

tharisa

PROFITABLE LOW COST CO-PRODUCER – PGMS AND CHROME January 2016







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Basis of preparation note: where figures are expressed in percent and a change is reflected, the change is expressed in percent basis points.

AGENDA

1	What will you	hear today
	,	,

- 2 What makes us different
- 3 What we do
- 4 What you will see today
- Why invest
- 6 Our future



WHAT YOU WILL HEAR TODAY

Tharisa is different...

Innovative ...

- We don't only produce platinum ... we are a co-producer of PGM and chrome concentrates
- We don't mine just one mineral reef ... we mine all 6 MG chromitite reef layers
- We don't have underground mines ... we run a large scale open pit operation
- We don't only mine ... we enjoy the benefits of controlling an integrated mine-to-market value chain

Established ...

- We are not new ... we are 10 years old
- We are not a start up ... we aim to reach steady state production of 144 koz 6E PGMs and 1.5 Mt chrome concentrates within the next year
- We are not still spending ... all major capital investment already complete
- We are not entering wage talks ... we have stable labour relations with a three year wage agreement with NUM
- We are not burning cash ... we are generating cash as a low cost producer

Focused ...

- We have a solid platform underpinned by an optimised operating model
- We are **profitable** in spite of a weak commodity environment
- We intend to maintain momentum through challenging times



WE ARE DIFFERENT



THARISA SNAPSHOT

Direct access to the only JSE
listed PGM and chrome
concentrate open pit coproducer with an integrated
marketing, sales and logistics
platform



Large scale
(828 Mt resource)
mid-tier PGM and chrome
concentrate co-producer

Open pit operations with

20 year LOM and

40 year LOM

underground extension

One of the world's largest single chrome resource mines

Mechanised open pit
mining with a skilled and
stable
labour force

of 144 koz PGMs
and 1.5 Mt of chrome
concentrates

In production and de-risked with major capex programme complete

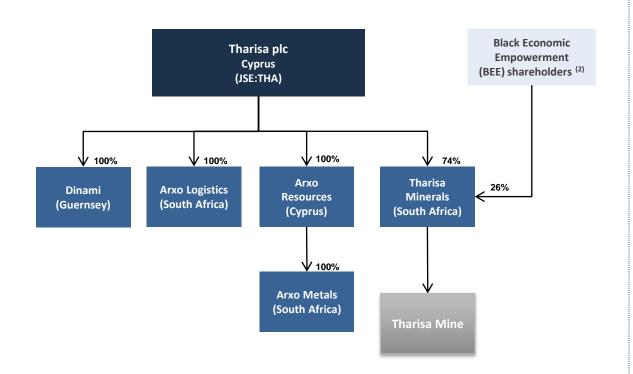
Lowest cost quartile producer of PGM and chrome concentrates

In-house, cost effective mine to customers logistics solution

Growth/optimisation initiatives in place

WHO WE ARE ... MEET THE TEAM

CORPORATE STRUCTURE



Notes:

- Only major subsidiaries have been included
- 2. Tharisa Minerals BEE partners are a broad-based Community Trust which holds an unencumbered 6% interest and a women's investment group Thari Resources, which holds a 20% interest

EXECUTIVE MANAGEMENT









GROUP MANAGEMENT







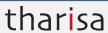
David Malunga Mine Manager: **Tharisa Minerals**





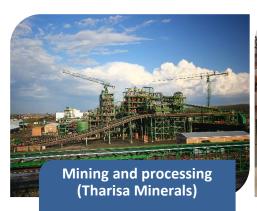
Willem de Villiers Managing Director: Arxo Metals





WHAT WE DO

THE FULL VALUE CHAIN IS CAPTURED THROUGH THE CO-EXTRACTION OF PGM AND CHROME AND IN-HOUSE MARKETING, SALES AND LOGISTICS



74%

- **20** year open pit
- 40 year LOM underground extension
- 828 Mt resource
- 100 Mt open pit reserve
- 5.5 km mining strike length
- 5 516 ha mining right area
- Production for FY2015:
 - **118.0 koz** of PGMs
 - 1.1 Mt chrome concentrates



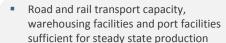
- Production of higher value foundry and chemical grade chrome concentrates
- Committed to research and development



 10.1% of China's chrome ore/concentrate imports and 14.2% of South Africa's chrome ore/concentrate exports for FY2015

100%



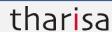


100%

- Transport of PGMs to Impala Refinery Services by road
- Shipment of chrome concentrate in bulk from Richards Bay Dry Bulk Terminal and containers from the Durban port
- Shipments for FY2015:
 - 974.8 kt of chrome concentrates, mainly to China
- 87% of shipments by bulk
- 13% of shipments by container



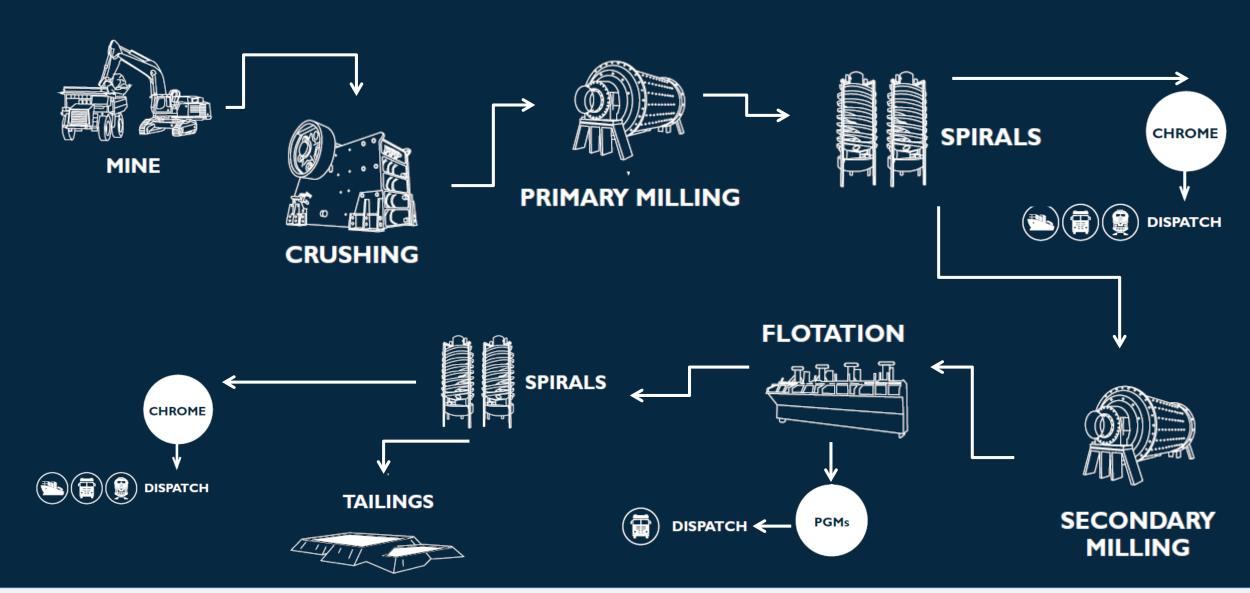
- PGM off-take agreement with Impala Refinery Services
- Off-take agreement with Rand York for foundry and chemical grade chrome concentrates
- 50 ktpm chrome concentrate agency agreement with the Noble Group
- Relationships with a broad range of stainless steel producers, ferrochrome producers and global commodity traders



WELCOME TO OUR MINE AND OPERATIONS

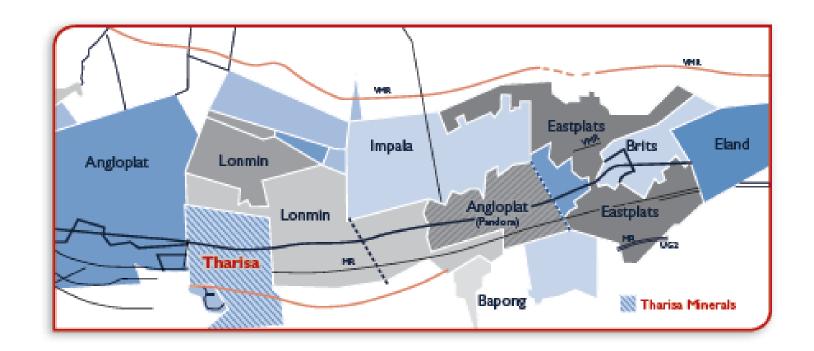


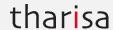
OPERATIONAL OVERVIEW



LOCATION

- Mining rights over 5 516 ha
- Neighbouring mining companies:
 - Anglo Platinum
 - Lonmin
 - Impala Platinum
 - Aquarius
 - Samancor
- Close proximity to national freeway and railway siding
- Neighbouring towns are Brits (45 km), Rustenburg (30 km), Mooinooi (10 km) and Marikana (5 km)





MINING ALL SIX MG CHROMITITE LAYERS

Steady state production of 4.8 Mtpa ROM average stripping ration of 8.5 (bcm:bcm) over LOM

MINERAL RESOURCE

828 Mt at 1.56 g/t 6E PGMs and 20.38% Cr₂O₃

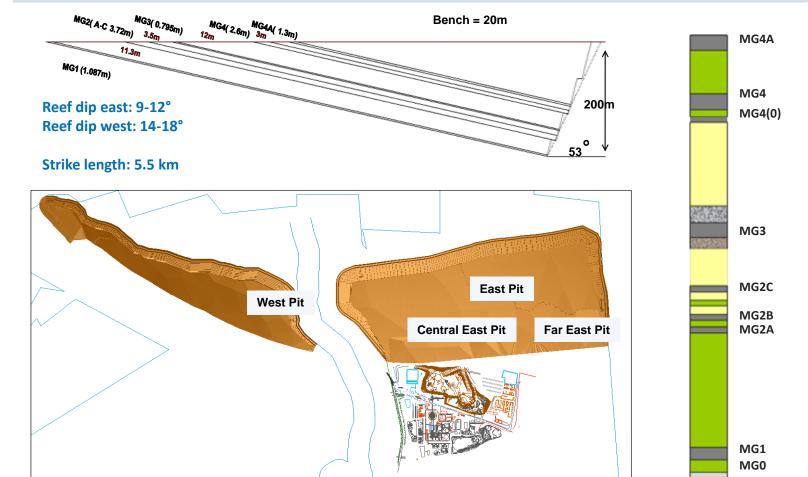
OPEN PIT MINERAL RESERVE

100 Mt at 1.51 g/t 6E PGMs and 19.4% Cr_2O_3

OPEN PIT CONTAINED METAL

3.79 Moz 6E PGMs and 19.4 Mt Cr_2O_3

GENERALISED CROSS SECTION SHOWING THE MG CHROMITITE LAYERS AND PLANNED PIT DEPTH



Resource and reserves as at 30 September 2015



GEOLOGY

GEOLOGY

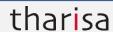
- The MG reef package is classified into six chromitite layers
 MG0, MG1, MG2, MG3, MG4, MG4A
- Partings are generally anorthosite, pyroxenite or norite
- Reef package varies from 50 m in the west to 74 m in the east (incl. partings)
- PGMs are concentrated in the MG2, MG3 and MG4 reefs

MINING SEQUENCE AND PROCESS ROUTE

THIRTING OLGOLITCL / HID I HOOLSS HOOTL	
UNIT	PROCESS
MG4A chromitite layer	Sent to Genesis Plant
Parting	Discarded
MG4 package	Sent to Voyager Plant
Norite or anorthosite	Selectively mined and discarded
MG3 package	Sent to Voyager Plant
Anorthsite or norite	Selectively mined and discarded
MG2 package	Sent to Voyager Plant
Pyroxenite with disseminated mineralisation	Selectively mined and discarded
MG1 and MG0 package	Sent to Genesis Plant

MG REEF STRATIGRAPHY





PROCESSING

KEY FACTS

- Process plants are owned and operated by Tharisa
- Each plant operates independently, providing flexibility and limiting potential process disruptions
- Basic process:
 - ROM is crushed and screened
 - Selected reef ROM sent to Challenger Plant to recover foundry and chemical grade
 - Primary milling to liberate chromite crystals
 - Primary spirals to recover chromite
 - Secondary milling to liberate PGM particles
 - Flotation circuit to recover PGM particles
 - Secondary spirals to recover additional chromite

INDEPENDENT PROCESSING PLANTS

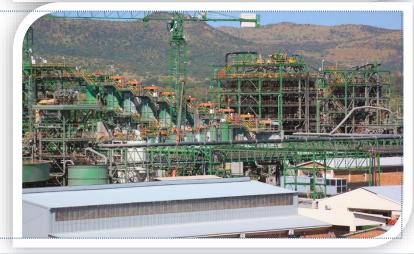
GENESIS PLANT

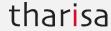
- Capacity: 100 ktpm ROM
- Processes reef layers with lower
 PGM and higher chromite grades
- Challenger Plant recovers high value foundry grade and chemical grade chrome concentrates



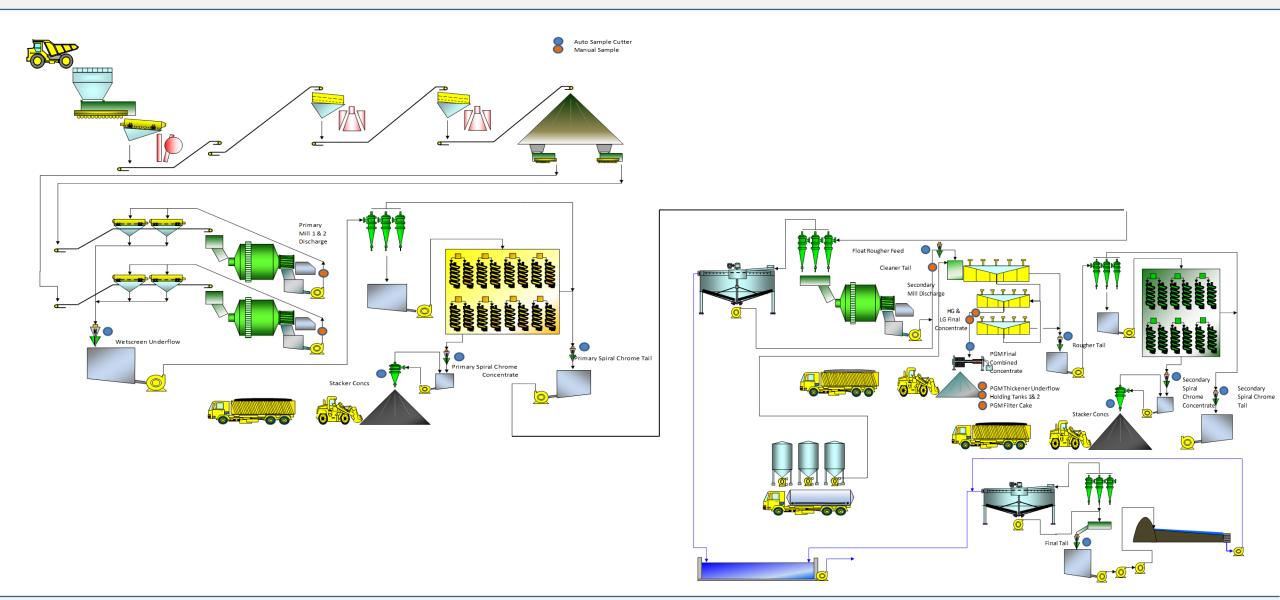
VOYAGER PLANT

- Capacity: 300 ktpm ROM
- Processes reefs with higher PGM and lower chromite grades
- Produces both metallurgical and chemical grade products





DETAILED PROCESS FLOW DIAGRAM



A SECURE VALUE INVESTMENT



OPERATIONAL HIGHLIGHTS

CHROME CONCENTRATE PRODUCTION

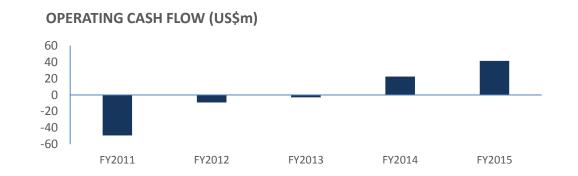
1.122 Mt

(2014: 1.085 koz)

KEY OPERATIONAL METRICS

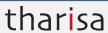
	Q1 FY2016	FY2015	FY2014
ROM mined Mt	1.12	4.18	3.91
PGM rougher feed grade g/t	1.61	1.62	1.63
Chrome grade %	18.5	18.3	19.4
ROM processed Mt	1.00	4.40	3.91
Tailings processed Mt	-	0.25	-
PGM recovery %	60.4	65.8	48.8
PGM in concentrate koz	24.0	118.0	78.2
Chrome recovery %	61.5	58.0	59.4
Chrome concentrate Mt	0.27	1.12	1.09
PGM basket price US\$/oz	687	885	1 103
Chrome concentrate price 42% CIF China) US\$/t	124	158	158
Average exchange rate ZAR:US\$	14.2	12.0	10.6

OPERATIONALLY CASH GENERATIVE for FY2015









INCOME STATEMENT

US\$246.8m (2014: US\$240.7m)

REVENUE

US\$18.4m (2014: US\$5.9m)

OPERATING PROFIT

NET PROFIT AFTER TAX

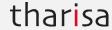
US\$6.0m (2014: loss US\$54.9m)

INCOME STATEMENT HIGHLIGHTS

US\$m	% change	FY2015	FY2014
Revenue	2.5%	246.8	240.7
Cost of sales		203.7	208.1
Gross profit	32.2%	43.1	32.6
Gross profit %		17.5%	13.5%
Results from operating activities	211.9%	18.4	5.9
EBITDA	75.8%	29.0	16.5
EBITDA margin		11.8%	6.9%
Net finance costs		8.7	46.2
Profit/(loss) before tax		9.6	(40.3)
Тах		3.6	14.6
Profit /(loss)		6.0	(54.9)
Headline earnings per share (US\$ cents)		2	(20)

INCREASED PROFITABILITY

- Revenue increased marginally partly as a result of significantly increased PGM production notwithstanding the reduction in the PGM basket price
- Improved gross profit % as a result of increased PGM unit production resulting in lower operating costs per unit and benefiting from lower chrome transport costs
- Increased EBITDA to US\$29.0m, an increase of 75.8%
- Non-recurring finance cost of US\$32.4m being the finance charge on preference shares that were converted into ordinary shares on listing – FY2014
- Effective tax rate of 37.6% impacted by permanent tax differences on inter group preference share funding structure
 - Accumulated tax loss of US\$17.7m
 - Unredeemed capex of US\$160.5m
- It is the Company policy to pay an annual dividend of 10% of consolidated net profit after tax. However, in the current commodity price cycle with both PGM prices and chrome concentrate prices reducing further past the financial year end, no dividends have been proposed or paid to ordinary shareholders



BALANCE SHEET

CAPITAL AND FUNDING

US\$m	FY2015	FY2014
Total capital spend*	403.0	378.4
Total interest bearing debt	75.6	116.0
Long term	36.3	64.2
Short term	39.3	51.8
Debt service reserve account	10.6	14.5
Pro forma interest bearing debt	65.0	101.5
Pro forma debt to total equity ratio	36.3%	48.4%
Cash and cash equivalents	24.3	19.6
Net current liabilities	10.3	1.5
Return on equity	2.0%	n/a

MAJOR CAPITAL INVESTMENT PROGRAMME COMPLETE

- Debt to total equity ratio adjusted for fully funded DSRA 36.3%
 - Optimisation projects to be funded from operational cash flows and debt may increase ratio in the short term
 - Debt to EBITDA multiple 2.6x
- Project related capital expenditure substantially complete, mainly sustaining capital going forward
- Interest bearing debt net of cash and DSRA of US\$40.7m
- Net debt to total equity ratio of 22.8%
- Senior debt finance facility compliant with financial covenants at 30 September 2015
- Income received in advance from chrome pre-pay transactions amounted to US\$8.3m
- Working capital facilities available to the Group
 - Limited recourse PGM receivable facility (not debt)
 - Pre-packing facilities for chrome production
 - Letters of credit discounting lines
 - Chrome pre-pay arrangements

^{*} Actual amount expended not restated at period end exchange rates



OPERATING PROFIT

↑211.9% US\$18.4M

(2014: US\$5.9M)

↑75.8% US\$29.0m (2014: US\$16.5m)

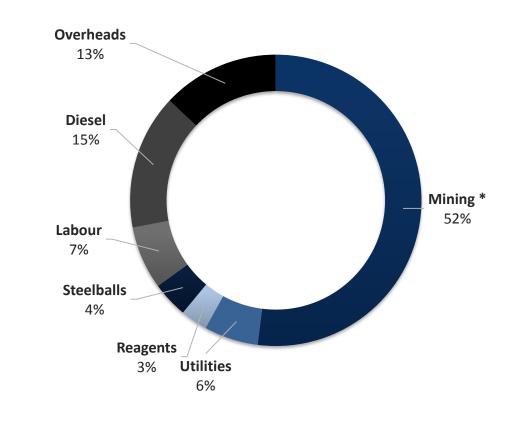
EBITDA

PGM AND CHROME REVENUE AND COSTS

		FY2015*			FY2014	
US\$m	PGMs	Chrome	Total	PGMs	Chrome	Total
Revenue	83.1	163.7	246.8	70.4	170.3	240.7
Cost of sales (excluding selling expenses)	63.7	80.8	144.5	53.4	91.9	145.3
Selling expenses	0.2	59.0	59.2	0.1	62.7	62.8
Gross profit	19.2	23.9	43.1	16.9	15.7	32.6
Gross profit percentage	23.1%	14.6%	17.5%	24.0%	9.2%	13.5%
On mine cash cost ** (US\$ per tonne processed)			34.2			33.5
Consolidated cash cost ** (US\$ per tonne processed - excluding transport)			37.7			38.2

*Cost allocation changed to 50% PGMs, 50% chrome concentrates for shared costs (2014: 40% PGMs, 60% chrome concentrates)

OPERATING COST ANALYSIS – EX-WORKS



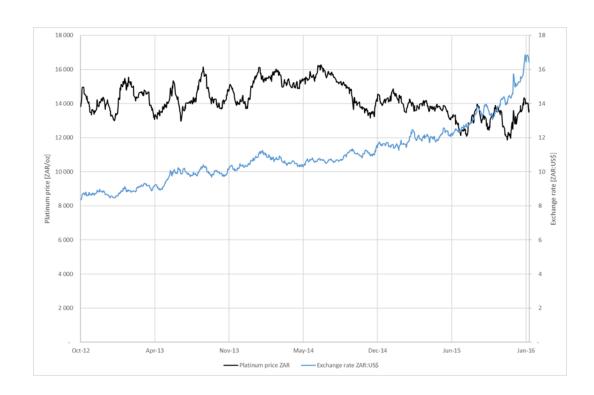
^{*} Including contractor labour



^{**} Excluding capex and funding

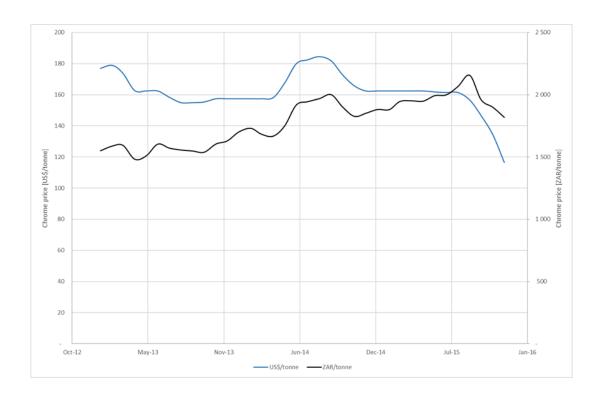
COMMODITY PRICES

PLATINUM PRICE IN ZAR vs ZAR/US\$ EXCHANGE RATE



Source: Johnson Matthey

CHROME PRICE IN ZAR vs US\$



Source: FerroAlloyNet



WHY WE STAND OUT FROM OTHER INVESTMENTS

UNIQUE MINING APPROACH

Mining all 6 MG chromitite layers – access to both PGMs and chrome resources

LOWEST QUARTILE COST CURVE

One of the PGM and chrome industry's lowest cost producers – with more room to cut costs

INNOVATIVE PROCESSING

Allows us to process both PGMs and chrome – with expansion opportunities

GROWTH OPPORTUNITIES

Organic growth opportunities through pit extension and future underground mining – with potential acquisitive growth when the market allows

SECURE VALUE INVESTMENT

Direct access to only JSE listed PGM and chrome concentrate co-producer

OUTLOOK

- FY2015 PGM production of 118.0 koz and 1.1 Mt of chrome concentrates
- PGM recoveries exceeded plan, annualised steady state production of 144 kozpa targeted for
 FY2016
- Chrome concentrate annualised steady state production of 1.5 Mtpa targeted for FY2016
- Impact of commodity prices
 - Chrome pre-pay arrangements to continue
 - Stringent cost cutting measures to reduce overhead and operational costs by at least 10%
 - Secure additional working capital facilities
- Looking ahead
 - Improving ROM feed grades
 - Targeted improvement in PGM and chrome recoveries
 - Stable operations leading to steady state

Tharisa will continue to implement its strategy to become a leading natural resources company focused on originating, developing and operating mines in the PGM, chrome and steel raw materials sectors



STRATEGY

LEADING NATURAL RESOURCES COMPANY

PGM, CHROME AND STEEL RAW MATERIALS

LARGE SCALE, LOW COST PROJECTS THAT ARE IN OR CLOSE TO PRODUCTION

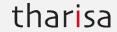


tharisa ANNEXURES

RESOURCE AND RESERVE STATEMENT

DECLARATION AS AT 30 SEPTEMBER 2015

MINERAL RESOURCE	Tonnes	6E + Au grade	4E grade	Cr ₂ O ₃ grade	Contained 4E	Contained 6E
	Mt	g/t	g/t	%	Moz	Moz
Measured	48.59	1.53	1.14	21.39	1.78	2.39
Indicated	129.53	1.68	1.24	22.24	5.16	7.00
Inferred	650.05	1.54	1.13	19.93	23.62	32.19
Total	828.17	1.56	1.15	20.38	30.56	41.58
MINERAL RESERVE	Tonnes	5E + Au grade	4E grade	Cr ₂ O ₃ grade	Contained 4E	Contained Cr ₂ O ₃
OPEN PIT	Mt	g/t	g/t	%	Moz	Mt
Proved	31.8	1.54	1.20	19.5	1.23	6.2
Probable	68.4	1.50	1.16	19.3	2.56	13.2
Total	100.2	1.51	1.18	19.4	3.79	19.4
MINERAL RESERVE	Tonnes	5E + Au grade	4E grade	Cr ₂ O ₃ grade	Contained 4E	Contained Cr ₂ O ₃
UNDERGROUND	Mt	g/t	g/t	%	Moz	Mt
Probable	18.7	1.52	1.17	19.3	0.7	3.6
Total	18.7	1.52	1.17	19.3	0.7	3.6



Contained Cr₂O₃

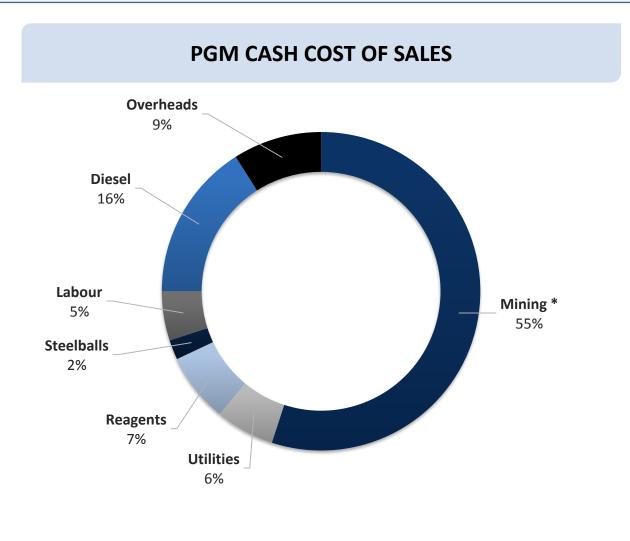
10.39

28.81

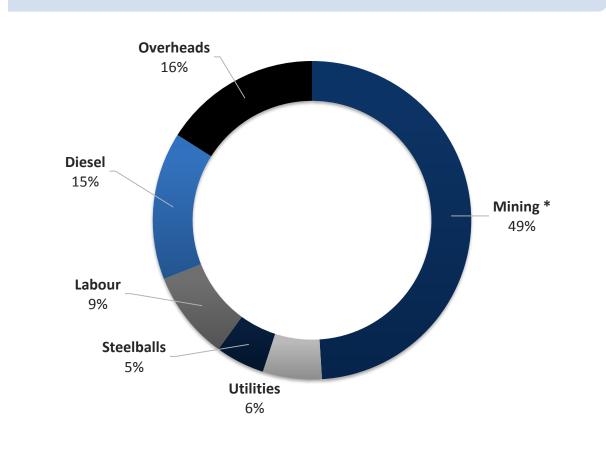
129.55

168.75

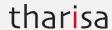
OPERATING COST ANALYSIS – EX-WORKS



CHROME CASH COST OF SALES



^{*} Including contractor labour

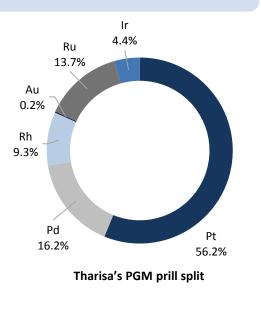


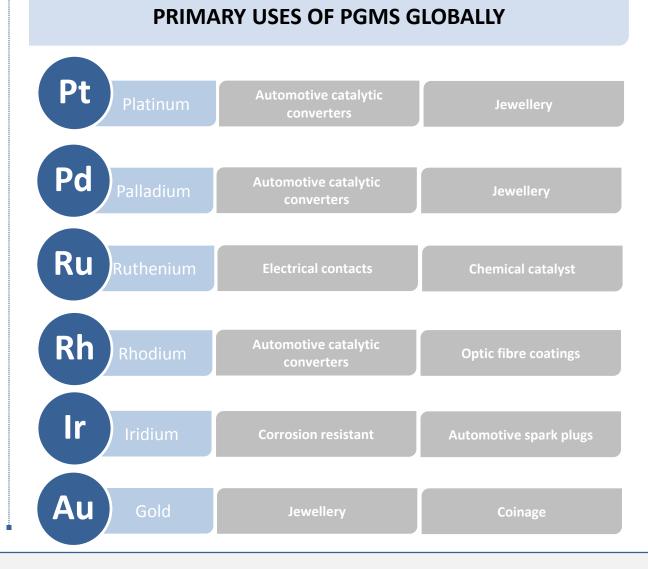
^{*} Including contractor labour

PGMS PRODUCTS AND END USES

PGM MARKETS

- Largest deposits of PGMs are found in South Africa, Zimbabwe, Russia
- Bushveld Complex is the largest platinum resource in the world and accounts for 75% of annual global production
- Longer term PGM outlook remains robust as global emission standards continue to tighten while mine production remains constrained and above ground stocks continue to be drawn down
- Fuel cell applications remain potential wildcard





CHROME PRODUCTS AND END USES

CHROME ORE/CONCENTRATE MARKETS

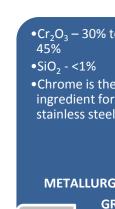
Chemical

grade

9.6%

- Chromite is the mineral extracted from the ore
- Chrome ore is mined from primary chromite deposits
- Chrome concentrates can be recovered from tailings and secondary ores
- Tharisa's chrome production 92% of global chromite produced is metallurgical grade used for stainless steel production (mostly via ferrochrome)
- Globally, 8% of global chromite produced is the higher value chemical and foundry products
- Tharisa produces up to 10% of the higher value chemical and foundry grades, depending on the ore mix

USE OF CHROME ORE/CONCENTRATE GLOBALLY



Foundry

grade

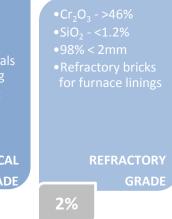
0.4%

Metallurgical

grade

90.0%

- •Cr₂O₃ 30% to $\cdot Cr_2O_3 - >46\%$ •SiO₂ - <1% High thermal •Chrome is the key conductivity and low thermal expansion Mould for metal castings **METALLURGICAL GRADE** 92% 3%
 - 47% •SiO₂ - <1.2% Chrome chemicals for metal plating •Leather tanning **FOUNDRY CHEMICAL GRADE GRADE** 2% 3%



SUSTAINABILITY

INTERNAL

HEALTH AND SAFETY

- Zero tolerance policy on unsafe conditions
- LTIFR at 31 December 2015 of 0.17 (per 200 000 man hours worked)

ENVIRONMENTAL MANAGEMENT

- Permits and licences are granted and valid
- Rehabilitation insurance in place

BEE OWNERSHIP

- Tharisa Community Trust holds a 6% equity interest in Tharisa Minerals for the benefit of the local community
- Thari Resources holds a 20% equity interest in Tharisa Minerals

UNION REPRESENTATION

- Recognition agreement with National Union of Mineworkers
- Current representation of 55%
- Wage negotiations completed, in year two of three-year agreement

EXTERNAL

STAKEHOLDER RELATIONSHIPS

- Engagement with regional and local government
- Relations and ongoing engagement with local community representatives

RELOCATION AND HOUSING INITIATIVES

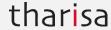
- Relocation of over 856 families from informal settlement
- Permanent housing with legal tenure
- Further upgrading of housing planned

COMMUNITY OWNERSHIP PROGRAMME

Community Trust will invest future dividends into community projects

SOCIAL UPLIFTMENT PROGRAMME

- Brick making and home building enterprises
- Development of small scale businesses, including a sewing enterprise, cleaning and gardening services



SHAREHOLDER ANALYSIS

MARKET STATISTICS

		25 January 2016
Share price	ZAR	4.00
Number of shares	m	255.9
Market capitalisation	ZAR m	1 023.6

TOP 10 SHAREHOLDERS**

Shareholder	%
Medway Developments Ltd	46.5%
LCC Pershing	15.8%
Fujian Wuhang Stainless Steel	11.0%
HSBC Private Bank (Suisse) Sa	4.3%
Phillip Ventures Enterprise Fund 2 & 3	4.2%
Macquarie Capital Hong Kong Limited	4.2%
Friedshelf 1525 Pty Ltd	2.6%
Altius Investment Holdings Pty Ltd	2.2%
HongKong Heyi Mining Resources Co Ltd	2.0%
Raiffeisen Bank International	1.1%
Other	7.1%
Total	100.0



^{**} Shareholder information as of December 2015

tharisa contact details

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