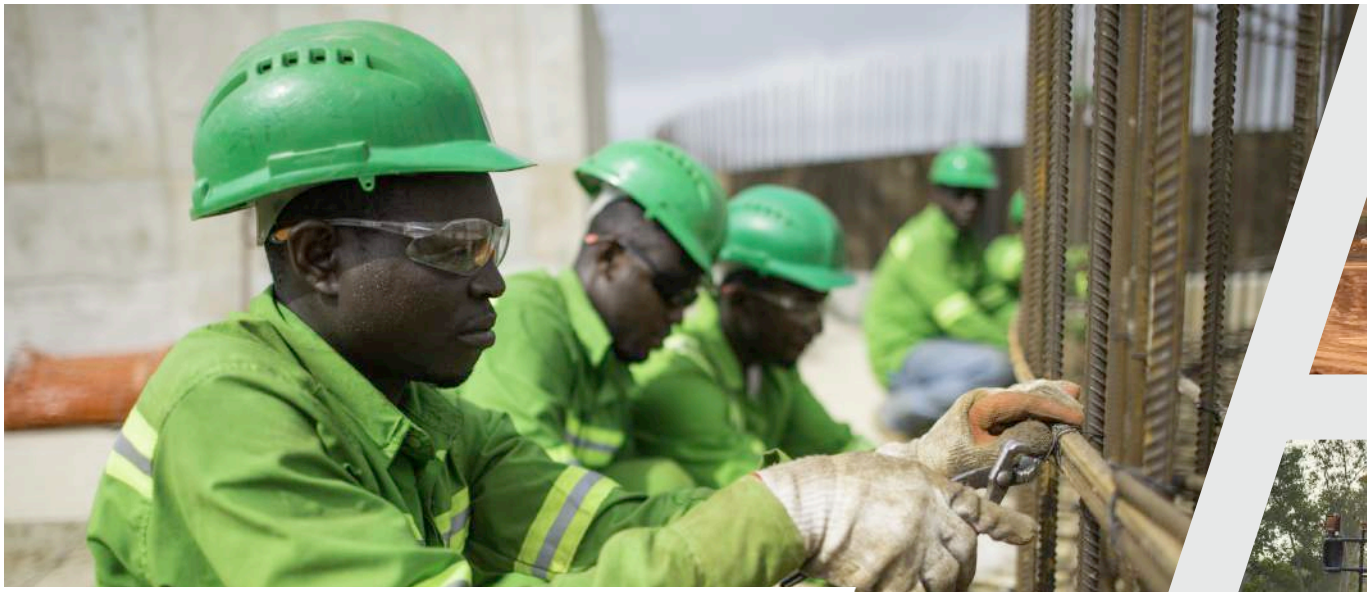






ASANKOGOLD

BUILDING A LOW COST, LONG LIFE OPERATION

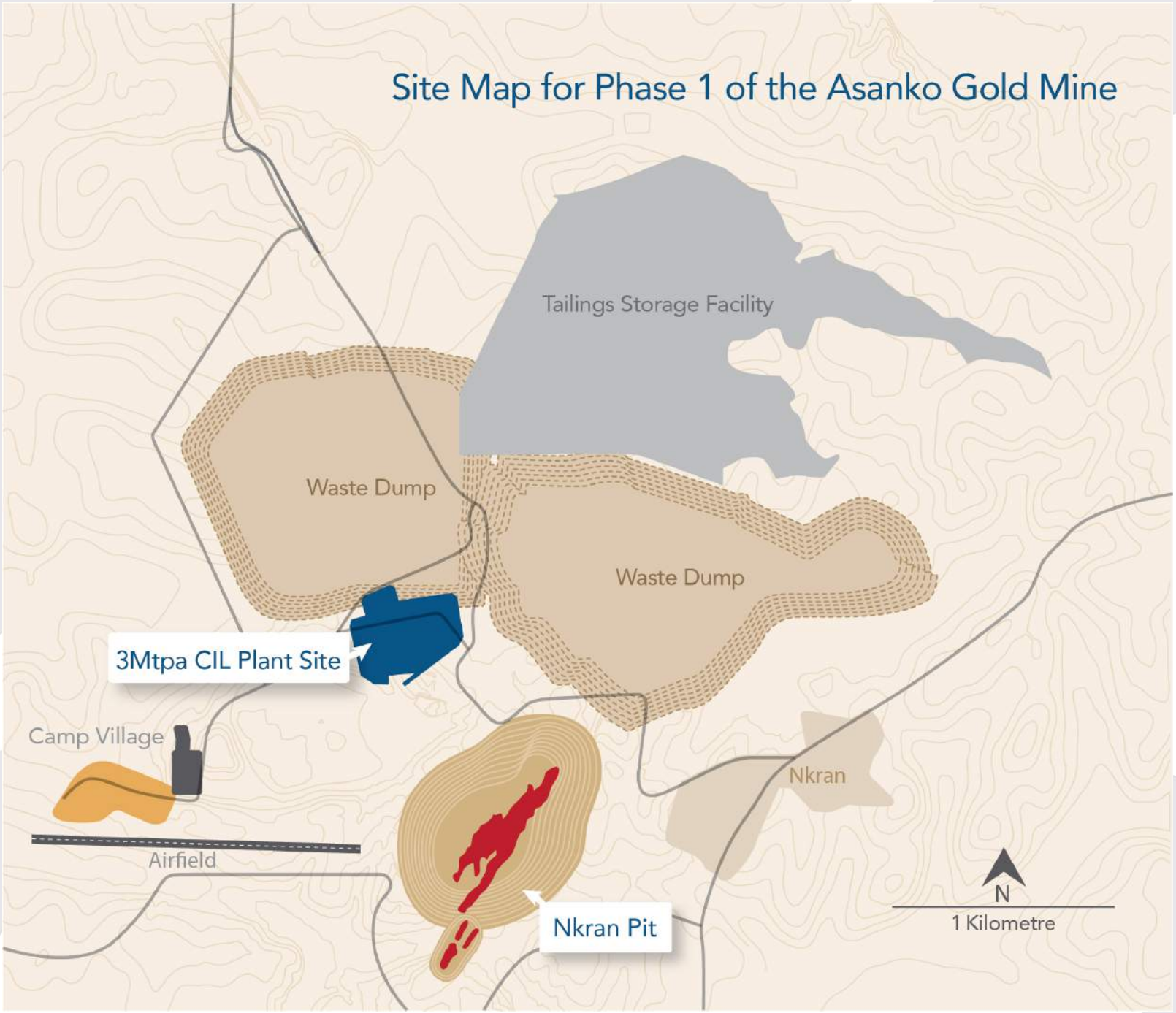
Technical Presentations

Asanko Gold Mine Site Visit – Phase 1 Update

14 May 2015

MINING




Site Map for Phase 1 of the Asanko Gold Mine
Tailings Storage Facility
Waste Dump
Waste Dump
3Mtpa CIL Plant Site
Camp Village
Airfield
Nkran
Nkran Pit
N
1 Kilometre

PHASE 1: MINING UNDERWAY

- Open pit contractor mining operation
- Low operating strip ratio (waste:ore) - 4.7:1
- Nkran is the main pit, >80% of the resource
- Selected mining contractor (PW Ghana) originally mined Nkran pit in late 1990's
- Mining contractor for Nkran pre-strip and Year 1 of operations – maintains future flexibility
- Strong emphasis on grade control to improve head grade and minimise dilution

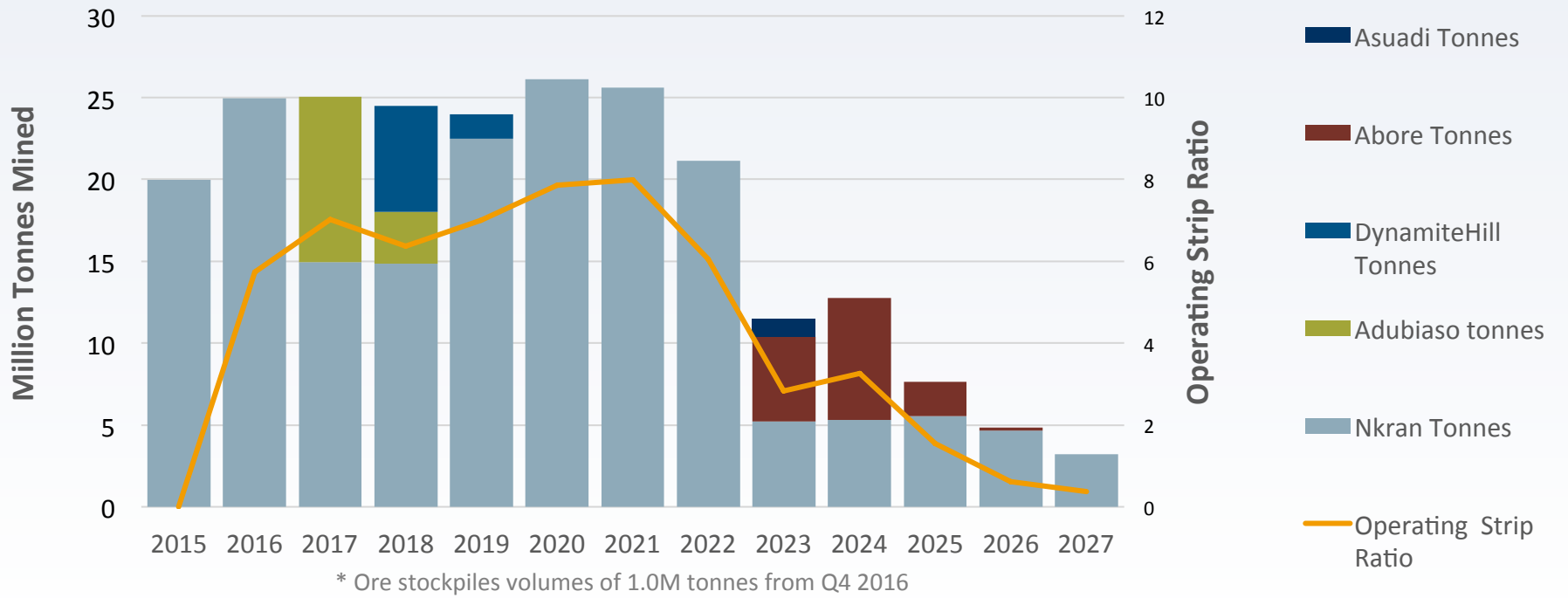




PHASE 1: BUILDING A LOW-RISK OPERATION

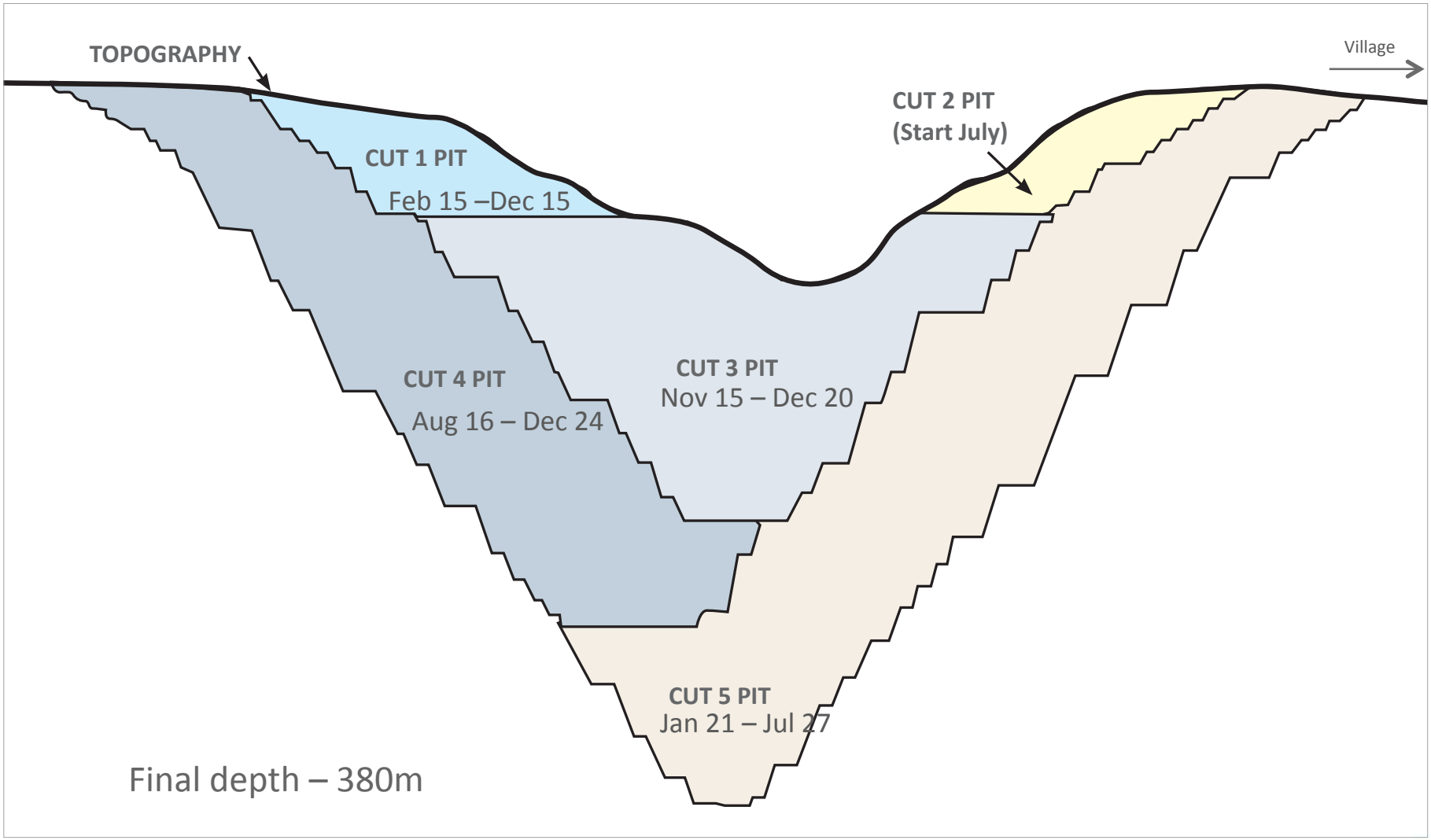
- Mine Plan designed around consistent annual operating volumes and operating strip ratio
- Ensures consistent ore availability with ore stockpiles between 1.0 and 1.8Mt (4-6 months)*

Life of Mine Tonnages and Strip Ratio



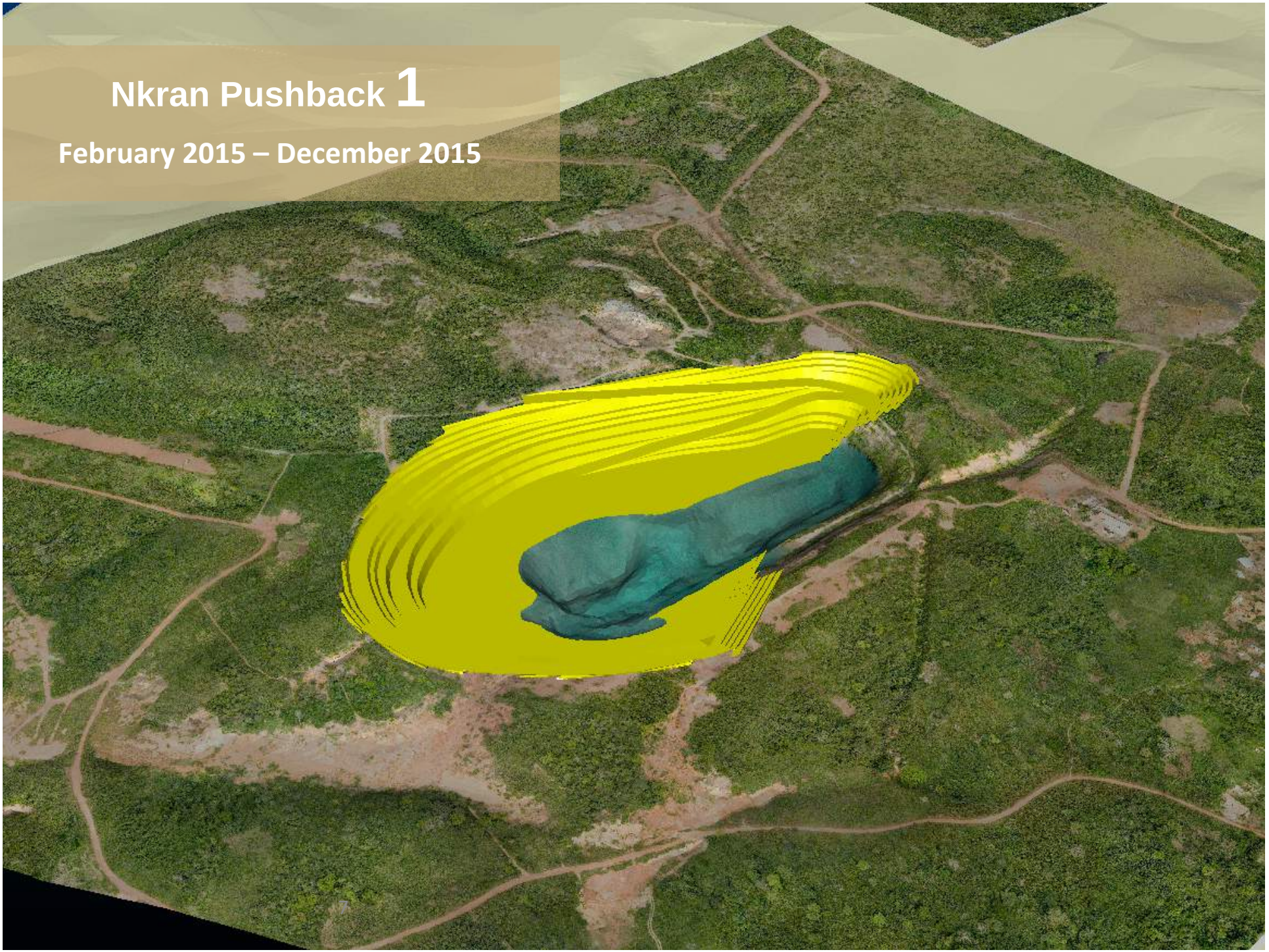
* Ore stockpiles volumes of 1.0M tonnes from Q4 2016

NKRAN PUSHBACK SEQUENCE



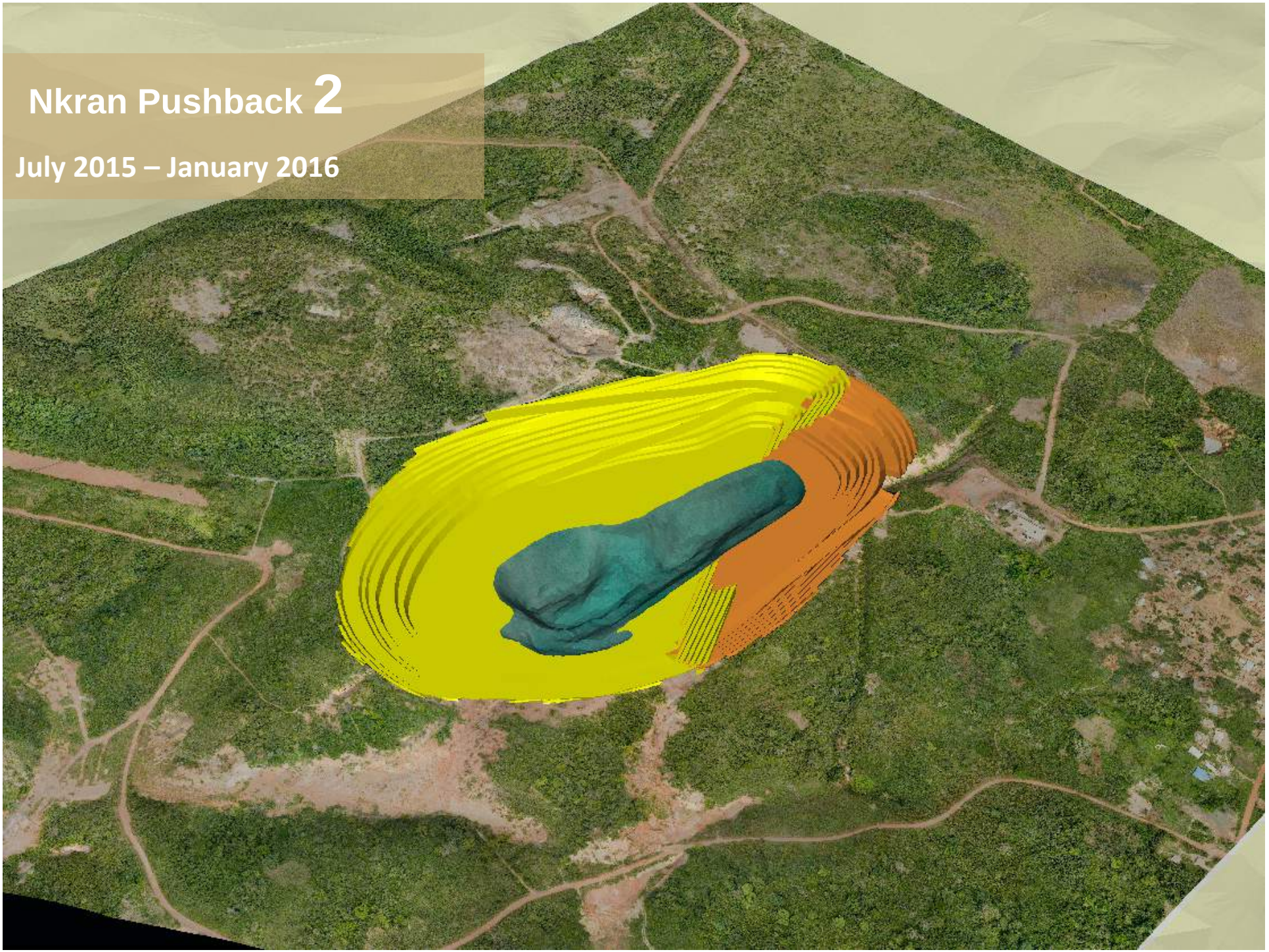
Nkran Pushback 1

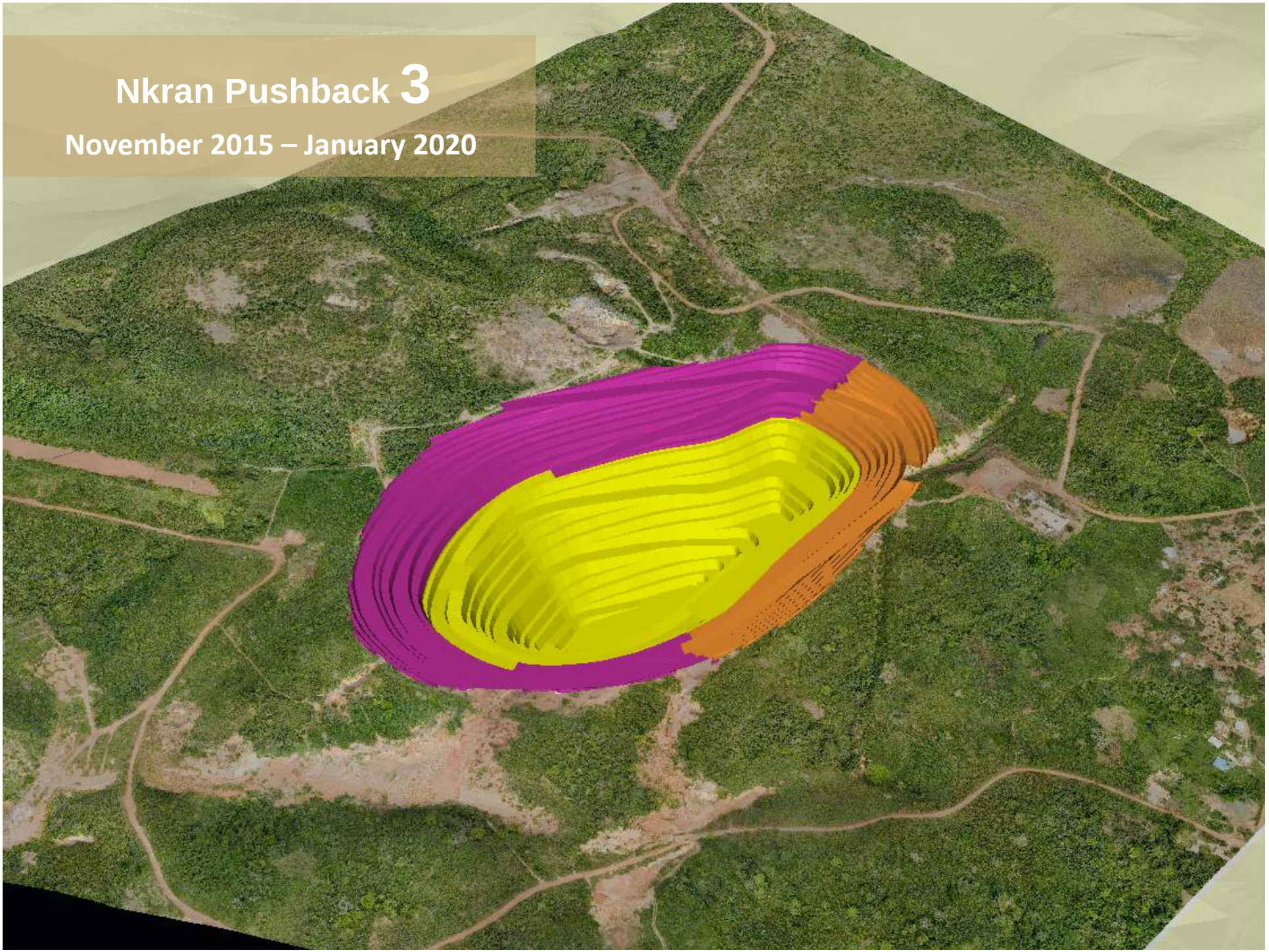
February 2015 – December 2015

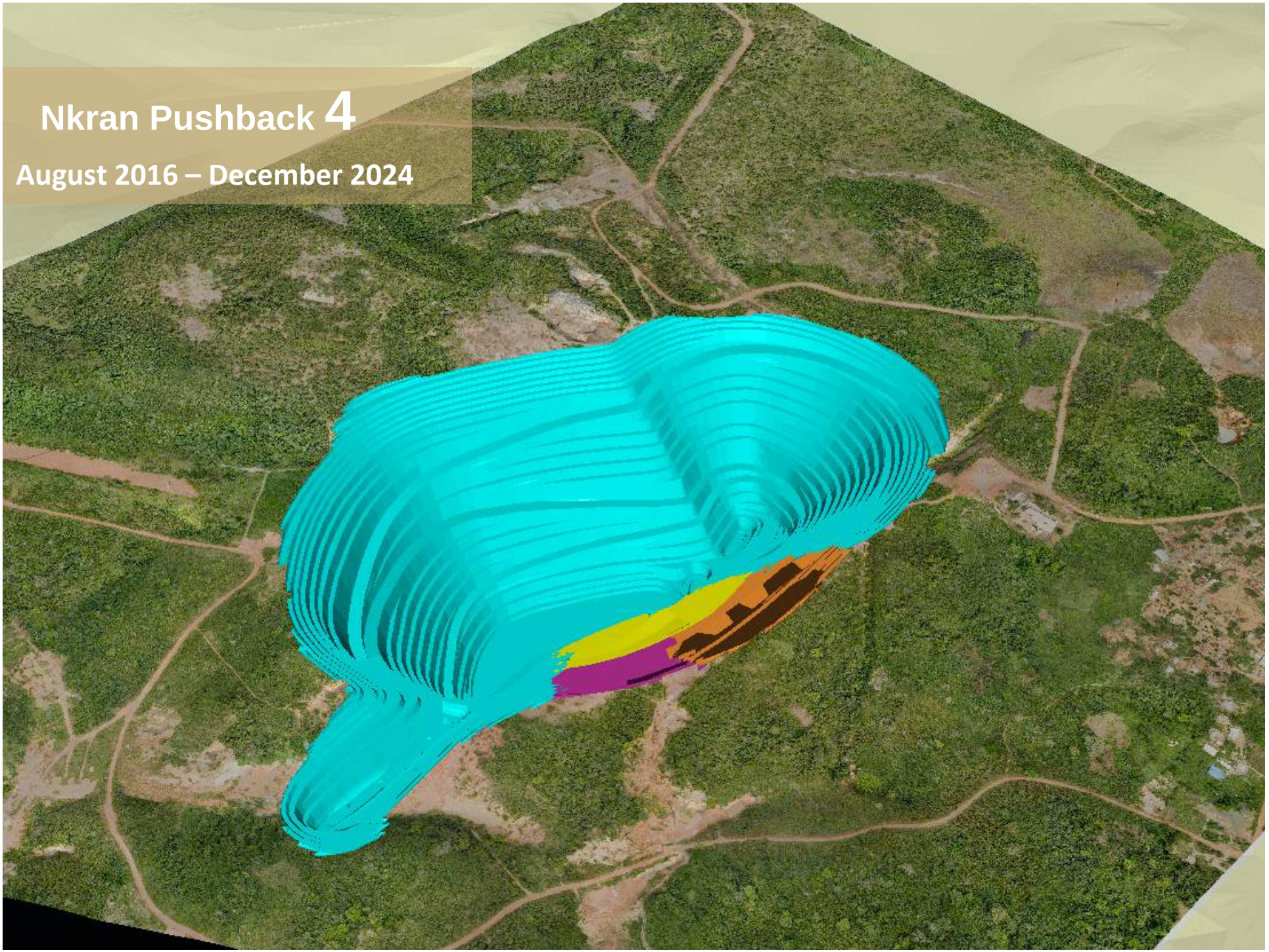


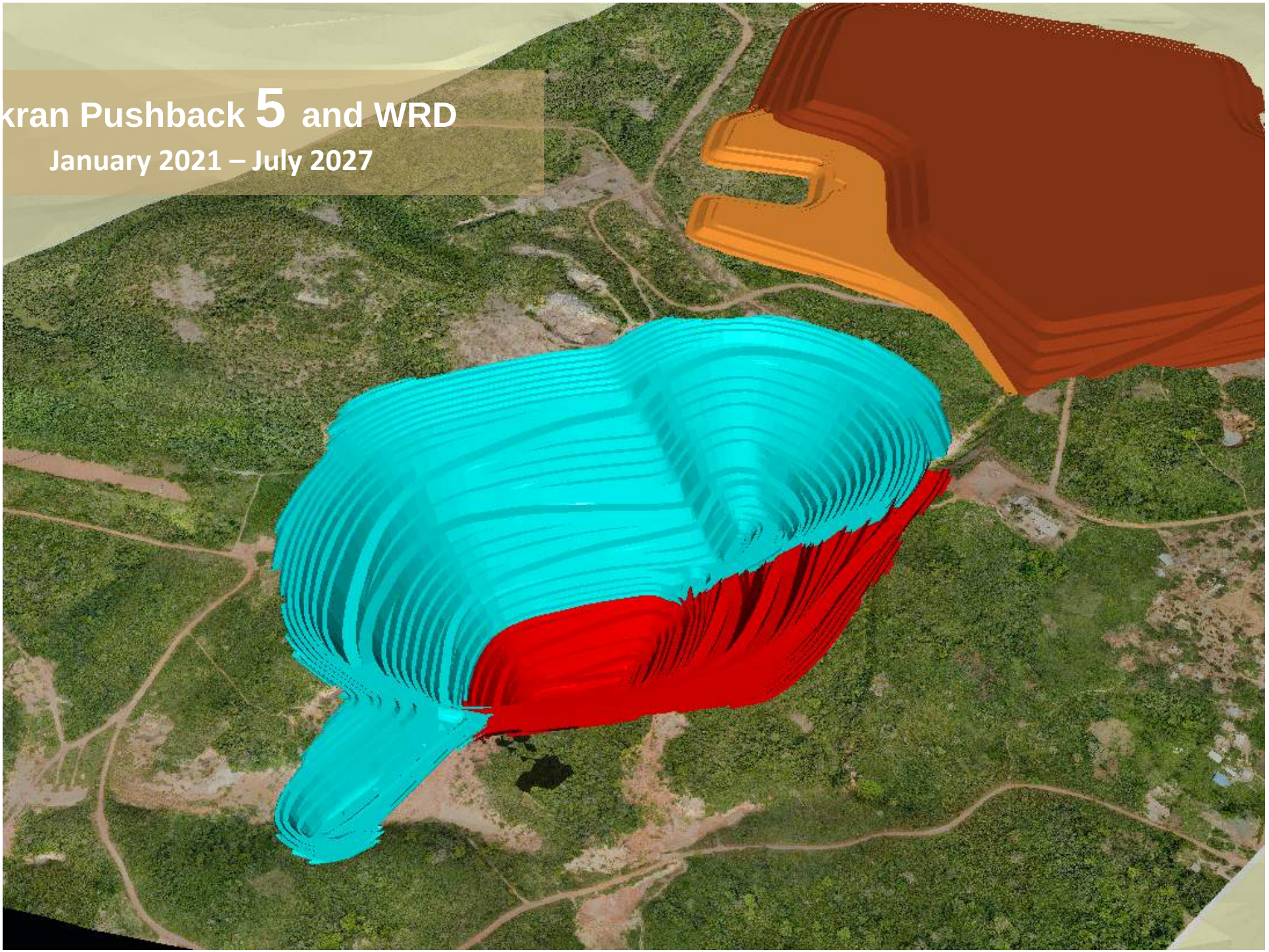
Nkran Pushback 2

July 2015 – January 2016

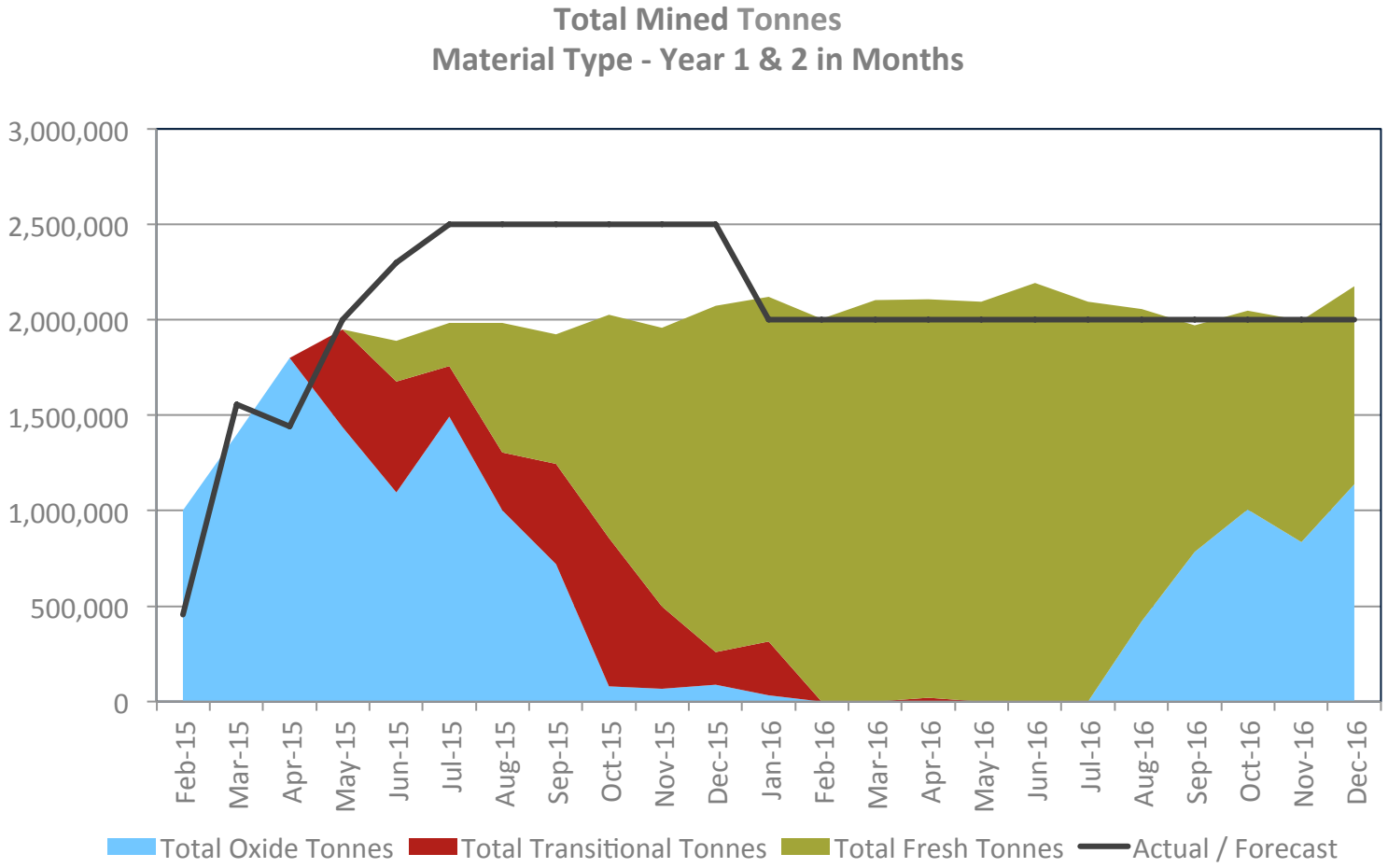



Nkran Pushback 3
November 2015 – January 2020


Nkran Pushback 4
August 2016 – December 2024

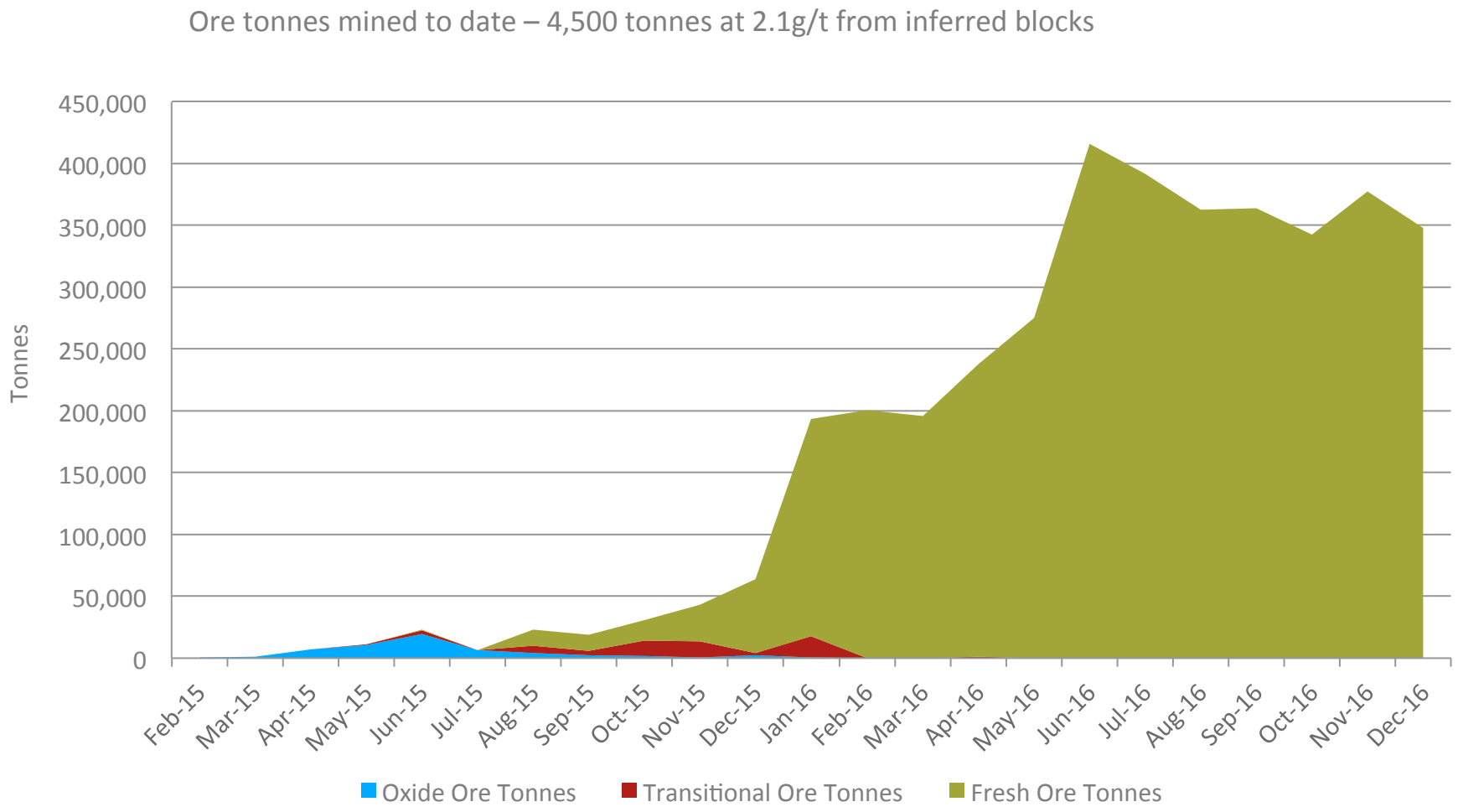

kran Pushback 5 and WRD
January 2021 – July 2027

TOTAL MINED TONNES
MATERIAL TYPE – YEAR 1 & 2 (MONTHS)

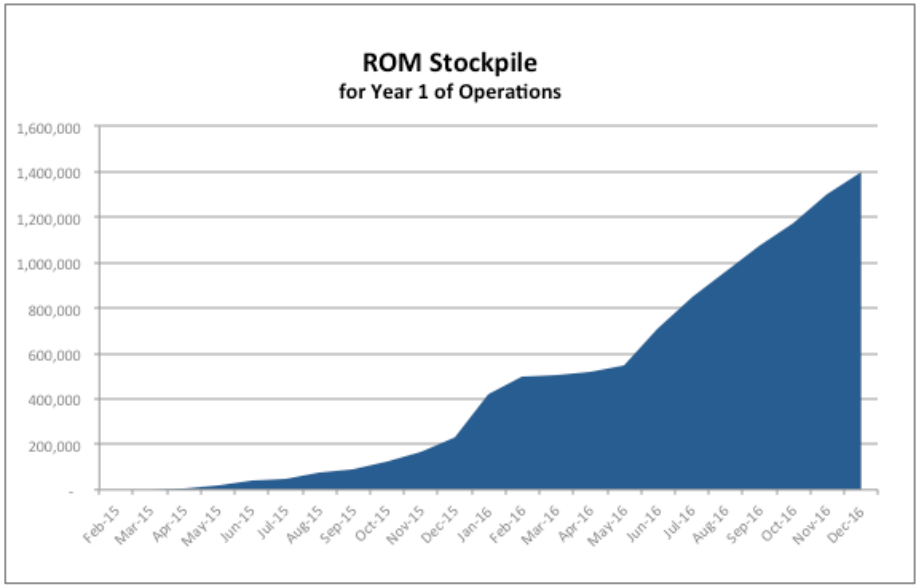


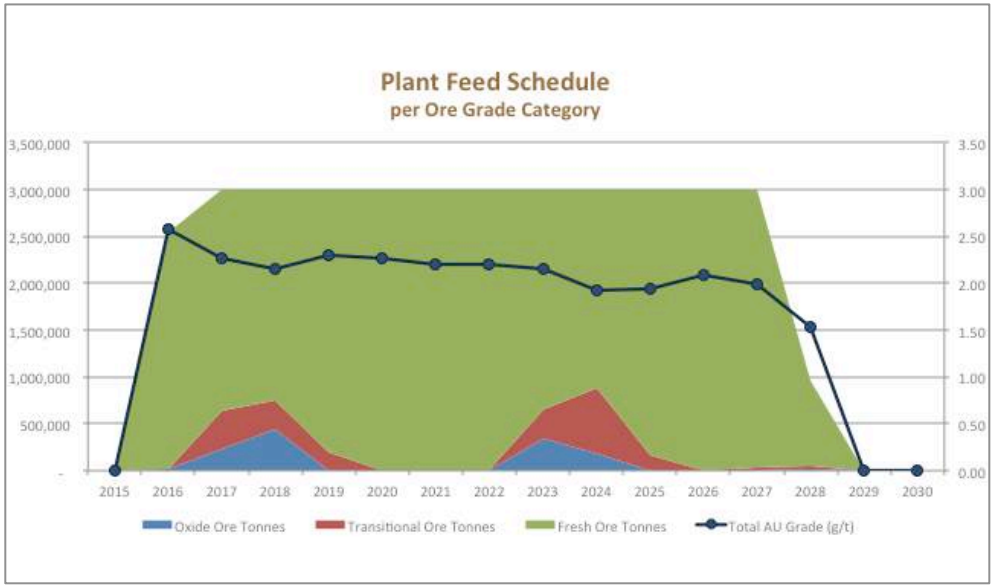
Progressive tonnes mned to end April 3.45Mt vs. plan 4.20Mt

ORE MINING SCHEDULE
MATERIAL TYPE – YEAR 1 & 2



CONSISTENT GRADE AND OUNCES





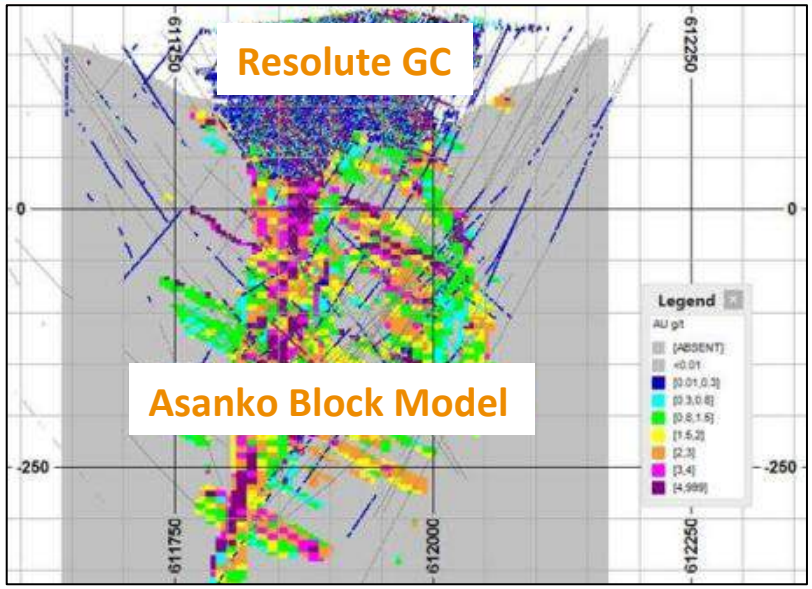
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Ore mined ('000t)	230	3,704	3,123	3,319	3,000	2,951	2,850	3,001	3,001	3,001	3,000	3,001	2,325	-
Grade mined (g/t)	2.44	2.15	2.22	2.15	2.30	2.28	2.23	2.20	2.15	1.93	1.94	2.08	2.12	-
Waste ('000t)	19,761	21,254	21,928	21,152	20,993	23,179	22,754	18,147	8,484	9,761	4,619	1,863	889	-
Strip ratio (w:o)	86.05	5.74	7.02	6.37	7.00	7.86	7.98	6.05	2.83	3.25	1.54	0.62	0.38	-
Plant feed ('000t)	-	2,538	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	968
Feed grade (g/t)	-	2.58	2.27	2.15	2.30	2.27	2.20	2.20	2.15	1.93	1.94	2.08	1.99	1.53
Recovery (%)	-	88.89	92.66	92.34	92.63	92.62	92.60	92.60	92.27	92.36	92.45	92.56	92.50	112.13
Gold produced (oz)	-	187,429	202,624	191,131	205,500	202,711	196,273	196,226	191,712	172,160	173,326	185,728	177,607	53,462

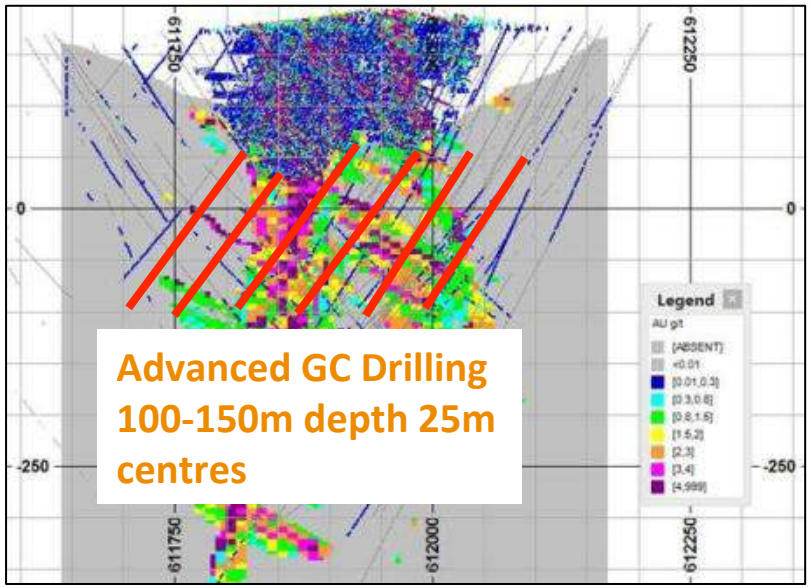
NKRAN PIT GRADE CONTROL

- Strong emphasis on grade control to minimize dilution and maximize ounces
- Grade control methodology in place
- As of April 30, 2015 4,500 ore tonnes @ 2.1 g/t Au placed on ROM stockpile

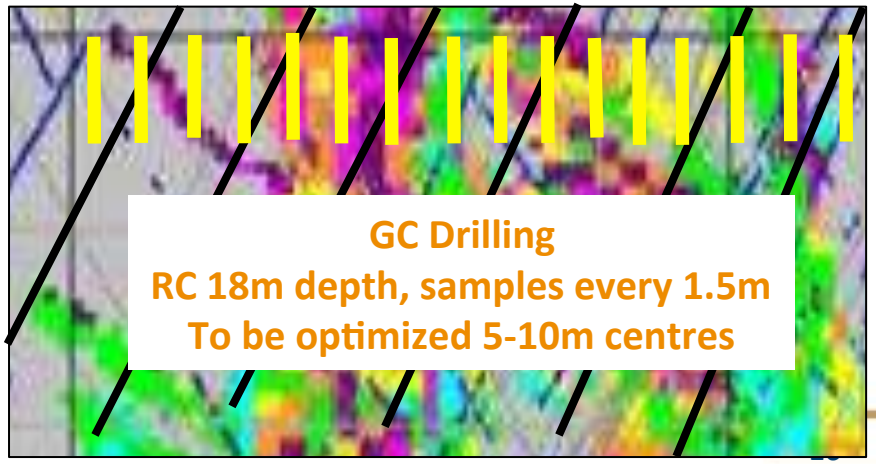


NKRAN PIT GRADE CONTROL DESIGN

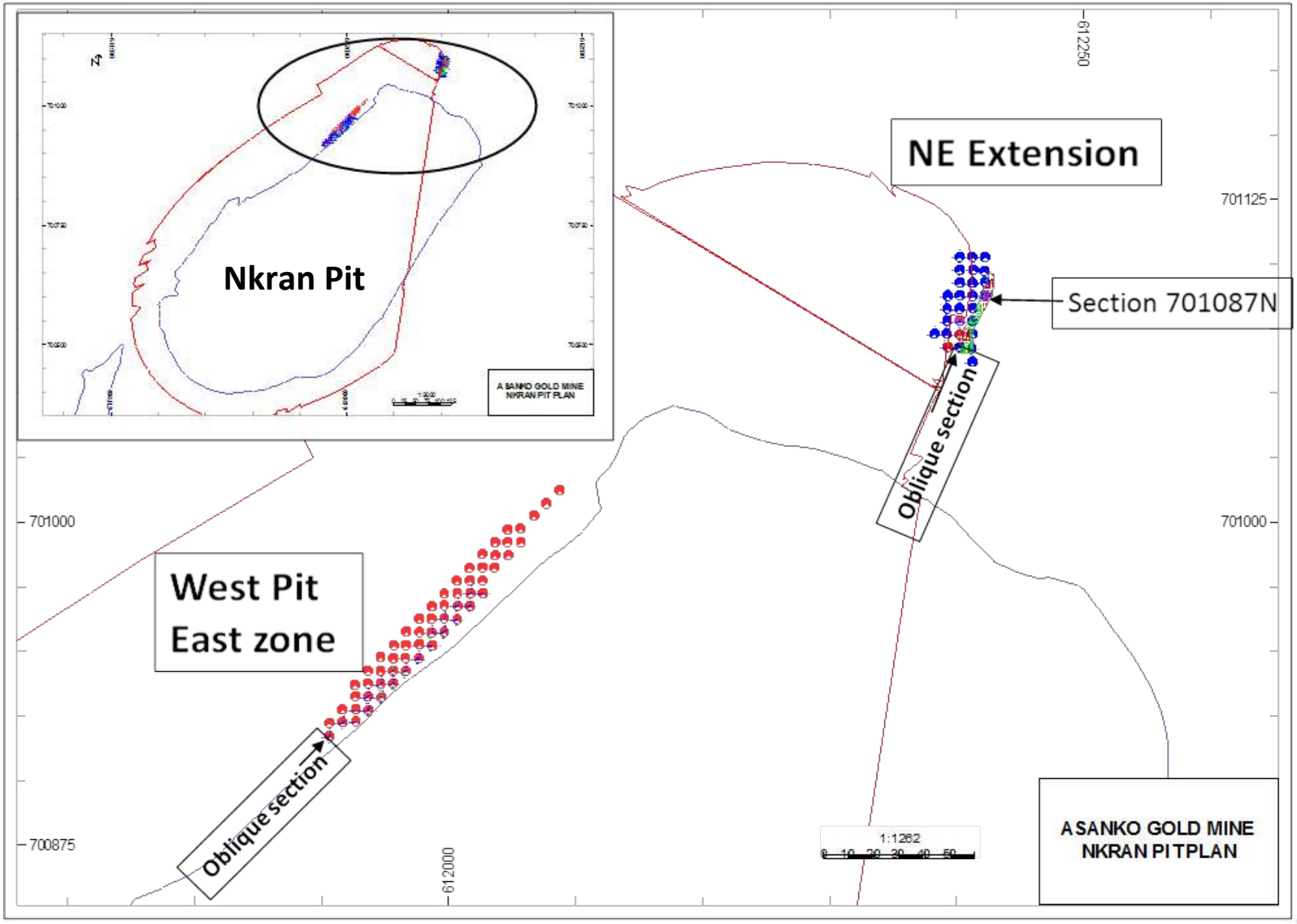




- SMU is 5m x 5m x3m
- Ore is mined in 3m flitches
- Waste mined in 6m Benches
- Stockpile Grade control
- Marginal : 0.5-0.8 g/t Au
- Low grade : 0.8-1.5 g/t Au
- Medium Grade : 1.5-2.5 g/t Au
- High Grade : > 2.5 g/t Au
- Waste : < 0.5 g/t Au



NKRAN PIT: PUSHBACK GRADE CONTROL



PLANT & INFRASTRUCTURE CONSTRUCTION



STRONG HEALTH & SAFETY PERFORMANCE

- Zero lost time accidents during 350 days of construction & 1,166,400 man-hours completed
- **1 Million LTI-free hours** achieved on the project on 15 April 2015 with only 2 first aid cases
- All SHE construction systems and procedures have been fully implemented on site
- Daily SHE training with a zero harm approach

Current Company Wide SHE Stats	
Last LTI Date	July 16, 2012
LTI Free Man-hours	3,266,983
LTI Free Days Worked	1018





CONSTRUCTION UPDATE



Construction approach

- Full review of previous work done & redesign of plant platform with Phase 2 in mind
- Optimized laydown areas around plant to speed up construction
- Innovative construction methodology on CIL tanks (flanged and bolted)

Plant site construction well advanced:

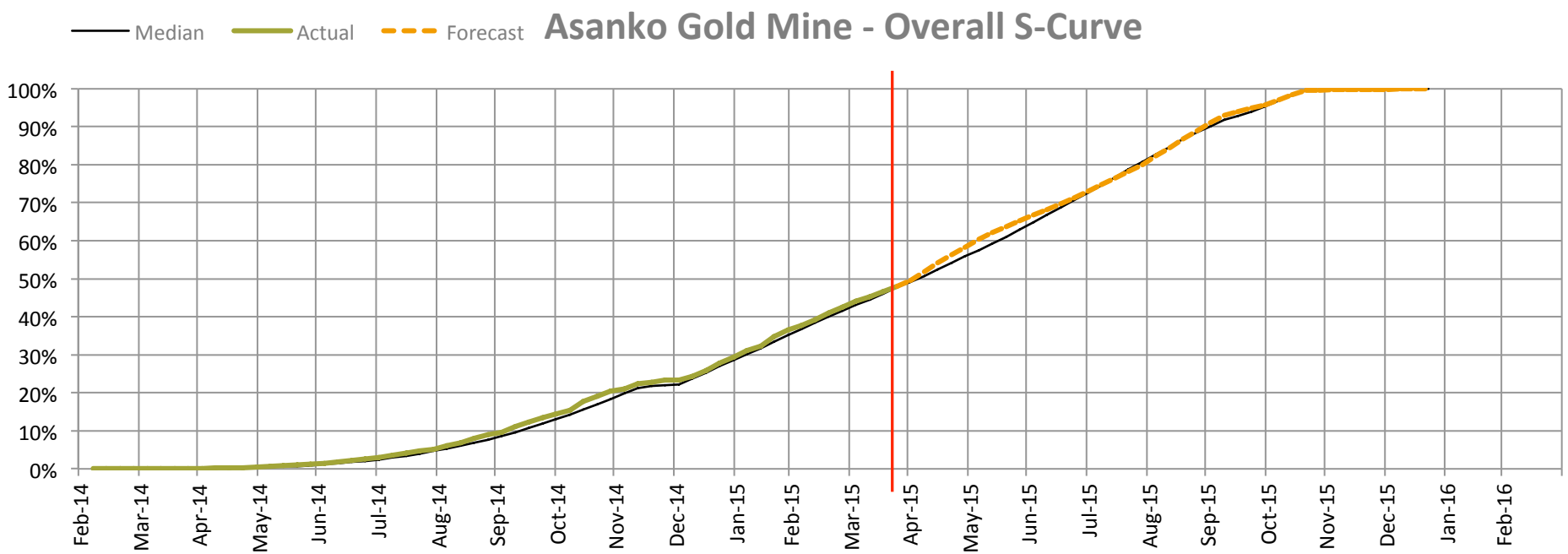
- EPCM contractor (DRA) plus seven subcontractors on site = 1,349people
  - Plant site terracing – Wilson Baily Holmes
  - Tailings Dam – Engineers and Planners
  - Pit Dewatering – KPS and De-Montage
  - Civil Works – Consar
  - Contractor Camp housing complex – Red Sea
  - Independent materials testing laboratory – Knight Piesold
  - Steelwork, Mechanical & Platework – Redis Construction
  - Electrical & Instrumentation – EnI Ghana
  - Piping – Redis Construction



PHASE 1: ON SCHEDULE

On track for first gold in Q1 2016

- Main construction commenced in August 2014 – earthworks scheduled around the rainy season
- All key contractors, 1,349 people, on site
- Project is 48% complete, tracking according to schedule and budget



PHASE 1: CONSTRUCTION PROGRESS



Pit Dewatering



Primary Crusher



Pre-Stripping



Stockpile Tunnel

PHASE 1: CONSTRUCTION PROGRESS



Mill Foundations



Pre-Leach Thickener



CIL Tanks



CIL Tank Platework

SECURING STABLE & RELIABLE POWER

Overview

- Ghana's power sector is expanding rapidly with offshore gas and independent power producers (IPPs)
- Power supplied via one national grid (Gridco)
- Main power generation body is the state owned Volta River Authority (VRA)
- Recent growth in demand is outstripping supply, resulting in competition for power and load shedding



ASANKO'S SOLUTION

Strategic Approach

- Secure long-term stable and reliable power
- Self generation too capital intensive
- Asanko building connecting power line from grid to ensure control over delivery date - targeting Q3 2015
- Have been monitoring the network reliability for past 14 months – over 99% reliable

Power Purchase Agreement with Independent Power Producer (IPP)

- Advanced negotiations with Genser Energy (International IPP)
- DPP cost: 18c/kwh including 2c/kwh wheeling charge
- IPP rates similar to DPP rates with probable reductions in future
- Envisage Genser will construct a 19MW plant next to the AGM processing facility – 100% redundancy
- Target to have power available in Q4 2015

GENSER ENERGY - LEADING ENERGY SOLUTION PROVIDER IN GHANA

- Genser Energy Ghana is an IPP based in the USA with operations in Africa. It provides electricity and steam solutions for mines, large-scale industrial companies, and utilities.
- Among the technologies used by Genser are the following
  - **IGCC -** Integrated Gasification Combined Cycle;
  - **CCGT** -Combined Cycle Gas Turbine;
  - **CHP** - Combined Heat and Power; and
  - **ICE -** Internal Combustion Engines.
- Genser has successfully built and operated the following power plants:
  - 30MW ICE Plant for Golden Star Resources; and
  - 5.0MW/ 20 tons CHP Facility for Unilever Ghana, Tema.

- Genser is in the commissioning phase of a 30MW IGCC Plant (GP Chirano Plant) for Chirano Gold Mines Limited (CGML).
- In the short term Genser shall install and operate the following power plants:
  - 20MW ICE for Asanko Gold ;
  - 120MW IGCC for GoldFields Ghana, Tarkwa.
- In the long term Genser will:
  - Expand the GP Chirano Plant from 30MW to 90MW;
  - Construct and operate a 120MW IGCC for Gold Fields Ghana, Tarkwa.
  - Expand into other African countries, including Burkina Faso, Mail, and Botwsana.

Existing Genser Projects



GP Chirano Plant



GP Bogoso Pant



GP Unilever Plant

Source: Genser Energy Africa Inc

PHASE 1 - KEY CONSTRUCTION SCHEDULE ITEMS

KEY MILESTONES	Date	Status
Commence Bulk Earthworks	Q3 2014	✓
Optimized Mine Plan for Phase 1 (Definitive Project Plan)	Q4 2014	✓
Start Plant Site Civils	Q4 2014	✓
Mining Pre-Strip Begins at Nkran	Q1 2015	✓
Plant Site Earthworks	Q1 2015	98% complete
Concrete Civils	Q3 2015	54% complete
Structural Steel and Mechanical Construction	Q2 2015	Commenced ahead of schedule
Mills Arrive on Site	Q2 2015	✓ Arrived in March
SAG and Ball Mill Civils	Q3 2015	95% complete
Piping, Electrical and Instrumentation	Q4 2015	
Ore Mining Operations	Q4 2015	
Commissioning	Q1 2016	
First Gold Pour	**Q1 2016**	
Phase 1 Steady State Production of 190,000oz/pa	**Q2 2016**	

OUR SOCIAL LICENCE TO OPERATE



CSR IS FUNDAMENTAL TO OUR SUCCESS

Our approach to CSR is based on the following principles:

- Complying with our corporate governance principles, national and international laws & industry codes
- Maintaining a high level of health and safety performance
- Actively identifying opportunities to make a positive and meaningful contribution to the communities we operate in beyond the life of our mines
- Contributing to the economic and social development of our host countries – we actively support the Africa Mining Vision
- Mitigating our impact on the environment
- Developing our employees
- Adhering to our values and demonstrating them in our behavior

- Our CSR stakeholder engagement commenced back in 2006 and is actively implemented and monitored by a site-based team of Ghanaian staff

- We are monitoring and measuring our CSR activities and their effectiveness, our first CSR report was published in March 2015

- We have established strategic partnership with GIZ to leverage expertise and funds in the areas of financial literacy, skills development, and healthcare so we can maximize our efforts

KEY CSR PROGRAMS

- **Jobs:**
  - Localization policy in place to ensure locals benefit from job opportunities at the mine

- **Building local capability:**
  - 2 Skills-development and training centers at Esaase & Obotan with GIZ
  - Training focused on carpentry, electrical installation, plumbing, masonry, catering, bamboo furniture production and dress making

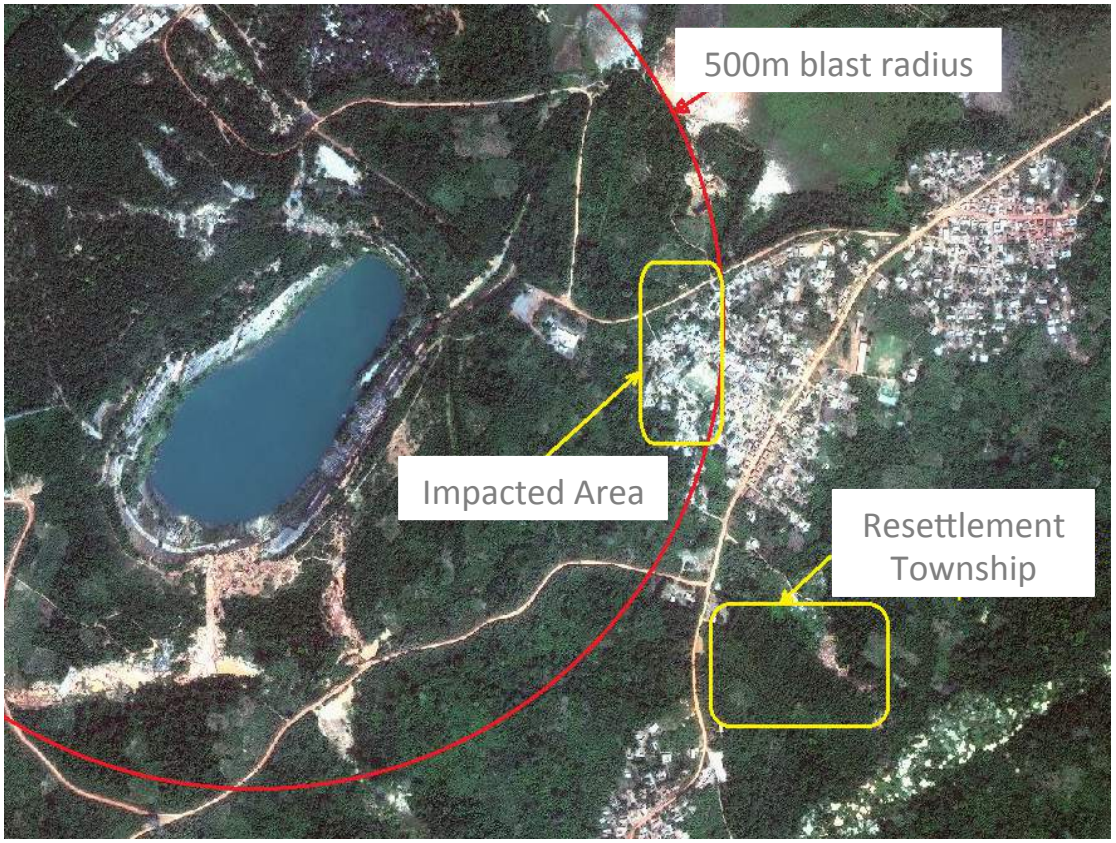
- **Community Healthcare (with GIZ):**
  - Implementing education programs about HIV/AIDS, STDs & malaria
  - 3,000 locals screened for basic healthcare in 2014

- **Community Engagement:**
- Social Responsibility Forums set up to shape and manage community expectations in a collaborative manner:
    - Relationship Agreement
    - Development Fund Agreement
    - Local Employment Agreement
    - Sustainable Livelihood Agreement

PHASE 1 – RELOCATION ACTION PLAN

- Ghana has a prescribed process for resettlement
- A portion of Nkran village, consisting of 88 building structures, have been identified for relocation
- Relocation costs included in Capital Cost Estimate
- The RAP report has been completed and submitted to EPA for review
- Site for relocation has been selected and approved by Ghanaian Lands Commission
- Site preparation completed in December 2014
- Relocation is due for completion end Q3 2015

Nkran Village Partial Relocation Action Plan (RAP)



UPGRADING LIVING STANDARDS

- Construction commenced February 2015
- 10 local contractors, all mobilized to site
- 56% of labour sourced from local villages
- Infrastructure:
  - Roads
  - Landscaping
  - Stormwater
  - Water supply and storage
  - Electrical Supply
- Houses will be replaced on a Room-for-Room basis
- Additional communal facilities:
  - Community information centre
  - Football field
  - Sold waste transfer station



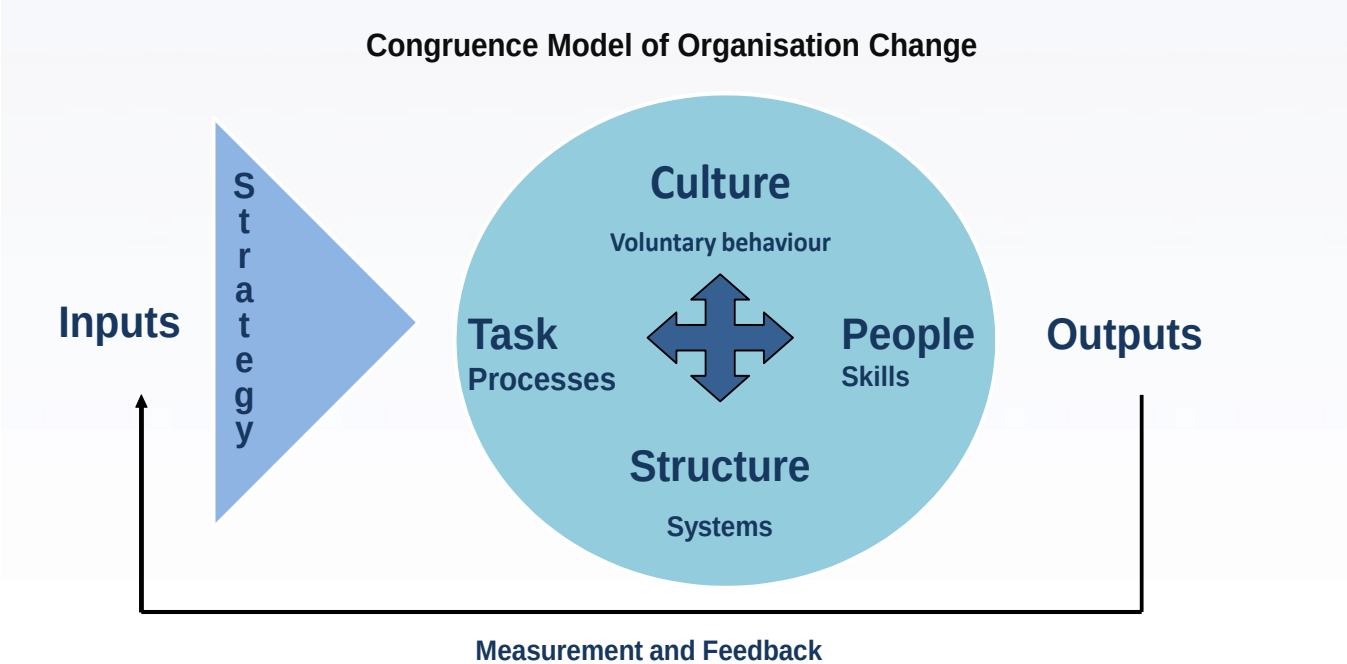


BUSINESS READINESS



OUR APPROACH TO BUILDING A HIGH PERFORMANCE ORGANISATION (HPO)

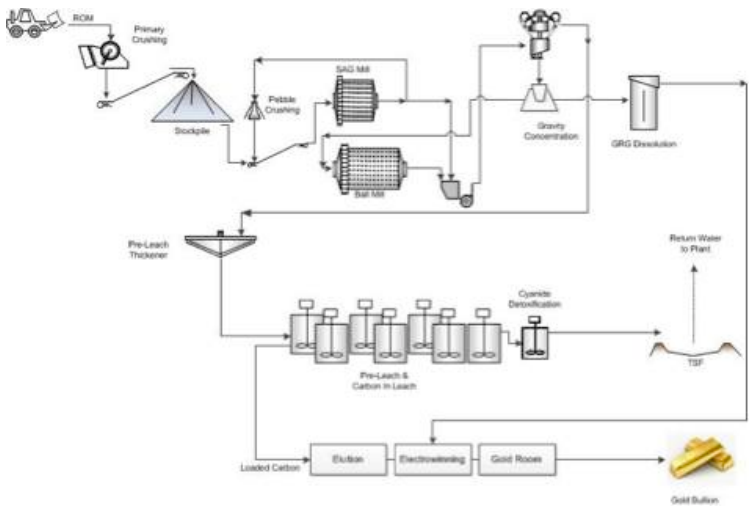
- Build the organizational capability and physical mine & plant in parallel
  - Design the organization and populate the management structure early on
  - Develop a high performance culture and business readiness
  - Use trusted, tested principles to guide design and behavior:
    - ✓ Organization Congruence
    - ✓ Stratified Systems
    - ✓ Core Process Design



BUILDING THE ORGANISATION AROUND THE REQUIREMENTS OF THE CORE PROCESS

- Design the organization around the Core Process and position Services to meet the requirements of the core
- Use core and service work cycles to design structures and roles
- Base these on the reality of operational and business environment

Technical Process Map



Core Process Map



BUSINESS READINESS PLAN (BRP)

- A BRP helps build required organization capability ahead of operations – progress against the plan is tracked
- Key BRP components include:
  - ***Recruitment***
    - ✓ Majority of AGM management team recruited, predominantly Ghanaian
    - ✓ Local hiring policy in place, important for "Social License"
    - ✓ Total current workforce in Ghana – 1,571 people
      - ✓ only 82 are non-Ghanaian
      - ✓ of 1,489 Ghanaians on site, 639 are local and 850 non-local
    - ✓ Asanko employees – 222 people
  - ***Operating System & Procedures Design***
    - ✓ All required operating systems & procedures identified
    - ✓ BRP details when and who will implement before commissioning
  - ***The Asanko Gold Way***
    - ✓ A guide that contains our High Performance Principles and Practices
  - ***Training and Development Plan***
    - ✓ Detailed Training and Development Plan drives technical, management, supervisory, policy and cultural training

43%
AGM employees from Local Communities

37%
AGM Contractors from Local Communities

96%
AGM total workforce are Ghanaian

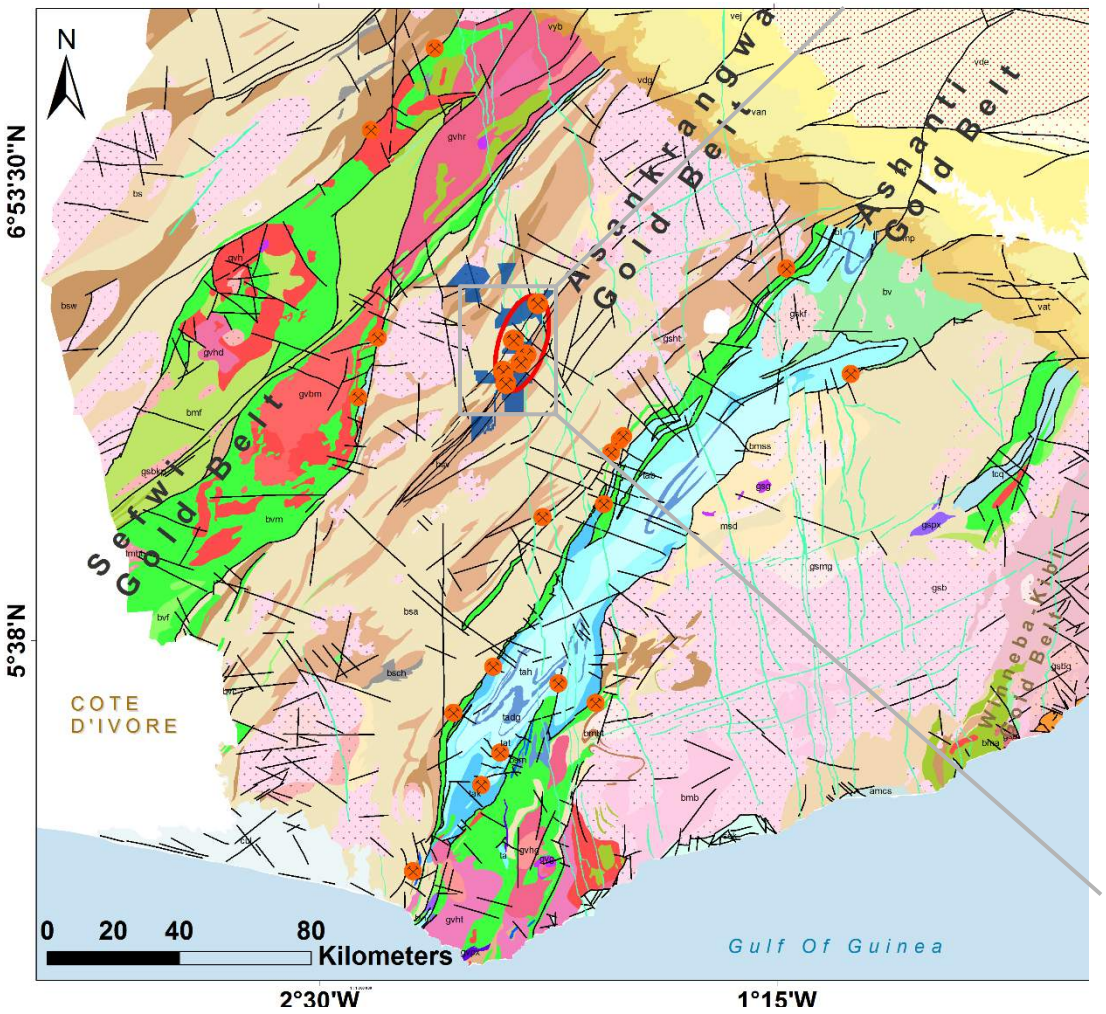
NEAR MINE EXPLORATION

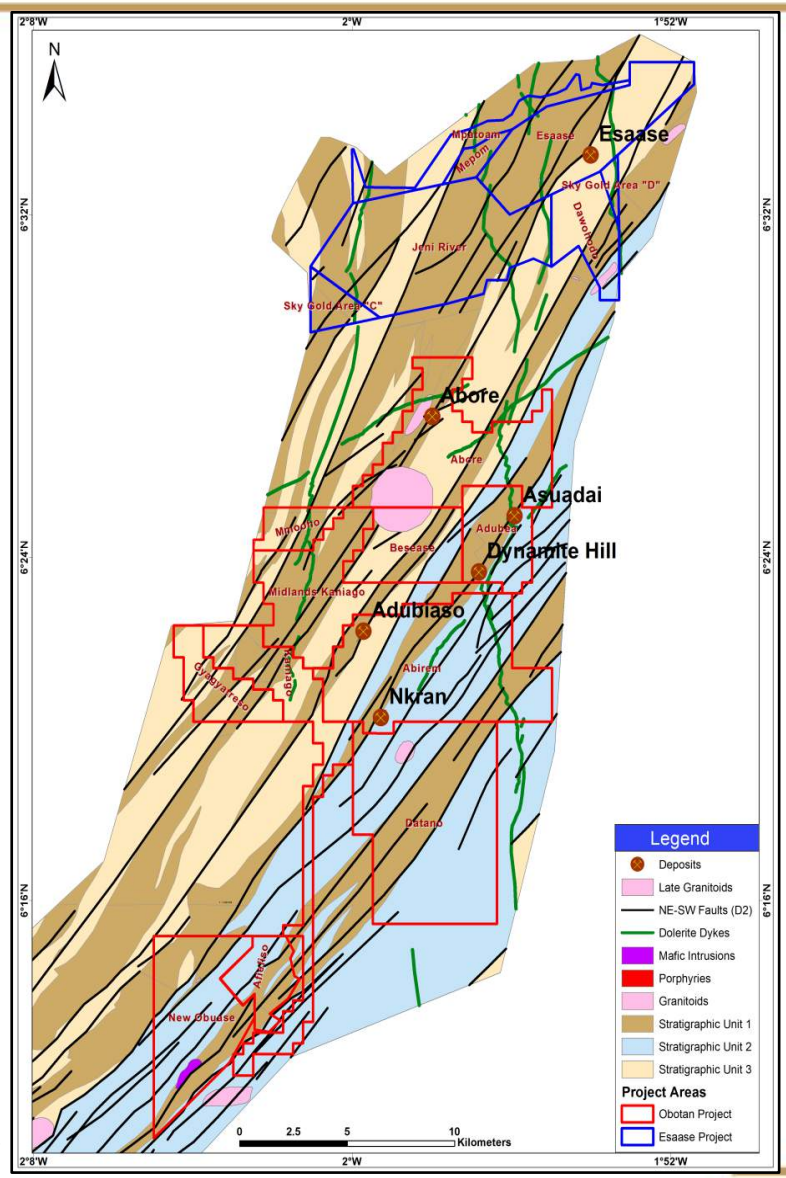


ASANKO GOLD MINE REGIONAL SETTING

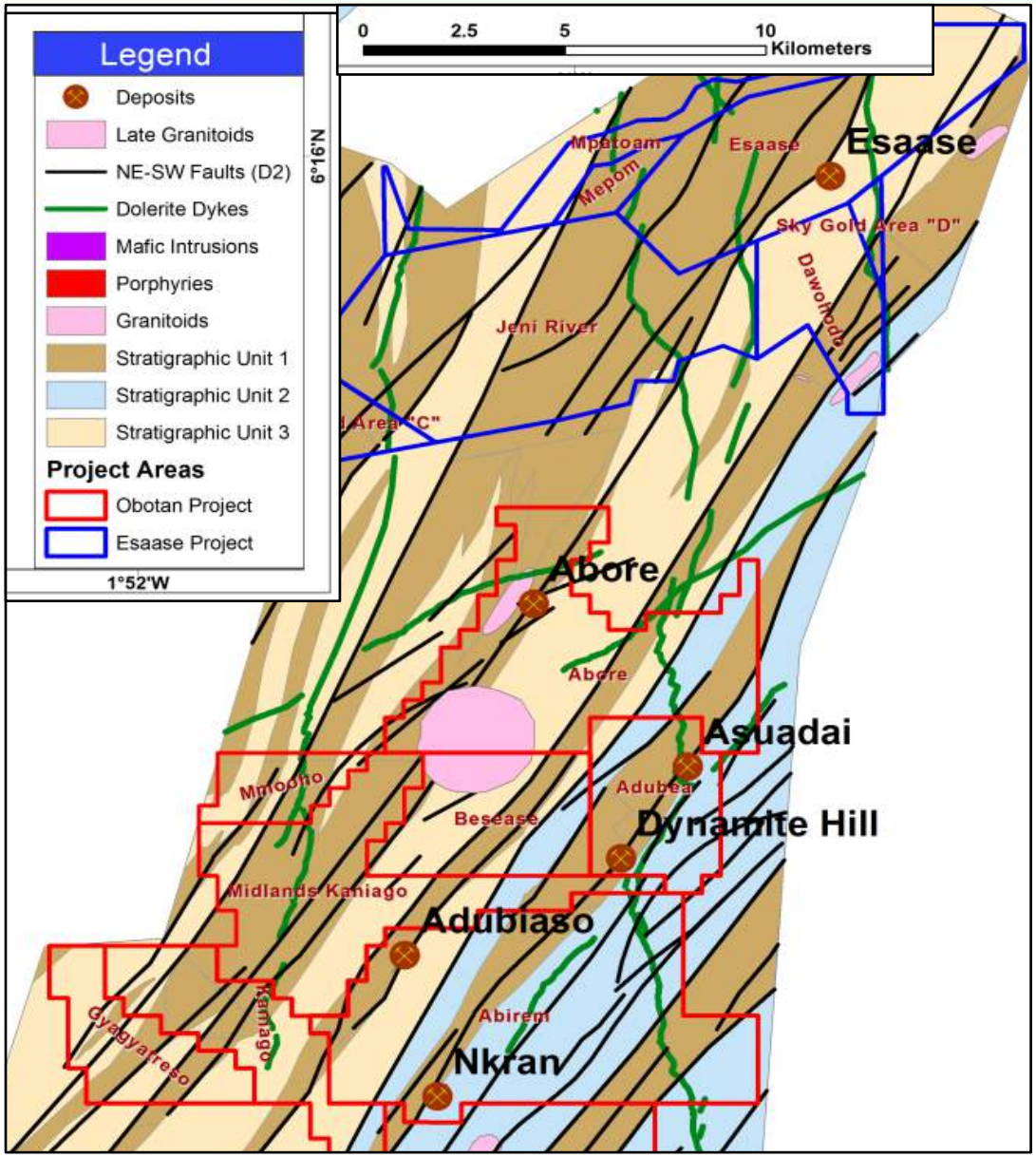
- Orebodies located in the Asankrangwa Gold Belt lying along the axis of the Kumasi Basin

- Deposits are structurally controlled by mineralized NE faults and predominantly hosted in metasedimentary rocks with minor granitic intrusions





AGM GEOLOGY, MINERAL RESOURCES & RESERVES

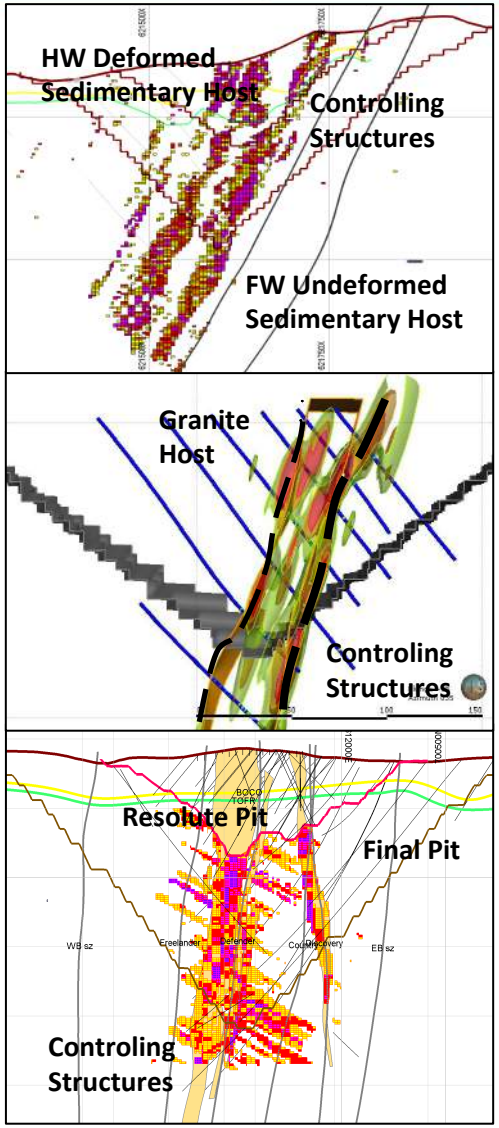


Nkran historic gold production 1997-2001
7.82 Mt @ 2.35 g/t Au rec 591,000oz

Deposit	Measured & Indicated Tonnes (million)	Grade (g/t)	Ounces (million)
Nkran	39.04	2.34	2.94
Abore	4.98	1.65	0.27
Adubiaso	2.13	2.23	0.15
Dynamite Hill	1.84	1.86	0.11
Asuadai	1.64	1.34	0.07
Phase 1 Total	49.63	2.22	3.54
Esaase	94.63	1.45	4.40
Phase 1 & 2 Total	144.26	1.71	7.94

Deposit	Proven & Probable Tonnes (million)	Grade (g/t)	Ounces (million)
Nkran	31.2	2.21	2.20
Abore	1.8	2.07	0.11
Adubiaso	2.1	1.77	0.11
Dynamite Hill	0.5	1.26	0.02
Asuadai	1.1	1.88	0.07
Phase 1 Total	36.7	2.15	2.52
Esaase	60.3	1.41	2.73
Phase 1 & 2 Total	97.0	1.68	5.25

THREE IDENTIFIED ORE DEPOSIT STYLES



Esaase and Adubiaso Style

- Quartz veins within deformed sediment host
- Gold mineralisation associated with brittle deformation of the sedimentary host
- Relatively simple structural controls on mineralisation

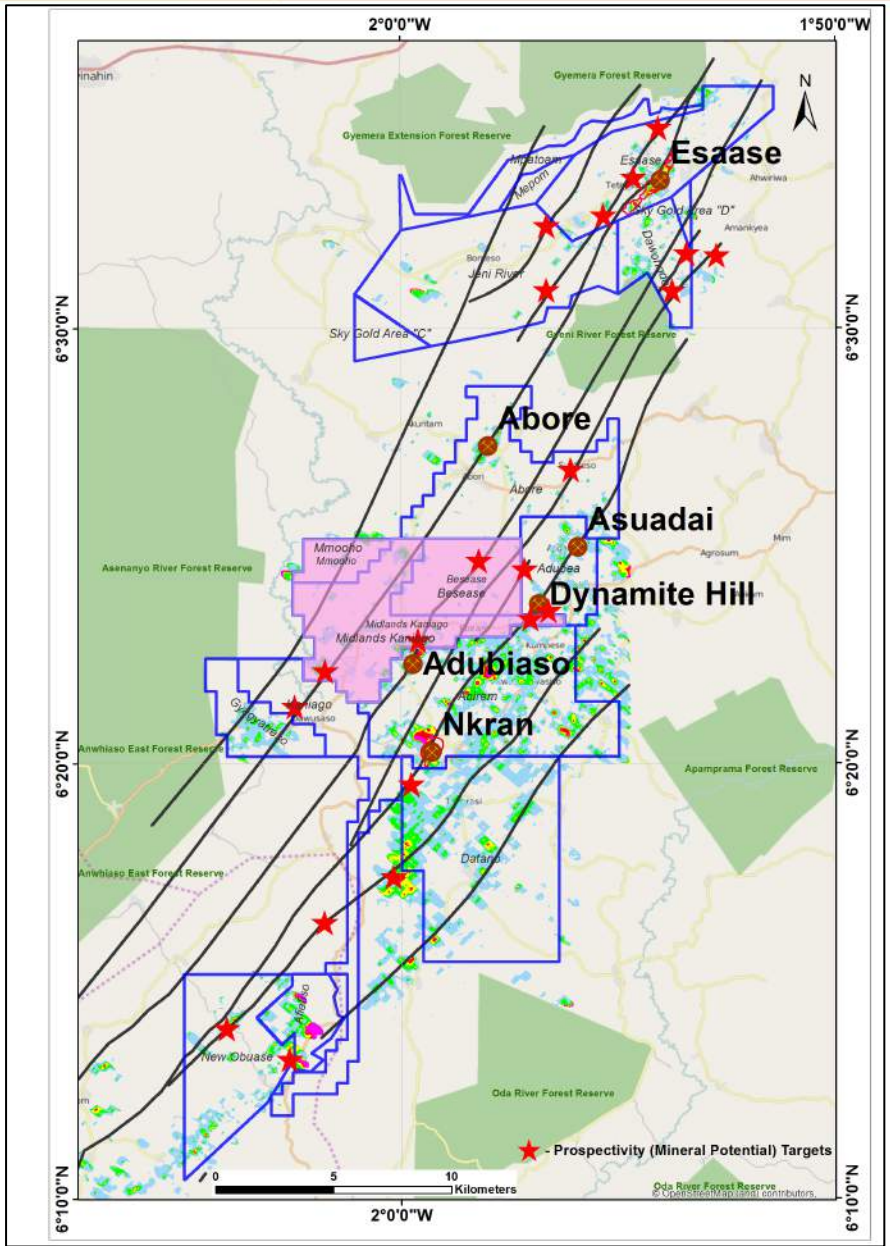
Dynamite Hill, Abore and Asuadai Style

- Shallow dipping quartz veins within granitic host
- Gold mineralisation associated with brittle deformation of the granitic host
- Relatively simple structural controls on mineralisation

Nkran Style

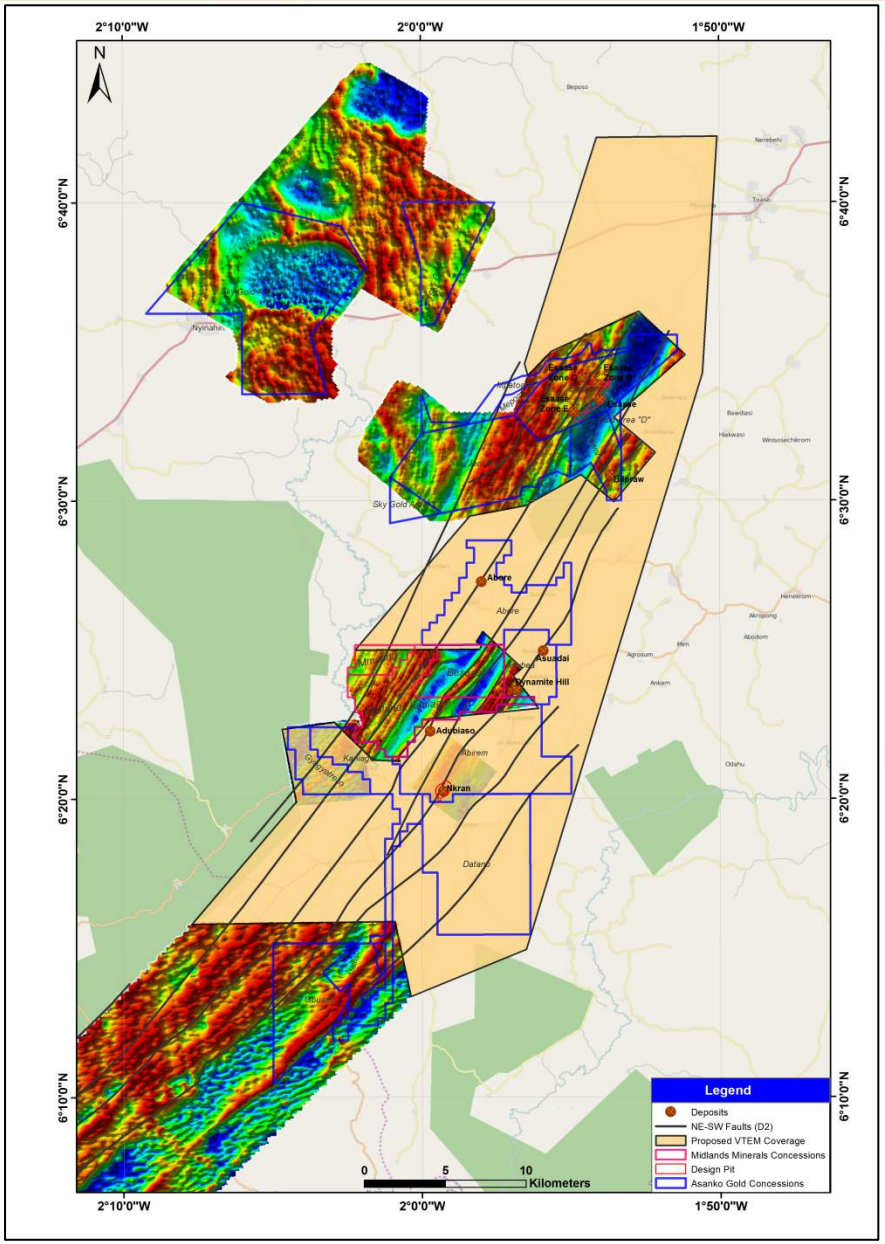
- Quartz veins within both sedimentary and granitic hosts
- Gold mineralisation associated multiple phases of deformation
- Complex structural controls on mineralisation

2014 BELT SCALE PROSPECTIVITY ANALYSIS



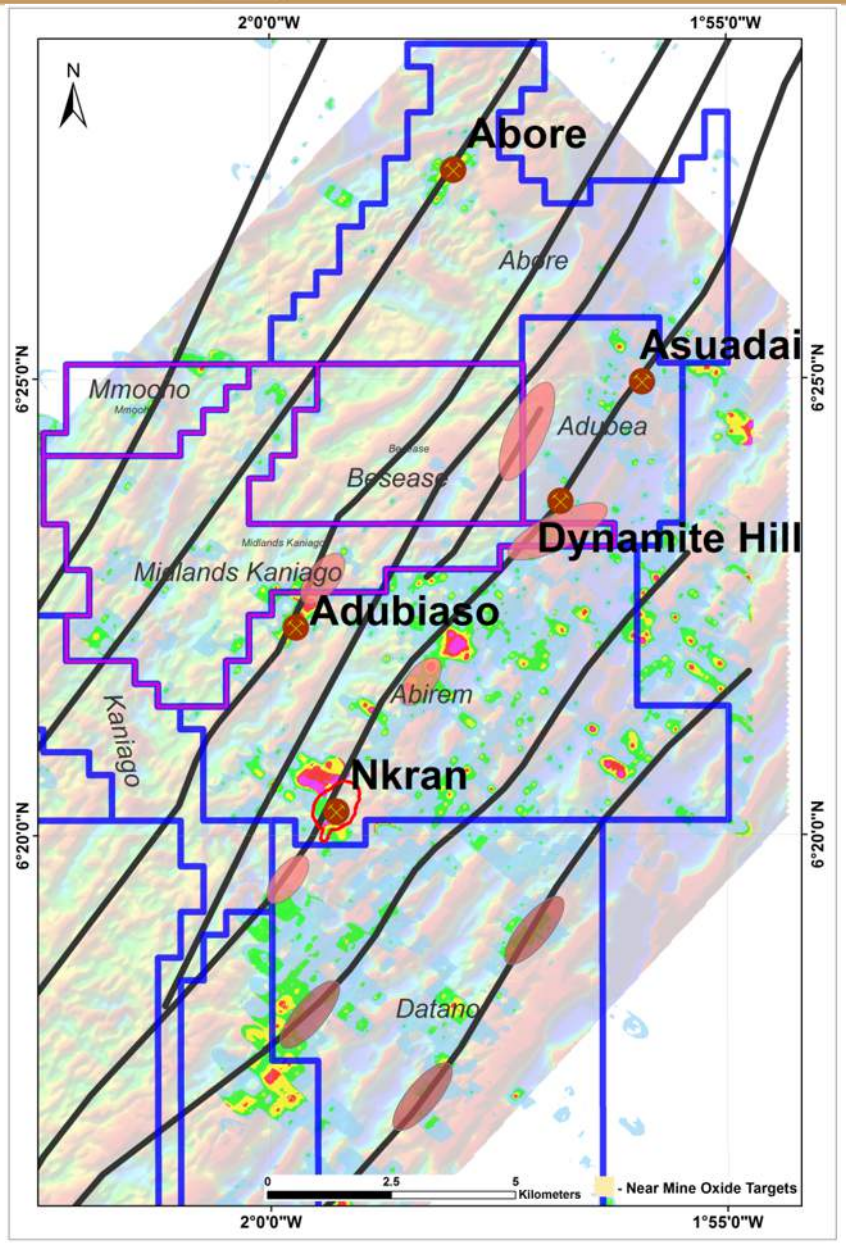
- Study completed in December 2014 of Kumasi Basin
- Both belt scale and locally focused
- Confirmed that only 7% of region has been effectively explored
- Identified many prospective near mine and regional targets
- Provided a platform for systematic exploration activities in 2015
- Identified data gaps in our geophysics coverage
- Prospectivity model is dynamic and continues to be refined as new data is collected

2015 AIRBORNE GEOPHYSICAL SURVEY



- Geophysical data gaps were identified once the PMI and Asanko data sets were merged
- 2015 survey will be combined VTEM, Magnetics, and Radiometrics, approximately 3200 line km.
- Vertical Time Electromagnetic (VTEM) surveys are excellent tools for identifying primary and secondary structures which control gold mineralization in the Asankrangwa gold belt
- Identification of these structures, and especially flexures and cross structure intersections, allow exploration to focus on the areas of the tenement with highest prospectivity
- Survey will lead to additional high priority targets for near mine and regional exploration activities
- Survey has been approved and will commence in May 2015

FOCUS ON NEAR MINE OXIDE EXPLORATION



- Phase 1 ore sources is dominated by Nkran fresh ore
- The satellite Dynamite Hill provides oxides for approximately the first 2 years of operations
- Study identified several targets near Phase 1 infrastructure
- These targets form basis for upcoming exploration programs in H2 2015 and beyond
- Targets will continue to be refined and generated as more field data is collected and the airborne geophysical survey completed and interpreted (September 2015)
- Near mine targets are currently being systematically explored with the aim of defining new drilling targets
- High likelihood of ongoing reserves replacement