SHEEP MOUNTAIN URANIUM PROJECT
CROOKS GAP, WYOMING

TITAN
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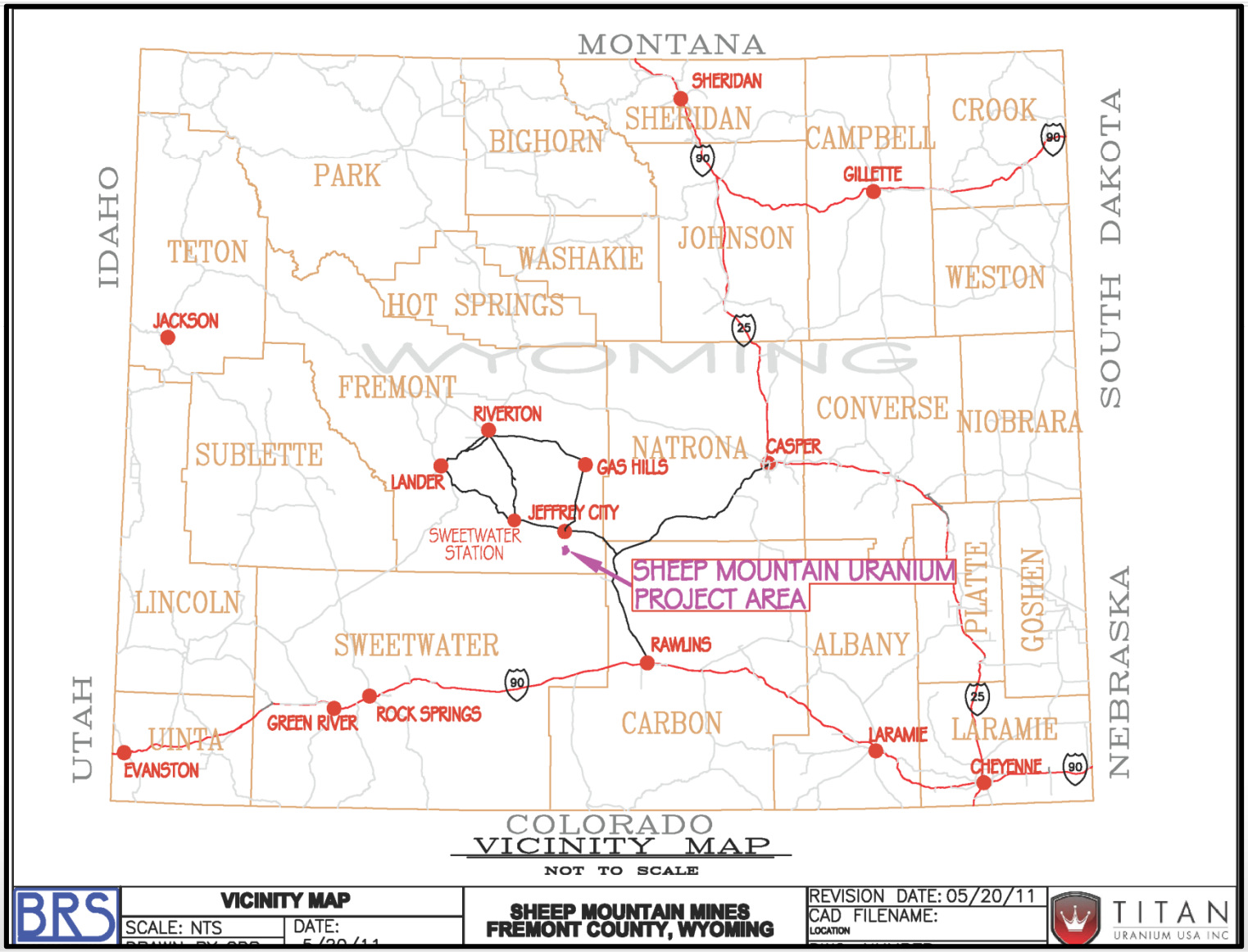
NRC Sidebar Meeting

TSX.V - TUE FRANKFURT - T4X

WWW.TITANURANIUM.COM

PROJECT OVERVIEW

- Location
- Project Scope
  - Mining
  - Milling


MONTANA
SHERIDAN
SHERIDAN
BIGHORN
CAMPBELL
CROOK
GILLETTE
PARK
JOHNSON
TETON
WASHAKIE
WESTON
HOT SPRINGS
JACKSON
IDAHO
WYOMING
SOUTH DAKOTA
FREMONT
CONVERSE
NIOBRARA
RIVERTON
SUBLETTE
NATRONA
CASPER
GAS HILLS
LANDER
JEFFREY CITY
SWEETWATER STATION
SHEEP MOUNTAIN URANIUM PROJECT AREA
LINCOLN
PLATTE
GOSHEN
SWEETWATER
RAWLINS
ALBANY
UTAH
GREEN RIVER
ROCK SPRINGS
CARBON
LARAMIE
UINTA
EVANSTON
CHEYENNE
NEBRASKA
COLORADO
VICINITY MAP
NOT TO SCALE
BRS
VICINITY MAP
SCALE: NTS
DATE:
SHEEP MOUNTAIN MINES
FREMONT COUNTY, WYOMING
REVISION DATE: 05/20/11
CAD FILENAME:
LOCATION
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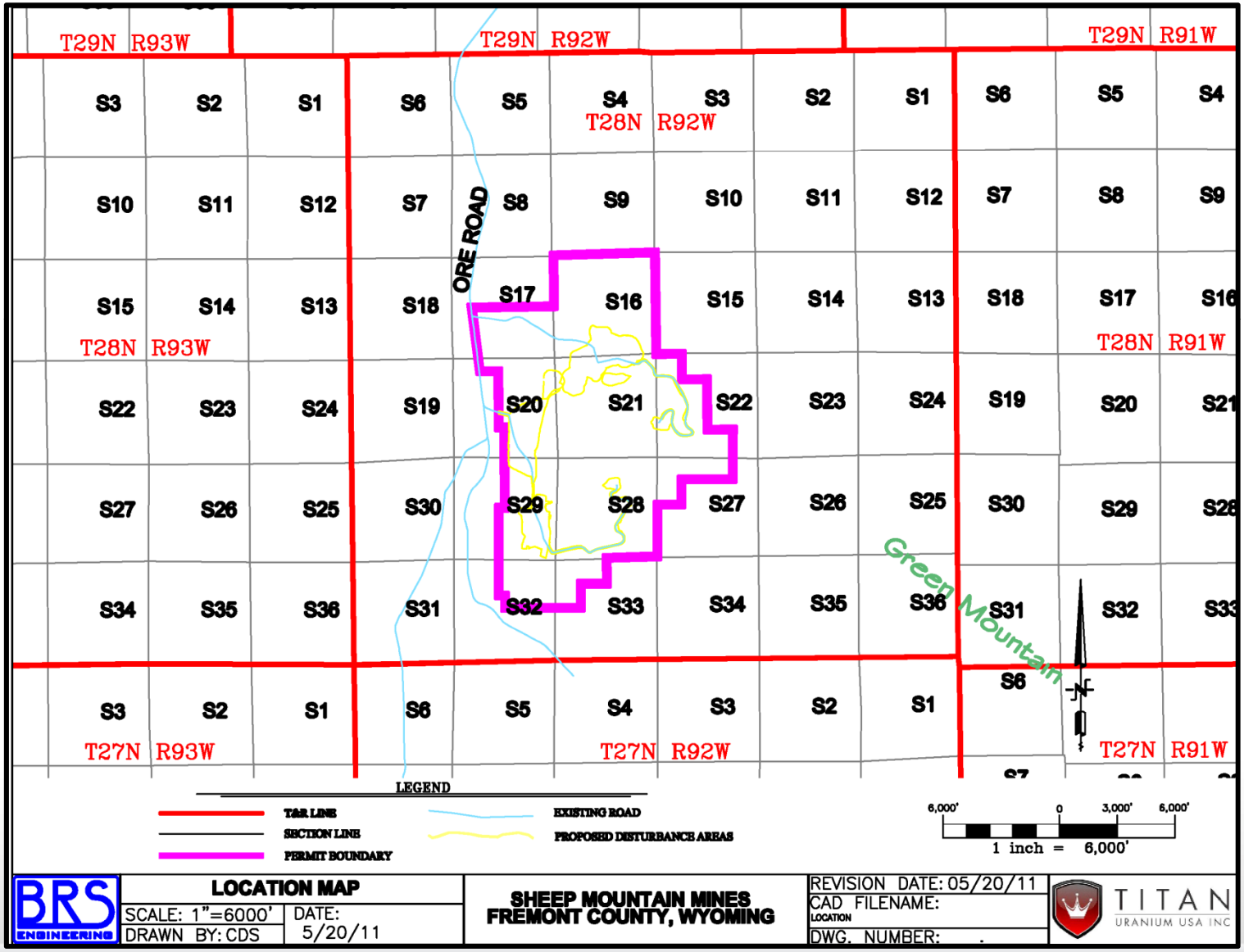
T29N R93W
T29N R92W
T29N R91W
T28N R93W
T28N R92W
T28N R91W
T27N R93W
T27N R92W
T27N R91W
ORE ROAD
Green Mountain
LEGEND
T&R LINE
SECTION LINE
PERMIT BOUNDARY
EXISTING ROAD
PROPOSED DISTURBANCE AREAS
6,000' 0 3,000' 6,000'
1 inch = 6,000'
BRS ENGINEERING
LOCATION MAP
SCALE: 1"=6000'
DRAWN BY: CDS
DATE: 5/20/11
SHEEP MOUNTAIN MINES
FREMONT COUNTY, WYOMING
REVISION DATE: 05/20/11
CAD FILENAME: LOCATION
DWG. NUMBER:
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PROJECT OVERVIEW

- Site Location
  - Fremont , Wyoming
  - Existing Uranium Mine Permit 381C
- Historical Operation
  - Western Nuclear Crooks Gap Project
    - Mined 1956 – 1988, processed at Split Rock Mill
  - US Energy
    - 1988 Sheep Mountain Underground
    - Partial reclamation since 1988, no new operation

Titan Sheep Mountain Project:

- Mine
  - Underground and Open Pit Mining
  - Current Mine Permit (381C)
    - Updating POO, Reclamation Plan & Bond
- Uranium Recovery
  - Heap Leach with Central Processing Plant
  - Within existing WDEQ Mine Permit (381C)

AGENDA

- Project Status Update
- Update on EPA Region 8/NESHAPS
- Update on Application & pre-application audit schedule

Project Status Update

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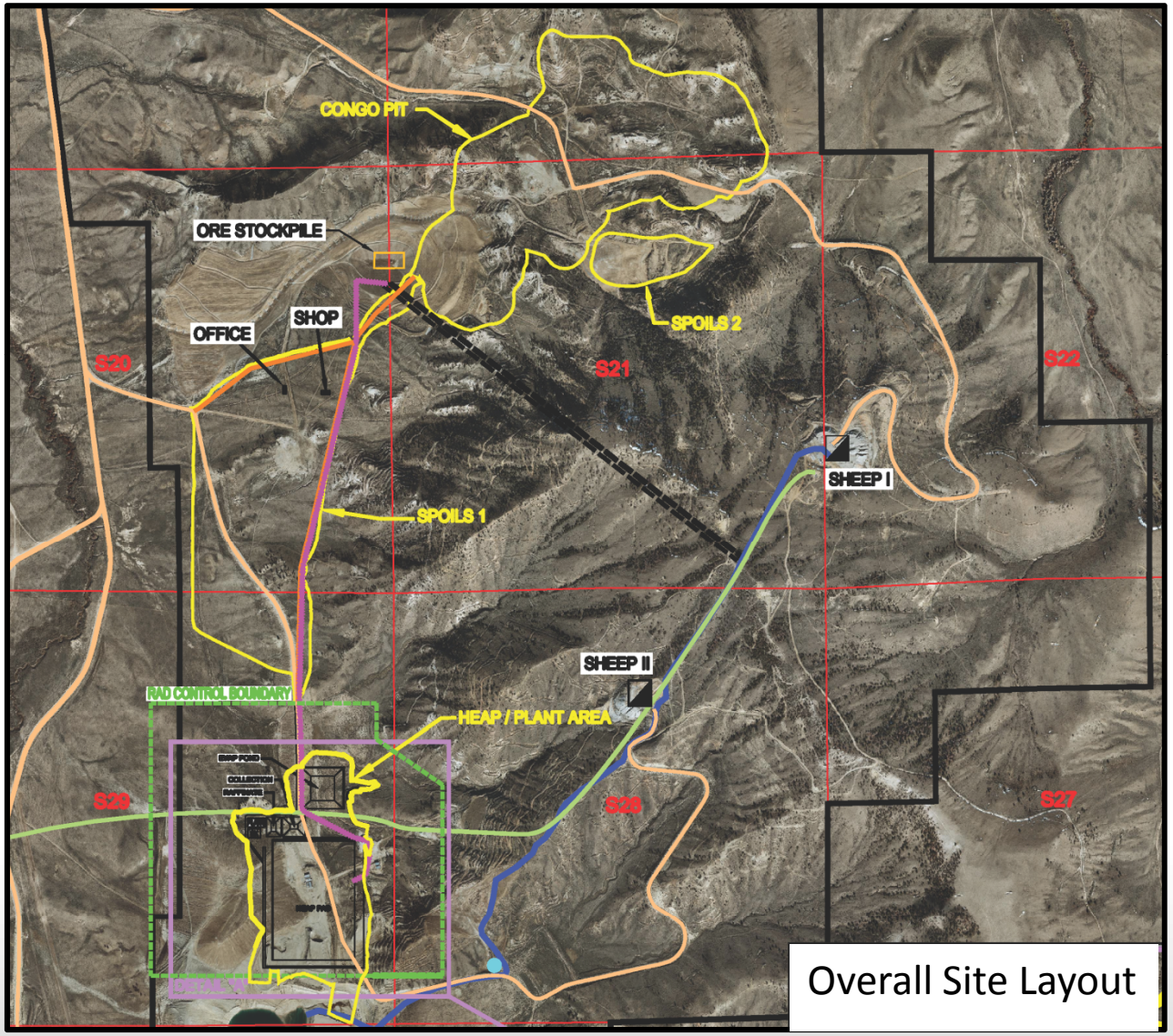
PROJECT STATUS UPDATE

- **Reconfiguration of Uranium Recovery Facility and Mine Facilities**
  - Heap, Central Processing Plant relocated to South, (McIntosh Area)
  - Could not reasonably acquire control of mineral claims in North Pay Dirt and Hanks Draw Area
- **Baseline studies contemplated southern site, no significant data gaps due to relocation**



Overall Site Layout

Mine Facilities Relocation:

- Congo Pit spoils pile relocated to south
- Congo Pit mine plan essentially unchanged
- Sheep Mountain underground mine plan unchanged
- Ore handling plan modified
  - Congo Pit ores hauled to Pay Dirt stockpile area
  - Underground ores placed on conveyor, conveyed to portal near Pay Dirt stockpile area
  - Congo Pit ores added to conveyor @ stockpile area
  - All ores sized (grizzly, 3 inch roller crusher) at mine to be compatible for conveyor transport
  - All ores transported to heap via conveyor

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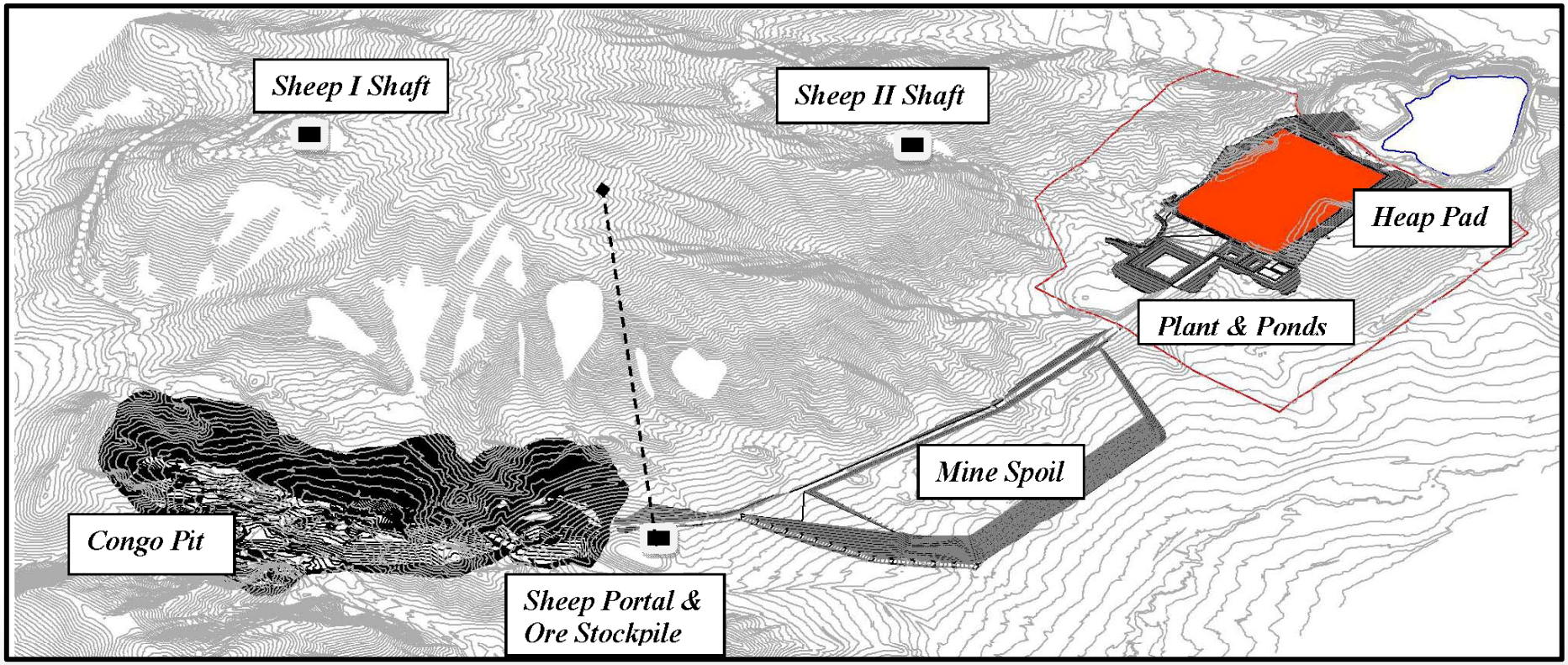
Sheep Mountain Facilities

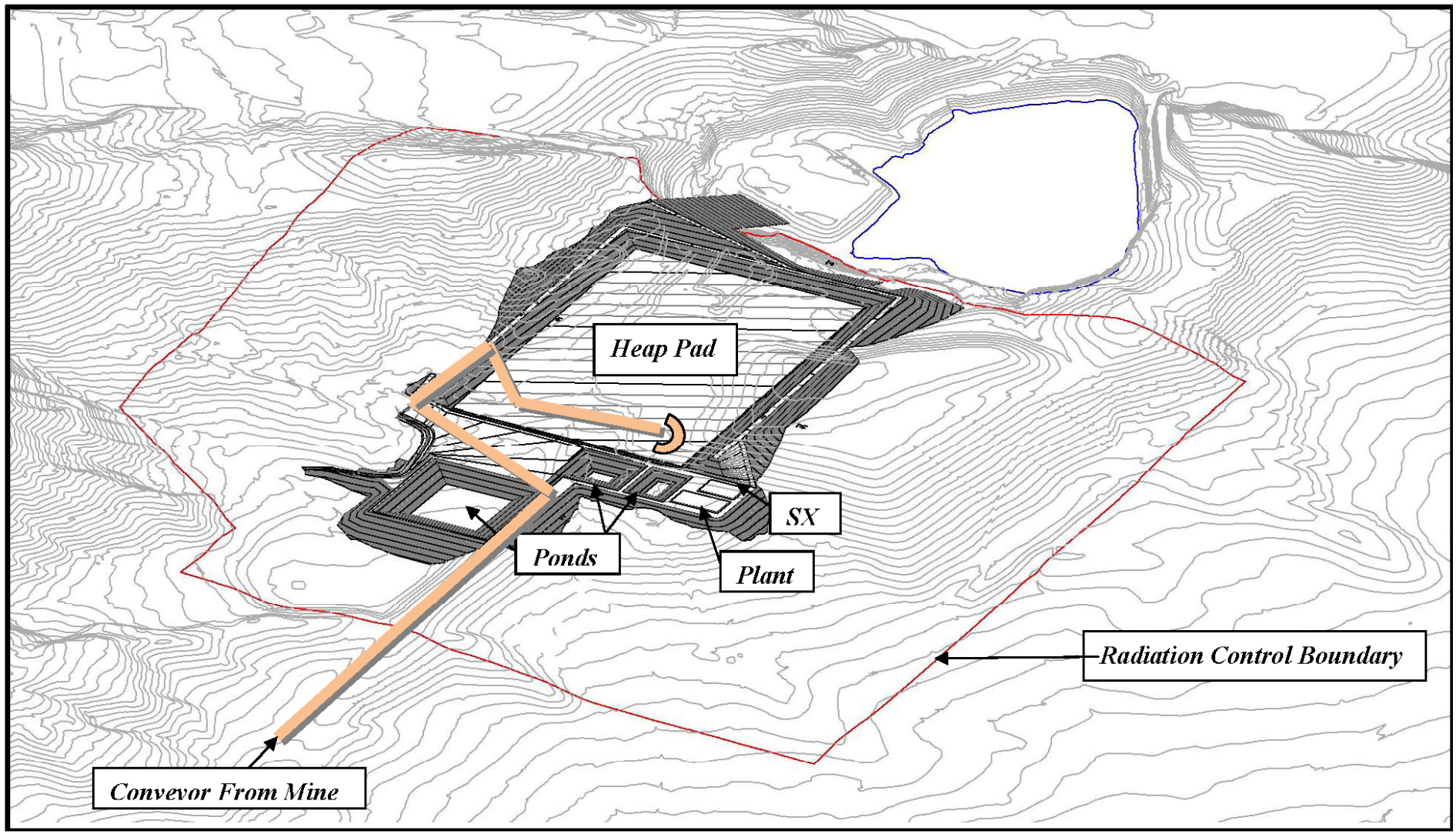


Mill Facilities Relocation:

- Heap now in Southern location
  - Radiation Control Area = 266 acres
  - Total Footprint = 80 acres
    - Pad, Ponds, Plant, Appurtenances, and Grading
- Heap pad partially subsurface
  - Excavated into native material
  - Side slopes lined to 28 ft @ 3H:1V on three sides
- Heap and liner design essentially unchanged
  - Two 25 ft lifts, max. height 50 ft
  - 60 mil HDPE primary liner
  - Geogrid drainage layer
  - 40 mil HDPE leak detection liner
  - ***GCL (Bentomat) underliner***

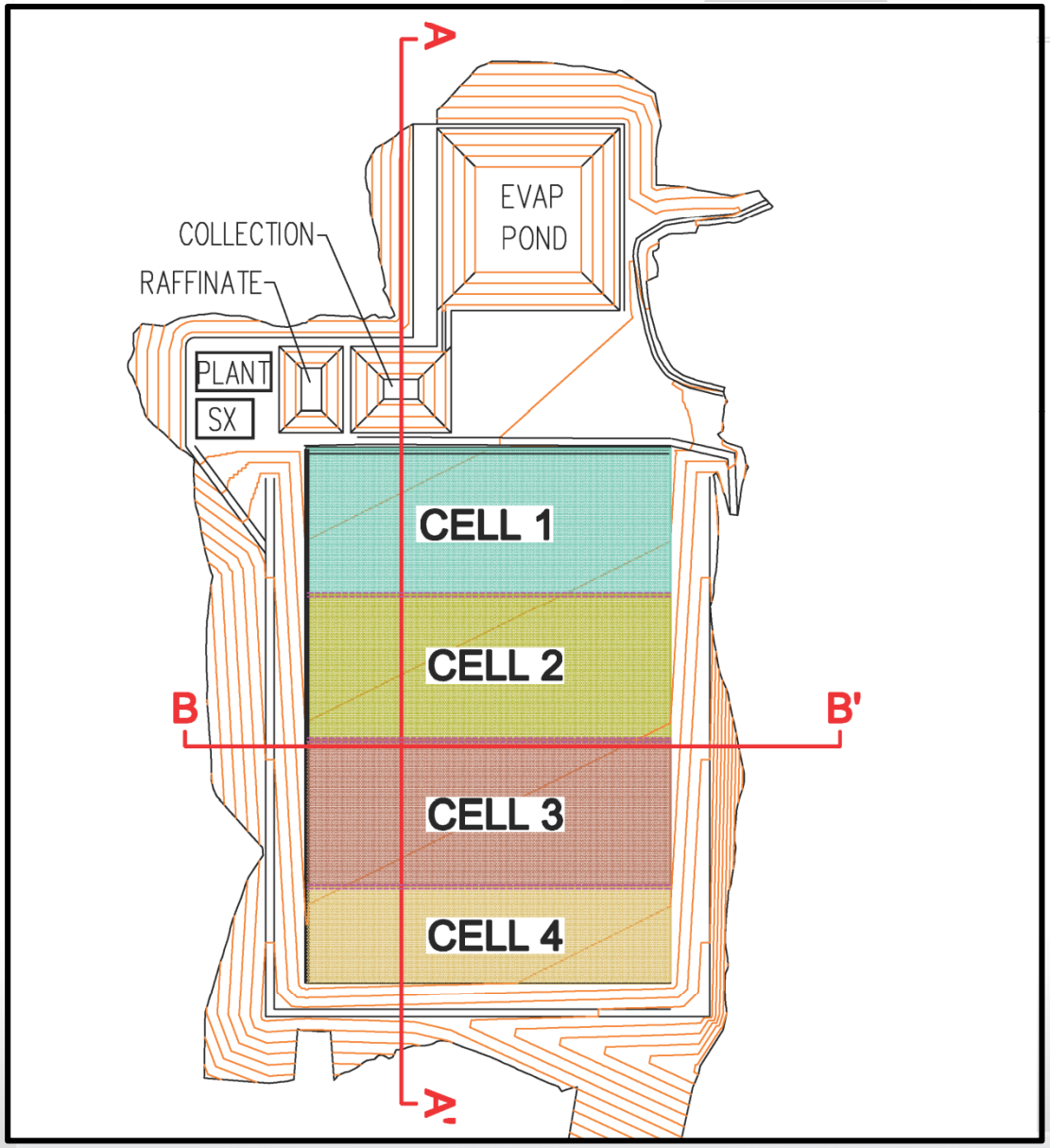
Mill Facilities Relocation (con't):

- Heap area = 40 acres, four 10-acre cells
- Evaporation Pond = 5.7 acres
- Collection Pond = 1.5 acres
- Raffinate Pond = 0.9 acres
- Central Processing Plant northwest of heap
  - SX Building = 0.3 acres
  - Central plant building = 0.5 acres
- Waste management facilities (heap & evap pond)
  - < two 40 acre cells


Heap Pad
SX
Ponds
Plant
Radiation Control Boundary
Convevor From Mine

- Heap and Process Facilities on Private Surface
  - Radiation Control Area = 266 acres
  - Total Footprint = 80 acres
    - Pad, Ponds, Plant, Appurtenances, and Grading
- Heap pad partially subsurface
  - Excavated into native material
  - Side slopes lined to 28 ft @ 3H:1V on three sides
- Heap and liner design
  - Two 25 ft lifts
  - 60 mil HDPE primary liner
  - Geogrid drainage layer
  - 40 mil HDPE leak detection liner
  - ***GCL (Bentomat) underliner under consideration***

BRS ENGINEERING



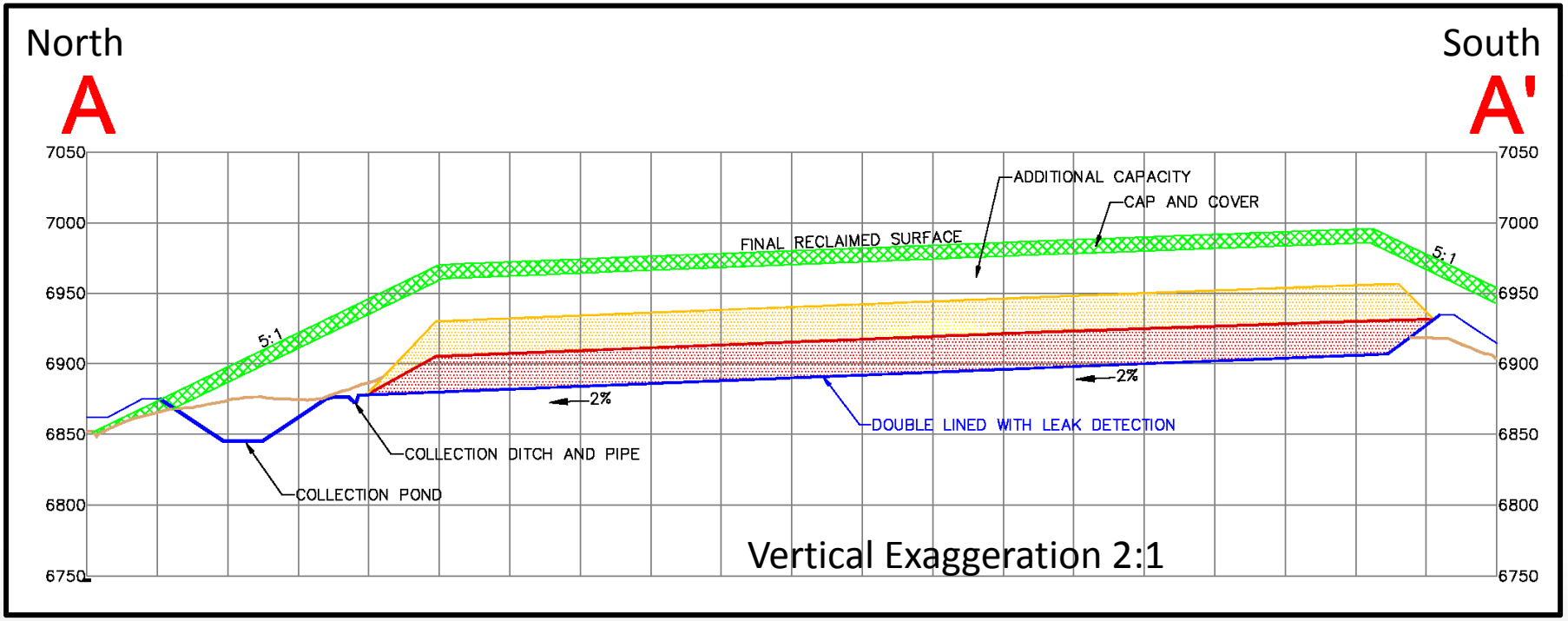
HEAP FACILITIES

- Heap Pad
- Plant
- Ponds

- Heap area = 40 acres, four 10-acre cells
- Evaporation Pond = 5.7 acres
- Collection Pond = 1.5 acres
- Raffinate Pond = 0.9 acres
- Central Processing Plant northwest of heap
  - SX Building = 0.3 acres
  - Central plant building = 0.5 acres

BRS ENGINEERING

N/S Sectional View



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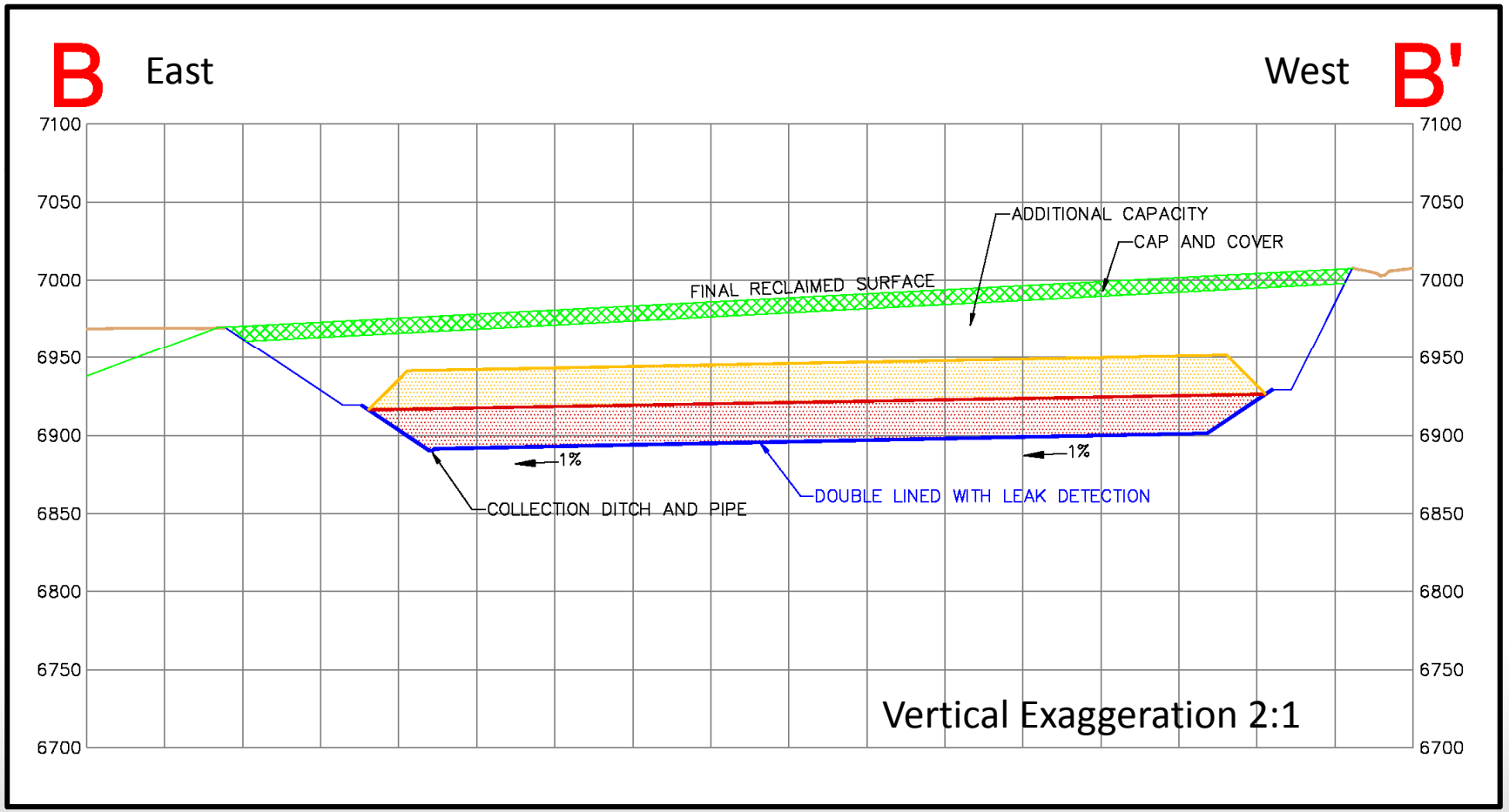
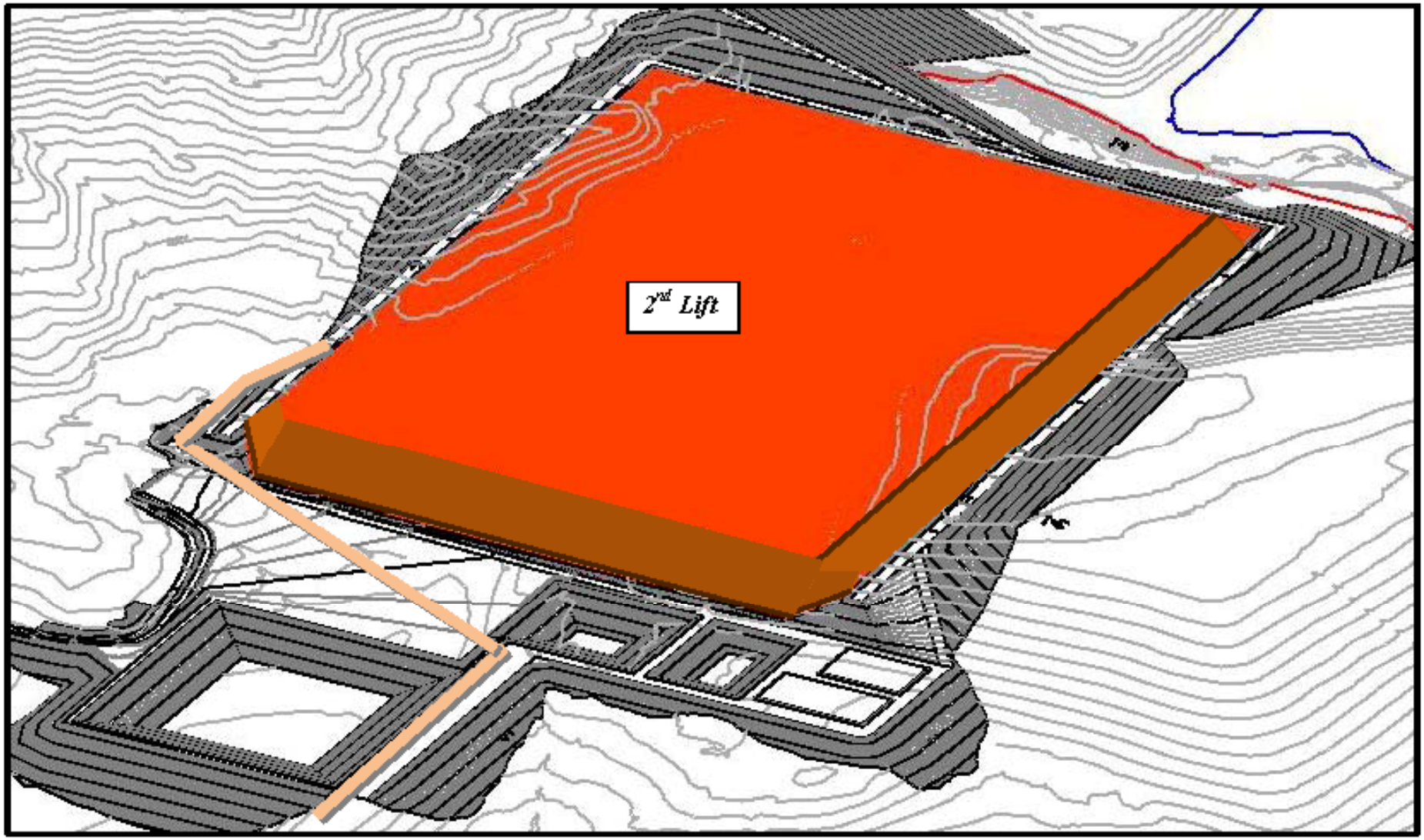
E/W Sectional View




2nd Lift

Conceptual Heap Sequencing

Heap Pad Loading

- up to 2,600 tons/day,
- ~1,800 cy/day
- 25 ft per lift (currently 2 lifts planned)
- Cells 400 ft wide by 1,150 ft
- Rows 200 ft wide
- Loaded with continuous conveyor/stacker

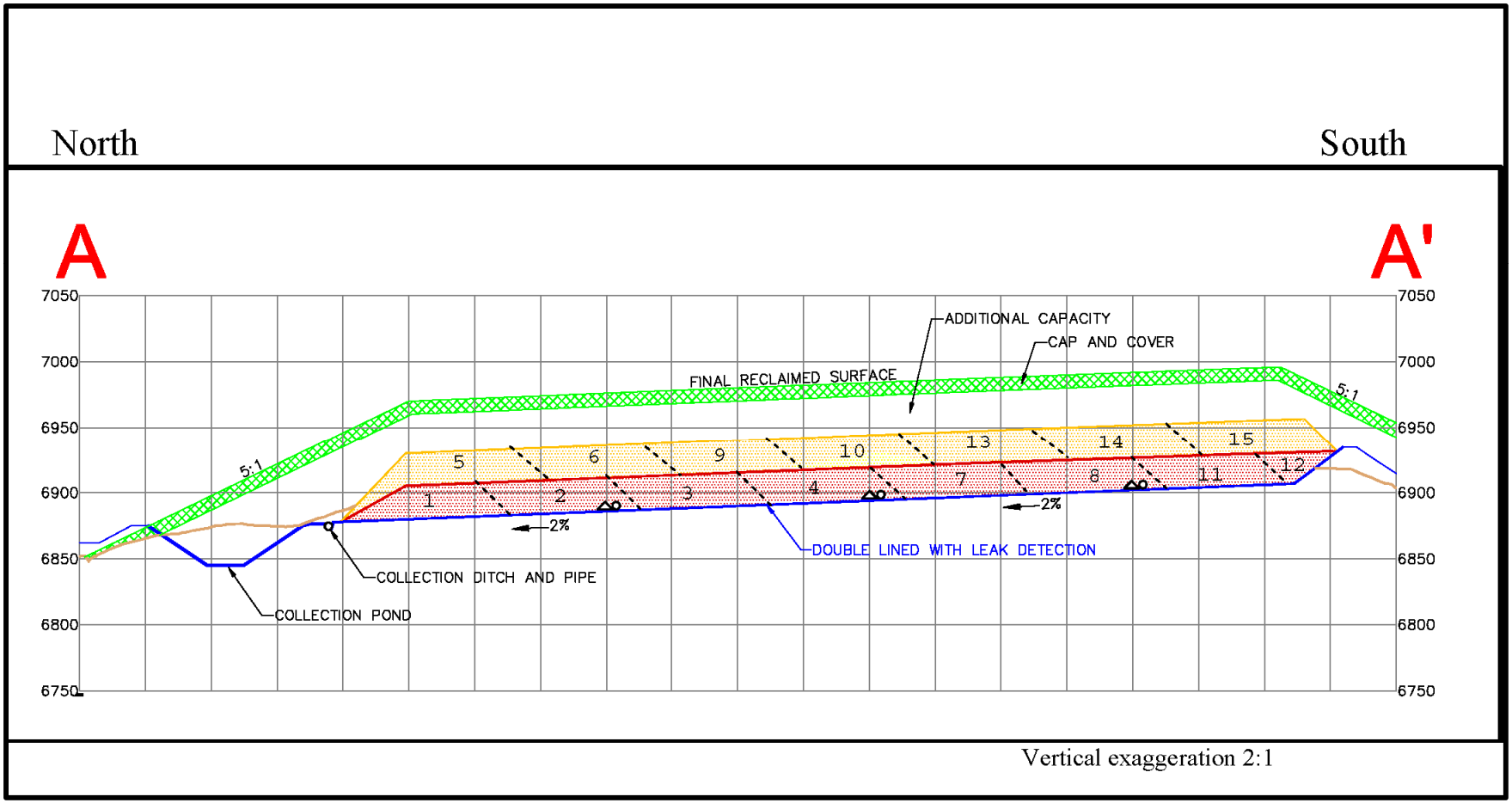
- **Stacking**, leaching is phased to minimize
  - Exposed ore and exposed spent material
  - Continual wetting during leaching and rinsing

Lixiviant is 1 normal H_2SO_4

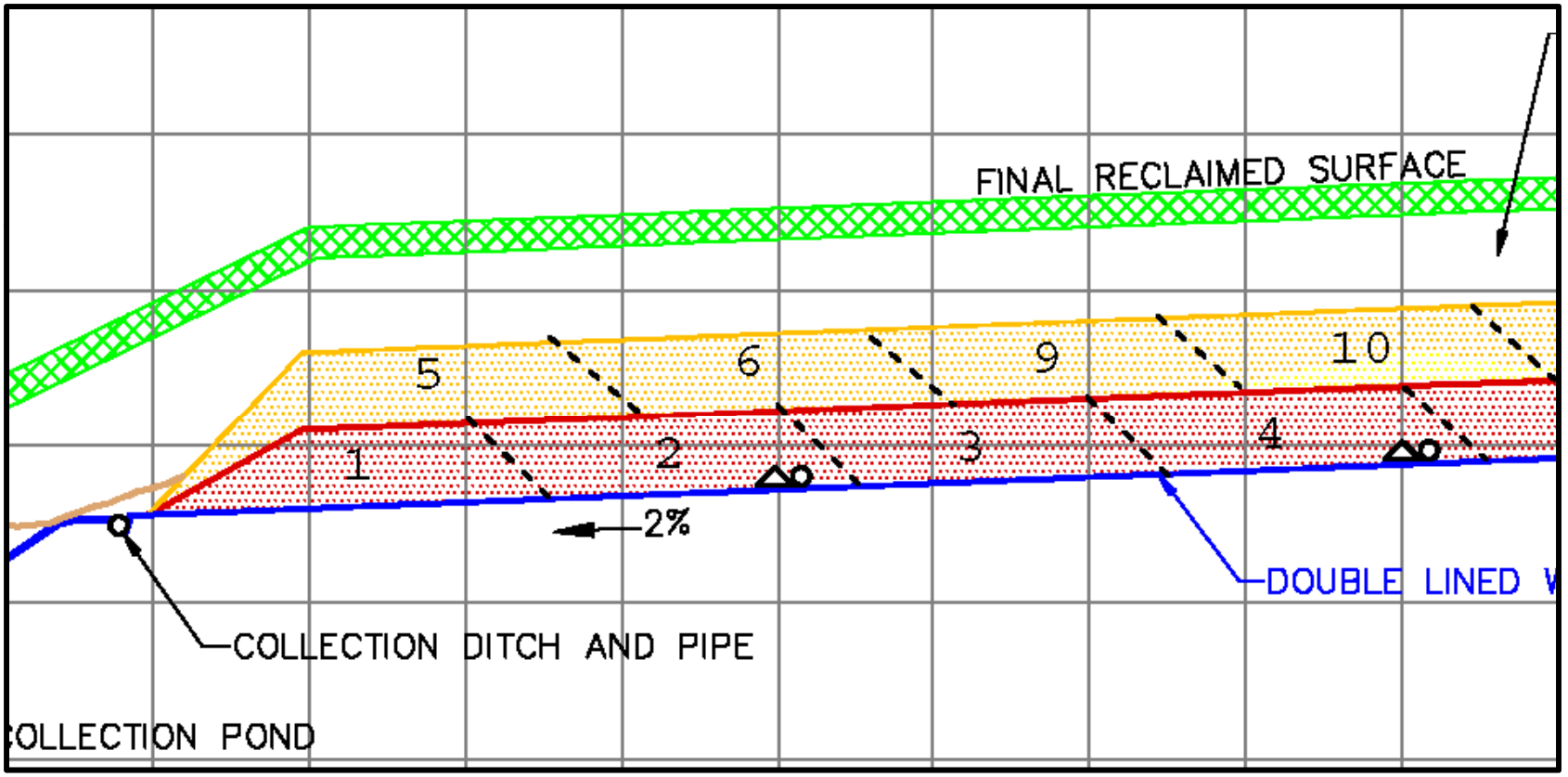
- applied at 0.005 gpm/sq ft

- Approx. 1.6 acres primary leach at any one time
- Average 360 gpm of solution to plant

Sectional View with Cells and Rows



Cells 1 and 2


FINAL RECLAIMED SURFACE
5
6
9
10
1
2
3
4
2%
DOUBLE LINED
COLLECTION DITCH AND PIPE
OLLECTION POND

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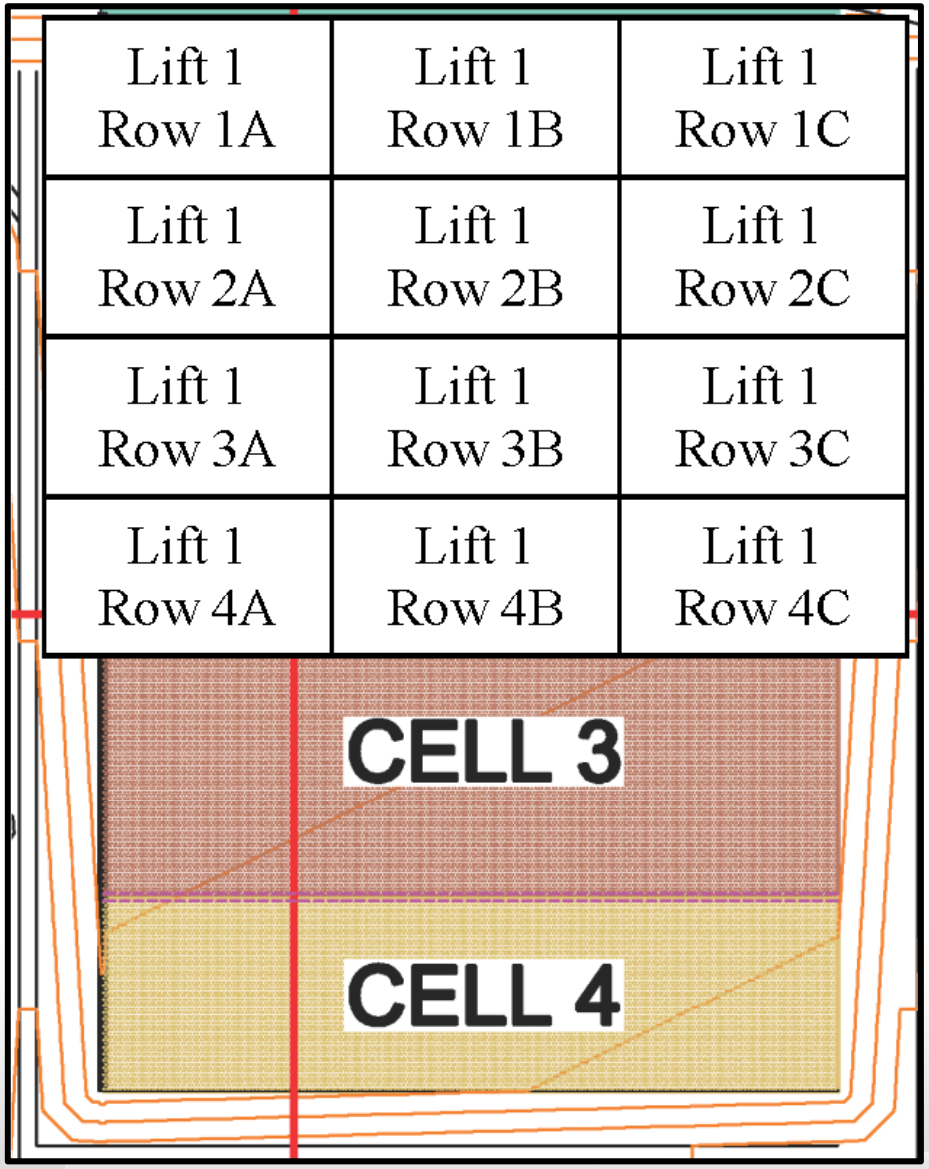
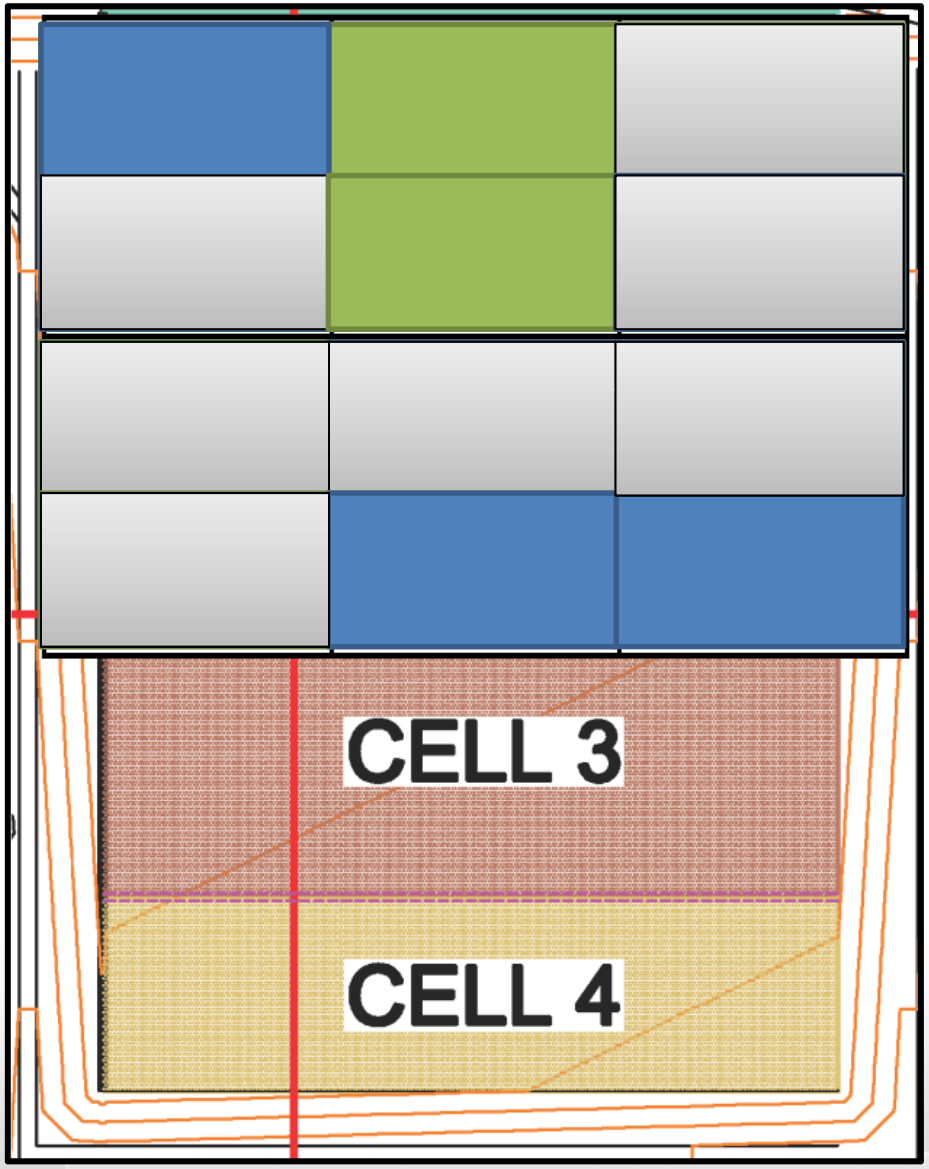


FIRST LIFT

- Each Cell 10 Acres
  - 6 Op Units
- Each Op Unit ~1.6 Acres
  - App Rate .005 gpm/ft^2
  - Avg Flow 360 gpm
- Sequential Operations
  - Placement;
  - Leaching;
  - Rinsing and Resting



Operation Sequence

Placement;

Leaching;

Rinsing and Resting

Legend

- Placement of Ore (milling)
- Leaching of Ore (milling)
- Rinsing/Resting Ore (milling)
- Spent Ore (Tailings)

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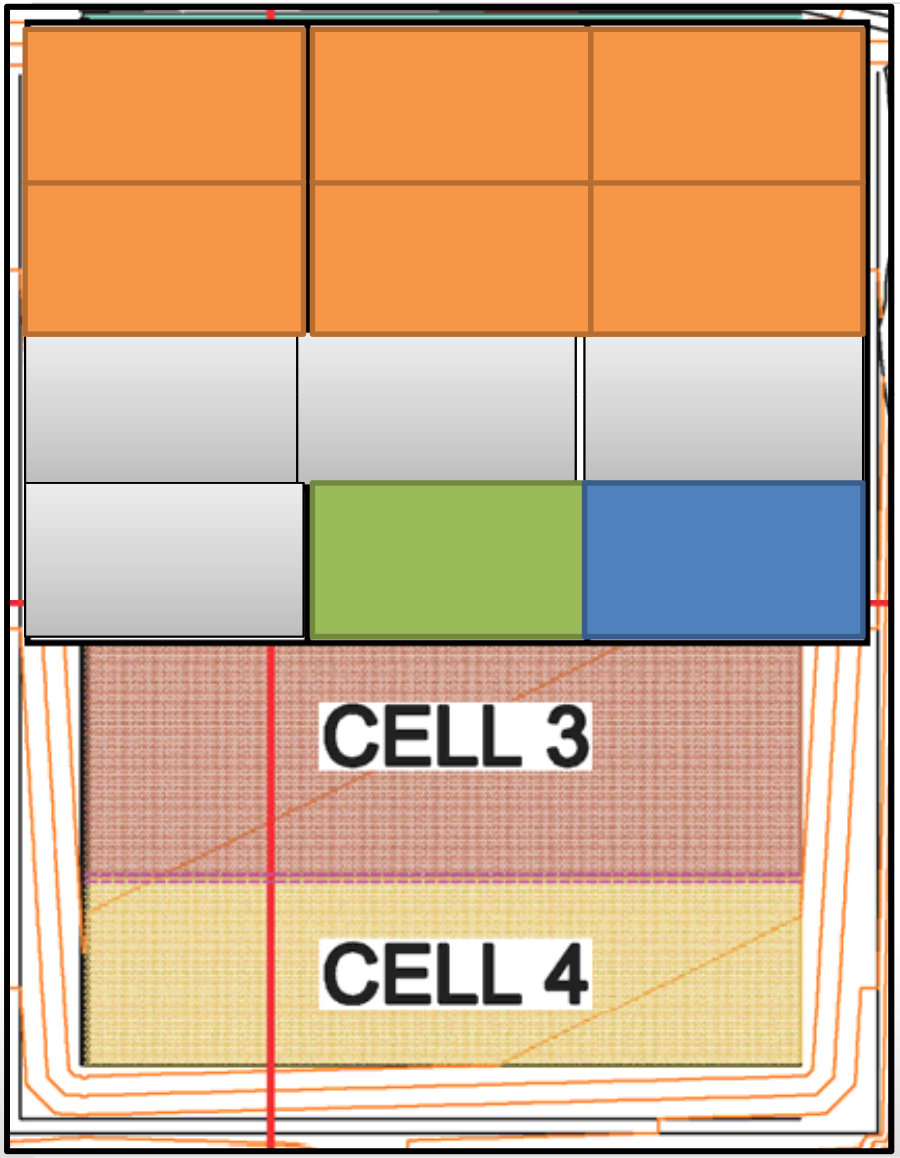


FIRST LIFT CELL 1 COMPLETE

PLACEMENT OF CELL 2 COMPLETE

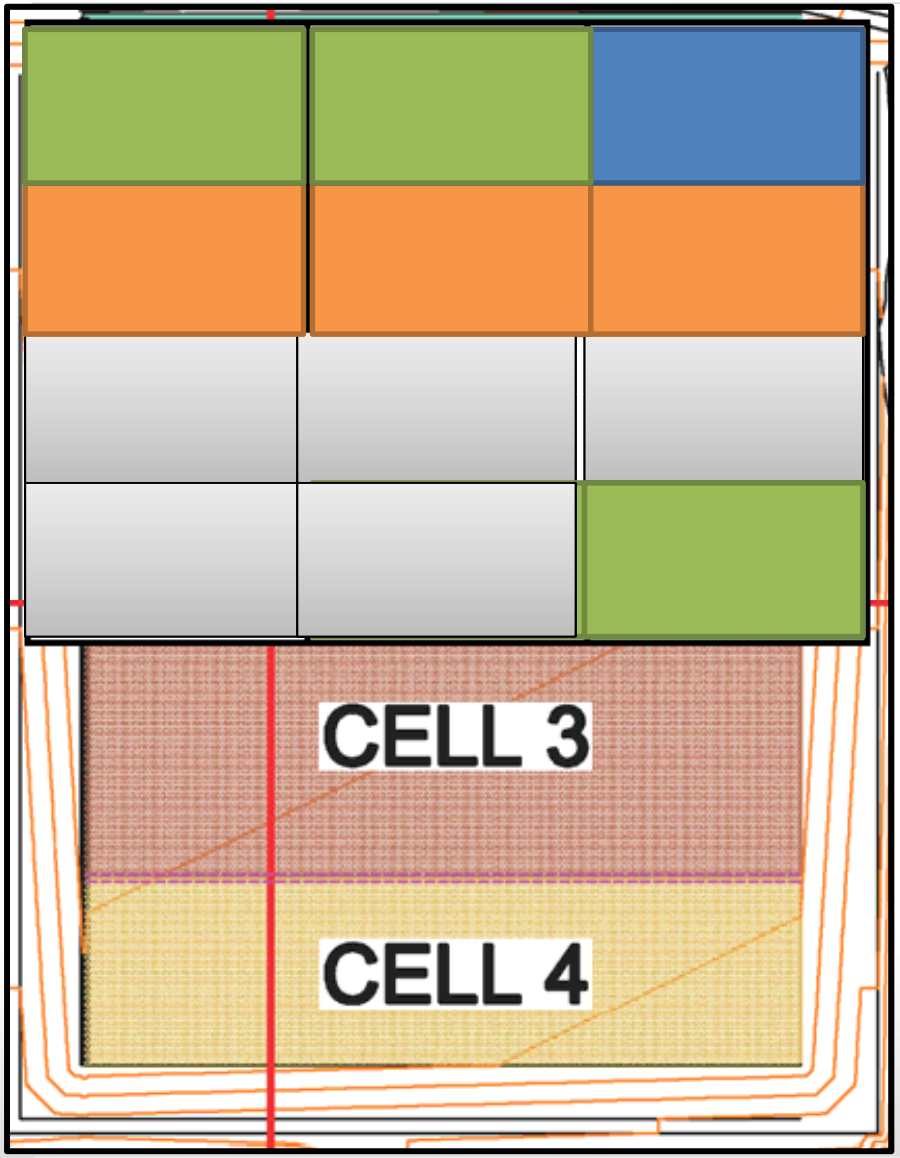
Continue Leaching;

Rinsing and Resting

BEGIN LIFT 2 CELL 1

Legend

- Placement of Ore (milling)
- Leaching of Ore (milling)
- Rinsing/Resting Ore (milling)
- Spent Ore (Tailings)



- SECOND LIFT CELL 1
  - Sequential Operation
  - Placement;
  - Leaching;
  - Rinsing and Resting
- CELL 2 CONTINUES:
  - Leaching;
  - Rinsing and Resting

Legend

- Placement of Ore (milling)
- Leaching of Ore (milling)
- Rinsing/Resting Ore (milling)
- Spent Ore (Tailings)

Status of Baseline Studies

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Pre-Operational Baseline Studies Status

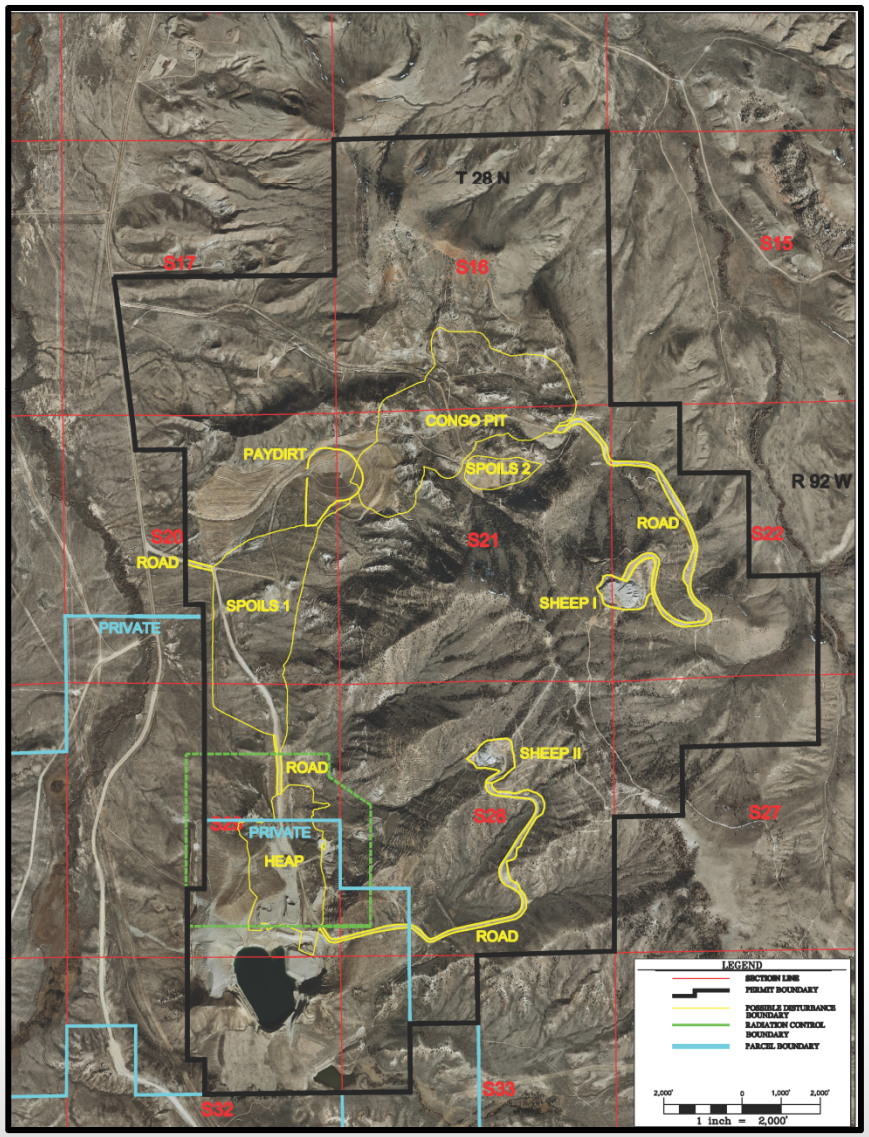
- Cultural Resources
- Wildlife
- Vegetation & Soils
- Surface Water
- Groundwater
- Radiological Characterization
- Meteorology
- AirQuality

Pre-Operational Baseline Studies Status

- Cultural Resources
- Wildlife
- Vegetation & Soils
- Surface Water
- Groundwater
- Radiological Characterization
- Meteorology
- AirQuality

Complete – Under Review by SHPO and BLM

- *Outside Sage Grouse Core Area*
- *Outside Critical Winter Range*
- *No T&E species present*
- *No T&E Species*
- *One BLM-Sensitive species found*
  - *Limber Pine*
- *Quarterly SW flow measurements*
  - *No impacted by proposed disturbance*
- *Monthly flowing SW quality sampling*
- *Completed 3 rounds of vegetation sampling*
- *Quarterly Pit Lake quality sampling*
  - *per Reg Guide 4.14*



Overall Site Layout

Mine

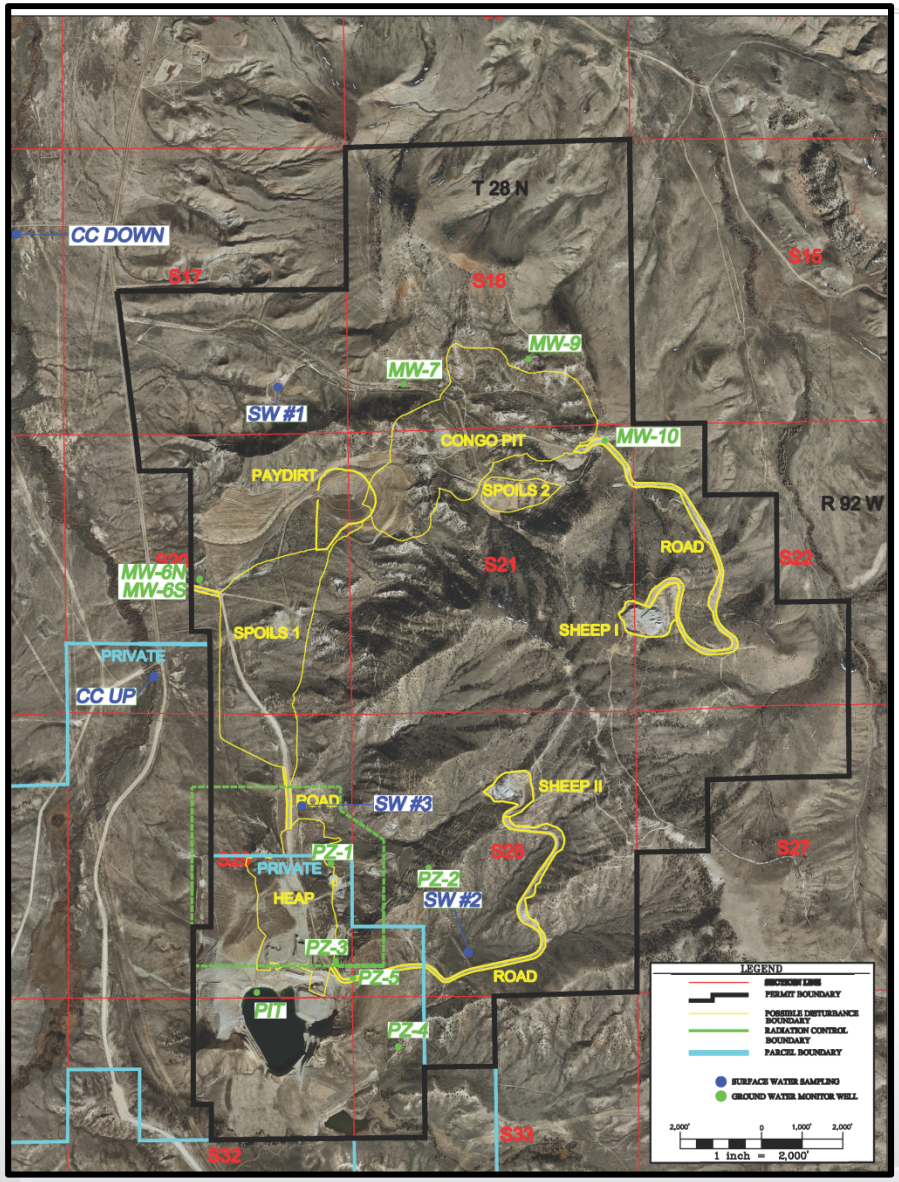
- Surface and Underground
- State and BLM Lands
- Permit 381C

Heap Leach Facility

- Private Surface
- Federal Minerals

Radiation Control Boundary

- Private Surface and BLM
- IBR Permit 381C (west on private lands)



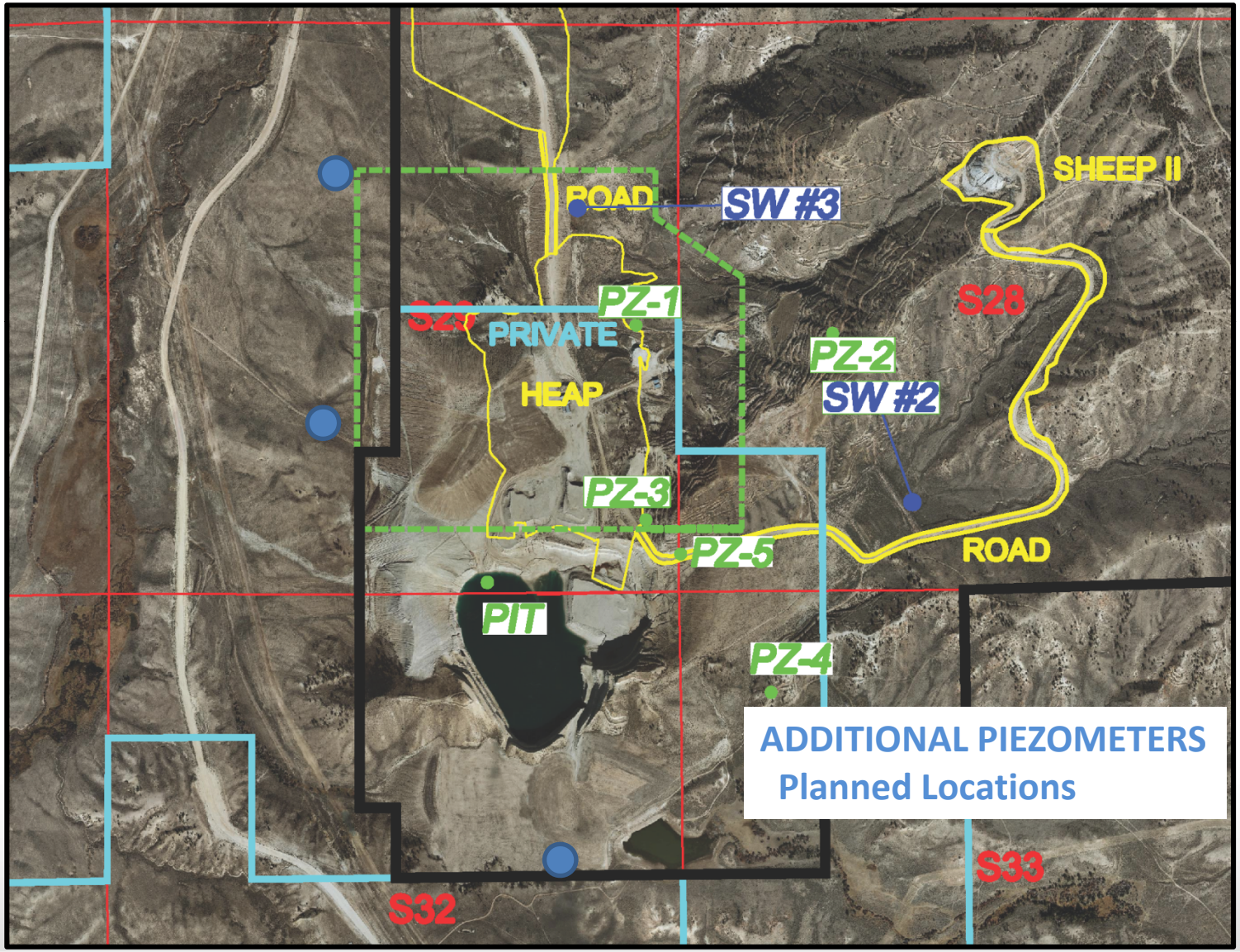
Ground and Surface Water Sampling Locations

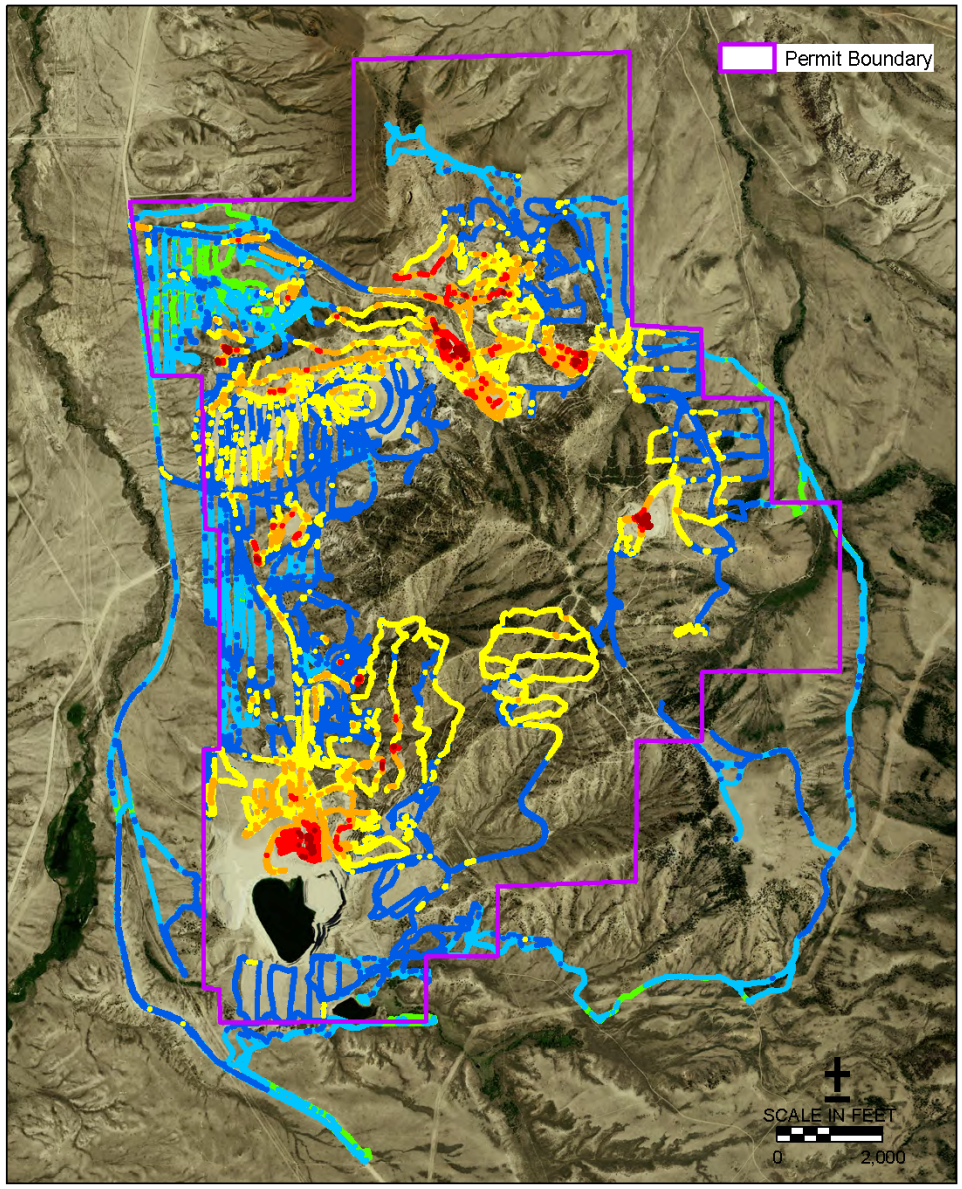
Ground Water

- Sampling Quarterly
- More than 4 Quarters
- Several Wells and Pit Since 1988

Surface Water

- Quarterly SW flow measurements
- Monthly flowing SW quality sampling
- More than 1 Year


ROAD
SW #3
SHEEP II
PZ-1
PRIVATE
S28
PZ-2
HEAP
SW #2
PZ-3
PZ-5
ROAD
PIT
PZ-4
ADDITIONAL PIEZOMETERS
Planned Locations
S33
S32



P:\182069 Titan Sheep MXGIS Mapping\GIS REPORT\MXD daniel.workman

Gamma Exposure Rate (uR/hr)

- <25
- 25-35
- 35-50
- 50-75
- 75-150
- 150-300
- >300

March, 2011

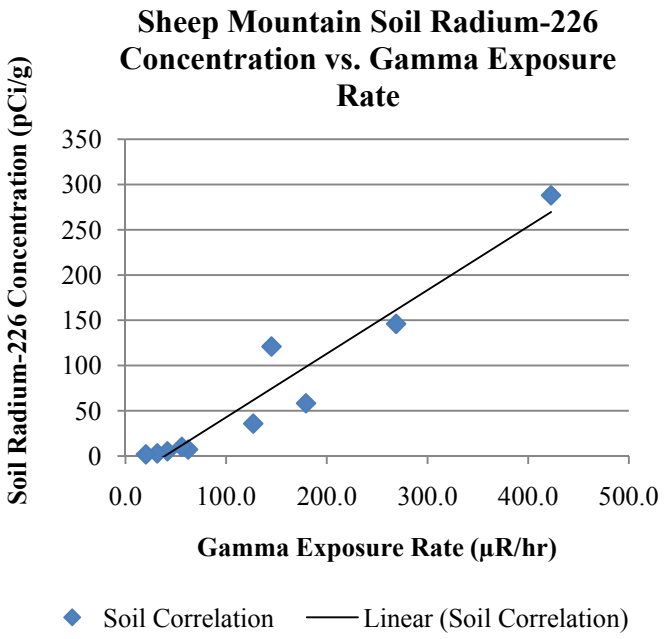
Figure 2.9-10

Gamma Exposure Rate Map

Sheep Mountain

Project: 182069

Correlation to Ra226



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Titan Uranium Sheep Mountain Meteorological Monitoring Program

9-Month Data Summary

- 9 Month Meteorological Data Preliminary Review
- Supplemental Air Monitoring
  - AM-5 upwind, still appropriate for new configuration
  - AM-4 @ Met station, on downwind Rad Control Boundary
  - AM-1 still at nearest resident
  - 4 new air monitoring locations installed on rad control boundary

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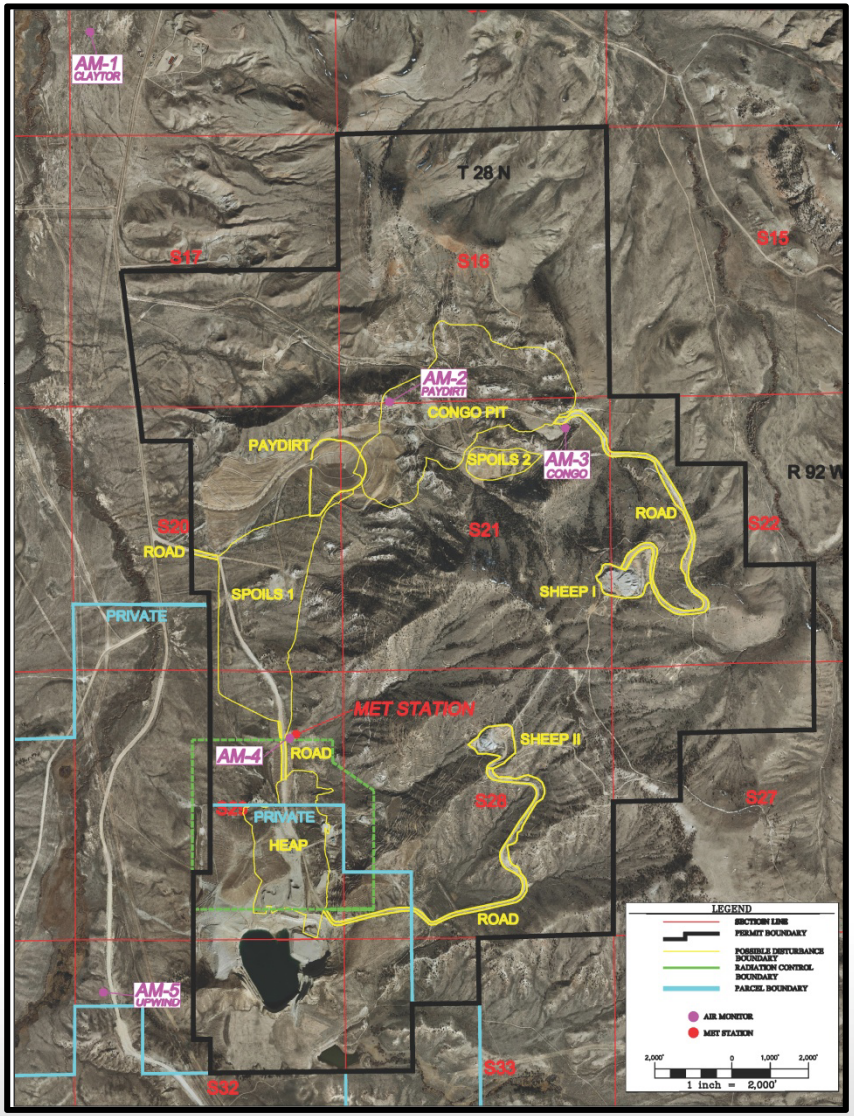
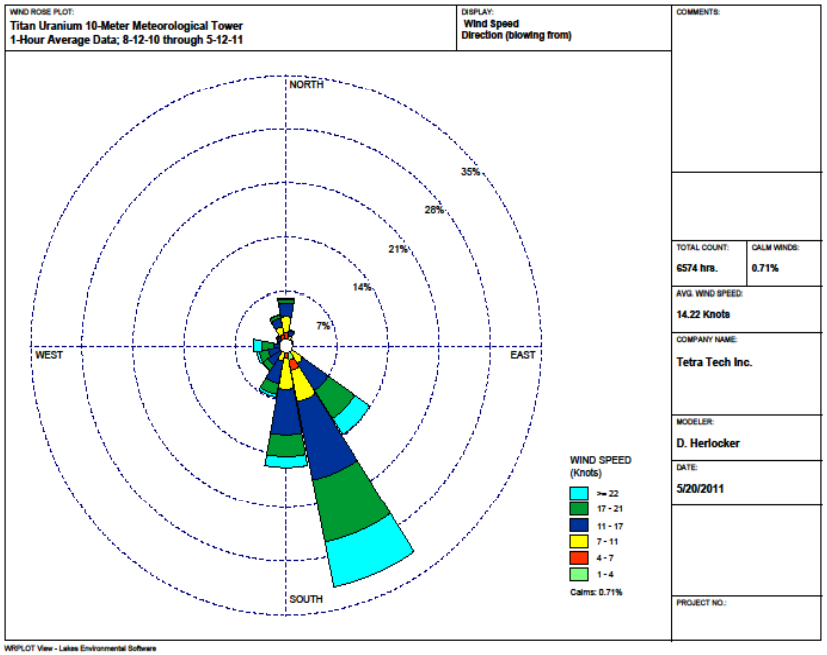
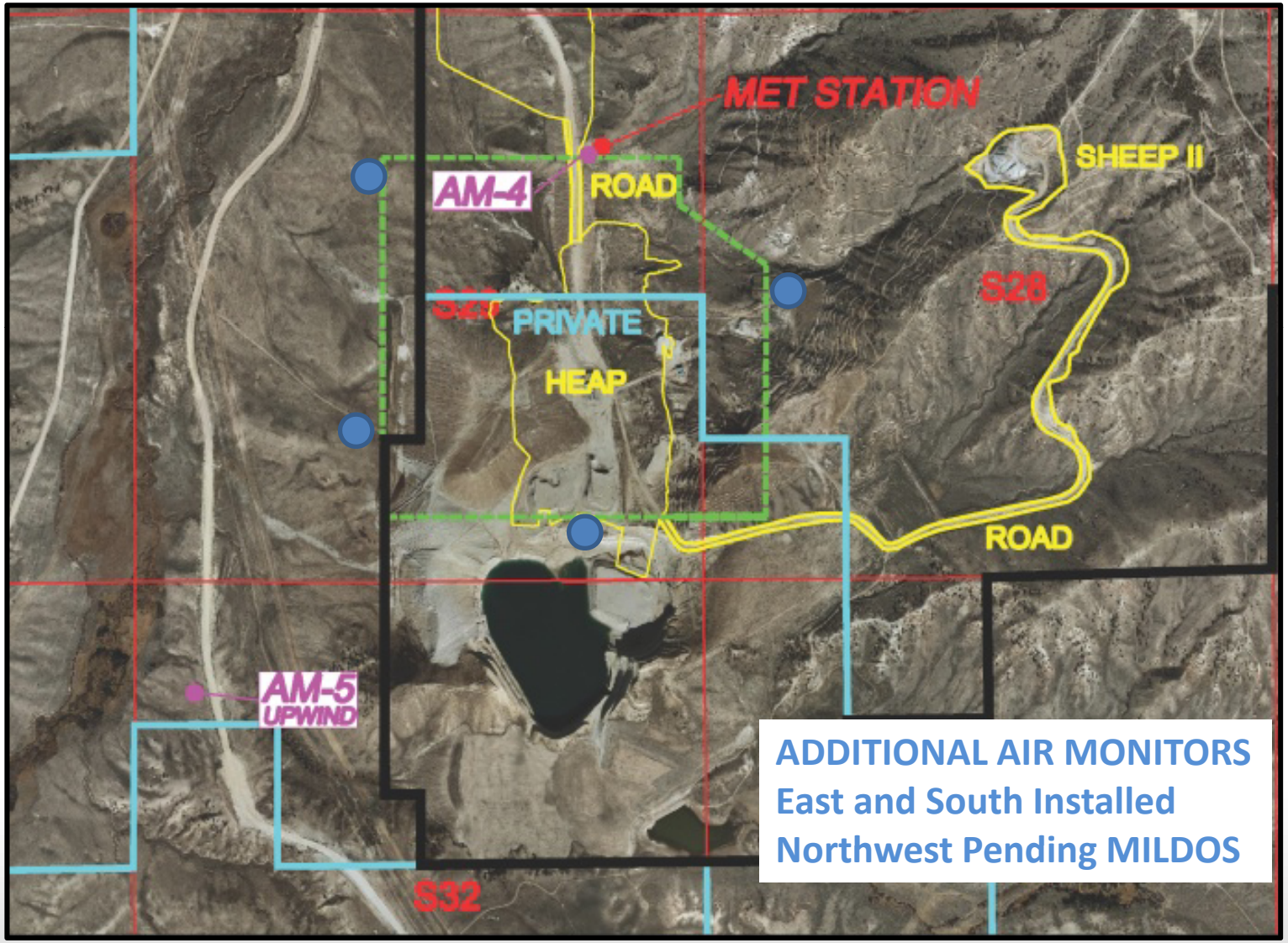


Background Air Sampler Locations

- 5 Air Samplers Continuous for 1 Year
- 4 Air Samplers Added at Rad. Control Boundary



Site Wind Rose Aug 2010 through April 2011


MET STATION
AM-4
ROAD
SHEEP II
S28
PRIVATE
HEAP
ROAD
AM-5
UPWIND
S32
ADDITIONAL AIR MONITORS
East and South Installed
Northwest Pending MILDOS

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- 10-Meter Meteorological Tower Station installed August 10-12, 2010
- Equipment, Sensors, and Operational Parameters as per NRC Regulatory Guide 3.63
- Location is Representative of On-Site Conditions Near Proposed Heap Leach Facility
- Site Visits Conducted Every 2 Weeks
- Quality Assurance Calibrations Conducted During Installation and every 6 months Afterwards (most recent calibration conducted on March 10, 2011)
- Data Downloaded, Screened and Archived Every 2 Weeks

Summary of Monitoring Parameters

- Wind speed
- Wind Direction
- Standard Deviation of Wind Direction
- 2- and 10-Meter Temperature
- Delta T
- Solar Radiation
- Humidity
- Precipitation

Summary of Monitoring Parameters (cont.)

- Data Collected and Stored in 15-and 60-Minute Averages
- All systems Are Solar-Powered
- Temperature Probes Outfitted With Fan-Aspirated Shields for Accuracy
- Precipitation Gauge Outfitted with Snowmelt Funnel for Winter Operations

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Summary: Sheep Mt. Data Capture Statistics

Parameter	Aug 12 – Nov 12, 2010	Nov 13 2010 – Feb 12, 2011	Feb 13 – May 12, 2011	Average
10-meter horizontal wind speed	100%	100%	99.8%	**99.95%**
10-meter wind direction	100%	100%	99.8%	**99.95%**
10-meter sigma-theta	100%	100%	99.8%	**99.95%**
10-meter temperature	100%	100%	99.8%	**99.95%**
2-meter temperature	100%	100%	99.8%	**99.95%**
Delta Temperature	100%		99.8%	**99.95%**
Relative Humidity	100%	100%	99.8%	**99.95%**
Solar Radiation	100%	100%	99.8%	**99.95%**
Precipitation	100%	100%	99.8%	**99.95%**
Battery Voltage	100%	100%	100%	**99.70%**

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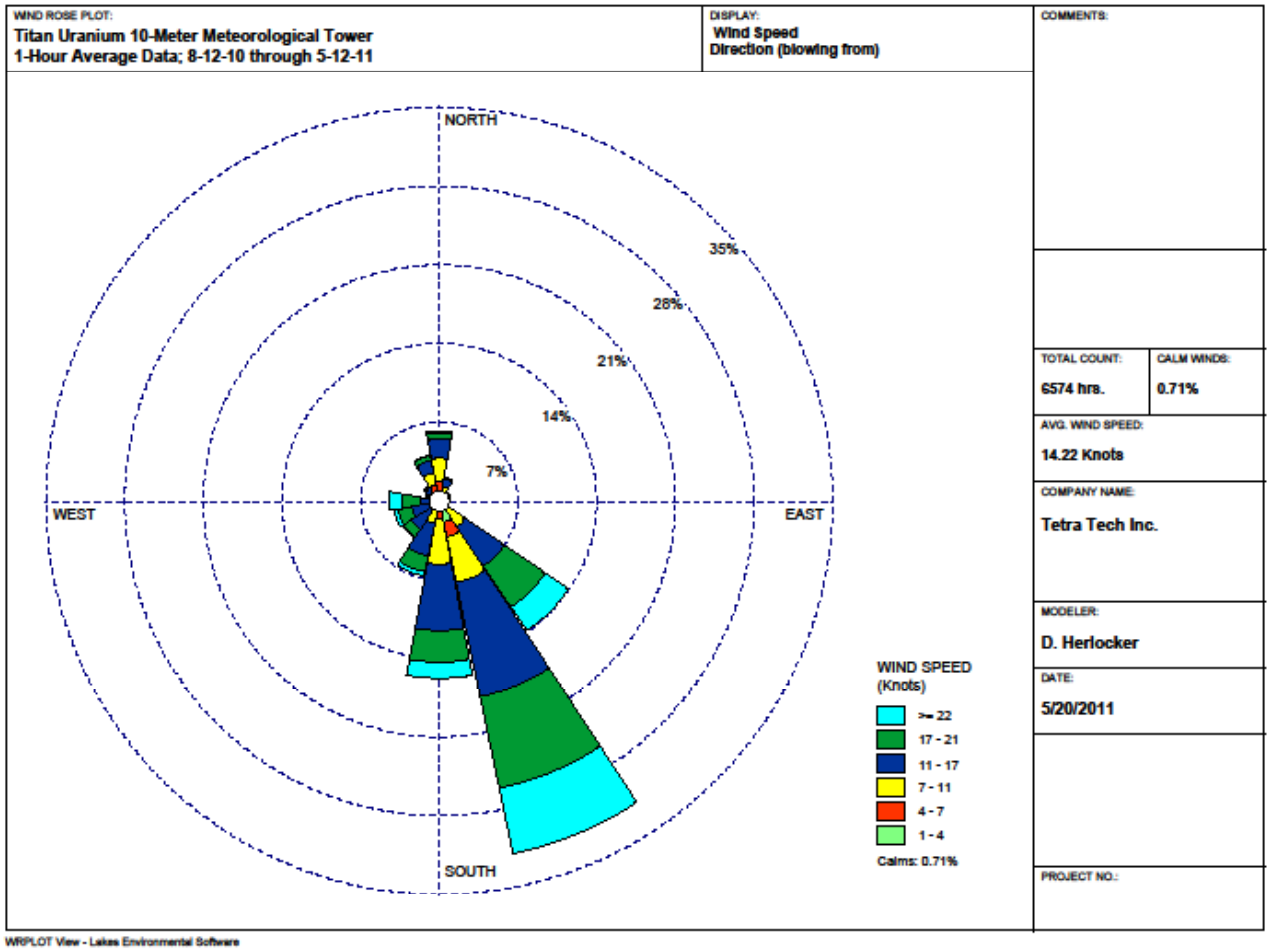
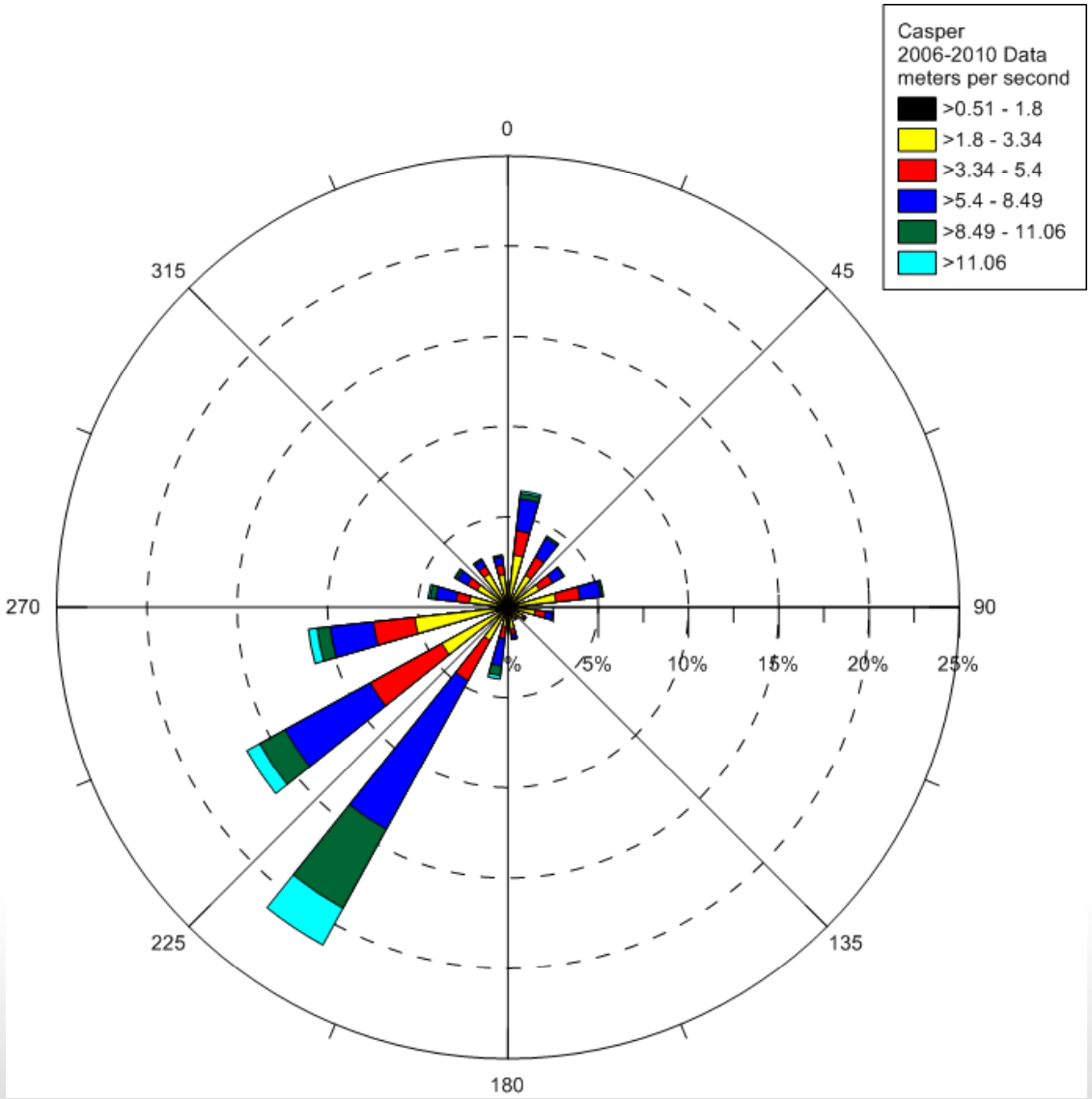
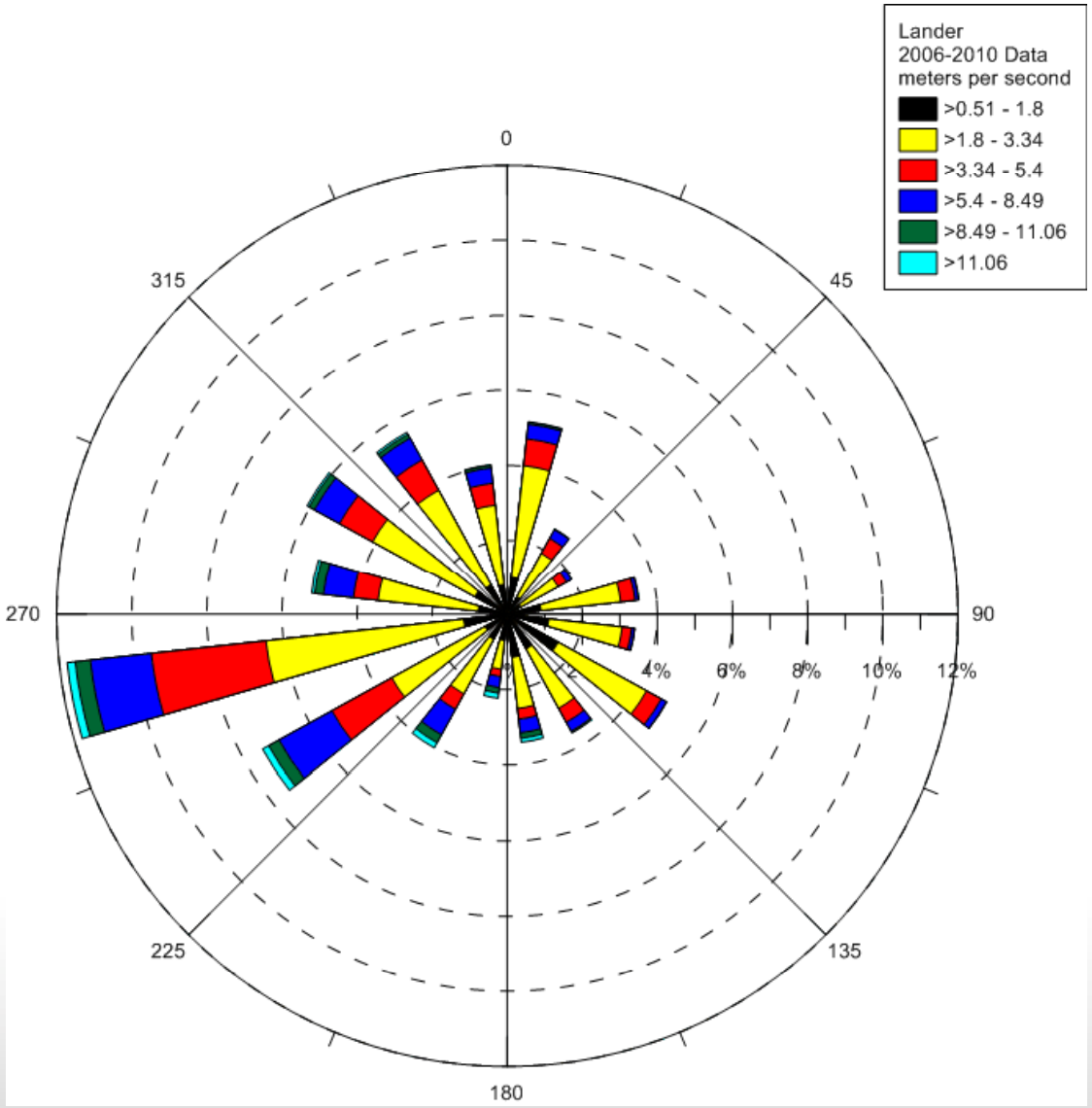
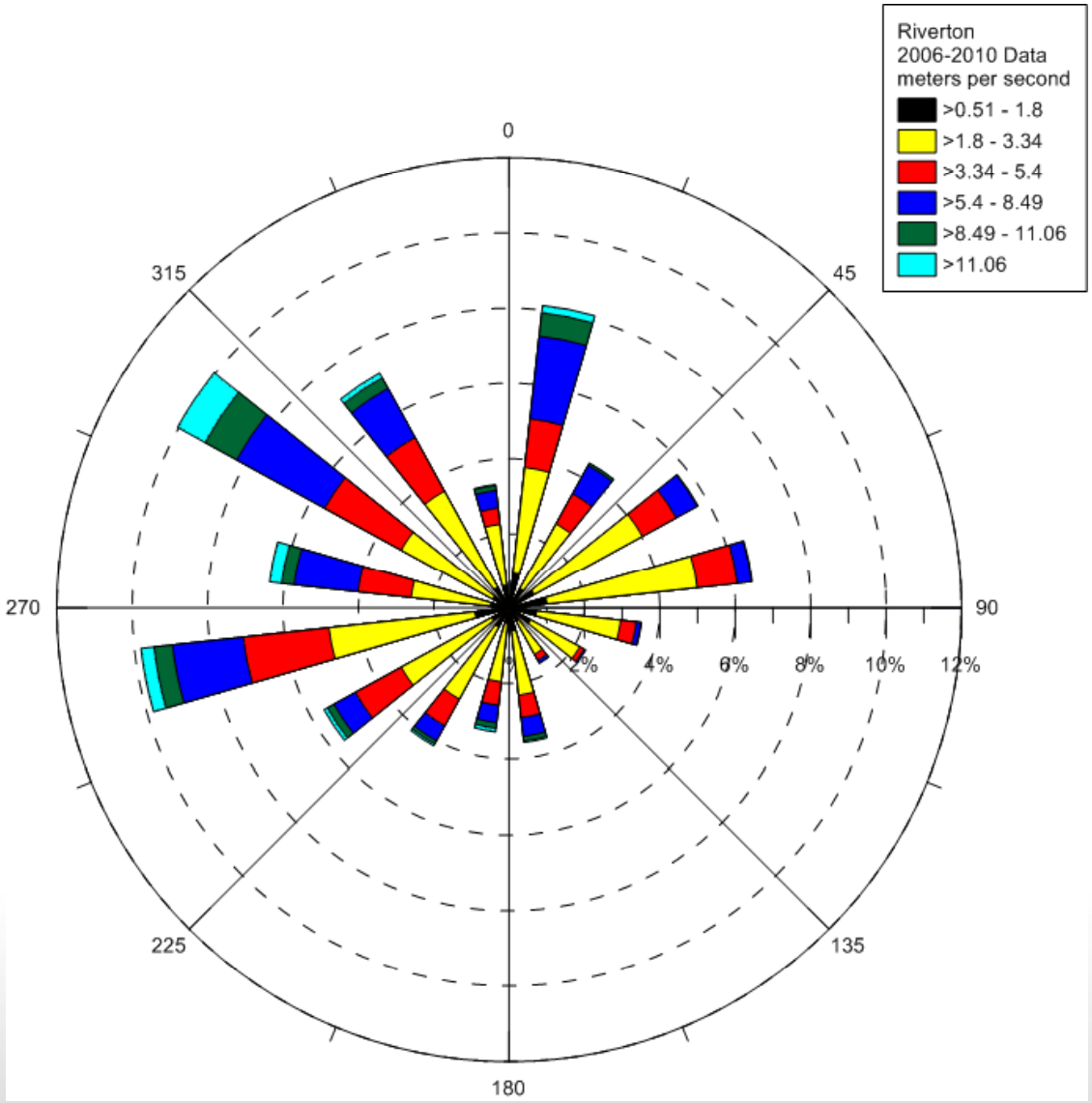
Summary of Wind Monitoring Data

- Wind at Sheep Mt. Predominantly from South and South-east.
- Wind Prone to Extreme Gusts and Sustained Wind Speeds in Excess of 18 m/s (40 mph)
- Maximum Recorded Wind Gust of 32.08 m/s (71.7 mph); Recorded at 12:00AM on January 17, 2011
- Max. 15-minute Avg. Wind Speed = 19.7 m/s (44.1 mph)
- Max. 60-minute Avg. Wind Speed = 18.3 m/s (40.9 mph)
- Wind Roses for Sheep Mt. and 3 Nearby Sites Provided on 4 Following Slides


WIND ROSE PLOT:
Titan Uranium 10-Meter Meteorological Tower
1-Hour Average Data; 8-12-10 through 5-12-11
DISPLAY:
Wind Speed
Direction (blowing from)
NORTH
EAST
SOUTH
WEST
35%
28%
21%
14%
7%
WIND SPEED
(Knots)
>= 22
17 - 21
11 - 17
7 - 11
4 - 7
1 - 4
Calms: 0.71%
COMMENTS:
TOTAL COUNT:
6574 hrs.
CALM WINDS:
0.71%
AVG. WIND SPEED:
14.22 Knots
COMPANY NAME:
Tetra Tech Inc.
MODELER:
D. Herlocker
DATE:
5/20/2011
PROJECT NO.:
WRPLOT View - Lakes Environmental Software


Casper
2006-2010 Data
meters per second
>0.51 - 1.8
>1.8 - 3.34
>3.34 - 5.4
>5.4 - 8.49
>8.49 - 11.06
>11.06
0
45
90
135
180
225
270
315
5%
10%
15%
20%
25%


Lander
2006-2010 Data
meters per second
>0.51 - 1.8
>1.8 - 3.34
>3.34 - 5.4
>5.4 - 8.49
>8.49 - 11.06
>11.06
0
45
90
135
180
225
270
315
4%
6%
8%
10%
12%


Riverton
2006-2010 Data
meters per second
>0.51 - 1.8
>1.8 - 3.34
>3.34 - 5.4
>5.4 - 8.49
>8.49 - 11.06
>11.06
0
45
90
135
180
225
270
315
2%
4%
6%
8%
10%
12%

Analysis of Met Data

- Regional Data vs. Site Data
  - Assessment of Comparability
  - Period of Site data with respect to Regional Data
  - Is period representative in regional record?
- Characterization of Conditions
- Other Analyses & Comparisons desired?

Update on EPA Region 8/NESHAPS

Item Discussed

Issues for Discussion

- Status of 40 CFR 192 GW standards update
- Status of Active Heaps & Inactive Heaps
- Status of Process Ponds

Our Understanding

- There are no size limits on the size of ***active*** heaps
- Heap pad designs are approved solely by NRC
- Process ponds that will never contain wastes are part of the mill
- Process Pond designs are approved solely by NRC
- Heap material only become tailings (11e.(2) byproduct material) once active uranium recovery is complete

Our Understanding (con't)

- Part 61, subpart W applies only to spent heap material (tailings)
- We are practicing ***phased disposal*** of tailings
  - Part 61.251(f): *means a method of tailings management and disposal which uses lined impoundments which are filled and then immediately dried and covered to meet all applicable Federal standards.*
- We are allowed no more than **two 40 acre cells** in area of exposed tailings
  - Part 61.252(b)(1): *Phased disposal in lined tailings impoundments that are no more than 40 acres in area and meet the requirements of 40 CFR 192.32(a) as determined by the Nuclear Regulatory Commission. The owner or operator shall have no more than two impoundments, including existing impoundments, in operation at any one time.*
- We will have appropriate environmental monitoring and radiation programs in place to ensure compliance with 10 CFR Part 20 subpart B and subpart C requirements

Open Discussion

QUESTIONS?