Technical Report Summary
of the
2024 Estimated Resources and Reserves at Intrepid Potash-New Mexico

Prepared for:

Intrepid Potash–New Mexico, LLC

Revised Report Date:

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Prepared by:

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This report titled "Technical Report Summary of the 2024 Estimated Resources and Reserves at Intrepid Potash-New Mexico" is effective as of December 31, 2024, and was prepared and signed by RESPEC Company, LLC, acting as a Qualified Person Firm.

Signed and Dated February 11, 2025.

signed/ RESPEC Company, LLC

Susan B Patton, PE

Principal

On behalf of RESPEC Company, LLC

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of the
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List of Abbreviations

°	degree
%	percent
AMAX	AMAX/Horizon Mine
APR	Annual Percentage Rate
BLM	United States Bureau of Land Management
BNSF	Burlington Northern Santa Fe
CFR	Code of Federal Regulations
CL	Competitive Lease
COGS	cost of goods sold
CPD	Carlsbad Potash District
DMS	dense media separation
DOI	United States Department of Interior
EA	Environmental Audit
EIS	Environmental Impact Statement
EOY	end of year
F	Fahrenheit
FR	Federal Register
ft	feet or foot
ft^3	cubic foot
ft%	feet-percent
g	grams
g/cm^3	grams per cubic centimeter
gpm	gallons per minute
GT	grade thickness
hp	horsepower
ID^2	inverse distance squared
Intrepid	Intrepid Potash, Inc.
IPNM	Intrepid Potash–New Mexico, LLC
K_2O	potassium oxide
$K_2SO_4 \cdot 2MgSO_4$	langbeinite
KCl	sylvite or potassium chloride
KPLA	Known Potash Leasing Area
LOM	Life-of-Mine
NMED	New Mexico Environmental Department
M	million

MOP	Muriate of Potash
MSHA	Mine Safety and Health Administration
msl	mean sea level
mm	millimeter
Mt	million tons
Mtpy	million tons per year
NaCl	halite
NCL	Non-Competitive Lease
NPV	Net Present Value
NAD	North American Datum
OSHA	Occupational Safety and Health Administration
PFD	process flow diagrams
PRL	Preference Rights Lease
QP	Qualified Person
RC	reflux classifier
REC	Recognized Environmental Concerns
RESPEC	RESPEC Company LLC
SEC	United States Securities Exchange Commission
SME	Society for Mining, Metallurgy & Exploration
SOE	statement of earnings
SOP	standard operating procedure
t	ton
TOC	Total Organic Carbon
tph	tons per hour
tpy	tons per year
TSF	Tailings Storage Facility
US	United States
USGS	United States Geological Survey
WIPP	Waste Isolation Pilot Plant
XRD	X-ray Diffraction

1.0 Executive Summary

RESPEC Company, LLC. was commissioned by Intrepid Potash, Inc. (Intrepid) to prepare the 2024 Technical Report Summary (TRS) filed as Exhibit 96.1 with the Intrepid Potash 10-K for End of Year (EOY) 2024 for the Intrepid Potash-New Mexico (IPNM) property. See Table 2-1 for previous TRS filings for the property. This report updates resource and reserve tables and updates the cash flow and economic analysis to reflect the change in mine plan for the sylvinite deposit and lease boundary adjustments. The resources and reserves are estimated according to United States (US) Securities and Exchange Commission (SEC) S-K 1300 regulations.

1.1 Property Description and Ownership

The property includes two operating mines, the East Underground mine and the HB Solar Solution Mines (HB Mine), the idled West Mine, and the North Mine which was shut down in the early 1980's. The property is located in Eddy and Lea Counties, near Carlsbad, New Mexico.

The East Plant processes the underground room-and-pillar-mined langbeinite ore into Trio®. The long-term underground mining plan is undecided and therefore previously reported reserves have been reestablished as resources. The HB Plant produces Muriate of Potash (MOP) from the solution mine brine. Solution mining of the 1st and 3rd ore zones in previously mined-out areas of the property is planned to continue long term.

1.2 Geology and Mineralization

The geology of the potash-bearing beds of the Carlsbad area has been well documented. Overall, the potash-bearing beds may be described as bedded sedimentary rocks, deposited across the Delaware Basin and Northwest Shelf backreef from the Capitan Reef.

1.3 Status of Exploration, Development and Operations

The property has been in continuous operation by IPNM since 2004. Confirmation drilling, channel sampling, and mine development are an integral part of the mine operations.

1.4 Mineral Resource Estimates

The resource model created from the database of exploration and sampling data served as the basis for the mineral resource estimate. The sampling data includes channel samples from the active mining horizon. The resources reported as mineralized rock in place, exclusive of mineral reserves effective December 31, 2024, are shown in Table 1-1 and Table 1-2.

Table 1-1. Mineral Resource Estimate Summary effective December 31, 2024

IPNM - Summary of Mineral Resources in millions of tons of Sylvinite in Place effective December 31, 2024, based on $450/Product Ton Mine Site

	Resources				
	Sylvinite[1] (Mt)	Grade ($\%K_2O$)	Contained K_2O (Mt)	Mining Cutoff[2] (ft-$\%K_2O$)	Processing Recovery (%)
Measured Mineral Resources	288	16	45	54-64	75-85
Indicated Mineral Resources	164	14	24	54-64	75-85
Measured + Indicated Mineral Resources	452	15	69		
Inferred Mineral Resources					

[1] Sylvinite is a mixed evaporite containing NaCl and KCl.
[2] Solution mining resource cutoff for flooded old working is the mining extents boundary.
Mineral Resources were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.
Mineral Resources are reported exclusive of Mineral Reserves, on a 100% basis.

Mt = million tons, % = percentage, K_2O = potassium oxide, ft = feet

Table 1-2. Mineral Resource Estimate Summary effective December 31, 2024

IPNM - Summary of Mineral Resources in millions of tons of Langbeinite Mineralized Rock in Place effective December 31, 2024 based on $470/Product Ton Mine Site

	Resources				
	Langbeinite Mineralized Rock (Mt)	**Grade ($\%K_2O$)**	**Contained K_2O (Mt)**	**Mining Cutoff (ft-$\%K_2O$)**	**Processing Recovery (%)**
Measured Mineral Resources	67	10	6	25	68
Indicated Mineral Resources	59	10	6	25	68
Measured + Indicated Mineral Resources	126	10	12		
Inferred Mineral Resources					

Mineral Resources were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.

Mineral Resources are reported exclusive of Mineral Reserves, on a 100% basis.

Mt = million tons, % = percentage, K_2O = potassium oxide, ft = feet

1.5 Mineral Reserve Estimates

Using the mineral resource grids, applying a reserve cut-off and modifying factors to a 25-year detailed mine plan reserves for the HB mine were estimated. Table 1-3 shows the estimated reserve summaries in product tons effective December 31, 2024.

Table 1-3. IPNM Mineral Reserve Estimate Summary effective December 31, 2024

IPNM - Summary of Potash Mineral Reserves effective December 31, 2024 based on $360/Product Ton Mine Site

	Reserves				
	In-Place KCl (Mt)	In-Situ Grade[1] ($\%K_2O$)	Product[2] (Mt)	Brine Cutoff Grade[3] ($\%K_2O$)	Processing Recovery (%)
Proven Mineral Reserves	5.3	22.9	3.4	2.9	83
Probable Mineral Reserves					
Total Mineral Reserves	5.3	22.9	3.4		

[1] In-situ grade is the amount of K_2O in the contact area of the caverns and is used to calculate the In-Place KCl.
[2] Product is calculated by multiplying In-Place KCl by: dissolution factor of 96%, areal recovery of 100%, geologic factor of 94.2%, plant recovery of 83%, cavern loss factor of 98%, a product purity factor of 103%, a bitterns loss factor of 88% and handling loss factor of 97%.
[3] Brine cutoff grade is the amount of K_2O in the extracted brine necessary to cover the cash costs of production.
Mineral Reserves were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.
Mineral Reserves are reported exclusive of Mineral Resources, on a 100% basis.

Mt = million tons, % = percent, K_2O = potassium oxide, ft = feet

1.6 Summary of Capital and Operating Cost Estimates

Operating cash cost per ton of product is estimated from actual operating data to average $260 with a credit for by-product sales of $57/ton resulting in a net operating cost per ton of product of $203.

Capital investment necessary to complete the HB 25-year mine plan includes pipeline upgrades, and well infrastructure to bring the AMAX/Horizon Mine (AMAX) into solution mining production. Capital is introduced in Year 25 for reclamation requirements if mining were to end in the 25th year. This investment is in addition to the sustaining capital requirements.

1.7 Economic Analysis

The Net Present Value (NPV) at 8% Annual Percentage Rate (APR) for the before- and after-tax estimated cash flow is positive. The sensitivity to product price and operating cost for an 8% APR was evaluated. Varying costs and sales price plus and minus 10% results in a positive NPV for all options.

1.8 Permitting Requirements

The mines are in operation and necessary state and federal operating permits are in place for current operations. IPNM has timely applied for new permits and permit renewals necessary to continue operations, which are being reviewed by regulatory agencies.

1.9 Conclusions and Recommendations

The QP recommends that IPNM continue planning for the challenges in solution mining with the presence of low levels of carnallite. No additional exploration work is recommended beyond the ongoing confirmation drilling.

2.0 Introduction

This document was prepared to report the IPNM mineral resources in terms of in-situ tons and reserves in terms of saleable product at IPNM under the SEC S-K 1300 rules (2018). The Society for Mining, Metallurgy & Exploration (SME) Guide for Reporting Exploration Information, Mineral Resources and Mineral Reserves (SME 2017) (The SME Guide) supplements the modifying factors used to convert mineral resources to mineral reserves. Previous TRS's filed for the property are listed in Table 2-1.

2.1 Terms of Reference

According to 17 Code of Federal Regulations (CFR) § 229.1300 (2025), the following definitions are included for reference:

An inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.

An indicated mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

A measured mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

Modifying factors are the factors that a qualified person must apply to indicated and measured mineral resources and then evaluate in order to establish the economic viability of mineral reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated mineral resources to proven and probable mineral reserves. These factors include but are not restricted to mining; processing; metallurgical; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. A *probable mineral reserve* is the economically mineable part of an indicated and, in some cases, a measured mineral resource.

A proven mineral reserve is the economically mineable part of a measured mineral resource.

Throughout this report, reserves are presented in tons of K_2O and potassium chloride (KCl). Historically, assay data have been reported in terms of %K_2O and reserves in equivalent tons of K_2O. Sylvite is KCl and, in many historical reports, reserve tons or product tons are recorded in terms of tons of KCl. Pure KCl equates to 63.17% K_2O by mass. To convert tonnages from K_2O to KCl, multiply by 1.583.

2.2 Sources of Information

Previously completed reserve estimations under SEC Guide 7 (2008) rules for this property and TRS's reporting mineral resources and mineral reserves under the SEC S-K 1300 rules are listed in Table 2-1.

2.3 Personal Inspection

Personal inspection of the properties has occurred over the years by the QP. The most recent inspection of the property took place on November 6 and 7, 2019. The inspection included an underground and surface visit to the East, West, and HB Mines.

Table 2-1. Summary of Reserve Reports

Effective EOY	Title	Notes	Reference
2006	Determination of Reserves for IPNM of the Carlsbad East and West Mines	Included North Mine reserves hoisted through the West Mine Facilities.	Agapito 2007
2007	Determination of Estimated Proven and Probable Reserves for the Planned HB Solution Mine for Intrepid Mining, LLC		Agapito 2008
2008	Reserve Update for the Carlsbad HB, East and West Mines for Intrepid Potash, Inc.		Agapito 2009
2009	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC		Agapito 2010
2010	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC	AAI updated the reserve estimate by adjusting for the mined-out areas of the LOMP.	Agapito 2011
2011	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC	Reserve estimate as of EOY 2011 based on depletion by extraction of the IPNM's LOMP.	Agapito 2012
2012	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC	New deposit information, lease boundaries, and an updated LOMP were incorporated into the reserve estimate.	Agapito 2013
2013	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC	EOY 2012 estimate was updated to account for depletion by extraction for 2013.	Agapito 2014
2014	Determination of Estimated Proven and Probable Reserves at Intrepid Potash–New Mexico, LLC	EOY 2012 estimate was updated to account for depletion by extraction for the 2013 and 2014 reserve estimate.	Agapito 2015
2015	End-of-Year 2015 Intrepid Potash, Inc. Reserve for the Carlsbad HB Solar Solution, East and West Mines Intrepid Potash–New Mexico, LLC	Updated lease maps, geologic database as of June 24, 2015, monthly lease reports, production maps, planning maps, and financial documents including sales and costs associated with the HB Solar Solution, West, and East Mines.	Agapito 2016
2016	End-of-Year 2016 Intrepid Potash, Inc. Reserve for the Carlsbad HB Solar Solution, East and West Mines Intrepid Potash–New Mexico, LLC	Depletion by extraction in the 1st, 3rd, 5th, and 7th ore zones from the 2015 EOY.	Agapito 2017
2017	End-of-Year 2017 Intrepid Potash, Inc. Reserve for the Carlsbad HB Solar Solution, East and West Mines	Conventional extraction of langbeinite at the IPNM East Mine 5th ore zone and solution extraction in the 1st and 3rd ore zones at the IPNM HB Solar Solution Mine with updated economic cutoff grades and drill island impacts.	Agapito 2018
2018	2018 Determination of Estimated Proven and Probable Reserves for the Carlsbad HB Solar Solution, East and West Mines	Updated lease maps, geologic database as of July 7, 2018, monthly lease reports, production maps, planning maps, and financial documents including sales and costs associated with the IPNM HB Solar Solution, West, and East Mines.	Agapito 2019
2019	2019 Determination of Estimated Proven and Probable Reserves for the Carlsbad HB Solar Solution, East and West Mines	Extraction, cutoff changes due to economic parameters, new exploration and channel sample data, drill islands, and financial data.	Agapito 2020
2020	2020 Determination of Estimated Proven and Probable Reserves for the Carlsbad HB Solar Solution, East and West Mines	Depletion by extraction in the 1st, 3rd, 5th, and 7th ore zones 2020 EOY.	Agapito 2021
2021	Technical Report Summary, 2021 Estimated Resources and Reserves at Intrepid Potash-New Mexico	Resources and reserves for all applicable zones EOY 2021	Agapito 2022
2021	Technical Report Summary, REVISED 2021 Estimated Resources and Reserves at Intrepid Potash-New Mexico	Added clarification to resource and reserve estimation methodology, added detail to the operating cost and cash flow methodology	RESPEC 2023
2023	Technical Report Summary of the 2023 Estimated Resources and Reserves at Intrepid Potash-New Mexico	Updated resources and reserves, and economics for new HB mine plan and depletion by extraction and lease modifications.	RESPEC 2024

3.0 Property Description

3.1 Location and Area of the Property

The IPNM Carlsbad HB Solar Solution, East, West, and North Mines are located in southeastern New Mexico in Eddy and Lea Counties in the Carlsbad Potash District (CPD), as shown in Figure 3-1. The location is further defined by the boundary of the Known Potash Leasing Area (KPLA) as shown in Figure 3-2. This United States Bureau of Land Management (BLM) managed area consists of that part of the district where the co-development guidelines for oil and gas and potash are in effect for federal lands under the Secretary's Order 3324 dated December 4, 2012 (Federal Register [FR] 2012-29393). This order revises and supersedes the Order of the Secretary of the Interior, dated October 28, 1986 (51 FR 39425), and corrected on August 26, 1987 (52 FR 32171). The 2012 Secretary's Order does not alter the boundaries of the area. The area also contains state lands that are managed by the state under the New Mexico Oil Conservation Division Order R-111-Q (State of New Mexico Energy, Mineral, and Natural Resources). In general, the stated objective of the Secretary's Order and R-111-Q is to prevent waste of petroleum and mineral resources and maximize the economic recovery of oil, gas, and potash minerals in the area.

3.2 Mineral Rights

IPNM controls the right to mine approximately 127,000 acres in New Mexico. Of that acreage, 21,000 acres are leased from the State of New Mexico, 106,000 acres are leased from the United States government through the BLM, and 300 acres of mineral rights are leased from private owners. IPNM owns 4,700 surface acres near the mine site, adjacent to the federal and state mining leases. Most mining operations are on properties leased from the state or the federal government. These leases generally contain stipulations that require IPNM to commence mining operations within a specified term and continue mining to retain the lease. The stipulations on IPNM leases are subject to periodic readjustment by the applicable state government and the federal government. Federal leases are for indefinite terms subject to readjustment of the lease stipulations, including the royalty payable to the federal government, every 20 years. Leases with the State of New Mexico are issued for terms of 10 years and for as long thereafter as potash is produced in commercial quantities and are subject to readjustment of the lease stipulations, including the royalty payable to the state. Table 3-1 lists the leases and the terms.

3.3 Significant Encumbrances

The IPNM properties are pledged as collateral for Intrepid's revolving credit facility Various reclamation bonds totaling $4.057 million are in place as of December 31, 2024.

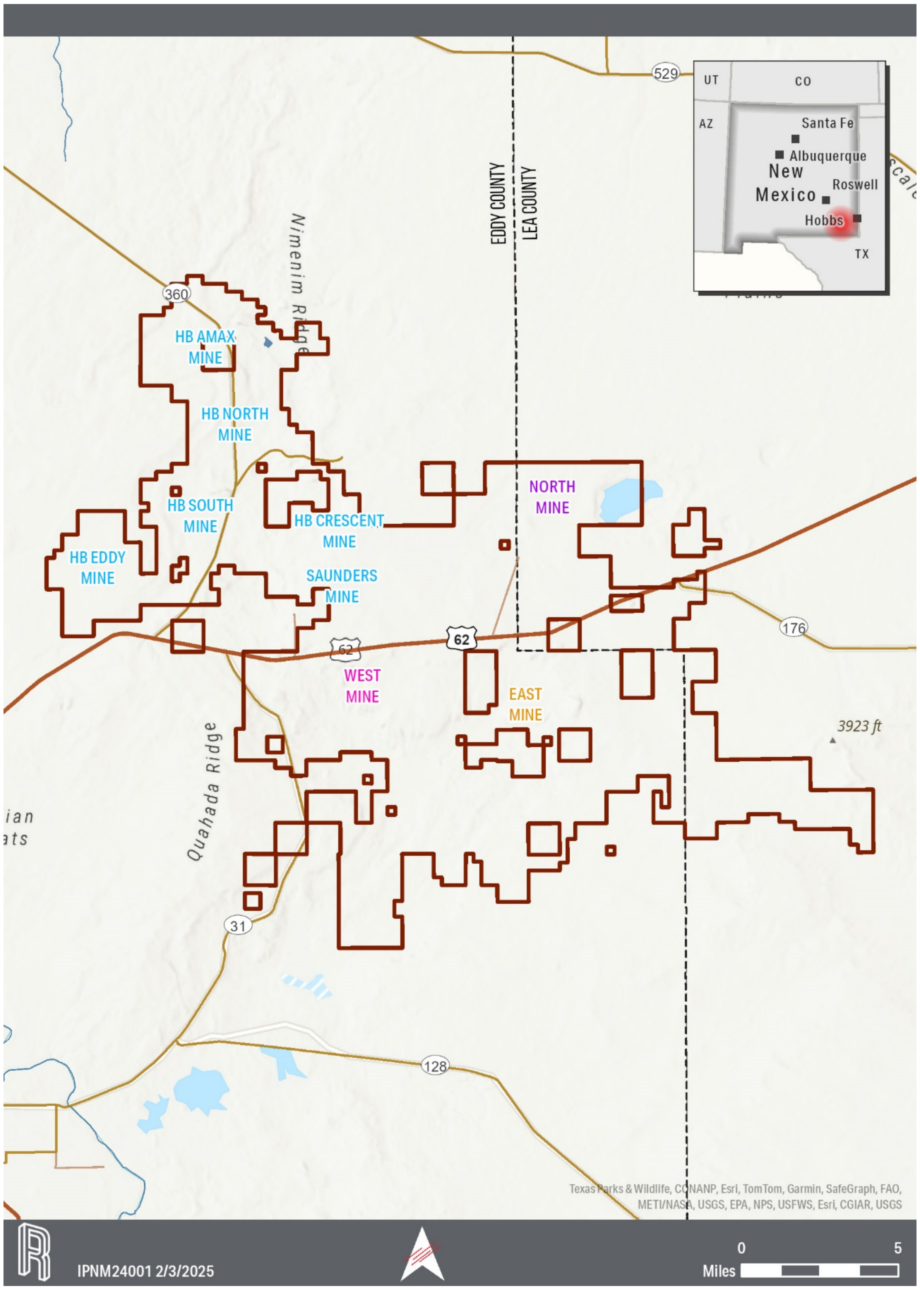

Figure 3-1. Location Map for the IPNM HB, East, West, and North Mines near Carlsbad, New Mexico

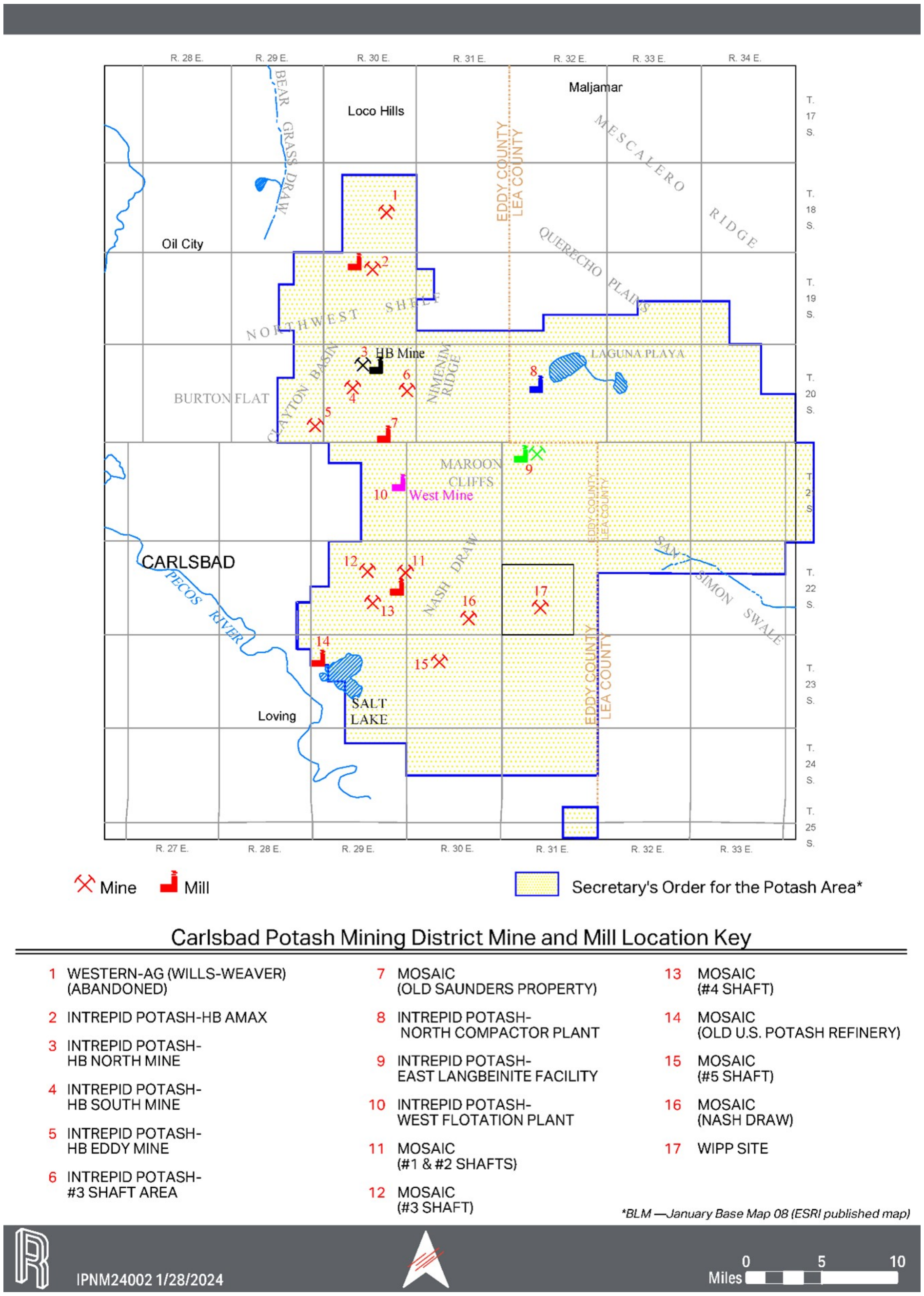

Figure 3-2. Location Map Depicting the Secretary's Order for the Potash Area

Table 3-1. Property Lease Details

Federal Land Lease Number	Lease Type	Mine	Date	Royalty Rate	Acres (BLM)	Readjustment Due	Amount Paid	Date Paid
NMNM 029268401	Potassium PRL	East	1966		2,546	12/1/2026	$10,184.00	12/18/2024
NMNM 012181001	Potassium PRL	HB	1965	5% Leased Deposits	640	1/1/2045	$2,560.00	12/18/2024
NMNM 005728701	Potassium PRL	East	1963		2,461	1/1/2044	$9,848.00	12/18/2024
NMNM 002362301	Potassium PRL	HB	1962	5% Leased Deposits	400	2/1/2042	$1,600.00	12/18/2024
NMNM 001654001	Potassium PRL	West	1960		120	4/1/2040	$480.00	12/18/2024
NMNM 001474201	Potassium PRL	East	1963		640	8/1/2043	$2,560.00	12/18/2024
NMNM 000685901	Potassium PRL	East	1953		2,554	10/26/2033	$10,220.00	12/18/2024
NMNM 000610101	Potassium PRL	West	1958		1,200	2/1/2038	$4,800.00	12/18/2024
NMNM 0554864	Potassium PRL	East	1953		1,250	2/24/2033	$5,004.00	12/18/2024
NMNM 0554863	Potassium PRL	East	1953		200	2/24/2033	$800.00	12/18/2024
NMNM 0554862	Pot Fringe Acre NCL	East	1953		480	2/24/2033	$1,920.00	12/18/2024
NMNM 0220116	Potassium CL	HB	1961	5% Leased Deposits	2,552	12/1/2041	$10,208.00	12/18/2024
NMNM 0184150	Potassium PRL	West	1949		240	11/30/2029	$960.00	12/18/2024
NMNM 0184149	Potassium PRL	West	1955		80	1/1/2035	$320.00	12/18/2024
NMNM 0135065	Pot Fringe Acre NCL	HB	1961	5%+1cent mrt	200	6/1/2041	$800.00	12/18/2024
NMNM 131012	Pot Fringe Acre NCL	East	2016		1,320	3/1/2036	$5,280.00	12/18/2024
NMNM 131011	Pot Fringe Acre NCL	East	2016		2,000	3/1/2036	$8,000.00	12/18/2024
NMNM 131010	Pot Fringe Acre NCL	East	2016		1,280	3/1/2036	$5,120.00	12/18/2024
NMNM 120103	Pot Fringe Acre NCL	East	2012		1,920	10/1/2032	$7,680.00	12/18/2024
NMNM 120102	Pot Fringe Acre NCL	West	2012		1,560	10/1/2032	$6,240.00	12/18/2024
NMNM 120101	Pot Fringe Acre NCL	East	2012		2,240	10/1/2032	$8,960.00	12/18/2024
NMNM 118970	Potassium CL	East	2008		320	1/1/2028	$1,280.00	12/18/2024
NMNM 118969	Potassium CL	East	2008		320	1/1/2028	$1,280.00	12/18/2024
NMNM 113457	Pot Fringe Acre NCL	HB	2012	5% Leased Deposits	560	10/1/2032	$2,240.00	12/18/2024
NMNM 113456	Pot Fringe Acre NCL	HB	2012	5% Leased Deposits	2,480	10/1/2032	$9,920.00	12/18/2024
NMNM 113455	Pot Fringe Acre NCL	HB	2012	5% Leased Deposits	2,401	10/1/2032	$9,604.00	12/18/2024
NMNM 112199	Pot Fringe Acre NCL	HB	2007	Sliding Scale (POT); 5% Lang	434	2/1/2027	$1,740.00	12/18/2024
NMNM 110949	Pot Fringe Acre NCL	East	2004		1,918	12/1/2044	$7,672.00	12/18/2024
NMNM 0088285	Pot Fringe Acre NCL	HB	1960	5%+1cent mrt	120	8/1/2040	$480.00	12/18/2024
NMNM 080707	Pot Fringe Acre NCL	East	1963		2,520	8/1/2043	$10,080.00	12/18/2024
NMNM 0070607	Pot Fringe Acre NCL	West	1960		552	2/1/2040	$2,208.00	12/18/2024
NMNM 0063880	Pot Fringe Acre NCL	West	1959		120	7/1/2039	$480.00	12/18/2024
NMNM 054619	Pot Fringe Acre NCL	East	1983		2,092	3/1/2043	$8,368.00	12/18/2024
NMNM 0050249A	Potassium PRL	HB	1963	5% Leased Deposits	920	9/1/2043	$3,680.00	12/18/2024
NMNM 047021	Pot Fringe Acre NCL	East	1982		1,105	7/1/2042	$4,424.00	12/18/2024
NMNM 0045410	Potassium PRL	East	1958		2,438	6/1/2038	$9,756.00	12/18/2024

Federal Land Lease Number	Lease Type	Mine	Date	Royalty Rate	Acres (BLM)	Readjustment Due	Amount Paid	Date Paid
NMNM 041639	Pot Fringe Acre NCL	East	1981		120	7/1/2041	$480	12/18/2024
NMNM 040362	Pot Fringe Acre NCL	East	1980		280	12/1/2040	$1,120	12/18/2024
NMNM 040071	Potassium CL	North	1980		2,080	5/1/2040	$8,320	12/18/2024
NMNM 0036791	Potassium CL	HB	1957	5% Leased Deposits	1,840	10/1/1037	$7,360	12/18/2024
NMNM 0035383	Potassium CL	East	1957		2,400	1/1/2038	$9,600	12/18/2024
NMNM 0033696A	Potassium PRL	East	1957		1,241	3/1/2038	$4,964	12/18/2024
NMNM 0033696	Potassium PRL	West	1958		960	3/1/2038	$3,840	12/18/2024
NMNM 028916	Pot Fringe Acre NCL	West	1963		880	8/1/2043	$3,520	12/18/2024
NMNM 028915	Potassium PRL	East	1958		118	6/1/2038	$472	12/18/2024
NMNM 025234	Potassium PRL	West	1949		80	11/30/2029	$320	12/18/2024
NMNM 025233	Potassium PRL	West	1952		1,600	1/2/2032	$6,400	12/18/2024
NMNM 025232	Potassium PRL	West	1951		1,600	7/6/2031	$6,400	12/18/2024
NMNM 024522	Pot Fringe Acre NCL	West	1982		800	3/1/2042	$3,200	12/18/2024
NMNM 018417	Pot Fringe Acre NCL	East	1952		160	1/9/2032	$640	12/18/2024
NMNM 0015064C	Potassium PRL	East	1953		1,049	10/25/2033	$4,200	12/18/2024
NMNM 0015064B	Potassium PRL	East	1953		1,280	10/26/2033	$5,120	12/18/2024
NMNM 0015064A	Potassium PRL	East	1953		1,600	10/26/2033	$6,400	12/18/2024
NMNM 013933	Pot Fringe Acre NCL	HB	1971	5% Leased Deposits	80	10/1/2031	$320	12/18/2024
NMNM 013932	Pot Fringe Acre NCL	West	1974		640	11/1/2034	$2,560	12/18/2024
NMNM 012763	Pot Fringe Acre NCL	HB	1971	5% Leased Deposits	160	6/1/2031	$640	12/18/2024
NMNM 0011777	Pot Fringe Acre NCL	North	1952	1% ORRI	1,118	1/9/2032	$4,472	12/18/2024
NMNM 0011776	Pot Fringe Acre NCL	North	1952	1% ORRI	2,559	1/9/2032	$10,240	12/18/2024
NMNM 0007005	Potassium PRL	West	1952		2,073	1/2/2032	$8,296	12/18/2024
NMNM 0003468	Pot Fringe Acre NCL	West	1958		960	7/1/2038	$3,840	12/18/2024
NMLC 007186801	Potassium PRL	East	1955		1,938	9/1/2035	$7,756	12/18/2024
NMLC 007014101	Potassium PRL	HB	1959	5%+1cent mrt	439	1/1/2039	$1,756	12/18/2024
NMLC 006839701	Potassium PRL	North	1952	1% ORRI	1,920	1/9/2032	$7,680	12/18/2024
NMLC 006602601	Potassium PRL	HB	1955	5% + 1cent mrt	200	9/1/2035	$800	12/18/2024
NMLC 006569301	Potassium PRL	West	1958		560	2/1/2038	$2,240	12/18/2024
NMLC 006556601	Potassium PRL	HB	1951	5% Leased Deposits; 1.0987% ORRI	720	9/28/2031	$2,880	12/18/2024
NMLC 006528601	Potassium PRL	North	1952	1% ORRI	2,554	1/9/2032	$10,216	12/18/2024
NMLC 006527501	Potassium PRL	North	1952	1% ORRI	2,551	1/9/2032	$10,204	12/18/2024
NMLC 006508101	Potassium PRL	HB	1950	Sliding Scale (POT); 1.0987% ORRI	560	12/6/2030	$2,240	12/18/2024
NMLC 006184701	Potassium PRL	West	1951	1.0987% ORRI	1,275	7/6/2031	$5,104	12/18/2024
NMLC 0050063F	Potassium PRL	HB	1939	5% Leased Deposits; 1.0987% ORRI	2,358	4/15/2039	$9,436	12/18/2024
NMLC 0050063B	Potassium PRL	HB	1939	5% Leased Deposits; 1.0987% ORRI	2,560	4/15/2039	$10,240	12/18/2024

Federal Land Lease Number	Lease Type	Mine	Date	Royalty Rate	Acres (BLM)	Readjustment Due	Amount Paid	Date Paid
NMLC 0046729D	Pot Fringe Acre NCL	HB	1933	5% Leased Deposits; 1.0987% ORRI	2,560	1/18/2033	$10,240	12/18/2024
NMLC 0046729C	Pot Fringe Acre NCL	HB	1933	5% Leased Deposits; 1.0987% ORRI	2,280	1/18/2033	$9,120	12/18/2024
NMLC 0046729A	Pot Fringe Acre NCL	HB	1933	5% Leased Deposits; 1.0987% ORRI	2,559	1/18/2033	$10,236	12/18/2024
NMLC 0044752	Pot Fringe Acre NCL	HB	1956	5% Lang	240	9/1/2036	$960	12/18/2024
NMLC 0043636C	Pot Fringe Acre NCL	West	1932		920	6/20/2032	$3,680	12/18/2024
NMLC 0043636B	Pot Fringe Acre NCL	West	1932		2,312	6/20/2032	$9,248	12/18/2024
NMLC 0043636A	Pot Fringe Acre NCL	West	1932		1,044	6/20/2032	$4,180	12/18/2024
NMLC 0036092C	Pot Fringe Acre NCL	West	1929		2,559	11/21/2029	$10,240	12/18/2024
NMLC 0036092B	Pot Fringe Acre NCL	West	1929		2,026	11/21/2029	$8,104	12/18/2024
NMLC 0036092A	Pot Fringe Acre NCL	West	1929		2,437	11/21/2029	$9,748	12/18/2024

State of New Mexico Land Lease Number	Lease Type	Issue Date	Acres (State)		Amount Paid	Date Paid
HP00050001	Potash	2005	3,200	HBP	$3,200	5/23/2024
M006510011	Potash	1936	17,486	HBP	$1,749	1/21/2024

NOTE—Coordinate System: Shifted from North American Datum (NAD) 27 New Mexico State Plane North to Local Mine Grid

PRL = Preference Rights Lease; CL = Competitive Lease; NCL = Non-Competitive Lease

3.4 Significant Factors

There are no significant factors or risks that may affect access, title, or the right or ability to perform work on the property.

4.0 Accessibility

4.1 Topography, Elevation, and Vegetation

The topography is explained in the HB Mine Environmental Impact Statement (EIS) (United States Department of Interior [DOI] 2012) as a karst topography with sinkholes, caves, and enclosed depressions. The topography is the result of the dissolution of evaporite deposits in the subsurface. The vegetation cover in the permit area is typical of the Pecos Valley on the eastern edge of the Guadalupe Mountains. The area is dominated by desert scrub, mesquite upland scrub, and grasslands (DOI 2012). The mines are located at an approximate surface elevation of 3,500-ft mean sea level (msl).

4.2 Property Access

The mining facilities are accessible by both road and rail as shown in Figure 4-1. Adequate infrastructure is in place to meet production requirements. Shipment of product is by truck and rail via paved United States Highway 180-W and the Burlington Northern Santa Fe (BNSF) rail link. The area is served by small air carriers at the Cavern City Terminal located in Carlsbad, New Mexico. Airports are located in Midland, Texas and El Paso, Texas, approximately 125 and 200 miles from the property, respectively.

4.3 Climate

The climate is generally mild with an average temperature of 62.4 degrees Fahrenheit (°F). The precipitation, as rainfall during the monsoon season from May to September, averages 13.4 inches. Average annual snowfall is 3 inches (US Climate Data 2020). The weather is favorable to conducting solar evaporation. Operations continue throughout the year without significant weather disruption.

4.4 Infrastructure Availability

IPNM has sufficient water rights, reliable electric power, and a robust supply chain. IPNM competes with other industries in the Carlsbad area for qualified labor. Layoffs in market downturns may make it more difficult to re-hire personnel as needed.

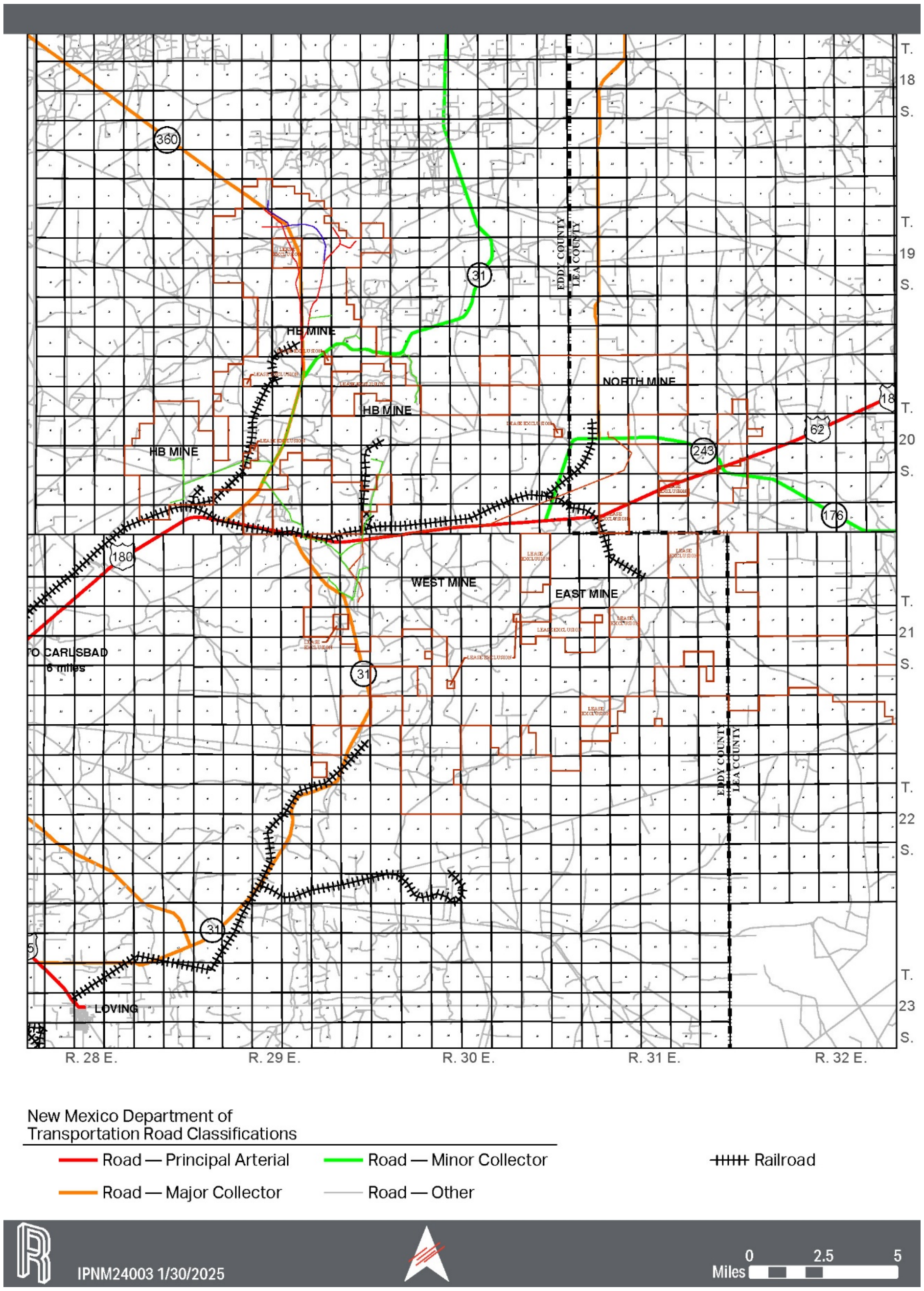

Figure 4-1. Mine Locations showing Property Access

5.0 History

Potash was first discovered in southeast New Mexico in 1925 in Eddy County, New Mexico, in Snowden McSweeney Well No. I on a V. H. McNutt permit near the center of the portion of what is now the KPLA. Commercial shipments began in 1931. The ownership history is listed in Table 5-1.

Table 5-1. Mine Ownership History

Property	Owner	Date
East Mine	Kerr-McGee Chemical Corporation	1961–1985
	New Mexico Potash Corporation (Trans Resources, Inc.)	1985–1996
	Mississippi Potash Inc.	1996–2004
	Intrepid Potash, Inc. (Intrepid Mining- NM, LLC)	2004–Present
West Mine	U. S. Potash Company	1929–1956
	U.S. Borax and Chemical Corporation	1956–1968
	U.S. Potash and Chemical	1968–1970
	Continental American Royalty Corporation	1970–1972
	Teledyne	1972–1974
	Mississippi Chemical Company (MCC)	1974–1996
	Mississippi Potash, Inc. (MPI) (a subsidiary of MCC)	1996–2004
	Intrepid Potash, Inc. (Intrepid Mining - NM, LLC)	2004–Present
North Mine	National Potash Company (Freeport Sulphur Company)	1957–1982
	New Mexico Potash Corporation (Trans Resources Inc.)	1982
	Mississippi Chemical Corporation	1985–1988
	Mississippi Chemical Corporation	1992–1996
	Mississippi Potash Inc.	1996–2004
	Intrepid Potash, Inc. (Intrepid Mining- NM, LLC)	2004–Present
AMAX Mine	Southwest Potash Corporation	1948
	AMAX Potash	1986–1992
	Horizon Gold (Horizon Potash)	1992–1995
	Intrepid Potash, Inc. (Intrepid Mining - NM, LLC)	2012–Present
HB Mine	Potash Corp of America	1934–1967
	Ideal Basic	1967–1985
	Lundberg Industries	1985–1987
	Trans-Resource (Eddy Potash)	1987–1996
	Mississippi Potash, Inc.	1996–2004
	Intrepid Potash, Inc. (Intrepid Mining NM, LLC)	2004–Present

6.0 Geologic Setting

The term "potash" is a generic term describing potassium in combination with chloride, sulfates, or nitrates. Potassium is one of the key nutrients for plants in fertilizer with nitrogen and phosphorus. Potash-bearing evaporites are typically formed as the result of evaporation of brine in basins with restricted outlets. Potash zones are found near the top of halite beds because potash is precipitated from the concentrated brines found at the end of the evaporation sequence. Important natural and commercial soluble potassium salts are sylvite (KCl) and langbeinite, a potassium magnesium double salt ($K_2SO_4 \cdot 2MgSO_4$) (Barker and Austin 1999).

6.1 Deposit Type

The geology of the potash-bearing beds of the Carlsbad area has been well documented. Overall, the potash-bearing beds may be described as bedded sedimentary rocks, deposited across the Delaware Basin and Northwest Shelf backreef from the Capitan Reef. The depositional sequences that developed in the Salado Formation consist of repetitive cycles that can be recognized by changes in mineralogy, sedimentary textures, and structures. Two types of cycles are differentiated as Type I and Type II. A complete Type I cycle ranges in thickness from 3 ft to 33- ft and consists of (in ascending order):

- A basal, mixed siliciclastic and carbonate mudstone
- Laminated to massive anhydrite-polyhalite
- Halite
- Halite with mud (argillaceous halite)

Type II is a thinner, less complete sequence and consists of halite that grades upward into argillaceous halite (Lowenstein 1988). The anhydrite-polyhalite beds are laterally continuous over large distances and are used as marker beds for correlation. Potash beds are not included in these sequences because potash is secondary and formed later than the basic depositional sequence.

6.2 Regional Geology

The Carlsbad area falls within the Delaware Basin of Permian Age. The Delaware Basin has a maximum width of approximately 100 miles and a length of approximately 150 miles, extending from north of Carlsbad, New Mexico, to Pecos County, Texas.

The Permian Age sequence comprises the Ochoan, Guadalupe, Leonard, and Wolfcamp series in order of increasing age (Linn and Adams 1966). Laterally extensive, evaporite beds containing deposits of halite, sylvite, langbeinite, kainite, carnallite, and other evaporite minerals are found within the Ochoan Series, whose top ranges from a depth of 2,000 ft near the Texas State line to approximately 200 ft below surface north of Carlsbad.

The Ochoan Series is divided into four formations as follows, in order of increasing depth (Vine 1963):

- Dewey Lake Red Beds, which consist of 200 to 250 ft of fine-grained sandstone, siltstone, and shale of low permeability that is absent west of the Pecos River.
- Rustler Formation, which consists of approximately 350 ft of dolomite and anhydrite beds that outcrop along the Pecos River west of the potash area.
- Salado Formation, which was originally called the Upper Castile Formation and was separated from the underlying Castile based on a potash content of more than 1% K_2O (Kroenlein 1939). The Salado Formation contains 12 potash zones, of which 6 have been or are currently being mined.
- Castile Formation, which is laterally bounded by the Guadalupian Age Capitan Reef limestones that define the Delaware Basin and consists of calcite-banded anhydrite and halite formed in a deep-water environment (Cheeseman 1978).

The Salado Formation thickness ranges from 1,200 ft to 2,300 ft and consists of an unnamed Upper Member, the McNutt Potash Member, and an unnamed Lower Member. Much of the variation in thickness is due to removal of halite by dissolution. It is an evaporite sequence dominated by 650 to 1,300 ft of halite and argillaceous halite and contains over 42 informally named or numbered marker beds in addition to 11 numbered potash zones within the McNutt Potash Member (Table 6-1). Figure 6-1 shows the zones in a cross section through the Property.

Table 6-1. The Potash Zones in the McNutt Potash Member

Potash Zone	Marker Bed	Thickness (ft)	Approximate Depth from Top of Salado (ft)	Lithology
	MB103	20	180	Anhydrite
	MB109	20	320	Anhydrite, finely crystalline, interbedded with stringers of halite, polyhalite and mudstone
	Vaca Triste	10	540	Siltstone and silty mudstone interbedded with halite
11				Mostly carnallite, minor sylvite, leonite
	MB117			Polyhalite
	MB119			Polyhalite
10				Sylvite, sylvinite
	MB120			Anhydrite
9				Carnallite, kieserite, sylvite
	MB121			Polyhalite
	MB122			Polyhalite
8				Sylvite
	Union Anhydrite	15-20	760	Anhydrite, finely crystalline with stringers of halite
7				Sylvite, sylvinite
6				Carnallite, kieserite, etc.
5				Sylvite, langbeinite
	MB123	5-10	845	Halite and polyhalite
	MB124	5-10	870	Anhydrite, finely crystalline laminated. May have stringers of mudstone
4				Langbeinite, sylvite
3				Sylvite, sylvinite
2				Carnallite, kieserite, etc.
	MB125			Polyhalite
1				Sylvite and sylvinite
	MB126			Polyhalite
	MB134	10-15	1,260	Anhydrite
	MB136	10-15	1,340	Anhydrite. May have interbeds of halite or polyhalite
	MB142	15	1,550	Anhydrite with interbeds of halite and stringers of mudstone
	Cowden Anhydrite	20	1,700	Anhydrite, finely crystalline, laminated. May have thin interbeds of magnesite and mudstone. Divided into two beds by intervening halite in SE Eddy County

Source: Backman (1984); Griswold (1982)

6.3 Property Geology

Sylvinite is currently being mined using solution methods in the 1st and 3rd ore zone. Historically, sylvinite has been conventionally underground mined in the 1st, 3rd, 5th, 7th, and 10th ore zones.

Mechanical mining of langbeinite is currently occurring in the 3rd and 5th ore zones at the East Mine. Langbeinite is prevalent in the 3rd and 4th ore zones in the southern part of the Delaware Basin, part of the Permian Basin, and occurs mixed with sylvite in the 5th ore zone.

The property stratigraphic column is shown in Figure 6-2.

6.3.1 East Mine

Historically, the East Mine primarily mined sylvinite in the 10th ore zone. Current mining is predominantly taking place on the 5th mixed and 3rd langbeinite ore zones. The 5th ore zone is a mixed ore consisting of variable amounts of K_2O as langbeinite and sylvite. The 5th ore zone, predominant in langbeinite, is mined and blended with the 3rd langbeinite ore. The common minerals found at the mine are halite, sylvite, clay (montmorillonite), sulfate minerals, and carnallite. The eastern sections of the mine have large deposits of carnallite and kieserite. The 10th ore zone is also characterized by isolated pods of barren clays. These clay pods range in size from a few square feet to several hundred thousand square feet. The location of these pods is random, and there is no known practical method of predicting their location.

6.3.2 West Mine

The potash deposits at the West Mine consist of mixed sylvite (KCl) and halite (NaCl) in two distinct zones within one of the flat-lying halite beds. This bed is located near the middle of the Salado Formation. Thin zones of enriched potash-bearing minerals are located within the 150-ft deposit.

Mining activities most recently took place in the 5th, 7th, and 10th ore zones. In most parts of the deposit, the vertical change from ore to barren salt is abrupt, while the lateral transition at the edges of the ore body is gradual. Barren masses of halite, known as “salt horses,” are scattered irregularly throughout the ore body. The ore is an intimate intergrowth of crystalline NaCl and KCl in various proportions, with sylvite typically less than 35% by weight. Sylvite is milky or faintly bluish gray but is often stained red by iron oxide around the crystals. Halite commonly is clear, grayish, or orange/yellow with occasional red staining. Blue halite is occasionally found associated with the sylvite.

6.3.3 North Mine

In the vicinity of the North Mine, the 10^{th} ore zone is encountered at depths of between approximately 1,400 and 1,900 ft below ground surface. The 10^{th} ore zone consists of two sylvinite beds separated by a halite unit. The lower member, or zone 10C, is the target ore bed for the North Mine and may vary in thickness from 3 to 8 ft.

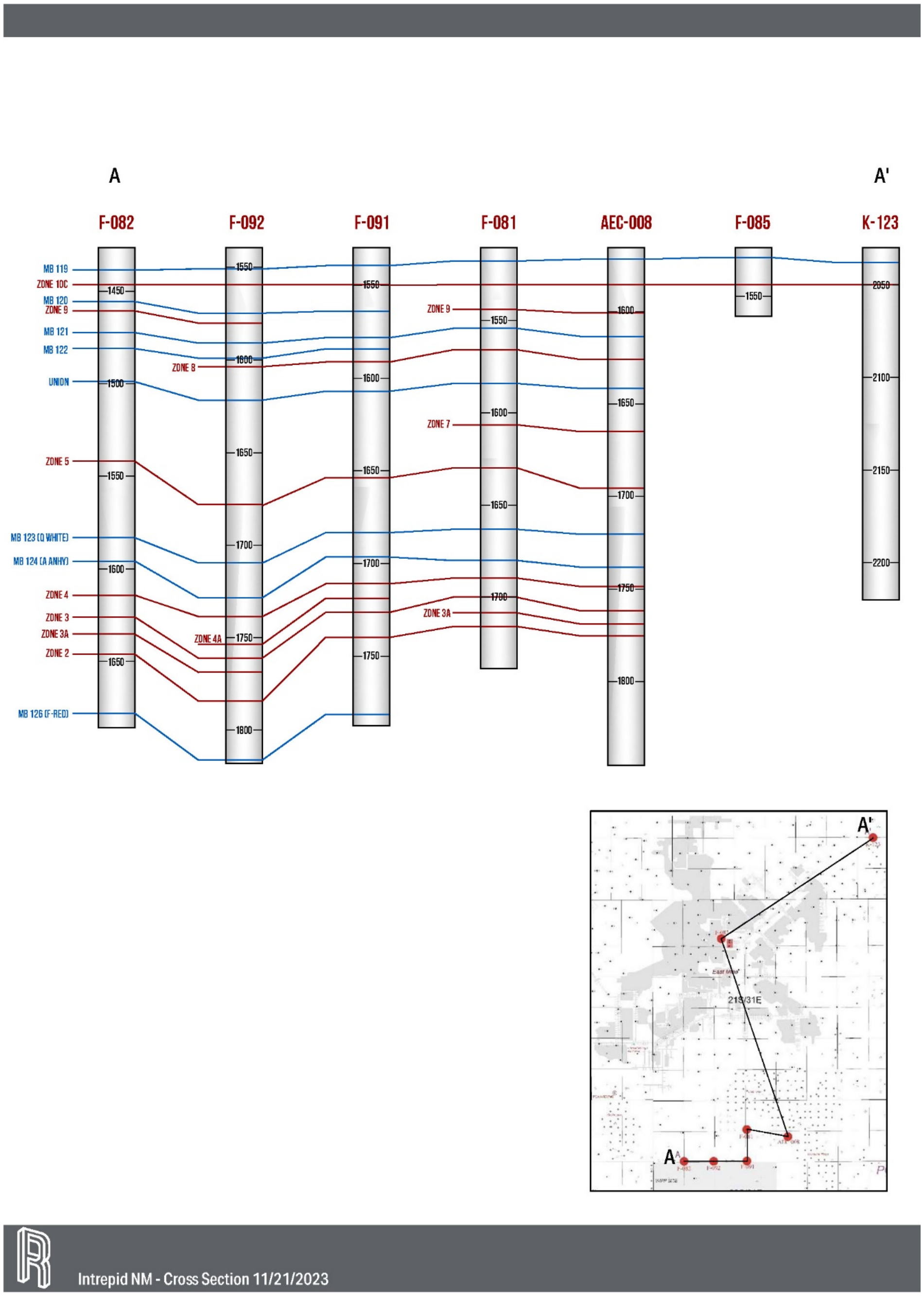

Figure 6-1. Carlsbad Potash District Regional Cross Section (Lewis 2007)

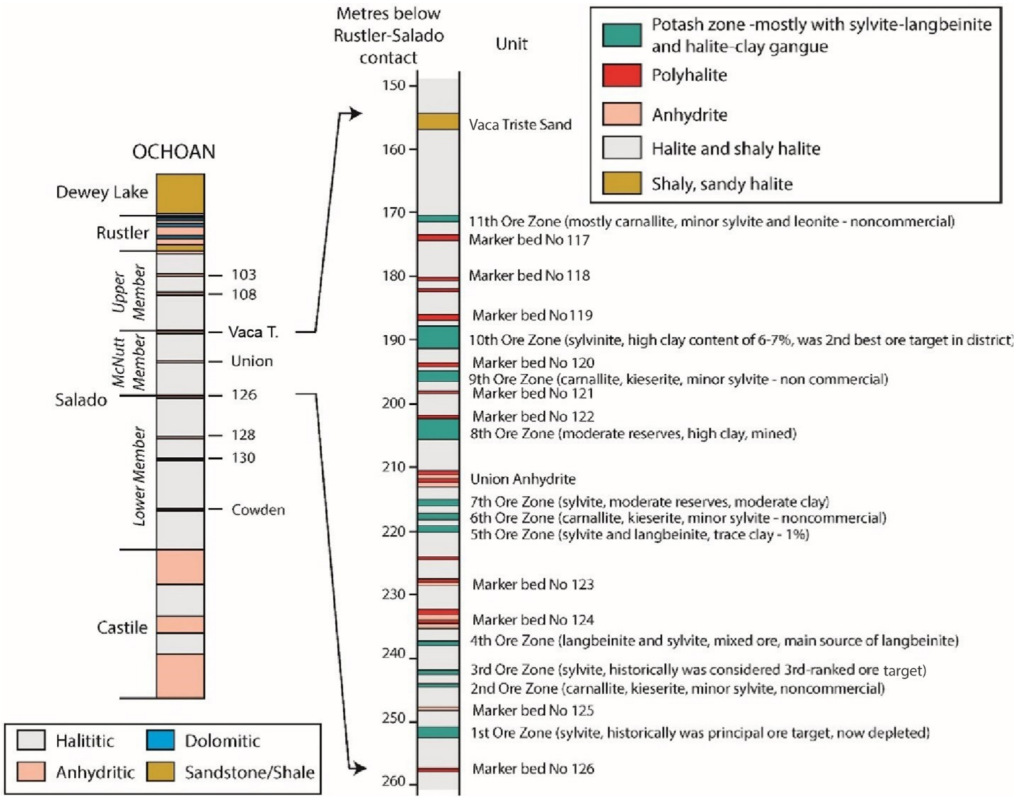

Figure 6-2. Typical Stratigraphic Column of the Ochoan (Warren 2018; Barker et al 1993)

6.3.4 HB Solar Solution Mine

The HB Mine, which was formerly owned by the Eddy Potash, Co., and mined on the 1st and 3rd ore zones (Barker and Austin 1999), has been flooded and is currently being solution mined with brines to obtain potash from the remaining pillars.

6.4 Mineralization

In the Carlsbad Area, the potassium minerals, in order of decreasing abundance, are polyhalite, sylvite, carnallite, langbeinite, kainite, and leonite. Other potassium minerals occur only in minor amounts in association with the principal potassium minerals listed previously. The mineralogy of the zones found in the Carlsbad Area are summarized in Table 6-2.

Table 6-2. Carlsbad Area Minerals and Their Compositions

Ore Zone	Closest Marker Bed: Above Ore Zone	Closest Marker Bed: Below Ore Zone	Approximate Bed Depth (ft-bgs)	Bed Thickness (ft)	Clay Content (%)	Mineralogy	Mineability and Status
Eleventh	Vaca Triste	MB117				Mostly carnallite, minor silvite and leonite	Not commercial
Tenth	MB119	MB120	700	5–12	5–7	Sylvite	Second best in District; in production
Ninth	MB120	MB121					Not commercial
						Carnallite, kieserite, minor sylvite	
Eighth	MB122	Union			6–7	Sylvite	Moderate size; unmined
Seventh	Union			5–9	3–4	Sylvite	Formerly mined; standby
Sixth	Union					Carnallite, kieserite, etc.	Not commercial
Fifth	Union	MB123	800	4.7–5	1	Sylvite and langbeinite	In production
Fourth	MB 124		850	4		Langbeinite and sylvite	Principal source of langbeinite; in production
Third	MB 124		865	3-6		Langbeinite and sylvite	In solution mining production of sylvite in Amax, In conventional production for langbeinite in East mine
Second	MB 124	MB125				Carnallite, kieserite, etc.	Not commercial
First	MB125	MB126	900	8–14	2	Sylvite	Long-time producer; currently flooded with brine for solution mining

Source: Barker and Austin (1993); Swales (1966); Pierce (1936); Haworth (1949); Bruhn and Miller (1954); Jones et al. (1954); Kirby (1974); Herne and McGuire (2001)

The minerals listed above can be described as follows (Schaller and Henderson 1932):

- Polyhalite is the most abundant potassium mineral in the Carlsbad Area. Beds of nearly pure polyhalite have thicknesses up to 8 ft and beds a foot or more thick are numerous.
- Sylvite often has a dark red or reddish-brown color due to hematite inclusions. Sylvite without the inclusions is a milky white color. Sylvite is typically mixed with halite and where clay is present in the mixture, it is in bands distinct from the sylvite.
- Carnallite is massive and compact showing no crystal faces. Crystals where seen are typically less than 1 millimeter (mm) in diameter. It occurs in small blebs with halite and sylvite.
- Langbeinite is found in distinct tetrahedral crystals that reach sizes up to ¾ inch. It is typically associated with halite and sylvite and often some kieserite. It has a distinct pink color in most samples and has a higher compressive strength than sylvite.

- Kainite is massive with poorly developed fibrous fracture surfaces and has a characteristic honey-yellow color. It is found in narrow bands between sylvite and langbeinite and is apparently a result of a reaction between the two.
- Leonite is typically found in small quantities in mixtures of other minerals, notably kainite and sylvite. Its color ranges from colorless to pale yellow. It is also found with polyhalite and anhydrite, but the relationship is unclear. It has also been found as a secondary replacement for kieserite.

6.5 Geologic Structure

The potash-bearing beds in the Carlsbad Area may be affected by several types of anomalies:

- "Salt horses" (Gunn and Hills 1978)
- "Mud horses" (Simmons 2013)
- Dissolution and collapse anomalies ("breccia chimneys")
- Igneous dykes

The presence of high concentrations of non-economic evaporite minerals, insolubles, or geologic disturbances that influence the normal character of the potash-bearing beds is considered an "anomaly" and may be unsuitable for mining. These anomalies range from localized features significantly less than a square kilometer to disturbances that are regional (i.e., several square kilometers in extent).

7.0 Exploration

7.1 Exploration Other than Drilling

No exploration other than confirmation drilling has been performed.

7.2 Drilling Exploration

Intrepid partakes in ongoing exploration as a part of operational long-term planning. Core holes are drilled from the surface and underground, and channel samples are collected as mining advances. Intrepid provided the QP their dataset beginning in 2007. Since that time, multiple data points have been added and several drillholes were reassessed. Potash is also identified from gamma ray geophysical logs in oil and gas wells. Bed thickness and potash grade are estimated and quantified with input from 2,928 sample points. Extensive work was completed with geophysical tools in collaboration with the United States Geologic Survey (USGS) (Nelson 2007) to determine and verify potash grades from gamma logs (Lewis 2006). The sample database for this exploration work is shown in Table 7-1. The dataset is from oil and gas wells, surface core holes, underground core holes, channel samples, shaft samples, and roof bolt holes. The key sample types include 7,209 drillholes and channel samples and are broken down by mining zone. Figure 7-1 shows the exploration drillhole and channel sample locations and regional topography. The dataset used for this reserve evaluation is shown in Table 7-2.

Table 7-1. Data Sample Sets—All Available Holes

Ore Zone	Oil/Gas Wells	Surface Core Holes	Underground Core Holes	Channel Samples	Shaft	Roof Bolt	Total Samples
Zone 2	—	2	—	1	—	—	2
Zone 3	478	560	57	743	3	—	1,171
Zone 3A	—	1	—	6	—	—	1
Zone 4	480	544	62	5	3	—	1,094
Zone 4A	—	2	—	—	—	—	2
Zone 5	488	572	114	2,616	4	42	3,234
Zone 7	484	611	89	805	4	7	2,000
Zone 8	492	613	53	—	3	—	1,161
Zone 9	—	1	—	—	—	—	1
Zone 10C	506	843	7	181	3	—	1,540
Total	2,928	3,749	382	4,357	20	49	**10,206**

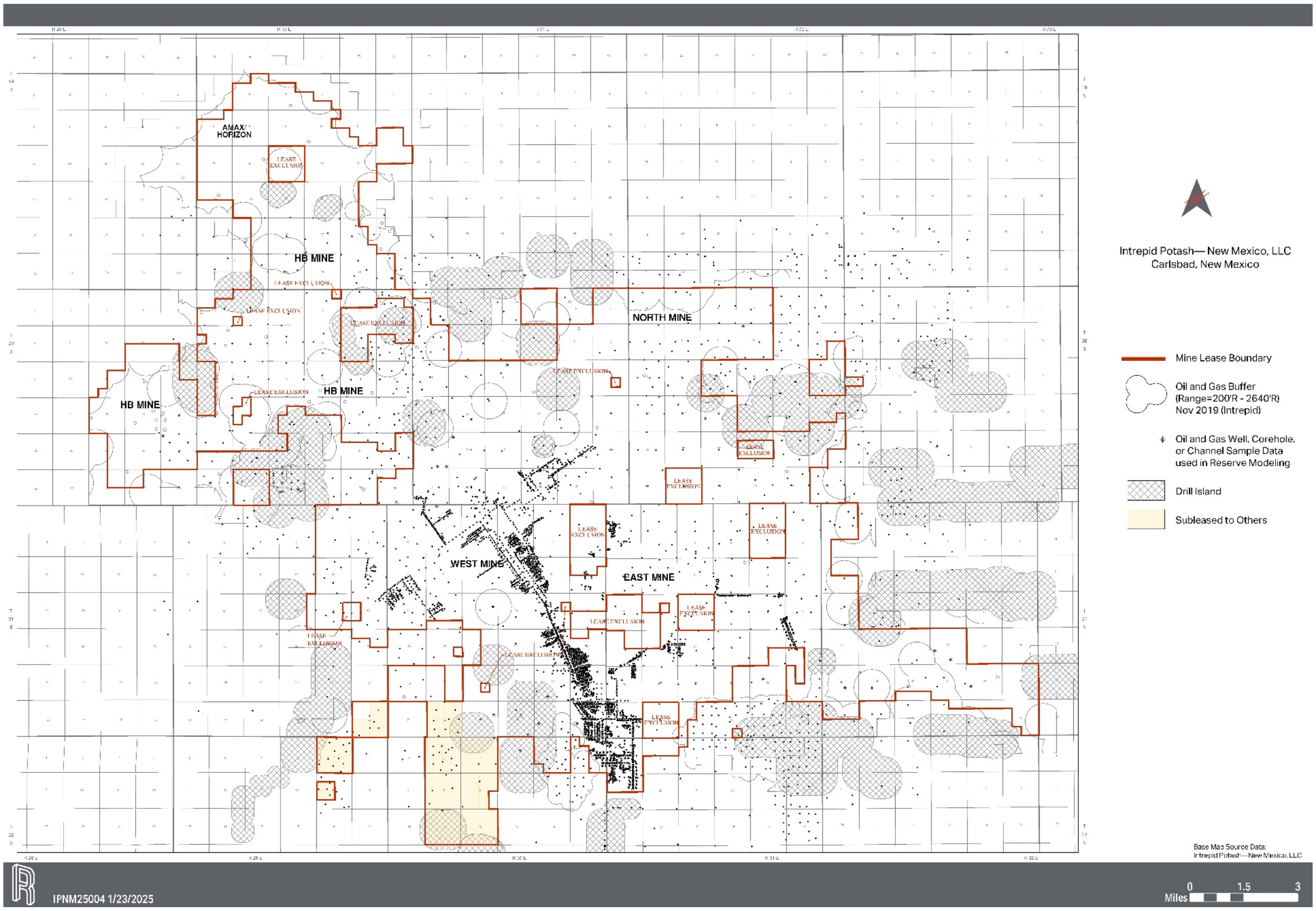

Figure 7-1. Base Map, Lease Lines, and Drillholes

Table 7-2. Data Sample Sets—Resource Evaluation Dataset

Ore Zone	Oil/Gas Wells	Core Holes	Channel Samples	Total Samples
Zone 3	463	542	73	1,078
Zone 4	469	619	12	1,100
Zone 5	482	651	1,979	3,112
Zone 7	480	609	831	1,920
Zone 8	476	576	2	1,054
Zone 10	486	729	183	1,398

7.3 Characterization of Hydrogeology Data

The characterization of the hydrogeology was completed for the HB Solar Solution Mine by AECCOM in 2011 and is included as part of the publicly available EIS (DOI 2012). The study confirmed the availability of water for the initial flooding of the solution mines at a pumping rate ranging from 177 to 1,440 gallons per minute (gpm).

7.4 Characterization of Geotechnical Data

Not applicable.

8.0 Sample Preparation

IPNM has standard operating procedures (SOP) in place for logging and sampling core from underground and surface core drilling. According to the SOP's, the geologist uses gamma ray to initially select the sample interval prior to prepping the sample for analysis. The samples are assayed at the on-site laboratory. The site laboratory has the capability to conduct X-ray Diffraction (XRD), Total Organic Carbon (TOC), and flame photometry laboratory techniques.

The mineral analysis for all core and channel samples is analyzed with the XRD. A sample of approximately 300–500 grams (g) is collected. The sample is split down to around 100 g and run through a grinding mill to reduce the size down to approximately –100 mesh. A sample is weighed out to 5 g and put into a micronizing mill that reduces the particle size to ~10 microns and pressed into a sample holder. The sample is inserted into the instrument and a diffraction pattern is retrieved. The diffraction pattern is then analyzed using the Rietveld refinement software, reporting weight percent of solid mineral in the sample.

The sample preparation, security, and laboratory analytical procedures are conventional industry practice and are adequate for the reporting of resources and reserves.

9.0 Data Verification

Due to the proximity of the location to the DOI Waste Isolation Pilot Plant (WIPP) site, and the intensive oil and gas drilling in the Permian Basin, there is geologic data publicly available for comparison. Data was also verified for beds with an extraction history by reconciling actual mining with the planned mining based on geologic modeling from the exploration database.

9.1 Data Verification Procedure

The property has been producing for many years. Mining and processing of the ore to successfully marketed products is verification of the exploration data.

9.2 Limitations on Verification

There are no limitations on the verification.

9.3 Adequacy of the Data

It is the opinion of the Qualified Person (QP) that the data is adequate for the determination of resources and reserves. The deposit has historically and continues to be mined with plans based on the data.

10.0 Mineral Processing and Metallurgical Testing

IPNM has a long history of processing ores on-site. Recovery estimates are based on past plant performance, current performance, and anticipated future performance based on laboratory or metallurgical testing of the anticipated plant feed. Over time, the appropriate capital modifications to the plants have been made to accommodate changes in ore feed and market requirements.

10.1 Adequacy of the Data

It is the opinion of the QP that the data is adequate for the determination of resources and reserves. The deposit has historically and continues to be processed successfully.

11.0 Mineral Resource Estimates

According to 17 CFR § 229.1300 (2025), the following definitions of mineral resource categories are included for reference:

An *inferred mineral resource* is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.

An *indicated mineral resource* is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.

A measured mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve.

11.1 Key Assumptions, Parameters and Methods

The exploration drillhole and channel sample data were compiled to form the database that serves as the basis for estimating the resources. The geologic setting was evaluated, and bed assignments reviewed. Of the data within the lease boundary, all data points contribute bed thickness, and several have assay information.

The geology was modeled using Carlson Software (2020). A basic inverse distance-squared (ID2) algorithm was used with a search radius of ¾ mile to prepare the 100-ft x 100-ft grids for bed thickness and grade. The search radius was applied for Measured and Indicated Resources of ¼ mile and ¾ mile, respectively. Where data is dense, the nearest 25 data points were used to assign values for the grid block. The grids were multiplied by each other to compile a grade-thickness (GT) grid within the lease boundaries held by IPNM. The base grid was adjusted for each ore type cutoff. Key assumptions and parameters for resource estimation are listed in Table 11-1.

The classification of cutoff in terms of GT in units of ft% was defined in the Secretaries Order dated October 21, 1986 (51 FR 39425) for mechanically mined potash deposits. The criteria

Table 11-1. Parameter Assumptions

	Resources	
	Measured	**Indicated**
Proximity to sample point	1,320 ft (1/4 mile)	3,960 ft (3/4 mile)
GT for sylvinite mechanical mining	54 ft% K2O	
GT for high-insoluble sylvinite mechanical mining*	64 ft% K2O	
GT for langbeinite mechanical mining	25 ft% K2O	
Flood elevation HB South	2,525 ft	
Flood Elevation HB North	2,325 ft	
Flood Elevation HB Eddy	2,675 ft	
Flood Elevation HB AMAX	2,500 ft	
Carnallite content mechanical mining	Less than 6%	
Mineability	Reasonably expected to be feasible to mine	

* High-insoluble sylvinite zones 8 and 10

are not dependent on thickness or grade, but on the product of the thickness and grade. To evaluate the viability of mining the IPNM mechanically mined resources, a cutoff GT was established. Inputs to the estimation of the cutoff analysis are cost of goods sold, product sale price, mill recovery, and nominal grade. The cutoff for solution mining in flooded abandoned underground potash mines is a function of the grade of the brine being extracted which results in enough product tons to just cover the cost of production.

The estimated cost of goods sold (COGS) and sales price used in the cutoff evaluation are outlined in Table 11-2.

Intrepid has a long history of sales and marketing of their products. Sales are managed for all properties through the corporate office. Intrepid provided the historical demand and sales pricing through the statements of earnings (SOE) from 2012 to 2024. Forward-looking pricing was provided by Intrepid marketing. The product sale prices selected for analysis of cutoff grade are shown in Table 11-2. These values are 25% greater than the product sales price for the reserve estimate.

Table 11-2. Cost of Goods Sold and Sales Price Assumptions

Product	Sale Price	Freight	Net Sales Price	Cost of Goods Sold (not including by-product credit)
Langbeinite	$470/t	$90/t	$380/t	$272/t
Sylvite Solution Mining	$450/t	$30/t	$420/t	$260/t
Sylvite Mechanical Mining	$450/t	$30/t	$420/t	$272/t

Economic modeling indicates cutoff grades at the IPNM East Mine of 25 ft %K_2O for langbeinite resource. Modeling also indicates a cutoff of 64 ft% K_2O for the high-insoluble sylvinite resources in the 8th and 10th zones, which requires the capital investment of a new plant and refurbishment of shafts. A cutoff of 54 ft% K_2O is indicated for the West sylvinite resources which requires the processing plant, mine equipment, and associated infrastructure to be rehabilitated. Cutoff grades are listed in Table 11-3.

Table 11-3. Cutoff Grade Analysis for Mechanical Mining

Ore Mineral	Pure Mineral (%)	Nominal Grade Cutoffs (% K_2O)	Nominal Grade Cutoffs (% KCl or Lang)	Mill Recovery (%)	Grade-Thickness Cutoff[1] (ft%)	Applicable Ore Zones
Carlsbad East Mine						
Langbeinite[2]	22.70%	5.2%	23.0%	68%	25	East–3, 4 and 5, West–4
Carlsbad West/North Mine						
High-Insolubles Sylvite with CAPEX Burden	63.17%	14.4%	22.8%	75%	64	8 and 10
Carlsbad West Mine						
Sylvinite with CAPEX Burden	63.17%	11.8%	18.7%	80%	54	West–3, 4, 5, 7 North–3 and 4

[1] Equivalent to 5.0-ft-thick ore at nominal grades in the East Mine and 4.5-ft-thick ore at nominal grades in the West and North Mines.
[2] All langbeinite is processed at the East Plant.
CAPEX = capital expenditure

By definition, the cutoff grade is the grade that determines the destination of the material during mining. The cutoff grade for resources of abandoned underground sylvinite is not a parameter for use in the estimation of solution mining resources but does establish an operational minimum limit for the brine grade reserves. The solution mining resources are the pillars remaining after mining and the fringe boundary of the mine. Resources could also be unmined sylvinite left behind to provide geotechnical support. An operational limit of the flood elevation establishes the cutoff between resource and reserve for this deposit. When mining using solution methods in proximity to other mines, or other underground mines not within the control of IPNM, the critical factor in establishing a flood elevation is to keep adjoining properties dry or to protect structures such as shafts.

Resource maps for sylvinite by zones 10, 8, 7, 5, 4, 3, and 1 are included in Figures 11-1 through 11-7, respectively. The langbeinite mineral resource maps for zones 5, 4, and 3 are included in Figures 11-8 through 11-10.

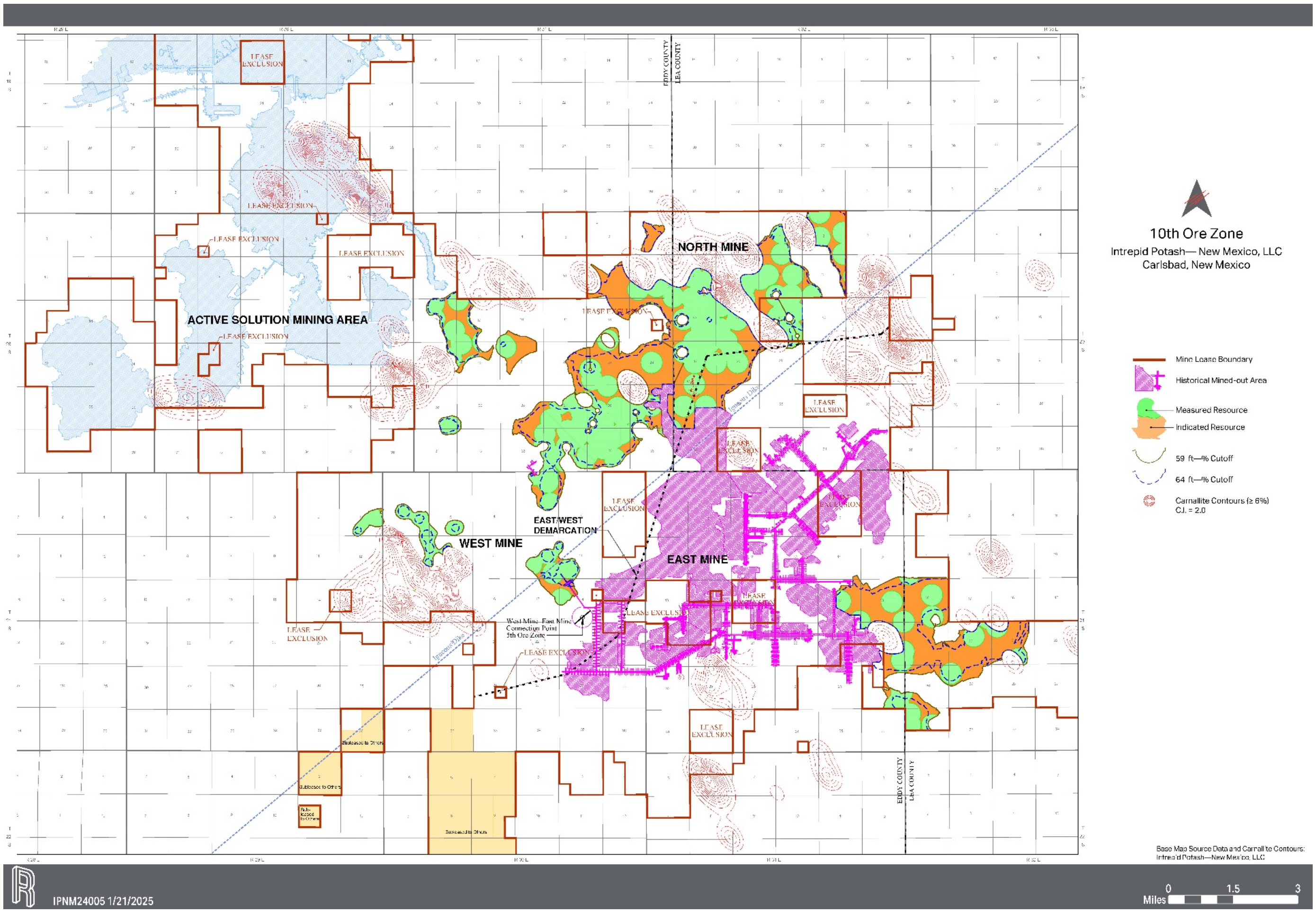

Figure 11-1. 10th Ore Zone Mineral Resources, Sylvinite Ore

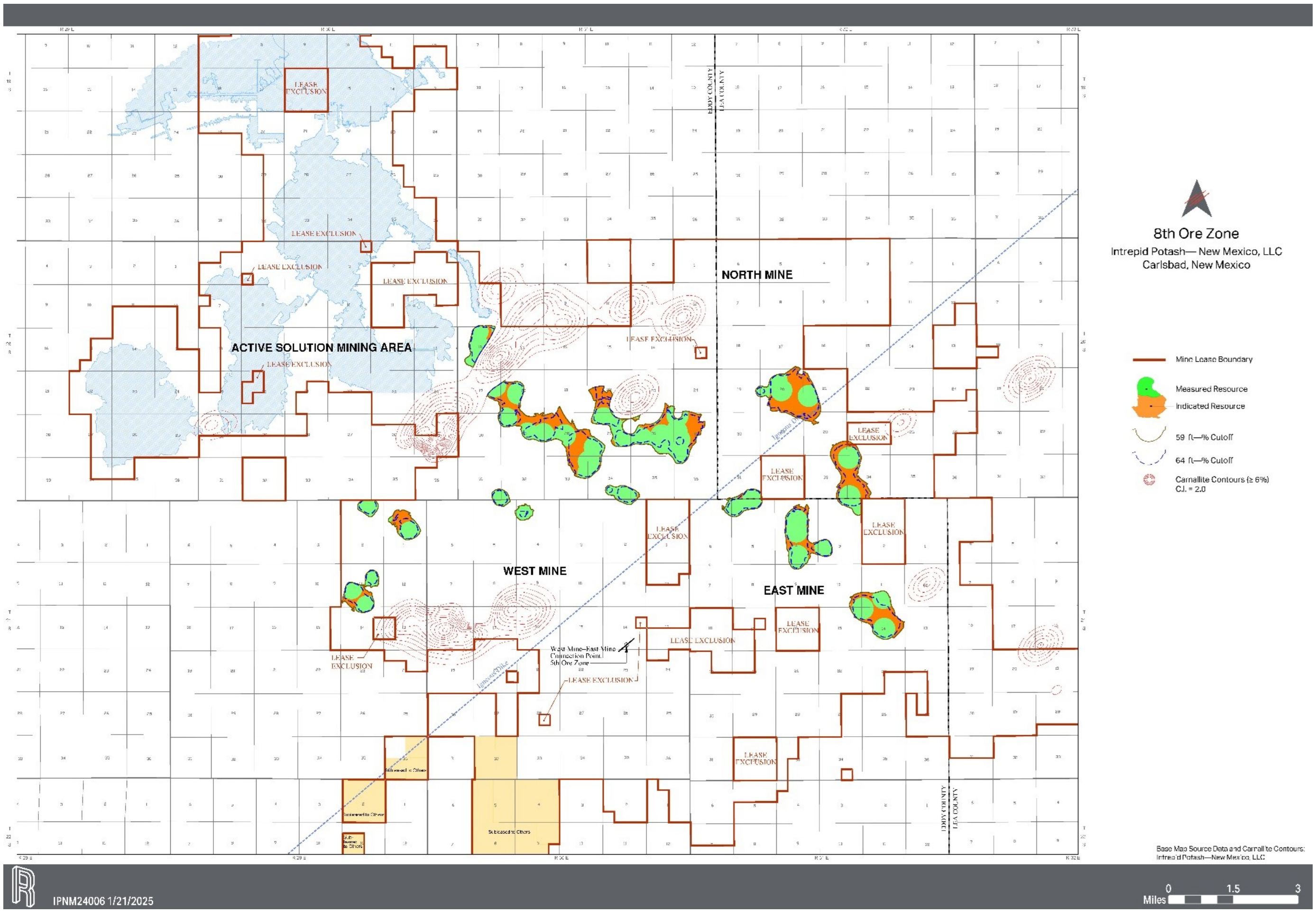

Figure 11-2. 8th Ore Zone Mineral Resources, Sylvinite Ore

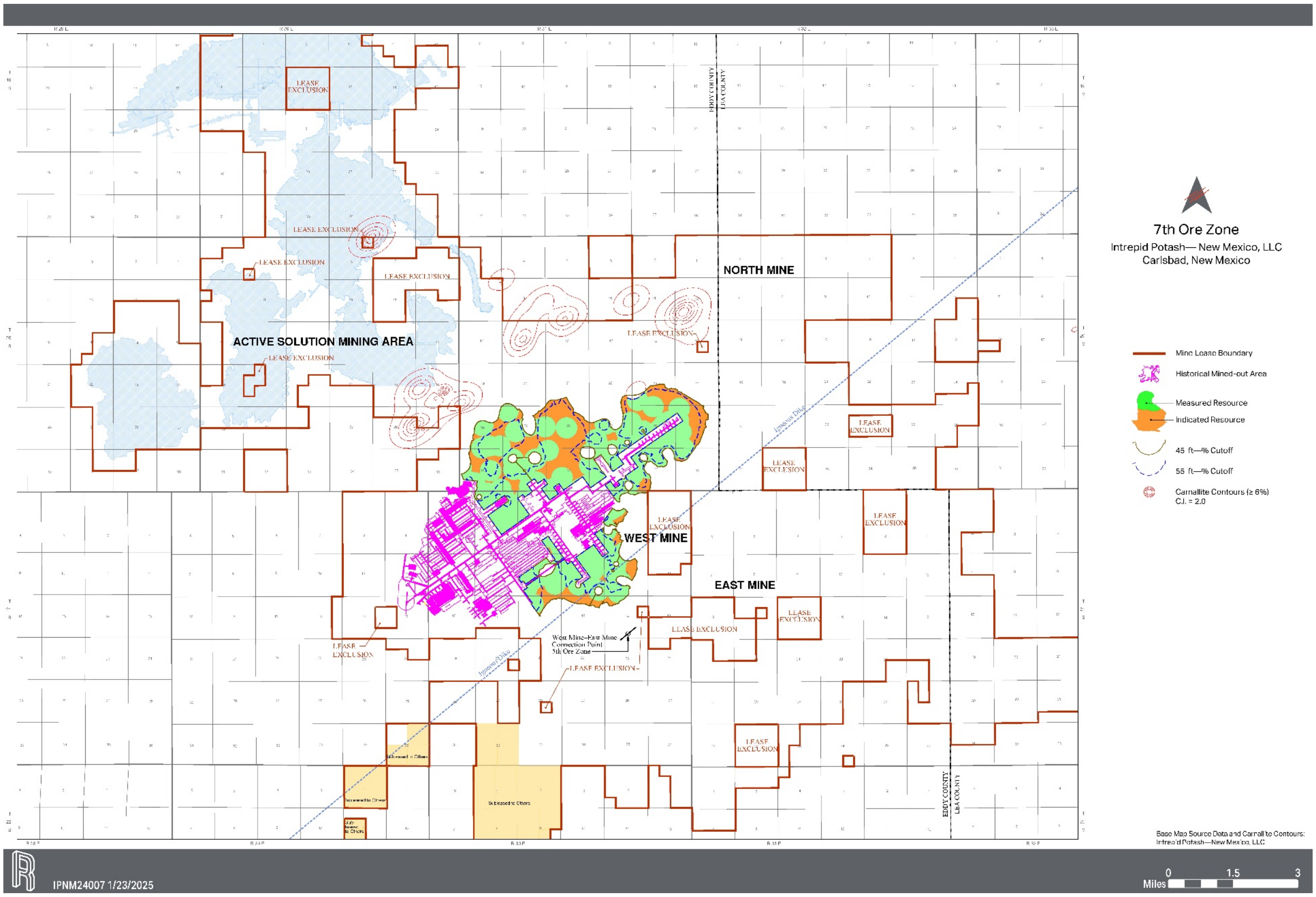

Figure 11-3. 7th Ore Zone Mineral Resources, Sylvinite Ore

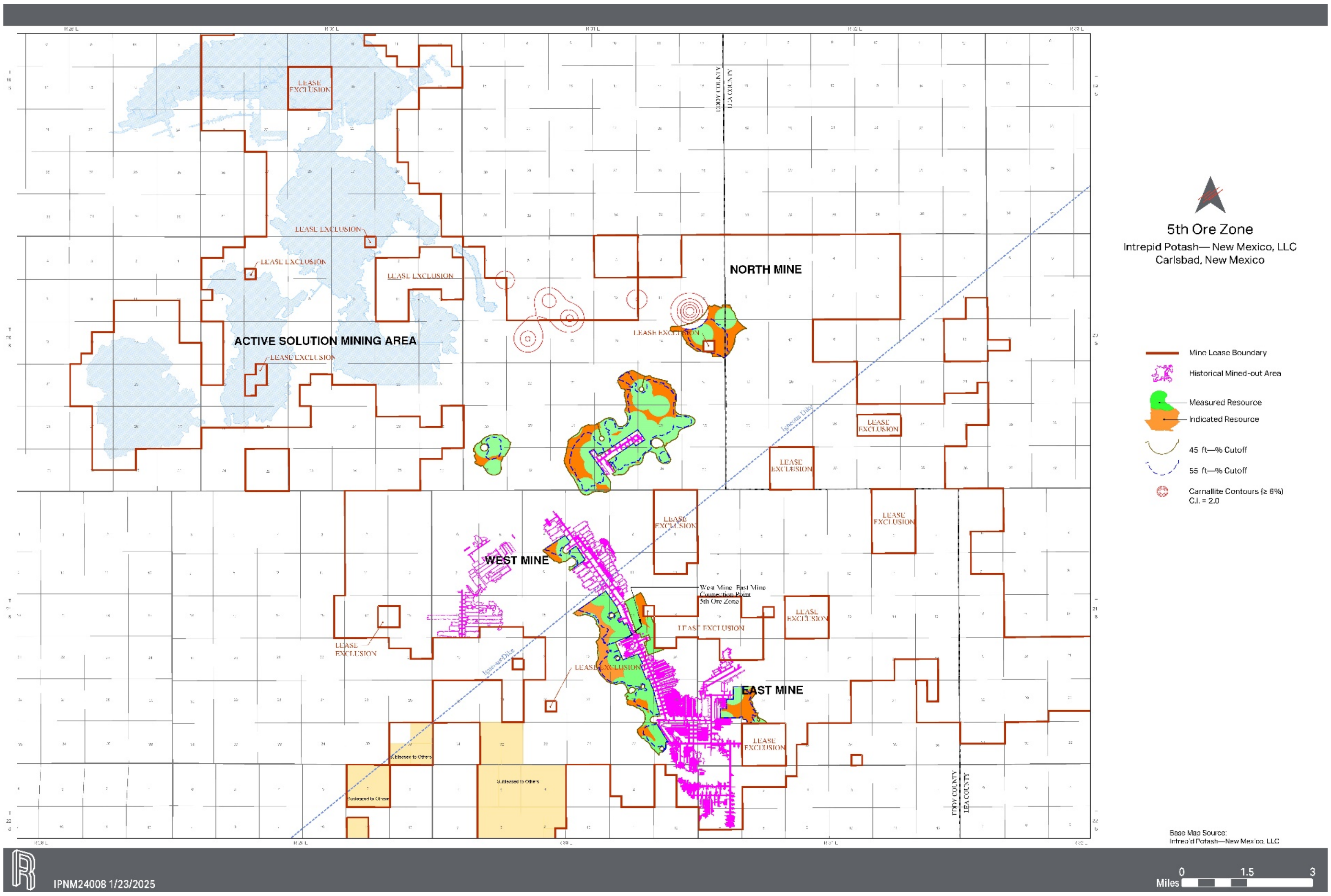

Figure 11-4. 5th Ore Zone Mineral Resources, Sylvinite Ore

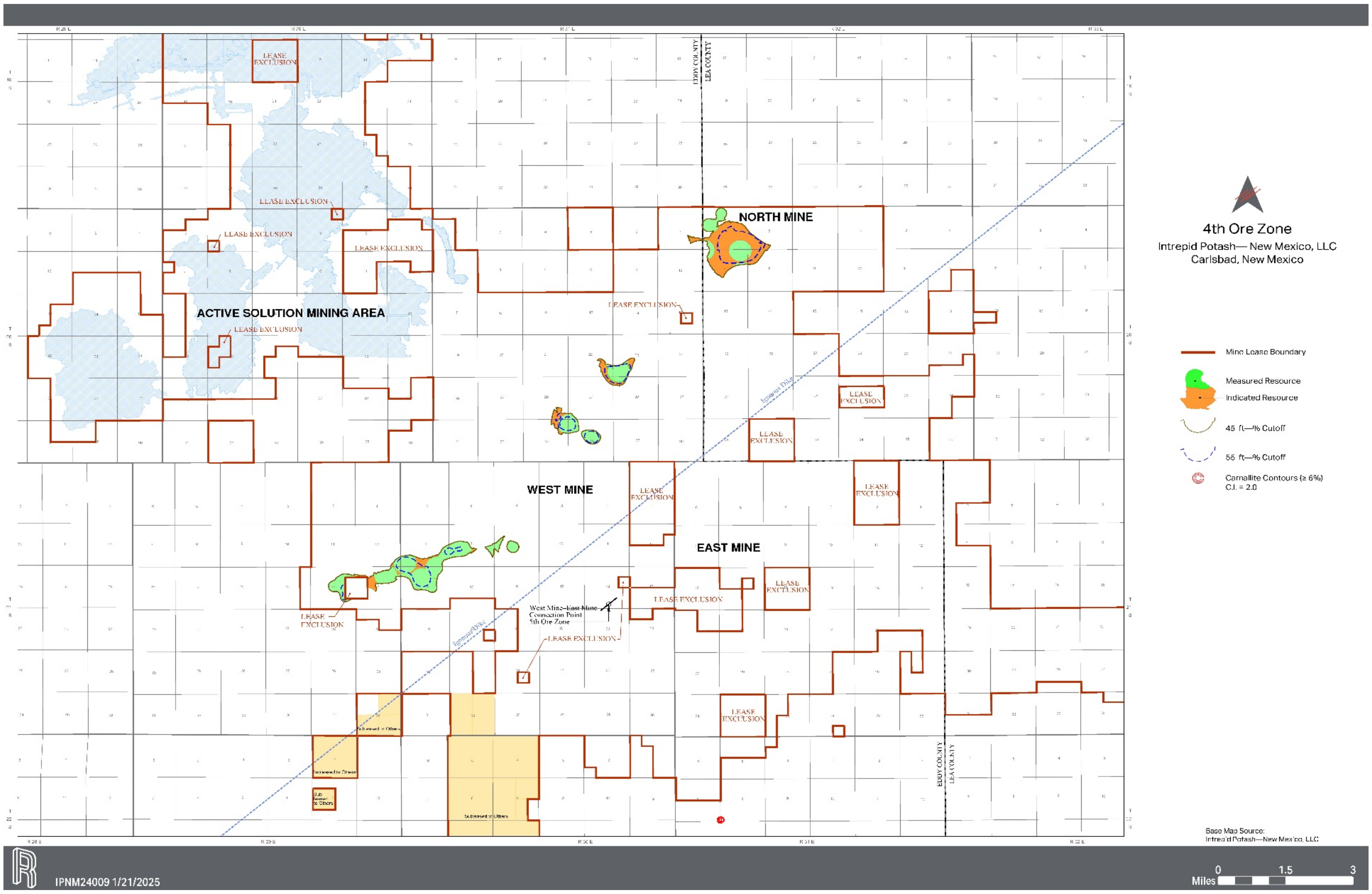

Figure 11-5. 4th Ore Zone Mineral Resources, Sylvinite Ore

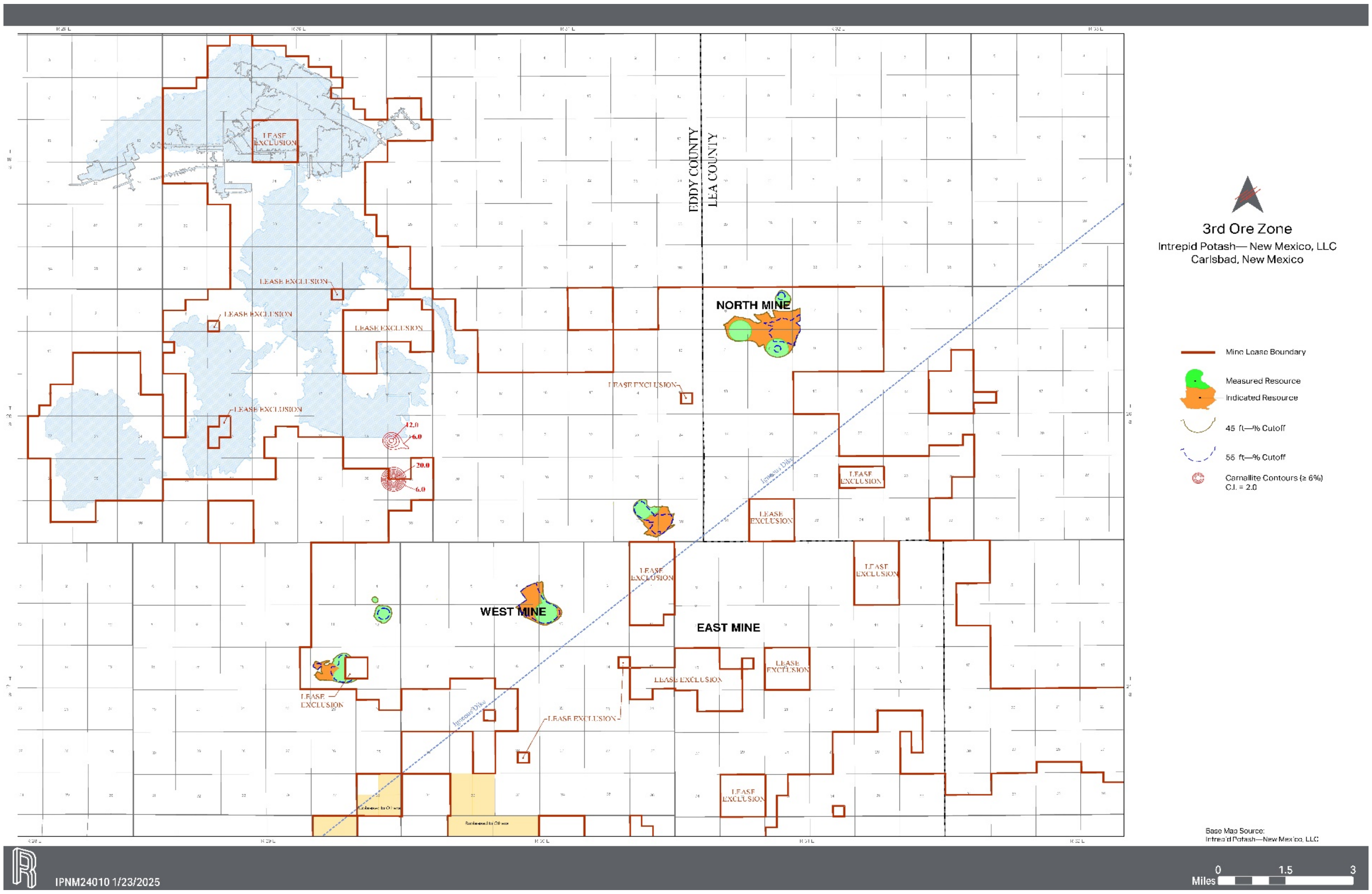

Figure 11-6. 3rd Ore Zone Mineral Resources, Sylvinite Ore

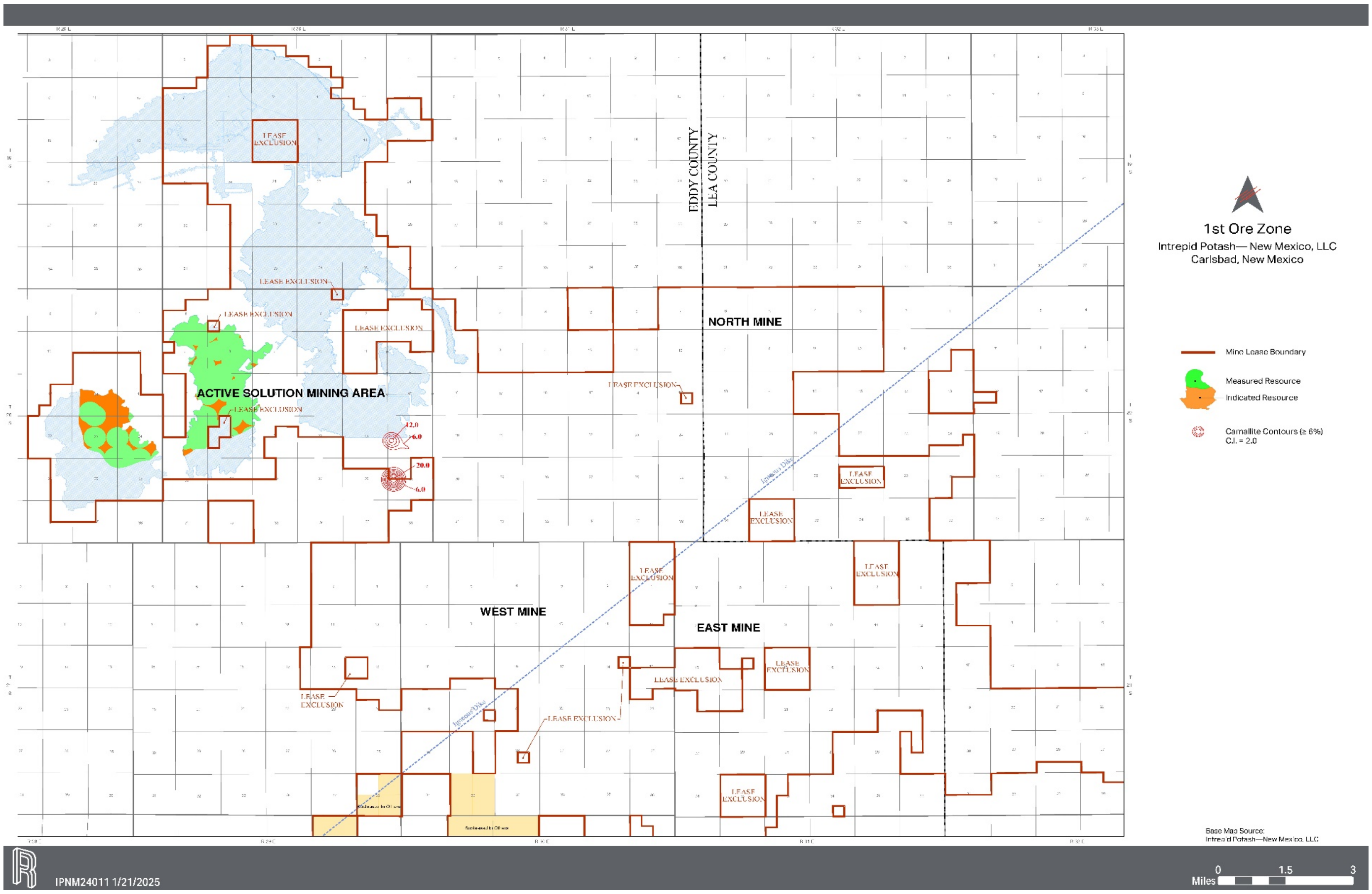

Figure 11-7. 1st Ore Zone Mineral Resources, Sylvinite Ore

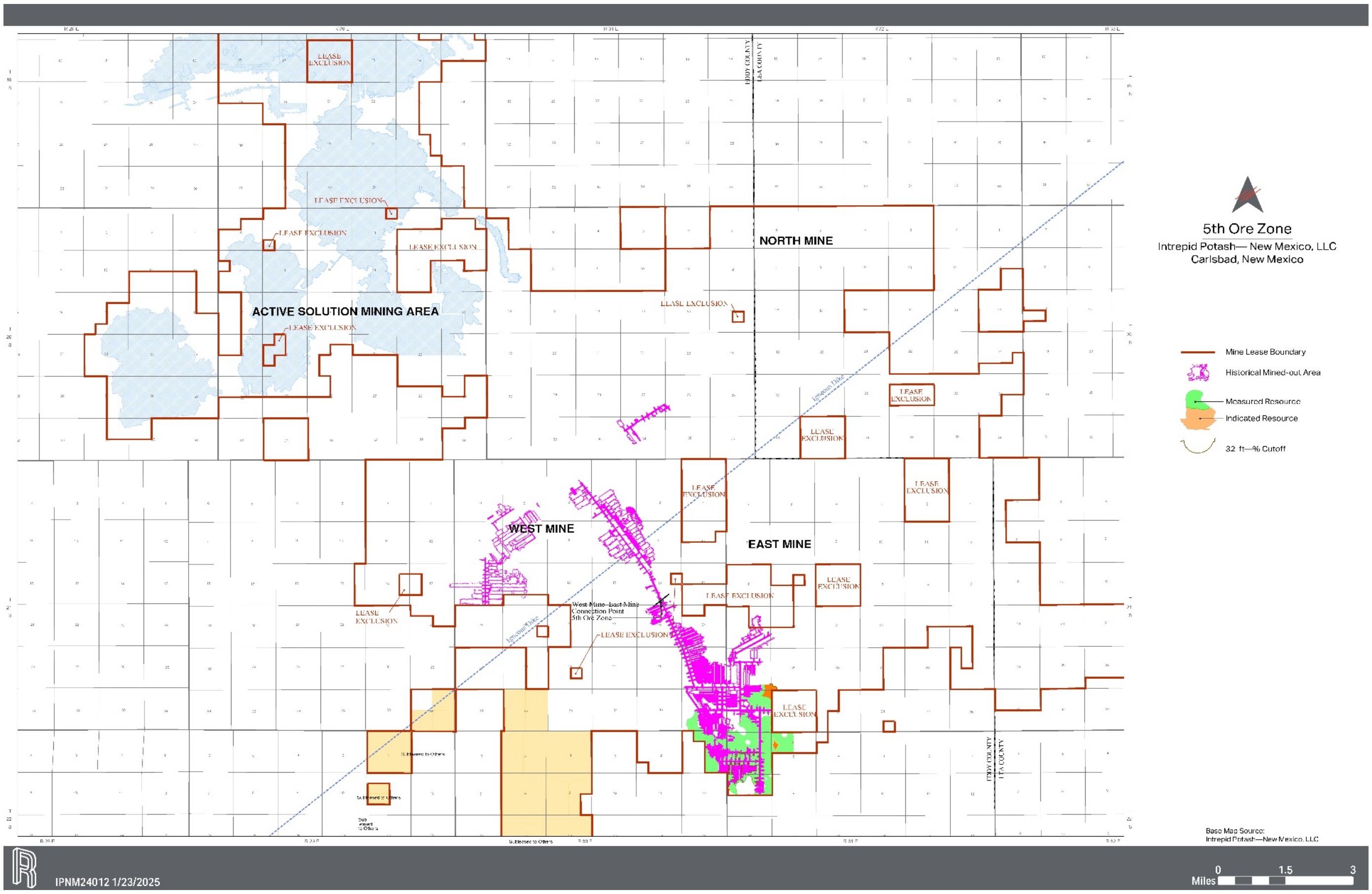

Figure 11-8. 5th Ore Zone Mineral Resources, Langbeinite Ore

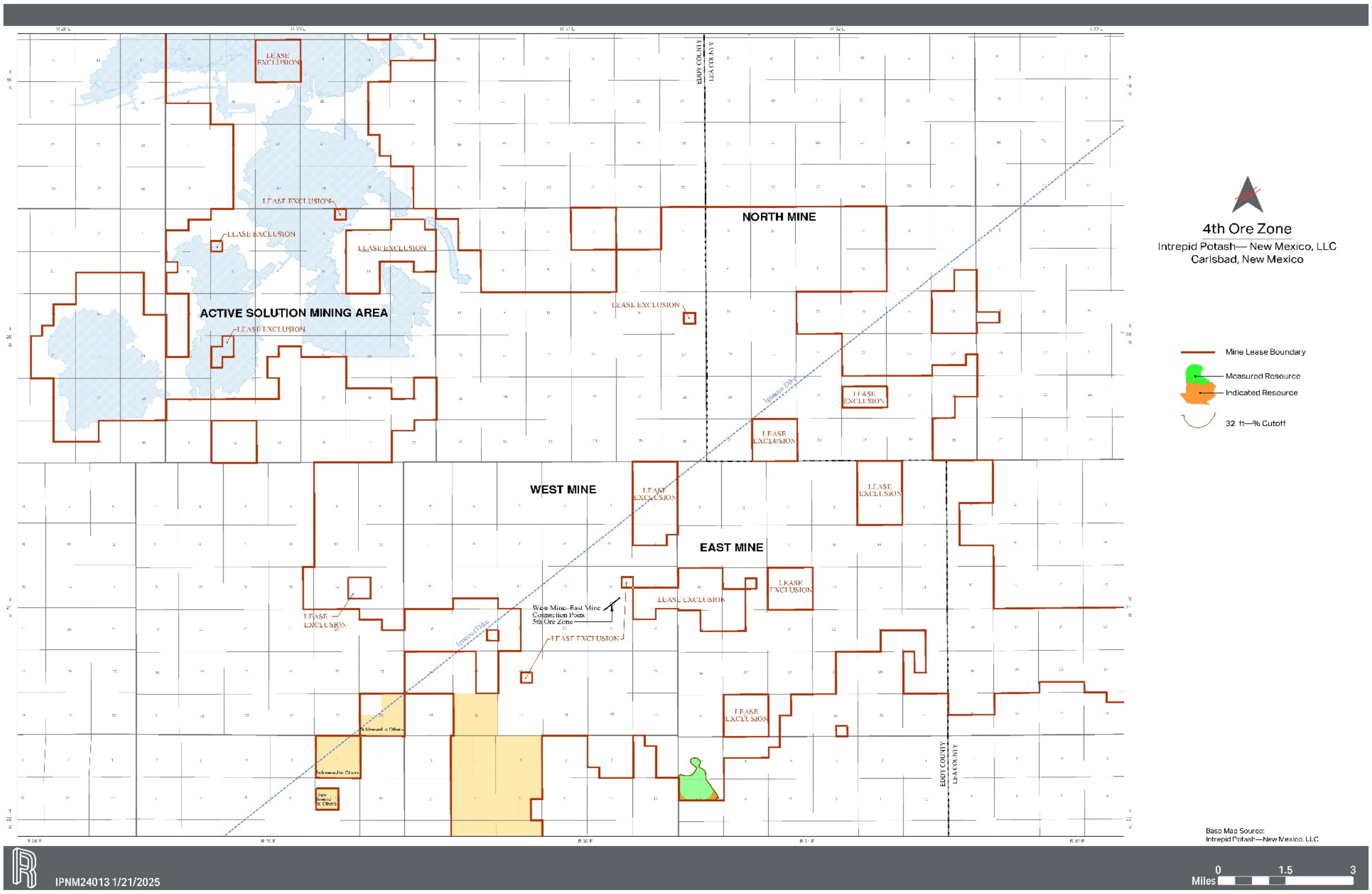

Figure 11-9. 4th Ore Zone Mineral Resources, Langbeinite Ore

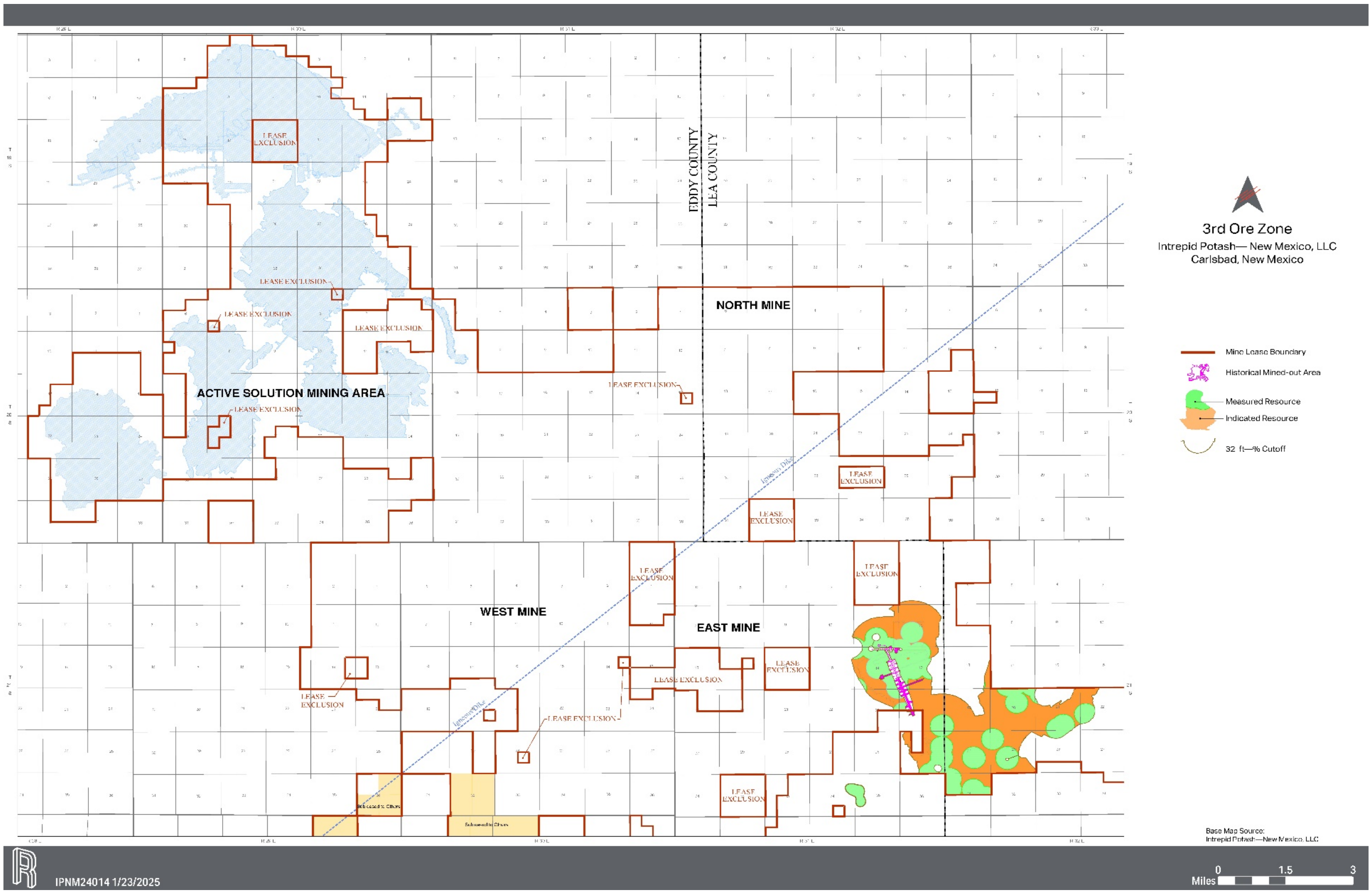

Figure 11-10. 3rd Ore Zone Mineral Resources, Langbeinite Ore

11.2 Mineral Resource Estimate

The estimate of measured and indicated mineral resources effective December 31, 2024, extracted from the application of the resource cutoffs to the geologic model is listed in Table 11-4 and Table 11-5.

Table 11-4. Mineral Resource Estimate Summary effective December 31, 2024

IPNM - Summary of Mineral Resources in millions of tons of Sylvinite in Place effective December 31, 2024, based on $450/product ton mine site

	Resources				
	Sylvinite[1] (Mt)	Grade ($\%K_2O$)	Contained K_2O (Mt)	Mining Cutoff[2] (ft-$\%K_2O$)	Processing Recovery (%)
Measured Mineral Resources	288	16	45	54-64	75-85
Indicated Mineral Resources	164	14	24	54-64	75-85
Measured + Indicated Mineral Resources	452	15	69		
Inferred Mineral Resources					

[1] Sylvinite is a mixed evaporite containing NaCl and KCl.
[2] Solution mining resource cutoff for flooded old working is the mining extents boundary.
Mineral Resources were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.
Mineral Resources are reported exclusive of Mineral Reserves, on a 100% basis.

Mt = million tons, % = percentage, K_2O = potassium oxide, ft = feet

Table 11-5. Mineral Resource Estimate Summary effective December 31, 2024

IPNM - Summary of Mineral Resources in millions of tons of Langbeinite Mineralized Rock in Place effective December 31, 2024, based on $470/Product Ton Mine Site

	Resources				
	Langbeinite Mineralized Rock (Mt)	Grade ($\%K_2O$)	Contained K_2O (Mt)	Mining Cutoff (ft-$\%K_2O$)	Processing Recovery (%)
Measured Mineral Resources	67	10	6	25	68
Indicated Mineral Resources	59	10	6	25	68
Measured + Indicated Mineral Resources	126	10	12		
Inferred Mineral Resources					

Mineral Resources were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.

Mineral Resources are reported exclusive of Mineral Reserves, on a 100% basis.

Mt = million tons, % = percentage, K_2O = potassium oxide, ft = feet

11.3 Discussion of Future Work

IPNM has historically and is currently producing from this property. There are no relevant technical or economic factors that need to be resolved.

12.0 Mineral Reserve Estimates

Mineral reserves that are to be mined using mechanical methods are estimated by the application of a detailed mine plan for the measured and indicated resources within the boundaries of the cutoff GT for reserves. The plan sets the basis for the estimation of annual production of product. The income from product sales and the operating and capital costs to mine the resource is fundamental to the cash flow used to establish economic viability.

Mineral reserves that are mined using solution mining methods are not subject to the traditional application of a cutoff grade but instead of operational limitations. An operational limit of the flood elevation establishes the cutoff between resource and reserve for this deposit.

According to 17 CFR § 229.1300 (2025), the following definitions are included for reference:

A *probable mineral reserve* is the economically mineable part of an indicated and, in some cases, a measured mineral resource.

A *proven mineral reserve* is the economically mineable part of a measured mineral resource.

12.1 Key Assumptions, Parameters, and Methods

By definition, modifying factors are the factors applied to indicated and measured mineral resources and then evaluated in order to establish the economic viability of mineral reserves. These factors for IPNM include mechanical and solution mining parameters; mineral processing; oil and gas drill islands and well locations; economic cutoff GT; deleterious minerology; legal, environmental permitting and lease boundaries.

Intrepid has a long history of sales and marketing of their products. Sales are managed for all properties through the corporate office. Intrepid provided the historical demand and sales pricing through their SOEs from 2012 to 2024. Potash market is discussed in Section 16. The product sales price selected for Reserve evaluation is shown in Table 12-1.

Table 12-1. Product Sales Price (Reserves)

Product	Sale Price	Freight	Net Sales Price	Cost of Goods Sold with by-product credit
Sylvite	$360/t	$30/t	$330/t	$203/t

Cutoff grade for brine production is listed in Table 12-2.

12.2 Mineral Reserves Estimate

The mine plan boundary determines the technical feasibility of mining the reserves for zones. The mine plan layout for the solution mining is a flood elevation indicating the limit of the fluid injection boundary. The proven and probable reserves are included in Table 12-3 and are shown in Figure 12-1 for ore zone 1, respectively.

Table 12-2. Cutoff for Solution Mined Reserves

5-Yr Basis (2025-2029)	
Total production costs ($/ton of product)	$260
Net revenue from byproducts ($/ton of product)	($57)
Total Cost ($/ton of product)	$203
Potash	
Price per ton less shipping ($/ton)	$330
Tons sold	726,500
Net potash sales ($)	$239,731,000
Cutoff Analysis	
Breakeven tons (tonnage to cover the costs)	446,034
Net concentration of production brine (% KCl)	8.4
Cutoff net concentration (% KCl)	4.8
Cutoff net concentration (% K_2O)	2.9

Table 12-3. Mineral Reserve Estimate effective December 31, 2024

IPNM -Summary of Potash Mineral Reserves effective December 31, 2024 based on $360/Product Ton Mine Site

	Reserves			Brine Cutoff Grade[3]	Processing Recovery
	In-Place KCl (Mt)	In-Situ Grade[1] (%K_2O)	Product[2] (Mt)	(%K_2O)	(%)
Proven Mineral Reserves	5.3	22.9	3.4	2.9	83
Probable Mineral Reserves					
Total Mineral Reserves	5.3	22.9	3.4		

[1] In-situ grade is the amount of K_2O in the contact area of the caverns and is used to calculate the In-Place KCl.
[2] Product is calculated by multiplying In-Place KCl by: dissolution factor of 96%, areal recovery of 100%, geologic factor of 94.2%, plant recovery of 83%, cavern loss factor of 98%, a product purity factor of 103%, a bitterns loss factor of 88% and handling loss factor of 97%.
[3] Brine cutoff grade is the amount of K_2O in the extracted brine necessary to cover the cash costs of production.
Mineral Reserves were prepared by RESPEC, a qualified firm for the estimate and independent of Intrepid Potash, for EOY 2024.
Mineral Reserves are reported exclusive of Mineral Resources, on a 100% basis.

Mt = million tons, % = percent, K_2O = potassium oxide, ft = feet

12.3 Risk Factors

Mineral reserves are an estimate from sparse data sampling points in a geologic setting that can be highly variable. The risk of material changes to the geologic interpretation is tempered by the application of the anomaly factor and the long history of mining in this deposit. Costs are subject to impact by the broader economy and can be impacted by the weather and other natural forces. A change in rules or regulations can result in unanticipated cost increases.

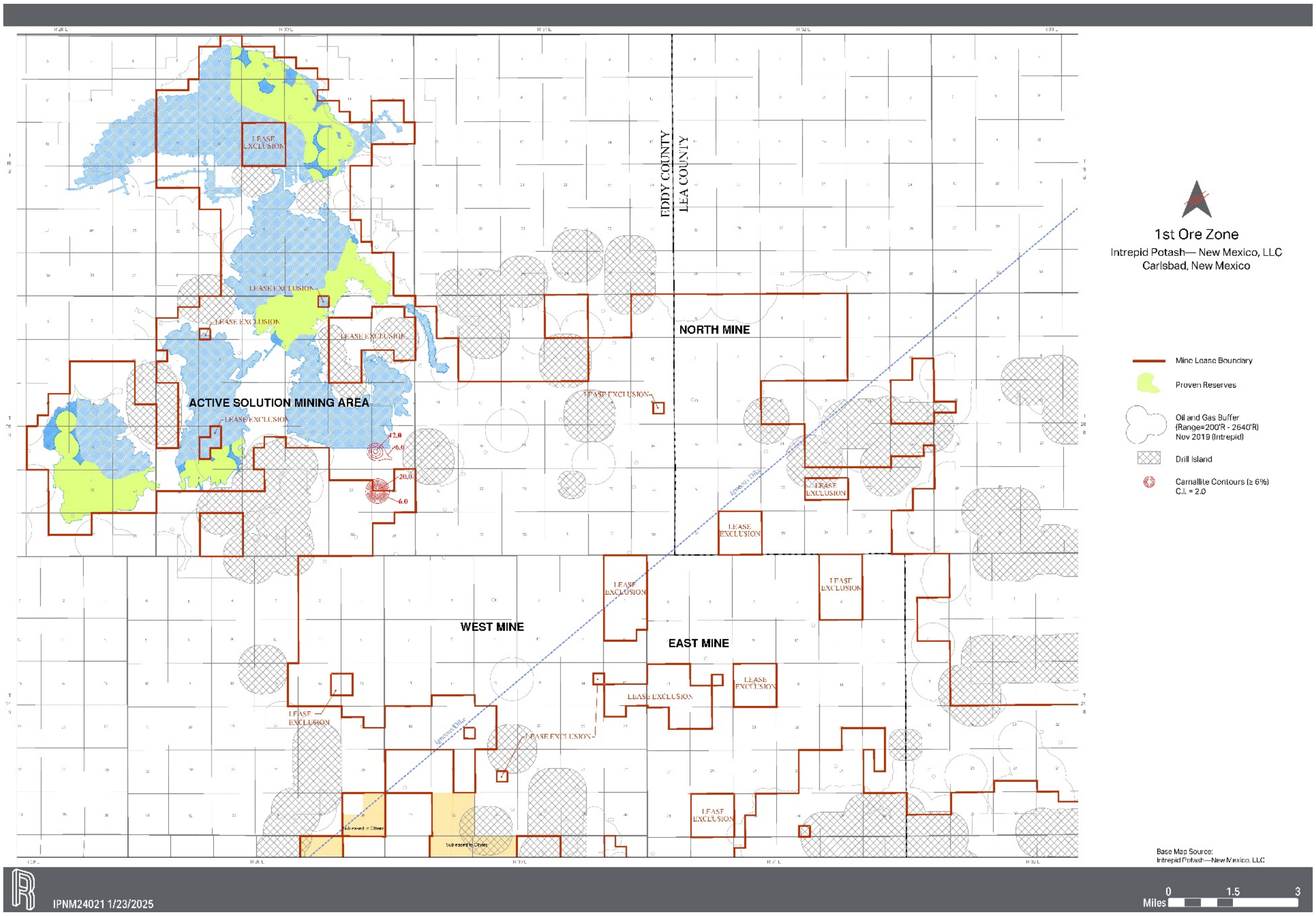

Figure 12-1. 1st Ore Zone Mineral Reserves, Sylvinite Ore

13.0 Mining Methods

The two mining methods currently in practice at IPNM are high-extraction mechanical underground room-and-pillar mining and solution mining. Mechanical mining is well suited to bedded deposits. All MOP production at IPNM comes from the HB Solar Solution Mine in the 1st and 3rd ore zones. Trio® production is from langbeinite mined using room-and-pillar mechanical mining methods at the East Mine in the 3rd, 4th, and 5th ore zones. Historically, MOP was sourced from the West Mine 5th, 7th, and 10th ore zones. Approximately 300 people are employed at the property.

The East Mine is a high-extraction, mechanical room-and-pillar mine. Potash was the primary product until mining progressed to the mixed langbeinite and potash ore in the 5th ore zone. The mixed ore was processed into two products: MOP sourced from the sylvinite portion of the mixed ore, and Trio® sourced from the langbeinite portion of the mixed ore. The East Mine plant was converted to a langbeinite-only operation in April 2016 and potash is no longer produced from the East Mine. The maximum productive capacity of the plant is 400,000 t of Trio® concentrate annually.

There are five active sections with a miner and a shuttle car loading onto a belt conveyor. Each mining section produces approximately 240,000 t of run-of-mine ore each year. The long-range production balanced with sales projections results in a long-term annual production of 1.2 Mt of ore for 250,000 t of Trio®.

Historical room-and pillar-mining operations at the HB Mine recovered about 70% of the ore, leaving approximately 30% of the ore available for secondary recovery in pillars plus what can be recovered beyond the limits of the conventional mine works. Mining at the HB Solar Solution Mine recovers potash by injecting saturated saline NaCl brine into the old mine works to create underground leach lakes. Over time, the solution becomes enriched with potash and is pumped to the surface to solar evaporation ponds. Selective solar evaporation leaves behind a potash-enriched salt that is collected using scrapers, pumped, and processed at the HB Plant. The solution mine comprises six injection wells, five extraction wells, and two monitoring wells.

The North Mine operated from 1957 to 1982 when it was idled, mainly due to low potash prices and a change in the mineralogy of the readily accessible remaining reserves which negatively impacted mineral processing. Although the mining and processing equipment has been removed, the mine shafts remain open. The compaction facility at the North Mine is where the HB potash product is granulated, stored, and shipped. The North Facility receives compactor feed from the HB Solar Solution Mine via truck and converts the compactor feed to finished granular-sized product and standard-sized product.

The extents of the mine plan for this reserve estimate is shown in Figure 13-1 and included in tabular format in Table 13-1. The life of the resources and reserves at IPNM exceeds 25 years.

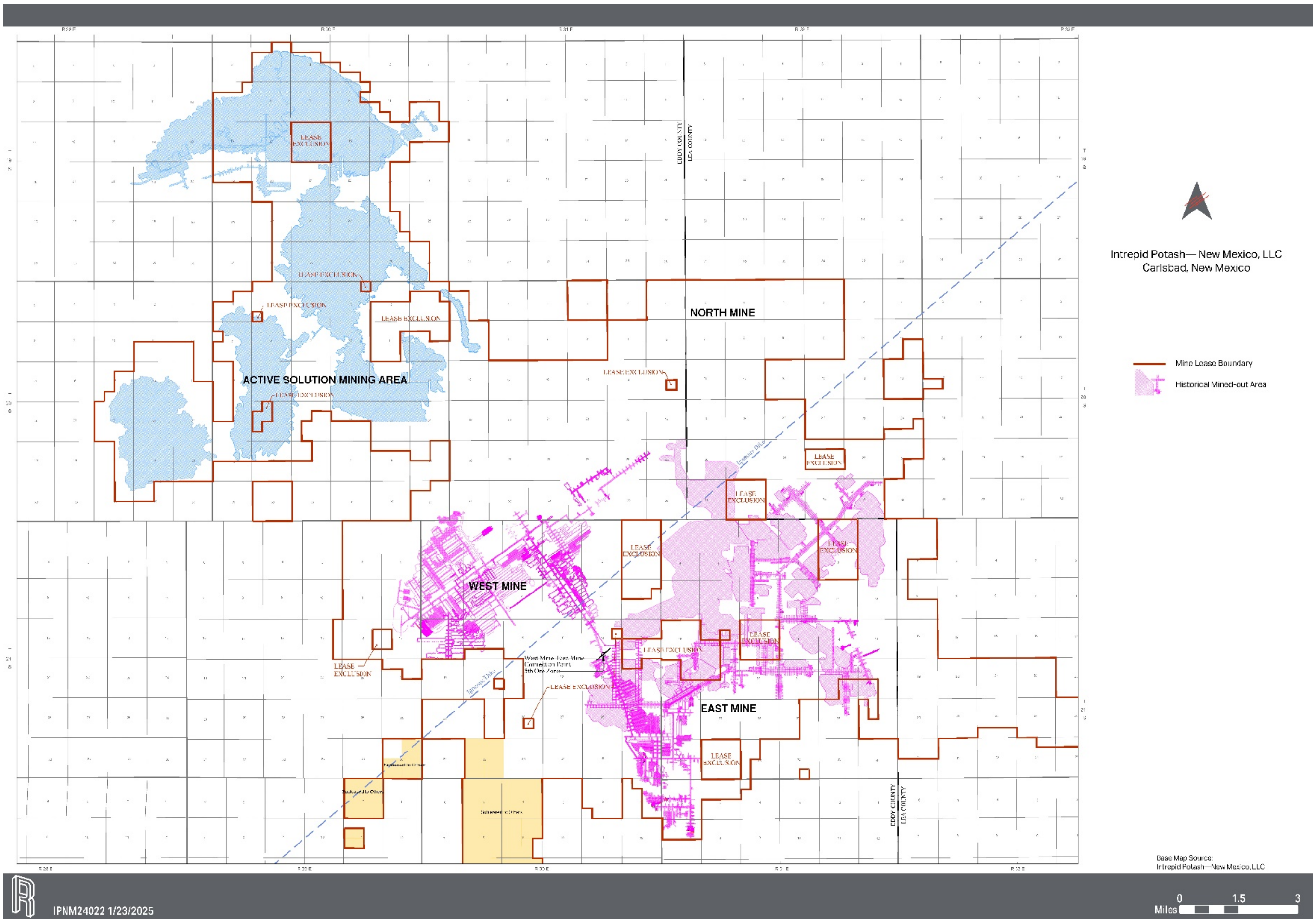

Figure 13-1. Underground and Solution Mining Extents

Table 13-1. IPNM 25-Year Mine Plan

Calendar Year	Plan Year	MOP					
		R	S	T	U	V	W
		Brine Extracted (Gallons)	Brine Grade (%K_2O)	K2O (Tons)	Product KCl (Tons)	Handling Losses (Tons)	MOP (Tons)
2025	**Year 1**	534,816,000	4.83	132,400	142,000	4,300	137,700
2026	**Year 2**	533,808,000	4.97	136,100	146,000	4,400	141,600
2027	**Year 3**	532,584,000	5.09	139,000	149,100	4,500	144,600
2028	**Year 4**	533,376,000	5.30	145,000	155,600	4,700	150,900
2029	**Year 5**	535,392,000	5.30	145,500	156,100	4,700	151,400
2030	**Year 6**	536,688,000	5.32	146,300	157,000	4,700	152,300
2031	**Year 7**	534,600,000	5.21	143,000	153,400	4,600	148,800
2032	**Year 8**	535,032,000	5.31	145,600	156,300	4,700	151,600
2033	**Year 9**	534,456,000	5.18	142,000	152,300	4,600	147,700
2034	**Year 10**	536,714,000	5.09	140,000	150,200	4,500	145,700
2035	**Year 11**	537,434,000	5.00	137,900	147,900	4,400	143,500
2036	**Year 12**	538,154,000	4.92	135,700	145,600	4,400	141,200
2037	**Year 13**	537,434,000	4.83	133,200	142,900	4,300	138,600
2038	**Year 14**	536,714,000	4.75	130,700	140,200	4,200	136,000
2039	**Year 15**	535,994,000	4.66	128,200	137,500	4,100	133,400
2040	**Year 16**	537,434,000	4.58	126,300	135,400	4,100	131,300
2041	**Year 17**	537,434,000	4.50	123,900	133,000	4,000	129,000
2042	**Year 18**	537,434,000	4.41	121,600	130,500	3,900	126,600
2043	**Year 19**	536,996,000	4.35	119,800	128,500	3,900	124,600
2044	**Year 20**	535,002,000	4.48	122,800	131,800	4,000	127,800
2045	**Year 21**	536,608,000	4.42	121,600	130,400	3,900	126,500
2046	**Year 22**	533,834,400	4.34	118,800	127,400	3,800	123,600
2047	**Year 23**	534,242,400	4.26	116,600	125,100	3,800	121,300
2048	**Year 24**	534,526,800	4.16	114,000	122,300	3,700	118,600
2049	**Year 25**	536,442,000	4.07	112,100	120,200	3,600	116,600

Extraction brine density - 1.23

KCl plant recovery - 83%

Product purity - 97%

Pond recovery – 90%

Pure KCl equates to 63.17% K2O by mass

Handling losses – 3%; Bitterns Losses – 12%

T = (R*(S/100)*1.23*8.34/2000)

U = (T/0.6317)*(0.83*0.90*0.88)/0.97

V = U*0.03

W = U-V

14.0 Processing and Recovery Methods

All IPNM ores are processed on-site. There are two active processing plants: the East Plant and HB Plant. The West Plant was idled in 2016. The North Compactor was completed in early 2013 and is used to granulate, store, and ship product from the HB Plant.

Declining ore grades coupled with market conditions have resulted in IPNM shuttering much of it sylvite capacity in the previous years. Historically, the East Plant produced white sylvite by evaporative crystallization and langbeinite (K2SO4·2MgSO4) by dense media separation of the coarse fraction (+20 mesh) of ore mined from the 3rd, 4th, and 5th ore zones. In 2016, sylvite production permanently ceased and the East Plant became a langbeinite-only producer. Langbeinite recoveries have since improved to as high as 72%.

14.1 HB Processing Facility

In 2012, IPNM commenced filling the HB solar evaporation ponds (Figure 14-1). The extraction brine sourced from the mined-out areas of the 1st ore zones of the former underground workings of portions of HB Eddy, HB South, HB North, and the HB Crescent, collectively referred to as the HB Mine. The brine is collected and crystallized in 18 solar evaporation ponds. The HB flotation mill processes the harvested potash and salts from the solar evaporation ponds.

Conditioned injectate, made with NaCl-saturated brine, is injected to create underground leach lakes in the lower portions of abandoned subsurface mine workings. The solution mine comprises six injection wells, five extraction wells, and two monitoring/extraction wells.

The simplified process flow diagram (PFD) is shown in Figure 14-2. NaCl-saturated brine is injected into the mines producing about 535 million gallons of brine at an estimated grade of 7.6% KCl and 21% NaCl. The evaporation ponds concentrate and crystallize the brine to produce about 700,000 - 900,000 tpy of crystal at 12–14% K_2O (19–22% KCl) with the remainder being largely halite. The crystals are mechanically harvested, re-pulped in double-saturated brine and pumped to the HB processing facility.

The crystals are statically screened with the oversize processed through a crusher and recycled. The screened crystal is combined with reagents and fed to flotation cells. The rougher flotation concentrate is forwarded to the agitated leach tank.

The leached solids are at a product grade of >95.5% KCl with a range of 60.5% to 62% K_2O. The solids are dried, sampled, and conveyed to storage bins prior to transfer to the North Plant for compaction and shipment to sales.

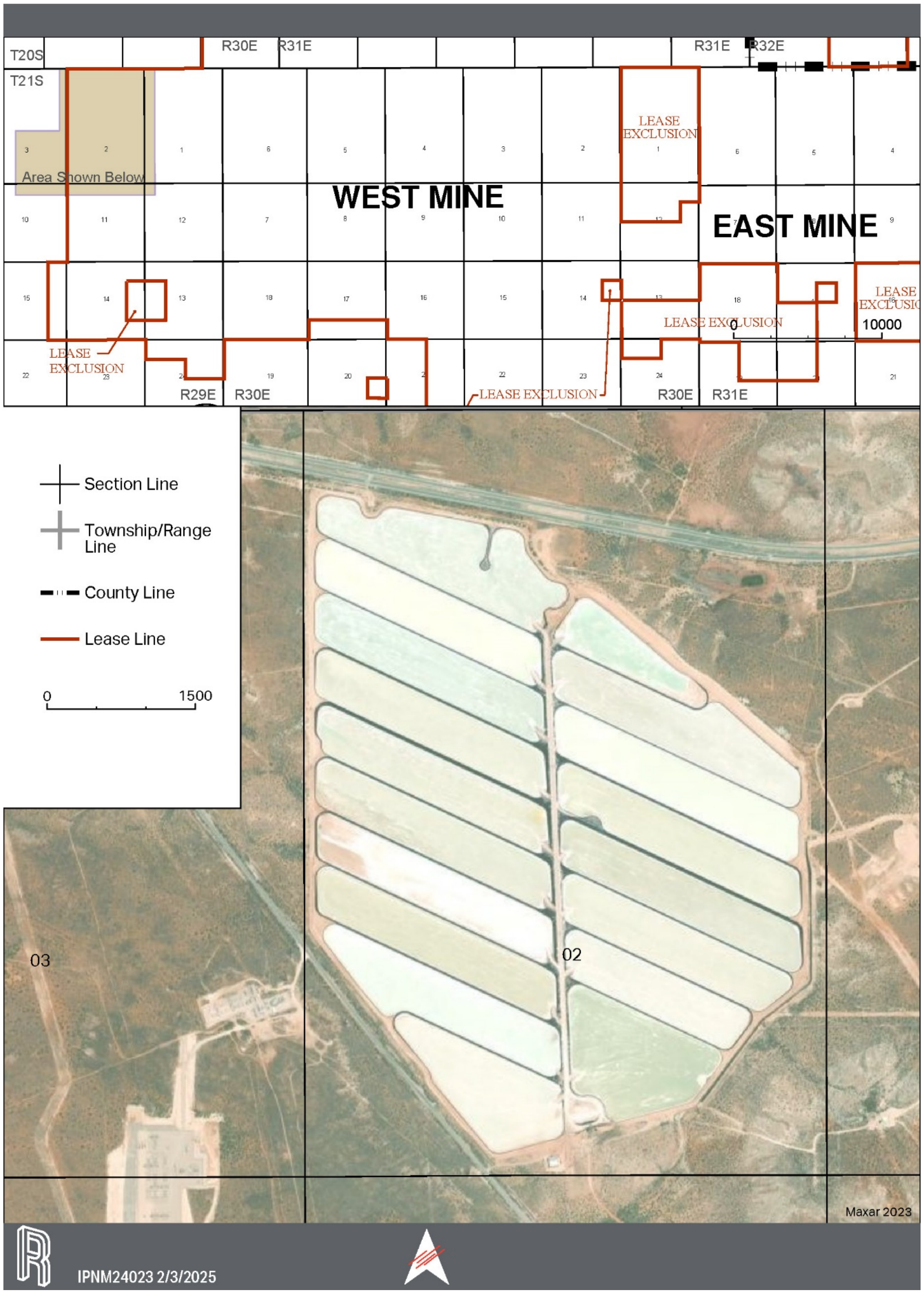

Figure 14-1. HB Evaporation Ponds

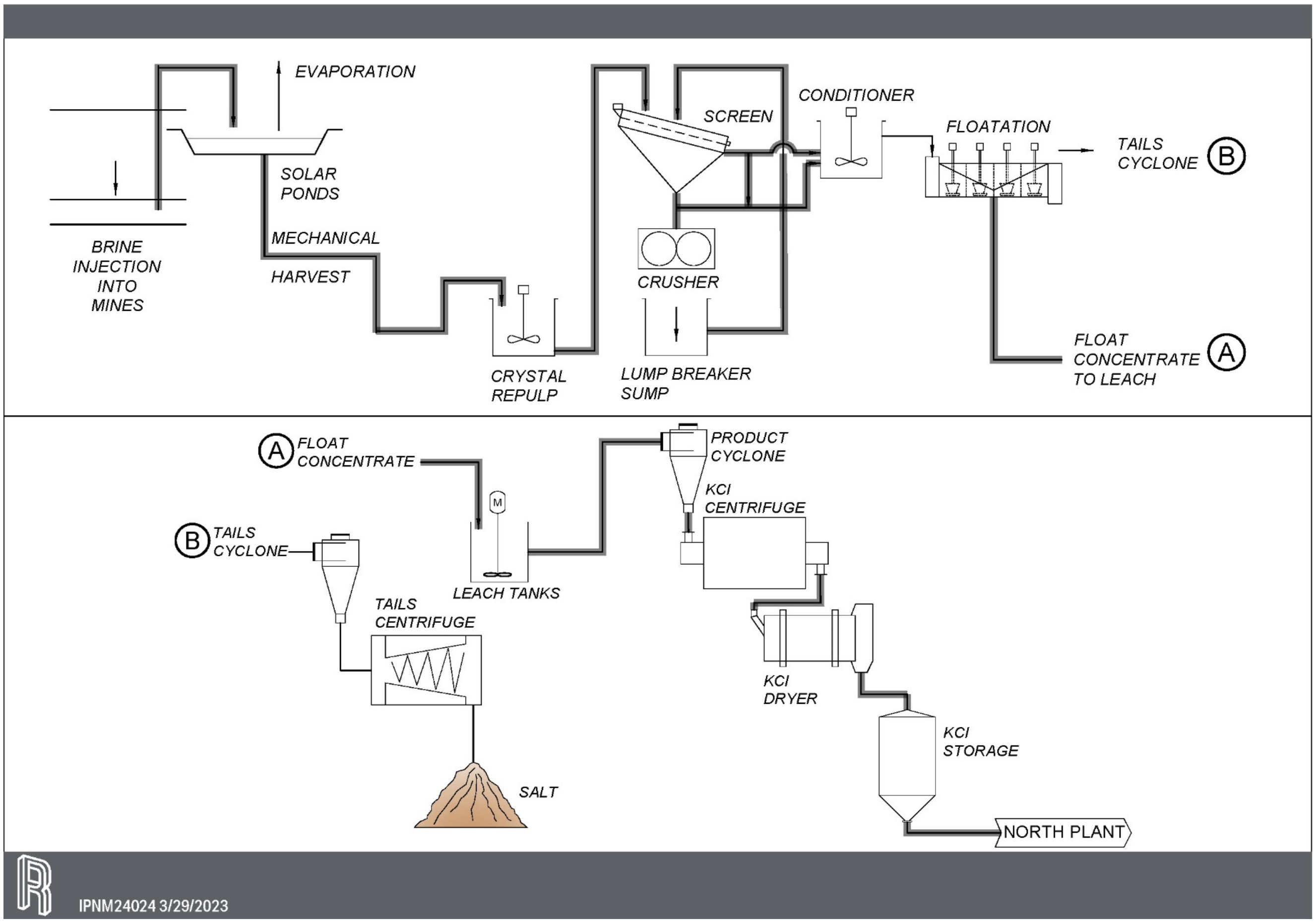

Figure 14-2. HB Process Flow Diagram

14.2 Langbeinite Processing Facility

The East Plant was modified in 2003–2004 to allow dual processing to recover the K_2O value from both the sylvite and langbeinite fractions of the ore. In 2016, the sylvite circuit was permanently closed. Langbeinite, marketed as the fertilizer Trio® brand of products, is recovered using dense media separation and a fine langbeinite recovery circuit. A simplified process flow diagram is included as Figure 14-3.

Currently about 1.2 million tpy (Mtpy) of ore is processed at a rate of 300 tph. The ore is crushed, screened, pulped, and rescreened. Coarse material is forwarded to the dense media separation (DMS) circuit. The DMS concentrate is water leached, debrined, and dried. The coarse product is separated into the three Trio® products. Fine material from the screening process is recovered using gravity separation, leaching, debrining, and drying. Fine material is upgraded to premium product using pelletization.

14.3 North Compaction Plant

The North Plant provides classification, compaction, quality control, and load-out services for production from the HB Solar Solution Mine. A simplified flow diagram for the North Compaction Plant is presented in Figure 14-4.

Belly dump trucks unload HB product into a dump pocket. The material is then sent to surge bins. The product is screened, preheated, weighed, and sent to a compactor feed bin.

Material is screened to produce standard product or fed to the roll compactor, and resulting flakes are further reduced in size with the subsequent flake breaker and crusher to produce granular product. Product is then screened and sent to the curing dryer and screened once again before being sent to final product storage.

The product is shipped to market in trucks or rail cars.

14.4 Tailings Facilities

There are three tailings storage facilities (TSF) at IPNM: East, West, and North.

The East TSF is shown in Figure 14-5. The New Mexico State Engineer in the Dam Safety Bureau required IPNM to evaluate as-built conditions and stability of the East TSF due to the lack of original construction calculations and drawings. IPNM completed the required geotechnical evaluation assessment in 2018. Based on that evaluation, a conceptual improvement plan was developed to address identified freeboard, spillway capacity, and embankment stability issues. IPNM is working with the New Mexico State Engineer to prioritize, approve and implement the plan. Full implementation will be phased over several years.

The West TSF, in Figure 14-6, is permitted for tailings disposal from the West Plant. Unsaturated brine is pumped onto the tailings where it is contacted with NaCl to produce a saturated brine for injection. The saturated brine flows to ponds below the tailings pile that manage brine inventory for injection into the HB Mine. The West TSF also stores tails from the West Plant, which is on care and maintenance. Total tailings volume is being reduced by the brine saturation process.

The North TSF in Figure 14-7 is only used to handle excess brine/water and has ample capacity.

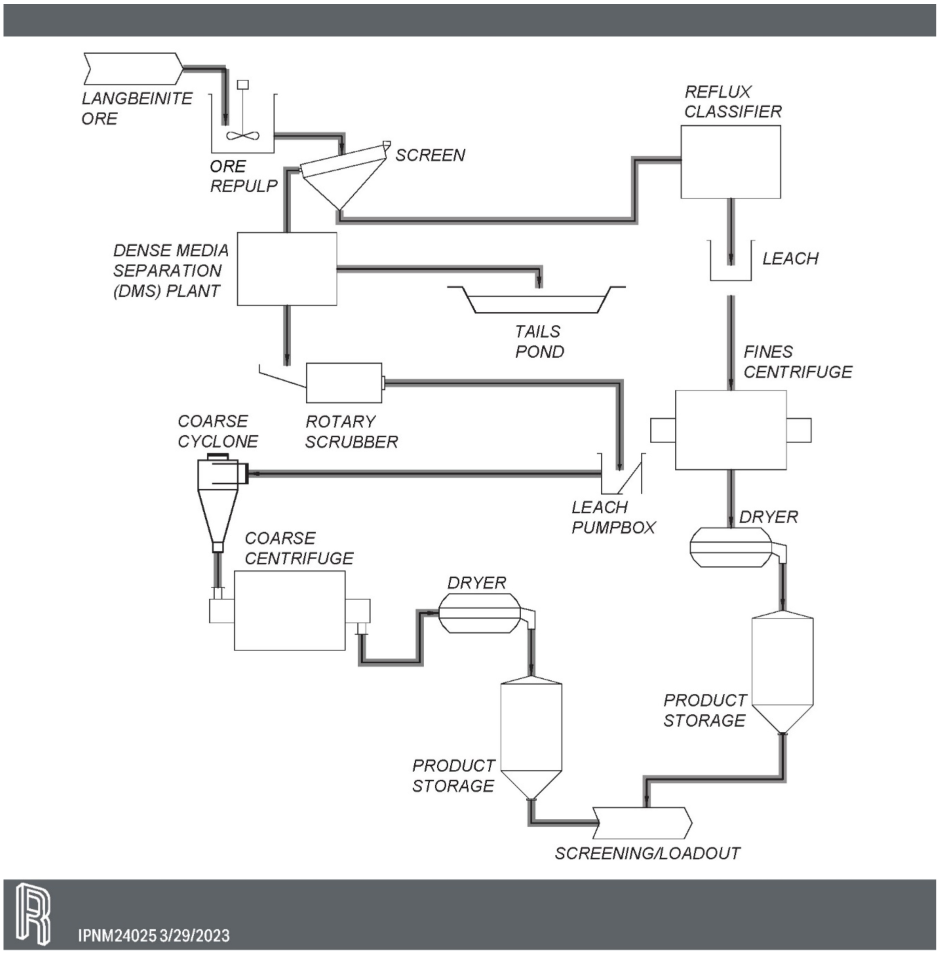

Figure 14-3. East Plant Process Simplified Flow Diagram

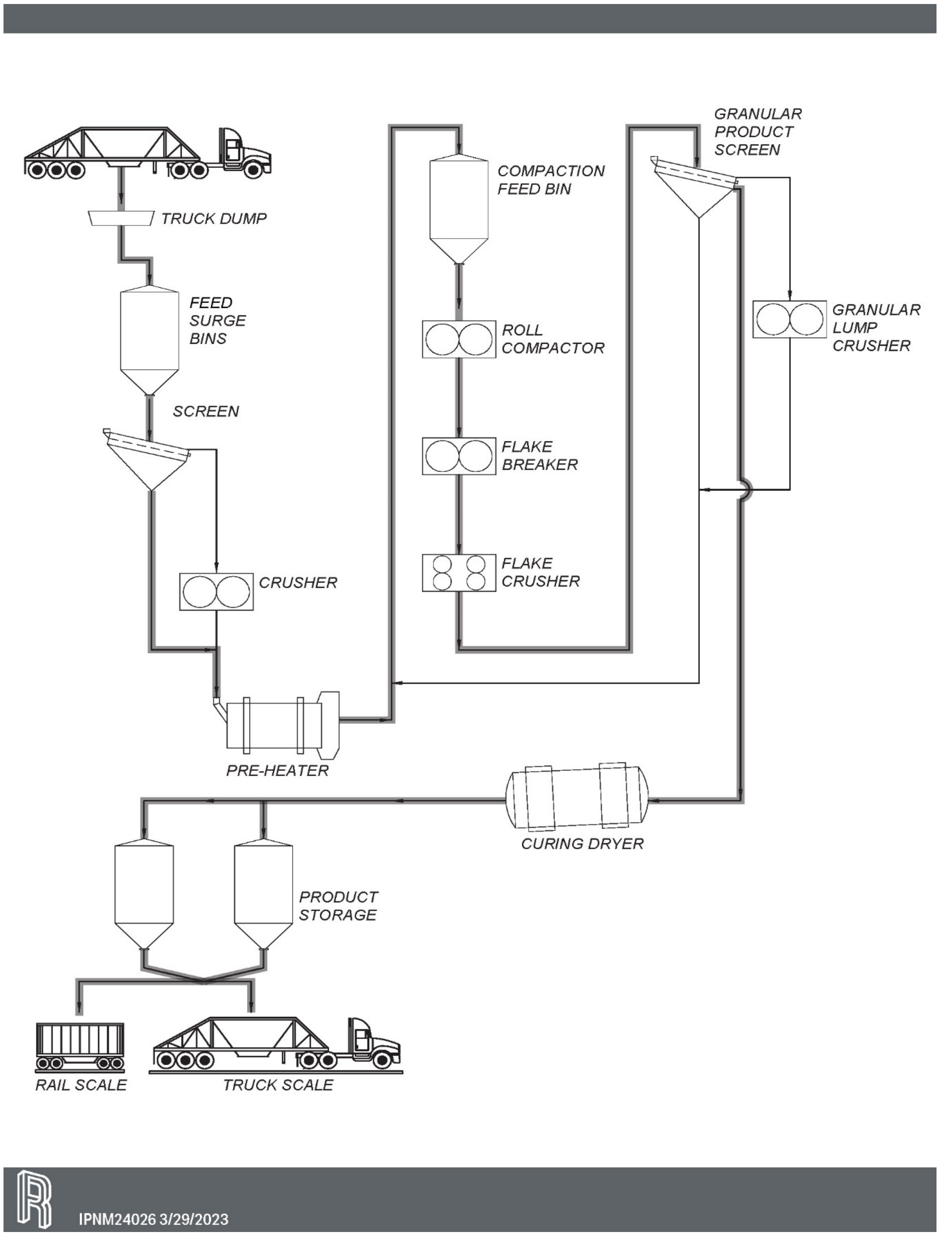

Figure 14-4. North Plant Simplified Process Flow Diagram

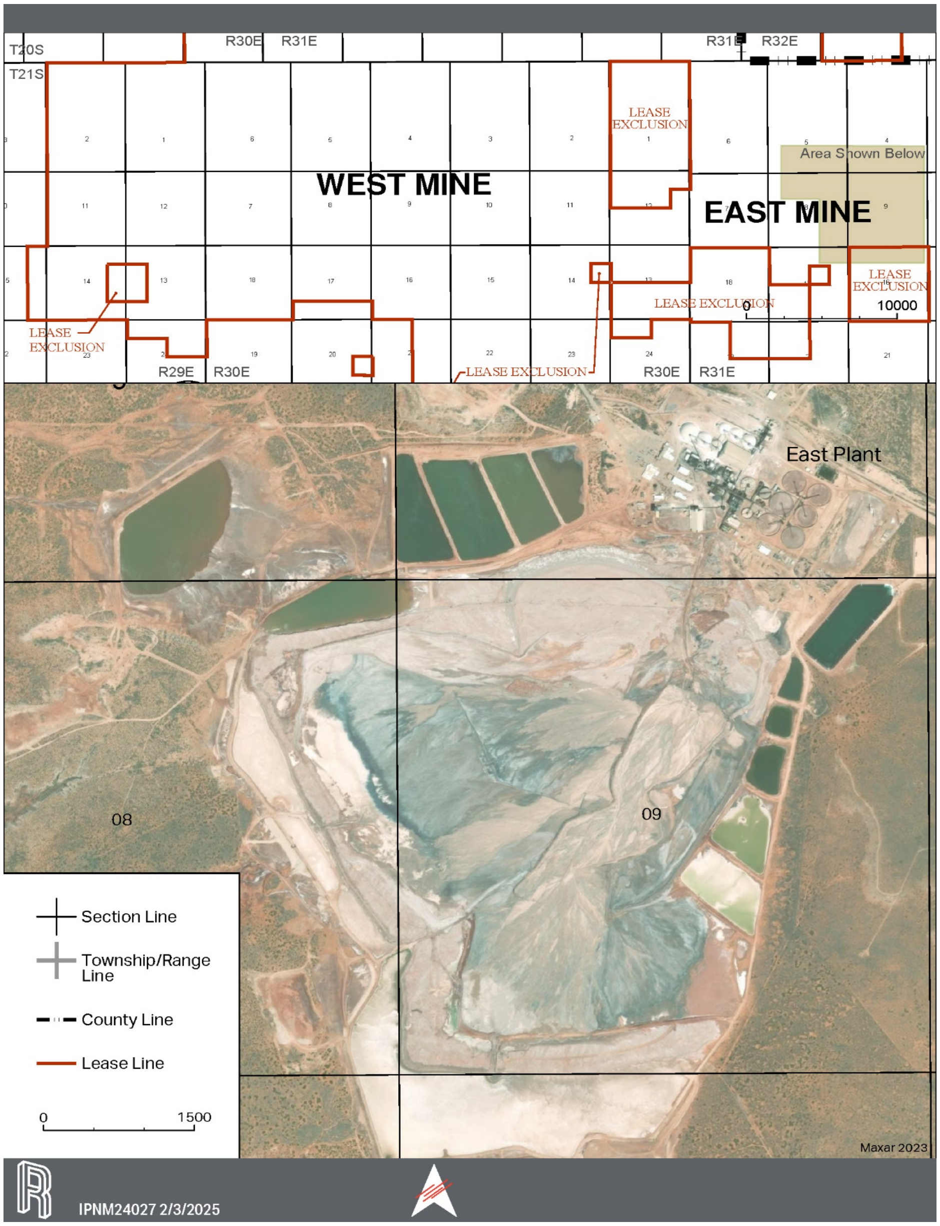

Figure 14-5. East Tailings Storage Facility

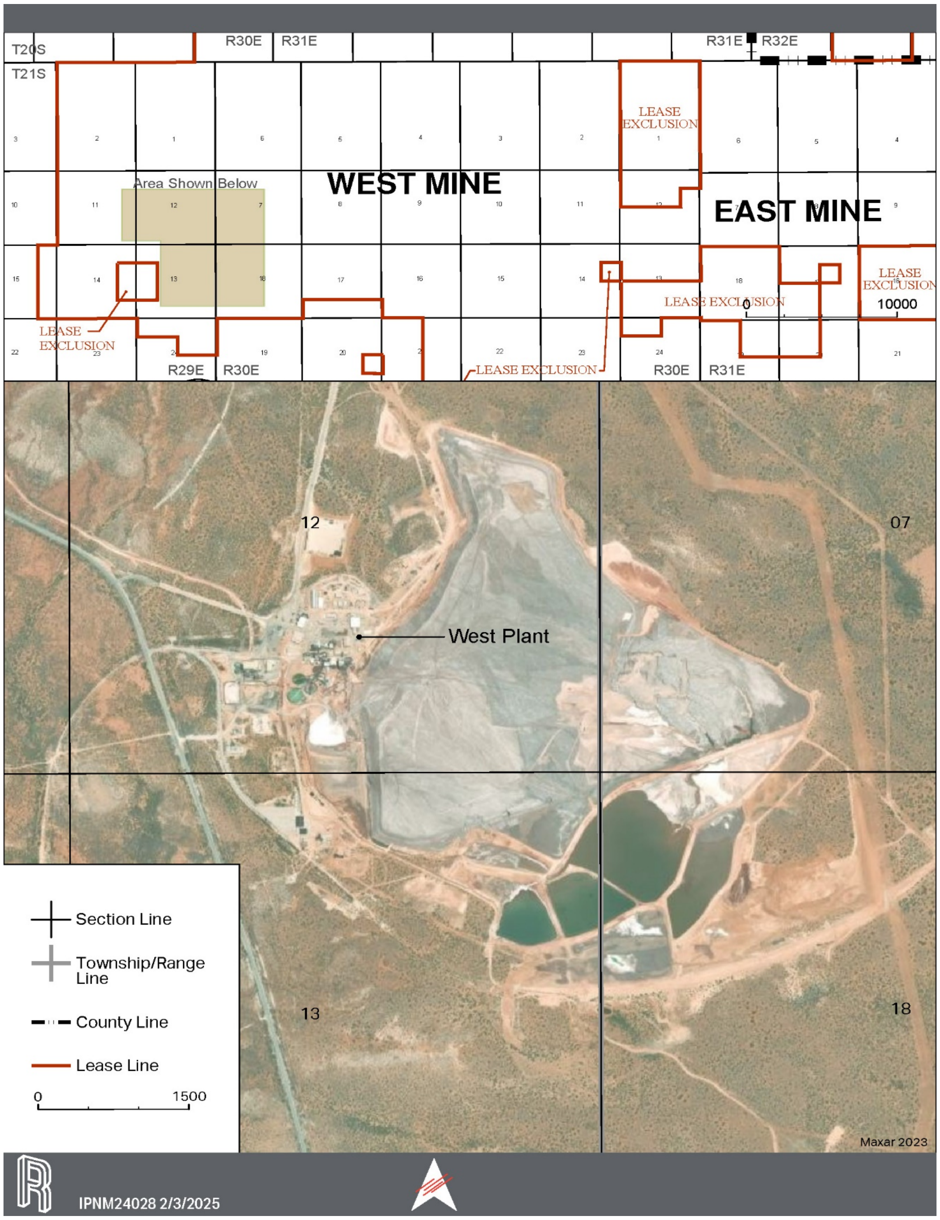

Figure 14-6. West Tailings Storage Facility (HB Brine Recirculation)

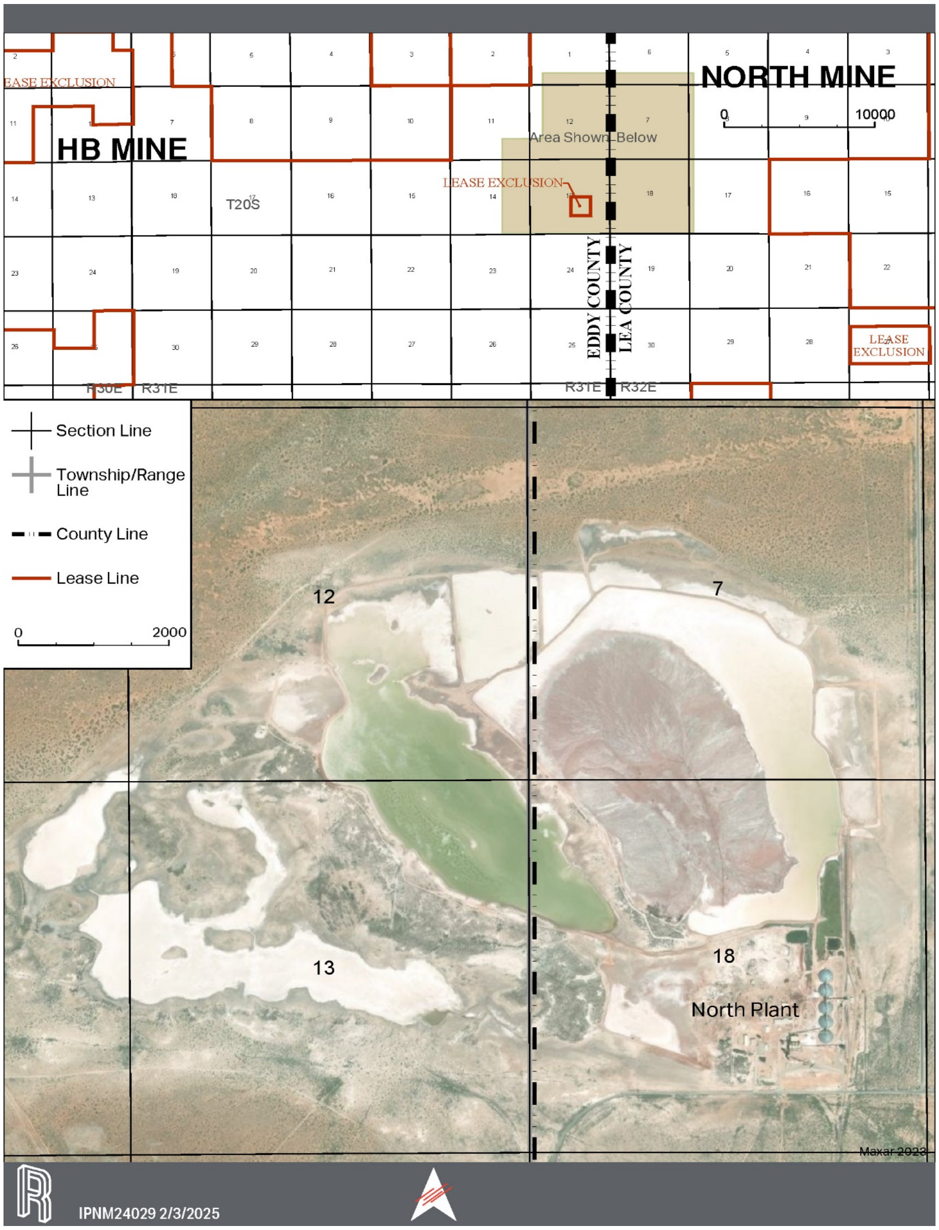

Figure 14-7. North Tailings Storage Facility (inactive)

15.0 Infrastructure

The IPNM mines have a robust infrastructure in place. IPNM has adequate water rights at each of the mine properties. All of the mining operations are accessible by paved state or county highways and are accessible by rail. All of the operations obtain electric power from local utilities fed to recently upgraded substations. The infrastructure layout is shown in Figure 15-1.

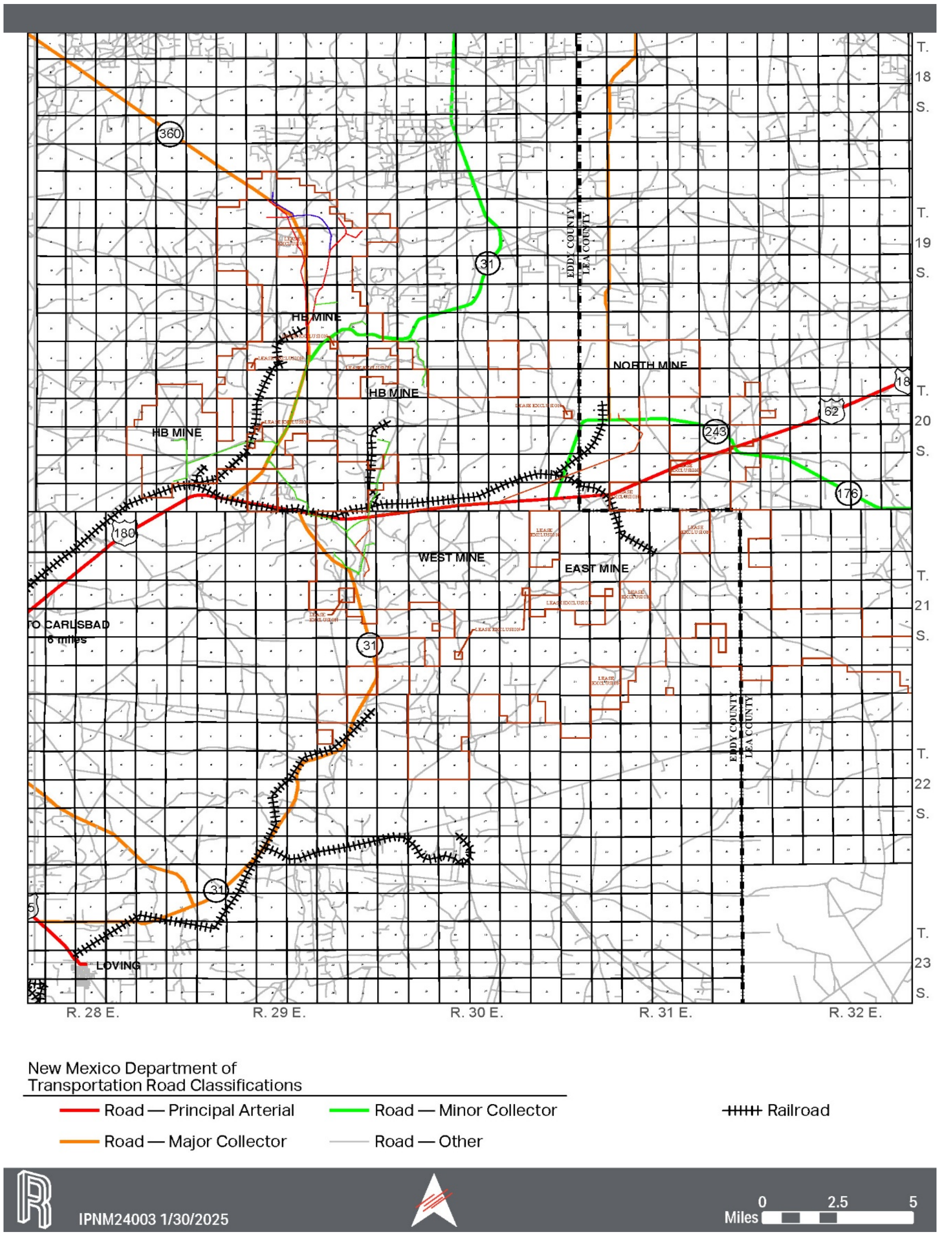

Figure 15-1. Layout of the Infrastructure

16.0 Market Studies

Price projections are based on a combination of historic pricing trends and expectations of future potash consumption and production. Intrepid uses a variety of sources including, but not limited to, industry reports, company announcements, third-party market studies, and internal estimates when establishing a forecasted price. Intrepid compares its historic realized pricing to widely available benchmark prices, specifically the Midwest Warehouse potash price and the U.S. New Orleans Louisiana ("NOLA") Barge Market potash price, to establish a historic price differential which it uses when analyzing future price expectations.

17.0 Environmental Studies, Permitting, and Plans

IPNM holds numerous environmental, mining, safety, and other permits and governmental approvals authorizing the operations at each of the facilities. Operations are subject to permits for, among other things, extraction of salt and brine, discharges of process materials and waste to air and surface water, and injection of brine. IPNM is obligated to reclaim and remediate disturbed lands when they cease operations.

17.1 Environmental Studies

IPNM has all necessary operating permits for the current operations and is in production, both underground and solution mining, and through the permit reporting maintains environmental compliance. Environmental studies are conducted for major project expansions. The most recent Environmental Assessment (EA) was completed in 2024 for the construction of new injection piping for the HB In-situ Solution mine. The work referenced the initial EIS for the HB In-Situ Solar Solution Mining Project EIS (DOI 2012).

17.2 Waste and Tailings Disposal, Site Monitoring, and Water Management During and After Mine Closure

The property has three tailings' impoundments, one of which is in current operation, that were described in Section 14. Tailings brine water is recycled for use in processing plants and solution wells. At closure, the tailings piles will dry and form a very hard, stable crust. No recontouring or revegetation of tailings piles are anticipated because the hard crust will provide adequate slope stability. The perimeter dikes will be stabilized for long-term integrity. Precipitation on the pile will dissolve some of the salt as it moves down into the brine pond, but is not anticipated to be saturated when it exits the pile. The tailings areas will be fenced off to minimize public access. Intrepid is in the process of reviewing the closure plan with the Bureau of Land Management and the New Mexico Environment Department Ground Water Quality Bureau.

17.3 Permitting Status and Reclamation Bonds

The permitting status of each of the major permits is listed in Table 17-1. Bonds for mine closure and groundwater discharge are currently at a value of $4.057 million.

IPNM has timely applied for new permits and permit renewals necessary for continued operations, which are under review by regulatory agencies. Upon issuance, some of these permits may require us to increase our reclamation bonds.

17.4 Agreements with Local Individuals

There are no specific agreements with local individuals or groups.

Table 17-1. Permitting Status

Common Name	Issuing Agency	Permit ID	Effective Date	Expiration Date	Bond Value	Note
Air Permit	New Mexico Environment Department (NMED) Air Quality Bureau	Title V Air Operating Permit P009-R3M1 (East Plant)	24-Apr-20	4-Apr-25	None	Title V operating permits have a 5-year permit term; a renewal application was timely filed. The application was ruled complete and is undergoing technical review by NMED.
Air Permit	NMED Air Quality Bureau	Title V Air Operating Permit P261-R1 (North Compaction Plant [NSR 0321-M8], West Floatation Plant [NSR 0421-M5, 0421-M5R1], HB Plant [NSR 4332-M21R3])	20-Dec-24	20-Dec-29	None	
Groundwater Discharge Permit	New Mexico Environment: Department Ground Water Bureau (Water Quality Control Commission Regulations)	Discharge Permit No.: DP-1681	10-Jul-15	10-Jul-20	$3,349,000	Application for renewal submitted January 2020. Additional modification applications have been filed since the 2020 renewal application. MMED is reviewing the modification and has indicated they will issue modifications with the permit renewal upon completions of the review. Existing permit remains in effect until agency issues the renewed permit. Current bond amount is shown. Intrepid provided an updated Mine Reclamation and Closure Plan Cost Estimate to NMED GWB in June 2021 for the amount of $4.475 million. Awaiting NMED acceptance before updating bond. Bond currently held by NMED and covered in joint bonding arrangement with the Bureau of Land Management.
West/HB Plant Liquid Waste Permit	NMED Health Bureau	Permit No. 008609	25-Sep-18	Good for the life of the system.	None	HB reclaim
West/HB Plant Liquid Waste Permits	NMED Health Bureau	Permit No. 004446, 004447, 004448, 004449, 004450, 004451, 004452, 004453	9-Jan-18	Good for the life of the system.	None	Various West/HB liquid waste permits
East Plant Liquid Waste Permits	NMED Health Bureau	Permit No. 004437, 004438, 004439, 004440, 004441, 004442, 004444, 004445	9-Jan-18	Good for the life of the system.	None	Various East Plant liquid waste permits.
East Plant Liquid Waste Permit	NMED Health Bureau	Permit No. 004439	14-Jun-19	Good for the life of the system.	None	East Loadout tank 3A
East Plant Liquid Waste Permit	NMED Health Bureau	Permit No. 009340	4-Sep-19	Good for the life of the system.	None	East Leachfield LF1A
North Plant Liquid Waste Permits	NMED Health Bureau	Permit No. 004454, 004455, 004457, 004458	9-Jan-18	Good for the life of the system.	None	Various North Plant liquid waste permits
Radioactive Devices	NMED Radiation Control Bureau	License Number GA417-17	22-Oct-24	30-Nov-24	None	An extension of 120 days has been granted until the license renewal is completed by NMED RCB
Waterfowl Hazing Plan and Reporting	Bureau of Land Management – Carlsbad Field Office	HB Project Solar Evaporation Ponds, Stepped Avian Monitoring and Mitigation Plan	1-Jan-12	None	None	Intrepid New Mexico submits quarterly reports on its activities
Brine Effects on State Trust Lands	New Mexico State Land Office	Remediation of Brine Effects on State Trust Lands, Lease Numbers bl-0559 and hp-0005	11-April-18	N/A	$250,000	Remediation of brine release on State Trust Lands
Fresh Water Easements	new Mexico State Land Office, Oil, Gas and Minerals Division	Damage bond for freshwater easements WR-813	29-August-23	N/A	$43,000	
CAM Plan	NMED Air Quality Bureau	West North and HB Compliance Assurance Monitoring Plan required by Title V Air Operating Permit P261-R1	Same as Title V permit	Same as Title V permit	None	
CAM Plan	NMED Air Quality Bureau	East Compliance Assurance Monitoring Plan required by Title V Air Operating Permit P009-R3M1	Same as Title V permit	Same as Title V permit	None	
Federal Explosives License	Bureau of Alcohol, Tobacco, and Firearms	Permit #5-NM-015-33-9J-00293		1-Sep-25	None	License covers shell crackers for shotguns. Used to control or scare away waterfowl from the ponds at all sites. This license is for all of Intrepid New Mexico.
Mine Operations and Closure Plans	Bureau of Land Management – Carlsbad Field Office	HB Solar Mine Operations and Closure Plan	31-May-21	31-May-31	$415,000	Intrepid NM provided an updated Mine Reclamation and Closure Plan and Closure Cost Estimate for HB to NMED GWB and concurrently with the BLM in June 2021 for the amount of $4.475 million. Awaiting

						NMED and BLM acceptance before updating the bond.
Mine Operations and Closure Plans	Bureau of Land Management – Carlsbad Field Office	East Mine Operations and Closure Plan North Mine Operations and Closure Plan West Mine Operations and Closure Plan	1977 1977 1977			Intrepid submitted draft Operations and Closure Plans to BLM. Those applications have not been approved and earlier plans remain in effect. Intrepid is working to provide revised Operations and Closure Plans to the BLM for these mines.
Well Permits	NM Office of State Engineer	Injection, Extraction, and Rustler Wells	Various	None	None	Permit status is undetermined at this time.

17.5 Closure Plans

Closure plans include the repurposing, demolition, and removal of surface infrastructure and safely securing shafts for public safety. Mine operations and closure plans are periodically filed with the BLM. The proposed methods of abandonment are designed to protect unmined recoverable reserves and other resources. While each mine area has specific detailed closure requirements, the major closure steps include closure of shafts and relief wells, tailings stabilization, asbestos removal, building demolition, reclamation of building footprints; reclamation of other areas, disposal of any contaminated soils, reclamation of landfills, reclamation of roads, and remediation of Recognized Environmental Concerns (REC).

Upon completion of solution mining operations at the HB Mine, all structures, wells, pipelines, and ancillary equipment located on Federal, State, and Intrepid fee land will be abandoned, demolished, razed, and hauled to an appropriately permitted local landfill for proper disposal.

17.6 Adequacy of Current Plans and Compliance

It is the QP's opinion that the current plans are adequate to address any issues related to environmental compliance, permitting, and local individuals or groups.

18.0 Capital and Operating Costs

18.1 Capital Cost Estimate

Capital items necessary to complete the mine plan include the pipeline and injection/extraction wells for the AMAX extension of the HB Solar Solution Mine. The budgeted mine reclamation capital costs are included for 2025 through 2028. Intrepid has provided the mining costs history and sales data since 2007 and budgeted capital costs. With the West Mine taken offline, many of the capital items were recovered from the West Mine for use in the East Mine, reducing the amount of new capital required to sustain East Mine operations. The remaining reclamation cost is included in year 2049 as $45.6 million. Any necessary reclamation work beyond Year 25 is allocated to Year 25 to establish contracting. The sustaining capital is outlined in the budget and includes major equipment replacement. Capital costs are shown in Table 18-1.

18.2 Operating Cost Estimate

Intrepid provided the mining costs history and sales data since 2007. The cash operating cost including warehouse, handling, and royalty is provided in Table 18-1. These costs are subject to vary with changes in production. Cash production costs do not include interest, depreciation, depletion, or income taxes. A by-product credit of $57 per ton is applicable.

18.3 Accuracy Discussion

Because the operating costs are based on historical actual expenses, the cost estimates are at an accuracy of at least +/- 15%.

Capital costs are based on actual bids or recent purchases of capital items plus an inflation factor. The capital costs estimates are at an accuracy of at least +/- 25% and contingency levels are less than 25%.

Reclamation costs are based on the most recent reclamation bond update and asset retirement obligations and are estimated to be accurate to at least +/- 15%.

Table 18-1. Major Remediation and Capital Cost Estimate

Year Number	Year	Remediation	Sustaining Capital	Capital
1	2025	$200,000	$6,800,000	$7,300,000
2	2026	$900,000	$5,500,000	$2,600,000
3	2027	$1,325,000	$5,700,000	$7,000,000
4	2028	$2,921,500	$5,700,000	
5	2029		$5,700,000	
6	2030		$5,700,000	
7	2031		$5,700,000	
8	2032		$5,700,000	
9	2033		$5,700,000	
10	2034		$5,700,000	
11	2035		$5,700,000	
12	2036		$5,700,000	
13	2037		$5,700,000	
14	2038		$5,700,000	
15	2039		$5,700,000	
16	2040		$5,700,000	
17	2041		$5,700,000	
18	2042		$5,700,000	
19	2043		$5,700,000	
20	2044		$5,700,000	
21	2045		$5,700,000	
22	2046		$5,700,000	
23	2047		$5,700,000	
24	2048		$5,700,000	
25	2049	$45,595,200	$5,700,000	

Table 18-2. Unit Mining Cost 2025-2029

Cost Category	Cost ($/Product Ton)	Cost Distribution
Labor	122	47 %
Maintenance Supplies	24	9 %
Operating Supplies Including Reagents	23	9 %
Natural Gas, Electricity and Fuel	15	6 %
Leases, Property Tax, Insurance, etc.	26	10 %
Subtotal	211	81 %
Warehouse	17	7 %
Royalties	17	6 %
Environmental Remediation and Other	15	6 %
Cost of Goods Sold	260	100 %
By-product Credit	57	
Cost of Goods Sold with By-product credit	203	

19.0 Economic Analysis

To evaluate the viability of mining the IPNM mines' reserves, an economic analysis was conducted. Annual revenue and production cost schedules were used to build a projected cash flow to accompany the mine plan. The costs and sales price parameters were assumed to be constant US dollars.

19.1 Key Assumptions, Parameters, and Methods

The property has a long history of operation at this location. The assumption list for the economic analysis is shown in Table 19-1.

Table 19-1. Economic Analysis Assumptions

Parameter	Assumption
Potash Sale Price (mine site)	$360/t
Shipping Potash	$30/t
Average Potash Production Target (25-yr avg.)	136,500 tpy
Interest Rate	0–12% APR
Income Taxes (State and Federal)	26%

19.2 Economic Analysis

For a property in operation, the economic viability may be implied. The cash flow was developed using the mine plan and is listed in Table 19-2. The after-tax cash flow is listed in Table 19-3. The cashflows are shown graphically in Figures 19-1 and 19-2 for pre- and after-tax, respectively. Annual ore production, ore grade and tons of product produced used in both the pre-tax and after-tax cash flow analyses are taken from the annual life of mine production schedule as shown in Section 13: Mining Methods included in this Technical Report Summary. The annual life of mine production schedule provides the calculation of product tons resulting from tons of ore mined and the associated grade of ore mined. The East Mine has a remediation cost of $17.6 M not included in the HB Mine reserves cash flow.

19.3 Sensitivity Analysis

NPV sensitivity analyses were run using variants in commodity price and operating costs for the pre-tax cash flow. The results of the sensitivity analysis are shown in Table 19-4 and graphically in Figure 19-3.

19.4 Discussion

Economic analysis using the price and cost assumptions shows the operation is expected to continue to be profitable over the reserve life.

Table 19-2. Estimated Pre-Tax Cash Flow

Item		Five-Year Periods 2025 - 2029		2030 - 2034		2035 - 2039		2040 - 2044		2045 - 2049
Tons of product production		726,500		746,100		692,800		639,400		606,700
Potash Sales price per ton mine site	$	360	$	360	$	360	$	360	$	360
Transportation cost per ton	$	30	$	30	$	30	$	30	$	30
Net sales price per ton	$	330	$	330	$	330	$	330	$	330
Period net revenue	$	239,731,000	$	246,202,000	$	228,608,000	$	210,989,000	$	200,222,000
Cost per product ton, excluding depreciation	$	211	$	206	$	219	$	234	$	245
Warehouse & Handling per product ton	$	17	$	17	$	17	$	17	$	17
Royalties per product ton	$	17	$	17	$	17	$	17	$	17
Environmental remediation and other non-inventory costs	$	15	$	15	$	16	$	17	$	18
Less byproduct revenues	$	(57)	$	(56)	$	(60)	$	(65)	$	(68)
Operating costs per production ton, excluding depreciation	$	203	$	199	$	209	$	220	$	228
Less period operating costs, excluding depreciation	$	(147,191,000)	$	(148,601,000)	$	(144,770,000)	$	(140,930,000)	$	(138,584,000)
Less period capital	$	(46,300,000)	$	(28,500,000)	$	(28,500,000)	$	(28,500,000)	$	(28,500,000)
Less period remediation	$	(5,347,000)		-		-		-	$	(45,595,000)
Estimated period pre-tax cashflow	$	40,893,000	$	69,101,000	$	55,338,000	$	41,559,000	$	(12,457,000)

Table 19-3. Estimated After-Tax Cash Flow

Item		Five-Year Periods				
		2025 - 2029	2030 - 2034	2035 - 2039	2040 - 2044	2045 - 2049
Tons of product production		726,500	746,100	692,800	639,400	606,700
Potash Sales price per ton mine site	$	360	$ 360	$ 360	$ 360	$ 360
Transportation cost per ton	$	30	$ 30	$ 30	$ 30	$ 30
Net sales price per ton	$	330	$ 330	$ 330	$ 330	$ 330
Period net revenue	$	239,731,000	$ 246,202,000	$ 228,608,000	$ 210,989,000	$ 200,222,000
Cost per product ton, excluding depreciation	$	211	$ 206	$ 219	$ 234	$ 245
Warehouse & Handling per product ton	$	17	$ 17	$ 17	$ 17	$ 17
Royalties per product ton	$	17	$ 17	$ 17	$ 17	$ 17
Environmental remediation and other non-inventory costs	$	15	$ 15	$ 16	$ 17	$ 18
Depreciation and Depletion	$	106	$ 103	$ 111	$ 120	$ 127
Less byproduct revenues	$	(57)	$ (56)	$ (60)	$ (65)	$ (68)
Total Operating Costs	$	309	$ 302	$ 320	$ 341	$ 355
Total operating costs	$	(224,121,000)	$ (225,531,000)	$ (221,700,000)	$ (217,860,000)	$ (215,514,000)
Estimated Pre-tax Income	$	15,610,000	$ 20,671,000	$ 6,908,000	$ (6,871,000)	$ (15,292,000)
Estimated Taxes at 26%	$	(4,059,000)	$ (5,374,000)	$ (1,796,000)	$ 1,786,000	$ 3,976,000
Estimated After Tax Income	$	11,551,000	$ 15,297,000	$ 5,112,000	$ (5,085,000)	$ (11,316,000)
Add back Depreciation and Depletion	$	76,930,000	$ 76,930,000	$ 76,930,000	$ 76,930,000	$ 76,930,000
Less Capital	$	(46,300,000)	$ (28,500,000)	$ (28,500,000)	$ (28,500,000)	$ (28,500,000)
Less Remediation	$	(5,347,000)	$ —	$ —	$ —	$ (45,595,000)
After-Tax Cash Flow	$	36,834,000	$ 63,727,000	$ 53,542,000	$ 43,345,000	$ (8,481,000)

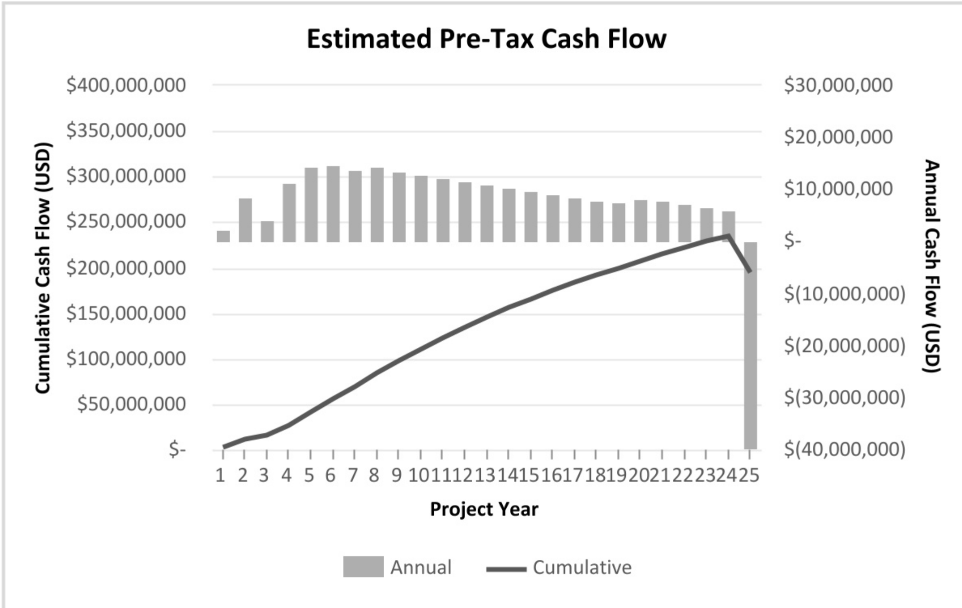

Figure 19-1. Estimated Pre-Tax Cash Flow

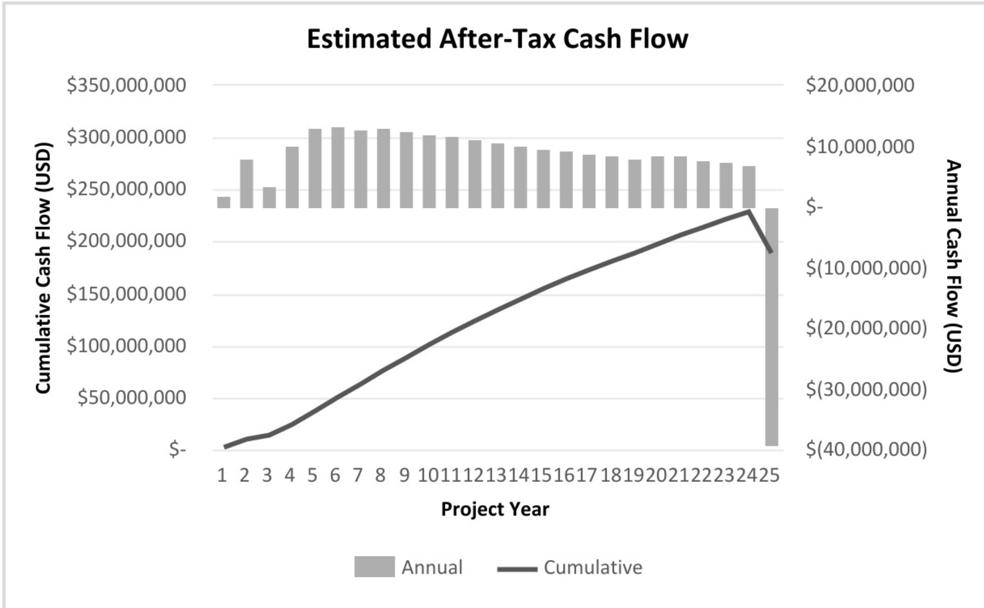

Figure 19-2. Estimated After-Tax Cash Flow

Table 19-4. NPV Pre-Tax Estimate

Interest Rate (% APR)	NPV ($Million)
0	$194
5	$126
8	$99
10	$85
12	$74

Table 19-5. NPV After-Tax Estimate

Interest Rate (% APR)	NPV ($Million)
0	$189
5	$120
8	$93
10	$80
12	$69

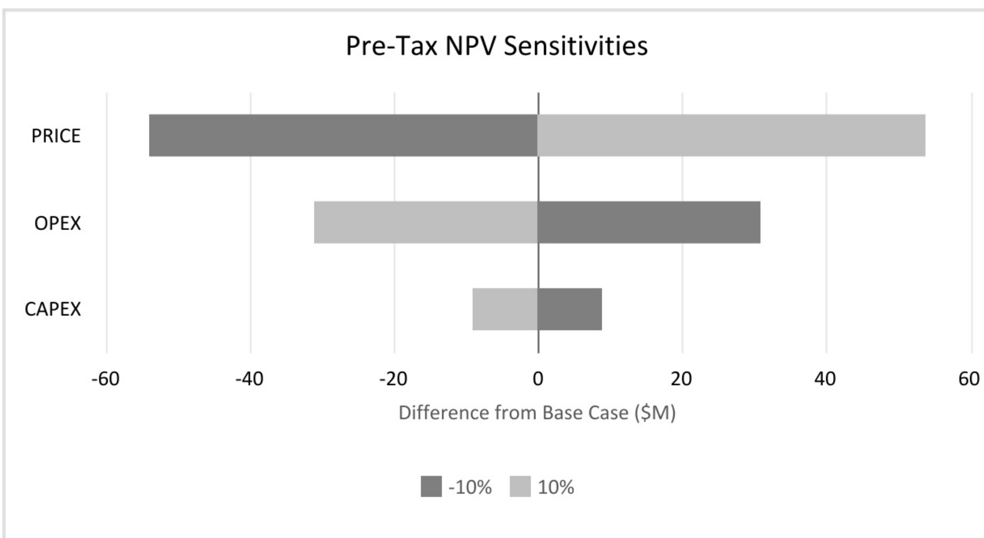

Figure 19-3. Pre-Tax NPV Sensitivities (APR 8%)

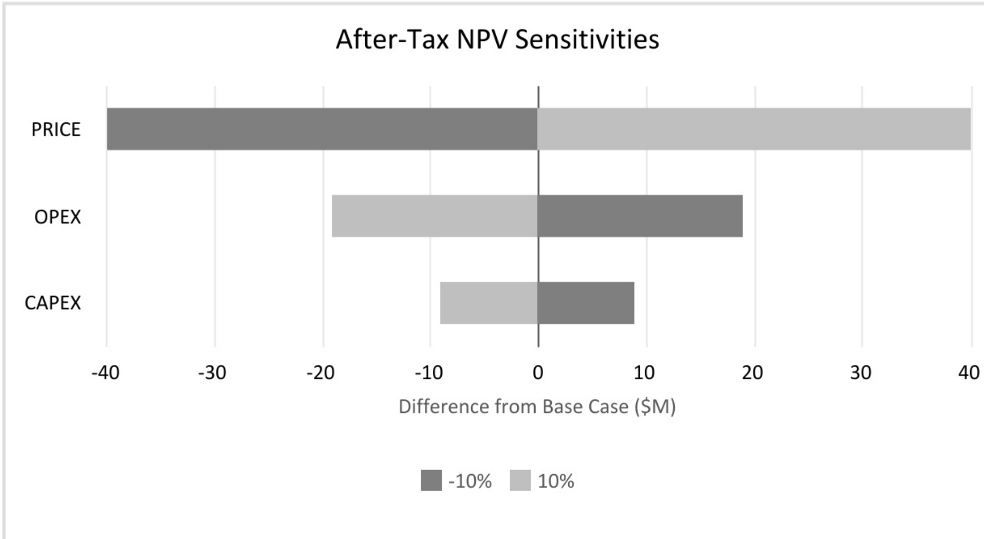

Figure 19-4. After-Tax NPV Sensitivities (APR 8%)

20.0 Adjacent Properties

In preparing the report, the QP indicated that the IPNM operations and The Mosaic Company operations, although mining in the same geologic deposit, each has its own plants and infrastructure and are entirely independent of each other. It is the qualified person's opinion that The Mosaic Company operations are not material in relation to IPNM.

21.0 Other Relevant Data and Information

The Mine Safety and Health Administration (MSHA) is the governing agency for IPNM's underground mines and related surface facilities in New Mexico. As required, these operations are regularly inspected by MSHA personnel. The HB Plant is governed by the Occupational Safety and Health Administration (OSHA).

22.0 Interpretation and Conclusions

RESPEC's QP review and resource and reserve estimations were performed to obtain a reasonable assurance of the estimates from the data provided by Intrepid and IPNM. The QP believes the findings are reasonable and realistic and have been developed using accepted engineering practices.

As with all geologic estimations, there is a level of risk and uncertainty because of sparse data. These estimates are considered reliable based on the historical success of mining operations recovering langbeinite and potash from this deposit. There is more uncertainty in future mining of the ore zones that have not been historically mined.

23.0 Recommendations

The QP recommends that IPNM continue planning for the challenges in solution mining with the presence of low levels of carnallite and plan for the expansion pipeline and wells for the AMAX mine. The property is in operation, and no additional work beyond current confirmation drilling is recommended.

24.0 References

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25.0 Reliance on Information

The QP relied on lease holdings and permitting status provided by Intrepid and IPNM for this reserve evaluation.