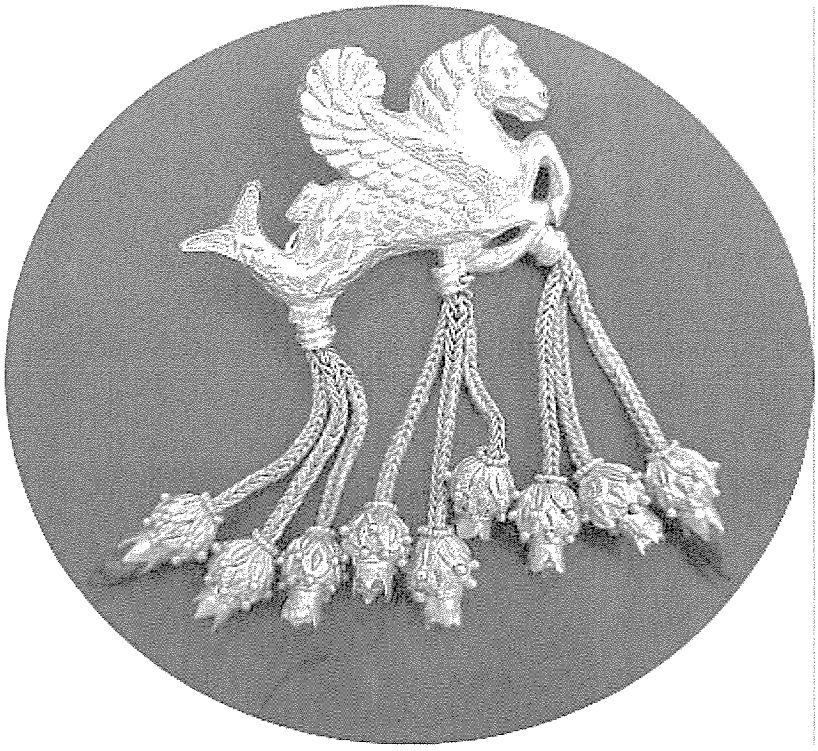
Table 6.5.4 NaCN Consumption Summary

APPENDIX Proposals

eldoradogold

KISLADAG PROJECT
WEST-CENTRAL TURKEY

EXECUTIVE SUMMARY
FEASIBILITY STUDY COST UPDATE



HATCH™

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Hatch

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1. Introduction

Eldorado Gold Corporation ("Eldorado") commissioned Hatch Associates Limited ("Hatch") to prepare a Kisladag Project Feasibility Study, that was completed in March 2003. Subsequent to the issue of the study, there have been a number of changes in conditions affecting financial performance of the project. This document serves as an update to the original study.

The major changes that have been considered in this update include:

- VAT: Capital and operating costs have been modified to include 18% VAT.
- Exchange Rate has been changed from 1.60 million TL per US dollar to 1.50 million TL per dollar.
- CPI was also considered at 27% per annum in Turkey and 5% in North America for two years since the feasibility study.
- Gold Price increased from $325/oz to $350/oz.
- New equipment quotations obtained for major equipment (crushers, ADR plant).
- Fuel price (diesel) has been increased from US$0.75/l to US$1.00/l inclusive of VAT.
- Closure costs have been updated to include the numbers from the EIS.
- Electrical cost increased from US$0.075/kWh to US$0.080/kWh, and an incentive deduction of 40% included for the first four years of operation.

No changes have been made to the original technical concepts developed in the Feasibility Study. The reserve has been increased since completion of the initial feasibility study as discussed below. The production schedule was modified to process 5million tpa in year 1, and 10million tpa in subsequent years. As a result, capital expenditures for phase 2 have been brought forward from year 5 to year 1.

2. Mining

Introduction

The chronology of the resource, reserve, and mine planning activities completed on the Kisladag project by Micon International (resources), and Hatch and Eldorado Gold (reserves and mine plan) can be summarized as follows:

- **April 2003**: Hatch Feasibility Study issued
- **September 2003**: Resource and Reserve Update (Micon and Hatch/Eldorado respectively)
- **May 2004** (this report): Reserve and operating cost update (Hatch/Eldorado).

Resources

The key resource estimates generated since early 2003 are summarized as follows:

Geological Resources
(0.40g/t Au Cut-off Grade)

	Measured & Indicated			Inferred		
	Mt	g/t Au	M Ozs.	Mt	g/t Au	Ozs.
Feasibility Study, April'03	166.4	1.13	6.05	69.1	0.81	1.81
September'03 Update	214.8	1.04	7.20	45.5	0.75	1.10
Current May'04	214.8	1.04	7.20	45.5	0.75	1.10

The increase in Measured and Indicated resource for the project that occurred in September 2003 (and carried through to this current update) was based on an expanded database of drill hole information (43 holes were added compared to the 2003 Feasibility Study), a modified set of resource classification criteria recommended by Micon International, a generally improved understanding of the deposit, and tighter density of drilling.

Reserves & Mine Plan

April 2003 Feasibility Study

Open pit reserves for the Feasibility Study issued in April 2003 were based on a Measured and Indicated resource of 166.4 Mt grading 1.13g/t Au as listed in the table above. From this resource base, a detailed mine plan was generated using Whittle and Gemcon software, geotechnically engineered pit slopes, representative operating costs, and a gold price of US$325 per ounce. The design included due allowances for metallurgical recoveries (81% for oxides and 60% for primary ore), waste dilution, and the application of internal cutoff grades of 0.35g/t (oxide) and 0.50g/t (primary) at initial ore mining and processing rates of 5Mt per year increasing to 10Mt per year in Year 6 of the project. The Feasibility cash

operating costs were estimated at $3.82 per tonne of process feed, of which $1.70/tonne was assigned to mine operations.

September 2003 Reserve Update

In September 2003, the same set of cost and price parameters were used to re-evaluate the pit design resulting in a larger pit of some 17% in overall pit tonnage due to a deeper and slightly wider pit (the Indicated Resource base increased compared to earlier pit designs).

A comparison of the April 2003 Feasibility Reserves versus the September 2003 Updated Reserves can be summarized as follows:

2003 Reserve Comparison
(Combined Oxide & Primary)

	Proven & Probable				Waste Material	
	Au Price US$/oz	Mt	g/t Au	M Ozs.	Mt	Strip Ratio
Feasibility Study	$325	115.14	1.23	4.532	105.88	0.92
September'03 Update	$325	135.02	1.16	5.053	108.26	0.80

Note: in both cases reserves are stated at cutoff grades of 0.35g/t Au for oxides, and 0.50g/t Au for primary ore.

May 2004 Reserve Update

In May 2004, a re-evaluation of the pit mine plan and resulting reserves was completed using a gold price of $350 per ounce (compared to $325/oz previously) combined with higher operating costs including increased VAT taxes, fuel, and exchange rate fluctuations:

Costs/t Processed	**2003 Feasibility**	**2004 Update pre VAT**	**2004 Update incl VAT**
Mining	$1.70	1.91	$2.21
Process	$1.51	1.53	$1.74
G&A	$0.47	0.47	$0.52
Heap Rinse, etc	$0.08	0.07	$0.08
Transport and Refining	$0.06	0.06	$0.06
Cash Operating Cost	**$3.82**	**$4.04**	**$4.60**

Several Whittle optimizations were run using these revised operating costs of $2.21 /tonne of ore or $1.23 per tonne material at a gold price of $350 per ounce. Little significant change occurred to either the

overall dimensions of the final pit limits or the total tonnes of ore and waste compared to the September 2003 Update mine plan. The principal reasons for this being a combination of the following factors:

- increased operating cost is offset by increased revenue from a gold price of $350/oz compared to $325/oz previously;
- internal cut-off grades remain the same as the previous (conservative) estimates;
- in general terms, the distribution of grades across the deposit is robust and can support the additional incremental operating cost without any significant adjustment to the economic limits of the ultimate pit.

Since no significant change in tonnes and grade occurred as a result of increased operating cost, the Mineable Reserve for the deposit and final pit design updated in September 2003 was retained as the basis for evaluating the Kisladag project in May 2004, as follows:

May 2004 Reserve
(Combined Oxide & Primary)

	Proven & Probable				Waste Material	
	Au Price US$/oz	Mt	g/t Au	M Ozs.	Mt	Strip Ratio
Current May'04	$350	135.02	1.16	5.053	108.26	0.80

Note: in all cases, reserves stated at cutoff grades of 0.35g/t Au for oxides, and 0.50g/t Au for primary ore (as previously).

Mine Production Schedule

The mine production schedule generated from the above reserves and current final pit design is show below:

Year	Total Tonnes Mined (kt)	Total Ore to Heap (kt)	Ore Grade g/t Au	Gold Recovery %	Total Gold Produced oz
-1	1,471	786	0.85		
* 1	7,936	5,000	1.20	90	163,970
2	17,713	10,000	1.16	74	251,878
3	21,896	10,000	1.30	67	279,313
4	22,872	10,000	1.19	63	246,586
5	23,298	10,000	1.13	64	233,935
6	22,404	10,000	1.16	64	236,702
7	19,176	10,000	1.11	63	227,726
8	18,021	10,000	1.29	61	250,197
9	19,153	10,000	1.35	60	261,375
10	17,260	10,000	1.18	60	232,473
11	16,354	10,000	0.98	60	194,557
12	14,202	10,000	1.18	60	223,304
13	11,357	10,000	1.40	60	265,558
14	10,170	9,238	1.17	60	216,654
15	-	-	-	-	25,771

* Recovery includes production from year -1

3. Capital Cost

The capital cost estimate had previously been prepared with an intended level of accuracy of plus or minus 15% and is intended to support the Feasibility Study financial analyses. The revised capital cost estimate is given in Table 3.1 below.

Total life of mine capital expenditure of $167.153 million includes $ 24.4 million attributed to VAT charges on goods and services.

Table 3-1: Capital Cost Summary

	Feasibility Study			May 2004 Update(Incl VAT)		
Description	**Initial Capital Cost (k$US)**	**Expansion Capital Cost (k$US)**	**Sustaining Capital Cost (k$US)**	**Initial Capital Cost (k$US)**	**Expansion Capital Cost (k$US)**	**Sustaining Capital Cost (k$US)**
Infrastructure	9,352	812		11,759	884	
Crushing	10,875	8,134		12,430	8,799	
Leach Pad Conveying	3,572	1,147		5,697	0	
Heap Leach Pad and Ponds	4,746	429	15,031	5,159	445	16,305
ADR Facilities	3,260	26		3,724	32	
Waste Dumps	327			334	0	
Mining	381	25,829	14,778	634		47,539
Closure Capital			7,400			2,293
Sub-Total Direct Costs	**32,513**	**36,377**	**37,209**	**39,738**	**10,160**	**66,137**
EPCM	3,908	949		4,568	914	
Construction Indirects	2,749	663		3,158	768	
Freight	946	533		1,277	489	
Owners Cost	7,537			7,516	0	
Spares	1,825			473	0	
First Fill	118			185	0	
Duties and Taxes				10,245	2,220	11,905
Sub-Total Indirect Costs	**17,083**	**2,145**	**0**	**27,423**	**4,391**	**11,905**
Contingency	4,777	885		6,186	1,213	
Total	**54,373**	**39,407**	**37,209**	**73,347**	**15,764**	**78,042**
Total Project	**130,989**			**167,153**		

The unit rates were modified to include the CPI increase of 27% on the labour, and to reflect current pricing. A summary of the changes is given in Table 3-2 below.

Table 3-2: Construction Unit Rates

		Feasibility	May 2004 Update
Description	**Unit**	**Rate US$/Unit**	
Earthworks (supplied and installed unit price)			
Detailed Excavation	M^3	$6.80	$8.16
Backfill	M^3	$8.80	$10.48
Granular Backfill	M^3	$11.40	$13.38
Concrete (supplied and installed unit price)			
Mats & Slabs	M^3	$136.50	$158.36
Footings	M^3	$168.90	$194.38
PC & Reclaim Elevated Slabs/Roofs	M^3	$214.12	$257.79
PC & Reclaim Walls	M^3	$238.00	$278.04
Structural Steel (supplied and installed unit price)			
Structural Steel	Tonne	$2,010.00	$2,549.00
Grating	M^2	$118.00	$129.30
Handrail	M	$90.00	$115.50
Stairs c/w Handrail & Kickplate	M	$234.00	$296.71
Platework and Liners			
Chutes and Platework	T	$2,170.00	$2,755.00
Liner Plate	T	$2,454.00	$3,109.00

4. Operating Cost

The estimated operating costs for the Project expressed in US dollars are summarised in the tables below.

Table 4-1:Life of Mine Operating Cost Summary

	Feasibility Study			May 2004 Update		
	Life-of mine MUS$	US$ per tonne	US$ per ounce	Life-of mine MUS$	US$ per tonne	US$ per ounce
Mining	196	1.70	68	298	2.21	90
Process	173	1.51	60	235	1.74	71
General and Administrative	54	0.47	19	70	0.52	21
Heap Rinse and Detox	9	0.08	3	11	0.08	3
Transport & Refining	7	0.06	2	8	0.06	2
Cash Operating Cost	**440**	**3.82**	**152**	**621**	**4.60**	**188**
Royalties	13	0.11	5	19	0.14	6
Total Cash Cost	**453**	**3.93**	**157**	**640**	**4.74**	**193**
Depreciation	114	0.99	39	143	1.06	43
Amortisation	13	0.12	4	25	0.18	7
Closure Cost	7	0.06	3	3	0.02	1
Total Production Cost	**583**	**5.10**	**203**	**810**	**6.00**	**244**

Table 4-2:Life of Mine Operating Cost Summary by Commodity

	May 2004 Update (excl VAT)			May 2004 Update (incl VAT)			
	Life-of mine MUS$	US$ per tonne	US$ per ounce	Life-of mine MUS$	US$ per tonne	US$ per ounce	% of cash op cost
Labour	94	0.70	28.5	94	0.70	28.5	15.2%
Reagents	65	0.48	19.6	77	0.57	23.1	12.3%
Power	55	0.40	16.5	64	0.48	19.4	10.3%
Fuel	94	0.70	28.5	111	0.83	33.7	18.0%
Parts/Supplies	132	0.98	39.7	152	1.13	46.0	24.5%
Other (incl refining)	105	0.78	31.7	122	0.91	36.9	19.7%
Cash Operating Cost	**545**	**4.04**	**165**	**621**	**4.60**	**188**	**100%**
Royalties	16	0.12	4.9	19	0.14	5.6	
Total Cash Cost	**561**	**4.16**	**169**	**640**	**4.74**	**193**	
Depreciation	120	0.89	36.3	143	1.06	43.1	
Amortisation	25	0.18	7.4	25	0.18	7.4	
Closure Cost	3	0.02	0.8	3	0.02	0.8	
Total Production Cost	**709**	**5.25**	**214**	**810**	**6.00**	**244**	

5. Financial Analysis

Hatch completed a financial analysis of the Kisladag Project using a discounted cash flow model incorporating the most recent Turkish tax and royalty schedules. Project construction capital cost estimates including pre-production costs, ongoing capital costs and mine closure costs have been included in the Project cashflow projection. Operating costs presented as May 2004 US dollars remain constant over the mine life and no allowance for inflation has been included. The economic analysis excludes considerations of alternative financing options and is based on zero debt in order to present a base case cash flow analysis. In order to meet regulatory requirements, the mine production schedule includes only Measured and Indicated Resources. A summary of the financial analysis is presented below:

Table 5-1: Project Financial Analysis Summary

Project Data	Feasibility	May 2004 Update
Life of Mine	15 years	15 years
Total Gold Produced	2.9 million oz	3.3 million oz
Total Ore Mined	115 million tonnes	135 million tonnes
Total Material Mined	221 million tonnes	243 million tonnes
Open Pit Strip Ratio	0.92	0.80
Initial Project Capital Cost	US$54.4 million	US$73.3 million
Cash Operating Cost	US$152 /oz	US$188 /oz
Total Production Cost	US$203 /oz	US$244 /oz
Base Case Gold Price	US$325 /oz	US$350 /oz
Before Tax Net Present Value @0%	US$356 million	US$352 million
After Tax Net Present Value @0%	US$255 million	US$286 million
After Tax Net Present Value @5%	US$146 million	US$164 million
After Tax Net Present Value @10%	US$85 million	US$94 million
After Tax Internal Rate of Return	33%	29%

6. Sensitivity Analysis

The variables that have been considered in this sensitivity analysis are as follows:

VAT – Reduce from base case (18%) to 0%.

Gold Price – Increase from base case (350$/oz) to 375 and 400 US$/oz.

Fuel Price – The base case is $1.00/l (32$/barrel). Sensitivities at $0.60/l($22/barrel) and $1.37/l ($42/barrel) were considered.

Table 6-1: Sensitivity to VAT

Project Data	May 2004 Update	May 2004 Excl. VAT
Initial Project Capital Cost	US$73.3 million	US$62.6 million
Cash Operating Cost	US$188 /oz	US$165 /oz
Total Production Cost	US$244 /oz	US$214 /oz
Base Case Gold Price	US$350 /oz	US$350 /oz
Before Tax Net Present Value @0%	US$352 million	US$455 million
After Tax Net Present Value @0%	US$286 million	US$348 million
After Tax Net Present Value @5%	US$164 million	US$215 million
After Tax Net Present Value @10%	US$94 million	US$137 million
After Tax Internal Rate of Return	29%	43%

Table 6-2: Sensitivity to Gold Price

Project Data	Gold Price			
	Gold @$325/oz	Gold @$350/oz	Gold @$375/oz	Gold @$400/oz
Cash Operating Cost	US$188 /oz	US$188 /oz	US$188 /oz	US$188 /oz
Total Production Cost	US$244 /oz	US$244 /oz	US$244 /oz	US$244 /oz
Gold Price	US$325 /oz	US$350 /oz	US$375 /oz	US$400 /oz
Before Tax Net Present Value @0%	US$269 million	US$352 million	US$434 million	US$517 million
After Tax Net Present Value @0%	US$216 million	US$286 million	US$342 million	US$397 million
After Tax Net Present Value @5%	US$118 million	US$164 million	US$203 million	US$244 million
After Tax Net Present Value @10%	US$61 million	US$94 million	US$123 million	US$155 million
After Tax Internal Rate of Return	23%	29%	34%	42%

Table 6-3: Sensitivity to Fuel Price

Project Data	May 2004 Update		
	Base - Fuel $1.00	**Fuel @ $0.60**	**Fuel @ $1.37**
Life of Mine	15 years	15 years	15 years
Total Gold Produced	3.3 million oz	3.3 million oz	3.3 million oz
Total Ore Mined	135 million tonnes	135 million tonnes	135 million tonnes
Total Material Mined	243 million tonnes	243 million tonnes	243 million tonnes
Open Pit Strip Ratio	0.80	0.80	0.80
Initial Project Capital Cost	US$73.3 million	US$73.3 million	US$73.3 million
Cash Operating Cost	US$188 /oz	US$175 /oz	US$208 /oz
Base Case Gold Price	US$350 /oz	US$350 /oz	US$350 /oz
Before Tax Net Present Value @0%	US$352 million	US$396 million	US$283 million
After Tax Net Present Value @0%	US$286 million	US$316 million	US$228 million
After Tax Net Present Value @5%	US$164 million	US$184 million	US$126 million
After Tax Net Present Value @10%	US$94 million	US$108 million	US$69 million
After Tax Internal Rate of Return	29%	31%	25%

TECIINICAL REPORT
ÇÖPLER GOLD PROJECT
EAST CENTRAL TURKEY

December 5th, 2008
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ANATOLIA
MINERALS

Anatolia Minerals Development Limited

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1.0 SUMMARY

This Technical Report summarizes updates to the reserves, resources, mining plan and mineral processing methods at the Çöpler Gold Project ("Çöpler") in east-central Turkey. The project is owned by Çukurdere Madencilik Sanayi ve Ticaret Şirketi a wholly owned indirect subsidiary of Anatolia Minerals Development Limited. ("Anatolia"). Anatolia is currently in the process of developing the oxide ores of the Çöpler Project for commercial production. The Çöpler Project is planned as conventional multi-open pit gold and silver mine with ore treatment using the heap leach process.

A recent assessment of the Çöpler Project suggested that a staged development of the project is preferable at this time with the initial development incorporating heap leach processing of the ore. Work will continue on assessing the economic benefits of adding a mill treatment circuit to augment the heap leach processing facility and studies are being conducted to assess potential development options for the sulfide resources.

In May 2006, a Technical Report was published by Samuel Engineering, Inc. ("Samuel") which summarized the results of the Çöpler feasibility study. Much of that work has not changed and this report draws heavily from the previous Technical Report by Samuel. It will be noted in this text when direct quotes are utilized from the previous Technical Report on which the Qualified Person is relying.

In March 2007, a Technical Report was published by Independent Mining Consultants ("IMC"), Inc. which presented the planned development of the Çöpler Project at that time. Much of the work documented in that report has not changed and this technical report will draw heavily from the previous Technical Report by IMC. Again, it will be noted in this text when direct quotes are utilized from the previous Technical Report on which the Qualified Person is relying.

The Çöpler mining area is located in east-central Turkey, roughly 550 km east of Ankara and 120km southwest of the city of Erzincan. The deposit is a near surface epithermal gold complex that is focused in three main areas. The three areas are: the Main Zone, the Manganese Zone, and the Marble Zone. Within this document they will be referred to as the Main, Manganese, and Marble zones respectively.

IMC was provided digital copies of the Çöpler mining area data base inclusive of drill hole assays, geologic logs, geotechnical logs, and various previous reports and interpreted geology. IMC completed a verification of the data base and developed a conventional block model of the deposits that was used to develop the resources, reserves, and the mining plan.

The deposits have been drilled by both reverse circulation ("RC") and diamond core ("DD") drilling methods. The total drilling in the project area as of January 2008 that

was used for the statement of mineral reserves and resources amounts to 836 drill holes totaling 108,829 meters of drilling.

IMC developed a single block model that contains all three deposits. Rock type interpretations and oxide versus sulfide surfaces were developed within the model. Block grades were estimated for gold, silver, and other accessory minerals based on linear kriging with appropriate rock type and grade boundary constraints.

The mine plan that resulted in the mineral reserve was based on measured and indicated mineralization only. Within the mine plan, inferred material was categorized as waste. However, the contained inferred material within the mine plan was included within the statement of mineral resources along with additional mineralization outside of the mine plan.

The mine operation will utilize conventional hard rock open pit mining methods with drilling, blasting, loading and hauling of the ore and waste material. Anatolia currently plans to use a Turkish mining contractor.

The mine plan delivers approximately 15,500 tonnes per day ("tpd") to a single gyratory primary crusher followed by secondary and tertiary crushing using a conventional standard-head secondary and two short-head cone tertiary crushers, the latter operating in a closed circuit. The crushed ore will be delivered to a heap leach facility via an overland conveyor and stacking system. Table 1-1 summarizes the mine production schedule and Figure 1-1 illustrates the mine plan, waste storage, and general locations of the plant and leach facilities.

Figure 1-2 illustrates the process flow sheet.

Table 1-2 illustrates the estimated project capital cost in third quarter 2008 dollars. Table 1-2 includes the capital costs related to the Engineering, Procurement and Construction Management ("EPCM") contract while the remainder of the capital costs is Owners Costs up until the time of commercial product for the project. The total estimated capital cost for the project is $169,528,336.

Table 1-3 illustrates the estimated project operating costs also in third quarter 2008 dollars as developed by Anatolia. Mining costs are $4.59 per tonne of ore (based on $1.96 per tonne of material moved), ore processing costs of $3.60 per tonne and G&A costs of $0.84 per tonne of ore. Total average operating cost per tonne of ore is $9.03. All costs are shown in third quarter 2008 United States dollars.

Economic analysis of the estimated mine and process costs were developed by Anatolia staff and is summarized on Table 1-4. The results of the financial analysis are summarized later in this text. Mineral reserves and mineral resources were based on metal prices of $600/oz gold and $11.00/oz silver, whereas the financial model was based on a three year look-back price for gold of $700/oz, a silver price of $12/oz and a copper price of $2.20/pound.

The Mineral Reserves are identical to the planned total of all ores processed within the plan as illustrated on Table 1-1. The total mineral resources on Table 1-4 are based on the assumption that a process facility for sulfide ores will be available after completion of the oxide ore reserves.

The information within this paragraph references the input data to Resources rather than Reserves. Recoveries were varied by ore type and lithology based on the results of metallurgical testing performed by Anatolia. Sulfide recoveries of 75 percent were assumed together with a sulfide process treatment facility being engineered, permitted, constructed and commissioned upon the completion of a successful feasibility study, allowing for continuous operations post completion of mining of the cyanide amendable reserves. Inferred resources within the reserve pit and the additional resource mineralization outside of the reserve pit were combined to determine the Çöpler Mineral Resources.

Table 1-1
Çöpler Mine Production Schedule
Based on Measured and Indicated Category Mineralization

Year	Heap Leach Ore						Waste Material Ktonnes	Total Material Ktonnes
	Cutoff $ Net /T	Ktonnes	Gold gm/t	Silver gm/t	Au Lch Rec %	Ag Lch Rec %		
2008	$0.001	0	0.00	0.00	-	-	309	309
2009	$0.001	1,300	0.88	0.34	74.3%	29.2%	5,765	7,065
2010	$0.001	5,613	1.64	2.89	67.9%	22.1%	8,716	14,329
2011	$0.001	5,765	2.06	4.34	63.7%	19.1%	9,569	15,334
2012	$0.001	5,699	1.36	3.74	64.8%	18.8%	9,631	15,330
2013	$0.001	5,651	1.29	1.32	65.8%	27.4%	9,679	15,330
2014	$0.001	5,591	1.34	1.43	65.8%	29.0%	8,645	14,236
2015	$0.001	5,736	1.75	4.66	59.0%	22.1%	4,853	10,589
2016	$0.001	5,474	2.29	8.77	40.6%	18.7%	4,913	10,387
Total		40,830	1.65	3.75	60.0%	20.7%	62,080	102,910

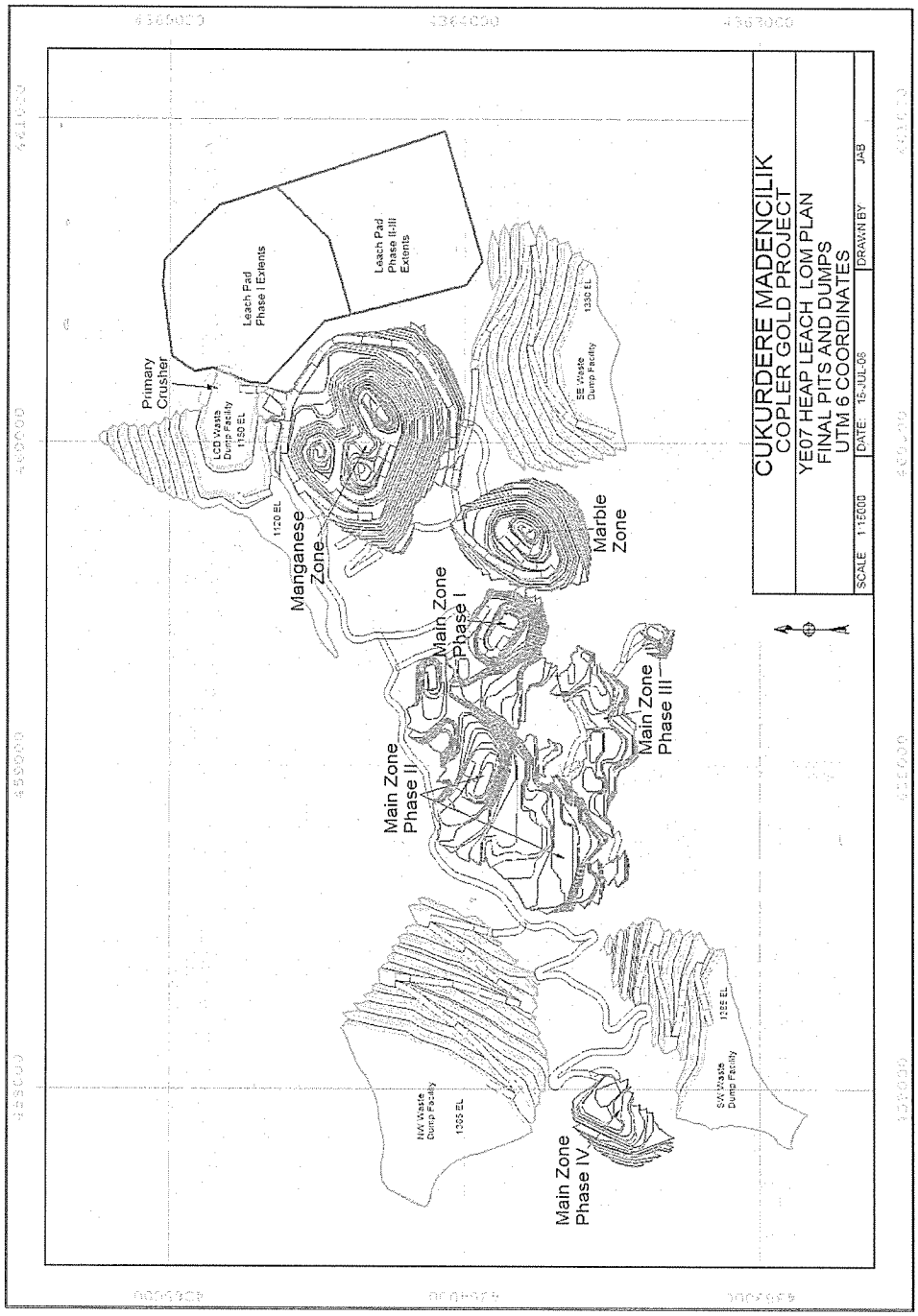


Figure 1-1

General Arrangement

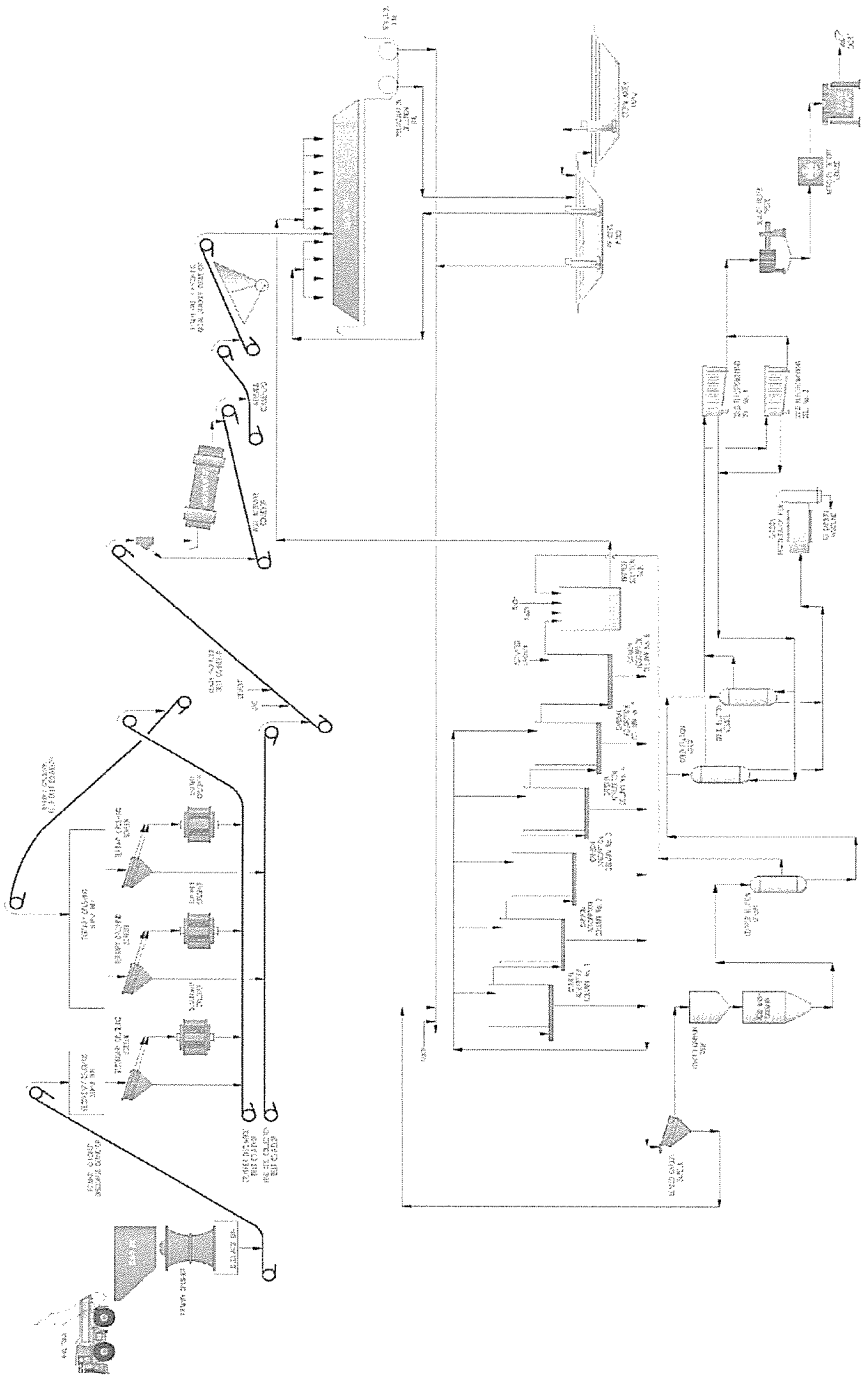


Figure 1-2

Simplified Heap Leach Only Process Flowsheet

Table 1-2 Capital Cost Summary

Capital Cost Summary	
Sunk Capital (as of June 30, 2008)	$30,892,281
Construction Directs	$51,443,422
Equipment Purchases	$23,805,288
Working Capital	$32,960,706
Project Indirects	$23,310,671
Contingency	$7,115,967
Total	$169,528,336

Table 1-3 – Operating Cost Summary

Item Description	Avg. Cost Per Ton of Ore
Mining Operating Cost (4,548,000 tpy)	$4.59*
Ore Processing Cost – Heap Leach (2,732,000 tpy)	$3.60
G & A Cost (4,548,000 tpy)	$0.84
*Based on $1.96 / metric ton material moved	

Item Description	Avg. Cost Per Year
Mining Operating Cost (2010 to 2017)	$ 23,346,000
Ore Processing Cost – Heap (Crushing and Leaching)	$ 18,301,000
G & A Cost	$ 4,276,000
Total Average Annual Operating Cost (w/SART)	$ 45,923,000
Total Average Annual Operating Cost per Tonne of Ore (includes SART)	$9.03

Table 1-4
Anatolia Minerals Development Limited
Copler Project, Mineral Reserves and Mineral Resources

Mineral Reserves												
Process Cateogry	Proven				Probable				Proven+Probable				
	Ktonnes	Gold gm/t	Silver gm/t		Ktonnes	Gold gm/t	Silver gm/t		Ktonnes	Gold gm/t	Silver gm/t		Recovered Au KOzs
Total Leach Ore	32,792	1.690	4.08		8,038	1.500	2.44		40,830	1.650	3.75		1,300
Total Mineral Reserves	32,792	1.690	4.08		8,038	1.500	2.44		40,830	1.650	3.75		1,300

Mineral Resources in Addition to Reserves, Assumes the Presence of a Sulfide Process Facility																			
Material Type	Measured				Indicated				Measured + Indicated					Inferred					
	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Contained Au KOzs	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Contained Au KOzs
Remaining Oxide Resource	15,908	0.757	1.35	0.09	8,725	0.782	1.25	0.16	24,633	0.766	1.32	0.11	607	1,448	0.847	0.77	0.18	39
Remaining Sulfide Resource	24,805	1.705	6.48	0.14	31,458	1.741	4.76	0.11	56,263	1.725	5.52	0.12	3,120	1,840	1.800	3.40	0.12	106
Total Mineral Resources	40,713	1.334	4.48	0.12	40,183	1.533	4.00	0.12	80,896	1.433	4.24	0.12	3,727	3,288	1.380	2.24	0.15	145

2.0 INTRODUCTION AND TERMS OF REFERENCE

This Technical Report has been prepared for Anatolia. Anatolia has requested that three qualified persons update various sections of the previous Technical Reports to reflect conditions at, and the proposed development of, its Çöpler Mining Area in east-central Turkey. This document represents the Technical Report of that work as outlined in Canadian National Instrument 43-101 ("NI 43-101") for public disclosure of resources.

A number of Technical Reports and related documents have been filed on SEDAR for the Çöpler project of which five previous Technical Reports are referenced or drawn upon in this Technical Report:

1) May 1, 2003: Update of the Geology and Mineral Resources of the Çöpler Prospect, Turkey, Watts, Griffis and McOuat Limited (the "2003 WGM Report")

2) October 19, 2005: Çöpler Project Resource Estimate Technical Report, by Independent Mining Consultants, Inc. (the "2005 IMC Report")

3) May 30, 2006: Technical Report for Çöpler Gold Project Feasibility Study, by Samuel Engineering, Inc. (the "2006 Samuel Report")_

4) March 2, 2007: Technical Report for Çöpler Gold Project by IMC (the "2007 IMC Report")

5) February 4, 2008: Çöpler Gold Project, Preliminary Assessment – Sulfide Ore Processing, by Easton Process Consulting and Pennstrom Consulting (the "2008 Sulfide Report")

IMC developed the block model, mineral resources, mineral reserves, and the mine plan within the feasibility study and John Marek of IMC was one of the authors of the 2006 Samuel Report and the 2007 IMC Report. This Technical Report includes an update of the data base and due diligence work that was completed in the 2006 Samuel Report and references the 2003 WGM Report. This Technical Report also provides a description of the modeling methods, and mine plan.

Process and on-site facilities design has been completed and this is incorporated within this Technical Report. Anatolia has developed the capital cost estimate presented in this Technical Report. Robert Benbow of Anatolia has relied upon the design consultants and contractors estimates and has incorporated them into the overall capital cost estimate presented. In addition, Robert Benbow, has worked with John Marek in developing the operating cost estimate incorporated into the mine plan and has developed the current mine plan and economic analysis presented in this Technical Report.

William Pennstrom has participated in the metallurgical test-work programs related to the Çöpler project ores and has contributed to the 2007 IMC Report and the 2008 Sulfide Report.

The qualified persons for this report are therefore; John Marek of IMC. William Pennstrom of Pennstrom Consulting and Robert Benbow of Anatolia (collectively referred to as the "Qualified Persons"). All of the Qualified Persons have visited the Çöpler project site as further stated in Section 20 of this report.

During the development of the 2006 Samuel Report, Samuel relied on the work of a number of contractors retained by Anatolia and upon work performed by Anatolia. This study relies on the 2006 Samuel Report, the 2005 IMC Report, the 2007 IMC Report and the 2008 Sulfide Report and therefore by reference relies on the work of the following contractors.

1) Bill Pennstrom of Pennstrom Consulting as a metallurgical consultant was responsible for the metallurgical aspects of the study.

2) Research Development Inc. was contracted by Anatolia for metallurgical test-work.

3) Vector Colorado, LLC and Tetratech were contracted by Anatolia for the heap leach pad and storage ponds design.

4) Water Management Consultants was contracted by Anatolia for the mine water supply report.

5) SIAL, Ankara, Turkey was contracted by Anatolia for the subsurface soil and geotechnical investigation work and report.

6) Ausenco, Ltd., Resource Development Inc. and SGS Lakefield Research Ltd. were contracted by Anatolia to perform the metallurgy and process related test work.

7) Anatolia geologist İlhan Poyraz provided the geology report for the project.

8) Anatolia staff who developed the Capital and Operating Costs for the Project and prepared the Economic Analysis for the project.

This report is in metric units. All metal grades are in grams per metric tonne for precious metals, and percent by weight for associated base metals.

3.0 RELIANCE ON OTHER EXPERTS

As presented in Section 2 of this report, the Qualified Persons who have authored and taken responsibility for this report have relied on the work of others in the preparation of this Technical Report. Where checks and confirmations were not possible, the Qualified Persons have assumed that all information supplied is complete and reliable within normally accepted limits of error. During the normal course of the review, the Qualified Persons have not discovered any reason to doubt those assumptions. In forming this opinion, the Qualified Persons have also relied on information provided by Anatolia and the contractors listed in Section 2.0 of this Technical Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Çöpler mining area is located in the eastern part of central Turkey, roughly 550 km east of Ankara and 120 km southwest of the city of Erzincan. The nearest population center is the village of Iliç (population 2,500) which is 6 km northeast of the Çöpler deposits. The town of Kemaliye (population 3,000) is located about 40km south of Çöpler. The town of Divriği is an iron mining area that is about 40 km west of Çöpler. Figure 4-1 illustrates the location of the project within Turkey and relative to nearby population centers.

There are three mineral deposits at Çöpler: the Main Zone, the Manganese Mine Zone, and the Marble Contact Zone. Within this document, their names will be contracted to Main, Manganese, and Marble Zones respectively.

The village of Çöpler lies immediately to the northeast of the Main Zone deposit. The village of Çöpler and all three deposits are located within the mining license area.

License

The Turkish mining license constitutes a large triangle as shown on Figure 4-2. The license is an operational license held by the Çukurdere Madencilik San. Vi Tic. Ltd. Sti. The License Number is: IR 257, - ER 10273102 and the license covers an area of 941.92 hectares. Çukurdere is a wholly owned indirect subsidiary of Anatolia.

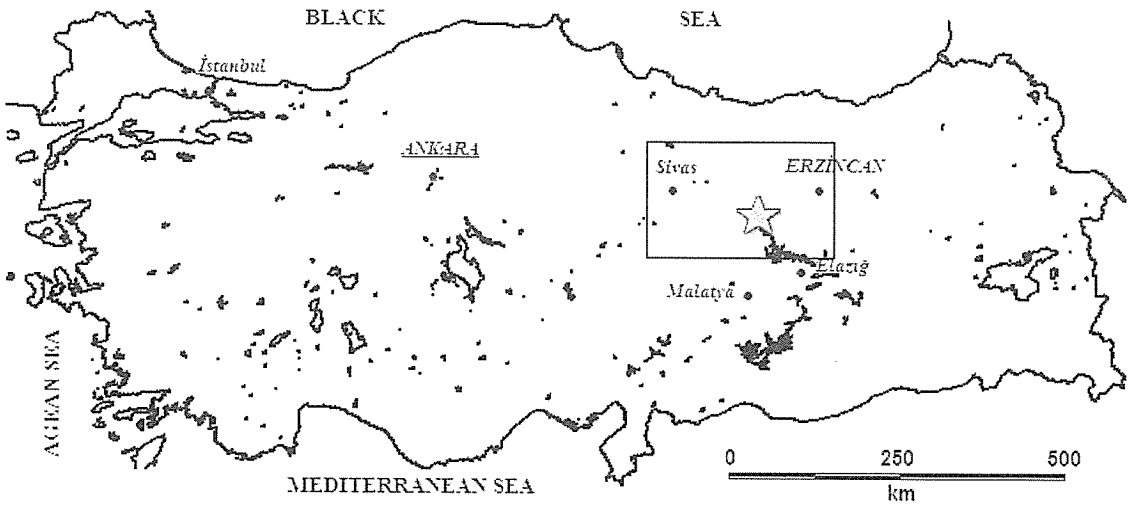
The UTM coordinates of the mining license are as follows:

Northing	Easting
4,366,400	457,280
4,363,600	462,600
4,362,680	457,620

The duration of an operational mining license in Turkey is 10 to 60 years depending on the potential production life of the particular project. An initial financial deposit plus an annual license fee is required to maintain the property. The mining license does not constitute a permit for operation, but it does grant mineral tenure to the license holder.

The operational License IR-257 area, as listed above, contains all of the drill hole information and all of the stated resources presented within this document.

Anatolia controls additional exploration licenses that surround the operational license area.



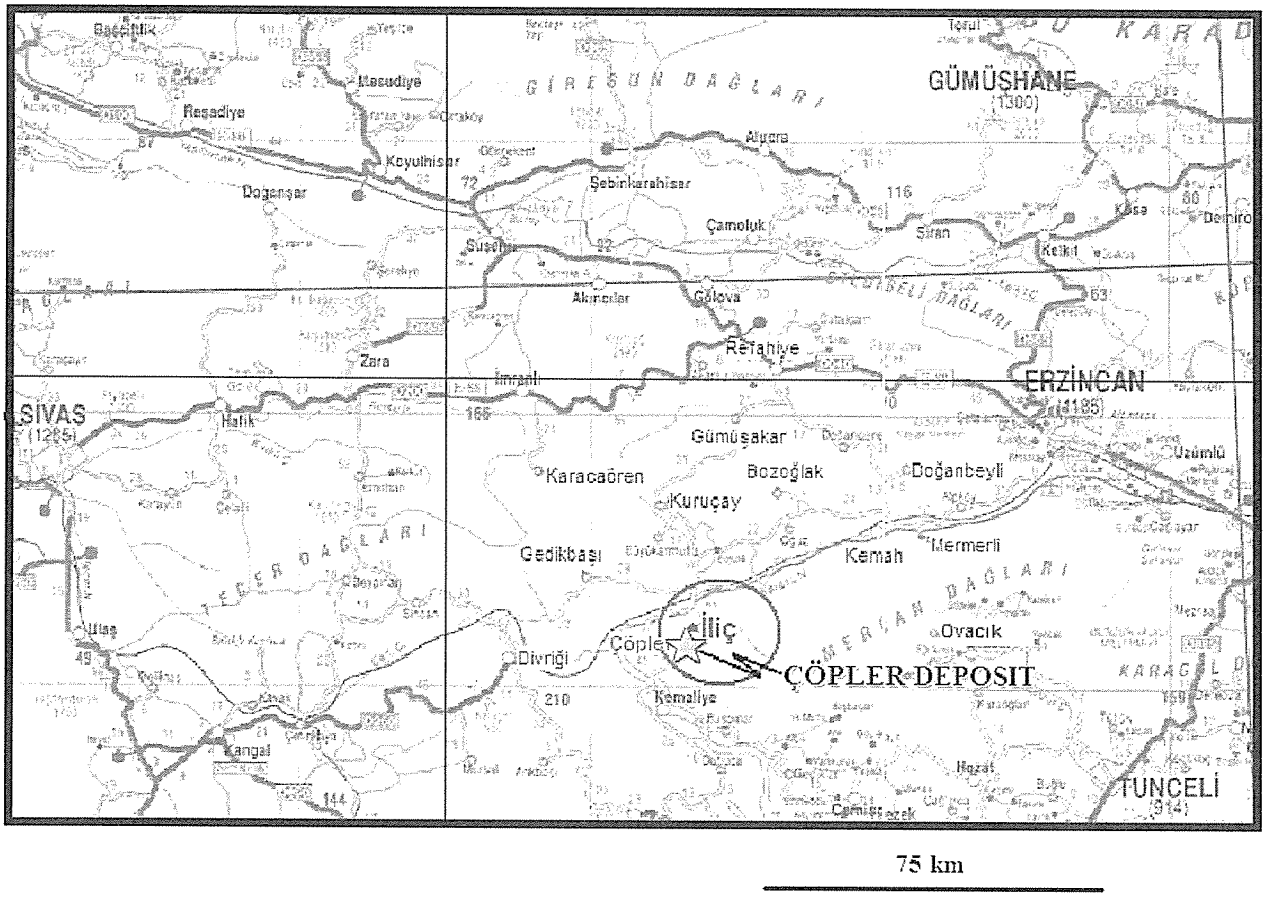


Figure 4-1

Çöpler Project Location Maps

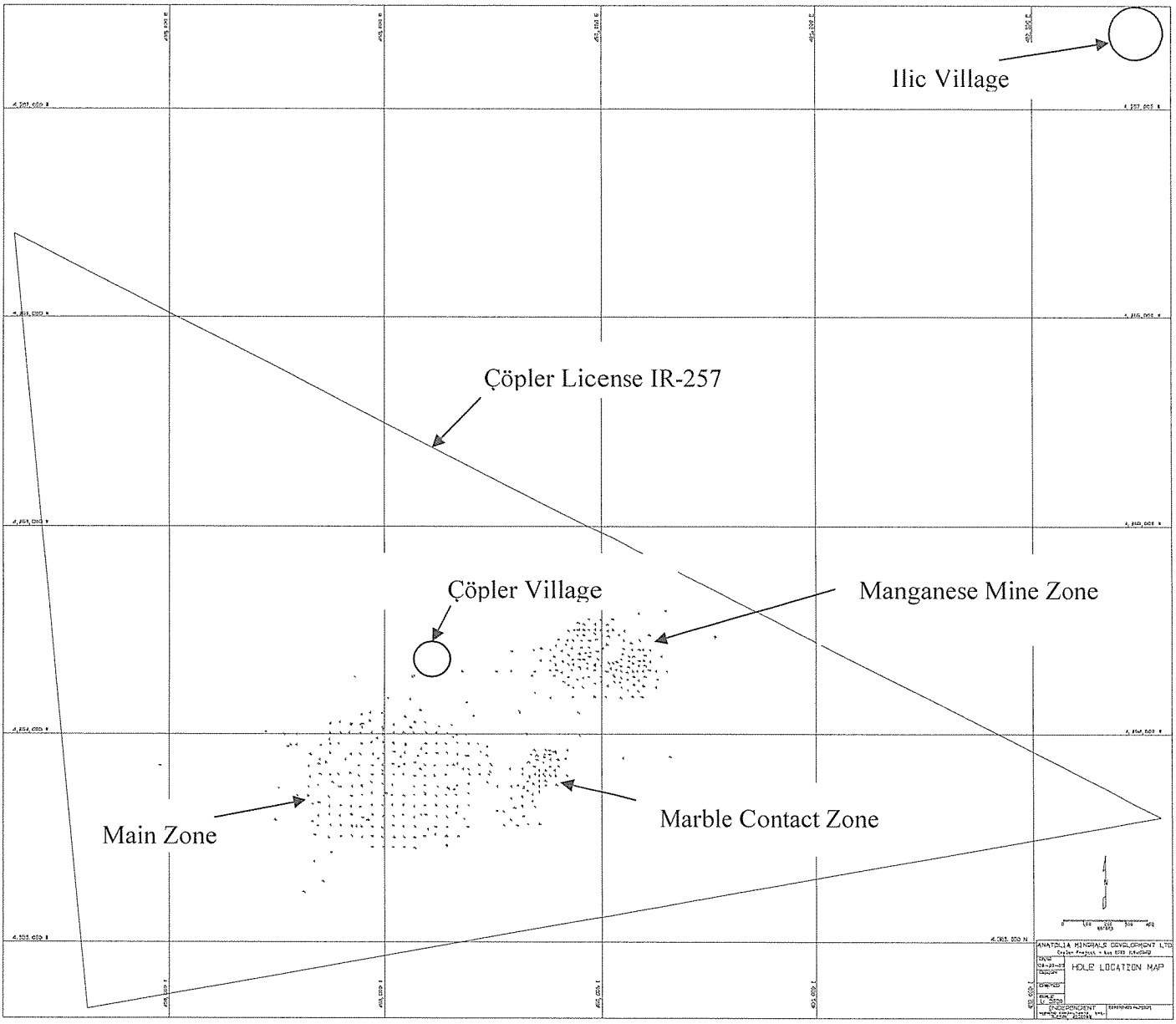


Figure 4-2

Drill Hole Location

License Area

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Accessibility

The Çöpler mining area is accessed from the main paved highway between Erzincan and Kemaliye. The highway passes 3 km north of the nearby village of İliç where it crosses the Karasu River via a bridge. The bridge is a major reinforced concrete and steel structure, capable of handling large Turkish transport vehicles. The bridge is rated with a capacity for 45 tonne vehicles. From İliç there is an additional 4.5 km of graded dirt road to reach the Çöpler mining site. Work has been completed to upgrade sections of road from the bridge to just east of the İliç railway station and the construction of a road bypassing İliç to the project site. This roadwork provides improved access for mine and construction equipment.

The Ankara to Erzincan railway line operated by TCDD, the Turkish State Railway Company runs parallel to the south bank of the Karasu River and passes within 2 km south of the site at a point between the train stations at İliç and Bağiştaş. The railway line connects the site with Ankara and the west as well as with sea ports to the north on the Black Sea, and to the south on the Mediterranean Sea. Overnight passenger sleeper cars are available to and from Ankara.

There are regular commercial airline flights from Istanbul and Ankara to Erzincan, Erzurum, Malatya, Elazig and Sivas. From these cities to the Project site takes about 2 to 4 hours of driving on paved highways. Driving from Ankara to the site takes about 8 hours.

Climate

The climate is typically continental with cold winters and hot summers. In winter, the night time temperature can drop to minus 25° C although the average is usually a few degrees below freezing. The July temperature frequently reaches plus 40° C but the climate is usually pleasantly warm outside of these extremes.

Most precipitation occurs in the winter and spring and total precipitation can range from 300 to 600mm per year. Snowfall is common during the mid-November to February period, but rarely stays on the ground but for a short period of time.

Local Resources

The town of İliç has a population of approximately 2,500 inhabitants and is located 6 km northwest of the site. The town has a hospital, schools, municipal offices, fire station, a police station and a Gendarmerie post. The primary economic activity in the region is sheep herding for wool, meat and dairy products. Other agricultural activities include bee keeping for honey production and, along the Karasu River,

some wheat farming. Additionally, there is some light manufacturing and grain milling performed in İliç.

The workforce for Anatolia's exploration programs has primarily consisted of residents drawn from the local communities of Çöpler, İliç, and Sabırlı. Unemployment in the region is high. Education through 8th grade is compulsory in Turkey, and secondary and technical schools are available free of charge to those individuals who choose to continue. There are numerous, government funded universities and private colleges in the country. Consequently, the local and regional population has a sufficiently large workforce with the necessary basic skills and general education level suitable for employment at the Project.

Infrastructure

Turkish telecommunications are good and up to European standards. High speed, fiber-optic internet access has been installed at the Çöpler project's exploration office in İliç and to the mine site.

Electrical power at 380 V, 50 Hz, is available in İliç and at the site, but the line capacity is not sufficient to handle the industrial loads required by the Project. A new, 40 km, 154 kV power line from the substation at Divriği to the site has been designed and permitted to provide the electrical power required by the Project. A construction contract has been let for the power line and construction has been initiated.

The bypass road commencing just north of İliç (near the railway station) to the project site has been completed to accommodate the increased/heavier traffic. Ground water resources have been identified about 2 km north of the Project site near the Karasu River and two production water wells have been constructed, with a third nearing completion.

Physiography

The Çöpler Deposit is located in a broad east-west oriented valley at an altitude of 1,100 to 1,300 m. The valley is surrounded by limestone mountains that rise to more than 2,500m on the north and south sides of the deposit. These mountains are at the western end of the Munzur range that rises to more than 3,300 m between Ovacik and Kemah. The region is sparsely vegetated with semi-arid brush and scrub trees.

The following are the site data developed for the design of the Project:

- Latitude 39° 25' North
- Longitude 38° 32' East
- Elevation 1150 m
- Frost Depth 500 mm
- Snow Load 145 kg/m^2

Wind Load	40 m/sec, Exposure C
Earthquake Zone	2nd Order, $A_o = 0.20$
Atmospheric Pressure (average)	880.5 millibar
Maximum Design Temperature	(+) 40° C
Minimum Design Temperature	(-) 25° C
Annual Rainfall	367 mm
Maximum Snowfall Depth	500 mm (Estimated)
Design Maximum Rainfall, 24 hours	76 mm

6.0 HISTORY

The Çöpler prospect was first identified by Anatolia in 1998 as part of a literature review of mineral properties and follow-up of a gossan investigation program in the district. The Çöpler area has seen gold and silver mining that dates back at least to Roman times, and possibly earlier, with historic bullion production estimated at about 50,000 ounces of gold. A copper rich slag pile of approximately 25,000 tonnes is located at the western edge of the district and is believed to be waste from ancient bullion production. Although the district contains copper mineralization, there appears to have been little production targeting copper. There are several additional minor slag piles scattered around the property thought to be from ancient, small-scale gold and byproduct copper production.

The Turkish 'Geological Survey' ("MTA") carried out regional exploration work in the early 1960's that was predominately confined to mapping. During 1964, a local Turkish company started manganese mining that produced about 73,000 tonnes of manganese ore until closing in 1973. Unimangan acquired the property in January 1979 and restarted manganese production the same year and produced about 1,000 to 5,000 tonnes of ore per year until 1992. Total production from the Manganese Mine Zone during this period is estimated to have been 15,000 tonnes of ore at a grade of between 43 percent and 51 percent manganese.

In September 1998, Anatolia identified several porphyry style gold-copper prospects in east-central Turkey and applied for an exploration license totaling over 100,000 hectares covering these prospects. This work was based upon the earlier work by MTA in the 1960's. During this effort, Anatolia delineated a prospect in the Çöpler basin formed by an altered and mineralized granodiorite intruded metasediments and limestone. This prospect and the supporting work was the basis for a joint venture agreement for exploration with Rio Tinto.

During the period of the joint venture, Anatolia and Rio Tinto explored and drilled the Çöpler deposits and developed resources in three mineralized zones: the Main, Manganese, and Marble Zones. In January of 2004, Anatolia acquired Rio Tinto's joint venture interest in the property from Rio Tinto and the interest of Unimangan in the property and the property has been under Anatolia's sole control since that time.

7.0 GEOLOGIC SETTING

The following discussion was extracted from work by Anatolia geologist İlhan Poyraz. IMC has reviewed this information with Mr. Poyraz, spot checked the interpretation and agrees with the information as presented by Mr. Poyraz.

Regional to Local Geology

The Çöpler area lies in the Anatolian Plate between the North and East Anatolian strike slip faults. These two faults define the collision boundary between the Eurasian Plate to the north, and the Arabian Plate to the south. The plate collision is pushing the Anatolian Plate to the west causing regional compression and structural deformation of the eastern end of the Anatolian plate. Figure 7-1 illustrates the regional structural setting of Anatolia. The small yellow block between Divriği and Ovacik indicates the location of the Çöpler project site.

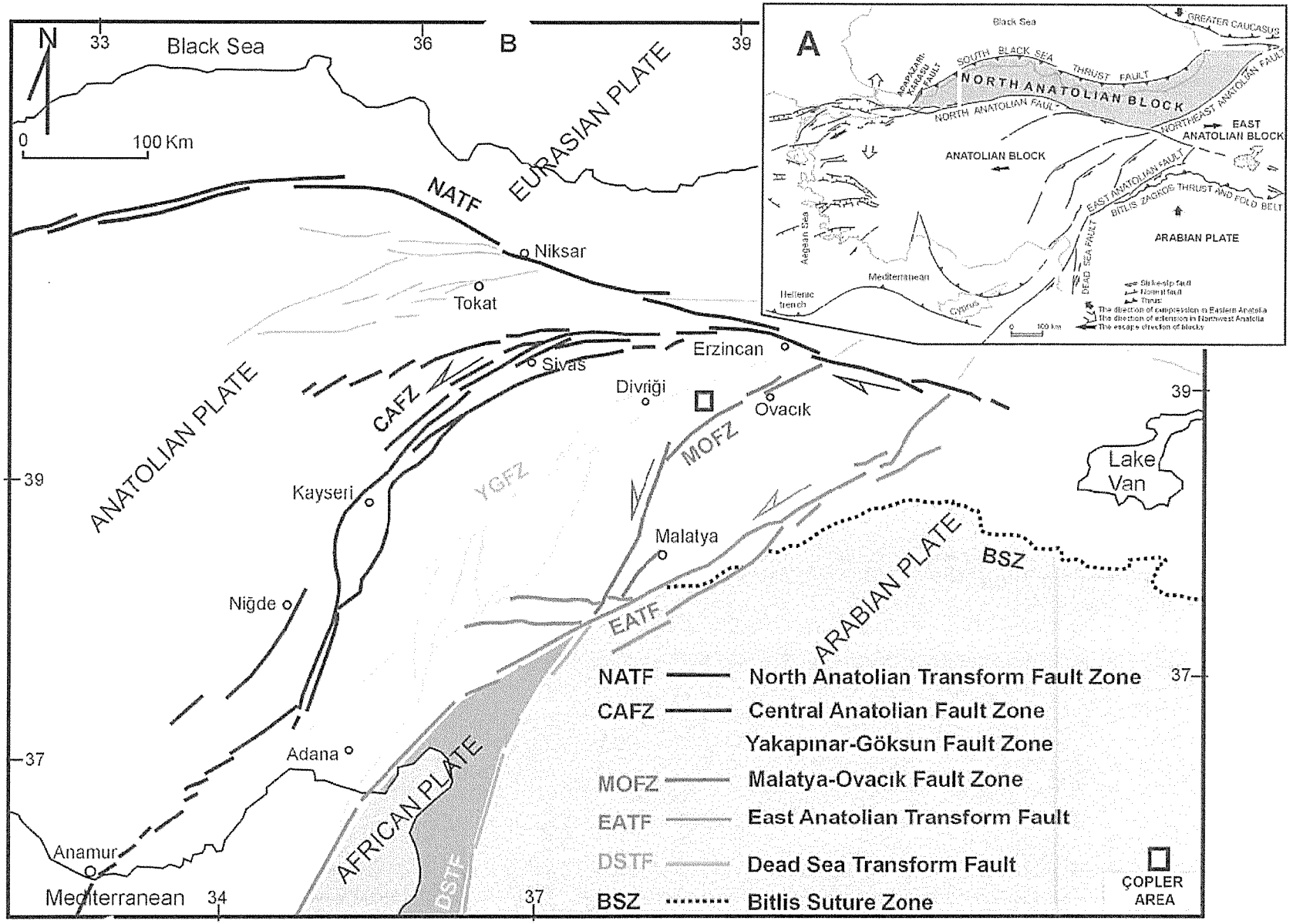
The rock units in the Çöpler district range from Permian to late Cretaceous age and include limestones, ophiolites, and other metasedimentary units followed by late Cretaceous to Paleocene intrusives and volcanics. The intrusives and volcanics provided the sources for hydrothermal mineralization throughout the district.

Figure 7-2 is a geologic map of the Çöpler project area. The Munzur limestone and marble sequences dominate the area and define the mountainous ridges to the north and south of the deposit. A metasedimentary unit is also present in the central to west portion of the project area. The metasediments lie stratigraphically below the Munzur formation and the contact between them appears to be tectonic in nature. The metasediments are believed to be Permian in age and were originally comprised of sandstone, siltstone, and chert.

The Çöpler project is centered on a composite diorite to monzonite porphyry stock that has been emplaced into the metasediments and limestones-marbles. The intrusive unit is believed to be late Cretaceous to Eocene in age.

Two parallel east-northeast striking faults spaced roughly 300 to 500 meters apart cross the project area. The faults transect all rock units in the project area and may have provided the locus for the intrusive events. The north fault is a low angle thrust fault passing through the Manganese Zone, but it can be traced for only 200m to the WSW, where it is lost in the marble towards Çöpler village and further WSW, expressed as: (a) an inferred faulted contact between metasediment and marble north west of Çöpler Village; (b) as a straight metasediment-intrusion contact WSW from and (c) as a prominent lineament in marble on the southwest side of the intrusion. The south fault is a high angle fault forming the metasediment/marble contact SE of Çöpler village, which can be traced to the ENE through the northern part of the Marble Zone Northeast/ northwest striking faults exist between the two major faults that further reflect the regional stress field and provided further ground preparation for hydrothermal mineralization. There are diorite intrusive units below surface within the Manganese and Marble zones that do not show on the Figure 7-2 surface

map. The mineralization within those zones is physically proximal and associated with the diorite intrusives. Additional contact metamorphics in the form of jasperoids occur locally at contacts between the intrusives and calc-silicate units in all three mineralized areas.



Major neotectonic elements of Anatolia (from Elmas 2003), **B:** Simplified neotectonic map showing major tectonic escape-induced structures in eastern half of Turkey and adjacent areas (from Koçyiğit and Erol, 2001)

Figure 7-1 Regional Tectonic Setting

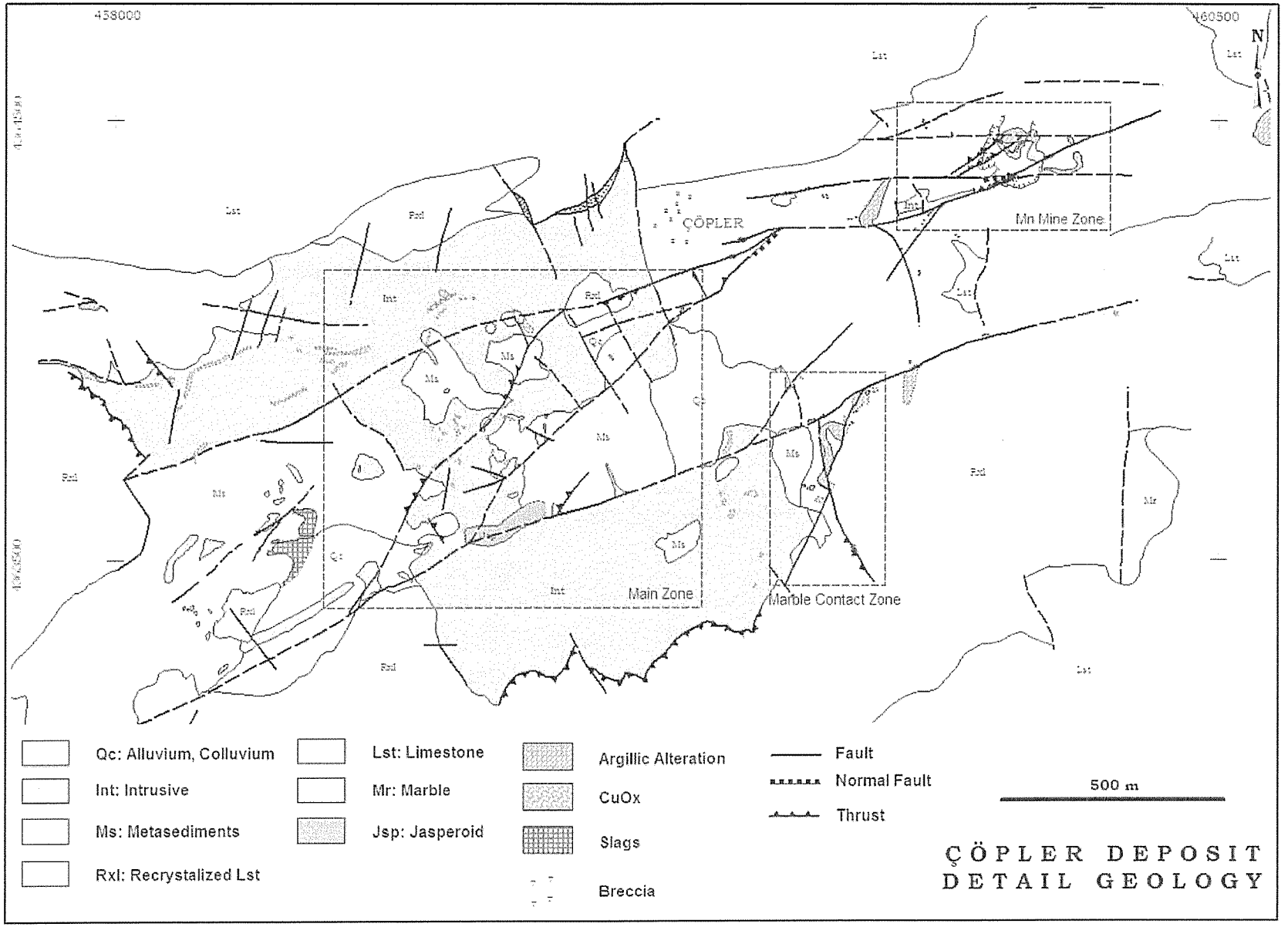


Figure 7-2 Çöpler Area Geology

8.0 DEPOSIT TYPES

The gold and silver mineralization at Çöpler is epithermal and was sourced from a low grade base metal porphyry intrusive described as a granodiorite to diorite stock. The gold mineralization is not a high-sulfidation occurrence as is commonplace in other porphyry copper systems. Two styles of gold mineralization are recognized at Çöpler: 1) quartz-manganese carbonate-barite veinlets, and 2) quartz–pyrite replacements of either limestone or prograde calc-silicate metamorphics.

The quartz-manganese veinlets represent the majority of mineralized material within the district. The gold mineralization is very fined grained and associated with arsenopyrite when in sulfide form.

9.0 MINERALIZATION

Epithermal gold mineralization at Çöpler occurs within structurally controlled zones of stockwork and sheeted veins hosted by a Tertiary diorite intrusive and an older metasediment complex; and as contact-type mineralization along the intrusive-metasediment faulted contact with the Munzur limestones. The epithermal mineralization may be related to porphyry copper-style mineralization intersected by several of the drill holes.

Sulfide mineralization at Çöpler exhibits three principal styles:

- Disseminated sulfides in stockwork quartz veined metasediments and diorite (Main Zone, Marble Zone).
- Disseminated sulfides in clay altered, brecciated and carbonatised diorite (Manganese Mine Zone).
- Massive sulfide replacement bodies along the marble contacts (Main Zone contacts, Marble Zone, Manganese Mine Zone).

Supergene oxidation of the above has resulted in the formation of gossans, massive manganese oxide and goethitic/jarositic assemblages hosting fine-grained free gold.

The three deposits (Figure 7-2) and the mineralization occurrence within each are summarized below:

Main Zone

The Main Zone occupies the west portion of the project area and is about 750m north to south by 1000m east to west. Typical depths of mineralization range from surface to about plus 172m in depth. The disseminated quartz-pyrite-arsenopyrite epithermal veinlets are primarily hosted in diorite and metasediments with some marble mineralization on the eastern end of the Main Zone. Supergene oxidation has occurred and oxide mineralization occurs from near surface to depths of about 85 meters.

Minor volumes of massive sulfide pyrite mineralization occur within the Main Zone.

Manganese Mine Zone

The Manganese Mine Zone occupies the eastern end of the Çöpler mineralized area. The zone is about 650m wide in the north to south direction by about 650m in the east to west direction. The surface of this area consists predominately of marble. A limb of the diorite intrusive occurs sub-surface and a major component of the Manganese Zone mineralization is associated with the contact between the diorite and the marble. Mineralization ranges from surface to about 300m deep.

Free gold mineralization occurs in the marble with minimal associated sulfides. Disseminated quartz-sulfide mineralization occurs in clay altered and brecciated diorites as well as locally carbonate altered diorite. Minor volumes of massive sulfide pyrite mineralization occur within the Manganese Mine Zone. There has been supergene oxidation in this deposit.

"Leachable" mineralization is a combination of free gold in marble and supergene oxidized mineralization in both marble and diorite. Some leachable mineralization occurs to over 195 meters in depth.

Marble Zone

The Marble Contact Zone occurs in the southeastern portion of the district and is associated with a northeast striking fault contact between marble on the east and metasediments and intrusives on the west. The width is approximately 350m and the strike length is 300m in a northeasterly direction. The depth of mineralization ranges from surface to about 160m.

Mineralization occurs as both disseminated sulfides in veinlets and massive sulfide along the marble contact. Supergene oxidation has occurred along the northeast structure resulting in greater depths of oxidized mineralization than in the Main Zone. The Marble Zone hosts more copper and other base metals than the other two deposits.

10.0 EXPLORATION

The primary exploration effort at Çöpler was completed by:

1) Anatolia independently during 1998 and 1999 prior to entering into a joint venture with Rio Tinto Exploration and Mining Limited ("Rio Tinto").

2) A joint venture between Anatolia and Rio Tinto prior to 2004, and

3) Anatolia independently during 2004 to 2008

As outlined within the project history section, the initial reconnaissance exploration was completed in the early 1960's by MTA.

Exploration by Anatolia commenced in 1998 and resulted in the discovery of several porphyry style gold-copper deposits in east-central Turkey. Shortly after that time, a joint venture with Rio Tinto resulted in an extensive drill hole exploration program at Çöpler. During early 2004, Anatolia acquired Rio Tinto's and Unimangan's interest in the property. Since that time all exploration and development has been by Anatolia.

Step out drilling at Çöpler has defined most of the lateral boundaries of mineralization. There has been additional development drilling, as well as condemnation drilling of areas planned for facilities during the last few years. During 2007, a number of infill holes were added to the areas planned for the first three years of production to improve confidence in the model for short range mine planning.

Anatolia has disclosed that regional exploration is planned in areas adjacent to the three zones currently under development at Çöpler and beyond. There is no direct impact of the planned exploration on the Phase 1 development of the Çöpler project.

11.0 DRILLING

The Çöpler deposit was drilled by reverse circulation drilling ("RC") and diamond core drilling ("DD"). A number of DD and RC twinned holes have been drilled to allow comparison of the results of the two drilling and sampling methods.

The data available in January 2008 that was used to develop the block model of the mineralized area of the project includes the total number of drill holes. The breakdown of RC and DD drill holes is summarized below.

Entire Data Base as of January 2008	Drilling Added: October 2006 through 2007
RC	*DD*
197 Drill Holes	84 Drill Holes
32,284 meters of drilling	15,353 meters of drilling
28,131 sample intervals	13,726 sample intervals
Reverse Circulation Only	*Reverse Circulation Only*
615 Drill Holes	108 Drill Holes
72,859 meters of drilling	16,963 meters of drilling
60,613 sample intervals	13,830 sample intervals
Combined Holes RC Start, DD Finish	
18 Holes	
RC Component	
2,460.1 meters of drilling	
1,928 sample intervals	
DD Component	
1,486.3 meters of drilling	
1,215 sample intervals	

Water Well Holes

6 Holes

739.7 meters of drilling with 130 sample intervals

Total Drilling

836 Drill Holes

108,829 meters of drilling

92,017 sample intervals

Drill hole locations and model zone boundaries are shown on Figure 11-1. Drill holes are color coded by date drilled. Holes colored red were drilled from October2006 through 2007. Drill holes colored in blue were drilled earlier in 2006. Holes drilled prior to 2006 are shown in black.

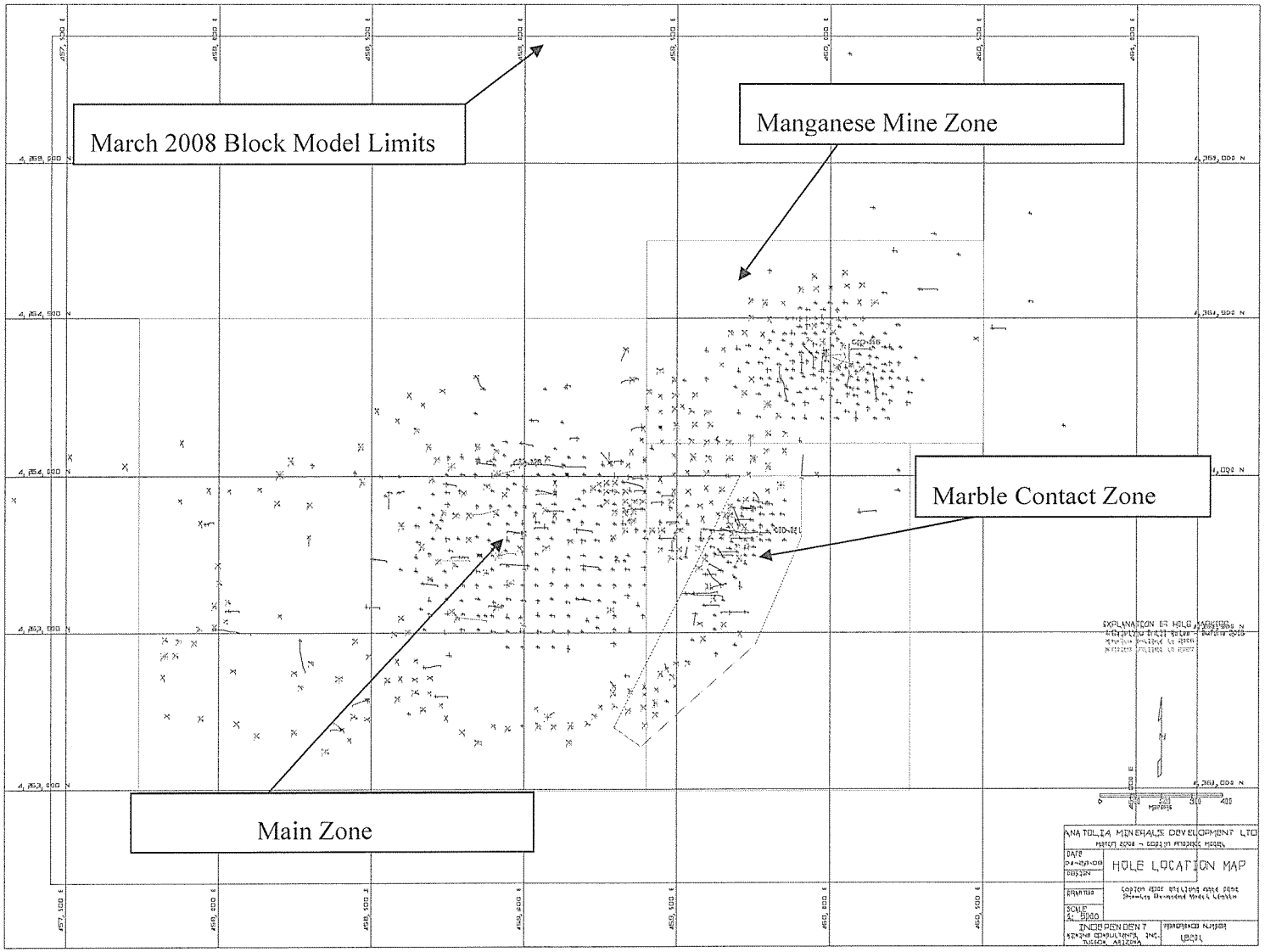


Figure 11-1 Hole Location Map

12.0 SAMPLING METHODS AND APPROACH

This section discusses the sample collection procedures at the drill rigs and preparation for shipment to the laboratories. Section 13.0 discusses the offsite sample preparation and assay procedures.

IMC personnel observed sample collection practices during July of 2005 and obtained supporting documentation regarding the sample collection methods currently in use at Çöpler at that time. Sample collection procedures prior to 2005 as practiced by the joint venture have been documented in the 2003 WGM Report. Where there are differences between current practice and pre-2005 practice, IMC has relied on the documentation of the pre-2005 drill campaigns by WGM. The sampling methods at the Project site have been relatively constant throughout the drilling programs.

IMC holds the opinion that the current sample collection and preparation methods described in this section are adequate for the determination of mineral resources and mineral reserves. As a result of the due diligence verifications by IMC, IMC found no indication of inappropriate tampering of samples or the sampling protocol.

RC Sample Collection

RC drilling has been completed with a 4.5 inch to 4.75 inch (11.4cm to 12.0cm) diameter down-the-hole hammer. RC cuttings are passed through a cyclone with a 10inch (25.4cm) port for sample collection. RC drill intervals are 1m in length and the entire 1m of cuttings is collected from the cyclone under-flow in large reinforced plastic bags. Each bag of sample weighs between 25kg and 30kg.

At each 1m interval, the driller halts the drilling process while the sampler (an Anatolia employee) collects the sample bag, and replaces it with a fresh sample bag. Drilling is then continued. Drill holes are not "blown" or cleaned other than roughly at every 10m or when additional drill pipe segments are required.

IMC observed a good seal between the sample bag and the cyclone port. Some dust did escape the cyclone overflow during the drilling process. However, the amount did not appear excessive compared with observations at other projects. IMC observations occurred while RC rigs were drilling marble in the Manganese Mine Zone. RC cuttings were made up of fine grained particles indicating that a fair component of down-hole regrind may have occurred.

The Çöpler drilling is generally above the water table particularly in the Manganese and Marble Contact Zones so that wet holes are not a particular problem for RC drilling in those areas. The water table is closer to the surface in the Main Zone and for that reason the preferred drilling method in this zone is core drilling.

It was reported in the 2003 WGM Report that minor water was added to holes when in clay zones to assist in sample collection.

The sampler sieves a small sample from the bag to generate a chip log at the rig. Sample bags are numbered and labeled at the rig with the drill interval.

RC sample bags are transferred to the sample storage and sample splitting and core sawing facility located immediately north of the Manganese Zone at site. RC Sample preparation procedures at site are as follows:

1) Sample numbers are assigned.

2) The entire 25kg to 30kg sample is weighed.

3) The sample is passed through a 1 in 4 Jones splitter between 1 and 2 times until a 5kg sample is obtained.

4) The 5kg sample is then passed through a smaller 1 in 2 Jones splitter unit until about 500gm of material are obtained. All coarse rejects are returned to the original sample bag.

5) Both the sample and the coarse reject are weighed for comparison with the original weight. IMC observed that many of the 500gm target samples actually weigh between 500gm and 1,000gm.

6) The 500gm to 1,000gm bags each receive a sample tag in the bag and a label outside of the bag. These bags are shipped offsite for additional preparation and assay.

7) In some holes, two samples are combined into one to represent 2m of drilling. This generally seems to occur in areas of lower grade mineralization.

8) Coarse rejects are stored on site under shelter. During 2005, old coarse reject samples that contained less than 0.25gm/t gold were being discarded.

9) Chip boards are made from the sieved chip samples and stored in the core storage shed on site.

10) Çöpler standards are inserted on a 1 in 20 basis. Duplicate samples are inserted on a 1 in 20 basis. Duplicates are prepared by pouring the coarse rejects through the splitter process again to establish a second 500g to 1000g sample.

DD Core Sample Collection

DD has generally utilized both NQ and HQ diameter cores, as defined by the Diamond Core Drill Manufacturers Association. HQ core has a nominal diameter of 63.5mm while NQ has a nominal size of 47.6mm. Approximately 90 percent of the core is HQ. Some holes are started with HQ and are reduced in size to NQ later in the hole.

Drill core is boxed at the rig by the driller and transported to the sample preparation facility on site for logging by Anatolia staff. All core is digitally photographed and logged at the core shed. Minor geotechnical data, such as RQD and the percentage of solid core, is recorded along with core recovery.

The drill core is sawn in half longitudinally with a diamond saw at the site. Half the core is placed in a sample bag and half is returned to the core tray. Sample numbers are assigned and sample tags are placed in the sample bags and recorded in the master sample list by down-hole interval. Sample intervals are typically one meter down-hole.

Half core is shipped to a commercial laboratory in İzmir for preparation and assay. Standards are inserted 1 in 20 and blank samples are inserted about every 3rd or 4th standard prior to shipment for assay. Duplicates are not prepared or inserted in the diamond core sampling.

13.0 SAMPLE PREPARATION ANALYSIS AND SECURITY

This section summarizes the off-site sample preparation and assay procedures applied to the Çöpler drill-hole samples. With the exception of Anatolia and Çukurdere geology personnel and drilling inspectors involved in the logging, splitting and preparation of the samples for shipment, as described in Section 12 of this report, at no time, or in any aspect, was any officer, director, employee or associate involved in sample preparation. In the author's opinion, the sample preparation, security and analytical procedures are adequate.

Current Practices

Current sample preparation practices as reported by Anatolia personnel for both RC and DD are summarized on Figures 13-1 and 13-2. Sample preparation is completed at the ALS-Chemex preparation facilities in İzmir, Turkey. Pulps are sent to ALS-Chemex in Vancouver or Romania for gold fire assay and ICP multi-element analysis.

Prior Practices

During the joint venture period from 2000 to 2003, the sample preparation was completed off site by Alex Stewart Assayers, Ltd. ("ASA") in İzmit, Turkey. Once the samples were prepared, pulps were sent to OMAC Laboratories Ltd. ("OMAC") in Galway, Ireland for gold fire assay and ICP multi-element analysis.

Historic ASA preparation procedures differed from current practice in that a larger pulp was prepared (1.5kg) and sized to minus 100 mesh rather than the last reported practice of 200 mesh.

Gold fire assays by OMAC were 50gm aliquots with AA finish. Current practice at ALS-Chemex is to use a 30 gm aliquot.

All other elements including silver were assayed by ICP analysis. The ICP digestion procedures of the two labs are:

- OMAC digests 0.2gm of pulp in 66 percent Aqua Regia acid for 1 hour at 120°C.
- Chemex digests 0.25gm of pulp in Aqua Regia Acid to dryness. The residue is then digested in 10 percent HCL prior to ICP–Atomic Emission Spectroscopy.

Sample bags are shipped from Çöpler to the preparation facility in Izmir, where they are logged into the system and retained under the control of the third-party outside lab until assay reports are issued. Excess pulps and coarse rejects from the assay and preparation process are stored at the lab.

Density data was measured on site by weighing core samples in air and in water. Two slightly different procedures were applied. The last reported practice is:

1) weigh the sample in air,

2) dry it for 24 hours at 104^{0} C,

3) coat with wax and weigh in air again, and

4) immerse in water and weigh in water. The density of wax at 0.86gm/cc is removed from the calculation of sample density.

The other method weighed the sample in air, dried it and weighed again, then weighed it immersed. This process is acceptable for solid core, but had drawbacks with clay altered samples. Both sets of information have been used to develop estimated material density for the block model.

Figure 13-1

ÇÖPLER PROJECT
CURRENT SAMPLE PREPARATION AND ANALYSIS REVERSE CIRCULATION "RC" DRILL

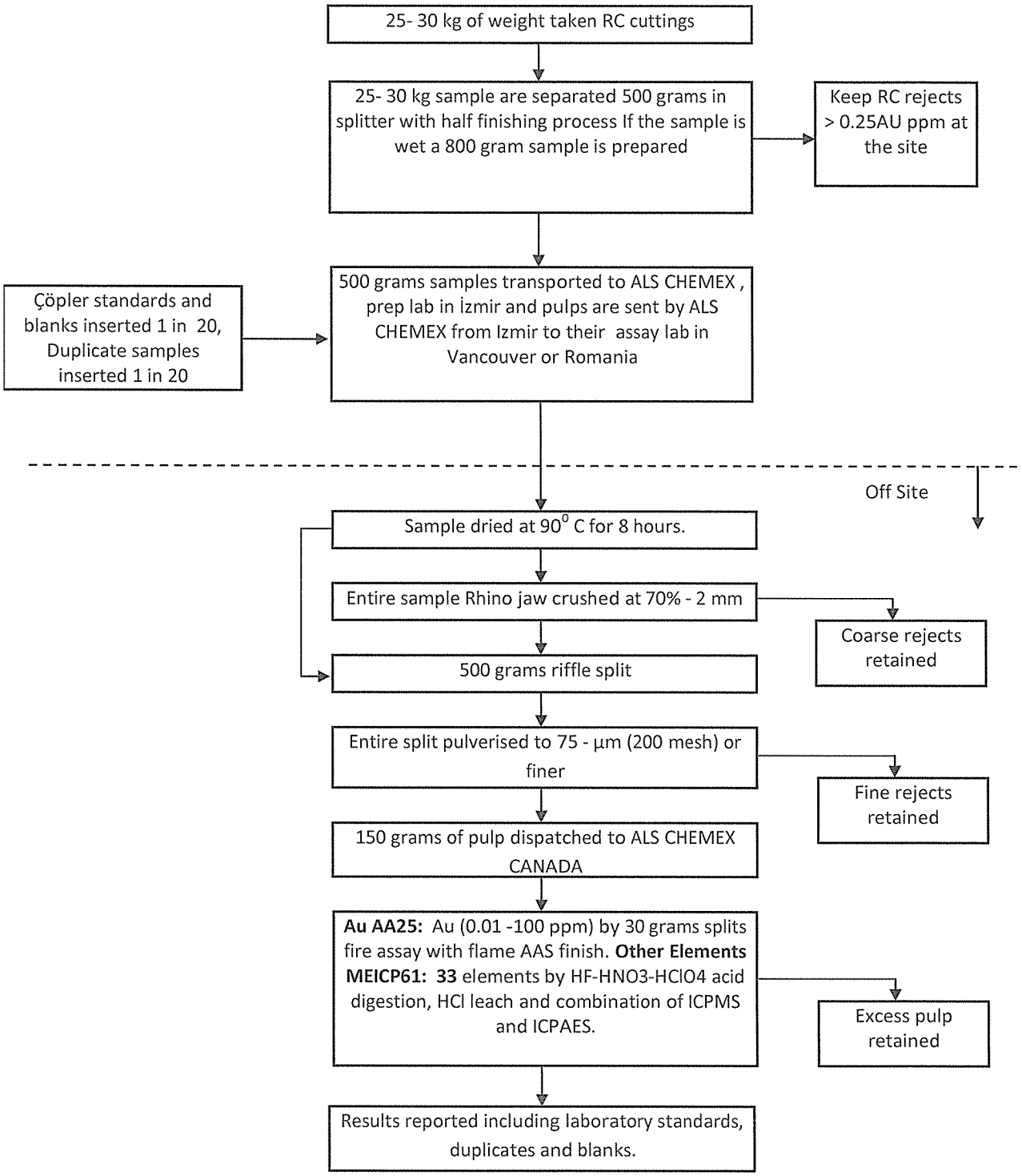
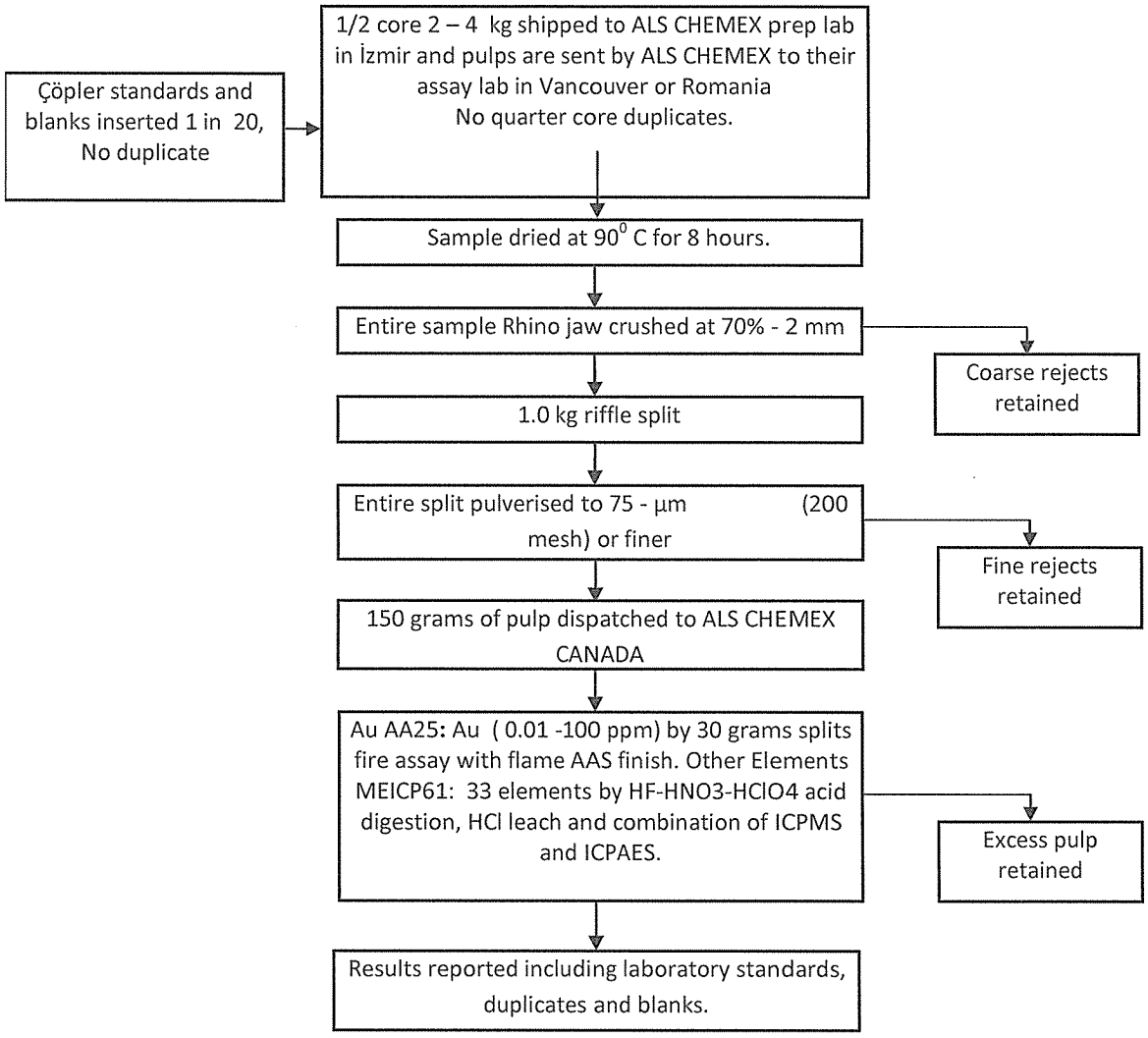


Figure 13-2

ÇÖPLER PROJECT
CURRENT SAMPLE PREPARATION AND ANALYSIS DIAMOND DRILL "DD" CORE



14.0 DATA VERIFICATION

This section summarizes the results of IMC's due diligence verification of the Çöpler data base. The verification analysis was updated in several iterations during the last several years. This section summarizes the data verification work completed over three iterations:

- September 2005
- September 2006 data analyzed in November 2006, and
- December 2007 data collected between October 2006 and December 2007.

The analysis of the September 2006 data will be presented in the following sections followed by the incremental update to reflect the December 2007 data.

IMC completed the following tasks on the Çöpler data set.

1) Review of Rio Tinto quality assurance and quality control (QAQC) analyses (2000 to 2003).
2) Checks of the data base compared to the electronic certificate of assay.
3) Analysis of inserted duplicates
4) Analysis of inserted standards versus certified standard value.
5) Verification of blank results
6) Comparison of diamond drill (DD) results with twinned reverse circulation (RC) drilling.
7) Check of diamond drill core recovery versus grade.
8) Independent assay by IMC of selected 30 samples of coarse rejects and half core.

Drill hole and assay data was verified by incremental analysis of the duplicate assays and the inserted standards each time the block model was updated. The comparison of diamond drilling versus RC drilling was updated during 2008 to take advantage of more closely spaced pairs of diamond and RC drilling available in December 2007.

The data for assembly of the March 2008 model was provided to IMC by Anatolia personnel in January of 2008 and referenced herein as the December 2007 data. IMC compared the December 2007 data with the earlier September 2006 data set and found no discrepancies between the historic September 2006 data base and the current December 2007 data base for the existing drilling.

Rio Tinto QAQC Analysis

During 2005, IMC reviewed the QAQC appendices that were published by Rio Tinto during the preparation of their Conceptual Study. IMC did not repeat the analysis, but did study the QAQC documentation provided by Rio Tinto. Rio Tinto completed duplicate assays, outside lab duplicates (check assays) and inserted standards and blanks into the sample stream.

Reported duplicate results and standards' results for OMAC assayed gold appear sound. However, duplicate assays and standards for OMAC assayed silver appear to run high compared with the outside lab checks and standards. There are indications of a high lab silver bias at OMAC in other analyses discussed below.

Certificates Check

The data base provided to IMC for resource estimation during 2006 was an Access data base prepared and maintained by Anatolia. IMC did not complete a certificate check on the incremental drill data added during 2007. Due to the results of the previous certificate check (as discussed below) and the relatively small amount of incremental data, IMC did not consider this to be necessary.

The assay results for the 2005 and 2006 drilling are a direct input of electronic certificates of assay from the assay lab. Trace assay was stored as one-half the trace value within the data set for block grade estimation.

Within the pre-2004 data set, IMC checks of the available paper certificates against the Access data base did not identify any discrepancies.

IMC was able to check 3.2 percent of OMAC lab assays and found no discrepancies for gold or silver in the intervals with available certificates.

The total data base as of September 2005 contained 34,308 gold assay intervals from the ALS-Chemex lab. IMC checked 33,088 of those certificates (96 percent) and found 8 intervals within the entire data base where the gold results did not match certificates resulting in a 0.02 percent error rate. There were 6 intervals for silver out of 34,275 available certificates for an error rate of 0.02 percent.

IMC finds the modest error rate acceptable for determination of mineral resources and mineral reserves.

Duplicates

The following discussion is divided into two components:

- Duplicates within the September 2006 data base, and
- Updates to reflect the data within the December 2007 data base

Duplicates of RC drill samples are prepared by Anatolia personnel and submitted on a 1 in 15 to 25 basis. IMC could identify 24 duplicates that had been assayed by OMAC during their tenure as an assay lab. Consequently, this discussion will focus on the duplicates assayed at Chemex.

Historic ALS-Chemex assay procedures used two slightly different assay procedures for gold: "aa23" with a 0.005 to 10 ppm reporting range, and "aa25" with a 0.005 to 100ppm reporting range. Both methods utilized a 30gm aliquot. During the use of the aa23 method, values greater than 10ppm were rerun with gravimetric finish (152 intervals). IMC was able to check that assignment during the certificates check. In comparing the duplicates during this period, the proper original assay was identified for the check. During the earlier verification work by IMC in 2005, no problematic issues were identified between the as23 and as24 methods. Consequently, the updated analysis of duplicates and standards has combined both assay methods. The 2006 through 2007 data was assayed by the "aa25" method only.

IMC completed statistical hypothesis tests for gold and silver for the available submitted duplicates. The 2006 work was updated with an incremental check of the new data drilled since that date. The duplicates results are satisfactory and indicate that the sample preparation and assay procedures applied at the commercial lab are repeatable with good precision. The test results are summarized in Table 14-1.

Table 14-1

RC Duplicates Inserted by Anatolia									
Metal	Number of Pairs	Dulicate		Original Values		Hypothesis Test Results at 95% Confidence			
		Mean gm/t	Variance	Mean gm/t	Variance	T Stat	Paired T	Binomial	KS
All Gold Duplicate Data Available in Sept 2006									
Gold	1989	0.809	9.150	0.785	7.927	Pass	Pass	Pass	Pass
Incremental Gold Duplicate Assays Added Between Oct 2006 and Dec 2007									
Gold	790	0.533	3.034	0.565	4.868	Pass	Pass	Pass	Pass
All Silver Duplicate Data Available in Sept 2006									
Silver	1979	1.645	55.673	1.642	54.564	Pass	Pass	Pass	Pass
Incremental Silver Duplicate Assays Added Between Oct 2006 and Dec 2007									
Silver	234	4.300	102.511	4.515	1115.999	Pass	Pass	Pass	Pass

Standards and Blanks

Standards and blank samples have been used as the primary verification of the assay methods throughout the project life. The historic results and the recent 2007 results will be discussed in this section.

During the Rio Tinto exploration program, blind standards were submitted to the OMAC lab.

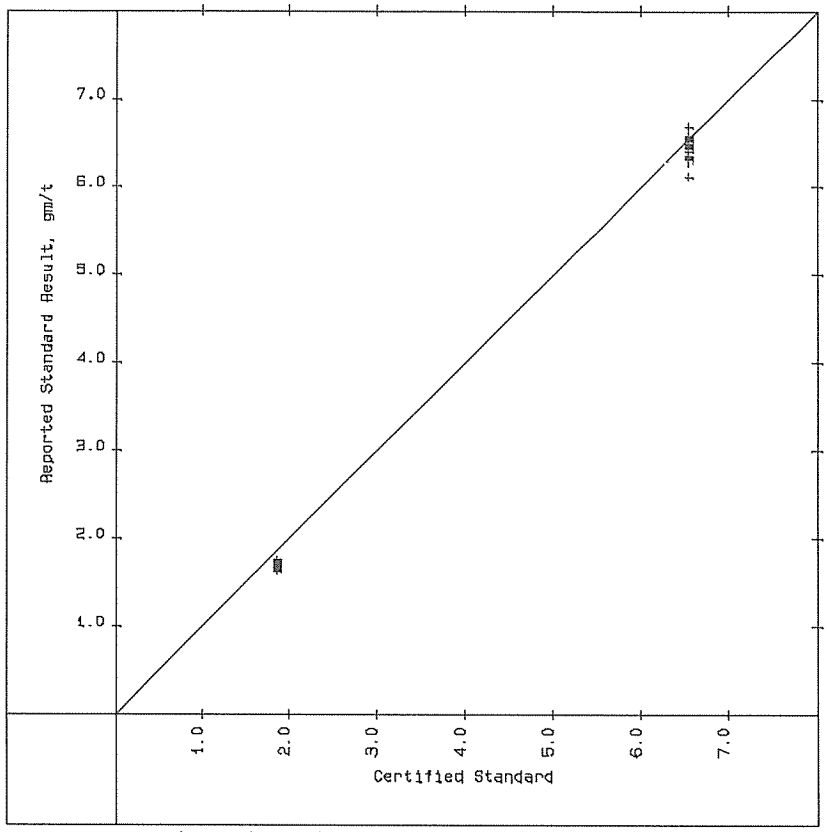
IMC was able to find the Rio Tinto standards files as separate spreadsheets as well as the analysis of that data within the Rio Tinto conceptual study. Figure 14-1 summarizes the results of the few OMAC standards that were within the Çöpler data base. The horizontal axis presents the agreed certified value of the standards, and the vertical axis reports the values actually reported by the OMAC lab during the normal assay process. The results for plotted gold values assay are satisfactory. Plotted silver values indicate a minor high bias in the high grade range that is also apparent in the Chemex lab results.

Figure 14-1

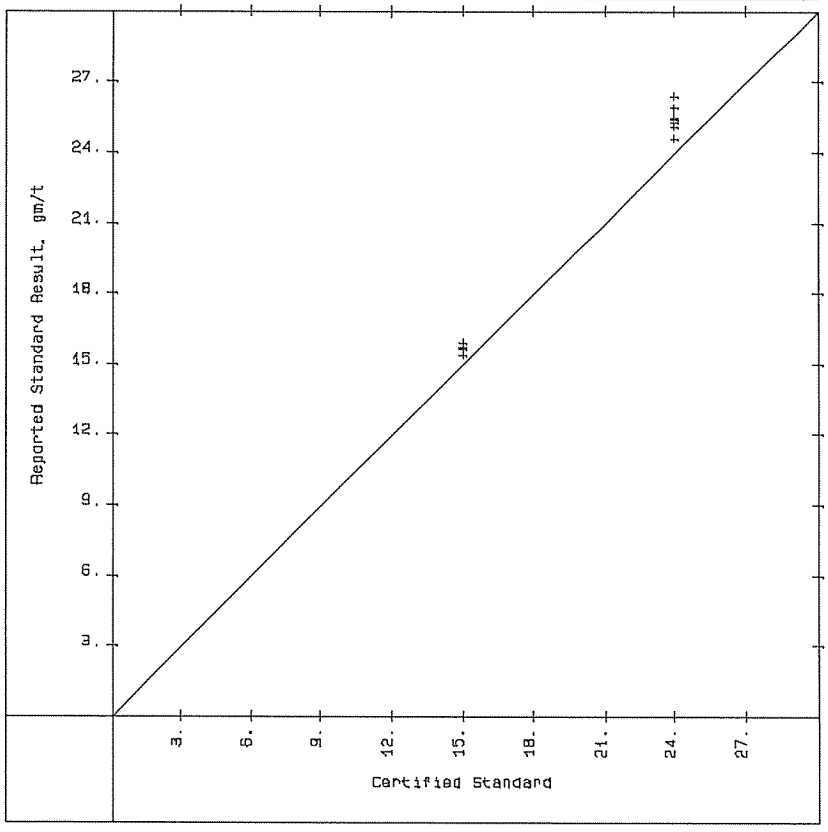
Standard Results

OMAC Labs

Reported vs Certified Values



OMAC Gold Standards



OMAC Silver Standards

Rio Tinto analysis of standards also indicates a high bias of OMAC versus standards for two of the three silver standards of ore grade interest. Rio Tinto duplicate assays checks on coarse rejects and pulps indicate a high bias of OMAC silver when compared with Chemex lab silver.

Altogether there were 1921 inserted standards samples for gold and 365 for silver within the September 2006 drill hole data base. Figure 14-2 presents the results of the inserted gold standards for all the September 2006 data followed by the 2007 drilling as a separate data set. The obvious issue is the swapping of standards in the historic and current data base. This issue was essentially resolved during 2006, but has resurfaced within the 2007 drill data. For example, inserted standards recorded as Standard #4 have assay values that report back typically as values for Standard #2. The indication is that the crew inserting the standards materials were inserting the wrong samples, or recording the wrong sample numbers in the standard insertion logs. This issue was discussed in the 2005 IMC Report and the 2007 IMC Report and it appears that improvements made during 2006 were not continued into 2007.

The swap rate on Figure 14-2 averages about 2 percent for the data prior to 2006. IMC has observed that there is no correlation to the value of the previous assay in the run, meaning that the results do not appear to be lab errors or inaccurate laboratory work, but are simply due to mislabeling or miss-insertion of standards prior to lab submittal in the pre-2006 data. During 2006, the sample swap rate was zero. During 2007 it is now back to 2 percent. When the swapped standards are removed from the pre-2006 data, there is a tendency for the high grade gold samples to report back with somewhat lower values than the certified value. This result is not atypical and will result in somewhat conservative assay results. Within the 2007 data there appears to be a similar trend.

Figure 14-3 shows the results of 365 available silver standards as assayed at ALS-Chemex by the ICP method. The same sample swap issues are obvious with about 5.7 percent of the inserted standards mislabeled or miss-inserted within the pre-2006 drilling. Within the 2007 drilling, the swap rate appears to be about 1.6 percent. When the swapped values are removed, there appears to be a tendency for ASL-Chemex to report values somewhat higher than the established standard value for silver. This difference is between 4 and 8 percent and is similar to the results reported regarding OMAC by Rio Tinto. The indication is that the standard is actually low valued or the ICP method applied by both labs is over estimating.

IMC was not provided with silver standards results from the RC drilling so Figure 14-3 presents the silver standards results for the Diamond drilling during Oct 2006 through Dec 2007. The high level of variability in the 5 gm silver standard during 2007 is of some concern. One cannot determine if the variance is due to lab repeatability issues or if the prepared standard is too coarse and insufficiently blended.

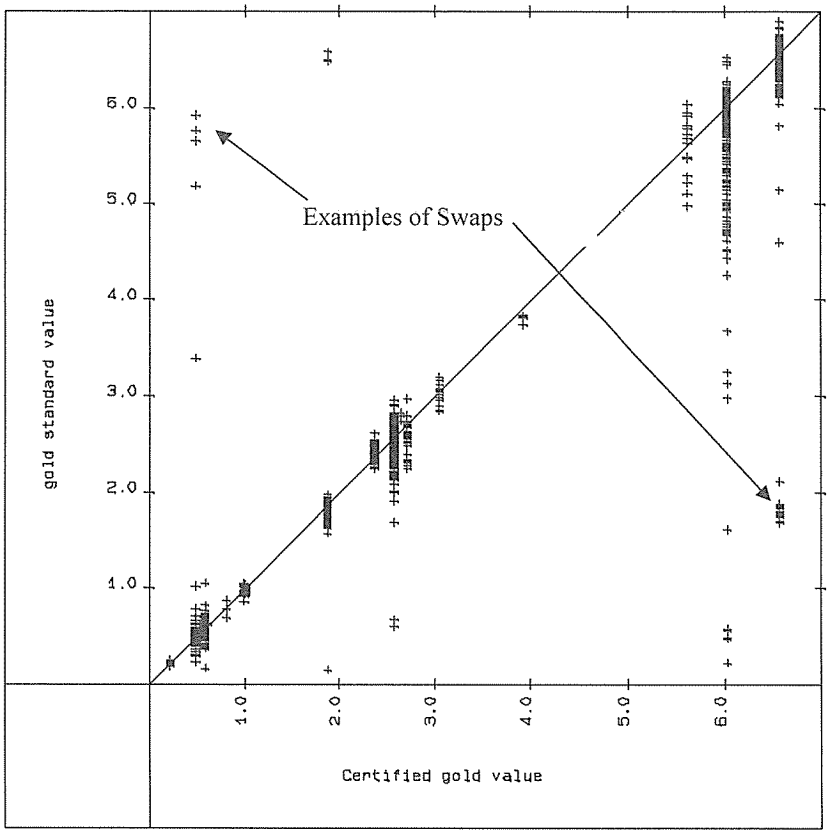


Figure 14-2

Gold Standard Results

ASL-Chemex Labs

Reported vs Certified Values

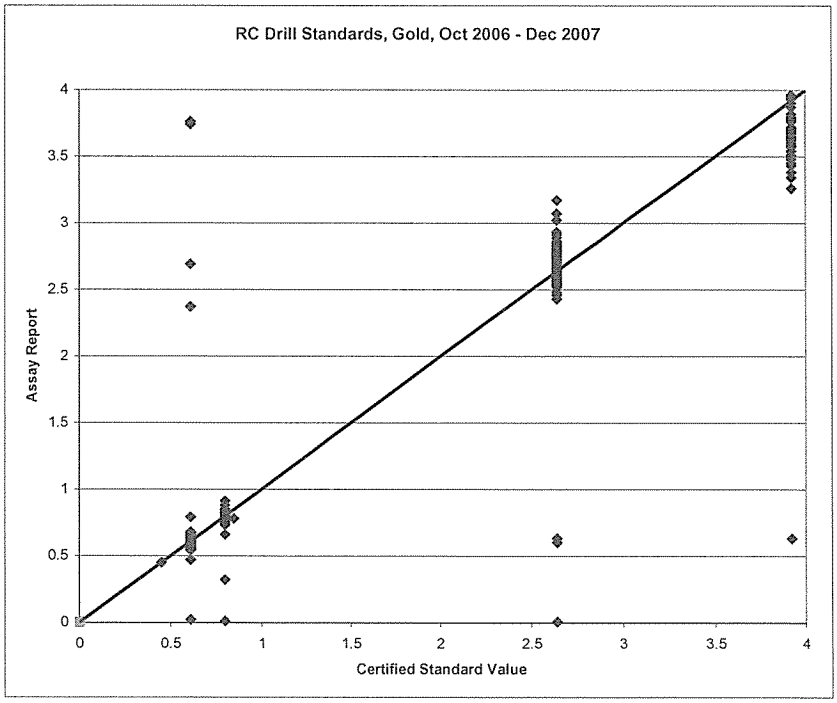
Inserted Gold Standards

All Available Standards

2002-2006

1921 samples

Excludes Blanks



Inserted Gold Standards

2007 Data

547 Samples, in RC Stream

Excludes Blanks

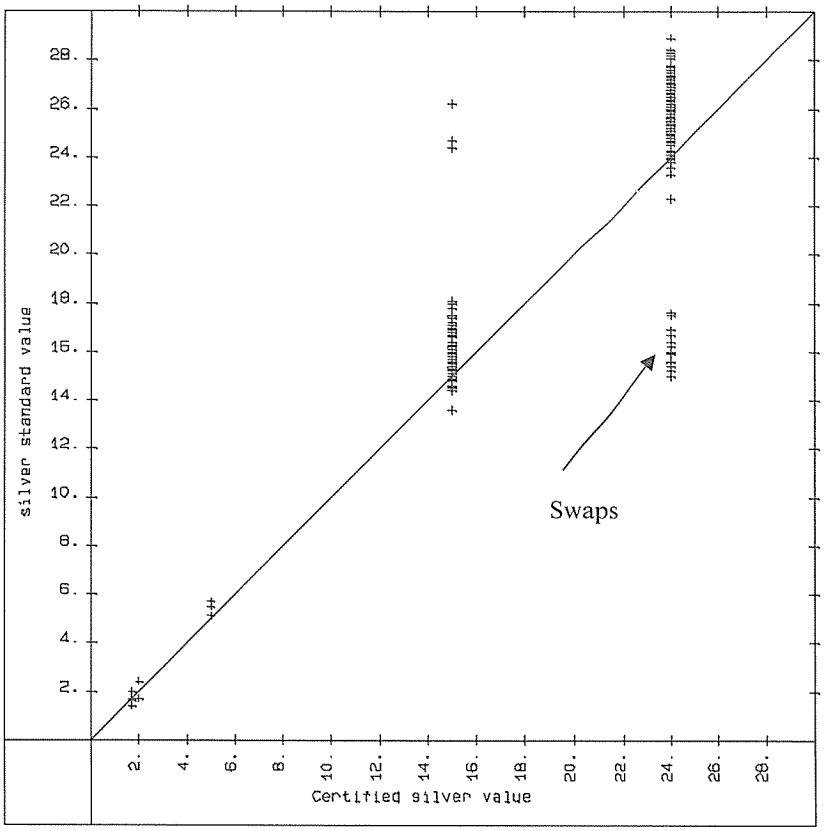


Figure 14-3

Silver Standards Results

ALS-Chemex Labs

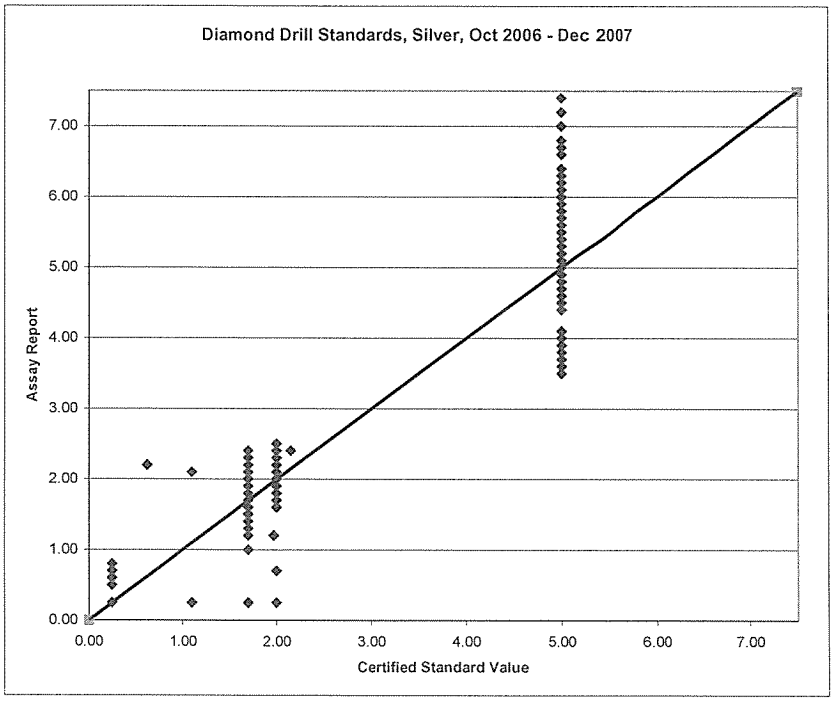
Inserted Silver Standards

All Available Standards

2002-2006

365 Samples

Excludes Blanks



Inserted Silver Standards

2007 Inserts within DD Holes

368 Samples

Excludes Blanks

Several items were observed within the standards data which should be addressed by mine site personnel. It appears that standards are prepared from material available at Çöpler and then assayed multiple times at the same lab. IMC recommends that a detailed protocol be implemented to prepare standards to rigorous QAQC standards. Assays should then be completed with a multi-lab round robin assay procedure to establish the certified value for the standard.

Additional diligence should address the sample swapping issue. The assay precision and reliability is open to question if there are periodic errors in standard sample submission.

Blanks

Blanks are inserted during the sample insertion process in the same manner as standards. The results of the inserted blank samples are as follows:

Gold, 2002 – Oct 2006

565 inserted blanks for gold

All but 6 results are below 0.05 gm/t (less than detection)

Of the 6, three are likely swaps of other standards

Std1 = 6.04, Std234 = 4.99, Std3 = 0.47

The other three values are 0.06, 0.08, and 0.15gm/t that have no impact on ore values

During 2007, there were 5 out of bounds results out of 550 inserted gold blanks for both DDH and RC drilling. As in previous years, these were likely swaps of standards.

Silver

504 inserted blanks for silver

All but 4 are below the 0.25 gm/t detection limit

Those 4 are reported at 1.1, 1.9, 2.0, and 2.2 gm/t and are likely swaps of Std7.

During 2007, there were 4 out of 246 silver blanks that were out of tolerance. The provided standards data were for Diamond drilling only. RC blanks for silver were not provided.

IMC has checked the values in the assay sequence prior to insertion of the blanks. There is no correlation between the reported values for the blanks and the prior assay meaning that this is not an issue with inaccurate laboratory practices.

IMC holds the opinion that the few out-of-limit blanks of between 0.5 and 1.6 percent are acceptable for determination of mineral resources and mineral reserves.

DD Versus RC Drilling

IMC composited the drill hole data into 5m bench interval composites for statistical work and for eventual block model grade estimation. Each drill hole interval was tagged with the drill type: 1 = DD, 2 = RC, and 4 = Water well drilling. The analysis of RC versus DD drilling was repeated by IMC with the entire data set through December 2007 rather than develop an incremental analysis by year. There is likely insufficient data in the year by year results

A set of DD to RC paired composites were identified where the spacing between the 5m composites was less than 5m in one case and 10m as a separate case. Particular emphasis was placed on those composites that were separated by 5m or less.

The comparison was completed for both gold and silver. In both cases, high grade assay data was removed prior to compositing for the Main, Manganese, and Marble zones. Gold composites were less than 25gm/t and silver composites were less than 70gm/t for this analysis.

The comparison of DD to RC sampling methods at data spacing of 5 and 10m are summarized on the Table 14-2. The hypothesis test results at the 5m spacing generally indicate that the data can be comingled. At the 10m spacing there is more uncertainty in the hypothesis test results due to the higher values of the RC data relative to the DD drilling. In summary, the RC data is between 16 and 20% higher in grade than the nearest DD drill hole. However, due to the high variance in the sample data, one cannot establish that the two sampling sets are different with 95 percent confidence.

In other words, there is sufficient variability in the sample data to mask the effects of possible bias between the two drilling methods.

Table 14-2

Nearest Neighbor Comparison DD to RC Drilling										
Metal	Spacing	Number	DD Drilling		RC Drilling		Hypothesis Test Results at 95% Confidence			
	Less than	of Pairs	Mean gm/t	Variance	Mean gm/t	Variance	T Stat	Paired T	Binomial	KS
Gold	5m	200	1.837	6.941	2.208	8.357	Pass	Close	Pass	Pass
Gold	10m	385	1.462	6.034	1.831	8.223	Pass	Fail	Fail	Fail
Silver	5m	201	4.932	91.322	5.745	118.008	Pass	Pass	Fail	Pass
Silver	10m	384	3.752	69.190	4.612	93.632	Pass	Pass	Fail	Fail

Figures 14-4 and 14-5 summarize the above data on cumulative frequency plots for the 5m paired data for gold and silver respectively. The plots are consistent with the results on Table 14-2

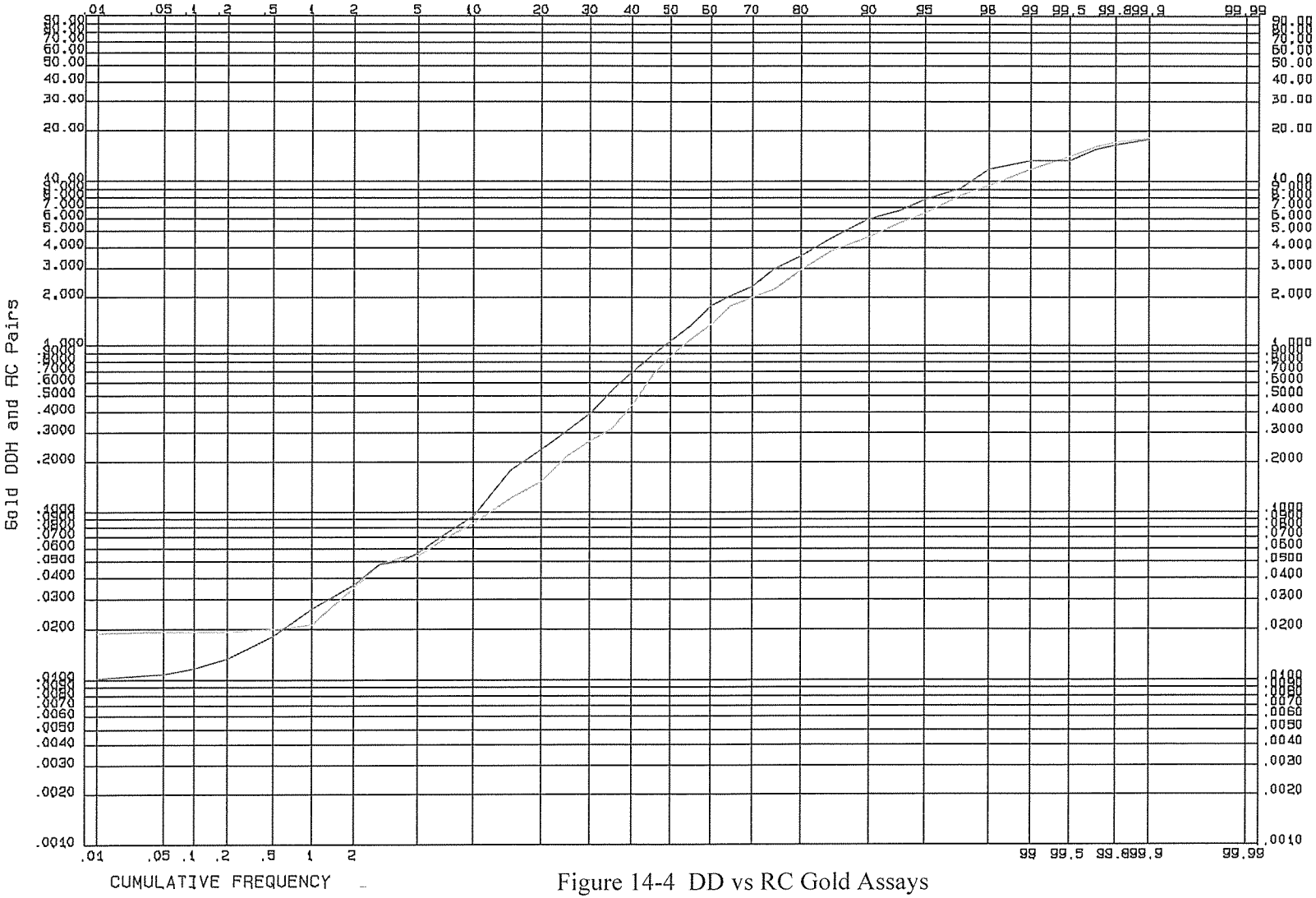


Figure 14-4 DD vs RC Gold Assays

DD Gold = Orange, RC Gold = Red

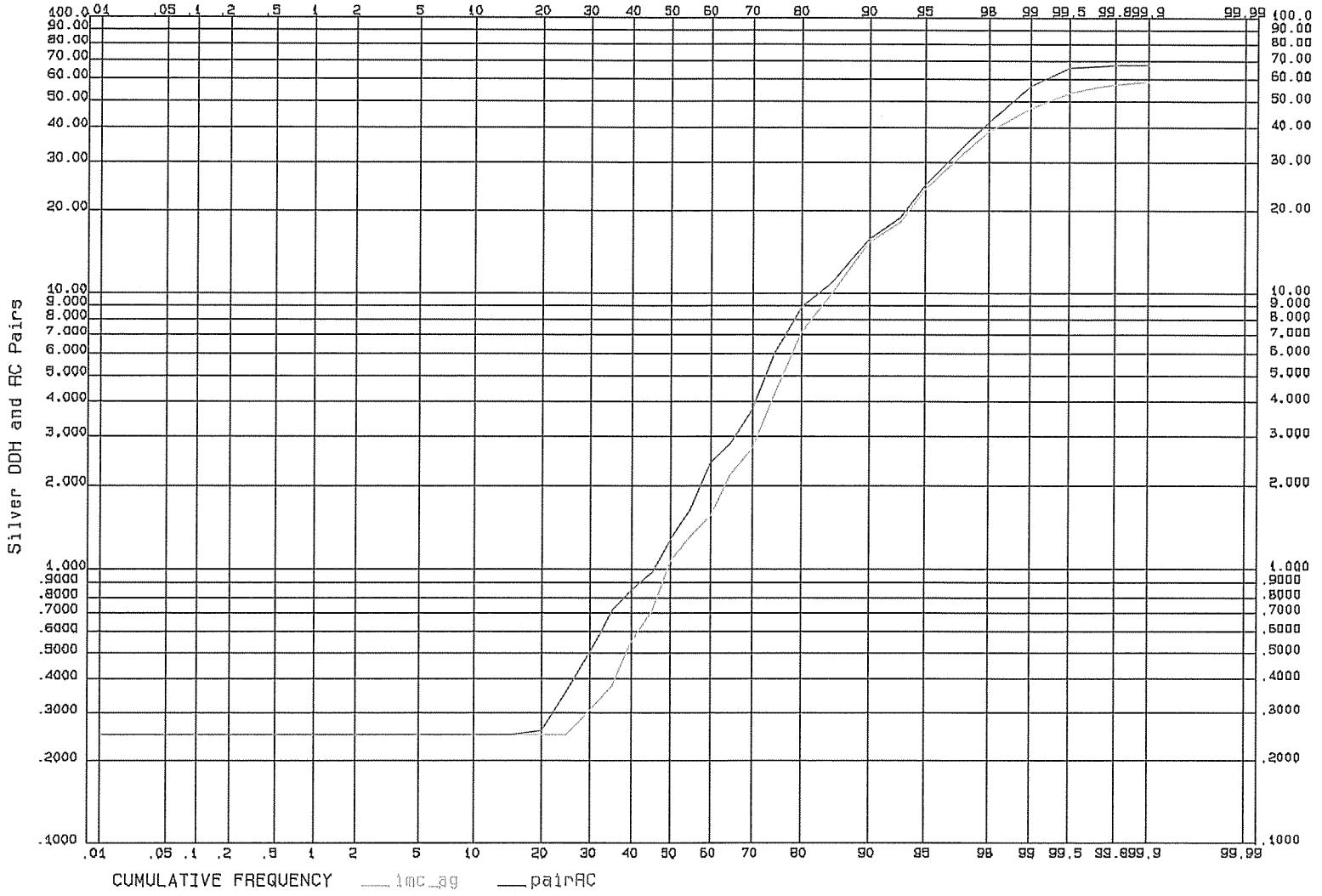


Figure 14-5 DD vs RC Silver Assays

DD Silver = Orange, RC Silver = Red

Core Recovery Versus Grade

IMC completed a comparison of grade versus core recovery within the diamond drill holes during 2005. The results indicated that at the highest core recoveries, the values of gold and silver were somewhat lower than the deposit mean. A more thorough review indicates that the best core recovery occurs in the low grade zones peripheral to the deposit.

The IMC test results do not indicate a data sampling bias but rather the trend for the best core recovery to occur where there is little metal and consequently little alteration. No further analysis of core recovery was deemed necessary.

IMC Independent Check Assay

IMC personnel selected 30 samples from DD core and RC coarse rejects for independent assay during the site visit in 2005. The sample list was prepared by IMC to cover the range of deposit grades, locations, and rock types. Çöpler personnel had no prior knowledge of the sample list.

The purpose of this type of independent assay is to confirm the presence of metal in the samples. A 30 sample suite is not of sufficient size to confirm the data base or to confirm the deposit grades. However, it is sufficient to verify the presence of ore grade mineralization as a blind test program.

The 12 samples that were from DD core used the remaining half core as the requested sample. The 18 RC samples were developed by pouring the coarse rejects through the splitters in the same process as applied to RC sampling described earlier in the text.

The collected samples were shipped by air freight to IMC offices in Tucson, Arizona. IMC personnel delivered the 30 samples to the Skyline–Activation Labs (Activation) offices in Tucson for preparation and fire assay. Requested preparation procedures were to crush to 10 mesh, split 250gm, and pulverize to 95 percent minus 150 mesh. Activation chose to ship pulps to their lab in Toronto for AA analysis of 30gm aliquots. Activation utilized a gravimetric finish when the AA result indicated a grade above 4.0gm/t.

Activation results for AA gold were not ideal in that their inserted standards indicate a 23 percent low bias in the AA gold results within the Activation results. Table 14-3 illustrates the raw data from Activation versus the data base information from Çöpler. Figure 14-6 summarizes the comparison of the check assays versus the original data base values. A correction factor has been applied to the Activation gold results for the AA range on the graph based on the Activation standards results.

Despite the issues with Activation's check assay results, the process has confirmed the presence of ore grade mineralization at Çöpler by blind independent sample collection and assay. It should be noted that the Activation assay issues discussed above do not apply to the Çöpler data base or assay methods.

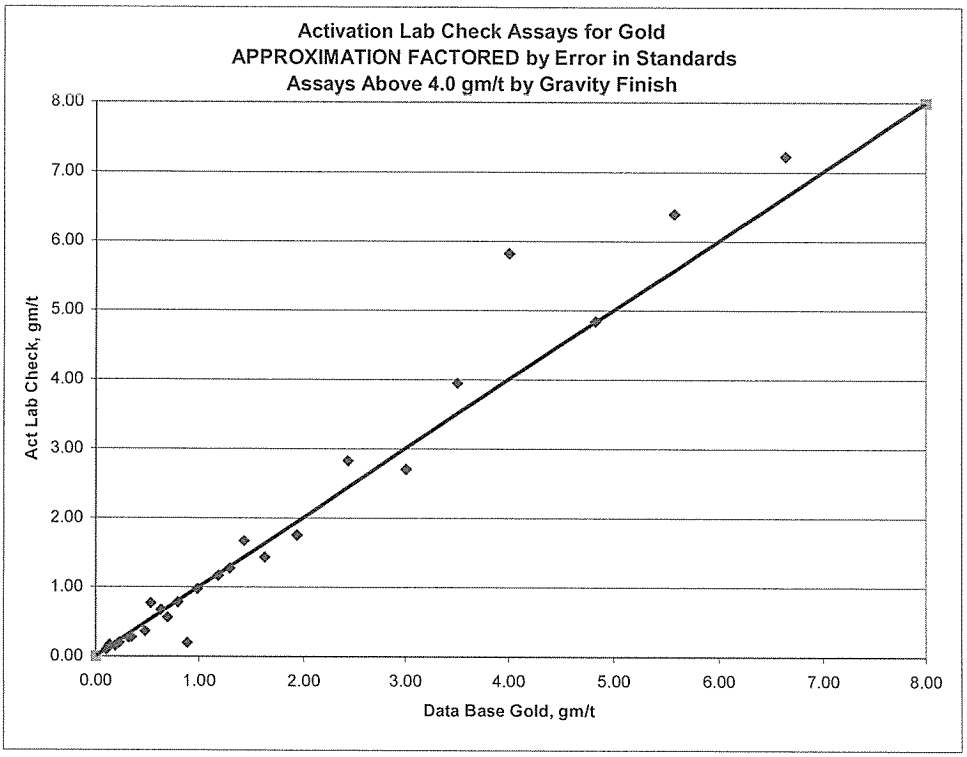
Table 14-3

Assays of Copler Samples Collected by IMC

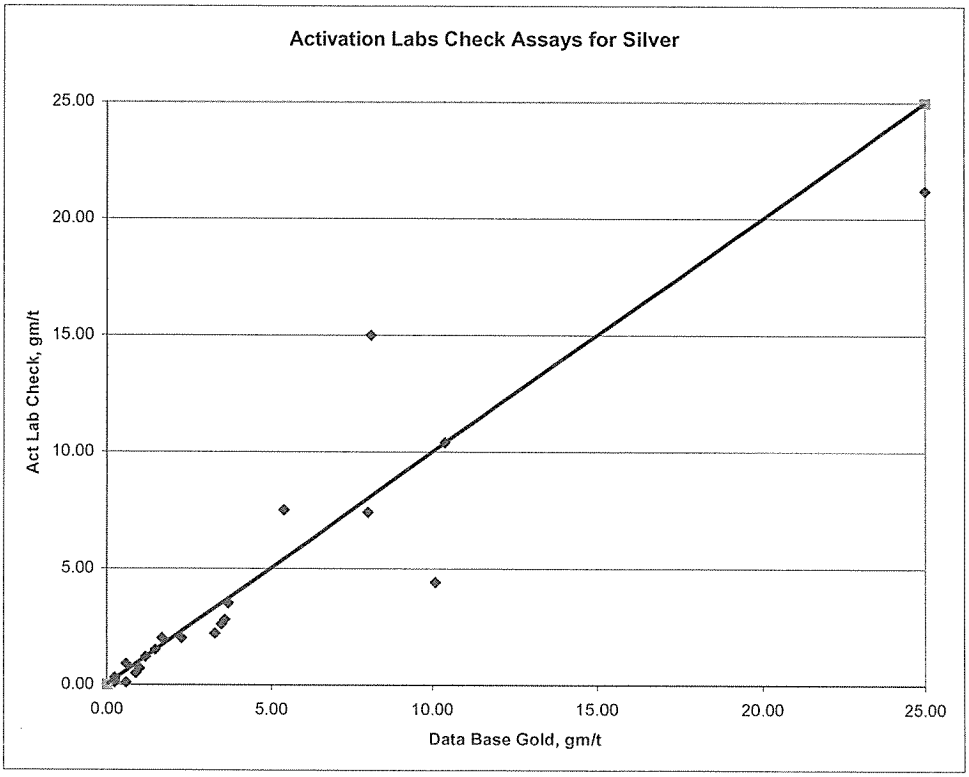
Sample Location from Coper Drilling						Original Gold	Act Labs Gold	Original Silver	Act Labs Silver
Hole	Sample No	From	To	İnterval	Lith	PPM	PPM**	PPM	PPM
CDD_001	39970	16.00	17.00	1.00	MTS	0.23	0.16	0.25	0.10
	39971	22.00	23.00	1.00	MTS	1.43	1.35	5.40	7.50
CDD_008	39972	126.00	127.00	1.00	INT	0.19	0.13	0.25	0.10
	39973	183.00	184.00	1.00	INT	0.99	0.79	10.40	10.40
CDD_045	39974	42.00	43.00	1.00	MTS	0.80	0.64	1.01	0.70
CDD_053	39975	98.00	98.90	0.90	MTS	0.35	0.23	0.25	0.30
CDD_054	39976	5.70	6.90	1.20	OVB	0.32	0.22	0.60	0.10
	39977	13.65	15.15	1.50	DIO	0.13	0.12	0.25	0.10
	39978	24.00	25.00	1.00	BRC	4.83	4.84	3.70	3.50
CDD_075	39979	29.00	30.00	1.00	CLA	0.48	0.30	0.90	0.50
	39980	51.00	52.00	1.00	BRC	54.90	59.91	35.10	7.60
CRD_248	39981	21.00	22.00	1.00	MRB	0.14	0.14	0.25	0.10
	39982	6.00	7.00	1.00	DIO	2.44	2.29	8.00	7.40
CRC_047	39983	11.00	12.00	1.00	DIO	3.51	3.20	25.00	21.20
	39984	34.00	35.00	1.00	DIO	0.54	0.62	8.10	15.00
	39985	6.00	7.00	1.00	JSP	1.30	1.03	3.30	2.20
CRC_064	39986	17.00	18.00	1.00	JSP	1.63	1.16	3.50	2.60
	39987	26.00	27.00	1.00	MPY	1.19	0.95	0.60	0.90
CRC_078	39988	6.00	7.00	1.00	MTS	0.12	0.10	0.25	0.30
CRC_119	39989	6.00	7.00	1.00	DIO	3.01	2.19	0.25	0.20
CRC_177	39990	5.00	6.00	1.00	CLA	0.11	0.08	0.25	0.10
	39991	36.00	37.00	1.00	MRB	4.01	5.82	1.70	2.00
CRC_196	39992	62.00	64.00	2.00	BRC	0.64	0.55	0.25	0.10
CRC_263	39993	160.00	161.00	1.00	MTS	0.70	0.46	0.25	0.10
	39994	34.00	35.00	1.00	JSP	18.85	22.66	26.30	22.90
	39995	42.00	43.00	1.00	DIO	1.94	1.42	1.50	1.50
CRC_293	39996	51.00	52.00	1.00	MTS	6.64	7.22	1.20	1.20
	39997	55.00	56.00	1.00	JSP	10.45	10.24	10.10	4.40
	39998	84.00	85.00	1.00	JSP	5.57	6.39	3.60	2.80
	39999	97.00	98.00	1.00	JSP	0.89	0.16	2.30	2.00
					Means =	4.28	4.51	5.16	3.93

** Values greater than 4.00 gm/t gold were reported by gravimetric finish
Gold Standards submitted in the AA assay stream average low and require a 1.23 factor to correct

Figure 14-6
Activation Lab Check Assays on Samples Selected by IMC



tab14-1.xls



15.0 ADJACENT PROPERTIES

Section 15.0 is based upon the 2006 Samuel Report. Changes have been in format for this technical report and the status of the properties has been updated by Anatolia to reflect exploration of the adjacent properties since the 2006 Samuel Report. The authors have been unable to verify the information in this section. The mineralization is not necessarily indicative of the mineralization of the Çöpler deposit and the following data is included for information purposes only.

The following properties are in the area near the Çöpler deposit, and are licensed for exploration by Anatolia:

Kabataş is now renamed Karakartal (Black Eagle)

This is a copper-gold porphyry deposit located about 15km southeast of Çöpler. Karakartal is an exploration target where some drilling was done early in the Rio Tinto/AMDL joint venture during 2001, with a new drilling program now underway (in 2008).

Demirmagara

Demirmagara is a copper-gold mineralization system located 5km southwest of the Project Site. It is an exploration target and mapping, surface sampling and geophysics have been completed for the area. AMDL tested the area by RC drilling in 2006, and is planning follow up drilling work in 2008.

Zangadere

This is a gold and copper mineralization system with potential geologic similarities to Çöpler. It is located about 2km south of the Project. No drill testing has been done to date.

Sabırlı

This is a gold and copper system located 4km east of Çöpler. Surface sampling has been completed on this exploration target.

Findiklidere

This is a copper-gold porphyry style target located 8km southeast of Çöpler. Mapping and some surface sampling have been completed. AMDL is planning to test drill the area in 2008.

Bahce

Bahce is a porphyry Au-Cu style mineralization target located 2km north of the Project. Mapping, surface sampling, trenching and preliminary drilling have been completed.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Section 16.0 is primarily quoted from the 2006 Samuel Report. Updates have been made to discuss relevant heap leach test-work in more detail reflecting the decision to proceed initially with a heap leach only process stream while retaining information from the entire metallurgical test program that was designed for two process streams, milling followed by CIP and the heap leach. The mill test data was used to supplement the heap leach test data with the understanding that more column tests will be performed prior to commencement of operations to optimize recoveries and operating parameters. Other changes within this Technical Report have been made to format, section number, and the removal of specific tonnage references in Table 16-1.

16.1 Background

Metallurgical tests were carried out as part of the Project development work on RC cuttings and DD cores from the three zones identified in the Çöpler deposit; the Manganese, Marble Contact and Main Ore Zones. Bulk surface samples have also been obtained from the Manganese Zone and tested.

The Çöpler deposit is a porphyry related, bulk mineable, epithermal gold complex with most of the gold mineralization located in three closely spaced zones. Metallurgical tests reveal that better than 80 percent gold recoveries are expected from the oxide ores in a whole ore leach/CIP process, while the sulfides are generally refractory. This report focuses on the metallurgical test work and project feasibility of the oxide ores.

Table 16-1 lists the major ore types and their contributions to the overall oxide ore body:

Table 16-1 - Major Ore Type Percentages

Oxide Ores	Percent of Total
Marble (MRB)	66.64
Diorite (DIO)	23.93
Metasediments (MTS)	7.18
Jasperoid (JSP)	1.63
Manganese Oxide (MNX)	0.62
Total Ore Types	100.0

Metallurgical test work commenced in September of 2004 and was managed by Resource Development Inc. ("RDi"), with oversight from Ausenco Limited of

Brisbane, Australia, and Pennstrom Consulting of Highlands Ranch, Colorado. RDi carried out the majority of the metallurgical testing in their laboratory at Wheat Ridge, Colorado. Specialized tests and analytical services, such as comminution, mineralogy, and rheology were sub-contracted out to others.

16.2 Comminution

The ore competency is low for all ore types in the deposits. This is consistent with the indicators measured: high drop weight A*b value of 83 to 91, along with very low UCS values (all less than 60 MPa).

The impact crushing work index (CIWI) values are low at 4 to 9kWh/mt for Manganese Zone ores and 2 to 6kWh/t for the Main Zone ores.

The rod mill work index to ball mill work index ratio (RWI:BWI) for the Manganese and Marble ores is generally 1.0 to 1.1, and 0.8 to 0.9 for the Main ores. This indicates a low potential for critical size pebble build up in SAG mill circuits and in single stage ball mill circuits.

The BWI values are variable and generally are in the soft to medium hardness range: 7 to 13kWh/mt for Manganese Zone ores and 8-16kWh/mt for Marble Contact Zone ores. BWI for the Main Zone ores are generally harder at 12 to 19kWh/mt.

Hardness of the ore as measured by the Bond ball mill work index, generally increases with silica content and decreases with assayed lime for ores in the three deposits.

The abrasion index values (Ai) are uniformly low at less than 0.1 for all ore types.

16.3 Agitated Cyanide Leaching

A moderate dependency residue grade and recovery with grind size was observed for the Main and Manganese samples tested and a lesser dependency for the Marble sample. A grind size of 80 percent passing 150µm (100 mesh) was selected following an assessment of economic and operating criteria over the particle size range of P_{80} 75µm to 180µm.

The ores did not demonstrate any influence of pregnant solution "robbing".

All ores exhibited rapid initial gold recovery in the first six hours, followed by a slow leaching fraction up to 18 to 24 hours.

In the Manganese Zone, marble lithology is the major ore type. Identified gold recovery trends are described as follows:

- Gold recovery for marble lithology varies from 70 percent to 90 percent. A strong correlation of recovery with head grade for marble ores was observed.

- Gold recovery for "non-marble" ore types is in the range of 75 percent to 80 percent. Poor correlation of recovery with head grade is noted for these other ore types. Good correlation of recovery with residue grade was observed.

- The range of cyanide consumption is expected to be low in operation, typically 0.1 to 0.5kg/t NaCN from scale-up of laboratory data to operating conditions. Excursions will occur when proportions of other "non-marble" ore types in plant feed increases. Depending on the run-of-mine blend this may result in cyanide consumption increasing by two to three times that normally encountered with the Marble ore.

Recovery characteristics for Marble Contact Zone Ores are:

- Gold recovery is 80 percent for marble lithology and around 60 percent for other non-marble ore types.

- The average cyanide consumption for non-marble ore types is about 1.5kg/t NaCN.

- Metallurgical outcomes from tests for the Main Zone ores are:

- Recovery for oxide diorite is good at around 75 percent, with low cyanide consumption.

- Gold recovery for oxide metasediment is good at about 75 percent, with average cyanide consumption at 1.5kg/t NaCN.

16.4 Pre-Concentration Methods

A series of flotation tests were carried out for a number of conditions: strong xanthate, sulfidizer, and speciality reagents (by vendor). Outcomes from the float tests on the oxide ores were poor, as would be expected. Tests on sulfide ores are, and will be, discussed in separate, future studies.

A manganese rich section, adjacent to the existing pit of the former manganese mine was identified. Gravity upgrade tests for two sizes simulating leach tails and cyclone underflow feed material were carried out to assess the potential to produce a saleable manganese product with minimal gold losses. The findings were:

- Primary gravity recovery of manganese was poor, with less than 50 percent of the manganese recovered in 30 percent by weight from the feed.

- Secondary gravity recovery of manganese was poor, with no further upgrading of manganese achieved.

- Gold recovery to a gravity product is low with less than 2 percent gold reporting to the manganese gravity concentrate.

- These products are unlikely to receive gold credits and will possibly incur downstream penalties for deleterious elements such as Ba, As, Hg, Zn, Pb, and Cu.

- The potential to make a saleable manganese product from this material for a metallurgical grade (>48 percent Mn) or a battery grade (>45 percent) is low.

Note that direct leaching of this sample achieves 81 percent extraction of gold with a cyanide consumption of 1.0kg/t.

16.5 Column Leaching

All test work performed by RDi was on non-agglomerated crushed ore samples. Recovery rates for all column tests were generally fast with rapid leaching (by column standards) occurring in the first six days followed by a slow leaching component for the remainder of the time allowed. The slowest initial leaching rate is observed in the diorite ore from the Main Zone.

Column leach tests were carried out at three crush sizes: 80 percent passing 25mm 12.5mm and 6.4mm, with most of the work performed with 12.5mm material. Marble ores from the Manganese Zone showed a relatively small decrease, 0.05g/t Au, in residue grade at the finer crush size. Re-crushing residues from column tests having a crush size of 12.5mm to 6.4mm followed by re-leaching, improved recoveries by an average of 5 percent. From the few test run at 25mm, recoveries were shown to be lower than seen from the 12.5mm crushed size material.

Good correlation is found in the plot of recovery against head grade for marble ore in the Manganese Zone.

Recoveries of 60 to 75 percent for marble and diorite ore are indicated from the tests at a low average cyanide consumption of between 0.5 and 0.6kg/t NaCN.

Additional column leach testing is currently in progress as part of the test program being performed by Australian Metallurgical and Mineral Testing Consultants ("AMMTEC") of Balcatta, Western Australia. The results of this test-work, scheduled to be available in late 2008, will provide additional information as to optimal ore preparation, reagent addition and projected recoveries prior to the start of operations.

16.6 Cyanide Soluble Copper

Cyanide Soluble Copper trends from analytical tests, carried out on drill core composite samples prepared from nominally 7 to10m interval of core are:

- Marble lithology has the lowest total copper and cyanide soluble copper. Average soluble copper is 6 to 14 percent of the total copper for all three deposits when leached at high temperature and with high cyanide strength solutions. Total range of averages for marble lithology in the three deposits is approximately 300 to 700 ppm Cu. For column tests average copper extraction in marble ores was 7 percent.

- Cyanide soluble copper in other non-marble lithologies is significantly higher with extraction averages in the range of 10 to 50 percent. Total copper range of averages for non-marble lithologies is approximately 500 to 7000ppm Cu (0.05 to 0.7 percent).

- Extreme variability in copper to solution is evident, ranging from 1 to 40 percent in marble lithology and 1 to 70 percent in non-marble lithologies.

There is a relatively strong correlation of cyanide soluble copper with total copper for all ore types. The relationship can be described by an algorithm using regression analysis, where there is sufficient data.

16.7 Copper Carbon Loading and Stripping

Tests were carried out to determine the anticipated copper carbon loading and the ability to remove copper from the carbon using a cold cyanide strip method. Results indicated:

- Copper carbon loading could be minimized by increasing the cyanide concentration of the solutions prior to adsorption.

- Copper loading on carbon was less than 3 percent with an initial copper feed grade of 8,450g/t.

- Stripping of copper from carbon was successful at ambient temperatures with a 5 percent cyanide solution removing over 90 percent of the copper from the carbon, and less than 0.6 percent of the gold. Copper stripping was essentially complete in six hours.

16.8 Amenability of Ores to Cyanide Leaching

Gold extraction and cyanide leach amenability trends from the same composite samples and cyanide solubility tests are:

- Gold in marble lithology is highly amenable to extraction by cyanide leaching, with extraction percentages in the low 90 percent range for pulverised samples for marble lithology in all ore zones.

- Gold is highly amenable to extraction by cyanide leaching from manganese oxide (Manganese Zone), with extraction percentages in the mid 90 percent range for pulverized samples.

- Gold amenability to cyanide leaching is favourable for oxidised ore types: diorite, metasediment, jarosite, with average percent extractions in the range mid 70 percent to mid 80 percent ranges for all deposits for pulverized samples.

- Gold amenability to leach extraction is poor (<40 percent) to very poor (<20 percent) for non-oxidized or fresh lithologies: diorite, metasediment, and gossan lithology for pulverized samples.

- Depending on the head grade and lithology, the equivalent gold recovery at a nominal grind size (P_{80} – 150µm) may be plus or minus 3 percent, to correct for the fine nature of the pulverised sample (> 85 percent minus 75µm).

Table 16-2, provides the projected gold recovery by ore types for both the mill and heap leaching process circuits, and demonstrates the difference between oxidized and unoxidized ores with respect to gold recovery. Heap leach recoveries were projected from bottle roll and available column test data. Additional column test work will be performed to verify the heap leach recovery estimates indicated and to optimize heap leach operating and agglomeration parameters. This Technical Report is based on the development of the oxide portion of the ore body only. Some of the economic, un-oxidized material was included in the mine plan and, to reflect this, the overall average gold recovery was lowered.

16.9 Cyanide Destruction

Cyanide destruction tests were performed on mill tailings using both sodium metabisulfite and ferrous sulfate methodologies. The results show:

- Both methods effectively eliminate free cyanide from tails slurries.

- Weak Acid Dissociable (WAD) cyanide concentrations varied greatly and were dependent on the amount of copper present in the tails slurry.

- Lower WAD and total cyanide concentrations were achieved using the sodium metabisulfite method.

Following the initial round of tests, a second series of cyanide destruction tests focused on utilizing sodium metabisulfite only. The results indicate:

- Total and WAD cyanide concentrations varied greatly and were dependent on the ore being treated.

- Total cyanide concentrations below 5 ppm and WAD cyanide concentrations below 1 ppm were consistently achieved.

- Some ores required only 2 times the stoichiometric amount of sodium metabisulfite to cyanide, while the more difficult ores required 5 times the stoichiometric amount.

- Slurry densities of 55 percent and 65 percent were tested, with both slurry densities achieving concentrations below 5 ppm total cyanides and WAD cyanide concentration below 1 ppm.

Table 16-2
Preliminary Ore Types versus Estimated Process Recovery
Çöpler Gold Project

Manganese Zone

Ore Type	Ore Type File Code	Mill Avg. percent Au Rec	Heap Leach Avg. percent Au Rec at 12.5mm crush size
Marble	MRB	88.0percent	74.8percent
Oxidized Diorite	OX DIO	80.0percent	68.0percent
Diorite	DIO	35.0percent	29.8percent
Jasperoid	JSP	73.0percent	62.1percent
Manganese Oxide	MNX	81.0percent	68.9percent

Main Zone

Ore Type	Ore Type File Code	Mill Avg. percent Au Rec	Heap Leach Avg. percent Au Rec
Overburden	OVB	77.0percent	65.5percent
Marble	MRB	77.0percent	65.5percent
Oxide Metasediments	OX MTS	75.0percent	63.8percent
Metasediments	MTS	26.0percent	22.1percent
Oxidized Diorite	OX DIO	80.0percent	68.0percent
Diorite	DIO	10.0percent	8.5percent
Jasperoid	JSP	77.0percent	65.5percent

Marble Zone

Ore Type	Ore Type File Code	Mill Avg. percent Au Rec	Heap Leach Avg. percent Au Rec
Marble	MRB	85.0percent	72.3percent
Oxide Metasediments	OX MTS	75.0percent	63.8percent
Metasediments	MTS	10.0percent	8.5percent
Oxidized Diorite	OX DIO	70.0percent	59.5percent
Diorite	DIO	40.0percent	34.0percent
Clay (usually altered Dio)	CLY	81.0percent	68.9percent
Jasperoid	JSP	73.0percent	62.1percent

16.10 Leach Tailings Thickening

An initial test program was undertaken by RDi to examine flocculent additions, settling area requirements and underflow densities obtainable from leach tails. The tests indicated the following:

- The material settles rapidly when a high anionic, moderate molecular weight acrylamide/acryate copolymer flocculent was added to a slurry ground to 80 percent passing 134 microns, diluted to 20 percent solids at a pH of ~10.0.
- The underflow densities exceeded 70 percent solids after 18 hours of settling with a moving picket.
- When allowed to settle undisturbed for 60 days without flocculent, the material reached a final density of 71 percent solids.
- The overflow water in each of the tests with flocculent was clear, with turbidity measurements of less than 40 NTUs. At a flocculent addition of 15g/t, the overflow had a turbidity of less than 15 NTUs.
- Settling of un-flocculated pulp resulted in slow settling, but clear water in the supernatant.

The results indicate that additional water may be recovered from the Tailings Storage Facility as the pulp density increases with time from 55 percent to over 70 percent.

16.11 High Density Thickening

A second series of thickening tests were performed by Dorr-Oliver-Eimco to determine if high density or paste thickening was possible. The results indicate:

- The material settles rapidly when a high anionic, moderate molecular weight flocculent was added at 10 to 30g/t to a leach tail slurry ground to 80 percent passing 134 microns, diluted to 15 percent solids.
- Densities exceeding 75 percent solids may be achieved and a paste may be produced.

16.12 Copper Recovery from Cyanide Solutions

Test work has been performed to determine whether copper can be electrowon from cyanide solution. Work was performed by Dawson Laboratories in Salt Lake City in 2008. Test results indicate that copper can be electrowon and this method is an option for recovering and managing copper in heap leach solutions.

Additionally, test-work is underway at SGS Lakefield Laboratories in Lakefield, Ontario to determine whether the sulfidization, acidification, recycle and thickening ("SART") process is a viable option for more economic copper recovery, with the additional benefits of lower cyanide consumption through cyanide regeneration. This work, together with design and possible plant additions, is planned for completion prior to the mining and processing of higher grade copper ores.

16.13 Agglomeration Tests for the Heap Leach Process

Preliminary agglomeration test-work was performed by Kappes-Cassiday Laboratories in Sparks, Nevada in 2007. Different additions of cement were used to determine optimum cement addition for a variety of ores. Most ores responded with improved permeabilities and additional work will be performed. Additional, pre-operational test-work is in progress as part of a test program being performed by AMMTEC of Balcatta, Western Australia. The results of this test-work will allow better optimization of cement and lime addition in the agglomerator.

For practicality, and in order not to have production interruptions in the future, particularly with a single process stream, it has been decided to install the agglomerator at the front end of the project rather than in later years. Additional optimization will be performed once the plant construction has been completed at the project and operations commence, as is normal industry practice.

17.0 MINERAL RESOURCES AND MINERAL RESERVES ESTIMATES

17.1 Block Model

The mineral reserves and mineral resources for the Çöpler deposit were based on a block model developed jointly by personnel of Anatolia and IMC during March of 2008. This current model is larger than the 2006 block model in terms of the special coverage of the model. The block size remains the same at 15m x 15m horizontally and 5m vertically. The number of rows, columns and tiers or benches has increased. The model includes grade estimates for gold, silver, and several associated minerals. IMC understands that the associated mineral grades are of value in process design. All three deposits are contained within a single block model.

The block model size and location within the UTM6 coordinate system is as follows:

March 2008 Copler Model - Block Centroids				
	Southwest	Northwest	Northeast	Southeast
Easting	457457.50	457457.50	461192.50	461192.50
Northing	4362707.50	4365392.50	4365392.50	4362707.50
Elevation Range		800.00	1655.00	
Model Primary Axis =		North South		
Size			250 Blocks in Columns	
			180 Blocks in Rows	
15 x 15 x **5** Meters Block Size			171 Levels	

The rock type codes assigned to the model were:

Code	Description
7	Gossan
2001	Diorite
3007	Marble
3012	Massive Pyrite
3018	Metasediments
3020	Manganese Oxide Zone

Rock types were supplied to IMC as an ASCII file of individual block model rock type codes. The rock types were interpreted by Anatolia's geologists at the site and digitally assigned to model blocks by their engineering staff. The geologic information assigned to model blocks was supplied to IMC in digital format along with a topography variable. The resulting whole block interpretation of geology was checked by IMC using the following method: 1) each drill composite was assigned the rock code from the interpreted model block that contained the composite, and 2) the logged composite results were compared to the interpreted results assigned from

the block model. The results indicated that the interpretation was reasonable and appropriate.

Drill hole assay values (typically one-meter intervals) were capped prior to block compositing at the following levels. The transition zone, referenced below, lies between the Main and Marble Zones in the model.

Zone	Gold Cut Value	Silver Cut Value
Main	30 gm/t	200 gm/t
Transition	30 gm/t	200 gm/t
Manganese	30 gm/t	200 gm/t
Marble	40 gm/t	200 gm/t

Drill hole assay data was composited to 5m bench intercept composites. Drill holes flatter than 30 degrees were composited to 5m down hole composites rather than bench intercept values. The composites were back assigned the same rock type as the model block that contained the composite.

17.2 Block Grade Estimation

Within each of the three deposits (totaling four estimation zones), grades were estimated for gold, silver, sulfur, copper, arsenic, manganese, zinc and magnesium. Gold, silver and arsenic are reported in parts per million (ppm), while sulfur, copper manganese, zinc, and magnesium all are reported in percent. This section will discuss the estimation methods applied to gold, silver, and sulfur. The other associated metals were estimated using ordinary linear kriging with search parameters consistent with the gold and silver estimates.

Gold estimation in all deposits used an indicator boundary to limit the extrapolation of ore grade values. A discriminator of 0.20gm/t gold was used based on the composite values. Ordinary linear kriging was applied to the composite indicators at the 0.20gm/t discriminator. The resulting indicator fractions were then contoured at the 50 percent probability level to establish a boundary between blocks with greater than 50 percent chance of being above 0.20gm/t and those that were likely less than 0.20gm/t.

Within the Manganese Mine zone, a similar indicator was applied to the silver within the diorite and marble rock units based on a 0.70gm/t silver discriminator. The Main and Transition Zone as well as the Marble Contact zone used a silver discriminator of 0.50gm/t.

Table 17-1 summarizes the kriging and search parameters used to set the indicator grade boundaries within each of the rock types in each of the 3 deposits.

Once the indicator limits were set, grades were estimated within each rock type and indicator zone using ordinary linear kriging. In most cases the rock type boundaries and the high grade vs low grade indicators were all treated as hard boundaries for estimation. Tables 17-1 and 17-2 detail the rock type and oxidation boundaries used in the gold and silver indicator and grade estimation procedures.

Rock type and grade hard boundaries for estimation can be summarized as follows:

- Main and Transition Zone: Metasediments and Marble were combined as one population. Otherwise all other rock boundaries were treated as hard boundaries for grade estimation. Oxide vs sulfide were also treated as a boundaries

- Manganese Mine Zone: Diorite and metasediments were treated as one population. Otherwise all other rock boundaries were treated as hard boundaries for grade estimation. Oxide versus sulfide was also treated as a hard boundary

- Marble Contact Zone: All rock type boundaries and the oxide versus sulfide boundary were treated as hard boundaries for grade estimation.

Table 17-3 shows the sulfur and manganese estimation parameters, while Table 17-4 details the estimation parameters for copper, arsenic, zinc and magnesium.

Oxide versus sulfide codes for process recovery assignments were established based on the review of the cyanide amenability tests completed by Anatolia. Samples with less than 2 percent sulfur generally showed good cyanide recovery and those with greater than 2 percent sulfur were nominally refractory to cyanide treatment.

IMC assigned an oxide versus sulfide process code to the blocks based on a 2percent sulfur discriminator and kriging of the sulfur composite indicators. Rock types were not respected in this estimate. Blocks with greater than 50 percent probability of being above 2 percent sulfur within the Metasediments and Diorite were coded as "sulfide" for process response.

The following rock types were coded as oxide or cyanide amenable:

Oxide Rocks: Marble, Gossan, and Manganese Oxide

The following rock types were coded as sulfide:

Sulfide Rocks: Massive Pyrite

The indicator process described above was consequently applied to the metasediments and the diorite. Table 17-1 illustrates the kriging parameters applied to the sulfur indicator.

Table 17-1

2008 Kriging Parameters for Indicator Grade Breaks

Area, Metal Discriminator	Discriminator	Major Axis		Nested Variogram Range			Primary Range			Search			Normalized Spherical Variogram			
		Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Nested Sill	Total Sill
Main Zone and Transition Zone - GOLD																
Oxide Diorite, Metasediments and Marble	0.20 gm/t	338	0				193	159	50	110	76	15	0.408	0.592		1.000
Sulfide Diorite, Metasediments and Marble	0.20 gm/t	338	0				193	159	50	110	76	15	0.408	0.592		1.000
Marble Contact Zone - GOLD																
Oxide Marble	0.20 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Oxide Metasediments	0.20 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Sulfide Metasediments	0.20 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone - GOLD																
Diorite and Metasidements	0.20 gm/t	338	22.5 Dn				175	120	120	175	120	15	0.389	0.611		1.000
Marble	0.20 gm/t	247.5	45 Dn	80	80	45	260	150	150	260	150	15	0.320	0.328	0.352	1.000
Main Zone and Transition Zone - SILVER																
Oxide Diorite	0.50 gm/t	22	10 Dn				213	142	50	110	76	15	0.576	0.424		1.000
Sulfide Diorite	0.50 gm/t	22	0				213	142	50	110	76	15	0.576	0.424		1.000
Oxide Metasediments and Massive Pyrite	0.50 gm/t	22	10 Dn				213	142	50	110	76	15	0.576	0.424		1.000
Sulfide Metasediments and Massive Pyrite	0.50 gm/t	22	0				213	142	50	110	76	15	0.576	0.424		1.000
Marble	0.50 gm/t	22	0				213	142	50	110	76	15	0.576	0.424		1.000
Marble Contact Zone - SILVER																
Oxide Diorite	0.50 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Sulfide Diorite	0.50 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Oxide Metasediments and Massive Pyrite	0.50 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Sulfide Metasediments and Massive Pyrite	0.50 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Marble	0.50 gm/t	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone Silver																
Diorite	0.70 gm/t	270	45 Dn				160	140	85	160	140	15	0.418	0.582		1.000
Marble	0.70 gm/t	225	45 Dn				250	140	120	250	140	15	0.390	0.610		1.000
Sulfur Indicator for Oxide vs Sulfide, All Deposits																
Main Zone	2.0% Sulf	0	10 Dn				250	250	20	200	200	12.5	0.100	0.900		1.000
Marble Contact Zone	2.0% Sulf	0	0				250	250	20	200	200	12.5	0.100	0.900		1.000
Manganese Mine Zone	2.0% Sulf	0	0				250	250	20	200	200	12.5	0.100	0.900		1.000

Composite Count	Max	Mininum
Gold and Silver	10	1
Sulfur	10	1

Table 17-2

2008 GOLD and SILVER Kriging Parameters for Block Grade Estimation

Area, Metal Discriminator	Major Axis		Range			Search			Normalized Spherical Variogram		
	Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Total Sill
Main Zone and Transition Zone - GOLD											
Oxide Diorite, Metasediments and Marble	338	0	106	76	25	110	76	15	0.293	0.707	1.000
Sulfide Diorite, Metasediments and Marble	338	0	106	76	25	110	76	15	0.293	0.707	1.000
Gossan and Massive Pyrite	338	0	106	76	25	110	76	15	0.293	0.707	1.000
Marble Contact Zone - GOLD											
Oxide Marble	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Oxide Metasediments	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Sulfide Metasediments	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Diorite, Gossan and Massive Pyrite	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Manganese Mine Zone Gold											
Diorite and Metasidements	338	22.5 Dn	115	100	75	115	100	15	0.632	0.368	1.000
Marble	247.5	45 Dn	200	100	75	200	100	15	0.572	0.428	1.000
Manganese Oxide, Massive Pyrite, Gossan	338	0	115	100	75	115	100	15	0.632	0.368	1.000
Main Zone and Transition Zone Silver											
Oxide Diorite	22	10 Dn	175	120	25	110	76	15	0.360	0.640	1.000
Sulfide Diorite	22	0	175	120	25	110	76	15	0.360	0.640	1.000
Oxide Metasediments and Massive Pyrite	22	10 Dn	175	120	25	110	76	15	0.360	0.640	1.000
Sulfide Metasediments and Massive Pyrite	22	0	175	120	25	110	76	15	0.360	0.640	1.000
Gossan	22	0	175	120	25	110	76	15	0.360	0.640	1.000
Marble	22	0	175	120	25	110	76	15	0.360	0.640	1.000
Marble Contact Zone - SILVER											
Oxide Diorite	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Sulfide Diorite	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Oxide Metasediments and Massive Pyrite	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Sulfide Metasediments and Massive Pyrite	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Marble	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Gossan	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Manganese Mine Zone Silver											
Diorite	270	45 Dn	130	55	130	130	55	15	0.613	0.387	1.000
Marble	225	45 Dn	150	100	100	150	100	15	0.398	0.602	1.000
Manganese Oxide	270	0	130	55	130	130	55	15	0.613	0.387	1.000
Massive Pyrite and Gossan	270	0	130	55	130	130	55	15	0.613	0.387	1.000
Metasediments	270	0	130	55	130	130	55	15	0.613	0.387	1.000

Composite Count	Max	Mininum
Gold and Silver	10	1

Table 17-3

2008 SULFUR and MANGANESE Kriging Parameters for Block Grade Estimation

Area, Metal	Major Axis		Nested Variogram Range			Primary Range			Search			Normalized Spherical Variogram			
	Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Nested Sill	Total Sill
Main Zone and Trnasition Zone Sulfur															
Oxide Diorite	0	-10				108	108	25	110	110	15	0.474	0.526		1.000
Sulfide Diorite	0	0				108	108	25	110	110	15	0.435	0.565		1.000
Oxide Metasediments	0	-10				108	108	25	110	110	15	0.474	0.526		1.000
Sulfide Metasediments	0	0				108	108	25	110	110	15	0.435	0.565		1.000
Marble	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Gossan	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Massive Pyrite	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Marble Contact Zone - Sulfur															
Oxide Diorite	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Sulfide Diorite	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Oxide Metasediments	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Sulfide Metasediments	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Marble	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Gossan	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Massive Pyrite	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone - Sulfur															
Oxide Diorite	0	-10				108	108	25	110	110	15	0.474	0.526		1.000
Sulfide Diorite	0	0				108	108	25	110	110	15	0.435	0.565		1.000
Oxide Metasediments	0	-10				108	108	25	110	110	15	0.474	0.526		1.000
Sulfide Metasediments	0	0				108	108	25	110	110	15	0.435	0.565		1.000
Marble	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Gossan	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Massive Pyrite	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Manganese Oxide	0	0				108	108	25	110	110	15	0.474	0.526		1.000
Main Zone and Transition Zone - Manganese															
Diorite and Gossan	0	0	82	82	15	235	235	50	110	110	15	0.194	0.168	0.638	1.000
Marble	0	0	82	82	15	235	235	50	110	110	15	0.194	0.168	0.638	1.000
Massive Pyrite	0	0	82	82	15	235	235	50	110	110	15	0.194	0.168	0.638	1.000
Manganese Oxide	0	0	82	82	15	235	235	50	110	110	15	0.194	0.000	0.638	0.832
Metasediments	0	0	82	82	15	235	235	50	110	110	15	0.194	0.168	0.638	1.000
Marble Contact Zone - Manganese															
Diorite and Gossan	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Marble	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Massive Pyrite	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Metasediments	45	0				170	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone Manganese															
Diorite	225	-45				110	110	50	110	110	50	0.446	0.554		1.000
Gossan and Massive Pyrite	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Mable	247.5	-45				190	90	50	190	90	15	0.059	0.941		1.000
Metasediments	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Manganese Oxide	0	0				110	110	50	110	110	50	0.446	0.554		1.000

Composite Count	Max	Mininum
Sulfur and Manganese	10	1

Table 17-4

2008 Kriging Parameters for Base Metal Model Grades

Area, Metal Discriminator	Major Axis		Nested Variogram Range			Primary Range			Search			Normalized Spherical Variogram			
	Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Nested Sill	Total Sill
Main and Transition Zone - Copper															
Oxide - Diorite and Metasediments	0	10 Dn	58	58	12	240	240	50	110	110	15	0.612	0.177	0.211	1.000
Sulfide - Diorite and Metasediments	0	0	58	58	12	240	240	50	110	110	15	0.612	0.177	0.211	1.000
Gossan	0	0	58	58	12	240	240	50	110	110	15	0.612	0.177	0.211	1.000
Massive Pyrite	0	0	58	58	12	240	240	50	110	110	15	0.612	0.000	0.211	0.823
Marble	0	0	58	58	12	240	240	50	110	110	15	0.612	0.177	0.211	1.000
Marble Contact Zone - Copper															
Dioritie	45	0				110	50	50	60	30	15	0.500	0.400		1.000
Marble	45	0				110	50	50	60	30	15	0.500	0.400		1.000
Metasediments	45	0				110	50	50	60	30	15	0.500	0.400		1.000
Massive Pyrite	45	0				110	50	50	60	30	15	0.500	0.400		1.000
Gossan	45	0				110	50	50	60	30	15	0.500	0.400		1.000
Manganese Mine Zone - Copper															
Diorite	90	0				222	163	70	222	163	15	0.356	0.644		1.000
Marble - IK (0.002 % Cu Discr)	247.5	45 Dn				161	90	154	161	90	15	0.553	0.447		1.000
Marble -*Grades*	247.5	45 Dn				161	90	154	161	90	15	0.695	0.305		1.000
Manganese Oxide	90	0				222	163	70	222	163	15	0.356	0.644		1.000
Massive Pyrite	90	0				222	163	70	222	163	15	0.356	0.644		1.000
Metasediments	90	0				222	163	70	222	163	15	0.356	0.644		1.000
Main and Transition Zone - Arsenic															
Oxide - Diorite and Metasediments	0	10 Dn				92	92	25	110	110	15	0.694	0.306		1.000
Sulfide - Diorite and Metasediments	0	0				92	92	25	110	110	15	0.694	0.306		1.000
Marble	0	0				92	92	25	110	110	15	0.694	0.306		1.000
Massive Pyrite	0	0				92	92	25	110	110	15	0.694	0.306		1.000
Gossan	0	0				92	92	25	110	110	15	0.694	0.306		1.000
Marble Contact Zone - Arsenic															
Dioritie	45	0				92	92	25	60	30	15	0.3064	0.694		1.000
Marble	45	0				92	92	25	60	30	15	0.3064	0.694		1.000
Metasediments	45	0				92	92	25	60	30	15	0.3064	0.694		1.000
Massive Pyrite	45	0				92	92	25	60	30	15	0.3064	0.694		1.000
Gossan	45	0				92	92	25	60	30	15	0.3064	0.694		1.000
Manganese Mine Zone - Arsenic															
Diorite	-22.5	22.5 Dn				75	75	50	115	100	15	0.589	0.411		1.000
Marble	247.5	45 Dn				208	111	50	200	100	15	0.251	0.749		1.000
Manganese Oxide	0	0				75	75	50	115	100	15	0.589	0.411		1.000
Gossan	0	0				75	75	50	115	100	15	0.589	0.411		1.000
Massive Pyrite	0	0				75	75	50	115	100	15	0.589	0.411		1.000
Metasediments	0	0				75	75	50	115	100	15	0.589	0.411		1.000

Composite Count	Max	Minimum
Copper and Arsenic	10	1

Table 17-4 (Continued)

2008 Kriging Parameters for Base Metal Model Grades

Area, Metal Discriminator	Major Axis		Nested Variogram Range			Primary Range			Search			Normalized Spherical Variogram			
	Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Nested Sill	Total Sill
Main Zone and Transition Zone - Zinc															
Diorite and Gossan	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Marble	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Massive Pyrite	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Manganese Oxide	0	0	82	82	15	235	235	50	110	100	15	0.194	0.000	0.638	0.832
Metasediments	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Marble Contact Zone - Zinc															
Dioritie	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Marble	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Metasediments	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Massive Pyrite	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Gossan	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone - Zinc															
Diorite	225	45 Dn				110	100	50	110	100	50	0.446	0.554		1.000
Gossan and Massive Pyrite	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Mable	247.5	45 Dn				190	90	50	190	90	15	0.059	0.941		1.000
Metasediments	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Manganese Oxide	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Main Zone and Transition Zone - Magnesium															
Diorite and Gossan	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Marble	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Massive Pyrite	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Manganese Oxide	0	0	82	82	15	235	235	50	110	100	15	0.194	0.000	0.638	0.832
Metasediments	0	0	82	82	15	235	235	50	110	100	15	0.194	0.168	0.638	1.000
Marble Contact Zone - Magnesium															
Dioritie	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Marble	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Metasediments	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Massive Pyrite	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Gossan	45	0				110	50	50	60	30	15	0.300	0.700		1.000
Manganese Mine Zone - Manganese															
Diorite	225	45 Dn				110	100	50	110	100	50	0.446	0.554		1.000
Gossan and Massive Pyrite	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Mable	247.5	45 Dn				190	90	50	190	90	15	0.059	0.941		1.000
Metasediments	0	0				110	110	50	110	110	50	0.446	0.554		1.000
Manganese Oxide	0	0				110	110	50	110	110	50	0.446	0.554		1.000

Composite Count	Max	Minimum
Zinc and Magnesium	10	1

17.3 Specific Gravity Data

IMC was provided with three Excel files that contained results for 1,119 specific gravity tests from 2000 to 2007 as the base data for the block densities assigned to the 2008 model. For each interval, the hole name, sample interval, depth, lithology code, drill hole type, orebody code, specific gravity value, and the depth at which the specific gravity was measured, as well as the year sampled, was contained in each file. The specific gravity field did not include the calculation equation, only the specific gravity value.

To analyze the specific gravity data, IMC sorted the data by rock type for each deposit, and plotted graphs of specific gravity versus depth by rock type. The plots indicated the presence of depth versus density relationships as well as occasional outliers in the data. IMC discarded apparent outliers and used the remaining data to calculate average specific gravities by rock type for each deposit.

For all deposits the statistics and graphical presentations of the new specific gravity showed that the following rock types: Marble, Gossan, Massive Pyrite and Manganese Oxide had no specific gravity changes by depth. Diorite and Metasediments show changes in density by depth; these were accounted for in the density models used by IMC.

There were no adjustments made between the specific gravity measurements and block densities assigned to the model

Table 17-5

Model Density Assignment

All Copler Mining Zones Combined	
Rock Type	Dry Density Tonnes / Cubic Meter
Marble	2.561
Gossan	2.372
Massive Pyrite	2.959
Manganese Oxide	2.505
Diorite	
Less than 20m below topo	2.083
Blocks 20 to 80m deep	2.358
Greater than 80m below topo	2.482
Metasediments	
Less than 20m below topo	2.316
Blocks 20 to 60m deep	2.455
Blocks greater than 60m deep	2.596

17.4 Resource Classification Code

The resource classification was done as follows for the Çöpler deposits. A special gold grade kriging was performed, specifically for the purpose of resource classification. Note that the gold grade from this kriging was not used, but the number of samples and kriging standard deviation from it were used for the resource classification.

- The maximum search radii for the special kriging was set equal to that used for gold grade in the major rock types in each orebody. The same normalized variogram model as in the gold grade estimate was used. A maximum of ten composites and a minimum of one composite were allowed in the kriging and rock type population boundaries were ignored. The resulting number of holes and kriged standard deviations were stored in the model.

- Initially, all blocks with kriged gold grades were set to a default of "inferred class".

- Blocks with a kriged standard deviation of less than 0.9 were classified as "indicated class".

- Blocks with a kriging standard deviation of less than 0.5 were then re-classified as "measured class".

Visually, the described method appears to give good results. Indicated resources are not extrapolated far outside of the drilling data and measured resources are developed only in well-drilled areas. Table 17-6 details the estimation parameters used for the special kriging run for confidence codes.

Table 17-6

Kriging Parameters for Confidence Codes

Model Area	Major Axis		Range			Search			Normalized Spherical Variogram		
	Bearing	Plunge	Major	Inter.	Minor	Major	Inter.	Minor	Nugget	C1	Total Sill
Main Zone and Transition Zone - CONF All Rock Types Same as gold Grades for MTS and MRB	338	0	106	76	25	110	76	15	0.293	0.707	1.000
Marble Contact Zone - CONF All Rock Types Same as Gold Grades	45	0	170	50	50	60	30	15	0.300	0.700	1.000
Manganese Mine Zone CONF All Rock Types Same as Gold Grades for Marble	247.5	45 Dn	260	150	150	260	150	15	0.572	0.428	1.000

Composite Count	Max	Mininum
Conf Codes	10	1

17.5 Floating Cones

The mining plans for the Çöpler project were developed by Anatolia's mine site engineering staff. IMC has reviewed and verified the Anatolia's mine plan. Anatolia's staff utilized the Whittle software as a guide to the development of practical mining pushbacks. IMC verified those results using check runs of the floating cone algorithm. The total material planned for processing to the heap leach facility constitutes the proven and probable reserves at Çöpler.

The resources in addition to reserves were developed by IMC assuming that a sulfide process facility is available at Çöpler. Estimated process costs and recoveries were developed by the process engineering team and used as input to the floating cone algorithm. The resulting material that is outside of the heap leach mine plan and inside of the Sulfide floating cone constitutes the resources that are in addition to reserves at Çöpler.

Metal prices of $600/ounce gold and $11.00/ounce silver were used as input to the Whittle software runs as guidance to the reserve pit design. Metal prices of $650/ounce gold, $12.00/ounce silver, and $2.20/lb copper were used as input to establish the resource containing floating cone.

There are other differences in the input information between the mine plan cones and the resource floating cones. The primary difference is that the resource pit did allow economic benefit to be calculated for the inferred mineralization. The mine plan and consequent reserve pit plans were based on calculating economic benefit from measured and indicted mineralization only. The resource cone assumes the presence of a sulfide process facility.

Table 17-7 summarizes the economic and recovery input data used to develop the mine plan pit geometry. Table 17-8 summarizes the economic and recovery input data used to develop the resource in addition to reserves.

Table 17-7

Economic and Recovery Input Data
Guidance to the Mine Plan and Reserve

Metal Prices	Units	Gold	Silver
	$/troy oz	$600.00	$11.00

Mining Costs	Units	Cost	
Base Mine Cost	$/t	$1.96	Add $0.0033/tonne for each bench below the daylight ramp for each pit
Mine Overhead+Infill drilling	$/t	$0.14	
Total	$/t	$2.10	Calculated Benefit from Measured and Indicated Only

Process Operating Costs - Oxide Material < 2% S

Oxide Heap Leach - Oxide Ore

Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	
Model Code		7	2001	3007	3012	3018	3020	Total
Crushing Cost	$/t	0.78	0.78	0.78	-	0.78	0.78	0.78
Process Cost	$/t	5.62	2.76	2.02	-	3.78	3.78	2.41
G/A HL Cost	$/t	1.51	1.51	1.51		1.51	1.51	1.51
Mine Royalty	$/t	0.09	0.09	0.09	-	0.09	0.09	0.09
Total HL Cost - Oxide	$/t	8.01	5.15	4.41	-	6.16	6.16	4.80

Process Operating Costs - Refractory Material > 2% S

Oxide Heap Leach - Sulfide Ore

Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	
Model Code		7	2001	3007	3012	3018	3020	Total
Crushing Cost	$/t	-	0.78	-	-	0.78	-	0.78
Process Cost	$/t	-	5.58	-	-	6.59	-	6.07
G/A HL Cost	$/t	-	1.51	-	-	1.51	-	1.51
Mine Royalty	$/t	-	0.09	-	-	0.09	-	0.09
Total HL Cost - Oxide	$/t	-	7.96	-	-	8.98	-	8.46

Process Recoveries by Lithology, % Sulfur, and Zone

YE06 Feasibility Recoveries		Sulfur < 2%						Sulfur > 2%	
Main Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Zone 1 Au Leach	%	68.0%	68.0%	65.5%	0.0%	63.8%	68.9%	8.5%	22.1%
Zone 1 Ag Leach	%	27.5%	30.8%	24.6%	0.0%	32.8%	6.2%	8.8%	14.6%

Manganese Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Zone 2 Au Leach	%	68.0%	68.0%	74.8%	0.0%	63.8%	68.9%	29.8%	22.1%
Zone 2 Ag Leach	%	27.5%	37.8%	27.3%	0.0%	32.5%	6.2%	33.9%	15.3%

Marble Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Zone 3 Au Leach	%	62.1%	59.5%	72.3%	0.0%	63.8%	68.9%	34.0%	8.5%
Zone 3 Ag Leach	%	27.5%	32.0%	34.0%	0.0%	32.8%	6.2%	16.7%	14.6%

tab17-7.xls

Additional Costs	Units	Cost	
Selling Cost	$/rec oz	$1.85	(99.8% Au and 99.7 Ag Return + $0.65/oz Transportation & Custom Charge)
Selling Cost	$/rec g	$0.06	

Lithology Based Slope Angles

Lithology	Main Zone Slope Angle
All Lithologies (<15 Meters from Surface)	32
All Lithologies (>15 Meters from Surface)	38

Manganese and Marble Zones

Lithology	Slope Angle
Diorite:	42
All Lithologies:	Varies by slope sector to account for ramps
	Inner ramp slopes for marble 48 degrees

Table 17-8

Economic and Recovery Input Data
Guidance to the Development of the Resource

Metal Prices	Units	Gold	Silver	Copper	
	$/troy oz	$650/oz	$12.00/oz	$2.20/lb	Copper TCRC = $0.35/Lb copper

Mining Costs	Units	Cost	
Base Mine Cost	$/t	$2.10	
Mine Overhead+Infill drilling	$/t	$0.15	
Total	$/t	$2.25	Calculated Benefit from Measured, Indicated, and Inferred

Heap Leach Operating Costs - Oxide Material < 2% S								
Oxide Heap Leach - Oxide Ore								
Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	
Model Code		7	2001	3007	3012	3018	3020	Total
Crushing Cost	$/t	0.78	0.78	0.78	-	0.78	0.78	0.78
Process Cost	$/t	5.62	2.76	2.02	-	3.78	3.78	2.41
G/A HL Cost	$/t	1.51	1.51	1.51		1.51	1.51	1.51
Mine Royalty	$/t	0.09	0.09	0.09	-	0.09	0.09	0.09
Total HL Cost - Oxide	$/t	8.01	5.15	4.41	-	6.16	6.16	4.80

Heap Leach Operating Costs - Refractory Material > 2% S								
Oxide Heap Leach - Sulfide Ore								
Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	
Model Code		7	2001	3007	3012	3018	3020	Total
Crushing Cost	$/t	-	0.78	-	-	0.78	-	0.78
Process Cost	$/t	-	5.58	-	-	6.59	-	6.07
G/A HL Cost	$/t	-	1.51	-	-	1.51	-	1.51
Mine Royalty	$/t	-	0.09	-	-	0.09	-	0.09
Total HL Cost - Oxide	$/t	-	7.96	-	-	8.98	-	8.46

Mill + Presure Oxidation Operating Costs - Refractory Material > 2% S								
Oxide Heap Leach - Sulfide Ore								
Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	
Model Code		7	2001	3007	3012	3018	3020	Total
Total Process Cost	$/t	18.78	18.78	18.78	18.78	18.78	18.78	0.78
Mine G/A Cost	$/t	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total Mill+Pox Cost	$/t	20.78	20.78	20.78	20.78	20.78	20.78	2.78

Heap Leach Process Recoveries by Lithology, % Sulfur, and Zone									
		Sulfur < 2%						Sulfur > 2%	
Main Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Gold	%	68.0%	68.0%	65.5%	0.0%	63.8%	68.9%	8.5%	22.1%
Silver	%	27.5%	30.8%	24.6%	0.0%	32.8%	6.2%	8.8%	14.6%
Manganese Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Gold	%	68.0%	68.0%	74.8%	0.0%	63.8%	68.9%	29.8%	22.1%
Silver	%	27.5%	37.8%	27.3%	0.0%	32.5%	6.2%	33.9%	15.3%
Marble Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox	Diorite	Metaseds
Model Code		7	2001	3007	3012	3018	3020	2001	3018
Gold	%	62.1%	59.5%	72.3%	0.0%	63.8%	68.9%	34.0%	8.5%
Silver	%	27.5%	32.0%	34.0%	0.0%	32.8%	6.2%	16.7%	14.6%

tab17-7.xls

Mill+POX Process Recoveries for All Zones and Rock Types							
Main Zone Lithology		Gossan	Diorite	Marble	Massive Pyrite	Metaseds	Mang Ox
Model Code		7	2001	3007	3012	3018	3020
Gold	%	86.70%	86.70%	86.70%	86.70%	86.70%	86.70%
Silver	%	68.43%	68.43%	68.43%	68.43%	68.43%	68.43%
Copper	%	82.50%	82.50%	82.50%	82.50%	82.50%	82.50%

Simplified Slope Angles for Resource 45 Degrees

17.6 Mine Plan and Production Schedule

Pushback Designs

Seven mine phases, or pushbacks, were designed by the Anatolia mine planning staff for all three deposits: one in the Marble Contact zone, two in the Manganese zone, and four in the Main zone. The pushbacks were designed to provide proper access and equipment working room. Each pushback is a logical expansion of the pit. The production schedule was developed from the pushback designs.

The design criteria for pushbacks are:

Manganese and Marble Contact Zones

Initial Pit, or Phase 1	45 degree interramps with single bench configuration
Final Pit, Marble	48 degree interramps with double bench configuration
Final Pit, Diorite	42 degree interramps with single bench configuration

Main Zone

Rock Slopes	38 degree interramps with single bench
Near Surface Slopes	32 degree interramps with single bench
West Contact in Marble	48 degree interramps with double bench configuration

The interramp slope angles above were recommended by IMC during 2006 after study of the geo-technical report prepared by SIAL, Geosciences Investigation and Consulting Ltd., 12, Oct 2004.

The slope angles were reduced in the Manganese and Marble Contact Zones from those recommended by SIAL for the following reasons:

- Initial pit openings in the early days of the mine should not be aggressive.
- Final pit slopes in marble were set at the maximum level practical without custom smooth wall blasting techniques. Even so, some buffer blasting will be required at the 48 degree interramp slope angles.
- Diorite slopes were reduced by IMC due to the observed altered condition of the diorite ore in the Manganese zone.

Haul road geometries were based on expected truck sizes in the 35 to 50 tonne class.

Road criteria are as follows:

Maximum road gradient	10 percent
Road width including berms and ditches	21 meters

Mine Production Schedule

The mine production schedule was developed by Anatolia's mine engineering staff at the site, to deliver a total of about 5,700,000 tonnes per year of heap leach ore to the crusher (about 15,500tpd). IMC has reviewed the mine plan and production schedule and confirms that the schedule is practical, achievable, and robust relative to current economic conditions.

The mine phase designs were used as input to develop the mine production schedule. Preproduction stripping starts in phase 1 of both the Marble Contact and Manganese pits. Initial ore flow is from those two pits. A detailed monthly ramp up schedule has been developed by the Anatolia staff for the first year of the mine life.

Cutoff grades were calculated in terms of gold for each rock type and zone based on the internal cutoff. The internal cutoff grade covers the costs of processing and G&A and relies on sufficient head grade to pay for mining and sufficient free cash flow to meet project requirements.

IMC has checked the Anatolia cutoff grade calculations and has recast them in terms of income net of processing so that a single parameter can be used as the mine planning cutoff in all rock types. IMC verified the mine schedule presented on Table 17-9 to assure that there was sufficient waste stripping to produce the required sustained quantity of heap leach ore.

Additional effort to incorporate the value of silver into the cutoff calculation or to maximize project net present value did not result in substantially better project economics than for the schedule shown on Table 17-9.

The schedule on Table 17-9 was developed by Anatolia staff and is based on measured and indicated mineralization. The total of all years in the plan results in the proven and probable minable reserves for the project. IMC has shown the cutoff grades in terms of income net of process for simplicity, although Anatolia used different gold cutoffs for each rock type. Both are equivalent algebraically.

Table 17-9
Çöpler Mine Production Schedule
Based on Measured and Indicated Category Mineralization

Year	Heap Leach Ore						Waste Material Ktonnes	Total Material Ktonnes
	Cutoff $ Net /T	Ktonnes	Gold gm/t	Silver gm/t	Au Lch Rec %	Ag Lch Rec %		
2008	$0.001	0	0.00	0.00	-	-	309	309
2009	$0.001	1,300	0.88	0.34	74.3%	29.2%	5,765	7,065
2010	$0.001	5,613	1.64	2.89	67.9%	22.1%	8,716	14,329
2011	$0.001	5,765	2.06	4.34	63.7%	19.1%	9,569	15,334
2012	$0.001	5,699	1.36	3.74	64.8%	18.8%	9,631	15,330
2013	$0.001	5,651	1.29	1.32	65.8%	27.4%	9,679	15,330
2014	$0.001	5,591	1.34	1.43	65.8%	29.0%	8,645	14,236
2015	$0.001	5,736	1.75	4.66	59.0%	22.1%	4,853	10,589
2016	$0.001	5,474	2.29	8.77	40.6%	18.7%	4,913	10,387
Total		40,830	1.65	3.75	60.0%	20.7%	62,080	102,910

17.7 Mineral Reserves and Mineral Resources

The production schedule presented on Table 17-9 is the basis for the Çöpler mineral reserves. The only addition to Table 17-10 is the segregation of proven and probable mineral reserves.

Mineral resources are based on a larger floating cone pit geometry that assumes the presence of a sulfide process facility and the incorporation of economic credit for inferred mineralization for the determination of resources only.

Table 17-10 summarizes the mineral reserves and mineral resources at Çöpler. Cutoff grades for mineral resource are equal to $0.001 income net of process per tonne of ore (internal cutoff).

Table 17-10
Anatolia Minerals Development Limited
Copler Project, Mineral Reserves and Mineral Resources

Mineral Reserves, 19 Jun 2008												
Process Cateogry	Proven				Probable				Proven+Probable				
	Ktonnes	Gold gm/t	Silver gm/t		Ktonnes	Gold gm/t	Silver gm/t		Ktonnes	Gold gm/t	Silver gm/t		Recovered Au KOzs
Total Leach Ore	32,792	1.690	4.08		8,038	1.500	2.44		40,830	1.650	3.75		1,300
Total Mineral Reserves	32,792	1.690	4.08		8,038	1.500	2.44		40,830	1.650	3.75		1,300

Mineral Resources in Addition to Reserves, Assumes the Presence of a Sulfide Process Facility																				
Material Type	Measured				Indicated				Measured + Indicated					Inferred				
	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Contained Au KOzs	Ktonnes	Gold gm/t	Silver gm/t	Copper %	Contained Au KOzs
Remaining Oxide Resource	15,908	0.757	1.35	0.09	8,725	0.782	1.25	0.16	24,633	0.766	1.32	0.11	607	1,448	0.847	0.77	0.18	39
Remaining Sulfide Resource	24,805	1.705	6.48	0.14	31,458	1.741	4.76	0.11	56,263	1.725	5.52	0.12	3,120	1,840	1.800	3.40	0.12	106
Total Mineral Resources	40,713	1.334	4.48	0.12	40,183	1.533	4.00	0.12	80,896	1.433	4.24	0.12	3,727	3,288	1.380	2.24	0.15	145

18.0 OTHER RELEVANT DATA

All additional relevant information regarding the Çöpler project will be summarized in Section 23.0 which addresses Additional Requirements.

19.0 INTERPRETATION AND CONCLUSIONS

IMC offers the following conclusions:

1) Additional drilling since 2006 has added confidence to mineral reserves and has defined additional mineral resources.

2) Process costs and recoveries are better understood than they were twenty one months ago.

3) More detailed mine planning has added confidence to the mine plan.

Pennstrom Consulting offers the following conclusions:

1) Using heap leaching as the primary production scenario significantly reduces the capital cost. However, lower gold and silver recoveries should be expected. Additional test work should be performed on each ore type to provide additional confidence in the recovery numbers. Gold and silver recoveries are currently developed from approximately 35 column tests and are in part based on de-rating the mill test recoveries of which many more tests were performed. Currently most of the column test data has been from marble ores and more tests are needed to confidently estimate the recoveries for a heap leach only processing facility at Çöpler. The planned column test work program should be initiated to provide data on each ore type within each of the Çöpler ore bodies. Pennstrom Consulting is aware that additional column leach testing is currently in progress.

2) The SART process for handling anticipated periods of high copper in the pregnant solutions from the heap leach requires a thorough examination due to the complexity of the process. Once the process and economics are well understood, a feasibility study encompassing the technical, economic and operating components should be completed to determine the overall economic impacts to the Çöpler project.

20.0 RECOMMENDATIONS

Pennstrom Consulting recommends more column leach testing be performed on all ore types present in the three main ore bodies. Although there is a significant amount of bottle roll and cyanide leach data, there is currently data from around 35 column tests used to predict the gold, silver, and copper recovery from the Çöpler ores in a heap leach only processing scenario. The results of the additional column testing currently in progress, should be assessed to confirm or improve the level of confidence in the data available at the time of this Technical Report. . The test work is scheduled to last approximately two months at a cost of $175,000. The results of this test work will allow refinement of the ore preparation and reagent addition, currently assumed, that is based on the original test work.

Pennstrom Consulting recommends Anatolia begin the process of identifying a smelting and refining company for the processing of the SART process product. Shipping and handling requirements and costs from the point of production to the refiner should also be investigated and included in the overall processing costs as well as any net revenues generated from the additional Çöpler products.

21.0 REFERENCES

The following documents were referenced during the preparation of this Technical Report.

1 Çöpler Gold Project Geology Report Çukurdere Madencilik San. Ve Tic. Ltd. Sti, Ilhan Poyraz, June 2005.

2 Technical Report, Çöpler Gold Project Feasibility Study, Prepared by Samuel Engineering, Inc. May 19, 2006

3 Technical Report, Çöpler Project Resource Estimate, Prepared by Independent Mining Consultants, Inc. October 2005.

4 Update of the Geology and Mineral resources of the Çöpler Prospect, Turkey, Watts, Griffis, and McOuat Limited, May 1, 2003.

5 Çöpler Mining Area, Geotechnical Report Çukurdere Madencilik San. Ve Tic. Ltd. Sti, Sial Geosciences Investigation and Consulting Ltd. October 12, 2004

6 Technical Report, Çöpler Gold Project, Prepared by Independent Mining Consultants, Inc. March 2, 2007.

7 Technical Report, Çöpler Gold Project, Preliminary Assessment Sulfide Ore Processing, Prepared by Easton Process Consulting Inc. and Pennstrom Consulting, February 4, 2008.

22.0 CERTIFICATES OF AUTHORS

This section contains the certificates of the Qualified Persons who have authored the report. These authors are:

Mr. John M. Marek P.E.,

Mr. Robert D. Benbow P.E. and

Mr. William J. Pennstrom.

Each author has signed and dated their Certificate as required by Section 5.2 of NI 43-101.

CERTIFICATE OF QUALIFIED PERSON

I, John M. Marek P.E. do hereby certify that:

1. I am currently employed as the President and a Senior Mining Engineer by:

   Independent Mining Consultants, Inc.
   2700 E. Executive Drive # 140
   Tucson, Arizona, USA 85706

2. I graduated with the following degrees from the Colorado School of Mines
   Bachelors of Science, Mineral Engineering – Physics 1974
   Masters of Science, Mining Engineering 1976

3. I am a Registered Professional Mining Engineer in the State of Arizona USA
   Registration # 12772
   I am a Registered Professional Engineer in the State of Colorado USA
   Registration # 16191

   I am a Registered Member of the American Institute of Mining and Metallurgical Engineers, Society of Mining Engineers

4. I have worked as a Mining Engineer for a total of 33 years since my graduation from university. I have been the President and Senior Mining Engineer at Independent Mining Consultant, Inc. for 25 years.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

6. I am responsible for sections 4 through 14, section 17, and components of sections 19, 20, and 23 of the Technical Report, Copler Gold Project, East Central Turkey, dated 5 December 2008 (Technical Report). I visited the Copler Project during July of 2005 for a period of 1 week. I have relied on the field observations of Mr. Robert Benbow who visited the site multiple times during 2008 and has confirmed the additional drilling and data collection completed at Copler since my site visit in 2005.

7. Independent Mining Consultants, Inc, and John Marek have worked on the Copler Project prior to this Technical Report.

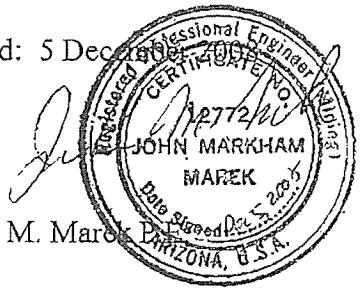
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

9. I am independent of the issuer applying the tests in Section 1.4 of NI43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and to my knowledge, the Technical Report has been prepared in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated: 5 December 2008



John M. Marek

CERTIFICATE OF QUALIFIED PERSON

I, Robert D Benbow P.E. do hereby certify that:

1. I am currently employed as Vice President and General Manager by

   Anatolia Management Corporation, a subsidiary of Anatolia Minerals Development, Ltd.

2. I graduated with the following degrees from the University of Texas and Regis University:

   Bachelors of Science, Civil Engineering 1979 (Texas),

   Masters of Business Administration, 2001 (Regis).

3. I am a Registered Professional Engineer in the State of Colorado USA, Registration No. 20633.

4. I have worked as a Mining Engineer and Mining Manager for a total of 34 years.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI43-101.

6. I am responsible for portions of sections 1 and 2, section 15, and the specific parts of section 23 identified in the text of the technical report regarding the Çöpler Project, dated November 7th 2008. I have worked at the Çöpler Project since September 19, 2007.

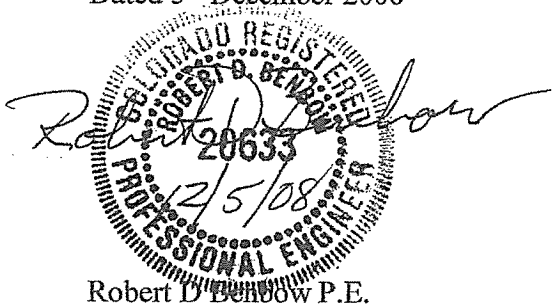
7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission of which would make the Technical Report misleading.

8. I am not independent of the issuer applying the tests in Section 1.5 of NI43-101.

9. I have read National Instrument 43-101 and Form 43-101F1, and to my knowledge, the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated 5th December 2008



Robert D Bendow P.E.

CERTIFICATE OF QUALIFIED PERSON

William J. Pennstrom

2728 Southshire Road

Highlands Ranch, CO 80126 USA

Telephone: 303-683-9227

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I, William J. Pennstrom, Jr., Qualified Professional in Metallurgy, do hereby certify that:

1. I am self employed as a Consulting Process Engineer and own:

   Pennstrom Consulting

   2728 Southshire Road

   Highlands Ranch, CO 80126

   USA

2. I graduated in 2001, with a Master of Arts degree in Management from Webster University, St. Louis, Missouri.

3. I graduated in 1983 with a Bachelors of Science degree in Metallurgical Engineering from the University of Missouri – Rolla, Rolla, Missouri.

4. I am a Founding Registered Member of the Society for Mining, Metallurgy, and Exploration (SME).

5. I am a recognized Qualified Professional (QP) Member, with expertise in Metallurgy, of the Mining and Metallurgical Society of America (MMSA).

6. I have worked in the Mineral Processing Industry for a total of 30 years since before, during, and after my attending the University of Missouri.

7. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101")

and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

8. I am responsible for section 16 and the specific parts of sections 19, 20 and 23 identified in the text of the technical report titled "Technical Report Çöpler Gold Project, July 2008". I visited the Project site during November of 2005.

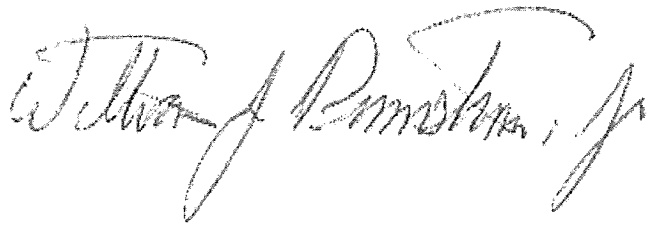
9. I have had prior involvement with the property that is the subject of this Preliminary Assessment. The nature of my prior involvement is as a contributing author to prior Technical Reports developed on the Çöpler Project, while owner of Pennstrom Consulting.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

12. I also certify that as of the date of this certificate, to the best of my knowledge, information and belief, that I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading.

13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 5th Day of December, 2008



William J. Pennstrom, Jr.

23.0 ADDITIONAL REQUIREMENTS

This section addresses the additional requirements for development properties as required for Technical Reports under NI43-101. The following summarizes the source of each sub-section

The following subsection is the responsibility of IMC:

23.1 Mining

The following subsection is the responsibility of Pennstrom Consulting:

23.2 Recoverability

The following subsections have been updated by Anatolia to reflect current conditions and development plans for the project and are the responsibility of Robert Benbow, PE:

23.1 Mining and Processing Operations

23.3 Markets

23.4 Contracts

23.5 Environmental and Permitting

23.6 Taxes

23.7 Capital and Operating Costs

23.8 Economic Analysis

23.9 Payback Period

23.10 Mine Life

23.1 Mining and Processing Operations

Mining

Mining will utilize conventional methods typically used in hard rock, open pit mines. The mine is assumed to operate 3 shifts per day for 365 days per year. Anatolia currently plans to use a mining contractor to mine both ore and waste. Mine planning and ore control for the mine will be the responsibility of Anatolia staff.

The mining contractor will have some latitude in the selection of mining equipment. However the mine plan was developed with the following equipment in mind: 30,000 lb (13,500 kg) pull down blast hole drills (5 inch diameter blast-holes), 6.5 cubic meter front-end-loaders, and 50 tonne capacity haul trucks with appropriate support equipment and services.

Blast holes will be sampled for ore control and excavation boundaries between leach ore and waste will be established by Anatolia's ore control technical staff.

The contractor will drill and blast the 5m benches and dig to the ore control excavation boundaries. Ore will be delivered to the primary crusher and waste will be delivered to the appropriate waste storage area.

Initial pit slopes in all areas will use a single bench configuration. However, final pit slopes in the marble will incorporate a double bench configuration. The Marble pit's final slopes will initially be mined with 5m benches, with final walls combining two 5m benches to a single 10m high bench.

The pit and waste storage configuration at the end of the mine life is presented on Figure 1-1.

Process Plant

The process facilities for the Project will be designed for a plant throughput of about 5.7 million tonnes of ore per year at a nominal daily production rate of 15,500 tpd. Figure 23-1 provides a simplified process flow sheet of the facilities. Flow rates to and from the heap leach facilities and production of saleable product are discussed in the following subsections.

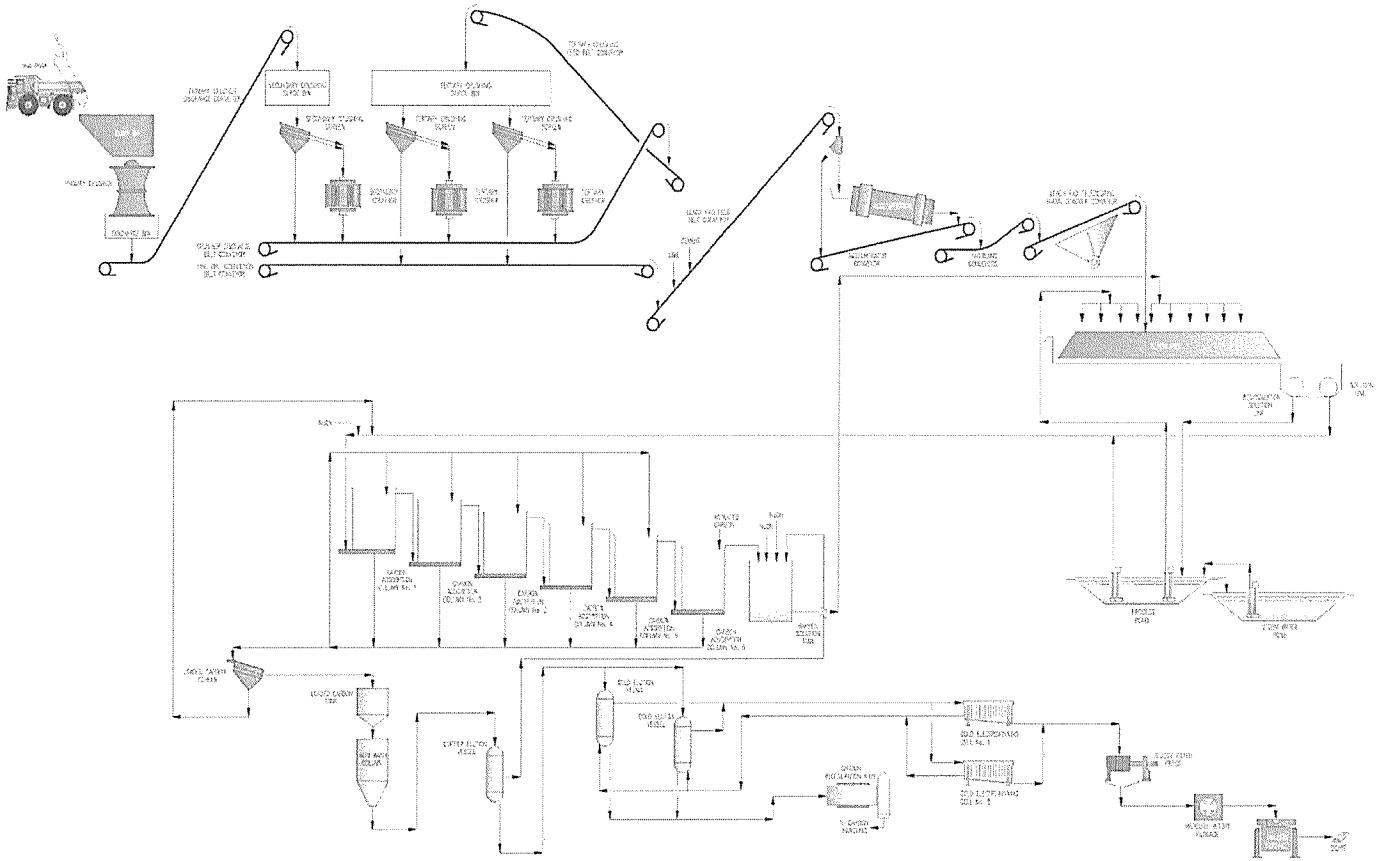


Figure 23-1: Simplified Heap Leach Only Process Flowsheet

Crushing and Screening

Dry product material handling is designed for 15,500 metric tpd of ore through the primary, secondary, and tertiary crushing and screening circuits. The features of the circuit include:

- Primary crushing consisting of one gyratory crusher that is intended to accept ROM ore and produce a nominal 150mm product. Discharge from the primary crusher is conveyed to the coarse ore surge bin.

- Ore discharged from the coarse ore surge bin reports to a secondary screen producing an oversize fraction that feeds one standard-head cone crusher operating in open circuit and an undersize fraction that reports to the tertiary crushing circuit.

- Tertiary crushing will consist of two short-head cone crushers, each operating in closed circuit with their associated tertiary screen. Ore discharged from the tertiary crushing circuit, at a nominal size of 12.5mm, has lime and/or cement added to it and is conveyed to an agglomerator and then to the heap leach pad stacking system.

Heap Leaching and CIC Circuit

A design 15,500 metric tpd of crushed and screened ore is conveyed to the HLP, where it is loaded on the pad using a portable stacking conveyor system in (nominal) six meter lifts. For the first phase some sections of the initial lifts will vary up to a maximum height of nine meters, due to topography. Once a horizontal plane is achieved, six meter lifts will be the norm. A leach solution is pumped to the HLP from the barren solution tank in the gold Adsorption, Desorption and Regeneration (ADR) Plant. The barren, dilute sodium cyanide solution is distributed over the ore by drip tubes fed by pipes from the solution distribution network at a nominal rate of 0.163 L/min/m^2. After the solution percolates through the ore, the pregnant solution is collected in a series of perforated drain pipes on an impermeable lined pad and a series of lined ditches route the solution either directly to the process plant or to the Pregnant Solution Pond. All solution that flows to and from the HLP will be measured and sampled for metallurgical accounting purposes.

Pregnant solution flows by gravity to a train of six Carbon-in-Column (CIC) tanks ahead of the ADR Plant. The pregnant solution is passed through an expanded bed of activated carbon to transfer the gold from the pregnant solution to the surface of the carbon via an adsorption process. Carbon is advanced in a direction counter-current to the solution flow so that the highest grade solution is contacted with the carbon that has the highest loading of gold on it and the lowest grade solution is contacted with fresh carbon that has the lowest gold loading. Loaded carbon from the CIC circuit is pumped to the loaded carbon screen to be recovered in the loaded carbon tank. Barren solution from the CIC circuit returns to the barren solution tank where make-

up water, sodium cyanide, sodium hydroxide and anti-scalent are added prior to the barren solution being pumped back to the HLP for leaching.

Carbon Handling and Electrowinning Circuits

Loaded carbon from the loaded carbon tank is pumped into the acid wash vessel where it is washed with a dilute solution of nitric acid for scale removal and neutralized with a diluted sodium hydroxide solution.

After the acid wash and neutralization, the loaded carbon is pumped into a copper strip vessel where a high cyanide concentration solution at ambient temperature is passed through the carbon to remove copper. During the first few years of operation with lower copper head grade, the copper strip solution will be pumped back to the CIC barren solution tank to be re-circulated onto the heap leach pad. In the later years, with higher copper grade ore, the strip solution will be pumped to a copper recovery circuit and cyanide regeneration circuit, a process that is being tested at SGS Lakefield laboratory facilities. It is envisaged that the copper recovery and cyanide regeneration circuit would be integrated by late 2010 to minimize cyanide consumption as well as produce a saleable copper product.

After the copper is stripped from the loaded carbon, the carbon, which is still loaded with gold and silver, is advanced to the desorption circuit and stripped in a traditional, high-pressure, high temperature, Zadra-strip circuit.

The pregnant solution from the gold strip circuit is pumped to the gold electrowinning circuit where the gold and silver are electrically plated out of solution onto stainless steel cathodes as a metallic sludge. The sludge is periodically washed from the cathodes and dewatered in the sludge filter press. The sludge is manually removed from the filter press and placed into a mercury retort furnace for drying and removal of residual mercury. Finally, the filter cake is mixed with flux and smelted in an induction furnace to produce a gold doré product. The gold doré product will be shipped offsite for further refining.

The stripped carbon is removed from the strip vessel and is dried and regenerated in a kiln. In the kiln, the carbon is heated to 700 degrees centigrade in a reducing atmosphere and the activity level of the carbon is returned to a "like new" condition.

Following regeneration, the carbon is screened to remove fines, and returned to the CIC circuit for reuse. The circuit is replenished with new carbon, as required.

Reagents

Reagents that are required for the Project include:

- Sodium Cyanide
- Activated Carbon
- Nitric Acid

- Sodium Hydroxide
- Antiscalent
- Lime
- Cement
- Fluxes

It is planned that the reagents will be delivered to site in the following manner. The activated carbon will be shipped to site in 500 kg bulk bags (super-sacks). The sodium cyanide will be shipped to site in ISO solid to liquid (SLS) 20 metric tonne bulk containers. Nitric acid, sodium hydroxide and antiscalent will be shipped in recyclable UBC containers (totes). The lime and cement will be delivered in bulk quantities to a silo on site in trucks that have a pneumatic delivery system. The fluxes will be delivered to site in small bags palletized in one ton lots. The acid will be stored in an area separate from the cyanide containment area, and all the reagents will be stored and contained in a secure reagent building.

Infrastructure and Ancillary Facilities

Plant utilities will include:

- high pressure air compressors for service and instrument air demands;
- diesel-powered backup generators;
- a potable water supply system;
- a sanitary sewer treatment system;
- fuel storage;
- an electrical sub-station; and
- electrical power distribution for the entire facility.

Plant infrastructure will include:

- laboratory facilities;
- warehouse and maintenance shop;
- administration offices;
- cafeteria;
- dormitories;

- reagents building;
- guard house;
- water well development;
- access roads;
- power, process water and fire water distribution; and
- upgraded access road from the town of Iliç.

Infrastructure for mining operations will be provided by the mining contractor and will include the truck maintenance shop, offices, warehousing, explosives storage, and fuel storage and distribution.

Water Wells and Water Distribution

The Project will be provided with a supply of fresh water from three deep-water wells located near the Karasu River, less than 3 km north of the project site. Two wells will be operating and one well will be held in reserve. The well pumps will be operated on a lead-lag basis (to allow time to replenish the aquifer at each well) to pump the water from the wells, through a pipe, to a raw water tank located at the plant site

Make-up water will be distributed as needed to the potable water system, the CIC barren solution tank, the agglomerator, the carbon adsorption circuits, and to a header for reagent preparation. In addition, raw water will be used for dust suppression in the mine, at the primary crushing truck dump hopper and for fire protection services.

Power Distribution

The Power Distribution System will consist of the following major elements:

- A new, 40 km, overhead power line will be built on steel towers from TEİAŞ's existing substation in Divriği to the plant substation yard. The power line will be operated at a voltage level of 154 kV at a system frequency of 50 Hz.
- The main substation at the Plant site will consist of a primary circuit-breaker and a main 16 MVA, outdoor, oil-filled transformer. The transformer will be provided with an automatic on-load tap changer to maintain adequate utilization voltage. There will be a primary metering unit at the substation (by Owner) for commercial power billing. Another metering unit will be provided on the medium-voltage distribution to serve as back-up metering per TEİAŞ requirements. The substation will distribute power to the Plant at 6.6 kV, 50 Hz.
- Power factor correction units will be provided both at medium voltage (6.6 kV) and low voltage (380 V) in order to meet the 0.98 power factor target imposed by TEİAŞ.

- A group of two diesel engine driven generators will serve as the emergency electrical power source for the whole plant, providing power at 6.6 kV. The generator sets will provide backup power the plant control system and security system. Selected process loads will also be fed by the emergency power distribution network to allow for an orderly shutdown of the process in case of main power failure.

- A local power transformer at the Crushing Area will distribute power at 380 Volt, 3-phase, 50 Hz to switchgear and motor control centers for process loads. Small distribution transformers will provide the 380/220 V power required for small tools, control voltages, building lighting, area lighting, building HVAC and heat tracing.

- An arrangement similar to the Crushing area will be provided for the low-voltage networks of the Heap Leach area and the Carbon Absorption/Refining/Reagents areas.

- All building, area, and roadway lighting will be High Pressure Sodium (HPS) type. Other areas will be lit with metal halide or fluorescent type lighting, where tasks require a better color rendition, such as in maintenance shops, electrical rooms and control rooms. Illumination levels at a minimum will meet Turkish standards for normal work conditions and emergency egress conditions. Exit and emergency lighting will connected to the emergency power distribution network.

- Power to the water well location will be provided from the new mine substation via a new 6.6 kV overhead line. Combination starters will be included for the water well pump motors, and a 50 kVA transformer provided to step down the voltage to 380/220V for location lighting and control power. No emergency power is provided at the wells.

Buildings

The permanent plant buildings will be constructed by Turkish contractors. Where feasible, the architecture and construction of the facilities will include local building materials and methods compatible with the surrounding communities. Permanent plant buildings will include the following:

- An Administration, Training, Cafeteria, Dormitories, and Infirmary Building.

- A Laboratory Building, including wet and dry facilities and a high bay for column leach tests,

- A Warehouse and Maintenance Building,

- A Guard House,

- A Truck Shop, provided by the Mining Contractor,

- A Primary Crusher Building,
- A Fine Crushing Building,
- Transfer towers,
- Electrical Rooms,
- Refining Building,
- A Reagent Preparation Building, and
- A Reagent Storage Building.

Fencing/Security

Security for the project will be provided by a 2.0 m high fence around the site (4-strand barbed wire with attached warning signs and symbols). Also, 2.0 m high chain link fences are required around the pad and ponds, the substation, the explosives storage area, and the reagent storage area.

A guard house will be provided at the entrance to the site to provide security and to control and regulate the traffic to and from the site.

In addition to the physical security measures, a contracted security company will provide security personnel and supervision on a 24/7 basis.

Haul Roads

Haul roads will be 21 m wide outside and inside the pits with a 10 percent maximum grade. Haul roads will be maintained and graded on a regular basis and water trucks will be used as an integral part of haul road dust control measures.

The haul roads will be constructed with safety berms approximately 1.5 m high, or at the axle height of a haul truck along the road edge. The roads will have a rock wear surface and a minimum 2 percent slope from the crown to the outside to allow for surface runoff. Drainage ditches will be constructed along the outside edge of the safety berms to convey surface runoff to nearby sediment traps and ponds. Also, water bars may be installed on steep sections of the road to prevent erosion.

Access Roads

Perimeter and/or secondary access roads have been designed to and around the HLP, the Mining Contractor's Area, and all other major activity areas. Diversion channels have been sited to convey runoff from the perimeter roads, adjacent cut slopes, around other major areas of activity and the heap leach pad, and to prevent any runoff from entering into the leach pad and disrupting the leach circuit.

An access road from the train station near the town of İliç has been constructed to bypass the town of Iliç and accommodate so that it does not travel through the town.

The bypass route improved sections of existing dirt road with sections of new road and generally runs parallel to the Karasu River before turning to enter the project site.

23.2 Recoverability

Recoverability was discussed in Section 16.0 of this Technical Report. A component of Section 16.0 is excerpted below as a summary of the discussion of recoverability of both gold and silver in the cyanide heap leach.

Metallurgical tests were carried out as part of the Project development work on reverse circulation and diamond drill cores from the three zones identified in the Çöpler deposit, the Manganese, Marble Contact and Main Ore Zones. Bulk surface samples have also been obtained from the Manganese Zone and tested. Almost every drillhole interval was analysed for total gold and cyanide soluble gold, and total copper and cyanide soluble copper which provided the database of leach data. Metallurgical test work commenced in September 2004 and has been managed by Resource Development Inc. (RDi) with oversight from Ausenco Limited of Brisbane, Australia, and Pennstrom Consulting of Highlands Ranch, Colorado. RDi carried out the majority of the metallurgical testing in their laboratory at Wheat Ridge, Colorado. Specialized tests and analytical services, such as comminution, mineralogy, and rheology were contracted out to others.

Additional column leach test-work is currently in progress at AMMTEC of Balcatta, Western Australia. Data from this test work was not available at the time of this Technical Report.

Column Leaching

Recovery rates for all column tests were generally fast with rapid leaching (by column standards) occurring in the first six days followed by a slow leaching component for the remainder of the time allowed. Slowest initial leaching rate is observed in the diorite ore from the Main Zone. Column leach tests were carried out at three crush sizes: 80 percent passing 25mm 12.5mm and 6.4mm, with most of the work performed with 12.5mm material. Marble ores from the Manganese Zone showed a relatively small decrease, 0.05g/t Au, in residue grade at the finer crush size. Re-crushing residues from column tests having a crush size of 12.5mm to 6.4mm and re-leaching those improved recoveries by an average of 5 percent. From the few tests run at 25mm, recoveries were shown to be lower than seen from the 12.5mm crushed size material. Good correlation is found in the plot of recovery against head grade for marble ore in the Manganese Zone. Recoveries of 60 to 75percent for marble and diorite ore are indicated from the tests at a low average cyanide consumption of between 0.5 and 0.6kg/t NaCN.

Table 23-1, provides the projected gold recovery by ore types for the heap leaching process circuit, and it demonstrates the difference between oxidized and unoxidized ores with respect to gold recovery. This report is based primarily on the oxide portion of the ore body. However, some of the economic, unoxidized material was included in the mine plan, with the result that the overall average gold recovery was lowered. Heap leach recoveries were projected from bottle roll and available column test data.

Marble lithology has the lowest total copper and cyanide soluble copper. Average soluble copper is 6 to 14 percent of the total copper for all three deposits when leached at high temperature and with high cyanide strength solutions. Total range of averages for marble lithology in the three deposits is approximately 300 to 700 ppm Cu. For column tests average copper extraction in marble ores was 7 percent.

Cyanide soluble copper in other non-marble lithologies is significantly higher with extraction averages in the range of 10 to 50 percent. Total copper range of averages for non-marble lithologies is approximately 500 to 7000 ppm Cu (0.05 to 0.7 percent).

Extreme variability in copper to solution recovery is evident, ranging from 1 to 40 percent in marble lithology and 1 to 70 percent in non-marble lithologies. The above recoveries have not been adjusted for the effects of using the SART process.

Table 23-1 Projected Gold Recovery by Ore Type

Manganese Mine Zone		
Ore Type	Ore Type File Code	Heap Leach Avg. percent Au Rec
Marble	MRB	74.8 percent
Oxidized Diorite	OX DIO	68.0 percent
Diorite	DIO	29.8 percent
Jasperoid	JSP	62.1 percent
Manganese Oxide	MNX	68.9 percent
Main Zone		
Ore Type	Ore Type File Code	Heap Leach Avg. percent Au Rec
Overburden	OVB	65.5 percent
Marble	MRB	65.5 percent
Oxide Metasediments	OX MTS	63.8 percent
Metasediments	MTS	22.1 percent
Oxidized Diorite	OX DIO	68.0 percent
Diorite	DIO	8.5 percent
Jasperoid	JSP	65.5 percent
Marble Contact Zone		
Ore Type	Ore Type File Code	Heap Leach Avg. percent Au Rec
Marble	MRB	72.3 percent
Oxide Metasediments	OX MTS	63.8 percent
Metasediments	MTS	8.5 percent
Oxidized Diorite	OX DIO	59.5 percent
Diorite	DIO	34.0 percent
Clay (usually altered Dio)	CLY	68.9 percent
Jasperoid	JSP	62.1 percent

23.3 Markets

Gold and silver produced at the Çöpler facility will be shipped as doré bars and sold to a refinery at current spot prices as quoted on the London Metals Exchange. Marketing will not be necessary, other than entering into a contractual relationship for secure transportation of metal and refining with specialist companies that provide such services. Anatolia has requested and received budgetary proposals for both secure shipping and refining charges from companies well respected in this field. Based on these quotes the sum of both expenses (secure transportation, and refining), is assumed to be less than the one half of one percent deduction in payable metal (gold and silver) as used in the financial model.

Contracts have not been entered into with either a refinery or a security and transportation company. Contracts will be in place prior to initial metal production. It is very likely that a European refinery will be selected to refine the doré, since the transportation costs from the mine site to a European refinery are lower than to a North American or Far Eastern refinery.

23.4 Contracts

As stated in Section 23.3, no marketing contracts for doré will be required for the metal produced at Çöpler. Contracts have yet to be entered for transport and security of the doré metal from the mine to the refinery at this time. No contract discussions have been entered into for the processing of the SART copper product.

Anatolia has received bids from Turkish mining contractors. A mining contractor has been selected and a mining contract has been entered into for an initial period of thirty-nine months.

SNC-Lavalin International Inc. provided detailed engineering and procurement services, both of which are substantially complete. Merit Consultants International has been retained as the onshore construction manager. Additional contracts have been awarded for the site accommodations area, the by-pass road around the town of Iliç and the earthworks and civils contract.

All contracts entered into at this time are within industry norms.

23.5 Environmental Considerations

Environmental

Environmental controls for the Project will include, but may not be limited to:

- Water sprays at the primary dump bin to control dust.
- Bag-house type dust collectors at the Secondary/Tertiary Crushing Building and for the Reclaim Feeders, with pick-up points and ductwork, as required.

- Pipes and conveyors carrying sodium cyanide solutions will be run on top of lined pads with containment berms and ditches that direct any spills to a contained and lined sump where they may be pumped back to the Barren Solution Tank.

- All process areas will be fenced to protect livestock and unauthorized personnel by restricting access to the site.

- Normal surface drainage will be diverted around the process areas and contained with silt fences, riprap, etc. to prevent soil-laden water from entering the river.

- Exhaust scrubbers will be provided to clean up the Electrowinning, Carbon Regeneration Kiln, and Mercury Retort exhaust gases. A Bag-house will be provided for the exhaust gases from the Bullion Furnace.

- Spills in the process areas will be directed to process sumps via sloped and curbed foundations. Sump pumps will return the liquids from the process sumps to the main process stream.

- Safety Shower/Eyewash stations will be located at strategic areas throughout the process and reagent areas.

- Water that collects in the mine pits during the rainy season will be pumped out of the pits with diesel-powered mine dewatering pumps to an API sump, to the Process Water Tank, or to other available storage with sufficient reserve capacity.

- A sanitary sewer system will collect the sanitary sewer effluent from all sources and direct it to a packaged digester system, which will provide a product of clean/chlorinated water and neutral sludge. The clean water may be returned to the Process Water Tank and the sludge will end up in the solid waste land-fill.

- A solid waste land-fill will be created for the project near one of the mine waste-dump areas. All solid waste generated by the project will be contained in the landfill for future remediation.

- Fuel storage tanks will be double contained with synthetic liner and gravel lining in a bermed area. The bermed area will be sloped to a collection sump where spills may be cleaned up with a vacuum pump. Waste oil from vehicles will be collected and shipped off site to a certified waste oil handling/disposal facility.

Remediation and Closure Plans will include, but may not be limited to:

- A topsoil management plan with available topsoil stockpiled for re-use in reclamation after mining operations are completed.

- The heaps will be rinsed with fresh water. The closure plan assumes a period of three years for fresh water rinsing after mining operations are completed.

- The heaps will be regraded and revegetated following the placement of an evaporative cover system.

- The open-pits will be stabilized and left open with access restricted to keep out livestock, and to ensure public safety.

- All process equipment will be salvaged as will the pre-engineered buildings.

- All solutions and solution ponds will be detoxified. Solution disposal will be primarily through evaporation, or other approved methods, as determined by Turkish authorities and meeting generally accepted international standards.

- Major concrete foundations will be demolished and/or buried.

- All non-economic rock dumps will be contoured for stability and to limit erosion, and re-seeded with plant species suitable for the climate and for the growing environment. Studies will be performed during mine life to test different species to maximize successful growth.

Anatolia has not finalized the financial mechanisms that will be established to fund reclamation and closure of the project. However as discussed in the following subsection discussions are in progress with the appropriate Turkish authorities as to what will be required to satisfy local requirement in this regard.

Permitting

The fundamental issues for permitting a mining operation in Turkey are land use, followed by review and approval of the process technologies, engineering, and the design parameters for construction of all facilities. The intent is to evaluate and mitigate potential risks that may be generated as a result of the project. The primary objectives are to protect the health and safety of the work force and surrounding population, and to protect environmental resources, including flora and fauna, as well as air, surface and groundwater quality. The permitting process is underpinned by an Environmental Impact Assessment ("EIA") that is equivalent to similar documents in other developed countries.

Anatolia initiated the permitting process by underwriting the Environmental Base Line Studies that were initiated in September 2004 by Ekobil, an Ankara based consultant specializing in environmental studies that meet Turkish EIA criteria. These studies included the construction of three weather stations on the project site, as well as literary searches, field studies of flora and fauna, surface and ground water hydrology, water quality, air quality and socio-economic status reports of communities neighboring the area.

The Project is located in close proximity to the village of Çöpler, which has a population of approximately 240 people. The Project requires the relocation of the village. Relocation has been openly discussed with the villagers and has resulted in

several phases of work to be undertaken in the pre-project stages including the census of the village, an assessment of socio-economic impacts, the development of a Public Disclosure and Consultation Plan ("PDCP") and the development of a Relocation Action Plan ("RAP"). These efforts were concurrent with regular meetings with villagers and their representatives to ensure the fair and equitable treatment of the village population, including an assessment of "vulnerable" segments of the population that might require additional assistance.

Anatolia plans to relocate the village prior to commencing production. Land purchases commenced in early 2005 and continue today with the intent of completing the village relocation prior to the time that the plant is commissioned.

A Permitting Manager (a Turkish national) has been retained by Anatolia. The permitting process duration was carefully managed to coincide with construction activities so that the operating permit will be on hand when the Project's facilities are completed. The main permits required for the Project are:

- Environmental Impact Assessment (received)
- Master Plan Approval (received)
- Construction Permit (received)
- Notification of New Workplace Permit (received)
- Building Occupancy Permit
- Operating Permit
- Temporary Operating Permit
- GSM Operating Permit (received)
- Forest Service Land Leases (received)

The project received the EIA Positive Decision April 16, 2008. The Forest Department land leases were approved in August 2008 and came into effect when lease fees were calculated and paid. Lease documentation was completed on September 18th, 2008. Construction commenced in late September with the mobilization of the earthworks and mining contractors. Establishment of the financial mechanism for funding closure and reclamation cost has been in progress with the appropriate Turkish authorities. This is scheduled to occur by the end of the construction period.

23.6 Taxes and Customs Duties

The Project is exempt from Turkish Customs Duties and Value Added Taxes ("VAT") as part of an economic incentives program to encourage both investment in economically disadvantaged areas and investment in gold and silver producing enterprises. Anatolia will has successfully filed documentation requesting custom duty waivers together with a list of all equipment and materials necessary for project construction and operation. However, VAT is levied on non-mining and non-processing equipment and furnishings and the payment of such taxes has been included in the capital cost estimate.

A corporate tax of 20 percent is currently applied to earnings. This tax rate has been included in the financial analysis and is shown in the financial model.

23.7 Capital and Operating Costs

Capital Costs

Capital Costs are summarized in Table 23-2 below. Project capital costs have been divided into capital spent prior to July 1, 2008 (Sunk Capital) and capital going forward from July1, 2008.

Table 23-2 Capital Cost Summary

Capital Cost Summary	
Sunk Capital (as of June 30, 2008)	$30,892,281
Construction Directs	$51,443,422
Equipment Purchases	$23,805,288
Working Capital	$32,960,706
Project Indirects	$23,310,671
Contingency	$7,115,967
Total	$169,528,336

Further detail for each of the categories in Table 23-2 is provided below.

Sunk Capital

Sunk capital includes construction activities, equipment purchases, permitting efforts and general and administrative costs incurred prior to July 1, 2008. The breakdown of sunk capital is as given in Table 23-3.

Table 23-3 Sunk Capital

Sunk Capital	Cost
Construction Directs	$2,745,526
Equipment Purchases	$10,200,022
Permitting, General and Administrative	$9,045,757
Project Indirects	$8,900,976
Total Sunk Capital	$30,892,281

Construction Direct Capital Costs

Construction Direct costs from July 1, 2008 forward are provided in Table 23-4. Construction direct capital refers to costs associated with earth works, foundations, structural concrete and steel erection, mechanical equipment installations, electrical installations, and instrumentation.

Table 23-4 Construction Direct Capital

Construction Direct Capital	**Cost**
Earthworks and Foundations	$11,013,815
Leach Pad	$7,371,183
Structural Steel	$2,548,636
Pre-Engineered Buildings	$2,733,000
Mechanical and Piping Installation	$8,553,879
Electrical and Instrumentation Installation	$6,140,991
Çöpler Village Relocation	$5,563,000
Power Lines	$3,053,154
Company Housing	$1,698,742
Substation Design and Installation	$925,300
Bypass and Service Roads	$659,479
Electrical Rooms	$693,000
Raw Water Wells and Pipeline	$438,874
Lightning Protection	$50,369
Subtotal Construction Directs	$51,443,422

Equipment Purchases

The cost of equipment purchases going forward is provided in Table 23-5 below. Equipment purchases have been ongoing as engineering progressed and commitments have been made for all major pieces of equipment.

Table 23-5 Equipment Purchases

Equipment Purchases	Cost
Structural Steel Supply	$1,589,552
Primary Crusher	$137,177
Secondary and Tertiary Crushers - Cones	$347,404
Belt Conveyors + Feeders	$2,092,852
Secondary + Tertiary Crushing Surge Bins	$1,029,631
Electro Magnets	$40,435
Screens	$87,542
Lime and Cement Storage System	$215,900
Agglomerator	$305,900
Portable Conveyors	$1,558,964
Prefabricated Tanks	$103,929
Pumps - Process - Water	$985,215
Pumps - Reagent, Sumps, Fire Water, Raw Water	$558,797
Carbon Columns, Agitators, Screens and Filters	$423,059
Refining + Electrowinning System - Gold/Copper	$3,941,771
Laboratory Equipment	$191,487
Water Treatment Systems - Waste and Potable	$133,091
Dust Collection Systems	$470,617
Compressors	$186,800
Cyanide Dissolution Station and Control System	$519,262
Emergency Diesel Generator	$1,242,147
Transformers	$555,470
Switch Gear and Motor Control Centers	$4,499,243
Valves, Analyzers, Detectors, and Switches	$160,780
Control System	$307,386
Overhead Cranes, Truck Scale, and Small Equipment	$310,798
Furniture, Computers, Communications Equipment, Etc.	$1,810,079
Subtotal Equipment Purchases	$23,805,288

Working Capital

Working capital costs are shown in Table 23-6 below. Working Capital Costs represent costs incurred by the company during the project development phase in order to achieve commercial production. Working capital includes salaries, mining contractor costs for pre-stripping and initial production, crushing of leach pad over liner and ore, leaching, recovery, and general and administrative costs for operations prior to achieving commercial production. In this case Commercial Production is defined at the point in time when the cost of producing a salable product is less than the market value of that product (excluding capital costs).

Table 23-6 Working Capital

Working Capital	
Mining (Including Heap Leach Pad Fill Material)	$14,396,588
Ore Processing	$3,117,121
General and Administration	$1,429,141
Finance	$2,262,024
HR	$3,653,490
Health, Safety and Environment	$1,439,311
Governmental Affairs and Community Relations	$918,004
Royalties	$105,686
Unrecoverable VAT	$1,183,241
Management Fees	$4,456,101
Subtotal Working Capital	$32,960,706

Project Indirect Costs

Project indirect costs are provided in Table 23-7. Project indirect costs include Engineering, Procurement and Construction Management (ECPM) costs, insurances, spare parts, first fills, commissioning, freight and QA/QC.

Table 23-7 Project Indirect Costs

Project Indirects	Cost
Construction Indirects	$1,795,255
Insurance	$1,791,300
Spare Parts (Including VAT)	$3,228,006
First Fills	$886,600
EPCM Services	$7,810,893
Commissioning & Start-Up	$729,770
Freight	$1,823,901
Engineering QA/QC	$1,501,688
Plant Mobile Equipment	$2,800,500
Consultants	$942,759
Subtotal Project Indirects	$23,310,671

Contingency

Contingency for the project is $7,115,967. The amount of contingency was determined by a subjective analysis of the risk of specific line item costs to exceed the estimated price and of the confidence in the estimate. Where purchase orders and/or contracts were in place, the confidence level is higher than for line items for which purchase orders or contracts have not yet been issued. Risks were seen as higher for activities that may possess unknown conditions, such as earth works, than for activities where conditions were well known such as mechanical installations.

Basis for Capital Estimate

Capital costs have been developed by Anatolia from work performed by Anatolia's design consultants and contractors who performed the engineering and procurement for the project and by work done by Anatolia for owner's projects and operating costs associated with working capital. As some of the work has progressed to the point that purchase orders have been issued and contracts entered into, actual data has been used wherever possible. Methodology and procedures consistent with the intended level of accuracy were followed in arriving at cost estimates.

This initial capital cost estimate does not include escalation, taxes, replacement capital and additional capital requirement after commissioning and start-up, such as the SART copper recovery and cyanide regeneration circuit and sustaining capital. However, capital for the SART and cyanide regeneration plant and sustaining capital totaling approximately $25 million has been included in the financial analysis.

The estimate is based on the latest information available prior to construction after all major equipment costs had been determined through executed purchase orders. The estimate is based on third quarter 2008, US Dollars.

The basis of estimate and methodology was as follows:

General

Currency: The estimate base currency is USD.

Work Week: All estimated costs for labor is based on a standard 60 hour workweek. There is no allowance for additional overtime.

Exchange Rates: The conversion rates used to convert other currencies to USD are shown below:

Table 23-8 Currency Conversions

COUNTRY/ZONE	CURRENCY	EQUIVALENT
Canada	CAD	0. 90 USD
Turkey	TRY	0. 67 USD
Europe	EUR	1. 34 USD

Labor Rates

The hourly crew rates used in the build-up of the estimate for Civil, Concrete and Structural works are based on current, in-place contract rates for project development.

For architecture, mechanical, piping, and electrical works, the crew rates are all inclusive. The trade base rates and the local construction equipment costs are based on information provided by local Turkish construction firms.

These all-inclusive rates include:

- Base salary
- Fringe benefits
- Payroll burden
- Room and board
- Contractor on site temporary construction facilities
- Contractors on site supervision and management
- Mobilization & demobilization of manpower and temporary construction facilities
- Contractor's overhead and profit
- Construction equipment rental
- Consumables and small tools

Hourly rates are indicated in Table 23-9.

Table 23-9 Typical Crew Rates per Trade or Work Specialty

Summary of the Rates reflecting the Direct + Indirect Cost Including Administration + Profit.

Crew	Labor Rate	Equipment Rate	Crew Rate
Crew for Civil – General excavation - as per C2010 contract	$23.00	C/w contractor O/H	$23.00
Crew for Civil – Corrugated pipe installation – as per C2010 contract	$15.00	C/w contractor O/H	$15.00
Crew for Civil - Site Preparation, Cut, Fill, Leveling (Heap Leach Area) - as per C2010 contract	$150.00	C/w contractor O/H	$150.00
Crew for Concrete - as per C2010 contract	$21.00	C/w contractor O/H	$21.00
Crew for Structural Steel - as per C2010 contract	$15.00	C/w contractor O/H	$15.00
Crew for Architecture	$9.74	$12.26	$22.00
Mechanical = Heavy Equipment Assembly	$12.99	$16.46	$29.50
Mechanical = Light Equipment (HVA/C)	$12.33	$9.64	$22.00
Piping = Industrial Piping	$14.05	$6.98	$21.00
Electrical = Assembling + Installation	$12.69	$11.33	$24.00
Automation = Instrumentation + Control	$12.69	$1.35	$14.00

Labor Productivity

Installation costs for civil, concrete, structural and architectural work are based on bids received from Turkish contractors, as a result, and no productivity factor has been applied to them.

The following factors have been applied to the other disciplines:

- Mechanical: 1.5
- Piping: 1.75
- Electrical: 1.75
- Instrumentation: 1.75

The productivity factor was originally established as per "Global Construction Cost" publication and later adjusted based on preliminary budget quotations for installation hours as provided by local firms in Turkey.

Some benchmarking of construction costs was made by comparison with another project being carried out in Turkey.

Actual quotes were used as a point of reference for civil, concrete, structural steel and architectural work and were further adjusted based on complete scope.

Mechanical installation hours are estimated based on USGC times a productivity factor of 1.5.

Piping was based on USGC times a productivity factor of 1.75.

Electrical and Instrumentation work productivity are based on North American Electrical Contractors Association ("NECA") standards for industrial plants times a productivity factor of 1.75.

Quantity and Pricing Development for Direct Costs

Civil

Civil quantities and take-offs are based on design developed up to June 2008.

Underground utility piping quantities were evaluated by engineering based on design and general routing of utility and fire protection systems indicated on the plot plan, plant layout and General Arrangement drawings ("GA"s).

Earthwork quantities are estimates based on ground survey contours and satellite imagery and were priced using unit rates from a combination of contractor's quote and historical data.

Concrete

Concrete quantities were estimated from design calculations, drawings and sketches. Material, labor and productivity were based on a quote received from a local contractor.

Structural Steel

Structural steel quantities were estimated from design calculations, drawings and sketches. Material costs are based on a quote received from a local contractor.

Architectural

Prices for the pre-fabricated main buildings: guardhouse, dormitory and cafeteria, and warehouse and maintenance shop have been estimated based on the pre-fabricated building supplier's firm offer. There are 7 units and final drawings are not complete. Warehouse and dormitory/kitchen building foundations are based on assumptions.

The Çöpler village relocation cost estimate is based on the Turkish architect's estimate.

Electrical pre-fabricated substations are based on historical data adjusted for the project.

Mechanical Equipment

Equipment costs included in the estimate are primarily based on approved purchase orders issued to date. For the remaining equipment not yet covered by purchase order, in-house historical data and/or vendor quotations were used.

Piping

All quantities are expressed in SI units (metric units, i.e. meters, metric tons, cubic meters, etc.).

Underground utility piping quantities are based on design and general routing of utility indicated on the plot plan, plant layout and GA drawings.

The piping quantities are calculated based on piping and instrument diagrams ("P&ID"), line list, pipe specifications and equipment and layout drawings.

The pipe length is expressed in "Linear Meters" whereas the nominal diameter is specified in US customary units (inch).

Materials of construction are in accordance with the project piping material specifications, in order to specify the schedule and description of the line.

The quantity of the pipe length does not include any pipe supports such as dummy or trunion. It is considered measured from centerline to centerline with no construction allowances. The temporary piping for the pre-commissioning and temporary spools for the pressure test are not included.

The pipes were routed with consideration so as not to obstruct access to emergency exits, fire escapes or access to or from firefighting equipment, not over or near equipment requiring process cleaning or mechanical attention, not interfering with hoisting equipment and not over high voltage electrical equipment or through electrical rooms.

The fittings, flanges and valves are expressed by number whereas the nominal diameter is specified in US customary units (inch).

The number of flanges includes the connection of equipment such as pumps and tanks, in-line instruments, spectacle plates, orifice plates, control valves and manual valves. The quantities do not cover any temporary blind flanges for pressure testing.

The control valves are covered under automation, however their flanges are included in piping.

Drain and vents valves are added at each low and high points of line respectively.

Electrical

Electrical distribution quantities were evaluated based on electrical layout drawings, site electrical distribution layouts, main substation layout, motor lists, cable lists, and single line diagrams.

Heat tracing quantities are as per the piping material take off.

The costs of bulk materials are established from historical data and quotations received from suppliers in Turkey. Major equipment costs are supported by approved purchase orders issued to date.

Costs for fire detection equipment are included in this estimate.

Instrumentation

Instrumentation quantities were evaluated by engineering, based on marked-up PFDs, instruments lists, network drawings and GA's. Prices for bulk material and components are as per approved purchase orders issued to date. Installation hours are as per similar mining projects.

Working Capital

Mining Costs

Mining costs are based on budget level staffing requirements and mining contract costs for bank cubic meters mined according to the current mine plan. This cost includes mining contract administration and engineering and geologic support for mining operations.

Crushing Costs

Crushing costs are based on budget level staffing and operational supply consumption rates. Crushing costs include conveying and leach pad stacking costs. Costs have been developed based on Çöpler ore test work as well as historical cost data from similar mining operations.

Processing Costs

Processing costs are based on budget level staffing and operational supply consumption rates. Processing costs include cyanidation, carbon plant operations, and electrowining and refining costs. Reagent consumption rates have been developed based on Çöpler ore test work. Other consumable costs are based on estimates specific to Çöpler and/or historical data from similar mining operations.

General and Administrative, Finance, HR, Health Safety and Environment, and Government Affairs and Community Relations

Administrative costs for these disciplines have been developed based on budget level staffing, service requirements, and consumable usage rates.

Unrecoverable VAT

The mine is exempt from paying VAT for mining related equipment and supplies. The practice is that VAT will be paid to suppliers and Anatolia will apply to the Turkish Government for a refund. Anatolia will enlist a consultant to recover the VAT payments and it is anticipated that there will be some portion of the VAT that will not get refunded by the Government. Anatolia has made an allowance of 10% of VAT payments to cover consultant fees and unrecoverable VAT payments.

Management Fees

Management fees include the cost of all Anatolia employed expat employees working on the project construction and the operations through commercial production.

Other Equipment Related Cost

Freight and Insurance

The costs for freight are as per the purchase order issued to Schenker of Canada.

Spare Parts

The costs for spare parts are as per purchase orders issued to date. An allowance has been made for spares not included in PO's. This item includes capital, commissioning and start-up, insurance and 2-years operational spares.

Vendor Representative

The costs for vendor representatives during construction to mechanical completion were included as per recommendations from suppliers, and as per standard practice in the industry.

Allowances

The estimate was based on clean (non-factored) quantities.

Indirect Costs

EPCM Services

Costs of management, engineering, procurement and construction were included in the estimate based on expected engineering deliverables and a manpower-loading plan. The costs include all salaries, payroll burdens, overheads and direct costs

associated with home office operations as well as travel and living, expatriate premiums and other direct costs associated with a construction management services.

Construction Indirect Cost (Site Temporary Facilities)

Construction indirect costs include the construction office, temporary utilities and facilities provided by the construction manager and preparation of the temporary parking area for the construction labor force and construction management force. Site maintenance and temporary fencing are also covered in these costs. The indirect costs were calculated based on site requirements for this particular project using cost data from another recent project and is based on a percentage of the direct cost.

Estimate Class

The capital cost estimate has been established as per AACE Class 2-type estimate.

Precision of the estimate

With the information available on local conditions and level of engineering this estimate has an intended level of precision of ±5 percent.

Value Added Tax (VAT) is included for building furnishings as well as an estimated percentage of VAT which will not be recovered.

Volumes of concrete, tonnage of steel and length of pipe were derived from the direct cost estimate presented above and the construction duration, man-hours, and peak workforce were extracted from the project schedule.

Table 23-10 – Key Capital Cost Construction Data

Item Description	Quantity
Cubic Meters of Concrete	7,735
Tonnes of Structural Steel	1,320
Meters of Pipe – Process / Utilities	15,441
Meters of Pipe – Leach Pad	3,000
Meters of Pipe – Water Reclamation	5,952
Construction Duration, Months	13
Construction Man-hours	826,340
Peak Construction Workforce	435

Operating Costs

Plant Operating Costs were developed by Anatolia using cost data for in-country labor, in conjunction with the design criteria, flow sheets, mechanical and electrical equipment lists, and mass balance developed from the feasibility study and detailed engineering.

Key operating cost data, summarized in Table 23-11, are an average of the five (5) major ore types over the Life of Mine.

Ore processing operating costs have been developed for each ore type. The major contributors to the operating costs are power consumption and cost per kilowatt hour, reagents (lime, cement, cyanide, caustic, acid, activated carbon, and antiscalent), crusher parts, pump parts, screen parts, other maintenance parts and supplies, and labor (staff, operating, and maintenance). Operating costs include SART processing costs and assume the SART plant start-up occurs during the first quarter of 2011.

Table 23-11 – Operating Cost Summary

Item Description	Avg. Cost Per Ton of Ore
Mining Operating Cost (4,548,000 tpy)	$4.59*
Ore Processing Cost – Heap Leach (2,732,000 tpy)	$3.60
G & A Cost (4,548,000 tpy)	$0.84
*Based on $1.96 / metric ton material moved	

Item Description	Avg. Cost Per Year
Mining Operating Cost (2010 to 2017)	$ 23,346,000
Ore Processing Cost – Heap Leach	$ 18,301,000
G & A Cost	$ 4,276,000
Total Average Annual Operating Cost (w/SART)	$ 45,923,000
Total Average Annual Operating Cost per Tonne of Ore (includes SART)	$9.03

General and Administrative (G & A) Costs were estimated by Anatolia from projected staffing requirements for the Project. Besides labor, the largest components of G & A costs are food, transportation, insurance, permitting, and license fees. Other/miscellaneous G & A Costs include: outside services, such as legal consultants; communications, which includes telephone, T1 lines, and site communications; miscellaneous services, which includes any local contracts, etc.; community goodwill, which includes donations and support for local causes.

23.8 Economic Analysis

Anatolia completed a financial analysis of the project using a discounted cash flow model incorporating the most recent Turkish tax and royalty schedules. Project construction capital cost estimates, including pre-production costs and ongoing capital costs, and mine closure costs have been included in the cash flow projection. Operating costs are presented as second quarter 2008 USD. An allowance for inflation has been included. The mine production schedule includes only Measured and Indicted Resources. Table 23-12 presents a summary of the financial analysis. Copper credits along with SART processing costs have been included in the table. Table 23-13 presents the financial model.

Table 23-12 – Financial Analysis Summary

IRR	28.3%	Comments
NPV @ 0% (Net Cash Flow)	$317,882,000	
NPV @ 5%	$200,723,000	
NPV @ 7.5%	$158,214,000	
NPV @ 10%	$123,504,000	
Summary Statistics		
Initial Capital	$169,528,336	Including Sunk Costs
Sustaining Capital	$25,021,000	Including SART
Gold recovered-oz	1,300,000	
Silver recovered-oz	1,000,000	
Cash operating cost/oz	$260	
Total cost/oz	$434	
Stripping ratio	1.5:1	

Table 23-13 Financial Model

Year		Jun-08	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Total
Assumptions															
Gold	$ 700.00														
Silver	$ 12.00														
Mining/t		$ -	$ -	$ 0.966	$ 1.905	$ 1.844	$ 1.884	$ 1.885	$ 1.911	$ 1.933	$ 1.896	$ -	$ -	$ -	$ 1.963
Crushing/t		$ -	$ -	$ 0.794	$ 0.812	$ 0.824	$ 0.802	$ 0.779	$ 0.779	$ 0.779	$ 0.780	$ -	$ -	$ -	$ 0.794
Leach/t		$ -	$ -	$ 2.805	$ 2.173	$ 2.652	$ 2.939	$ 2.545	$ 2.449	$ 2.626	$ 4.230	$ -	$ -	$ -	$ 2.805
		-	-	-	-	-	-	-	-	-	-	-	-	-	
Crushed tonnes		-	-	1,233	5,588	5,659	5,659	5,659	5,659	5,659	5,714	-	-	-	40,830
		-	-	-	-	-	-	-	-	-	-	-	-	-	
Leach tonnes mined		-	1	1,300	5,613	5,765	5,699	5,651	5,591	5,736	5,474	-	-	-	40,830
Waste tonnes		-	309	5,765	8,716	9,569	9,631	9,679	8,645	4,853	4,913	-	-	-	62,080
Total material		-	310	7,065	14,329	15,334	15,330	15,330	14,236	10,589	10,387	-	-	-	102,910
Contained															
Leach grade gold		-	428.6850	0.8793	1.6368	2.0635	1.3644	1.2910	1.3407	1.7478	2.2855	-	-	-	
Leach grade silver		-	-	0.3363	2.8926	4.3369	3.7423	1.3178	1.4256	4.6626	8.7731	-	-	-	
Copper grade		-	-	0.0000	0.0003	0.0008	0.0008	0.0003	0.0003	0.0005	0.0007	-	-	-	
Recoverable															
Leach grade gold		-	-	0.0581	0.6292	1.0254	1.0951	0.8635	0.9092	1.0200	1.0033	-	-	-	
Leach grade silver		-	-	0.0087	0.3061	0.6102	0.7959	0.4544	0.4390	0.8697	1.4326	-	-	-	
Copper grade		-	-	-	-	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	-	-	-	
Capex															
Opening balance		-	-	39,074	138,936	159,226	162,857	162,957	163,057	163,557	163,657	163,657	163,657	163,657	
Initial capital (excluding sunk costs of $30,892,281)		-	38,999	99,637	-	-	-	-	-	-	-	-	-	-	138,636
Sustaining capital		-	75	225	20,290	3,631	100	100	500	100	-	-	-	-	25,021
Retirements		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending balance		-	39,074	138,936	159,226	162,857	162,957	163,057	163,557	163,657	163,657	163,657	163,657	163,657	163,657
Accumulated Depreciation		-	-	-	(37,323)	(70,385)	(96,855)	(118,051)	(135,108)	(148,773)	(203,435)	(203,435)	(203,435)	(203,435)	(203,435)
PP&E Book Value		-	39,074	138,936	121,903	92,472	66,102	45,006	28,449	14,884	(39,778)	(39,778)	(39,778)	(39,778)	(39,778)
Revenue															
Leach gold		-	-	1,699	79,482	133,051	140,452	109,815	114,398	131,689	123,607	75,907	-	-	910,099
Total metal revenue		-	-	1,699	79,482	133,051	140,452	109,815	114,398	131,689	123,607	75,907	-	-	910,099
Other Rev		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue		-	-	1,699	79,482	133,051	140,452	109,815	114,398	131,689	123,607	75,907	-	-	910,099
Direct Operating Costs															
Mining costs		-	-	(792)	(19,435)	(26,183)	(33,997)	(30,437)	(30,735)	(22,324)	(14,656)	(9,000)	-	-	(187,559)
Crushing cost		-	-	(114)	(3,151)	(4,292)	(5,422)	(4,703)	(4,923)	(4,537)	(3,260)	(2,002)	-	-	(32,403)
Milling costs		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leaching costs		-	-	(402)	(8,863)	(13,249)	(18,727)	(15,608)	(15,683)	(15,140)	(16,637)	(10,217)	-	-	(114,525)
G&A		-	-	-	(4,644)	(4,684)	(4,581)	(4,581)	(4,549)	(4,430)	(4,426)	(2,310)	-	-	(34,206)
Silver recovery, net		-	-	4	663	1,357	1,750	991	947	1,925	3,026	1,592	-	-	12,254
Copper recovery		-	-	-	-	2,506	4,342	2,099	1,527	2,584	3,891	1,989	-	-	18,937
Cash Oprating Cost		-	-	(1,303)	(35,429)	(44,544)	(56,635)	(52,240)	(53,416)	(41,923)	(32,062)	(19,948)	-	-	(337,501)
Mining Tax		-	-	(10)	(313)	(401)	(502)	(455)	(459)	(348)	(248)	(147)	-	-	(2,883)
Reclamation expense		-	-	(1,413)	(2,866)	(3,067)	(3,066)	(3,066)	(2,847)	(2,118)	(2,077)	-	-	-	(20,520)
Total Cash Costs		-	-	(2,727)	(38,608)	(48,012)	(60,203)	(55,761)	(56,722)	(44,389)	(34,388)	(20,095)	-	-	(360,904)
Depreciation		-	-	-	(37,323)	(33,062)	(26,470)	(21,196)	(17,057)	(13,665)	(54,662)	-	-	-	(203,435)
Total Production Costs		-	-	(2,727)	(75,931)	(81,074)	(86,673)	(76,957)	(73,779)	(58,054)	(89,049)	(20,095)	-	-	(564,339)
Net income before tax		-	-	(1,028)	3,551	51,977	53,780	32,857	40,619	73,635	34,557	55,812	-	-	345,760
Income taxes		-	-	-	-	(10,310)	(10,756)	(6,571)	(8,124)	(14,727)	(6,911)	(11,162)	-	-	(68,562)
Net income after tax		-	-	(1,028)	3,551	41,667	43,024	26,286	32,495	58,908	27,646	44,649	-	-	277,198
CF adjustments to net income															
Initial capex		-	(38,999)	(99,637)	-	-	-	-	-	-	-	-	-	-	(138,636)
Sustaining capex		-	(75)	(225)	(20,290)	(3,631)	(100)	(100)	(500)	(100)	-	-	-	-	(25,021)
Add: Depreciation		-	-	-	37,323	33,062	26,470	21,196	17,057	13,665	54,662	-	-	-	203,435
Add: Reclamation expense		-	-	1,413	2,866	3,067	3,066	3,066	2,847	2,118	2,077	-	-	-	20,520
Deduct: Reclamation payments		-	-	-	-	-	-	-	-	-	-	(6,861)	(6,861)	(6,861)	(20,582)
Change in Working Capital		-	-	(9,954)	(12,531)	(4,227)	8,090	3,045	5,862	2,262	(13,765)	21,219	-	-	0
Add: VAT recovery		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Project Cash Flow (Un-levered)		-	(44,983)	(108,164)	13,464	72,035	80,549	53,493	57,762	76,853	70,619	59,007	(6,861)	(6,861)	316,914

Tables 23-14 and 23-15 present the Project's IRR sensitivity to variables such as gold price, gold recovery capital, and operating costs.

Table 23-14 IRR Sensitivity to Gold Price

Gold Price, US $	IRR	NPV @ 5% (Millions $)
450	6.1%	7.935
500	11.2%	46.913
550	15.9%	85.234
600	20.2%	123.475
650	24.3%	161.716
700	28.1%	199.957
750	31.8%	238.154
800	35.4%	276.348
850	38.8%	314.541
900	42.1%	352.734

Table 23-15 IRR Sensitivity to Other Variables

Change	Operating Costs	Initial Capital	Recovery
Plus 15 percent	24.7%	23.9%	36.2%
Plus 10 percent	25.8%	25.2%	33.5%
Base case	28.1%	28.1%	28.1%
Minus 10 percent	30.4%	31.5%	22.4%
Minus 15 percent	31.6%	33.4%	19.4%

The project was found to be most sensitive to changes in gold price and recovery, followed by changes in operating costs and capital costs.

The breakeven price of gold, defined as the price at which the Project's net cash flow is zero, is $403 per ounce of gold.

23.9 Payback Period

The project non-discounted payback period at the base case metal price of $700/oz gold is 2.3 years.

23.10 Mine Life

The planned mine life is approximately 8 years of operation. Continued leaching and washing of the heap leach material will continue the life for a period beyond the current mine plan.

There are additional cyanide amenable resources in the district that could become ore with a higher gold price and or with additional drilling. Additions to project surface area for waste storage may be required if significant additional oxide ore is found.

There are substantial additional resources that may contribute to project life with the successful implementation of a sulfide treatment facility and sustained higher metal prices. That eventuality will be continually reviewed during the course of operation of the cyanide amenable ores.

24.0 ILLUSTRATIONS

All illustrations are contained in the report sections and are listed in the Table of Contents at the beginning of this report.

EK-4

ANAHTAR TESLİMİ USULÜ İLE İHALE EDİLEN YAPIM İŞLERİNDE UYGULANACAK TİP İDARİ ŞARTNAME

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EK-4

ANAHTAR TESLİMİ USULÜ İLE İHALE EDİLEN YAPIM İŞLERİNDE UYGULANACAK TİP İDARİ ŞARTNAME

I- İHALENİN KONUSU VE TEKLİF VERMEYE İLİŞKİN HUSUSLAR

Madde 1 - İdareye ilişkin bilgiler

a) Adı: KOZA ALTIN İŞLETMELERİ A.Ş.

b) Adresi: **İstanbul Yolu, 10.km, No:310, Batıkent, ANKARA**

c) Telefon numarası: **0.312.587 10 00**

ç) Faks numarası: **0 .312.587 11 00**

d) Elektronik posta adresi: **yatirimciiliskileri@kozagold.com**

e) İlgili personelinin adı, soyadı ve unvanı: .....

1.2. Adaylar, ihaleye ilişkin bilgileri yukarıdaki adres ve numaralardan görevli personelle irtibat kurmak suretiyle temin edebilirler.

Madde 2 - İhale konusu işe ilişkin bilgiler

2.1. İhale konusu işin;

a) Adı: **Himmetdede Altın Madeni Projesi**

b) Yatırım proje no'su/kodu:

c) Miktarı (fiziki) ve türü: **Komple Yeni Yatırırm**

ç) Yapılacağı yer: **Himmetdede, Kayseri**

d) İşe ait (varsa) diğer bilgiler: **Proje mevcut temel mühendislik verilerinden yola çıkılarak anahtar teslimi esasına göre; Tesisin uygulama ve detay mühendislik projeleri, kırma-eleme, boyut sınıflandırma, yığın liçi ve çözeltiden altın/gümüş külçe üretimi ile bu ünitelere hizmet verecek tüm altyapıyı kapsamaktadır.**

Madde 3 - İhaleye ve ön yeterlik değerlendirmesine ilişkin bilgiler

3.1. a) İhale kayıt numarası:

b) İhale usulü : **arasında ihale**

c) Ön yeterlik başvurusunun sunulacağı adres: **İdarenin yukarıda belirtilen adresi**

b) Ön yeterlik değerlendirmesinin yapılacağı adres: **İdarenin yukarıda belirtilen adresi**

c) Ön yeterlik değerlendirme (son başvuru) tarihi: **../.../2012**

d) Ön yeterlik değerlendirme (son başvuru) saati: __/__

e) İhale komisyonu toplantı yeri: **İdarenin yukarıda belirtilen adresi**

3.2. Teklifler davet mektubunda belirtilen ihale (son teklif verme) tarih ve saatine kadar yukarıda belirtilen yere verilebileceği gibi, iadeli taahhütlü posta yoluyla da gönderilebilir. İhale (son teklif verme) saatine kadar İdareye ulaşmayan teklifler değerlendirmeye alınmaz.

3.3. Verilen teklifler, zeyilname düzenlenmesi hali hariç, herhangi bir sebeple geri alınamaz.

3.4. İhale tarihinin tatil gününe rastlaması halinde ihale, takip eden ilk iş gününde yukarıda belirtilen yer ve saatte yapılır ve bu saate kadar verilen teklifler kabul edilir.

3.5. Davet tarihinden sonra çalışma saatlerinin değişmesi halinde de ihale davet mektubunda belirtilen saatte yapılır.

3.6. Saat ayarlarında, Türkiye Radyo Televizyon Kurumunun (TRT) ulusal saat ayarı esas alınır.

Madde 4 - İhale dokümanının görülmesi ve temini

4.1. İhale dokümanı aşağıda belirtilen adreste bedelsiz olarak görülebilir. Ancak, ihaleye teklif verecek olanların, İdarece onaylı ihale dokümanını satın alması zorunludur.

a) İhale dokümanının görülebileceği yer: **İdarenin yukarıda belirtilen adresi**

b) İhale dokümanının görülebileceği internet adresi:

c) İhale dokümanının satın alınabileceği yer: **İdarenin yukarıda belirtilen adresi**

ç) İhale dokümanı satış bedeli (varsa vergi dahil):.....

4.2. İhale dokümanını satın almak isteyenler, ihale dokümanını oluşturan belgelerin aslına uygunluğunu ve belgelerin tamam olup olmadığını kontrol eder. Bu incelemeden sonra, ihale dokümanını oluşturan belgelerin tamamının aslına uygun olarak teslim alındığına dair standart form biri satın alana verilmek üzere iki nüsha olarak düzenlenir.

4.3. Bu madde boş bırakılmıştır..

4.4. İhale dokümanının tamamını veya bir kısmını oluşturan belgelerin, Türkçe yanında başka dillerde de hazırlanıp isteklilere verilmesi halinde, ihale dokümanının anlaşılmasında, yorumlanmasında ve anlaşmazlıkların çözümünde Türkçe metin esas alınır.

Madde 5- İhale dokümanının kapsamı

5.1. İhale dokümanı aşağıdaki belgelerden oluşmaktadır:

a) İdari Şartname.

b) Teknik Şartnameler.

c) Sözleşme Tasarısı.

ç) Yapım İşleri Genel Şartnamesi. (İhale dokümanı kapsamında verilmemiştir.)

d) Standart formlar.

e) İş kalemleri veya iş gruplarına ait ilerleme yüzdeleri listesi ve .....adet analiz formatı,

5.2. Ayrıca, bu Şartnamenin ilgili hükümleri gereğince İdarenin düzenleyeceği zeyilnameler ile isteklilerin yazılı talebi üzerine İdare tarafından yapılan yazılı açıklamalar, ihale dokümanının bağlayıcı bir parçasıdır.

5.3. İstekli tarafından, ihale dokümanının içeriği dikkatli bir şekilde incelenmelidir. Teklifin verilmesine ilişkin şartların yerine getirilmemesinden kaynaklanan sorumluluk teklif verene aittir. İhale dokümanında öngörülen kriterlere ve şekil kurallarına uygun olmayan teklifler değerlendirmeye alınmaz.

Madde 6- Bildirim ve tebligat esasları

6.1. Bildirim ve tebligat iadeli taahhütlü posta yoluyla veya imza karşılığı elden yapılır. Ancak ihale dokümanının satın alındığına ya da EKAP üzerinden e-imza kullanılarak indirildiğine ilişkin formda ve/veya teklif mektubunda elektronik posta adresinin ve/veya faks numarasının belirtilmesi ve bu adrese veya faks numarasına yapılacak bildirimlerin kabul edileceğinin taahhüt edilmesi kaydıyla, İdare tarafından elektronik posta yoluyla veya faksla bildirim de yapılabilir.

6.2. İadeli taahhütlü mektupla yapılan tebligatta mektubun postaya verilmesini takip eden yedinci gün, yabancı isteklilerde ise ondokuzuncu gün tebliğ tarihi sayılır. Tebligatın bu tarihten önce muhataba ulaşması halinde ise fiili tebliğ tarihi esas alınır.

6.3. Elektronik posta yoluyla veya faks ile yapılan bildirimlerde, bildirim tarihi tebliğ tarihi sayılır. Bu şekilde yapılan bildirimlerin aynı gün İdare tarafından teyit edilmesi zorunludur. Aksi takdirde bildirim yapılmamış sayılır. Teyit işleminin gerçekleşmiş kabul edilmesi için tebligatın iadeli taahhütlü mektupla bildirime çıkarılmış olması yeterlidir. Elektronik posta yoluyla veya faks ile yapılan bildirimler, bildirim tarihi ve içeriğini de kapsayacak şekilde ayrıca belgelenir.

6.4. Elektronik posta yoluyla yapılacak bildirimler, İdarenin resmi elektronik posta adresi kullanılarak yapılır.

6.5. İdare tarafından ortak girişimlere yapılacak bildirim ve tebligat yukarıdaki esaslara göre pilot/koordinatör ortağa yapılır.

6.6. İstekli olabilecekler ve istekliler tarafından İdareyle yapılacak yazışmalarda, elektronik posta ve faks kullanılamaz. Ancak bu Şartnamenin **4.3.** maddesinde ihale dokümanının posta yoluyla satılması hususunun düzenlenmiş olması şartıyla, ihale dokümanının posta yoluyla satın alınmasına ilişkin talepler faksla yapılabilir.

II- İHALEYE KATILMAYA İLİŞKİN HUSUSLAR

Madde 7 - İhaleye katılabilmek için gereken belgeler ve yeterlik kriterleri

7.1. Teklif vermeye davet edilen adayların ihaleye katılabilmeleri için aşağıda sayılan belgeleri teklifleri kapsamında sunmaları gerekir:

a) Mevzuatı gereği kayıtlı olduğu ticaret ve/veya sanayi odası ya da esnaf ve sânatkar odası veya ilgili meslek odası belgesi;

1) Gerçek kişi olması halinde, kayıtlı olduğu ticaret ve/veya sanayi odasından ya da esnaf ve sânatkar odasından veya ilgili meslek odasından, davet tarihinin veya ihale tarihinin içinde bulunduğu yılda alınmış, odaya kayıtlı olduğunu gösterir belge,

2) Tüzel kişi olması halinde, ilgili mevzuatı gereği kayıtlı bulunduğu ticaret ve/veya sanayi odasından, davet tarihinin veya ihale tarihinin içinde bulunduğu yılda alınmış, tüzel kişiliğin odaya kayıtlı olduğunu gösterir belge.

b) Teklif vermeye yetkili olduğunu gösteren imza beyannamesi veya imza sirküleri;

1) Gerçek kişi olması halinde, noter tasdikli imza beyannamesi,

2) Tüzel kişi olması halinde, ilgisine göre tüzel kişiliğin ortakları, üyeleri veya kurucuları ile tüzel kişiliğin yönetimindeki görevlileri belirten son durumu gösterir Ticaret Sicil Gazetesi, bu bilgilerin tamamının bir Ticaret Sicil Gazetesinde bulunmaması halinde, bu bilgilerin tümünü göstermek üzere ilgili Ticaret Sicil Gazeteleri veya bu hususları gösteren belgeler ile tüzel kişiliğin noter tasdikli imza sirküleri.

c) Bu Şartname ekinde yer alan standart forma uygun teklif mektubu.

ç) Bu Şartnamede belirlenen geçici teminata ilişkin geçici teminat mektubu veya geçici teminat mektupları dışındaki teminatların Saymanlık ya da Muhasebe Müdürlüklerine yatırıldığını gösteren makbuzlar.

d) Vekaleten ihaleye katılma halinde, vekil adına düzenlenmiş, ihaleye katılmaya ilişkin noter onaylı vekaletname ile vekilin noter tasdikli imza beyannamesi.

e) İsteklinin ortak girişim olması halinde, bu Şartname ekinde yer alan standart forma uygun iş ortaklığı beyannamesi.

7.2. İhaleye iş ortaklığı olarak teklif verilmesi halinde;

7.2.1. . İş ortaklığının her bir ortağı tarafından 7.1 maddesinin (a) ve (b) bentlerinde yer alan belgelerin ayrı ayrı sunulması zorunludur

7.3. İhaleye konsorsiyum olarak teklif verilmesi halinde;

7.3.1. . İhaleye konsorsiyum olarak teklif verilmesine izin verilmediğinden bu madde boş bırakılmıştır

7.4. Belgelerin sunuluş şekli

7.4.1. İstekliler, yukarıda sayılan belgelerin aslını veya aslına uygunluğu noterce onaylanmış örneklerini vermek zorundadır. Ancak Türkiye Ticaret Sicili Gazetesi Nizamnamesi'nin 9 uncu maddesinde yer alan hüküm çerçevesinde; Gazete İdaresince veya Türkiye Odalar ve Borsalar Birliğine bağlı odalarca "aslının aynıdır" şeklinde onaylanarak isteklilere verilen Ticaret Sicili Gazetesi suretleri ile bunların noter onaylı suretleri de kabul edilecektir.Kamu kurum ve kuruluşları ile kamu kurumu niteliğindeki meslek kuruluşlarının internet sayfası üzerinden temin edilebilen ve teyidi yapılabilen ihaleye katılım ve yeterlik belgelerinin internet çıktısı sunulabilir.

7.4.2. Noter onaylı belgelerin aslına uygun olduğunu belirten bir şerh taşıması zorunlu olup, sureti veya fotokopisi görülerek onaylanmış olanlar ile "ibraz edilenin aynıdır" veya bu anlama gelecek bir şerh taşıyanlar geçerli kabul edilmeyecektir.

7.4.3. İstekliler, istenen belgelerin aslı yerine ihale tarihinden önce İdare tarafından "aslı idarece görülmüştür" veya bu anlama gelecek şekilde şerh düşülen suretlerini tekliflerine ekleyebilirler.

7.4.4. Türkiye Cumhuriyetinin yabancı ülkelerde bulunan temsilcilikleri tarafından düzenlenen belgeler dışında yabancı ülkelerde düzenlenen belgeler ile yabancı ülkelerin Türkiye'deki temsilcilikleri tarafından düzenlenen belgelerin tasdik işlemi:

7.4.4.1. Tasdik işleminden, belgedeki imzanın doğruluğunun, belgeyi imzalayan kişinin hangi sıfatla imzaladığının ve varsa üzerindeki mühür veya damganın aslı ile aynı olduğunun teyidi işlemi anlaşılır.

7.4.4.2. Yabancı Resmi Belgelerin Tasdiki Mecburiyetinin Kaldırılması Sözleşmesine taraf ülkelerde düzenlenen ve bu Sözleşmenin 1 inci maddesi kapsamında bulunan resmi belgeler, "apostil tasdik şerhi" taşıması kaydıyla Türkiye Cumhuriyeti Konsolosluğu veya Türkiye Cumhuriyeti Dışişleri Bakanlığı tasdik işleminden muaftır.

7.4.4.3. Türkiye Cumhuriyeti ile diğer devlet veya devletler arasında, belgelerdeki imza, mühür veya damganın tasdik işlemini düzenleyen hükümler içeren bir anlaşma veya sözleşme bulunduğu takdirde, bu ülkelerde düzenlenen belgelerin tasdik işlemi bu anlaşma veya sözleşme hükümlerine göre yaptırılabilir.

7.4.4.4. "Apostil tasdik şerhi" taşımayan veya tasdik işlemine ilişkin özel hükümler içeren bir anlaşma veya sözleşme kapsamında sunulmayan yabancı ülkelerde düzenlenen belgelerin üzerindeki imzanın, mührün veya damganın alındığı ülkedeki Türkiye Cumhuriyeti Konsolosluğu tarafından veya sırasıyla belgenin düzenlendiği ülkenin Türkiye'deki temsilciliği ile Türkiye Cumhuriyeti Dışişleri Bakanlığı tarafından tasdik edilmesi gerekir. Türkiye Cumhuriyeti Konsolosluğunun bulunmadığı ülkelerde düzenlenen belgeler ise sırasıyla, düzenlendiği ülkenin Dışişleri Bakanlığı, bu ülkeyle ilişkilerden sorumlu Türkiye Cumhuriyeti Konsolosluğu veya bu ülkenin Türkiye'deki temsilciliği ve Türkiye Cumhuriyeti Dışişleri Bakanlığı tarafından tasdik edilmelidir.

7.4.4.5. Yabancı ülkenin Türkiye'deki temsilciliği tarafından düzenlenen belgeler, Türkiye Cumhuriyeti Dışişleri Bakanlığı tarafından tasdik edilmelidir.

7.4.4.6. Fahri konsolosluklarca düzenlenen belgelere dayanılarak işlem tesis edilmez.

7.4.5. Teklif kapsamında sunulan ve yabancı dilde düzenlenen belgelerin tercümelerinin yapılması ve bu tercümelerin tasdik işlemi:

7.4.5.1. Yerli istekliler tarafından sunulan ve yabancı dilde düzenlenen belgelerin tercümelerinin yaptırılması ve tercümelerinin tasdik işlemi, aşağıdaki şekilde yapılır.

7.4.5.1.1. Yerli istekliler ile Türk vatandaşı gerçek kişi ve/veya Türkiye Cumhuriyeti kanunlarına göre kurulmuş tüzel kişi ortağı bulunan iş ortaklıkları veya konsorsiyumlar tarafından sunulan ve yabancı dilde düzenlenen belgelerin tercümelerinin, Türkiye'deki yeminli tercümanlar tarafından yapılması ve noter tarafından onaylanması zorunludur. Bu tercümeler Türkiye Cumhuriyeti Dışişleri Bakanlığı tasdik işleminden muaftır.

7.4.5.2. Yabancı istekliler tarafından sunulan ve yabancı dilde düzenlenen belgelerin tercümeleri ve bu tercümelerin tasdik işlemi aşağıdaki şekilde yapılır.

7.4.5.2.1. Tercümelerin tasdik işleminden tercümeyi gerçekleştiren yeminli tercümanın imzası ve varsa belge üzerindeki mührün ya da damganın aslı ile aynı olduğunun teyidi işlemi anlaşılır.

7.4.5.2.2. Belgelerin tercümelerinin verildiği ülkedeki yeminli tercüman tarafından yapılmış olması ve tercümesinde "apostil tasdik şerhi" taşıması halinde bu tercümelerde başkaca bir tasdik şerhi aranmaz. Bu tercümelerin "apostil tasdik şerhi" taşımaması durumunda ise tercümelerdeki imza, ve varsa üzerindeki mühür veya damga, bu ülkedeki ilgili Türkiye Cumhuriyeti Konsolosluğu tarafından veya sırasıyla belgenin düzenlendiği ülkenin Türkiye'deki temsilciliği ile Türkiye Cumhuriyeti Dışişleri Bakanlığı tarafından tasdik edilmelidir.

7.4.5.2.3. Türkiye Cumhuriyeti ile diğer devlet veya devletler arasında belgelerdeki imza, mühür veya damganın tasdik işlemini düzenleyen hükümler içeren bir anlaşma veya sözleşme bulunduğu takdirde belgelerin tercümelerinin tasdik işlemi de anlaşma veya sözleşme hükümlerine göre yaptırılabilir.

7.4.5.2.4. Türkiye Cumhuriyeti Konsolosluğunun bulunmadığı ülkelerde düzenlenen belgelerin tercümelerinin verildiği ülkedeki yeminli tercüman tarafından yapılmış olması ve tercümenin de "apostil tasdik şerhi" taşımaması durumunda ise sözkonusu tercümedeki imza ve varsa üzerindeki mühür veya damganın sırasıyla bu ülkenin Dışişleri Bakanlığı, bu ülkeyle ilişkilerden sorumlu Türkiye Cumhuriyeti Konsolosluğu veya bu ülkenin Türkiye'deki temsilciliği ve Türkiye Cumhuriyeti Dışişleri Bakanlığı tarafından tasdik edilmelidir.

7.4.5.2.5. Yabancı dilde düzenlenen belgelerin tercümelerinin Türkiye'deki yeminli tercümanlar tarafından yapılması ve noter tarafından onaylanması halinde ise bu tercümelerde başkaca bir tasdik şerhi aranmaz.

7.5. Yabancı istekli tarafından ihaleye teklif verilmesi halinde, bu Şartname ve eklerinde istenilen belgelerin, isteklinin kendi ülkesindeki mevzuat uyarınca düzenlenmiş olan dengi belgelerin sunulması gerekir.

7.6. Tekliflerin dili:

7.6.1. Teklifi oluşturan bütün belgeler ve ekleri ile diğer dokümanlar Türkçe olacaktır. Başka bir dilde sunulan belgeler, Türkçe onaylı tercümesi ile birlikte verilmesi halinde geçerli sayılacaktır. Bu durumda teklifin veya belgenin yorumlanmasında Türkçe tercüme esas alınır. Tercümelerin yapılması ve tercümelerin onay işleminde ilgili maddedeki düzenlemeler esas alınacaktır

Madde 8 - İhalenin yabancı isteklilere açıklığı

8.1. İhale, yeterlik kriterlerini taşıyan yerli ve yabancı tüm isteklilere açıktır.

Madde 9 - İhaleye katılamayacak olanlar

9.1. 4734 sayılı Kanunun 11 inci maddesinde ihaleye katılamayacağı belirtilenler ile 4734 sayılı Kanunun 53 üncü maddesinin (b) bendinin (8) numaralı alt bendi gereğince alınacak Bakanlar Kurulu Kararları ile belirlenen yabancı ülkelerin isteklileri doğrudan veya dolaylı yada alt yüklenici olarak, kendileri veya başkaları adına hiçbir şekilde ihaleye katılamazlar.

9.2. Bu yasaklara rağmen ihaleye katılan istekliler ihale dışı bırakılarak geçici teminatları gelir kaydedilir. Ayrıca, bu durumun tekliflerin değerlendirilmesi aşamasında tespit edilememesi nedeniyle bunlardan biri üzerine ihale yapılmışsa, teminatı gelir kaydedilerek ihale iptal edilir.

Madde 10 - İhale dışı bırakılma ve yasak fiil veya davranışlar

10.1. İsteklilerin, ihale tarihinde 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e), (g) ve (i) bentlerinde belirtilen durumlarda olmaması gerekmektedir. (c) ve (d) bentleri hariç bu durumlarında değişiklik olan istekli, İdareye derhal bilgi verecektir İhale üzerinde kalan istekli ise sözleşmenin imzalanmasından önce ihale tarihinde, 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e) ve (g) bentlerinde belirtilen durumlarda olmadığına ilişkin belgeleri verecektir.

10.2. Bu Şartnamenin 9 uncu maddesi uyarınca ihaleye katılamayacak olanlar ile 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrası uyarınca ihale dışı bırakılma nedenlerini taşıyan istekliler değerlendirme dışı bırakılır.

10.3. 4734 sayılı Kanunun 11 nci maddesi uyarınca ihaleye katılamayacak olanlar ile 17 nci maddesinde sayılan yasak fiil veya davranışta bulunduğu tespit edilenler hakkında, ayrıca fiil veya davranışın özelliğine göre aynı Kanunun Dördüncü Kısmında belirtilen hükümler uygulanır.

Madde 11 - Teklif hazırlama giderleri

11.1. Tekliflerin hazırlanması ve sunulması ile ilgili bütün masraflar isteklilere aittir. İstekli, teklifini hazırlamak için yapmış olduğu hiçbir masrafı İdareden isteyemez.

Madde 12 - İşin yapılacağı yerin görülmesi

12.1. İşin yapılacağı yeri ve çevresini gezmek, inceleme yapmak,; teklifini hazırlamak ve taahhüde girmek için gerekli olabilecek tüm bilgileri temin etmek isteklinin sorumluluğundadır. İşyeri ve çevresinin görülmesiyle ilgili bütün masraflar isteklilere aittir.

12.2. İstekli, işin yapılacağı yeri ve çevresini gezmekle; işyerinin şekline ve mahiyetine, iklim şartlarına, işin gerçekleştirilebilmesi için yapılması gerekli çalışmaların ve kullanılacak malzemelerin miktar ve türü ile işyerine ulaşım ve şantiye kurmak için gerekli hususlarda maliyet ve zaman bakımından bilgi edinmiş; teklifini etkileyebilecek riskler, olağanüstü durumlar ve benzeri diğer unsurlara ilişkin gerekli her türlü bilgiyi almış sayılır.

12.3. İstekli veya temsilcilerinin işin yapılacağı yeri görmek istemesi halinde, işin gerçekleştirileceği yapıya ve/veya araziye girilmesi için gerekli izinler İdare tarafından verilecektir.

12.4. Tekliflerin değerlendirilmesinde, isteklinin işin yapılacağı yeri incelediği ve teklifini buna göre hazırladığı kabul edilir.

Madde 13 - İhale dokümanına ilişkin açıklama yapılması

13.1. İstekliler, tekliflerin hazırlanması aşamasında, ihale dokümanında açıklanmasına ihtiyaç duydukları hususlarla ilgili olarak, ihale tarihinden yirmi gün öncesine kadar yazılı olarak açıklama talep edebilir. Bu tarihten sonra yapılacak açıklama talepleri değerlendirmeye alınmayacaktır.

13.2. Talebin uygun görülmesi halinde İdarece yapılacak yazılı açıklama, ihale tarihinden en az on gün öncesinde bilgi sahibi olmalarını temin edecek şekilde ihale dokümanı alanların tamamına gönderilir veya imza karşılığı elden tebliğ edilir.

13.3. Açıklamada, sorular ile İdarenin ayrıntılı cevabı yer alır; açıklama talebinde bulunanın kimliği belirtilmez.

13.4. Açıklamalar, açıklamanın yapıldığı tarihten sonra dokümanı satın alanlara ihale dokümanının bir parçası olarak verilir.

Madde 14 - İhale dokümanında değişiklik yapılması

14.1. İlan yapıldıktan sonra ihale dokümanında değişiklik yapılmaması esastır. Ancak, tekliflerin hazırlanmasını veya işin gerçekleştirilmesini etkileyebilecek maddi veya teknik hatalar veya eksikliklerin İdarece tespit edilmesi veya İdareye yazılı olarak bildirilmesi halinde, zeyilname düzenlenmek suretiyle ihale dokümanında değişiklik yapılabilir. Zeyilname, ihale dokümanının bağlayıcı bir parçası olarak ihale dokümanına eklenir.

14.2. Zeyilname, ihale tarihinden en az on gün öncesinde bilgi sahibi olmalarını temin edecek şekilde ihale dokümanı alanların tamamına gönderilir veya imza karşılığı elden tebliğ edilir.

14.3. Zeyilname düzenlenmesi nedeniyle tekliflerin hazırlanabilmesi için ek süreye ihtiyaç duyulması halinde İdare, ihale tarihini bir defaya mahsus olmak üzere en fazla yirmi gün süreyle zeyilname ile erteleyebilir. Erteleme süresince, ihale dokümanının satılmasına ve teklif alınmasına devam edilecektir.

14.4. Zeyilname düzenlenmesi halinde, tekliflerini bu düzenlemeden önce vermiş olan istekliler tekliflerini geri çekerek, yeniden teklif verebilirler.

14.5. 4734 sayılı Kanunun 55 inci maddesi uyarınca şikayet üzerine yapılan incelemede tekliflerin hazırlanmasını veya işin gerçekleştirilmesini etkileyebilecek maddi veya teknik hataların veya eksikliklerin bulunması ve İdarece ihale dokümanında düzeltme yapılmasına karar verilmesi halinde, ihale tarihinden önce gerekli düzeltme yapılarak yukarıda belirtilen usule göre ihale tarihi bir defa daha ertelenebilir. Belirlenen maddi veya teknik hataların veya eksikliklerin ön yeterlik ilanında da bulunması halinde ise, ihale iptal edilir.

Madde 15 - İhale saatinden önce ihalenin iptal edilmesi

15.1. İdare tarafından gerekli görülen veya ihale dokümanında yer alan belgelerde ihalenin yapılmasına engel olan ve düzeltilmesi mümkün bulunmayan hususların bulunduğunun tespit edildiği hallerde, ihale saatinden önce ihale iptal edilebilir.

15.2. Bu durumda, iptal nedeni belirtilmek suretiyle ihalenin iptal edildiği ilan edilerek duyurulur. Bu aşamaya kadar teklif vermiş olanlara ihalenin iptal edildiği ayrıca tebliğ edilir.

15.3. İhalenin iptal edilmesi halinde, verilmiş olan bütün teklifler reddedilmiş sayılır ve bu teklifler açılmaksızın isteklilere iade edilir.

15.4. İhalenin iptal edilmesi nedeniyle isteklilerce İdareden herhangi bir hak talebinde bulunulamaz.

Madde 16 - İş ortaklığı

16.1. Birden fazla gerçek veya tüzel kişi, iş ortaklığı oluşturmak suretiyle ihaleye teklif verebilir.

16.2. İş ortaklığında en çok hisseye sahip ortak, pilot ortak olarak gösterilmek zorundadır. Ancak bütün ortakların hisse oranlarının eşit olduğu veya diğer ortaklara göre daha fazla hisse oranına sahip ve hisseleri birbirine eşit olan ortakların bulunduğu iş ortaklıklarında ise, bu ortaklardan biri pilot ortak olarak belirlenir.

16.3. İş ortaklığı oluşturmak suretiyle ihaleye teklif verecek istekliler, iş ortaklığı yaptıklarına dair pilot ortağın da belirtildiği, ekte örneği bulunan iş ortaklığı beyannamesini teklifleriyle beraber sunacaklardır.

16.4. İhalenin iş ortaklığı üzerinde kalması halinde, iş ortaklığı tarafından, sözleşme imzalanmadan önce noter onaylı ortaklık sözleşmesini İdareye vermesi zorunludur.

16.5. İş ortaklığı sözleşmesinde, ortakların hisse oranları, pilot ortak ile diğer ortakların işin yerine getirilmesinde müştereken ve müteselsilen sorumlu oldukları belirtilecektir.

Madde 17 - Konsorsiyum

17.1. Konsorsiyumlar ihaleye teklif veremez."

Madde 18 - Alt yükleniciler

18.1. İhale konusu işte idarenin onayı ile alt yüklenici çalıştırılabilir. Ancak işin tamamı alt yüklenicilere yaptırılamaz. Alt yüklenicilerin yaptıkları işlerle ilgili sorumluluğu yüklenicinin sorumluluğunu ortadan kaldırmaz

III- TEKLİFLERİN HAZIRLANMASI VE SUNULMASINA İLİŞKİN HUSUSLAR

Madde 19 - Teklif ve sözleşme türü

19.1. İstekliler tekliflerini, anahtar teslimi götürü bedel üzerinden vereceklerdir; ihale sonucu, ihale üzerine bırakılan istekliyle anahtar teslimi götürü bedel sözleşme imzalanacaktır

Madde 20 - Kısmi teklif verilmesi

20.1. Bu ihalede işin tamamı için teklif verilecektir

20.2. Kısmi teklife ilişkin açıklamalar

20.2.1. . Bu madde boş bırakılmıştır

Madde 21 - Teklif ve ödemelerde geçerli para birimi

21.1. Bu ihalede istekliler Türk Lirası (TL), Amerikan Doları ($) ve EURO olarak teklif verebilirler. Ödemeler teklif edilen para birimi cinsinden yapılacaktır.

Madde 22 - Tekliflerin sunulma şekli

22.1. Teklif mektubu ve geçici teminat da dahil olmak üzere ihaleye katılabilme şartı olarak bu Şartnamede istenilen bütün belgeler bir zarfa veya pakete konulur. Zarfın veya paketin üzerine isteklinin adı, soyadı veya ticaret unvanı, tebligata esas açık adresi, teklifin hangi işe ait olduğu ve ihaleyi yapan İdarenin açık adresi yazılır. Zarfın yapıştırılan yeri istekli tarafından imzalanarak, mühürlenir veya kaşelenir.

22.2. Teklifler, ihale dokümanında belirtilen ihale saatine kadar sıra numaralı alındılar karşılığında İdareye (tekliflerin sunulacağı yere) teslim edilir. Bu saatten sonra verilen teklifler kabul edilmez ve açılmadan istekliye iade edilir. Bu durum bir tutanakla tespit edilir

22.3. Teklifler iadeli taahhütlü olarak posta ile de gönderilebilir. Posta ile gönderilecek tekliflerin ihale dokümanında belirtilen ihale saatine kadar İdareye ulaşması şarttır. Postadaki gecikme nedeniyle işleme konulmayacak olan tekliflerin alınış zamanı bir tutanakla tespit edilir ve bu teklifler değerlendirmeye alınmaz.

22.4. Zeyilname ile teklif verme süresinin uzatılması halinde, İdare ve isteklilerin ilk teklif verme tarih ve saatine bağlı tüm hak ve yükümlülükleri süre açısından, tespit edilecek yeni teklif verme tarih ve saatine kadar uzatılmış sayılır.

Madde 23 - Teklif mektubunun şekli ve içeriği

23.1. Teklif mektupları, ekteki form örneğine uygun şekilde yazılı ve imzalı olarak sunulur.

23.2. Teklif mektubunda;

a) İhale dokümanının tamamen okunup kabul edildiğinin belirtilmesi,

b) Teklif edilen bedelin rakam ve yazı ile birbirine uygun olarak açıkça yazılması,

c) Kazıntı, silinti, düzeltme bulunmaması,

ç)Türk vatandaşı gerçek kişilerin Türkiye Cumhuriyeti kimlik numarasının, Türkiye'de faaliyet gösteren tüzel kişilerin ise vergi kimlik numarasının belirtilmesi,

d) Teklif mektubunun ad, soyad veya ticaret unvanı yazılmak suretiyle yetkili kişilerce imzalanmış olması,

zorunludur.

23.3. İş ortaklığı olarak teklif veren isteklilerin teklif mektuplarının, ortakların tamamı tarafından veya yetki verdikleri kişiler tarafından imzalanması gerekir.

23.4. Konsorsiyum olarak teklif veren isteklinin teklif mektubunda, konsorsiyum ortaklarının işin uzmanlık gerektiren kısımları için teklif ettikleri bedeller ayrı ayrı yazılacaktır. Konsorsiyum ortakları birden fazla kısma da teklif verebilir.Konsorsiyum ortaklarının işin uzmanlık gerektiren kısımları için teklif ettikleri bedellerin toplamı, konsorsiyumun toplam teklif bedelini oluşturacaktır.

Madde 24- Tekliflerin geçerlilik süresi

24.1. Tekliflerin geçerlilik süresi, ihale tarihinden itibaren (90) *(rakam ve yazıyla)* doksan takvim günüdür.

24.2. İhtiyaç duyulması halinde, teklif geçerlilik süresinin en fazla yukarıda belirlenen süre kadar uzatılması istekliden talep edilebilir. İstekli, İdarenin bu talebini kabul veya reddedebilir. İdarenin teklif geçerlilik süresinin uzatılması talebini reddeden isteklinin geçici teminatı iade edilir.

24.3. Teklifinin geçerlilik süresini uzatan istekli, teklif ve sözleşme koşullarını değiştirmeden, geçici teminatını kabul ettiği yeni teklif geçerlilik süresi ile geçici teminata ilişkin hükümlere uygun hale getirir.

24.4. Bu konudaki istek ve cevaplar yazılı olarak yapılır.

Madde 25- Teklif fiyata dahil olan giderler

25.1. İsteklinin sözleşmenin uygulanması sırasında ilgili mevzuat gereğince ödeyeceği her türlü vergi, resim, harç, yapı kullanım izin belgesi giderleri ve benzeri giderler ile ulaşım, nakliye ve her türlü sigorta giderleri teklif fiyatına dahildir.

25.2. 25.1. maddesinde yer alan gider kalemlerinde artış olması ya da benzeri yeni gider kalemlerinin oluşması hallerinde, teklif edilen fiyatın bu tür artış ya da farkları karşılayacak payı içerdiği kabul edilir. Yüklenici, bu artış ve farkları ileri sürerek herhangi bir hak talebinde bulunamaz.

25.3. Sözleşme konusu işin bedelinin ödenmesi aşamasında doğacak Katma Değer Vergisi (KDV), ilgili mevzuatı çerçevesinde İdare tarafından yükleniciye ayrıca ödenir.

Madde 26- Geçici teminat

26.1. İstekliler, teklif ettikleri bedelin % 3'ünden az olmamak üzere kendi belirleyecekleri tutarda geçici teminat vereceklerdir. Teklif edilen bedelin % 3'ünden az oranda geçici teminat veren isteklinin teklifi değerlendirme dışı bırakılır.

26.2. İsteklinin ortak girişim olması halinde, toplam geçici teminat miktarı ortaklık oranına veya işin uzmanlık gerektiren kısımlarına verilen tekliflere bakılmaksızın ortaklardan biri veya birkaçı tarafından karşılanabilir.

26.3 Geçici teminat olarak sunulan teminat mektuplarında geçerlilik tarihi belirtilmelidir. Bu tarih. .../.../... tarihinden önce olmamak üzere istekli tarafından belirlenir

26.4. Kabul edilebilir bir geçici teminat ile birlikte verilmeyen teklifler, İdare tarafından istenilen katılma şartlarının sağlanamadığı gerekçesi ile değerlendirme dışı bırakılacaktır.

Madde 27 - Teminat olarak kabul edilecek değerler

27.1. Teminat olarak kabul edilecek değerler aşağıda sayılmıştır:

a) Tedavüldeki Türk Parası.

b) Bankalar tarafından verilen teminat mektupları.

c) Hazine Müsteşarlığınca ihraç edilen Devlet İç Borçlanma Senetleri ve bu senetler yerine düzenlenen belgeler.

27.2. (c) bendinde belirtilen senetler ve bu senetler yerine düzenlenen belgelerden nominal değere faiz dahil edilerek ihraç edilenler, anaparaya tekabül eden satış değeri üzerinden teminat olarak kabul edilir.

27.3. İlgili mevzuatına göre Türkiye'de faaliyette bulunmasına izin verilen yabancı bankaların düzenleyecekleri teminat mektupları ile Türkiye dışında faaliyette bulunan banka veya benzeri kredi kuruluşlarının kontrgarantisi üzerine Türkiye'de faaliyette bulunan bankaların düzenleyecekleri teminat mektupları da teminat olarak kabul edilir.

27.4. Teminat mektubu verilmesi halinde, bu mektubun kapsam ve şeklinin Kamu İhale Kurumu tarafından belirlenen esaslara ve standart formlara uygun olması gerekir. Bu esaslara ve standart formlara aykırı olarak düzenlenmiş teminat mektupları geçerli kabul edilmez.

27.5. Teminatlar, teminat olarak kabul edilen diğer değerlerle değiştirilebilir.

27.6. Her ne suretle olursa olsun, İdarece alınan teminatlar haczedilemez ve üzerine ihtiyati tedbir konulamaz.

Madde 28 - Geçici teminatın teslim yeri

28.1. Teminat mektupları, teklifle birlikte zarf içinde İdareye sunulur.

28.2. Teminat mektupları dışındaki teminatların Koza Altın İşletmeleri Muhasebe Servisine yatırılması ve makbuzlarının teklif zarfının içinde sunulması gerekir.

Madde 29- Geçici teminatın iadesi

29.1. İhale üzerinde bırakılan istekli ile ekonomik açıdan en avantajlı ikinci teklif sahibi istekliye ait teminat mektupları ihaleden sonra Saymanlık ya da Muhasebe Müdürlüklerine teslim edilir. Diğer isteklilere ait teminatlar ise hemen iade edilir.

29.2. İhale üzerinde bırakılan isteklinin geçici teminatı, gerekli kesin teminatın verilip sözleşmeyi imzalaması halinde iade edilir.

29.3. İhale üzerinde bırakılan istekli ile sözleşme imzalanması halinde, ekonomik açıdan en avantajlı ikinci teklif sahibine ait teminat, sözleşme imzalandıktan hemen sonra iade edilir.

IV- TEKLİFLERİN DEĞERLENDİRİLMESİ VE SÖZLEŞME YAPILMASINA İLİŞKİN HUSUSLAR

Madde 30 - Tekliflerin alınması ve açılması

30.1. Teklifler, davet mektubunda belirtilen ihale saatine kadar İdareye (tekliflerin sunulacağı yere) verilecektir.

30.2. İhale komisyonunca, tekliflerin alınması ve açılmasında aşağıda yer alan usul uygulanır:

30.2.1. İhale komisyonunca davet mektubunda belirtilen ihale saatinde ihaleye başlanır ve bu saate kadar kaç teklif verilmiş olduğu bir tutanakla tespit edilerek, hazır bulunanlara duyurulur.

30.2.2. İhale komisyonu teklif zarflarını alınış sırasına göre inceler. Bu incelemede, zarfın üzerinde isteklinin adı, soyadı veya ticaret unvanı, tebligata esas açık adresi, teklifin hangi işe ait olduğu, ihaleyi yapan İdarenin açık adresi ve zarfın yapıştırılan yerinin istekli tarafından imzalanıp kaşelenmesi veya mühürlenmesi hususlarına bakılır. Bu hususlara uygun olmayan zarflar bir tutanakla belirlenerek değerlendirmeye alınmaz.

30.2.3. (Değişik : 16/07/2011 -27996 R.G. / 33 md.) İhale konusu işin yaklaşık maliyeti açıklandıktan sonra zarflar isteklilerle birlikte hazır bulunanlar önünde alınış sırasına göre açılır. İsteklilerin belgelerinin eksik olup olmadığı ve teklif mektubu ile geçici teminatlarının usulüne uygun olup olmadığı kontrol edilir. Belgeleri eksik olan veya teklif mektubu ile geçici teminatı usulüne uygun olmayan istekliler tutanakla tespit edilir. İstekliler ve teklif bedelleri açıklanarak tutanağa bağlanır. Düzenlenen bu tutanaklar ihale komisyonunca imzalanır ve ihale komisyon başkanı tarafından onaylanmış bir sureti isteyenlere imza karşılığı verilir.

30.2.4. Bu aşamada hiçbir teklifin reddine veya kabulüne karar verilmez. Teklifi oluşturan belgeler düzeltilemez ve tamamlanamaz. Teklifler değerlendirilmek üzere ilk oturum kapatılır.

Madde 31- Tekliflerin değerlendirilmesi

31.1. Tekliflerin değerlendirilmesinde, öncelikle belgeleri eksik olduğu veya teklif mektubu ile geçici teminatı usulüne uygun olmadığı ilk oturumda tespit edilen isteklilerin tekliflerinin değerlendirme dışı bırakılmasına karar verilir.

31.2. Teklifin esasını değiştirecek nitelikte olmaması kaydıyla, sunulan belgelerde bilgi eksikliği bulunması halinde idarece belirlenen sürede bu eksik bilgilerin tamamlanması yazılı olarak istenir. Bu çerçevede, tamamlatılması istenen bilgi eksikliklerinin giderilmesine ilişkin belgelerin niteliği dikkate alınarak İdare tarafından iki iş gününden az olmamak üzere makul bir tamamlama süresi verilir. Belirlenen sürede bilgileri tamamlamayanların teklifleri değerlendirme dışı bırakılır ve geçici teminatları gelir kaydedilir.

31.3. Bilgi eksikliklerinin tamamlatılmasına ilişkin olarak, verilen süre içinde isteklilerce sunulan belgelerin ihale tarihinden sonraki bir tarihte düzenlenmesi halinde, bu belgeler, isteklinin ihale tarihi itibarıyla ihaleye katılım şartlarını sağladığını tevsik etmesi durumunda kabul edilecektir.

31.4. Bu ilk değerlendirme ve işlemler sonucunda belgeleri eksiksiz ve teklif mektubu ile geçici teminatı usulüne uygun olan isteklilerin tekliflerinin ayrıntılı değerlendirilmesine geçilir.

31.5. Bu aşamada, tekliflerin ihale dokümanında belirtilen şartlara uygun olup olmadığı ile birim fiyat teklif cetvellerinde aritmetik hata bulunup bulunmadığı incelenir. Uygun olmadığı belirlenen teklifler ile birim fiyat teklif cetvellerinde aritmetik hata bulunan teklifler değerlendirme dışı bırakılır.

Madde 32 - İsteklilerden tekliflerine açıklık getirmelerinin istenmesi

32.1. İhale komisyonunun talebi üzerine İdare, tekliflerin incelenmesi, karşılaştırılması ve değerlendirilmesinde yararlanmak üzere net olmayan hususlarla ilgili isteklilerden açıklama isteyebilir.

32.2. Bu açıklama, hiçbir şekilde teklif fiyatında değişiklik yapılması veya ihale dokümanında öngörülen kriterlere uygun olmayan tekliflerin uygun hale getirilmesi amacıyla istenilemez ve bu sonucu doğuracak şekilde kullanılamaz.

32.3. İdarenin yazılı açıklama talebine, istekli tarafından yazılı olarak cevap verilir.

Madde 33 - Aşırı düşük teklifler

33.1. İhale komisyonu, verilen teklifleri değerlendirdikten sonra, diğer tekliflere veya yaklaşık maliyete göre teklif fiyatı aşırı düşük olanları tespit eder. Bu teklifleri reddetmeden önce, belirlediği süre içinde teklif sahiplerinden, teklifte önemli olduğunu tespit ettiği bileşenler ile ilgili ayrıntıları yazılı olarak ister.

33.2. İhale komisyonu tarafından;

a) Yapım yönteminin ekonomik olması,

b) Seçilen teknik çözümler ve teklif sahibinin işin yerine getirilmesinde kullanacağı avantajlı koşullar,

c) Teklif edilen işin özgünlüğü,

hususlarında belgelendirilmek suretiyle yapılan yazılı açıklamalar dikkate alınarak, Kamu İhale Kurumu tarafından belirlenen kriterler çerçevesinde aşırı düşük teklifler değerlendirilir. Bu değerlendirme sonucunda, açıklamaları yeterli görülmeyen veya yazılı açıklamada bulunmayan isteklilerin teklifleri reddedilir.

33.3. İhale komisyonu tarafından, aşırı düşük tekliflerin tespiti, değerlendirilmesi ve ekonomik açıdan en avantajlı teklifin belirlenmesinde, sınır değer veya sorgulama kriterleri ya da ortalamalara ilişkin olarak Kamu İhale Kurum tarafından belirlenen kriterler esas alınacaktır.

Madde 34 - Bütün tekliflerin reddedilmesi ve ihalenin iptal edilmesi

34.1. İhale komisyonu kararı üzerine İdare, verilmiş olan bütün teklifleri reddederek ihaleyi iptal etmekte serbesttir. İdare bütün tekliflerin reddedilmesi nedeniyle herhangi bir yükümlülük altına girmez.

34.2. İhalenin iptal edilmesi halinde, bu durum bütün isteklilere gerekçesiyle birlikte derhal bildirilir

Madde 35 - Ekonomik açıdan en avantajlı teklifin belirlenmesi

35.1. Bu ihalede ekonomik açıdan en avantajlı teklif,

35.1.1 Birden fazla istekli tarafından teklif edilen fiyatın en düşük fiyat olması durumunda ekonomik açıdan en avantajlı teklifin belirlenmesinde istekliler tarafından sunulan iş deneyim belgeleri değerlendirilerek, belge tutarı daha fazla olan isteklinin teklifi ekonomik açıdan en avantajlı teklif olarak belirlenir. İş ortaklıklarında pilot ortağın, konsorsiyumlarda ise koordinatör ortağın iş deneyim belgesi esas alınacaktır

Madde 36 - İhalenin karara bağlanması

36.1. Yapılan değerlendirme sonucunda ihale komisyonu tarafından ihale, ekonomik açıdan en avantajlı teklifi veren istekli üzerinde bırakılır.

36.2. İhale komisyonu, yapacağı değerlendirme sonucunda gerekçeli bir karar alarak ihale yetkilisinin onayına sunar.

Madde 37 - İhale kararının onaylanması veya iptali

37.1. İhale kararı ihale yetkilisince onaylanmadan önce, ihale üzerinde kalan istekli ile varsa ekonomik açıdan en avantajlı ikinci teklif sahibi isteklinin ihalelere katılmaktan yasaklı olup olmadığı Kurumdan teyit edilerek buna ilişkin belge ihale kararına eklenir.

37.2. Yapılan teyit işlemi sonucunda; her iki isteklinin de yasaklı çıkması durumunda ihale iptal edilir.

37.3. İhale yetkilisi, karar tarihini izleyen en geç beş iş günü içinde ihale kararını onaylar veya gerekçesini açıkça belirtmek suretiyle iptal eder.

37.4. İhale; kararın ihale yetkilisince onaylanması halinde geçerli, iptal edilmesi halinde ise hükümsüz sayılır.

Madde 38 - Kesinleşen ihale kararının bildirilmesi

38.1. (Değişik : 16/07/2011 -27996 R.G. / 34 md.) Kesinleşen ihale kararı, ihale yetkilisi tarafından onaylandığı günü izleyen en geç üç gün içinde, ihale üzerinde bırakılan dahil, ihaleye teklif veren bütün isteklilere, 36.2. maddesi uyarınca alınan ihale komisyonu kararı ile birlikte bildirilir.

38.2. İhale kararının ihale yetkilisi tarafından iptal edilmesi durumunda da isteklilere gerekçeleri belirtilmek suretiyle bildirim yapılır.

38.3. İhale sonucunun bütün isteklilere bildiriminden itibaren on gün geçmedikçe sözleşme imzalanmayacaktır.

Madde 39 - Sözleşmeye davet

39.1. 4734 sayılı Kanunun 41 inci maddesinde belirtilen sürenin bitimini, ön mali kontrol yapılması gereken hallerde ise bu kontrolün tamamlandığı tarihi izleyen günden itibaren üç gün içinde, ihale üzerinde bırakılan istekli sözleşmeye davet edilir. Bu davet yazısında, tebliğ tarihini izleyen on gün içinde yasal yükümlüklerini yerine getirmek suretiyle sözleşmeyi imzalaması hususu bildirilir. Yabancı istekliler için bu süreye oniki gün ilave edilecektir.

39.2. İsteklinin, bu davet yazısının bildirim tarihini izleyen on gün içinde yasal yükümlülüklerini yerine getirerek sözleşmeyi imzalaması zorunludur.

Madde 40 - Kesin teminat

40.1. İhale üzerinde bırakılan istekliden sözleşme imzalanmadan önce, ihale bedelinin % 6'sı oranında kesin teminat alınır.

40.2. Ancak, 4734 sayılı Kanunun 38 inci maddesine göre yapılan aşırı düşük teklif sorgulaması sonucunda, ihalenin sınır değerin altında teklif veren isteklilerden biri üzerinde bırakılmasına karar verilmesi halinde ise kesin teminat, sınır değerin yüzde altısı oranında alınır.

40.3. İhale üzerinde bırakılan isteklinin ortak girişim olması halinde, toplam kesin teminat miktarı, ortaklık oranına veya işin uzmanlık gerektiren kısımlarına verilen teklif tutarlarına bakılmaksızın, ortaklardan biri veya birkaçı tarafından karşılanabilir.

Madde 41 - Sözleşme yapılmasında isteklinin görev ve sorumluluğu

41.1. İhale üzerinde bırakılan istekli, sözleşmeye davet yazısının bildirim tarihini izleyen on gün içinde, ihale tarihinde 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e) ve (g) bentlerinde sayılan durumlarda olmadığına dair belgeleri ile kesin teminatı verip diğer yasal yükümlülüklerini de yerine getirerek sözleşmeyi imzalamak zorundadır. Sözleşme imzalandıktan sonra geçici teminat iade edilecektir.

41.2. İhale üzerinde bırakılan isteklinin ortak girişim olması halinde, ihale tarihinde 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e) ve (g) bentlerinde sayılan durumlarda olunmadığına ilişkin belgeleri her bir ortak ayrı ayrı sunmak zorundadır.

41.3. İhale üzerinde bırakılan yabancı istekliler, ihale tarihinde 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e) ve (g) bentlerinde sayılan durumlarda olmadığına dair belgelerden, kendi ülkelerindeki mevzuat uyarınca dengi olan belgeleri sunacaklardır. Bu belgelerin, isteklinin tabi olduğu mevzuat çerçevesinde denginin bulunmaması ya da düzenlenmesinin mümkün olmaması halinde, bu duruma ilişkin yazılı beyanlarını vereceklerdir. Ancak bu husus, yabancı gerçek kişi isteklinin uyruğunda bulunduğu ya da yabancı tüzel kişi isteklinin şirket merkezinin bulunduğu ülkenin Türkiye'deki temsilciliklerine veya o ülkelerdeki Türkiye Cumhuriyeti konsolosluklarına teyit ettirilecektir.

41.4. Mücbir sebep halleri dışında, ihale üzerinde bırakılan isteklinin, sözleşmeyi imzalamaması durumunda geçici teminatı gelir kaydedilerek hakkında 4734 sayılı Kanunun 58 inci maddesi hükümleri uygulanır. Ancak, **(*)** 4734 sayılı Kanunun 10 uncu maddesi kapsamında taahhüt altına alınan durumu tevsik etmek üzere İdareye sunulan belgelerin taahhüt edilen duruma aykırı hususlar içermesi halinde, geçici teminatı gelir kaydedilmekle birlikte, hakkında yasaklama kararı verilmez.

Madde 42 - Ekonomik açıdan en avantajlı ikinci teklif sahibine bildirim

42.1. İhale üzerinde bırakılan istekliyle sözleşmenin imzalanamaması durumunda, ekonomik açıdan en avantajlı ikinci teklif fiyatının ihale yetkilisince uygun görülmesi kaydıyla, bu teklif sahibi istekliyle sözleşme imzalanabilir. Bu durumda, sözleşmenin imzalanacağı tarihte ekonomik açıdan en avantajlı ikinci teklif sahibi isteklinin ihalelere katılmaktan yasaklı olup olmadığı teyit edilerek ihale sonucu Kuruma gönderilir.

42.2. Ekonomik açıdan en avantajlı ikinci teklif sahibi istekliye, 4734 sayılı Kanunun 42 nci maddesinde belirtilen sürenin bitimini izleyen üç gün içinde sözleşme imzalamaya davet edilir.

42.3. Ekonomik açıdan en avantajlı ikinci teklif sahibi istekli, sözleşmeye davet yazısının bildirim tarihini izleyen on gün içinde, ihale tarihinde 4734 sayılı Kanunun 10 uncu maddesinin dördüncü fıkrasının (a), (b), (c), (d), (e) ve (g) bentlerinde sayılan durumlarda olmadığına dair belgeleri ile kesin teminatı verip diğer yasal yükümlülüklerini de yerine getirerek sözleşmeyi imzalamak zorundadır. Sözleşme imzalandıktan sonra geçici teminat iade edilecektir

42.4. Mücbir sebep halleri dışında, ekonomik açıdan en avantajlı ikinci teklif sahibi isteklinin sözleşmeyi imzalamaması durumunda geçici teminatı gelir kaydedilerek hakkında 4734 sayılı Kanunun 58 inci maddesi hükümleri uygulanır. Ancak, **(*)** 4734 sayılı Kanunun 10 uncu maddesi kapsamında taahhüt altına alınan durumu tevsik etmek üzere İdareye sunulan belgelerin

taahhüt edilen duruma aykırı hususlar içermesi halinde, geçici teminatı gelir kaydedilmekle birlikte, hakkında yasaklama kararı verilmez.

42.5. Ekonomik açıdan en avantajlı ikinci teklif sahibiyle de sözleşmenin imzalanamaması durumunda, ihale iptal edilir.

(* "diğer yasal yükümlülükler yerine getirildiği halde" ibaresi 16/7/2011 tarihli ve 27996 sayılı Resmi Gazete'de yayımlanan Yönetmeliğin 24. maddesi ile yürürlükten kaldırılmıştır.)

Madde 43 - Sözleşme yapılmasında idarenin görev ve sorumluluğu

43.1. İdarenin sözleşme yapılması konusunda yükümlülüğünü yerine getirmemesi halinde istekli, 4734 sayılı Kanunun 42 ve 44 üncü maddelerinde yer alan sürenin bitimini izleyen günden itibaren en geç beş gün içinde, on gün süreli bir noter ihbarnamesi ile durumu İdareye bildirmek şartıyla, taahhüdünden vazgeçebilir.

43.2. Bu takdirde geçici teminatı iade edilir ve istekli teminat vermek için yaptığı belgelendirilmiş giderleri isteyebilir.

Madde 44 - İhalenin sözleşmeye bağlanması

44.1 İdare tarafından ihale dokümanında yer alan şartlara uygun olarak hazırlanan sözleşme, ihale yetkilisi ve yüklenici tarafından imzalanır ve sözleşmenin İdarece onaylı bir örneği yükleniciye verilir. Yüklenici tarafından sözleşmenin birden fazla nüsha olarak düzenlenmesi talep edilirse, talep edilen sayı kadar sözleşme nüshası düzenlenir.

44.4. İdare ile İstekli arasında imzalanan sözleşmenin en geç (3) üç işgünü içerisinde notere tescil ve onayı gereklidir. Üç iş günü içerisinde noterce tescil edilip onaylanmayan sözleşmeler yok hükmündedir.

44.5. Yüklenicinin iş ortaklığı veya konsorsiyum olması halinde, hazırlanan sözleşme bütün ortaklar tarafından imzalanır ve sözleşmenin İdarece onaylı birer örneği ortaklara verilir. Ortaklar tarafından sözleşmenin birden fazla nüsha olarak düzenlenmesi talep edilirse, talep edilen sayı kadar sözleşme nüshası düzenlenir.

44.6. Sözleşmenin imzalanmasına ilişkin her türlü vergi, resim ve harçlar ile diğer sözleşme giderleri yükleniciye aittir.

V-DEĞİŞİKLİK: SÖZLEŞMENİN UYGULANMASI VE DİĞER HUSUSLAR

Madde 45- Sözleşmenin uygulanmasına ilişkin hususlar

45.1. Sözleşmenin uygulanmasına ilişkin aşağıdaki hususlar sözleşme tasarısında düzenlenmiştir.

a) İhale konusu işin başlama ve bitirme tarihleri ile gecikme halinde alınacak cezalar,

b) Ödeme yeri ve şartlarıyla avans verilip verilmeyeceği, verilecekse şartları ve miktarı,

c) Süre uzatımı verilebilecek haller ve şartları ile sözleşme kapsamında yaptırılabilecek iş artışları ile iş eksilişi durumunda karşılıklı yükümlülükler,

ç) İş ve işyerinin sigortalanması ile yapı denetimi ve sorumluluğuna ilişkin şartlar.

d) Denetim, muayene ve kabul işlemlerine ilişkin şartlar.

e) Anlaşmazlıkların çözüm şekli.

45.2. Planlanan ödenek dilimleri

45.2.1 Bu iş için planlanan yıllık ödenek dilimleri aşağıdadır;

YILLAR	ÖDENEK (%)
.....	.....
.....	.....
.....	.....

45.3- Fiyat farkı

45.3.1 Fiyat farkı hesaplanmayacaktır. Ancak, mücbir sebepler veya idarenin kusuru nedeniyle işin bitim tarihinin süre uzatımı verilmek suretiyle uzatılması halinde, ihale tarihinde yürürlükte bulunan fiyat farkı kararnamesi esas alınarak fiyat farkı hesaplanacaktır.

VI- DİĞER HUSUSLAR

Madde 46- Diğer hususlar

46.1. İDARE 4734 ve 4735 sayılı kanun kapsamındaki Kamu İhale Yönetmeliklerine tabii değildir. Bu ihalede Kamu İhale Kurumunun yönetmelikleri kullanılacaktır, ancak gerekli görülen yer, zaman ve hallerde mevzuata ilişkin İDARE'nin yorumu geçerlidir

KOZA ALTIN İŞLETMELERİ

HİMMETDEDE PROJESİ

GENEL TEKNİK ŞARTNAMESİ

1. AMAÇ

   Bu şartnamenin amacı; Kayseri Himmetdede mevkiinde kurulacak ve 11000ton/gün tüvonan cevher işleyerek altın üretimi yapacak tesisin yapılmasının şartları tanımlamaktır.

2. PROSESİN TANIMI

   Altın cevheri sahasından, açık ocak işletmeciliği ile üretilen günlük 11.000 ton cevher kırılıp elenerek 0.95 cm boyutuna getirilir, kireç ve çimento ilavesiyle aglomere edilir, yığın liçine alanında 4 m yükseklikte yığınlar oluşturulur, sodyum siyanür ile spreyleme sonucu ortaya çıkan çözelti, CIC prosesinden geçirilir ve elektrolizle işlenir, elektrliz çamuru filtrlerden geçirierek dore fırınına beslenerek. altın/gümüş külçeler üretilir.

3. KAPSAM

   Burada tanımlanan iş bakir sahada yapılacak olup tesisle ilgili bu şartname kapsamında tanımlanan ve/veya tesisin çalışmasına engel olacak tüm altyapı ve üst yapı sistemlerini içerecek şekilde dizayn edilecektir. Himmetdede altın tesisine ait açık ocaktan cevherin üretilmesinden, külçe altın/gümüş üretimine kadar (mevcut detay mühendislik çalışmaları baz alınarak) tüm;

   Uygulama ve Detay Mühendislik hizmetleri
   P&I diyagramı
   Ekipman spesifikasyonları
   Yerleşim ve yük çizimleri
   Temel projeleri
   Boru sınıfları ve yerleşimi
   Elektrik – otomasyon projeleri
   Enstrüman spesifikasyonları
   Montaj, İşletme ve Bakım Talimatları
   2 yıllık İşletme dönemi için yedek parça listesileri
   İnşaat İşleri, kazı, bina, yol, altyapı hizmetleri,
   Ekipman temini, sahada montajı ,
   Mekanik işler, imalat ve montaj, boya ve izolasyon işleri,
   Elektrik işleri,
   Otomasyon işleri'nin tüm aşamalarının yaptırılmasını işlerini kapsamaktadır.

4. TESİSİN ÜNİTELERİ:

   Tesise ait üniteler ekli tablolarda mevcut alanlardan, işlevlerden ve ekipmanlardan oluşacaktır. Bu tablolar tesisin tam kapasite ve randımanla çalışmasını sağlayacak minimum gereksinimlerden oluşmaktadır. Tesisin çalışmasına katkı yapacak her türlü ilave iş ve ünite bu kapsamın içerisindedir.

   100- KIRMA/ELEME ALANI
   200- ÇİMENTO/KİREÇ DEPOLAMA ALANI
   300- AGLOMERASYON ALANI
   400- YIĞIN LİÇİ ALANI
   500- ÇÖZELTİ HAVUZLAR ALANI
   600- ALTIN KAZANMA TESİSİ ALANI

   Ek:1 (Bakınız Ekipman Listesi Excel Tablosu) Mevcut excell tablosuna ilave olarak verilecek çizimler (inşaat, mekanik, elek.&otomasyon) Koza Altın İşletmeleri tarafından belirlenerek bu şartnameye eklenecektir.

5. STANDARLAR

   Bu Şartname ve eklerinde tanımlanan tesisin mühendislik, inşaat, mekanik, elektrik ve otomasyon kurulum, temin, montaj ve uygulamalarının gerçekleştirilmesinde özel olarak Ekte Şartname olarak verilen veya bahse konu edilen ilgili mevzuat ve genel olarak TSE, TSEK, ASTM, EC ve DIN norm ve standartlarına göre işlem yapılması zorunludur.

6. ŞARTNAMENİN EKLERİ
   a) Geoteknik Rapor
   b) Deprem Bölgelerinde Yapılacak Binalar Hk. Yönetmelik (06.03.2007)
   c) TS 500 Betonarme Yapılar
   d) TS 648 Çelik Yapıların Hesap ve Yapım Kuralları
   e) TS 498 Yapılarda Kullanılacak Yüklerin Hesap Esasları
   f) Genel Kaynak Şartnamesi
   g) Genel Borulama Şartnamesi
   h) Genel Boya Şartnamesi
   i) Genel İzolasyon Şartnamesi

KOZA ALTIN İŞLETMELERİ A.Ş

ANKARA

08.06.2012 tarhli yazınız ile istenmiş olan Kayseri Himmetdede altın madeni ve proses tesisinin yapımı işine ait fiyat teklifimiz ekte sunulmaktadır.

Saygılarımızla,

HIMMETDEDE PROCESS PLANT CAPITAL COST (USD)		
Infrastructure	Koza	6.430.000
CIC & Reagent Plant	Koza	9.000.000
Crusher Plant	Metso	44.950.000
Heap Leach Pad	SRK	63.100.000
Electricity/ Automation	Koza	2.450.000
Indirect Costs	Koza	17.070.000
Total ($)		**143.000.000**

HIMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS (USD)	
Main Powerline	1.100.000
Water Supply	700.000
Transportation and Service Roads	500.000
Hedge and Barriers	430.000
Ligthing	300.000
Security	290.000
Offices and Buildings	800.000
Engineering	310.000
Earthworks	2.000.000
Total ($)	6.430.000

HIMMETDEDE CIC & REAGENTS PLANT CAPITAL COSTS (USD)	
CIC Plant Equipments	2.700.000
Reagents Equipments	190.000
Concrete and Steel Construction	2.900.000
Electricity Automation	1.750.000
Engineering	500.000
Project Management	350.000
Material Packing	100.000
Mechanical Supervision	350.000
Electrical Supervision	90.000
Total $	8.930.000

HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS

	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530
3	Primary Grizzly LH2148-1g	1	540.459	540.459
4	C160 Jaw Crusher	1	577.048	577.048
5	EF 2496-2(modular Screen)	1	582.884	582.884
6	EF 2496-2(modular Screen)	1	582.884	582.884
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250
9	Electromechanical Vibrating Feeder	2	8.542	17.084
10	GP500S Secondary Cone Crusher	2	492.008	984.016
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000
13	HP500 Cone Crusher	4	487.552	1.950.206
14	Engineering	1	37.500	37.500
15	Mechanical Project Management	1	37.500	37.500
16	Mechanical Supervision	1	37.316	37.316
17	Mechanical Commisionning	1	30.633	30.633
18	Agglomerator	3	1.225.000	3.675.000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750
	Total ($)			16.285.939 -

HIMMETDEDE CRUSHING PLANT STEEL CONSTRUCTION, CONVEYING AND ELECTRICITY COSTS				
1	Steel construction		13.100.000	
2	Conveyors		7.500.062	
3	Electiricity Automation		4.240.000	
3	Engineering		900.000	
4	Project Management		800.000	
5	Material Packing		164.000	
6	Mechanical Supervision		1.930.000	
7	Electrical Supervision		30.000	
Total ($)				28.664.062

HIMMETDEDE CRUSHING CIRCUIT COSTS				
1	Steel construction,conveying and electricity			28.664.062
2	Equipment Costs			16.285.938
Total ($)				44.950.000

HIMMETDEDEPROCESS PLANT PROJECT INDIRECT COSTS (USD)	
Construction Indirect	1.412.117
Insurance	1.245.985
Spare Pats (VAT)	2.907.299
First Fills	747.591
EPCM Services	6.437.591
Engineering QA/QC	1.245.985
Plant Mobile Equipment	664.526
Consultants	622.993
Commissioining & Start-Up	539.927
Freight	1.245.985
Total ($)	17.070.000

HIMMETDEDE PROCESS PLANT CAPITAL COST (USD)		
Infrastructure	Koza	**6.430.000**
CIC & Reagent Plant	Koza	**9.000.000**
Crusher Plant	Metso	**44.950.000**
Heap Leach Pad	SRK	**63.100.000**
Electricity/ Automation	Koza	**2.450.000**
Indirect Costs	Koza	**17.070.000**
Total ($)		**143.000.000**

LOTUS MÜTEAHHİTLİK PLANLAMA İNŞAAT MÜHENDİSLİK
ENERJİ MADENCİLİK ve TAŞIMACILIK A.Ş.
Oğuzlar Mah. 1370. Sok. No:18 Balgat-Çankaya/ANKARA
Tel: (0312) 284 09 48 - 49 Faks: (0312) 284 09 88-89
BAŞKENT VD No. 009 041 9723

HIMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS (USD)	
Main Powerline	1.100.000
Water Supply	700.000
Transportation and Service Roads	500.000
Hedge and Barriers	430.000
Ligthing	300.000
Security	290.000
Offices and Buildings	800.000
Engineering	310.000
Earthworks	2.000.000
Total ($)	6.430.000

HIMMETDEDE CIC &REAGENTS PLANT CAPITAL COSTS (USD)	
CIC PlantEquipments	2.700.000
Reagents Equipments	190.000
Concrete and Steel Construction	2.900.000
Electricity Automation	1.750.000
Engineering	500.000
Project Management	350.000
Material Packing	100.000
Mechanical Supervision	350.000
Electrical Supervision	90.000
Total $	8.930.000

LOTUS MÜTEAHHİTLİK PLANLAMA İNŞAAT MÜHENDİSLİK
ENERJİ MADENCİLİK ve TAŞIMACILIK A.Ş.
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Tel: (0312) 284 09 48 - 49 Fax: (0312) 284 09 88-89
BAŞKENT V.D. No: 600 284 1973

HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS

	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530
3	Primary Grizzly LH2148-1g	1	540.459	540.459
4	C160 Jaw Crusher	1	577.048	577.048
5	EF 2496-2(modular Screen)	1	582.884	582.884
6	EF 2496-2(modular Screen)	1	582.884	582.884
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250
9	Electromechanical Vibrating Feeder	2	8.542	17.084
10	GP500S Secondary Cone Crusher	2	492.008	984.016
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000
13	HP500 Cone Crusher	4	487.552	1.950.206
14	Engineering	1	37.500	37.500
15	Mechanical Project Management	1	37.500	37.500
16	Mechanical Supervision	1	37.316	37.316
17	Mechanical Commisionning	1	30.633	30.633
18	Agglomerator	3	1.225.000	3.675.000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750
	Total ($)			16.285.939 -

LOTUS MÜTEAHHİTLİK PLANLAMA İNŞ. MÜH. İŞLİK
ENERJİ MADENCİLİK ve TAŞIMACILIK A.Ş.
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Tel: (0312) 284 09 48 - 49 Fax: (0312) 284 09 88-89
BAŞKENT V.D. No:609 004 5728

	HIMMETDEDE CRUSHING PLANT STEEL CONSTRUCTION, CONVEYING AND ELECTRICITY COSTS			
			₺	
1	Steel construction		13.100.000	
2	Conveyors		7.500.062	
3	Electiricity Automation		4.240.000	
3	Engineering		900.000	
4	Project Management		800.000	
5	Material Packing		164.000	
6	Mechanical Supervision		1.930.000	
7	Electrical Supervision		30.000	
	Total ($)			28.664.062

	HIMMETDEDE CRUSHING CIRCUIT COSTS			
1	Steel construction,conveying and electricity			28.664.062
2	Equipment Costs			16.285.938
	Total ($)			44.950.000

LOTUS MÜTEAHHİTLİK PLANLAMA İNŞAAT MÜHENDİSLİK
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Tel: (0312) 284 09 48 - 49 Fax: (0312) 284 09 88-89
BAŞKENT V.D. No: 641 9723

HIMMETDEDEPROCESS PLANT PROJECT INDIRECT COSTS (USD)	
Construction Indirect	1.412.117
Insurance	1.245.985
Spare Pats (VAT)	2.907.299
First Fills	747.591
EPCM Services	6.437.591
Engineering QA/QC	1.245.985
Plant Mobile Equipment	664.526
Consultants	622.993
Commissioining & Start-Up	539.927
Freight	1.245.985
Total ($)	17.070.000

Oğuzlar Mahallesi 1370. Sok. No:18 Balgat, Çankaya – Ankara/ TÜRKİYE
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Lotus Müteahhitlik Planlama İnşaat Mühendislik
Enerji Madencilik ve Taşımacılık A.Ş.

KOZA ALTIN İŞLETMELERİ A.Ş
ANKARA

08.06.2012 tarİhli yazınız ile istenmiş olan Kayseri Himmetdedealtın madeni ve proses tesisinin yapımı işine ait fiyat teklifimiz Ekte sunulmaktadır.

Saygılarımızla,

LOTUS MÜTEAHHİTLİK PLANLAMA İNŞAAT MÜHENDİSLİK
ENERJİ MADENCİLİK ve TAŞIMACILIK A.Ş.
Oğuzlar Mah. 1370. Sok. No:18 Balgat-Çankaya/ANKARA
Tel: (0312) 284 09 48-49 Fax: (0312) 284 09 88-89
BAŞKENT V.D. No. 605 001 9723

Oğuzlar Mahallesi 1370. Sok. No:18 Balgat, Çankaya – Ankara/ TÜRKİYE
Tel: +90 (312) 284 09 48-49 Faks: +90 (312) 284 09 88-89
info@lotusas.com • www.lotusas.com

KOZA ALTIN İŞLETMELERİ A.Ş

ANKARA

08.06.2012 Tarhli yazınız ile istenen Kayseri Himmetdede altın madeni ve process tesisinnin mekanik,elektrik, proses ve otomasyon işleri dahil anahtar teslimi götürü bedel esasına göre yapımı için hazırlanan teklifimiz ektedir

Saygılarımızla,

ENDER MÜHENDİSLİK
İNŞAAT ve TİC. A.Ş.
Çetin Emeç Bulvarı İnşaat Sit. Bilgi/ANKARA
Tel: 0312 [illegible] Fax: 0312 284 25 24
Başkent V.D. 334 01[illegible]

HIMMETDEDE PROCESS PLANT CAPITAL COST (USD)		
Infrastructure	Koza	**5.945.000**
CIC & Reagent Plant	Koza	**7.869.000**
Crusher Plant	Metso	**42.017.000**
Heap Leach Pad	SRK	**59.000.000**
Electricity/ Automation	Koza	**2.350.000**
Indirect Costs	Koza	**16.819.000**
Total ($)		**134.000.000**

ENDER MÜHENDİSLİK
İNŞAAT TİCARET A.Ş.
Çetin Emeç Bulvarı No: 62 Balgat/ANKARA
Tel: 0312 284 [illegible] 00 Fax: 0312 284 20 24
Başkent V.D. 334 017 [illegible]33

HIMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS (USD)	
Main Powerline	**1.011.345**
Water Supply	**713.185**
Transportation and Service Roads	**534.890**
Hedge and Barriers	**356.595**
Ligthing	**297.160**
Security	**237.630**
Offices and Buildings	**832.550**
Engineering	**713.184**
Earthworks	**1.253.461**
Total ($)	**5.950.000**

ENDER MÜHENDİSLİK
İNŞAAT ve TİCARET A.Ş.
Çetin Emeç Bulvarı No: 62 Balgat/ANKARA
Tel: 0312 284 21 60 Fax: 0312 284 25 24
Başkent V.D. 334 017 6533

HIMMETDEDE CIC &REAGENTS PLANT CAPITAL COSTS (USD)	
CIC Plant Equipments	**1.010.344**
Reagents Equipments	**713.184**
Concrete and Steel Construction	**534.888**
Electricity Automation	**356.592**
Engineering	**297.160**
Project Management	**237.728**
Material Packing	**832.048**
Mechanical Supervision	**713.184**
Electrical Supervision	**1.963.056**
Total $	**5.945.000**

ENDER MÜHENDİSLİK
İNŞAAT ve TİCARET A.Ş.
Çetin Emeç Bulvarı No: 62 Balgat/ANKARA
Tel: 0312 284 33 66 Fax: 0312 284 25 24
Başkent V.D. 334 041 [illegible]

HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS

	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530
3	Primary Grizzly LH2148-1g	1	540.459	540.459
4	C160 Jaw Crusher	1	577.048	577.048
5	EF 2496-2(modular Screen)	1	582.884	582.884
6	EF 2496-2(modular Screen)	1	582.884	582.884
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250
9	Electromechanical Vibrating Feeder	2	8.542	17.084
10	GP500S Secondary Cone Crusher	2	492.008	984.016
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000
13	HP500 Cone Crusher	4	487.552	1.950.206
14	Engineering	1	37.500	37.500
15	Mechanical Project Management	1	37.500	37.500
16	Mechanical Supervision	1	37.316	37.316
17	Mechanical Commisionning	1	30.633	30.633
18	Agglomerator	3	1.225.000	3.675.000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750
			Total ($)	16.285.939

ENDER MÜHENDİSLİK
İNŞAAT ve TİCARET A.Ş.
Çetin Emeç Bulvarı No: 6 Balgat/ANKARA
Tel: 0312 284 [illegible] Faks: 0312 284 25 24
Başkent VD. 034 017 6088

HIMMETDEDE CRUSHING PLANT STEEL CONSTRUCTION, CONVEYING AND ELECTRICITY COSTS				
1	Steel construction		11.300.000	
2	Conveyors		7.100.062	
3	Electiricity Automation		3.720.000	
3	Engineering		950.000	
4	Project Management		780.000	
5	Material Packing		161.000	
6	Mechanical Supervision		1.700.000	
7	Electrical Supervision		20.000	
Total ($)				25.731.062

HIMMETDEDE CRUSHING CIRCUIT COSTS				
1	Steel construction,conveying and electricity			25.731.062
2	Equipment Costs			16.285.938
Total ($)				42.017.000

ENDER MÜHENDİSLİK
İNŞAAT ve TİCARET A.Ş.
Çetin Emeç Bulvarı [illegible] Sk. Balgat/ANKARA
Tel: 0312 284 [illegible] Fax: 0312 284 21 24
Başkent [illegible]

HIMMETDEDEPROCESS PLANT PROJECT INDIRECT COSTS (USD)	
Construction Indirect	**1.391.353**
Insurance	**1.227.664**
Spare Pats (VAT)	**2.864.550**
First Fills	**736.599**
EPCM Services	**6.342.932**
Engineering QA/QC	**1.227.664**
Plant Mobile Equipment	**654.754**
Consultants	**613.832**
Commissioining & Start-Up	**531.988**
Freight	**1.227.664**
Total ($)	**16.819.000**

ENDER MÜHENDİSLİK
İNŞAAT ve TİCARET A.Ş.
Çetin Emeç Bulvarı No: Eryaman/ANKARA
Tel: 0312 284 31 00 Fax: 0312 284 25 24
Başkent V.D. 334 617 6638

İLCİ
İnşaat Sanayi ve Ticaret A.Ş.

ANAHTAR TESLİMİ GÖTÜRÜ BEDEL TEKLİF MEKTUBU

KOZA ALTIN İŞLETMELERİ A.Ş.
ANKARA

22.06.2012

İhalenin adı	HİMMET DEDE ALTIN MADENİ PROJESİ
Teklif sahibinin adı ve soyadı/ ticaret unvanı	İLCİ İNŞAAT SANAYİ VE TİCARET A.Ş.
Uyruğu	TÜRKİYE CUMHURİYETİ
TC Kimlik Numarası[1]	---
Vergi Kimlik Numarası	SEĞMENLER V.D. 471 004 4505
Tebligat adresi	BİRLİK MAH. 415. CAD. 406. SOK. NO.11 GAZİOSMANPAŞA–ANKARA
Telefon ve Faks numarası	0 312 495 06 06 0 312 495 97 66
Elektronik posta adresi (varsa)	ilci@ilci.com.tr

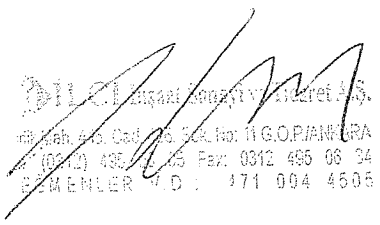
1) Yukarıda adı yer alan ihaleye ilişkin ihale dokümanını oluşturan tüm belgeler tarafımızdan okunmuş, anlaşılmış ve kabul edilmiştir. Teklif fiyata dahil olduğu belirtilen tüm masraflar ve teklif geçerlilik süresi de dahil olmak üzere ihale dokümanında yer alan tüm düzenlemeleri dikkate alarak teklif verdiğimizi beyan ediyoruz.

2) İhale konusu işin tamamını Katma Değer Vergisi hariç toplam **132.000.000 USD $ (Yüzotuzikimilyon Amerikan Doları)** anahtar teslimi götürü bedel üzerinden yapmayı kabul ve taahhüt ederiz.

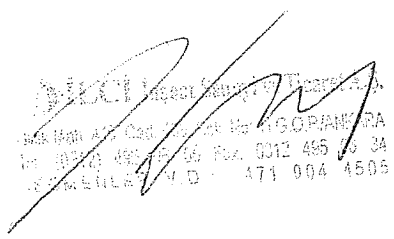
İLCİ İnşaat San. Ve Tic. A.Ş.
Kenan DEMİR
Kanuni Vekil

İLCİ İnşaat Sanayi ve Ticaret A.Ş.
Birlik Mah. 415. Cad. 406. Sok. No.11 ÇANKAYA/ANKARA
Tel: 0312 495 06 06 Fax: 0312 495 97 66
SEĞMENLER V.D. 471 004 4505

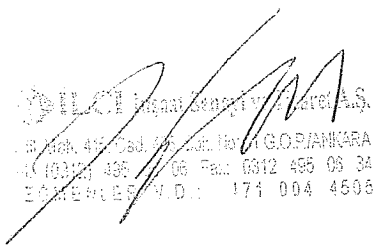
HİMMETDEDE PROCESS PLANT CAPITAL COST		
Infrastructure	Koza	6.300.000
CIC& Reagent Plant	Koza	8.000.000
Crusher Plant	Metso	41.480.000
Heap Leach Pad	SRK	58.200.000
Electricity /Automation	Koza	2.250.000
Indirect Costs	Koza	15.770.000
Total ($)		**132.000.000**



HİMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS	
Main Powerline	1.069.776
Water Supply	755.136
Transportation and Service Roads	566.352
Hedge and Barriers	377.568
Ligthing	314.640
Security	251.712
Offices and Building	880.992
Engineering	755.136
Earthworks	1.328.688
Total ($)	**6.300.000**

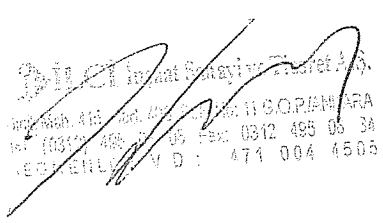


HİMMETDEDE CIC&REAGENTS PLANT CAPITAL COCTS	
CIC Plant Equipments	2.454.440
Reagents Equipment	129.380
Concrete and Steel Construction	2.753.100
Electricity Automation	1.573.200
Engineering	384.560
Project Management	305.900
Material Packing	79.640
Mechanical Supervision	305.900
Electrical Supervision	13.880
Total ($)	**8.000.000**



HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS

	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530
3	Primary Grizzly LH2148-1g	1	540.459	540.459
4	C160 Jaw Crusher	1	577.048	577.048
5	EF 2496-2(modular Screen)	1	582.884	582.884
6	EF 2496-2(modular Screen)	1	582.884	582.884
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250
9	Electromechanical Vibrating Feeder	2	8.542	17.084
10	GP500S Secondary Cone Crusher	2	492.008	984.016
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000
13	HP500 Cone Crusher	4	487.552	1.950.206
14	Engineering	1	37.500	37.500
15	Mechanical Project Management	1	37.500	37.500
16	Mechanical Supervision	1	37.316	37.316
17	Mechanical Commisionning	1	30.633	30.633
18	Agglomerator	3	1.225.000	3.675.000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750
	Total ($)			16.285.939



VIMETDEDE CRUSHING PLANT STEEL CONSTRUCTION,CONVEYING AND ELECTRICIT		
1	Steel Construction	10.764.865
2	Conveyors	7.123.500
3	Electricity Automation	3.736.020
4	Engineering	949.840
5	Project Management	791.530
6	Material Packing	158.306
7	Mechanical Supervision	1.650.000
8	Electrical Supervision	20.000
Total($)		**25.194.061**

HİMMETDEDE CRUSHING CIRCUIT COSTS		
1	Steel Construction, Conveying and Electricit	25.194.061
2	Equipment Costs	16.285.939
Total($)		**41.480.000**

HİMMETDEDE PROCESS PROJECT INDIRECT COSTS	
Construction Indirect	1.304.574
Insurance	1.151.095
Spare Pats (VAT)	2.685.888
First Fills	690.657
EPCM Services	5.947.324
Engineering QA/QC	1.151.095
Plant Mobile Equipment	613.917
Consultants	575.547
Commissioining & Start-Up	498.808
Freight	1.151.095
Total($)	15.770.000

Akademi
İnşaat Proje ve
Taahhüt A.Ş.

20 Haziran 2012

KOZA ALTIN İŞLETMELERİ A.Ş.

ANKARA

08.06.2012 Tarihli yazınız ile istenen Kayseri Himmetdede altın madeni ve process tesisinin mekanik, elektrik, proses ve otomasyon işleri dahil anahtar teslimi götürü bedel esasına göre yapımı için hazırlanan teklifimiz ektedir.

Saygılarımızla,

İK AKADEMİ İNŞAAT
PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Ostim Vergi Dairesi: 582 047 6450

HIMMETDEDE PROCESS PLANT CAPITAL COST (USD)		
Infrastructure	Koza	5.950.000
CIC & Reagent Plant	Koza	7.750.000
Crusher Plant	Metso	40.150.000
Heap Leach Pad	SRK	55.750.000
Electricity/ Automation	Koza	2.500.000
Indirect Costs	Koza	18.400.000
Total ($)		130.500.000

İK AKADEMİ İNŞAAT
PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Ostim Vergi Dairesi: 582 047 8450

HIMMETDEDE PROCESS PLANT INFRASTRUCTURE COSTS (USD)	
Main Powerline	1.011.345
Water Supply	713.185
Transportation and Service Roads	534.890
Hedge and Barriers	356.595
Ligthing	297.160
Security	237.630
Offices and Buildings	832.550
Engineering	713.184
Earthworks	1.253.461
Total ($)	5.950.000

İK AKADEMİ İNŞAAT PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Üstün Vergi Dairesi: 582 047 6450

HIMMETDEDE CIC &REAGENTS PLANT CAPITAL COSTS (USD)	
CIC Plant Equipments	2.378.620
Reagents Equipments	125.390
Concrete and Steel Construction	2.668.050
Electricity Automation	1.524.600
Engineering	372.680
Project Management	296.450
Material Packing	77.180
Mechanical Supervision	296.450
Electrical Supervision	10.580
Total $	7.750.000

İK AKADEMİ İNŞAAT
PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Oslm Vergi Dairesi: 582 047 6450

HIMMETDEDE CRUSHING PLANT EQUIPMENT COSTS

	Equipment	Unit	Unit Costs	Total $
1	Primary Apron Feeder D6 2000*10500	1	521.324	521.324,000
2	By-pass Revesible Apron Feeder D4 1700*5000	1	340.530	340.530,000
3	Primary Grizzly LH2148-1g	1	540.459	540.459,000
4	C160 Jaw Crusher	1	577.048	577.048,000
5	EF 2496-2(modular Screen)	1	582.884	582.884,000
6	EF 2496-2(modular Screen)	1	582.884	582.884,000
7	Reclaim Apron Feeder AF5-D4-48*6,1	4	158.735	634.940,000
8	Secondary Scalping RF Screen 2448-2p	2	282.125	564.250,000
9	Electromechanical Vibrating Feeder	2	8.542	17.084,000
10	GP500S Secondary Cone Crusher	2	492.008	984.016,000
11	Electromechanical Diverging Feeder LH 1.6/2.6*4,8	4	186.779	747.115,000
12	Tertary Product Screen MF 3073-2	4	523.000	2.092.000,000
13	HP500 Cone Crusher	4	487.552	1.950.206,000
14	Engineering	1	37.500	37.500,000
15	Mechanical Project Management	1	37.500	37.500,000
16	Mechanical Supervision	1	37.316	37.316,000
17	Mechanical Commisionning	1	30.633	30.633,000
18	Agglomerator	3	1.225.000	3.675.000,000
19	MMD Series 3 tooth x 8 ring Sizer	1	1.494.500	1.494.500,000
20	MMD Series 5 Tooth Segment T/L	1	838.750	838.750,000
	Total ($)			16.285.939

İK AKADEMİ İNŞAAT
PROJE VE TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 31/B Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Ostim Vergi Dairesi: 682 047 6450

	HIMMETDEDE CRUSHING PLANT STEEL CONSTRUCTION, CONVEYING AND ELECTRICITY COSTS			
1	Steel construction		10.222.404	
2	Conveyors		6.688.560	
3	Electiricity Automation		3.547.775	
3	Engineering		901.977	
4	Project Management		751.647	
5	Material Packing		150.330	
6	Mechanical Supervision		1.584.473	
7	Electrical Supervision		16.896	
	Total ($)			23.864.062

	HIMMETDEDE CRUSHING CIRCUIT COSTS			
1	Steel construction,conveying and electricity		23.864.062	
2	Equipment Costs		16.285.938	
	Total ($)			40.150.000

İK AKADEMİ İNŞAAT
PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No:310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Çankaya Vergi Dairesi: 582 047 6450

HIMMETDEDEPROCESS PLANT PROJECT INDIRECT COSTS (USD)	
Construction Indirect	1.522.141
Insurance	1.343.066
Spare Pats (VAT)	3.133.820
First Fills	805.839
EPCM Services	6.939.173
Engineering QA/QC	1.343.066
Plant Mobile Equipment	716.302
Consultants	671.533
Commissioining & Start-Up	581.995
Freight	1.343.066
Total ($)	18.400.000

İK AKADEMİ İNŞAAT
PROJE ve TAAHHÜT A.Ş.
Uğur Mumcu Mah. Fatih Sultan Mehmet Bulvarı
No: 310 Yenimahalle - ANKARA
Tel: (0312) 587 10 00 Fax: (0312) 587 11 00
Ostim Vergi Dairesi: 582 047 6450