NI 43-101 TECHNICAL REPORT

Intercontinental Potash Corp. (USA) - Ochoa Project, New Mexico, United States of America.

Preliminary Economic Assessment

Effective Date: October 28, 2016

Published: October 28, 2016

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Project No. 1659743

TITLE PAGE

NI 43-101 TECHNICAL REPORT for Intercontinental Potash Corp. (USA). - Ochoa Project - Preliminary Economic Assessment

New Mexico, United States

DATE AND SIGNATURE PAGE

This Technical Report on the Ochoa Project is submitted to Intercontinental Potash Corp. (USA) and is effective as of October 28, 2016.

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1.0 SUMMARY

1.1 Summary Project Description

Golder Associates Inc. (Golder) was commissioned by Intercontinental Potash Corp. USA (ICP) to compile an independent Qualified Person (QP) authored National Instrument 43-101 (NI 43-101) Technical Report (TR), a Preliminary Economic Assessment (PEA) on a greenfield underground polyhalite mine (the Project). ICP is a majority-owned entity of IC Potash Corp., which is a Canadian entity listed on the Toronto Stock Exchange under the symbol ICP-TSX.

This TR (also referred to as the Report) incorporates relevant information from previous studies, recent changes to the Project, and an updated Mineral Resources estimate.

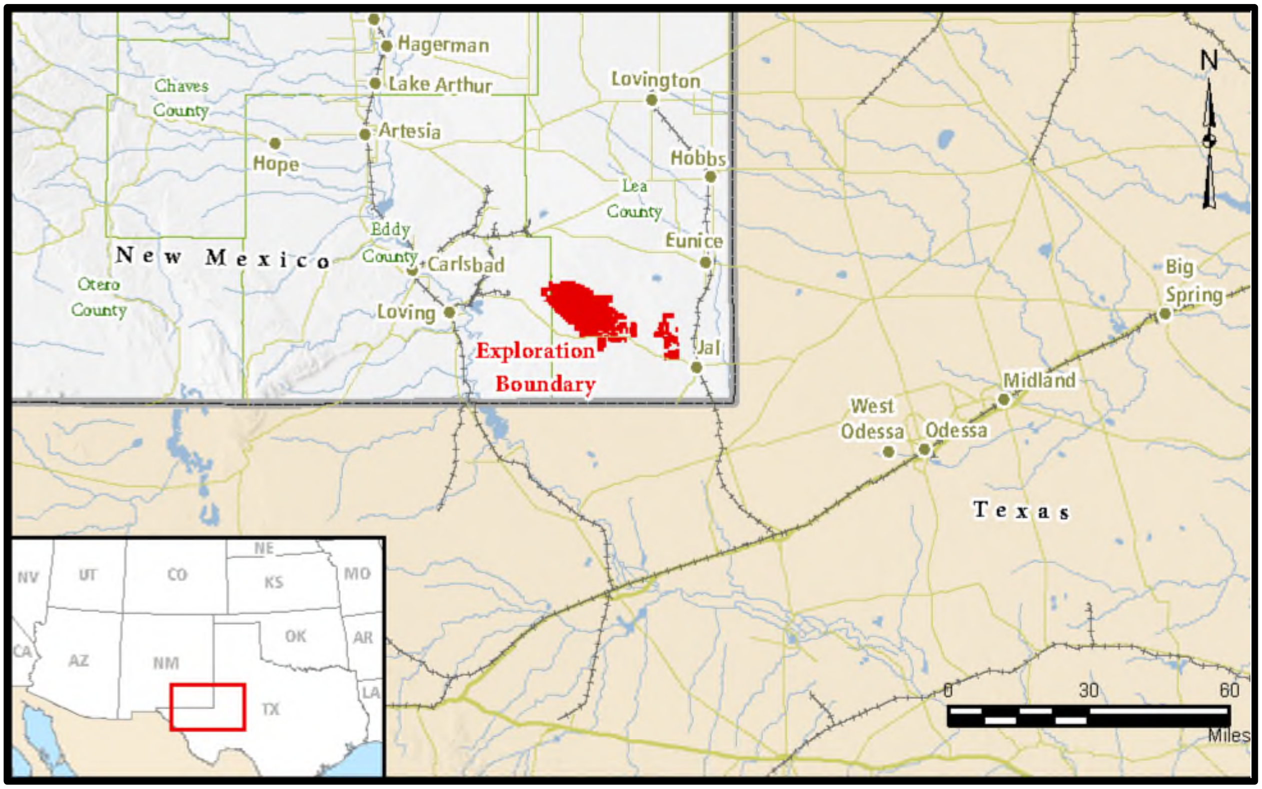
This summary is a high-level review of the contents of this PEA. This TR is meant to be read as a whole, and sections or parts including this Summary should not be read or relied upon out of context. The Summary was written by using the information drawn from various sections within the TR.

1.1.1 General

ICP is focused on developing the Ochoa Project (the Project). The company plans to mine polyhalite to be sold as a direct application crop nutrient product. The Project includes the integration of an underground mine with an adjacent process plant and a remote rail loadout facility.

The proposed Project site is primarily located in Lea County, New Mexico, with a small portion in Eddy Country, New Mexico. The Project site is approximately 60 miles east of Carlsbad, New Mexico, and less than 20 miles west of the Texas/New Mexico state line. The Project spans portions of 16 townships to include lease mineral rights totaling more than 86,027 acres with 26 US Department of Interior (DOI), Bureau of Land Management (BLM) prospecting permits (58,223 acres), and 18 New Mexico State Land Office (NMSLO) State Trust Lands potash mining leases (27,804 acres). Figure 1.1: Location of the Ochoa Project shows the Project location.

Figure 1.1: Location of the Ochoa Project



1.1.2 Geology & Mineral Resources

1.1.2.1 Geology

Potash mineralization encountered in the Ochoa Project area occurs within the Delaware Basin, a large Permian age (298.9 Ma to 254.14 Ma) sedimentary basin that developed as a foreland basin associated with late Carboniferous tectonic activity. The Delaware Basin is in turn a smaller sub-basin forming the western edge of the larger Permian Basin that covers a large portion of west Texas and New Mexico.

The Ochoa Project potash mineralization area is in the form of polyhalite hosted within anhydrite members of the Rustler Formation. Polyhalite is a hydrated sulfate of potassium, calcium, and magnesium. The polyhalite in the Ochoa Project area occurs in the basal anhydrite unit of the Tamarisk Member of the Rustler Formation. The mineralization occurs as a single polyhalite bed, the Ochoa polyhalite bed, with a mean composite thickness of 5.0 feet (range of 2.2 feet to 6.6 feet) within the Project area. The upper and lower contacts of the polyhalite bed are marked by gradational contact domains with the overlying and underlying anhydrite. The upper and lower contact domains bound a polyhalite dominated target domain. The mineralization occurs as a generally undisturbed, flat-lying bed ranging between 4 feet and 6 feet thick inside the margins of the depositional basin.

The Ochoa polyhalite bed is the subject of this PEA, which identifies the portion of the Ochoa polyhalite bed that qualifies as an NI 43-101 Mineral Resource. Mineral Reserves are not stated in this PEA; however, Mineral Resources are projected to be recoverable by room-and-pillar mining methods, which are further explained in this PEA.

1.1.2.2 Mineral Resources

The polyhalite domains of the Ochoa polyhalite bed are estimated to contain approximately 330 million short tons (Mt) of Measured plus Indicated polyhalite Mineral Resources at a mean grade of 89.3 weight percent (wt.%) polyhalite ($K_2Ca_2Mg(SO_4)\cdot 2H_2O$), based on core drilling and core chemical analyses from a total of 32 exploration drillholes drilled by ICP from December 2009 through April 2013. Another 718 petroleum wells in the area provided supplemental definition of both bed thickness and continuity from elogs.

As per NI 43-101 guidelines, Golder is reporting only in-situ polyhalite Mineral Resources as the necessary modifying factor studies have not yet been completed to a minimum of a Pre-feasibility Study (PFS) level of study as of the effective date of the current PEA level Mineral Resources estimate.

Golder performed categorization of the polyhalite Mineral Resources for the Project according to the Canadian Institute of Mining, Metallurgy and Petroleum Council (CIM) Definition Standards (CIMDS) definitions as referenced in NI 43-101. Mineral Resources were categorized into Measured, Indicated, and Inferred Mineral Resource categories using area of influence (AOI) polygons around points of observation (POB).

Mineral Resource volumes and grade were estimated for each polyhalite domain falling within the AOI polygons and where polyhalite domain thickness and grade were above the minimum grade and minimum thickness cut-offs. Estimated volumes of polyhalite Mineral Resources were then converted to short tons using the default density of 173.5 pounds per cubic foot (pcf) (wet basis).

Based on an evaluation of the drillhole spacing and geological continuity of the polyhalite domains, Golder has applied the following Mineral Resource classification schema:

- Measured Mineral Resources - 0-foot to 3,330-foot radius around POB
- Indicated Mineral Resources - 3,330-foot to 6,660-foot radius around POB
- Inferred Mineral Resources - 6,660-foot to 10,000-foot radius around POB

No Mineral Resources were categorized beyond the Inferred Mineral Resource classification distance of 10,000 feet from a POB.

As per the CIMDS definition of Mineral Resources, a key requirement in the estimation of Mineral Resources is that they must have a reasonable prospect for economic extraction. Based on mining method and head grade considerations, a minimum grade cut off of 85% polyhalite and a minimum thickness of 4.0 feet have been applied; no dilution, recovery, or other mining factors have been applied to the in-situ Mineral Resource estimate and no Mineral Reserves are being reported at this time.

Although the polyhalite Mineral Resources presented in this TR are believed to have a reasonable expectation of being extracted economically, they are not at this time Mineral Reserves. Estimation of Mineral Reserves requires additional modifying factors studies performed to a minimum of a PFS level; mine planning, processing, environmental, economic, marketing, and other modifying factors studies that will provide further insight into prospects for development and extraction of the Mineral Resource are presented at a PEA level of study in this TR.

1.1.3 Mining

For purposes of the PEA, ICP plans to construct and operate an underground polyhalite mine to provide a nominal 2 million tons per year (Mtpy) of run-of-mine (ROM) polyhalite material to a processing plant located on the surface. ROM material must have a minimum grade of 85% polyhalite in order to meet market quality demands; therefore, resource grade is a key driver for mining plans. Based on the Resource estimate and orebody geometry, approximately 80 Mt of mining is expected, which potentially translates to a 42-year mine life.

The room-and-pillar mining method was chosen as the PEA base case because it is well-matched to the deposit characteristics. Heavy duty underground room-and-pillar continuous mining equipment similar to that used in potash, coal, and trona mining is planned. For the PEA, extraction is limited to 70% in the production panels, with no pillar mining planned. Long-life main entries are protected with barrier pillars, as are abandoned and existing gas, oil, and disposal wells. The PEA considers two continuous miner models to produce from varying polyhalite thickness zones. Miners would target the highest grade polyhalite bed (POLY2). Smaller continuous miners (CM) would be used in thinner zones to maximize grade and tons mined while the thicker zones and main conveyor drifts would be excavated with larger CMs.

Figure 1.2: Site Layout and Mining Limits shows a conceptual layout for the mains, panels, and division between smaller and larger CMs. This layout also considers mineral rights boundaries and surface facility location (yellow box).

This mining layout has not been optimized and can be reconfigured to further avoid well pillars and maximize panel lengths in the next level of study.

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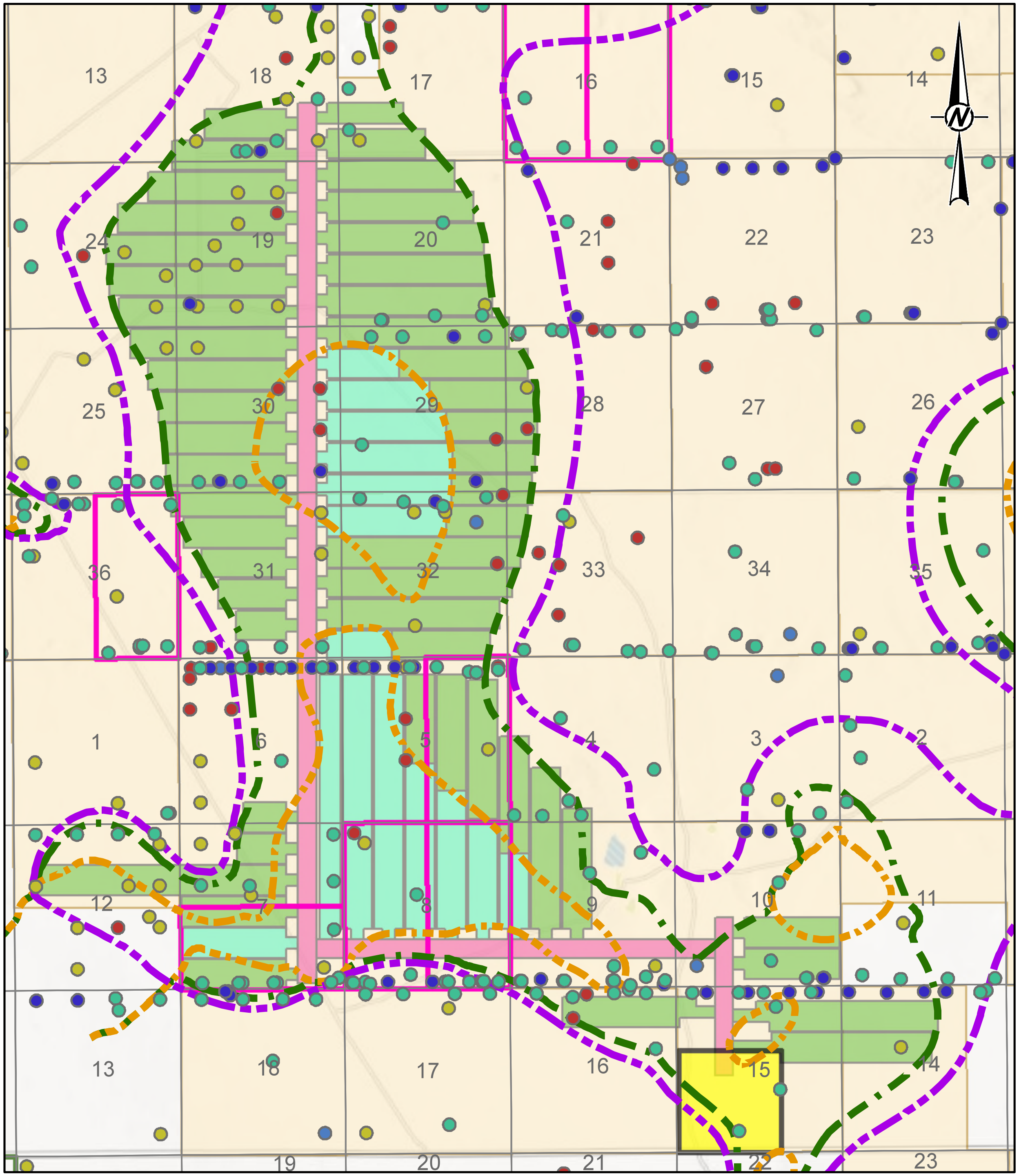

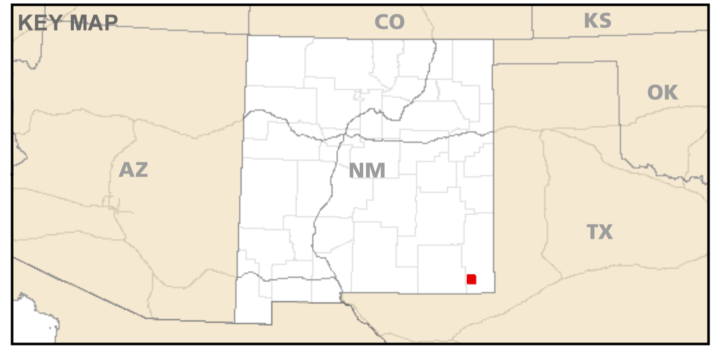

LEGEND

- 57 inch Panel
- 48 inch Panel
- Main
- Poly2 Thickness > 4 ft
- 85% Polyhalite Cutoff - 48"
- 85% Polyhalite Cutoff - 57"
- ICP Mining Rights
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Surface Facility
- Surface Water
- Section

Well Buffer (200ft)

- Active
- New
- Cancelled APD
- Plugged, Site Released
- Other

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 5,000 10,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
SITE LAYOUT AND MINING LIMITS

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	CH
PREPARED	JF
REVIEWED	CH
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
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The mineralized bed would be accessed using two 25-foot diameter mine shafts. Shaft #1 would be the production shaft while #2 would be the mine ventilation and service shaft. The 1,525-foot deep service shaft would be used for ventilation intake air, men and materials movement, and services (electrical cables, communication cables, water, drainage, and so forth). The production shaft and hoisting system would be capable of meeting design throughput for the entire mine life.

ROM material will be transported underground from the working face using the main line conveyor system to the production shaft loading pocket for hoisting to surface. Mine equipment will be lowered down the service shaft and assembled underground. An underground shop and warehouse will be located near the shaft bottom area to support operations.

1.1.4 Mineral Processing & Metallurgical Testing

Metallurgical test work for polyhalites in New Mexico and Texas was initially completed by the United States Bureau of Mines (USBM) in the 1920s and 1930s for evaluating the potential of producing sulfate of potash (inter and other fertilizers. Subsequent to the USBM studies, Potash Corporation of America (PCA) completed test work in the 1950s to evaluate the potential for large scale developments of potash projects in New Mexico. Several test programs were completed by ICP between 2011 and 2013 to confirm the test work completed by the USBM and PCA and for the 2014 Feasibility Study (FS) completed by Agapito Associates Inc.(AAI) and SNC Lavalin (2014 Study). Historic test programs are summarized in Item 13 of the 2014 Study. Golder has reviewed and applied data from the test programs where relevant to the new production strategy. No additional test work was completed for this PEA study.

1.1.5 Recovery Methods

The proposed process follows the strategy that the mining operation would mine high grade POLY 2 material from which two direct application crop nutrient products would be produced that would be sold to markets domestically and internationally. These products are the following:

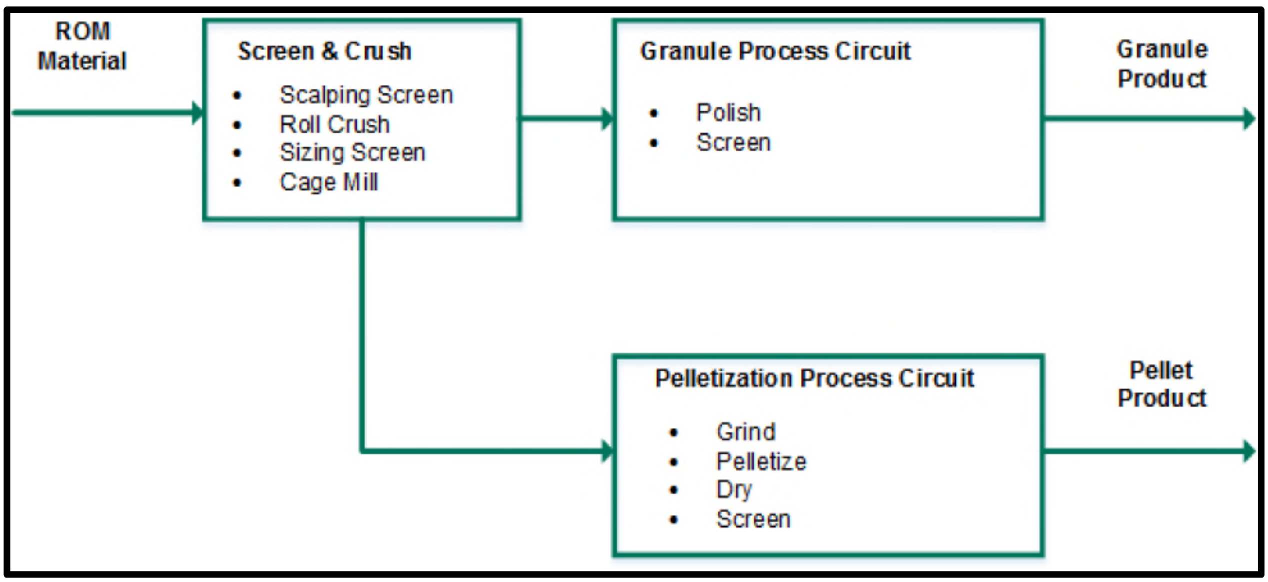
- Raw granule product
- Pelletized product

This approach varies from the previous studies where they considered crystallization circuit options to produce a manufactured soluble sulfate of potash (SOP), Granular SOP, Standard SOP, and leonite crystal using an evaporative crystallization process of the leach solution from calcined polyhalite material.

For the PEA, the nominal capacity of the process plant would be 2.0 Mtpy with a product size gradation targeted in the 3 to 8 Tyler Equivalent Mesh range for each product. The feed material would have a minimum grade of 85% polyhalite, but can range between 85% and 90%. This TR assumes 100% of the

ROM feed material is converted into one of the two products. Treatment of dilution from the mining operation within the feedstock is not considered nor addressed in this TR. Based on a 365-day operating year and a plant availability of 78%, the design feed rate would be 338 tons per hour (tph). The production range between the two products would be: 1.0 Mtpy to 1.5 Mtpy of raw granule product and 0.5 Mtpy to 1.0 Mtpy of pelletized product. The proposed process for the raw granule product would be entirely mechanical, and would require no chemical treatments, additions, or nonstandard material handling processes. The process would focus on crushing and size classification as the primary objectives. The proposed process for the pelletized product is to convert a portion of the raw granulated material along with collected fines into a consistent, uniform, value added marketable product through grinding, pelletizing, and drying. Figure 1.3 illustrates the flow of material through these processes.

Figure 1.3: Material Flow Process



Each of the two products would be conveyed to its dedicated loadout bins for loading into bottom dump trailers for transfer to the Project's railyard facility. The product will be trucked approximately 22 miles over public roadways to the product storage and rail loadout facility located northwest of the community of Jal.

1.1.6 Project Infrastructure

The Project is located on a greenfield site and will still require the addition of infrastructure to support the operation. The major infrastructure requirements for the Project include the following:

- Project access
- Water supply
- Power supply

- Natural gas supply
- Support structures and buildings
- Off-site rail loading
- Miscellaneous support infrastructure

The Project would be accessed via County Road 2, also known as Brinninstool Road located off of New Mexico State Road 128 (NM 128). The site can be approached from Carlsbad, west of the Property, or from Jal, east of the Property. The Project site would be located on the north side of NM 128. Road upgrades such as acceleration and deceleration lanes would be considered.

Water supply would be sourced from the Capitan Reef aquifer. Water wells, a pumping and distribution system, and a pretreatment system would be located at the well field site approximately 13 miles northeast of the process plant. Three water support systems: raw process water (untreated), treated process water, and potable water are considered for the Project. Due to the salinity level of the water from this aquifer, a water treatment plant (WTP) in the form of a multi-stage RO treatment facility would be required for the treated water supply. Potable water would also require disinfection. Water would be stored on site in their respective tanks.

Xcel Energy, the local electrical utility supplier, has constructed an electrical sub-station approximately 1 mile from the mine site and on the north side of NM 128. Xcel Energy will tie the Project's main sub-station into this substation with either a 345-kilovolt (kV) or 230-kV service line. It is estimated that the facility would require approximately 3 megawatts (MW) of connected power to support the mining and processing operations. The loadout site and Capitan Reef well field will receive power from Xcel Energy's existing grid.

Natural gas would be required to support the process operations to fuel the pelletizer dryer and for building services. Natural gas would be provided by one of several natural gas suppliers in the region. A new underground pipeline adjacent to NM 128 would be installed terminating at a pressure reducing station to service the Ochoa Project. Onsite supply of the gas would be via a metering and low-pressure distribution system.

The process and mining facilities require structures and buildings to support the operation. It is assumed that the following buildings would be required:

- Process structure
- Control room/electrical rooms
- Transformer room

- Administrative building/change rooms
- Security entry gate
- Maintenance shop
- Warehouse

The Project's rail loadout facility would be adjacent to an existing Texas-New Mexico Railroad (TNMR) rail line running north to south, west of the community of Jal. The Project would construct new tracks and switch assemblies to connect to the TNMR line. The TNMR is a short-line railroad that runs from Lovington, New Mexico, to Monahans, Texas, and passes through Jal. The TNMR connects to the Union Pacific Railroad (UPRR) at Monahans. All products would be trucked from the mine site to the Jal loadout facility via NM 128.

Since it is assumed that all material mined will be processed and shipped to market, there is no requirement for a tailings management area. Additionally, no evaporation ponds or water injection would be required to support the process operation. A waste rock storage facility will be situated near the mine shafts to hold all shaft and pre-production material. This material will be retained on surface and used for site construction as needed.

1.2 Scope of PEA

This PEA is an update to the 2014 Study by SNC Lavalin which considered processing polyhalite into an SOP product. The PEA considers a new project design that reflects shipping direct application polyhalite without the need for a chemical processing plant. Due to this material change, other aspects of the Project have been adjusted to meet market demands and mining constraints.

The PEA assesses economic viability and provides recommendations regarding project advancement. Available geological resources were evaluated along with the potential approach to mining and processing. The scope of the study consists of the following:

- Update the Mineral Resource model as a gridded seam model
- Update the site facilities and infrastructure plan
- Prepare a conceptual mine layout and production plan
- Provide process flow diagrams (PFDs) for the processing facility
- Confirm environmental and permitting requirements
- Summarize the polyhalite product development tests completed to date
- Summarize the polyhalite market analysis and price expectations from CRU International Limited (CRU) and ICP
- Provide capital and operating costs of the Project with a target confidence level of ±40%
- Prepare a cashflow model with net present value (NPV) and internal rate of return based on Project parameters and economic inputs

- Summarize key risks and make recommendations for future work

1.3 Project Schedule

The proposed Project timeline has a pre-production construction period of 3 years which includes design, shaft sinking and process plant construction. ICP is considering a contractor agreement for design, build, operation, and maintenance of the mine (DBOM) in order to improve the overall Project timeline. Production will ramp up as panels are developed to a proposed throughput of 2 Mtpy over a 3 year ramp-up period. There are several critical paths items that need to be resolved in order to meet overall Project schedule, including the following:

- Project financing
- Final environmental approvals and construction licensing
- Selection of a DBOM contractor and negotiating a construction agreement
- Procurement of long lead time equipment
- Sinking of the production and service shafts and underground infrastructure to begin production
- Construction of process facilities at the mine site
- Construction of the rail load-out facilities north of the town of Jal which is approximately 22 miles east of the Project site. Note: the PEA considers truck haulage from the Project site to the rail load-out facility.

1.4 Capital Cost Estimate

Capital costs were estimated using indicative pricing for major components and equipment. In some cases, actual vendor quotes were used in the capital cost estimate. Other capital cost estimates were factored from the 2014 Study and adjusted to the new Project design. The capital cost estimate for the Project is shown in Table 1.1.

Initial capital is defined as costs required to meet the desired throughput rate of 2 Mtpy and includes all mobile support equipment, fixed equipment, materials, supplies, and labor. Sustaining capital includes rebuilds and replacements as a function of initial capital for all fixed and mobile equipment.

A flat contingency of 15% has been applied to direct initial capital items.

Indirect capital costs include owners cost, design, initial construction, spares, freight, and commissioning.

All costs are expressed in 2016 US Dollars ($) with no allowance for escalation, currency fluctuation, or interest during construction.

Table 1.1: Ochoa Capital Cost Estimate (US$000s)

Area (WBS / Description)	Initial Capital	Sustaining Capital	Total Capital
1.0 - Mine			
11000 General Site Mine	$13,073	-	$13,073
17000 Ancillary Buildings Mine	$1,479	-	$1,479
18000 Off Site Facilities	$1,183	-	$1,183
12100 Underground Mine Development	$940	-	$940
2200 Shaft Construction	$77,514	$58,135	$135,649
12300 Mine Production Equipment	$13,730	$53,754	$67,485
12400 Underground Support Equipment	$9,320	$70,365	$79,685
Mine Sub-Total	$117,239	$182,255	$299,494
2.0 - Process Facility			
21000 General Site - Process Plant	$38,430	$28,822	$67,252
24000 Process Plant	$71,337	$96,304	$167,641
25000 Product Loadout	$11,501	$15,526	$27,027
27000 Ancillary Facilities - Process Plant	$7,209	$5,407	$12,617
Process Sub-Total	$128,477	$146,060	$274,537
3.0 - Jal Storage / Loading			
31000 General Site - Jal	$12,164	$9,123	$21,286
36000 Jal Storage / Loading Facilities	$20,151	$27,204	$47,355
37000 Ancillary Facilities - Jal	$205	$154	$359
Jal Sub-Total	$32,520	$36,480	$69,000
Total Direct Capital	**$278,236**	**$364,795**	**$643,031**
4.0 - Indirect			
49100 EPCM	$19,477	-	$19,477
49200 Construction Support & Facilities	$10,847	-	$10,847
49300 Other Indirect Costs	$17,864	-	$17,864
Total Indirect Capital	**$48,188**	**-**	**$48,188**
Contingency	$41,735	-	$41,735
Total Capital	**$368,159**	**$364,795**	**$732,954**

1.5 Operating Cost Estimate

Operating costs were developed either from internal Golder data sources, first-principle calculations, or by factoring previous costs in the 2014 Study. All costs are in 2016 US dollars. Table 1.2 details the steady state operating costs for the Ochoa Project.

Table 1.2: Ochoa Operating Cost Estimate

Area	Total Cost (US$000s)	Cost per Ton Mined ($)
Mine	$1,954,499	$24.07
Process Plant	$947,708	$11.67
Jal Storage / Loading	$422,351	$5.20
G&A Operations	$250,908	$3.09
Total Operating Cost	$3,575,466	$44.04

Operating costs include transportation of all products to the rail loadout facility in Jal. Costs to transport product from the Jal loadout facility to port or final market and other sales related charges have been included as a reduction of revenue in determining net-back prices.

The operating cost estimates presented in Item 21.0 were based on AACE Class 5 estimate methodology which has an expected order of accuracy is in the range of ±40%, as required by this estimate class and as appropriate for a PEA.

1.6 Product Development

Since polyhalite is considered a new fertilizer product, ICP commissioned Upstream Resources LLC (Upstream) to perform an interim product development study to determine if Ochoa polyhalite test material possess mineralogical, chemical, and agronomical characteristics of a viable fertilizer (*Product Development Study, Interim Report,* September 16, 2016). In addition, Upstream compared test results against existing commercial products and hypothetical commercial products with the intent of providing guidance to engineering, marketing, and future product development activities.

In order to complete this PEA, a composite sample of Ochoa polyhalite was prepared. This test sample was used to compare with ICL Fertilizers (ICL), and Sirius Minerals PLC (Sirius), product information specification report.

The test results concluded that the Ochoa granular test product is similar to the ICL product in regards to nutrient content, nutrient availability, and dissolution characteristics. Also, the solubility of the Ochoa agronomic composite exhibits acceptable fertilizer properties in all size fractions. From these results, it is reasonable to infer that standard grade Ochoa product will be similar to the ICL standard product. In addition, there are no restrictions being placed on selection of size fraction to be used for future test work.

Product development testing is ongoing.

1.7 Marketing

ICP has developed a marketing strategy to develop direct application polyhalite for crop nutrient applications in the United States, Mexico and Brazil. ICP commissioned CRU Group to conduct a market study for the use of polyhalite as a possible fertilizer which was prepared July 2016. CRU Consultants completed a marketing study that suggests market prices at various production throughput rates. Based on this assessment, ICP determined that a production rate of 2 Mtpy would be used for the PEA. A product pricing schedule associated with this production rate was used in the cashflow model. Key points of the marketing study include the following:

- Polyhalite as a fertilizer is currently an extremely small market, with only ICL Fertilizers in the United Kingdom (UK) producing the product commercially in small volumes. In the US, and the Americas more generally, polyhalite would essentially represent a new fertilizer product.
- The granting of planning permission in June 2015 to Sirius Minerals PLC (Sirius) for a large scale polyhalite mine in northern England has drawn attention to the potential for a polyhalite market to become established and compete with other potassium fertilizers. Should this Project secure financing and commence production as planned, it holds the potential to reshape the specialty potash sector and commoditize polyhalite, which has until now represented a niche fertilizer product with untested large scale commercial demand.
- Polyhalite is a source of low chloride potassium and three secondary-nutrients: magnesium, sulfur, and calcium; however, its light nutrient density, particularly in potassium and magnesium, classifies it as a 'low analysis' organic fertilizer.
- Polyhalite is well-suited for application to the high value and organic crops which are associated with higher grower margins and willingness to invest in balanced secondary-nutrient fertilizer programs.
- CRU believes that there is strong demand potential for fertilizers such as polyhalite as a premium product, despite being relatively low analysis, because of the growing awareness among growers of the yield and quality benefits which can be associated with secondary-nutrient applications.
- If produced in manageable quantities and properly positioned in the market, polyhalite should be able to achieve a low chloride premium price.
- The relatively low potassium content of polyhalite means the product will encounter significant challenges in any attempt to displace muriate of potash (MOP) and SOP from nitrogen/phosphorous/potassium (NPK) blends; it will be most suited to low-potassium content blends.
- It will necessitate considerable time and effort to build up and maintain an effective distribution system and dealer network for polyhalite.
- The K-Mg-S market is a relatively small market; polyhalite is likely to compete in this space with other sulfate of potash-magnesia (SOPM) branded fertilizers.
- Polyhalite would represent a new product in a mature K-Mg-S market; an advanced and sustained marketing effort and sales strategy will be necessary to position polyhalite as a premium fertilizer and overcome low brand recognition.

Oversupply of polyhalite is a threat to long term pricing and will diminish the premium fertilizer branding effort. With oversupply, the market may view polyhalite as a commoditized product, therefore negatively impacting ICP's value proposition. Price assumptions have assumed that supply from Sirius will be sold to UK markets and not impact supply/demand relationships in the US or Brazil.

ICP must ensure an orderly entry into the market with a focus on quality products and strong customer service fundamentals.

1.8 Price Forecast

The polyhalite market is limited, therefore data on traded polyhalite and its corresponding prices are also limited. This poses challenges in estimating the market value of polyhalite as a commercial fertilizer. CRU Group researched evidence of polyhalite prices from the trade statistics available and analyzed the components contained in SOPM to extrapolate a potential value for polyhalite. Table 1.3 was used in the cashflow model to determine expected revenues.

To attain these prices, ICP must position their marketing as a premium fertilizer product which can be achieved by selling half in the US market and half in international markets. Strategically, initial price discounting of the product would be detrimental to the longer term price prospects for polyhalite.

1.9 Economic Analysis

Discounted cashflow modeling of the Project base case yields an after-tax internal rate of return (IRR) of 28% and a NPV of $1,197 million at a discount rate of 8%. Tax rates applied include 7.2% ad valorem, 2% severance, 35% corporate, and 5.9% state. A 6.7% effective royalty rate was applied to gross sales. All cashflow amounts are expressed in September 2016, US$, with no allowances for escalation. Table 1.4 presents the estimated revenue, disbursements, and resulting free cashflows of the Project in dollar per ton of polyhalite produced, for selected years (in nominal dollars).

Table 1.3: Price Forecast

Count	Year	PEA Mtpy Produced	PEA Real Price (US$/ton)
1	2020	416,042	$162
2	2021	1,126,089	$161
3	2022	1,824,441	$157
4	2023	1,955,284	$159
5	2024	1,955,858	$161
6	2025	2,000,000	$164
7	2026	2,000,000	$167
8	2027	2,000,000	$169
9	2028	2,000,000	$172
10	2029	2,000,000	$175
11	2030	2,000,000	$178
12	2031	2,000,000	$181
13	2032	2,000,000	$184
14	2033	2,000,000	$188
15	2034	2,000,000	$191
16	2035	2,000,000	$195
17	2036	2,000,000	$200
18	2037	2,000,000	$206
19	2038	2,000,000	$212
20	2039	2,000,000	$218
21	2040	2,000,000	$224
22-42	2041-2061	2,000,000	$224

Table 1.4: Ochoa Project Cashflows (Selected Years)

Description	Units	Total or Average	-3	-2	-1	1	2	3	4	5	6	7	8	9	10
RoM Ore	kst-RoM	**81,186**	-	-	250	1,000	1,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Gross Income from Mining															
Polyhalite Produced	kst-dry	**81,186**	-	-	-	1,250	1,500	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Market Price	$/ton	**-**	-	-	-	162	161	157	159	161	164	167	169	172	175
Gross Sales	$000s	**16,503,664**	-	-	-	202,500	241,500	314,000	318,000	322,000	328,000	334,000	338,000	344,000	350,000
Freight	$000s	**-**	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Sales	$000s	**16,503,664**	-	-	-	202,500	241,500	314,000	318,000	322,000	328,000	334,000	338,000	344,000	350,000
Royalty	$000s	**(1,097,494)**	-	-	-	(13,466)	(16,060)	(20,881)	(21,147)	(21,413)	(21,812)	(22,211)	(22,477)	(22,876)	(23,275)
Gross Income (FOB-Plant)	$000s	**15,406,170**	-	-	-	189,034	225,440	293,119	296,853	300,587	306,188	311,789	315,523	321,124	326,725
Operating Cost															
Mine	$000s	**1,954,499**	1,627	9,907	13,236	31,693	39,259	46,772	46,772	47,377	47,377	47,377	47,377	47,377	47,377
Process Facility	$000s	**947,708**	-	-	-	15,451	19,353	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255
Jal Storage / Loading	$000s	**422,351**	-	-	-	7,491	8,439	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334
G&A Operations	$000s	**250,908**	-	-	773	3,091	4,636	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181
Direct Operating	$000s	**3,575,466**	1,627	9,907	14,008	57,725	71,686	86,541	86,541	87,147	87,147	87,147	87,147	87,147	87,147
Production Taxes															
Ad Valorem	$000s	**1,190,310**	-	-	-	14,605	17,418	22,647	22,935	23,224	23,657	24,089	24,378	24,811	25,243
Severance	$000s	**330,073**	-	-	-	4,050	4,830	6,280	6,360	6,440	6,560	6,680	6,760	6,880	7,000
Production Tax	$000s	**1,520,384**	-	-	-	18,655	22,248	28,927	29,295	29,664	30,217	30,769	31,138	31,691	32,243
Operating Cost	$000s	**5,095,850**	1,627	9,907	14,008	76,381	93,934	115,468	115,837	116,811	117,363	117,916	118,285	118,837	119,390
Tax Depreciation	$000s	**684,766**	-	-	-	43,309	75,426	56,134	41,590	30,413	30,190	35,633	26,237	10,325	8,279
Amortization	$000s	**368,159**	-	-	-	4,549	6,823	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098
Total Operating Cost	$000s	**6,148,774**	1,627	9,907	14,008	124,238	176,183	180,699	166,524	156,321	156,651	162,647	153,619	138,260	136,767
Operating Profit	$000s	**9,257,396**	(1,627)	(9,907)	(14,008)	64,796	49,257	112,420	130,329	144,266	149,537	149,142	161,904	182,864	189,958
Working Capital															
Beginning Balance	$000s	**-**	-	201	1,221	1,727	11,077	13,561	16,810	16,888	17,041	17,159	17,276	17,354	17,472
Ending Balance	$000s	**-**	201	1,221	1,727	11,077	13,561	16,810	16,888	17,041	17,159	17,276	17,354	17,472	17,589
Change in Working Capital	$000s	**(0)**	(201)	(1,021)	(506)	(9,350)	(2,484)	(3,249)	(78)	(153)	(117)	(117)	(78)	(117)	(117)
Cash Flow															
Operating Profit	$000s	**9,257,396**	(1,627)	(9,907)	(14,008)	64,796	49,257	112,420	130,329	144,266	149,537	149,142	161,904	182,864	189,958
Depreciation and Amortization	$000s	**1,052,925**	-	-	-	47,857	82,250	65,231	50,687	39,511	39,287	44,731	35,335	19,423	17,377
LoM Capital	$000s	**(732,954)**	(66,750)	(150,962)	(129,568)	(3,976)	(8,432)	(7,434)	(3,088)	(1,678)	(3,663)	(39,028)	(4,341)	(3,595)	(4,767)
Federal Income Tax	$000s	**(2,467,755)**	-	-	-	-	-	(13,949)	(31,069)	(35,764)	(37,335)	(36,922)	(41,206)	(48,267)	(50,476)
State Income Tax	$000s	**(415,993)**	-	-	-	-	-	(2,351)	(5,237)	(6,029)	(6,294)	(6,224)	(6,946)	(8,136)	(8,509)
Working Capital	$000s	**(0)**	(201)	(1,021)	(506)	(9,350)	(2,484)	(3,249)	(78)	(153)	(117)	(117)	(78)	(117)	(117)
Cash Flow	$000s	**6,693,619**	**(68,577)**	**(161,890)**	**(144,082)**	**99,327**	**120,591**	**150,668**	**141,544**	**140,153**	**141,415**	**111,581**	**144,668**	**142,171**	**143,466**
Cumulative Cash Flow	$000s	**-**	(68,577)	(161,890)	(305,972)	(206,645)	(86,054)	64,614	206,157	346,310	487,725	599,307	743,974	886,145	1,029,611

Sensitivity analysis was run for various factors as shown in Figure 1.4 and below using ±25% variations from the base case.

Figure 1.4: NPV Sensitivity Analysis

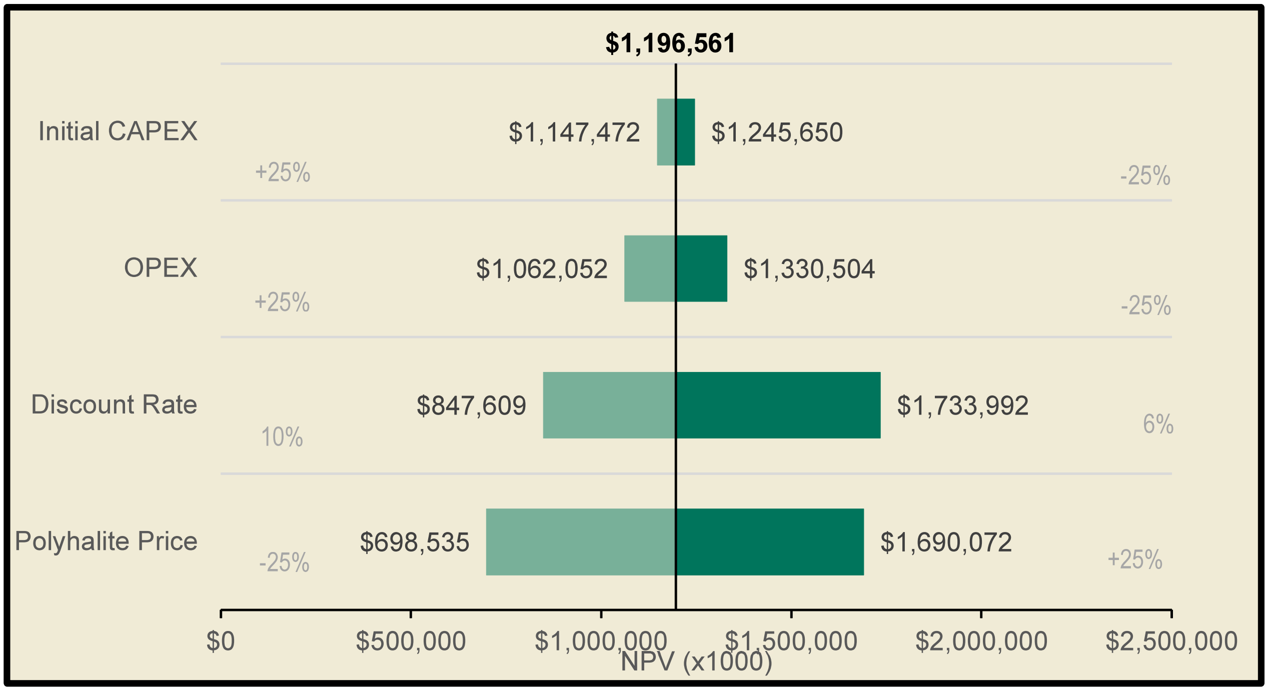
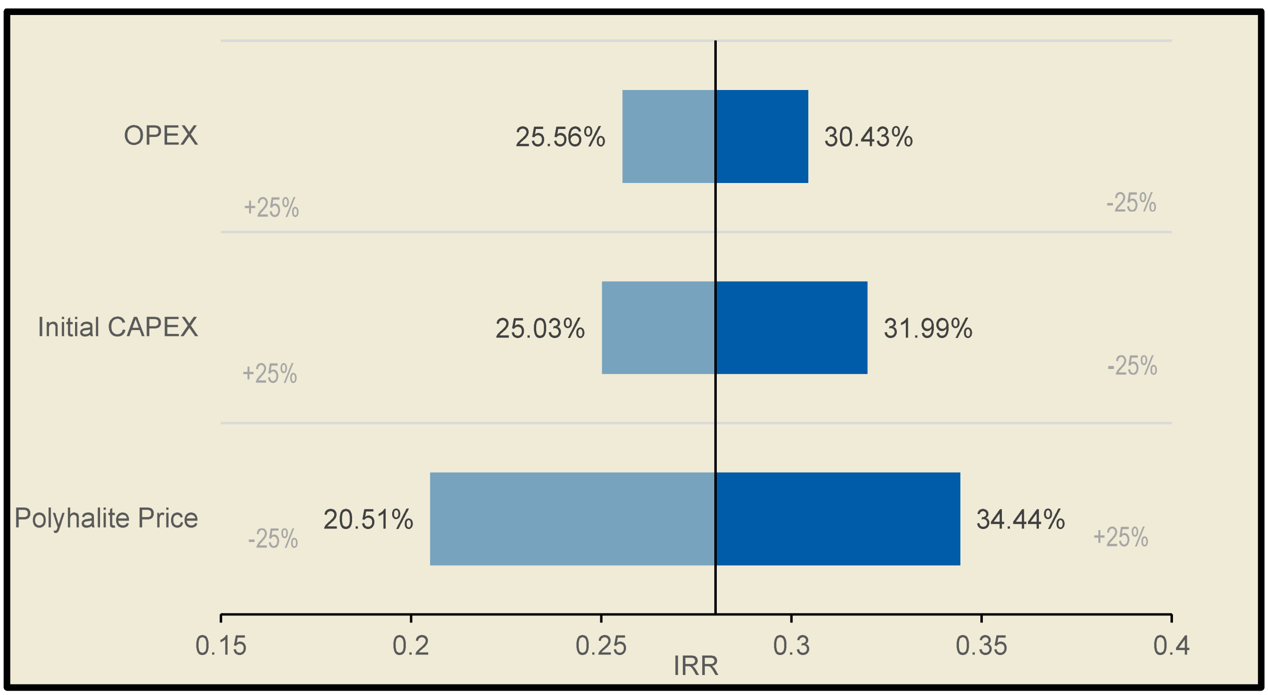


Figure 1.5: IRR Sensitivity Analysis



The sensitivity analysis shows that the Project's NPV is most sensitive to variations in polyhalite prices and discounted cashflow rates while internal rate of return (IRR) is most sensitive to prices and initial capital costs.

1.10 Environmental & Permitting

An Environmental Impact Statement (EIS) was authored by AECOM which has the following BLM/NM/PL reference number:

U.S Bureau of Land Management (BLM), 2014, Ochoa Mine Project, Final Environmental Impact Statement, BLM/NM/PL-14-02-3500, February 2014.

From this EIS, the Ochoa Project Record of Decision (ROD) was signed by the BLM on April 10, 2014 (BLM/NM/PL-14-02-3500). Other permits have been received including:

- New Mexico Environmental Department (NMED) Air Quality Permit was obtained in 2014 to reflect the previous design which included a chemical processing facility, (NMED Air Quality Bureau issued New Source Review Permit No. 5384 on July 30, 2014). This authorizes the construction of the proposed Processing Facility from the 2014 Study.
- Federal Prospecting Permits: Decision Record approving the conversion of 52 preference right lease (PRL) applications totaling 43,449 acres to preference right leases to be issued by the BLM to ICP on March 30, 2016 (AECOM 2016; BLM 2016a; BLM 2016b).
- Federal PRLs: ICP holds 15 federal preference right leases totaling 14,774 acres.
- BLM Leasing Finding of No Significant Impact.
- BLM Decision Record on Leasing EA.
- New Mexico State land office business lease number 2158 authorized improvements to state lands for the use of 2 existing groundwater supply wells.

Since the ROD and air quality permit were issued, ICP has re-assessed the Project to consider a direct ship product as outlined in Item 19.0. This change has resulted in the following key differences from the 2014 Study:

- Elimination of the chemical processing facility,
- Elimination of the evaporation ponds,
- No requirement for a tailings impoundment, (no tailings produced),
- Reduced water required (minimal process water),
- Reduction in injection well capacity due to less water requirements,
- Reduction in Reverse Osmosis (RO) plant requirements,
- Reduced area of surface disturbance, (approximately 1 mile square vs 4 miles square),

- Relocation of the surface facilities from the south side of NM 128 to the north side adjacent to Brinninstool road. This section of land was included in the 2014 Study which at that time supported the mine service shaft and associated facilities.
- Additional haul truck traffic along NM 128 to ship 2 Mtpy rather than 720,000 tpa in the 2014 Study.

Since the ROD, the BLM has not yet determined the extent of further NEPA compliance given the changes in the new project design. Future Ochoa Project studies must include a review of existing permits and permit applications with respect to the new project design parameters. It is possible that some of the previous work completed will be relevant for the new project design however in some cases, amendments or new permits will need to be prepared and filed.

Based on the key differences listed above, the new project design is likely to have a lower overall environmental impact which may result in lower compliance and reclamation costs. For the purposes of this PEA, indirect costs associated with environmental compliance and reclamation have been held constant relative to the 2014 Study.

1.11 Recommendations

Based on the results of the PEA, the Ochoa project demonstrates potential economic viability. ICP is contemplating a design, build, operate, and maintenance contracting agreement to advance the project to construction stage. This approach may super cede the traditional study levels used for Project advancement. As a parallel effort, ICP should continue with community involvement and permitting activities necessary to comply with regulatory and social expectations.

Regardless of the overall Project approach, the PEA recommends that ICP complete a prefeasibility study to assess various trade-off options and advance the project to a higher level of confidence to reduce Project risk. The PFS includes but not limited to the specific items listed below:

- Complete metallurgical testing on representative samples from the Ochoa deposit to confirm data for design criteria, processing plans, and product specifications for granular and pelletized products.
- Design the processing plant and associated load-out facilities necessary to meet desired throughput.
- Advance product development testing to include incubation (aka pot test), greenhouse trials, and micro-nutrient assessment for the two product types.
- Continue ongoing market analysis efforts to develop a detailed polyhalite sales strategy. This should include confirmation of polyhalite sales pricing levels to meet long term objectives.
- Two direct ship crop nutrient products can be produced by incorporating generally accepted process technologies. Further study should confirm all product development assumptions are correct.

- Engage strategic vendors to secure long lead time items that need to be procured in order to meet project schedules. Vendors generally will provide this service as part of their overall sales plans at no cost.
- Conduct additional geotechnical modeling for pillar layout, extraction ratio and subsidence for the new project design.
- Perform additional geotechnical modelling to confirm roof and floor creep (convergence) that can be expected from mining activities. Although this level of movement may be minimal, mining equipment clearance must be considered for the next phase of mine planning and sequencing.
- Perform additional testing to confirm instantaneous cutting rates and that continuous miner equipment is appropriately configured to meet mining demands. This could be accomplished by engaging a key vendor to design and build a mining fleet specifically for Ochoa. The key mining equipment supplier would likely provide this service as part of their sales plan at no extra cost.
- Complete a more detailed mine design of shafts, mains, panels, and associated mine infrastructure. The mine design must be further optimized to avoid well bore protection pillars and sequencing.
- Confirm that previously performed hydrology studies are applicable to the new Project design. With the relocation of surface facilities and significantly reduced land area required in the PEA, there are opportunities to optimize hydrology impacts.
- Confirm that previously performed geochemistry studies are applicable to the new Project design. With the relocation of surface facilities and significantly reduced land area required in the PEA, there are opportunities to optimize geochemical impacts.
- Explore the possibility of extending the rail line to the plant for direct shipping thereby eliminating the need for both trucking to Jal and the Jal loadout, which may result in an overall cost savings. A preliminary rail study has already been performed. Costs associated with permitting and land acquisition should be considered as part of the next level of study.
- Since the ROD was issued, the Project characteristics have changed to eliminate the chemical processing facility, evaporation ponds, tailings impoundment, and injection wells. In addition, the new project design has a reduction of surface area disturbance and lower water requirements from wells. Future studies should consider these significant changes to amend the permit requirements and reclamation costs.
- The new Project design has a reduced requirement for surface disturbance and surface access rights. Land leases and land tenure negotiations should be completed as soon as practical.
- The Federal Prospecting Permits should be updated to reflect completion of EA and Record of Decision to convert 52 preference right lease (PRL) applications totaling 43,449 acres to preference right leases. Note that the BLM has not yet converted these applications to leases, but have completed the NEPA compliance and environmental permitting steps required to do so.

2.0 INTRODUCTION

This TR is being prepared for ICP, which is a subsidiary of IC Potash Corp. a Canadian publicly traded company listed on the Toronto Stock Exchange (ICP-TSX) with head offices located at 600 West Bender Boulevard, Hobbs, New Mexico, 88240. The registered office is located at 36 Toronto Street, Suite 1000, Toronto, Ontario, M5C 2C5. ICP refers to the Company and/or all affiliates and is used interchangeably. ICP, in conjunction with funding source Cartesian Capital Group, holds a 100% interest in the 86,027.27-acre Ochoa Project (the Property) located in Lea and Eddy Counties, New Mexico, approximately 60 miles east of Carlsbad, New Mexico, US.

ICP's objective is to become a primary producer of high-quality direct ship polyhalite crop nutrient products. Material will be mined using room-and-pillar underground methods and hoisted to surface where crushing, sizing, and product preparation systems will be used prior to shipping polyhalite from its Property to supply regional and international markets. The Project principal characteristics have been modified from previous studies which considered processing feed to an SOP product. The focus of this TR will regard the direct application of polyhalite products which does not require a chemical processing facility.

Golder was commissioned by ICP to compile an independent QP authored NI 43-101 TR. This TR incorporates relevant information from previous studies, recent changes to the Project, and an updated Mineral Resources estimate completed by Golder.

Previous studies include the following:

- Micon International Limited, Independent Technical Report on the Ochoa Polyhalite Project, New Mexico, November 2008.
- Gustavson Associates, NI 43-101 Technical Report on the Polyhalite Resources and Updated Preliminary Economic Assessment of the Ochoa Project, Lea County, Southeast New Mexico, 14 January 2011.
- Gustavson Associates, NI 43-101 Technical Report on the Polyhalite Resources and Updated Mineral Resources Estimate for the Ochoa Project, Lea County, Southeast New Mexico, 25 November 2011.
- Gustavson Associates, "NI 43-101 Technical Report, Prefeasibility Study for the Ochoa Project: Lea County, New Mexico," 30 December 2011.SNC Lavalin and Agapito Associates, Inc, "NI 43-101 Technical Report Ochoa Project Feasibility Study Lea County, New Mexico, USA," 7 March 2014.

This TR is an update to the 2014 Study by SNC Lavalin which considered processing polyhalite into an SOP product. The TR considers a new Project design that reflects shipping direct application polyhalite without the need for a chemical processing plant. Due to this material change, other aspects of the Project have been adjusted to meet market demands and mining constraints.

The purpose of this TR is to update the Project characteristics to form a PEA of the new project design including potential risks and recommended next steps. A new Mineral Resource model was built that includes all available ICP drilling and analytical data was well as data for 718 surrounding oil and gas wells. A significant modification to the geological model used for this TR is the introduction of domaining within the Ochoa polyhalite bed; in previous models the polyhalite was treated as a single bed from top to bottom, with all material over 50% polyhalite content included. Golder has subdivided the Ochoa Polyhalite bed into a core target polyhalite zone with polyhalite grade in excess of 80%, bordered by an upper and lower transitional zone each with polyhalite grades ranging from 50% to 80%.

The PEA compiles relevant information including exploration, geologic modeling, Mineral Resource estimation, mine planning and design, mining methodology and equipment, surface infrastructure, labor, environmental and permitting, waste and water management, marketing, project economics, product development, and risk analysis in support of a project to mine and process polyhalite. ICP retained the following consulting companies to assist with the development of the PEA:

- Golder – lead consultant to compile relevant data, update the Mineral Resource estimate, refresh the mining plan, compile capital and operating costs, and complete the economic analysis
- Upstream Resources – to perform product development studies and subsequent data analysis
- CRU Group – to perform a market analysis on polyhalite and forecast price assumptions to be used in the economic analysis
- INTERA Incorporated (INTERA) – to provide support on behalf of ICP by providing references to documents and resources that contained information relevant for review of permitting needs and risks.

Technical personnel from Golder are the QP authors of this TR, as summarized below, and identified in the Certificates of Qualified Persons included as Appendix A. The authors obtained information and data during the study from March 2016 through September 2016. Representatives from Golder visited the Project site and company offices on September 8, 2016, along with ICP representative Robert Goins.

Relevant data was reviewed in sufficient detail for preparation of the PEA and this TR.

The following personnel are independent QPs for this TR:

Daniel Saint Don, P.Eng, MBA, acted as Study Manager for Golder and reviewed technical data, oversaw the development of the room-and-pillar mine plan, mine access, estimation of the mine operating and capital cost, environmental, and financial analysis. Mr. Saint Don conducted a site visit September 8, 2016, which included inspection of water wells, Jal loadout location conditions, project site inspection, and infrastructure review.

Jerry DeWolfe, P.Geo, developed the geological model and estimated Mineral Resources. Mr. DeWolfe conducted a site visit September 8, 2016, to inspect drillhole collars, the general condition of site, and core storage facilities.

Alva L. Kuestermeyer, SME Registered Member and AusIMM Fellow Member, acted as metallurgical engineer for review and compilation of metallurgical test work, process plant design, and flow sheet.

Peter Critikos, PE and QP member of MMSA, developed the process criteria and flow sheet and estimated the operations infrastructure technical and cost requirements for the PEA. Mr. Critikos did not conduct a site visit and relied on Mr. Saint Don and Mr. DeWolfe for information regarding current available infrastructure and general condition of the site.

2.1 Units

All tonnages are noted in short tons unless otherwise noted. All costs are expressed in 2016 US Dollars ($) with no allowance for escalation, currency fluctuation, or interest during construction.

2.2 Abbreviations & Acronyms

2014 Study	2014 Feasibility Study completed by Agapito Associates Inc. and SNC Lavalin
AAI	Agapito Associates Inc.
AOI	area of influence
BLM	Bureau of Land Management
BLM Permit	Prospecting Permits issued by the Bureau of Land Management
CAGR	compound annual growth rate
CCTV	closed-circuit television
CFM	cubic feet per minute
CIM	Canadian Institute of Mining, Metallurgy and Petroleum Council
CIMDS	Canadian Institute of Mining, Metallurgy and Petroleum Council Definitions Standards adopted May 10, 2014
CM	continuous miners
CRU	CRU International Limited
DBOM	design, build, operate, and maintain
DCF	discounted cashflow
DOI	US Department of Interior
DPM	diesel particulate matter
EIS	Environmental Impact Statement
FOB	free on board
FS	feasibility study
Golder	Golder Associates Inc.
GPRs	gross profit royalties
ICP	Intercontinental Potash Corp.
INTERA	INTERA Geoscience Incorporated
IRR	internal rate of return

kV	kilovolt
LAN	local area network
MOP	muriate of potash
Mtpy	million tons per year
MW	megawatts
NEPA	National Environmental Protection Act
NM 128	New Mexico State Road 128
NMAQB	New Mexico Environmental Department Air Quality Board
NMSLO	New Mexico State Land Office
NMLSO Lease	New Mexico State Land Office State Trust Lease
NPK	nitrogen/phosphorous/potassium
NPV	net present value
OSD	out-of-seam dilution
PCA	Potash Corporation of America
pcf	pounds per cubic foot
PCS	process control system
PEA	Preliminary Economic Assessment
PFD	process flow diagram
PFS	pre-feasibility study
POB	points of observation
PRL	Preference Right Lease
QA/QC	quality assurance/quality control
QP	Qualified Person
RO	reverse osmosis
ROD	Record of Decision
ROM	run-of-mine
ROW	right of way
SHPO	State Historic Preservation Office
Sirius	Sirius Minerals PLC
SOP	Sulfate of Potash
SOPM	sulfate of potash-magnesia
the Project	Ochoa Project
TNMR	Texas-New Mexico Railroad
tph	tons per hour
TR	Technical Report
TSX	Toronto Stock Exchange
UCS	unconfined compressive strength
UPRR	Union Pacific Railroad
US	United States of America
US$ or $	US Dollars
USACE	US Army Corps of Engineers
USBM	US Bureau of Mines
USGS	United States Geological Survey
WAN	wide area network

wt.%	weight percent
WTP	water treatment plant
XRD	x-ray diffraction
XRF	x-ray fluorescence

3.0 RELIANCE ON OTHER EXPERTS

The authors of this TR state they are QPs for those areas as identified in the appropriate "Certificate of Qualified Persons" attached as Appendix A. The authors have relied upon the following expert reports described below pertaining to mineral tenure, surface rights, access, seismic interpretations, marketing, environment, and permitting as allowed under Item 3 of Form 43-101F1.

3.1 Mineral Tenure

The QPs have not reviewed mineral tenure, nor independently verified the legal status or ownership of the mineral title and underlying property agreements. The QPs have relied upon and disclaim responsibility for information supplied by ICP and independent experts retained by ICP with respect to mineral tenure, which is represented in Item 4.0 of this TR, including information derived from the following documents:

- 2014 Study
- SNC Lavalin and Agapito Associates, Inc, "NI 43-101 Technical Report Ochoa Project Feasibility Study Lea County, New Mexico, USA," 7 March 2014.

3.2 Surface Rights & Access

The QPs have not reviewed surface rights and access agreements, nor independently verified the legal status or ownership of the surface title and underlying property agreements. The QPs have relied upon and disclaim responsibility for information supplied by ICP and independent experts retained by ICP with respect to surface rights and access, which is represented in Item 4.0, including information derived from the following documents:

- 2014 Study
- SNC Lavalin and Agapito Associates, Inc, "NI 43-101 Technical Report Ochoa Project Feasibility Study Lea County, New Mexico, USA," 7 March 2014.

3.3 Market Studies

An independent marketing analysis was completed by CRU, an independent, industry-recognized marketing expert specializing in agribusiness, fertilizer, minerals and energy business. CRU provided an updated marketing summary. The QP has reviewed these analyses and relied upon the results and conclusions produced by CRU in the report titled Polyhalite Market Study, July 2016. This report is summarized in Item 19 and support the assumptions in this TR.

3.4 Product Development

ICP retained Upstream Resources LLC (Upstream) to complete product development testing and comparison of product specifications with other polyhalite products on the market. Upstream is an independent consulting group that is involved in mineral and energy resource projects worldwide. Upstream provided a report titled Product Development Report – Interim Study, September 2016. The QP has reviewed this report and relied upon the results and conclusions produced by Upstream. This report is summarized in Item 19 and support the assumptions in this TR.

3.5 Environmental & Permitting

The QPs have relied on INTERA Incorporated for completeness of environmental and permitting information. ICP has retained INTERA throughout the permitting process as they maintain existing environmental compliance issues as well as provide guidance on future environmental initiatives.

An independent environmental and socio-economic assessment, permitting schedule, and reclamation evaluation was completed by INTERA (2013) and Walsh (2013a). In addition, INTERA acted as an ICP consultant for the Environmental Impact Statement (EIS). The QPs have relied upon the results and conclusions produced by INTERA in Item 20.0 of this TR.

4.0 PROPERTY DESCRIPTION & LOCATION

The Property for the Ochoa Mine Project is located in Lea and Eddy Counties, New Mexico, and consists of 86,027.27 acres. See Figure 4.1 for the location of the Project. Production is expected to be sourced from federal and state lands.

The material presented herein references and relies upon the 2014 Study, published January 28, 2014. This Item additionally relies upon information found in a previously published NI 43-101 compiled by Agapito Associates, Inc, and SNC Lavalin, published in March 2014. In addition, ICP has continued work in the areas of land tenure, permitting and property rights since the publishing of the FS. The PEA has updated these aspects of the Project. All new property developments should be considered in future studies.

4.1 Mineral & Surface Land Tenure

ICP currently holds 26 prospecting permits issued by the Bureau of Land Management (BLM Permits), totaling 58,223.28 acres. Additionally, ICP holds 18 State Trust Lands potash mining leases from the New Mexico State Land Office (NMSLO Leases), totaling 27,803.99 acres.

BLM Permits allow exploration; however, a Preference Right Lease (BLM PRL) is required to actually mine. A BLM Permit can be converted to a PRL by demonstrating that a valuable mineral resource has been discovered within the BLM Permit area, and that the lands are “chiefly valuable” for the valuable mineral resource. ICP currently holds 15 Preference Right Leases totaling 14,773.96 acres. The remaining 43,449.32 acres are protected under Preference Right Lease Applications.

BLM PRLs do not expire, but are subject to readjustment every 20 years. NMSLO Leases have a term of 10 years, but are automatically extended as long as average annual production is enough to generate the minimum required royalty (over any three consecutive years).

All BLM Permits and NMSLO Leases are on file at the Count Clerk’s Office, the BLM, and the NMSLO, as appropriate. Table 4.1 lists active BLM Permits, while Table 4.2 lists the NMSLO Leases for the Project.

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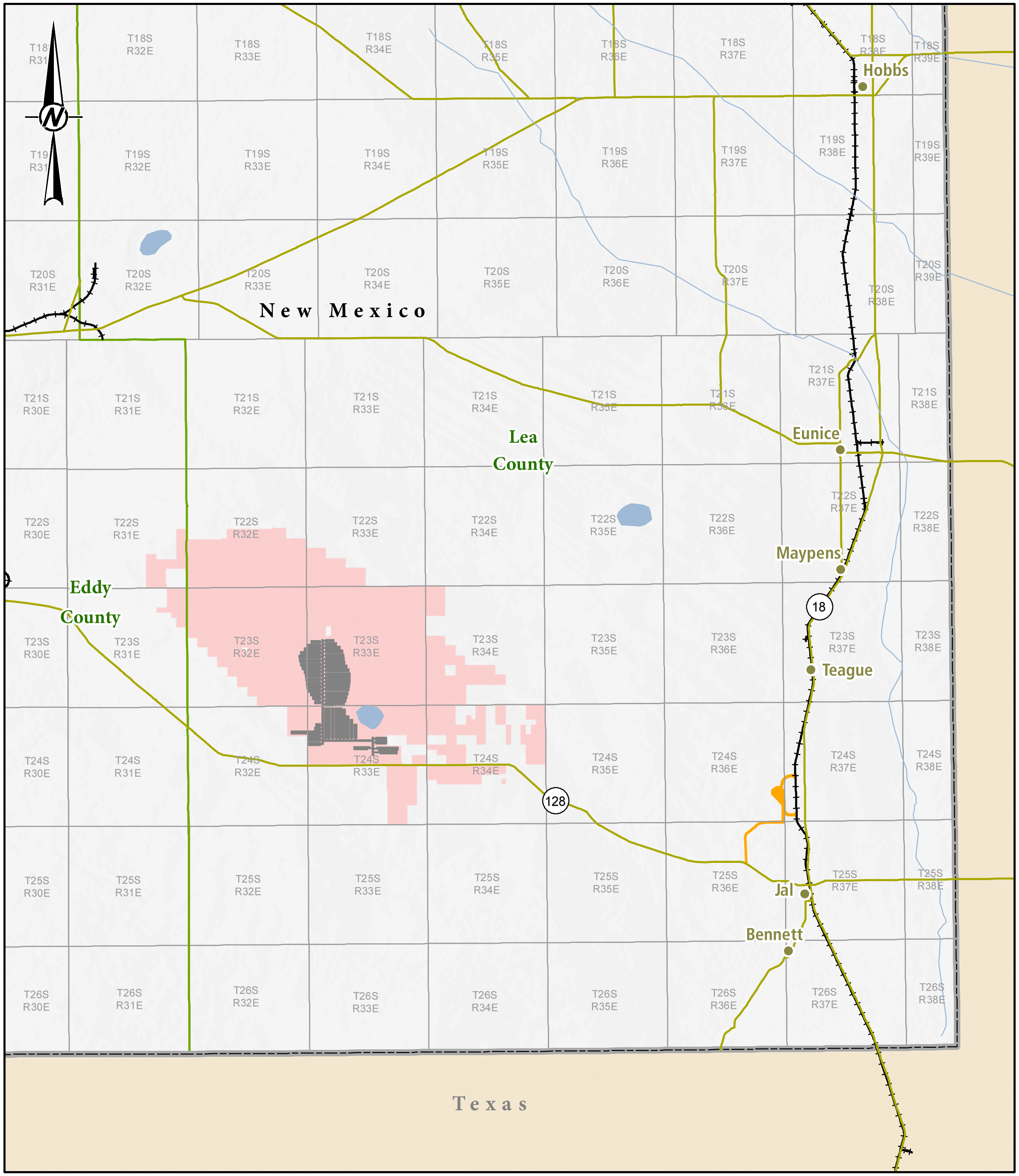

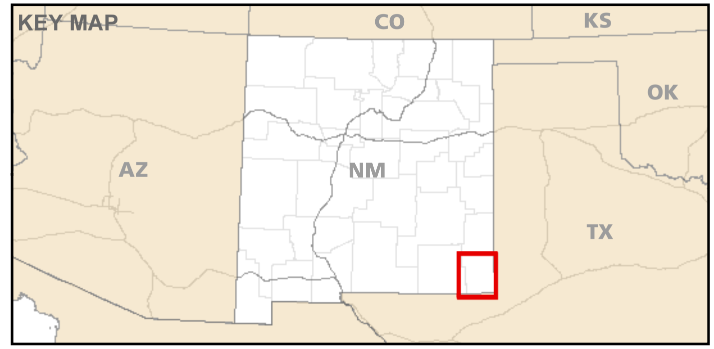

LEGEND

- Exploration Boundary
- Jal Loadout
- Proposed Underground Layout
- Railroad
- Major Road
- State
- County
- Township
- Town
- Surface Water

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 6 12 Miles

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
SITE LOCATION

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-11-02
DESIGNED	CH
PREPARED	JF
REVIEWED	CH
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	4.1

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Table 4.1: Active BLM Permits

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
121105-tbd	Preference Right Lease Application	Pending	2,559.08	Township 24 South, Range 34 East Sec. 09: N/2,SE/4 Sec. 11: W/2W/2, E/2E/2 Sec. 12: E/2, SW/4, E/2NW/4 Sec. 13: All Sec. 19: N/2, SE/4,N/2SW/4
121107-tbd	Preference Right Lease Application	Pending	1,695.31	Township 23 South, Range 34 East Sec. 06: Lots 1-7, SE/4NW/4, E/2SW/4, S/2NE/4, SE/4 Sec. 07: Lots 1-2, E/2NW/4, NE/4 Sec. 18: Lot 3, SE/4, NE/4SW/4 Sec. 19: Lots 2-4, E/2SW/4, SE/4, E/2NE/4, SW/4NE/4, SE/4NW/4
121107A	Preference Right Lease	11/1/2014	195.78	Township 23 South, Range 34 East Sec. 18: SE/4SW/4, Lot 4 Sec. 19: NE/4NW/4, NW/4NE/4, Lot 1
121108-tbd	Preference Right Lease Application	Pending	2,279.38	Township 24 South, Range 34 East Sec. 01: Lots 1-4, S/2N/2, N/2SW/4, SE/4 Sec. 03: Lots 1-2, S/2NE/4, SE/4 Sec. 04: Lots 1-2, S/2NE/4, SE/4,S/2SW/4, NW/4SW/4 Sec. 05: Lots 3-4, S/2NW/4,SW/4 Sec. 07: Lot 2, SE/4NW/4, S/2NE/4 Sec. 08: N/2, SW/4
121108A	Preference Right Lease	11/1/2014	159.35	Township 24 South, Range 34 East Sec. 7: NE/4NW/4, N/2NE/4; Lot 1
121109-tbd	Preference Right Lease Application	Pending	1,600.00	Township 24 South, Range 33 East Sec. 11: S/2N/2 Sec. 12: S/2S/2, SW/4NW/4, SE/4NE/4, NE/4SE/4, NW/4SW/4 Sec. 13: SE/4, E/2SW/4 Sec. 14: W/2E/2, N/2NW/4, S/2SW/4 Sec. 23: W/2, NE/4, W/2SE/4

Golder Associates

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
121109A	Preference Right Lease	11/1/2014	720	Township 24 South, Range 33 East Sec. 11: N/2N/2 Sec. 12: N/2N/2, SE/4NW/4, SW/4NE/4, NW/4SE/4, NE/4SW/4 Sec. 14: S/2NW/4, N/2SW/4 Sec. 23: E/2SE/4
121110-tbd	Preference Right Lease Application	Pending	160	Township 24 South, Range 33 East Sec. 24: E/2W/2
121110A	Preference Right Lease	11/1/2014	1,120.00	Township 24 South, Range 33 East Sec. 24: W/2W/2 Sec. 25: W/2 Sec. 26: All
121111-tbd	Preference Right Lease Application	Pending	640	Township 23 South, Range 33 East Sec. 28: All
121111A	Preference Right Lease	11/1/2014	1,920.00	Township 23 South, Range 33 East Sec. 24: All Sec. 25: All Sec. 26: All
121112-tbd	Preference Right Lease Application	Pending	2,439.57	Township 24 South, Range 34 East Sec. 17: All Sec. 18: Lot1, NE/4NW/4, NE/4 Sec. 20: All Sec. 21: N/2, SW/4,W/2SE/4 Sec. 22: N/2, SE/4SE/4
121113-tbd	Preference Right Lease Application	Pending	520	Township 23 South, Range 33 East Sec. 21: E/2, E/2NW4, E/2SW/4, SW/4SW/4
121113A	Preference Right Lease	11/1/2014	1,400.00	Township 23 South, Range 33 East Sec. 13: S/2 Sec. 14: S/2 Sec. 21: W/2NW/4, NW/4SW/4 Sec. 23: All

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
121114-tbd	Preference Right Lease Application	Pending	1,472.07	Township 23 South, Range 33 East Sec. 01: Lots 1-4, S/2N/2, S/2 Sec. 04: Lots 1-4, N/2S/2, S/2N/2 Sec. 05: Lots 1-3, S/2NE/4, N/2SE/4 Sec. 06: Lots 4-5
121114A	Preference Right Lease	11/1/2014	1,074.89	Township 23 South, Range 33 East Sec. 04: S/2S/2 Sec. 05: N/2SW/4, S/2S/2, S/2NW/4; Lot 4 Sec. 06: E/2SW/4, SE/4, S/2NE/4, SE/4NW/4; Lots 1-3, 6-7
121115-tbd	Preference Right Lease Application	Pending	200	Township 23 South, Range 33 East Sec. 11: NE/4, NE/4NW/4
121115A	Preference Right Lease	11/1/2014	2,350.80	Township 23 South, Range 33 East Sec. 7: E/2, E/2W/2; Lots 1-4 Sec. 8: All Sec. 9: All Sec. 11: S/2, S/2NW/4, NW/4NW/4
123690-tbd	Preference Right Lease Application	pending	720	Township 23 South, Range 32 East Sec. 24: E/2SE/4, SE/4NE/4 Sec. 25: W/2SW/4, NE/4NE/4 Sec. 26: NW/4 Sec. 27: N/2
123690A	Preference Right Lease	11/1/2014	1,200.00	Township 23 South, Range 32 East Sec. 24: W/2, W/2E/2, NE/4NE/4 Sec. 25: W/2NE/4, SE/4, SE/4NE/4, E/2SW/4, NW/4 Sec. 26: NE/4

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
123691-tbd	Preference Right Lease Application	pending	2,125.08	<u>Township 22 South, Range 32 East</u> Sec. 30: Lot 4 <u>Township 23 South, Range 32 East</u> Sec. 1: SW/4, NW/4SE/4 Sec. 3: SE/4NW/4, S/2NE/4, S/2; Lots 1-4 Sec. 4: S/2NW/4, SW/4NE/4, S/2; Lots 1-4 Sec. 5: S/2N/2, S/2; Lots 1-4 Sec. 6: Lot 7
123691A	Preference Right Lease	11/1/2014	40	<u>Township 23 South, Range 32 East</u> Sec. 1: SW/4SE/4
123692-tbd	Preference Right Lease Application	pending	2,535.70	<u>Township 23 South, Range 32 East</u> Sec. 6: SE/4NW/4, S/2NE/4, E/2SW/4, SE/4; Lots 1-6 Sec. 8: All Sec. 9: All Sec. 10: All
123693-tbd	Preference Right Lease Application	pending	920	<u>Township 23 South, Range 32 East</u> Sec. 12: N/2NW/4 Sec. 22: All Sec. 23: N/2NW/4, SW/4NW/4, W/2SW/4
123693A	Preference Right Lease	11/1/2014	1,480.00	<u>Township 23 South, Range 32 East</u> Sec. 12: W/2E/2, SW/4, S/2NW/4 Sec. 13: All Sec. 23: E/2, E/2SW/4, SE/4NW/4
123694-tbd	Preference Right Lease Application	pending	2,534.80	<u>Township 22 South, Range 32 East</u> Sec. 28: All Sec. 29: All Sec. 30: E/2W/2, E/2; Lots 1-3 Sec. 33: All

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
124371-tbd	Preference Right Lease Application	pending	2,249.63	Township 22 South, Range 32 East Sec. 19: E/2SW/4, SE/4; Lots 3-4 Sec. 20: S/2 Sec. 21: All Sec. 22: All Township 22 South, Range 33 East Sec. 29: S/2
124372-tbd	Preference Right Lease Application	pending	2,560.00	Township 22 South, Range 32 East Sec. 23: All Sec. 24: S/2 Sec. 25: All Sec. 26: All Sec. 27: N/2
124373-tbd	Preference Right Lease Application	pending	2,260.72	Township 22 South, Range 32 East Sec. 27: S/2 Sec. 31: E/2W/2, E/2; Lots 1-4 Sec. 34: All Sec. 35: All
124374-tbd	Preference Right Lease Application	pending	1,200.00	Township 22 South, Range 31 East Sec. 24: E/2 Sec. 25: SW/4, E/2 Sec. 26: S/2NW/4, S/2
124375-tbd	Preference Right Lease Application	pending	2,039.25	Township 22 South, Range 31 East Sec. 35: All Township 23 South, Range 31 East Sec. 1: S/2N/2, S/2; Lots 1-4 Sec. 11: N/2NE/4 Sec. 12: N/2NW/4, SE/4NW/4, E/2 Township 23 South, Range 32 East Sec. 1: SW/4NE/4, S/2NW/4; Lots 2-4

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
124376-tbd	Preference Right Lease Application	pending	1,903.92	Township 23 South, Range 32 East Sec. 7: E/2W/2, E/2; Lots 1-4 Sec. 11: W/2, NE/4 Sec. 14: W/2, SW/4NE/4, W/2SE4 Sec. 15: N/2
124376A	Preference Right Lease	11/1/2014	360	Township 23 South, Range 32 East Sec. 11: SE/4 Sec. 14: NW/4NE/4, E/2E/2
124377-tbd	Preference Right Lease Application	pending	2,492.07	Township 23 South, Range 32 East Sec. 15: S/2 Sec. 17: All Sec. 18: E/2NW/4, NE/4, SE/4; Lots 1-2 Sec. 20: N/2, SE/4 Sec. 21: S/2, NW/4, W/2NE/4
124378-tbd	Preference Right Lease Application	pending	2,240.00	Township 23 South, Range 32 East Sec. 26: S/2 Sec. 27: S/2 Sec. 28: N/2, SE/4 Sec. 34: N/2, SE/4 Sec. 35: All
124379-tbd	Preference Right Lease Application	pending	749.53	Township 23 South, Range 33 East Sec. 19: E/2W/2, Lots 1-4 Sec. 29: S/2 Sec. 30: E/2SE/4, Lots 1
124379A	Preference Right Lease	11/1/2014	1,793.79	Township 23 South, Range 33 East Sec. 19: E/2 Sec. 20: All Sec. 29: N/2 Sec. 30: NE/4, W/2SE/4, E/2W/2; Lots 2-4

Table 4.1: Active BLM Permits (continued)

Serial No. (NMNM)	Authorization	Date Issued	Total Acres	Lands
124380-tbd	Preference Right Lease Application	pending	2,080.00	Township 23 South, Range 34 East Sec. 20: S/2, NW/4 Sec. 27: S/2, NW/4 Sec. 28: All Sec. 29: S/2, NE/4
124381-tbd	Preference Right Lease Application	Pending	1,273.21	Township 24 South, Range 32 East Sec. 01: Lot 4, SW/4NW/4, SW/4,S/2SE/4 Sec. 12: N/2 Township 23 South, Range 34 East Sec. 30: Lots 1-4, E/2W/2, E/2
124381A	Preference Right Lease	11/1/2014	319.35	Township 24 South, Range 32 East Sec. 01: S/2NE/4, N/2SE/4, SE/4NW/4, Lots 1-3
124381B	Preference Right Lease	11/1/2014	640	Township 24 South, Range 33 East Sec. 35: All
		TOTAL	**58,223.28**	

Table 4.2: Active NMSLO Leases

Serial Number	Township and Range	Sections and Descriptions	BLM Approval Date	Acreage
HP-0030	Township 22 South, Range 32 East, NMPM	Section 32	24-May-10	640.00
HP-0031	Township 22 South, Range 32 East, NMPM	Section 36	24-May-10	640.00
HP-0031	Township 23 South, Range 32 East, NMPM	Section 1: Lot 1, E2SE4, SE4NE4 Section 12: E2E2	24-May-10	319.95
HP-0032	Township 23 South, Range 32 East, NMPM	Section 3: SW4NW4 Section 4: SE4NE4	24-May-10	80.00
HP-0033	Township 23 South, Range 32 East, NMPM	Section 2: Lots 1-4, S2, S2N2	24-May-10	638.52
HP-0034	Township 23 South, Range 32 East, NMPM	Section 16: All lands	24-May-10	640.00
HP-0035	Township 23 South, Range 32 East, NMPM	Section 21: SE4NE4	24-May-10	40.00
HP-0036	Township 22 South, Range 33 East, NMPM	Section 30: Lots 1-4, E2, E2W2 Section 31: Lots 1-4, E2, E2W2 Section 32: All lands Section 33: All lands	24-May-10	2,533.44
HP-0037	Township 23 South, Range 33 East, NMPM	Section 2: Lots 1-4, S2, S2N2 Section 3: Lots 1-4, S2, S2N2 Section 10: All lands	24-May-10	1,917.64
HP-0038	Township 23 South, Range 33 East, NMPM	Section 12: All lands	24-May-10	640.00
HP-0039	Township 23 South, Range 33 East, NMPM	Section 15: All lands Section 16: All lands Section 17: E2, E2NW4, SW4 Section 18: Lots 1-4, E2, E2W2	24-May-10	2,471.40
HP-0040	Township 23 South, Range 33 East, NMPM	Section 22: All lands Section 27: All lands Section 33: All lands Section 34: All lands	24-May-10	2,560.00
HP-0041	Township 23 South, Range 33 East, NMPM	Section 35: All lands Section 36: All lands	24-May-10	1,280.00
HP-0041	Township 23 South, Range 34 East, NMPM	Section 31: Lots 1-4, E2, E2W2 Section 32: All	24-May-10	1,274.80

Table 4.2: Active NMSLO Leases (continued)

Serial Number	Township and Range	Sections and Descriptions	BLM Approval Date	Acreage
HP-0042	Township 24 South, Range 33 East, NMPM	Section 1: Lots 1-4, S2, S2N2 Section 2: Lots 1-4, S2, S2N2 Section 3: Lots 1-4, S2, S2N2	24-May-10	1,918.60
HP-0042	Township 24 South, Range 34 East, NMPM	Section 6: Lots 1-7, SE4, S2NE4, E2SW4, SE4NW4	24-May-10	636.24
HP-0043	Township 23 South, Range 33 East, NMPM	Section 32: All lands	24-May-10	640.00
HP-0043	Township 24 South, Range 33 East, NMPM	Section 4: Lots 1-4, S2, S2N2 Section 5: Lots 1-4, S2, S2N2 Section 8: All lands	24-May-10	1,918.76
HP-0044	Township 23 South, Range 32 East, NMPM	Section 36: All lands	24-May-10	640.00
HP-0044	Township 23 South, Range 33 East, NMPM	Section 31: Lots 1-4, E2, E2W2	24-May-10	632.36
HP-0044	Township 24 South, Range 33 East, NMPM	Section 6: Lots 1-7, SE4, S2NE4, E2SW4, SE4NW4 Section 7: Lots 1-4, E2, E2W2	24-May-10	1,268.12
HP-0045	Township 24 South, Range 33 East, NMPM	Section 9: All lands Section 10: All lands Section 15: All lands	24-May-10	1,920.00
HP-0046	Township 23 South, Range 33 East, NMPM	Section 13: N2 Section 14: N2	24-May-10	640.00
HP-0047	Township 24 South, Range 33 East, NMPM	Section 16: All Section 17: All Section 18: Lots 1-4, E2, E2W2	15-Jan-13	1,914.16
			Total	**27,803.99**

4.2 Royalties

ICP would be required to pay royalties on production from BLM PRLs and NMSLO Leases; see Table 4.3 for the anticipated rates.

Table 4.3: Anticipated Royalty Schedule

Agency	Royalty
New Mexico State Land Office (NMSLO)	5% of the gross value of production
US Bureau of Land Management (BLM)	5% of the gross value at the point of shipment to market

For the NMSLO Leases, a minimum advance royalty payment of $8.00 per acre is payable to the state of New Mexico Commissioner of Public Lands. Once the Ochoa project comes into production, minimum royalties of 5% of the gross value of production after processing will be owed on the NMSLO leases.

In addition, once the Ochoa project comes into production, and no later than six years after obtaining the federal BLM PRLs, minimum royalty payments of 5% of the gross value at the point of shipment to market are expected to be imposed on the federal BLM PRLs.

Gross profit royalties (GPRs) totaling 3% are payable for a term of 25 years after production first reaches 50%. ICP may acquire, at its option, up to one-half of the GPRs at a price of $3,000,000 per 0.5% royalty interest. Payments due may be deferred under certain conditions until any initial project financing for the Project has been repaid or other terms of the project financing have been satisfied.

An additional private royalty of $1.00 per ton of polyhalite mine applies to the first 1 Mt and $0.50 per ton thereafter is also payable on the Project pursuant to an agreement with a third party.

For the purposes of cashflow modeling, the aggregate of all royalties is equivalent to approximately 6.7% of total gross revenue.

4.3 Other Risks & Factors

The loadout facility, haul roads, and water supply pipeline will be located on private, state, and federal lands. ICP has negotiated agreements with private entities for this infrastructure, but right-of-way (ROW) agreements with private entities are ongoing. Additionally, ROW agreements for federally and state-owned lands are contingent upon final project designs and amended permit results

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, & PHYSIOGRPAHY

The Ochoa Project Property is located in Lea County, New Mexico, approximately 8 miles east of the Eddy County line. The Project is located approximately 60 miles east of Carlsbad and less than 22 miles northwest of Jal on NM 128. The process plant area will be located in all or portions of Sections 9, 10, 15, and 16 in Township 24S, Range 33E. The general site location is at geographic coordinates of 32.22° latitude north and 103.57° longitude west. See Figure 4.1 previously in this Report for the general site location.

The material presented herein references and relies upon the 2014 Study and the NI 43-101 compiled by Agapito Associates, Inc (2014b).

5.1 Access

The Ochoa Project is readily accessible from NM 128 and an extensive network of gravel roads. The Property is traversed by Lea County Road 2, also known as Brinninstool Road, and numerous two-track trails and primitive roads. The site's administrative facilities, processing plant, and main shaft site will be accessed from NM 128 via Brinninstool Road by a two-lane gravel access roadway north of NM 128. There are existing deceleration turn lanes in both directions on NM 128 at the intersection with Brinninstool Road.

Airports are located near Carlsbad (Eddy County), approximately 60 miles west via NM 128, and at Hobbs, New Mexico (Lea County), via NM 128 and SH18, located about 70 highway miles north-northeast of the plant site. Both airports provide commercial and general aviation services.

The Jal loadout site is approximately 22 miles east of the plant site and north of the community of Jal, New Mexico. The loadout will be located near the existing TNMR line running north-south through Jal and connecting to the Union Pacific Railroad near Monahans, Texas. Highway access will be via Phillips Hill Road off SH18, which connects to NM 128 in Jal. An industrial spur track connection will be made with the TNMR to handle train shipments of polyhalite.

The mine's processing plant, administrative facilities, and main shaft site are located in parts of Sections 9, 10, 15 and 16, T24S/R33E. The Jal loadout site will be sited in Sections 24, 25, and 36, T24S/R36E and Sections 19 and 31, T24S/R37E.

5.2 Climate

The climate for the Project area is typical of a high plains desert environment: semi-arid with generally mild temperatures. The expected climatic environment will not significantly affect the ability to explore, mine, or process mineral resources.

5.3 Local Resources

Food, fuel, and limited services are available in Jal. Heavy equipment, industrial supplies, and mining support services are available in Carlsbad and Hobbs, New Mexico, and in Midland, Texas. Experienced labor for construction, mining, and processing is available from southeastern New Mexico, and nearby West Texas communities. Many local residents have worked in the underground potash mines and processing plants located between Carlsbad and Hobbs.

An Xcel Energy power line is located near the southern boundary of the Property. Several natural gas transmission pipelines cross the Property. The area encompassing the Property and surrounding lands has long been an active gas and oil production area with numerous permitted, active, and abandoned gas and oil well sites serviced with a network of interconnected small dirt roads, power lines, and pipelines.

5.4 Infrastructure

Adequate surface rights have been obtained or are under option to support mining and processing infrastructure on the Property in the form of leases or prospecting permits from the BLM and the NMSLO and private parties. See Item 4.0 for more information on permitting and leases. See Item 18.0 for more information on project infrastructure.

5.5 Physiography

The Property is located in the Pecos Valley section of the southern Great Plains physiographic province. The surface consists of relatively flat terrain with minor arroyos and low-quality semi-arid rangeland. Top soil is caliche rubble and wind-blown sand with mesquite, shinnery oak, and course grasses as the dominant vegetation. The Project area is sparsely vegetated and no cultivation is present. Elevation ranges from 3,100 feet to 3,750 feet above mean sea level.

6.0 HISTORY

6.1 Ownership History

Ownership of the Ochoa Project Property in its present state originates with ICP; there have been no previous owners or titleholders of the Project Property. Golder did not perform a search for nor establish the historical land tenure boundaries for any potential past exploration and mining license titleholders in the region. As a result, it is possible that a portion or all of the current Project property area may have been included in the land holdings of some historical titleholders in the area.

6.2 Exploration History

Potash mineralization was first discovered in the 1920s during oil and gas exploration near Carlsbad, approximately 60 miles west of the Project area. The Project represents the first exploration work in the Project area and within the Delaware sub-basin of the Permian Basin where potash mineralization in the form of polyhalite in the Rustler Formation is the primary focus. Past and current potash exploration and production activity in the Carlsbad area has focused on sylvite and langbeinite potash mineralization (some with associated accessory polyhalite mineralization) from the underlying Salado Formation (see Item 7.0 for a discussion of regional geology and mineralization).

In addition to potash mineralization, the Permian Basin is the largest producing petroleum field in the US and from the early 1900s through to present day there has been significant oil and gas exploration and production activity, targeting productive horizons in the formations underlying the potash-bearing formations. Polyhalite exploration and Project study activity for the Project is summarized in Table 6.1.

Table 6.1: Summary of Ochoa Project Exploration and Project Work History

Year	Exploration Phase	Description of Exploration Activity	Project Studies Completed
2008	-	Applied for initial exploration permits	Scoping study prepared by Micon
2009	Phase 1	Drilling of 6 core holes totaling 8,162 feet and including 113 analytical samples	Updated Scoping study prepared by Micon; PEA prepared by Chemrox & Gustavson
2010	Phase 2A	Drilling of 7 core holes totaling 10,427 feet and including 120 analytical samples	
2011	Phase 2B	Drilling of 7 core holes totaling 10,901 feet and including 157 analytical samples	Updated PEA prepared by Gustavson; PFS prepared by Gustavson
2012	Phase 3	Drilling of 12 core holes totaling 118,390 feet and including 256 analytical samples	
2014	-	no exploration activity	FS prepared by SNC Lavalin & Agapito Associates Inc.
2016	-	no exploration activity	PEA prepared by Golder Associates Inc.

6.3 Development History

As of the effective date of this TR there has been no polyhalite mining development work undertaken on the Project Property by either the current or previous owners or operators.

6.4 Production History

As of the effective date of this TR there has been no polyhalite production mining undertaken on the Project Property by either the current or previous owners or operators.

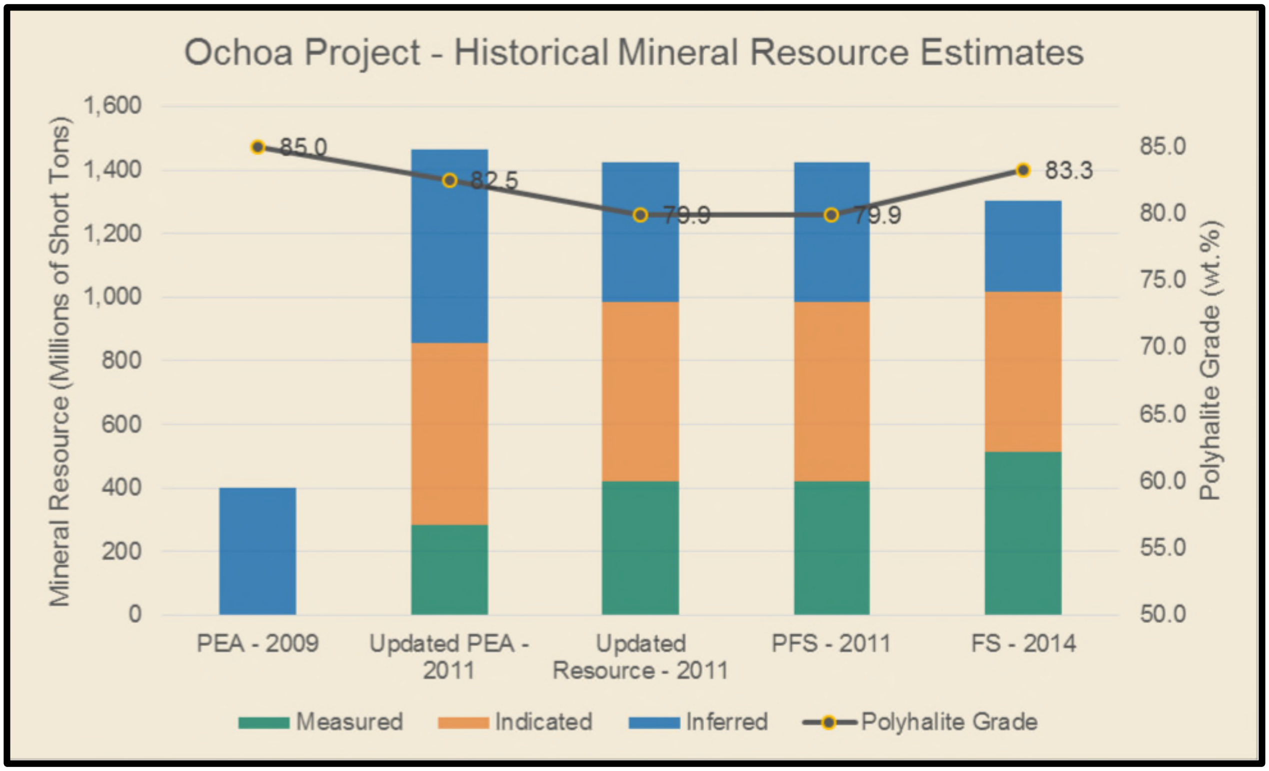
6.5 Historical Mineral Resource & Mineral Reserve Estimates

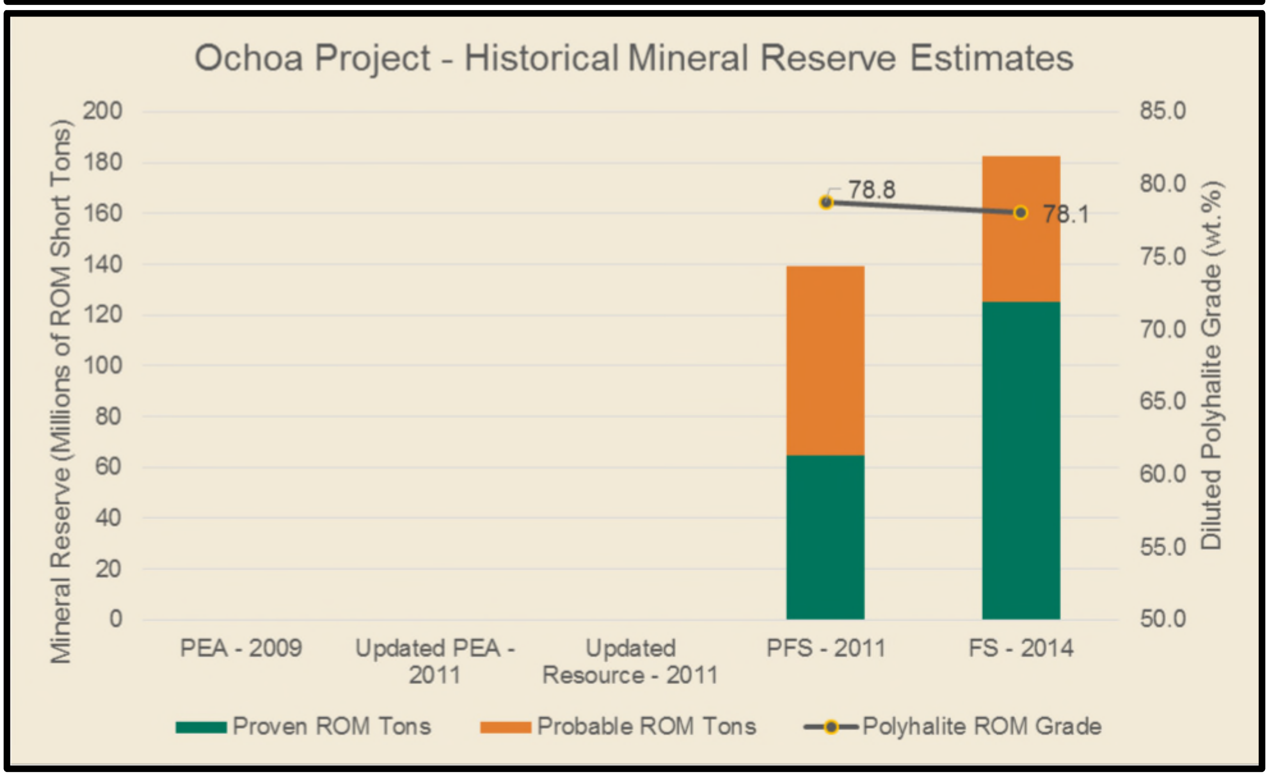
Prior to the ICP Phase 1 exploration program and corresponding 2009 maiden polyhalite Mineral Resource estimate prepared by Chemrox Technologies (Chemrox) and Gustavson Associates (Gustavson) on behalf of ICP, there were no reported historical polyhalite Mineral Resource estimates or Mineral Reserve estimates for the Project Property.

As summarized in Table 6.1, there were multiple iterations of polyhalite Mineral Resource estimates and Mineral Reserve estimates prepared as part of the PEA, PFS, and FS work performed on the Project between 2009 and 2014. The 2009 through 2014 Mineral Resource and Mineral Reserve estimates were prepared by ICP and their consultants in accordance with the NI 43-101 guidelines in place at the time of preparation. A summary of the 2009 through 2014 polyhalite Mineral Resource and Mineral Reserve estimate results is presented in Figure 6.1.

Golder and ICP are not considering any of the historical polyhalite Mineral Resource and Mineral Reserve estimates discussed in this section as current NI 43-101 compliant polyhalite Mineral Resources and Mineral Reserves; therefore, the 2009 through 2014 historical polyhalite Mineral Resources and Mineral Reserves should not be relied upon and are provided here simply for comparison purposes with the current polyhalite Mineral Resource estimate presented in Item 14.0 of this TR.

Figure 6.1: Summary of Historical Mineral Resource and Mineral Reserve Estimates





Note: the historical studies presented here use varying models, grade and thickness cut-offs, Mineral Resource and Reserve classification parameters and life of mine periods.

7.0 GEOLOGICAL SETTING & MINERALIZATION

The following section presents a summary of the regional and local geological setting for the polyhalite mineralization encountered in the Project area as presented in the New Mexico Bureau of Geology and Mineral Resources (2003), Keller et al. (1980), Jones and Madsen (1968) and references therein.

7.1 Regional Geology

Potash mineralization encountered in the Project area occurs within the Delaware Basin, a large Permian age (298.9 Ma to 254.1 Ma) sedimentary basin that developed as a foreland basin associated with late Carboniferous tectonic activity. The Delaware Basin is in turn a smaller sub-basin forming the western edge of the larger Permian Basin covering a large portion of west Texas and New Mexico. The regional geology map of the Project property and surrounding area, modified from the New Mexico Bureau of Geology and Mineral Resources surficial geology map (2003), is presented in Figure 7.1.

The Delaware Basin is bordered on the east by the Central Basin Platform which separates the Delaware Basin from the Midland Basin, the other major sub-basin of the Permian Basin. The Delaware Basin is bordered to the north by the Northwestern Shelf, to the west and southwest by the Diablo Platform, and to the south by the Ouachita Fold Belt. The Delaware Basin is asymmetric, with basin fill thickest along the eastern margin adjacent to the Central Basin Platform and thinnest to the west.

The Project area falls within the Carlsbad Potash District, which is host to significant past and current potash production from mines in the Carlsbad area, where the potash is predominantly in the form of sylvite (KCl) and langbeinite ($Mg_2K_2(SO_4)_3$. In addition to significant potash and other evaporite deposits, the Permian Basin is the largest producing petroleum field in the US.

The Permian stratigraphy is broken out into four Series as presented in Figure 7.1. Within the Delaware Basin the Early Permian (Wolfcamp Series and Leonard Series) was dominated by limestone and clastic sediment deposition as the basin continued to deepen and shelf carbonates covered a large portion of the basin. During the Middle Permian (Guadalupe Series) cyclical rise and fall in sea level in the basin resulted in cycles of carbonates, including development of the Capitan Reef complex, and back-reef evaporites. By Late Permian time (Ochoan Series) carbonate deposition was limited to a narrow area around the margins of the established Capitan Reef complex, with the basin fill being dominated by cyclical clastic and evaporite depositional sequences as the sea level continued to decline. The lowermost Late Permian clastic units were deposited in reducing marine environments while the final stage of deposition in the basin at the end of the Late Permian was in the form of continental red beds.

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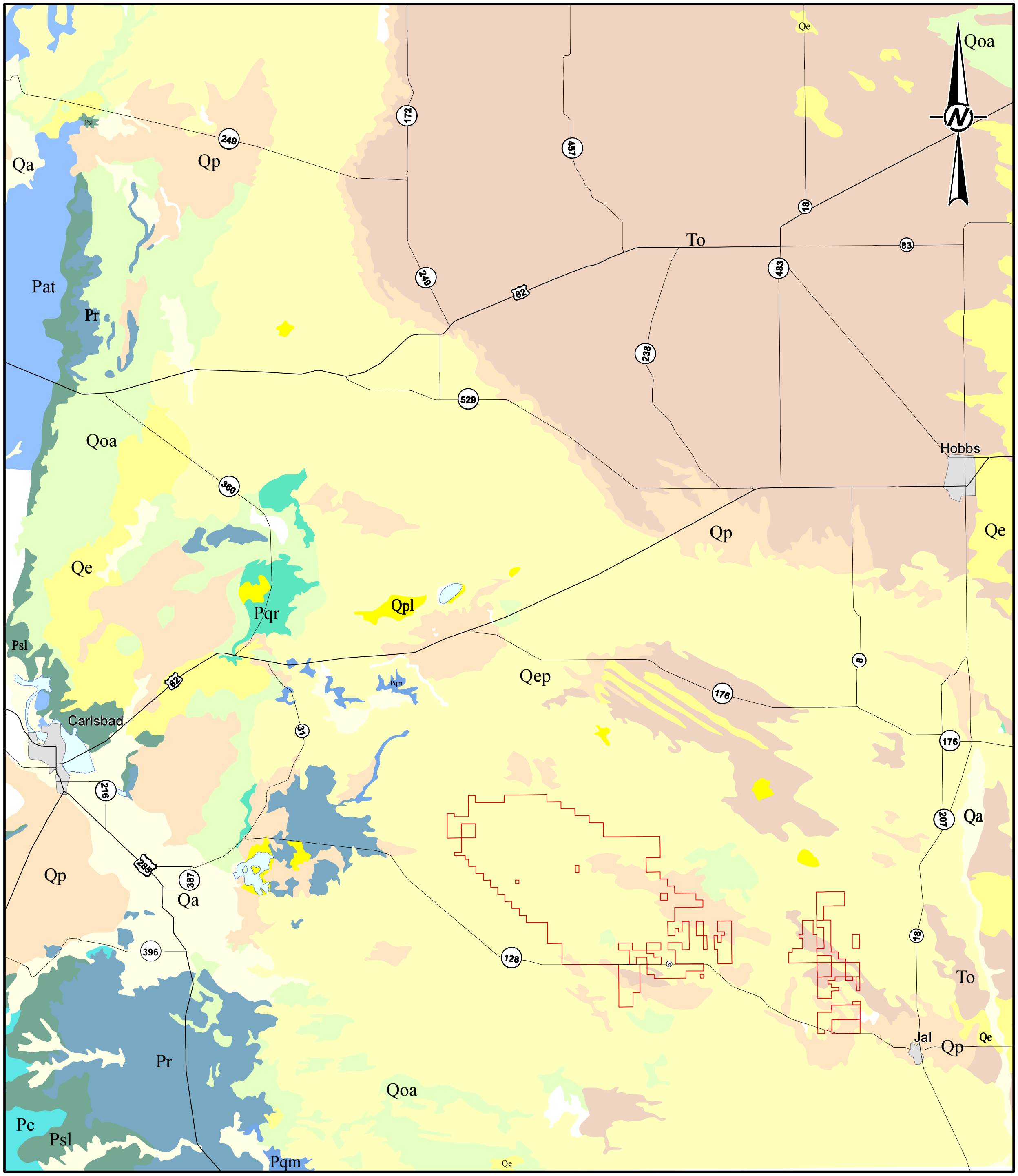

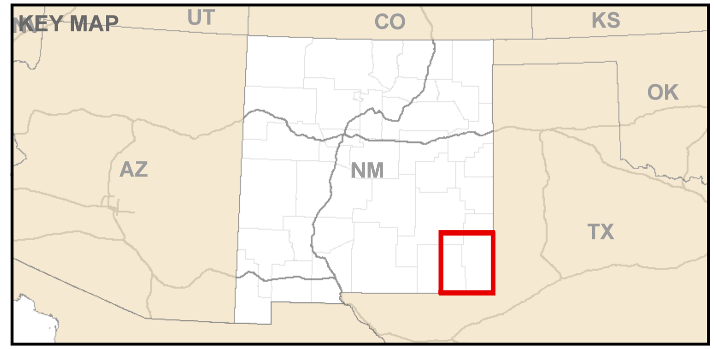

LEGEND

Geology

- Qa
- Qe
- Qep
- Qoa
- Qp
- Qpl
- Kl
- To
- Pat
- Pc
- Pqm
- Pqr
- Pr
- Psl

- ICP New Mexico Mineral Rights
- US Highway
- State Road
- Town
- Water

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 25,000 50,000 Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
REGIONAL GEOLOGY MAP

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	7.1

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Figure 7.2: Permian Stratigraphy

Eon	Era	System	Period	Series	Delaware Basin Gr. & Fm.	Period Age (Ma)
Phanerozoic	Cenozoic	Quaternary	Holocene		Quaternary sediments	Present
			Pleistocene		Quaternary volcanics	0.0117
		Tertiary	Pliocene		Tertiary volcanics	2.58
					Tertiary intrusives	
					Tertiary sediments	
			Miocene		Ogallala Fm.	5.333
	Mesozoic	Cretaceous				66
		Jurassic	*absent*			145
		Triassic				201.3 ± 0.2
	Paleozoic	Permian	Lopingian	Ochoan	Dewey Lake Fm.	254.14 ± 0.07
					Rustler Fm.	
					Salado Fm.	
					Castile Fm.	
			Guadalupian	Guadalupian	Artesia Gr.	259.8 ± 0.4
					Capitan Reef Fm.	
					Delaware Mountain Gr.	
			Cisuralian	Leonardian	San Andreas Fm.	272.3 ± 0.5
					Yeso Fm.	
					Ado Fm.	
				Wolfcampian	Hueco Fm.	
		Carboniferous	Pennsylvanian			298.9 ± 0.15
			Mississippian			323.2 ± 0.4
		Devonian				358.9 ± 0.4
		Silurian				419.2 ± 3.2
		Ordovician				443.8 ± 1.5
		Cambrian				485.4 ± 1.9
Precambrian						541.0 ± 1.0

Note: Prepared using information gathered from Jones and Madsen (1968), Cohen, et al (2013), and USGS (2016)

The Late Permian Ochoan age potash mineralization occurs within three evaporite bearing formations, namely the Castile, Salado, and Rustler formations. The evaporite bearing formations overlay the marine carbonate dominate sequence of the Capitan Reef Complex and are in turn overlain by the continental red beds of the Dewey Lake Formation. The Ochoan age units combine to span a total vertical thickness in excess of 4,000 feet.

The Castile Formation is the basal evaporite sequence within the Ochoan stratigraphy, comprising alternating thick beds of anhydrite and halite.

The Salado Formation is the middle evaporite sequence within the Ochoan stratigraphy, comprising an intricate series of alternating thick beds of halite, anhydrite, potash, and mudstone. Potash mineralization occurs in several distinct, thick zones throughout the sequence and is commonly associated with thick halite and anhydrite members.

The Rustler Formation is the upper evaporite sequence within the Ochoan stratigraphy, comprising alternating thick beds of anhydrite, halite, dolomite, and mudstone. Potash mineralization is focused in a single thick bed associated with anhydrite in the middle member (Tamarisk Member; see further discussion in the following section) of the formation.

The Dewey Lake Formation is the upper most formation in the Ochoan stratigraphy, unconformably overlying the Rustler Formation. The Dewey Lake Formation marks the transition from evaporite dominated deposition to terrestrial clastic sediment deposition with the Formation comprising alternating beds of oxidized mudstone, siltstone and sandstone.

The Permian stratigraphy is overlain by alternating red shales, sandstones, and limestones from the Triassic and Cretaceous (there is no preserved Jurassic stratigraphy in the Project area). This is in turn overlain by Neogene and Quaternary era gravel, sand, clay, and silt.

The basin stratigraphy is gently folded by a broad regional-scale open syncline, with the fold axes paralleling the southeast trending long axes of the basin. The limbs dip gently across the basin but are slightly higher in the eastern portion of the basin in the west. The combination of the basin geometry during deposition (deeper in the east where bounded against the Central Basin Platform), uplift of the western edge of the basin onto the adjacent shelf, and the nature of the syncline fold all combine to give the basin an asymmetrical nature with basin fill thickest in the center an eastern portions of the basin relative to the west.

7.2 Local & Property Geology

Potash mineralization on the Project Property and surrounding area is in the form of polyhalite mineralization hosted within anhydrite situated in the Rustler Formation. The Rustler Formation is subdivided into five members as presented in Figure 7.3.

Within the Project property the total Rustler Formation (composite of all five members) has a mean thickness of 400 feet (range of 248 feet to 619 feet).

The Los Medanos Member is the basal member of the Rustler Formation, comprising alternating units of mudstone, halite, and anhydrite, with the clastic and evaporite units often intermingled on a fine scale to produce muddy halite and anhydrite beds. Within the Project property, the Los Medanos Member has a mean thickness of 134 feet (range of 65 feet to 231 feet).

The Culebra Member sits above the Los Medanos Member, comprising a thick unit of pink-grey dolomite. Within the Project property the Culebra Member has a mean thickness of 31 feet (range of 9 feet to 70 feet).

Figure 7.3: Rustler Formation Members and Units

System	Series	Formation	Member	Unit	
Permian	Ochoan	Rustler Formation	Forty-Nine Member	A5	
				M4	
				A4	
			Magenta Member		
			Tamarisk Member	A3	
				H3	Halite
					POLY1
					POLY2
					POLY3
					H3A
					H3S
				A2	
			Culebra Member		
			Los Medanos Member		
		Salado Formation			

Note: Prepared using information gathered from Jones and Madsen (1968), Cohen, et al (2016), and USGS (2016)

The Tamarisk Member sits stratigraphically above the Culebra Member, comprising a basal zone of anhydrite, a middle zone of mudstone and halite, and an upper zone of anhydrite. The potash mineralization that is the focus of exploration on the Project property and surrounding area is in the form of polyhalite mineralization hosted within the basal anhydrite. Within the Project property the Tamarisk Member has a mean thickness of 145 feet (range of 28 feet to 350 feet).

The Magenta Member sits stratigraphically above the Tamarisk Member, comprising a thick unit of dolomite with minor gypsum. Within the Project property the Magenta Member has a mean thickness of 22 feet (range of 9 feet to 37 feet).

The Forty-Nine Member sits stratigraphically above the Magenta Member and is the uppermost member of the Rustler formation. The member is similar in composition to the Tamarisk Member with a lower anhydrite zone, a middle zone of mixed mudstone and halite and an upper anhydrite zone. Within the Project Property the Forty-Nine Member has a mean thickness of 65 feet (range of 35 feet to 93 feet).

Within the Project area, the Rustler Formation is overlain by a sequence of Mesozoic Era sedimentary units and Cenozoic unconsolidated gravels, sands and clays. Within the Project Property the composite overburden thickness above the top of the Rustler Formation has mean thickness of 1,080 feet (range of 300 feet to 2,400 feet).

The stratigraphy of the Rustler Formation dips gently, with dip ranging from 1° to 2°, from west to east across the majority of the Project area, increasing slightly to 6° to 7° towards the eastern limit of the Project area. Due to the asymmetric nature of the basin, the Members are thickest to the east and pinch out to the west as they on-lap onto the underlying basin fill units.

There are no identified post-depositional structural features that modify the Rustler Formation members within the Project area.

7.3 Property Mineralization

The potash mineralization encountered in the Project area is in the form of polyhalite hosted in anhydrite members of the Rustler Formation. Polyhalite is a hydrated sulfate of potassium, calcium, and magnesium.

The polyhalite in the Project area occurs in the basal anhydrite unit of the Tamarisk Member of the Rustler Formation. The mineralization occurs as a single polyhalite bed with a mean composite thickness of 5.0 feet (range of 2.2 feet to 6.6 feet) within the Project area. The upper and lower contacts of the polyhalite bed are marked by gradational contact domains with the overlying and underlying anhydrite. The upper and lower contact domains bound a polyhalite dominated target domain. Thickness, polyhalite, and anhydrite content parameters of the three polyhalite domains are discussed in detail in Item 14.2.4: Polyhalite Domaining of this TR.

The gradational polyhalite-anhydrite contact domains are characterized by 0.25-inch to 0.50-inch thick laminations of interlayered light to dark grey polyhalite and white to grey anhydrite. The core domain of polyhalite has very fine laminations of light and medium grey polyhalite and often appears massive.

In addition to the physical identification of polyhalite in the ICP core drillholes, polyhalite is readily identifiable from the other potash minerals, evaporite minerals, and carbonates found in the area via a combination of the standard suite of downhole geophysical logs performed on the ICP drillholes as well as the oil and gas wells in the Project area. The high gamma ray response of polyhalite distinguishes it from halite and anhydrite while it is distinguished from sylvite by relatively higher neutron and density response and caliper (normal core diameter for polyhalite versus enlarged diameter for sylvite due to solubility differences) responses for polyhalite.

The focus on polyhalite mineralization in the Project area differs from the focus of past and present potash production from mines in the Carlsbad area, where the potash is predominantly in the form of sylvite and langbeinite. The sylvite and langbeinite mineralization in the Carlsbad area occurs in a series of thick halite dominated members of the Salado Formation that underlies the Rustler Formation. Polyhalite is present in the Carlsbad area in association with anhydrite dominated members but hasn't been the primary focus of exploration and mining activities to date.

8.0 DEPOSIT TYPES

8.1 Genetic Model

The following section presents a summary of the deposit type and genetic model for the polyhalite mineralization encountered in the Project area and for potash and evaporite deposition in general as presented in Orris et. al. (2014), Prud'homme and Krukowski (2006) and Jones and Madsen (1968) and references therein.

Polyhalite mineralization encountered in the Project area can be characterized as a stratabound potash-bearing salt deposit (also known as bedded potash and marine potash). Stratabound potash-bearing salt deposits form in marine sedimentary basins with restricted access to the open sea. The restricted nature of the basin is key to the depositional process, limiting seawater recharge and resulting in the development of brines within the basin as salinity increases during the evaporation of seawater.

The potash minerals are deposited during sustained evaporation of seawater and brine and generally occur in association with a larger assemblage of carbonate minerals and other evaporite minerals including halite, anhydrite, gypsum, and other potash minerals. Due to solubility and elemental concentrations in seawater and resultant brines, the potash minerals are generally precipitated late in the evaporite sequence and are generally volumetrically and spatial less extensive than the carbonate and sodium and magnesium rich evaporites.

The evaporite deposits generally form as laterally extensive, tabular areas with clear zonation of carbonate, other evaporite, and potash assemblages. Depositional processes are commonly cyclical such that there are multiple potash mineral-bearing horizons within the greater evaporite sequence. Overall evaporite sequence thickness is typically on the scale of several hundred feet in thickness, with potash mineral horizons ranging in thickness from several inches to tens of feet thick. Lateral extents are limited by the basin size at the time of deposition and are commonly hundreds to thousands of square miles.

The chemistry of the seawater and brine and the mixing process between the two solutions, as well as the interaction between the solutions and carbonate and evaporite minerals that have already been precipitated all play a role in determining the carbonate and evaporite mineral assemblage that is precipitated in the basin. Potassium bearing minerals are generally precipitated as potassium and magnesium chlorides including sylvite (KCl), langbeinite ($Mg_2K_2(SO_4)_3$ and carnallite ($KCl•MgCl_2•6H_2O$). Polyhalite ($K_2Ca_2Mg(SO_4)•2H_2O$) mineralization can develop both through primary precipitation from brine as well as by later diagenetic processes whereby anhydrite and gypsum are altered to polyhalite as a result of contact with potassium and magnesium rich fluids.

9.0 EXPLORATION

9.1 Summary of Non-Drilling Exploration Activity

Exploration activities on the ICP Ochoa Project area took place during four exploration programs:

- Phase 1 (2009)
- Phase 2A (2010)
- Phase 2B (2011)
- Phase 3A (2012)

All four exploration programs were conducted by ICP; there is no known polyhalite or potash exploration work performed on the Project Property prior to commencement of the ICP programs. The four ICP exploration programs focused on exploration drilling and associated downhole wireline geophysical and analytical programs. Details of the ICP exploration drilling, downhole geophysical, and sampling and analytical programs are presented in Items 10.0, Item 11.0, and Item 12.0 of this TR.

In addition to downhole wireline geophysical logging performed during the four ICP exploration campaigns, downhole wireline geophysical data was also collected from the oil and gas exploration wells by the respective oil and gas exploration and production companies. In excess of 1,300 geophysical logs were downloaded by ICP from the New Mexico government drilling data repository and were used in the interpretation of geological unit tops, including the top and bottom of the overall polyhalite zone. Geophysical interpretation from the oil and gas wells was tied to markers identified within the ICP drillholes and their correlation with observed geological units within these drillholes.

Golder is not aware of any surface polyhalite exploration related geochemical sampling, including outcrop, trench or test pit sampling programs performed in the Project area. Likewise, Golder is not aware of any polyhalite exploration related surface or airborne geophysical surveys conducted within the Project area. Surface seismic velocity surveys were performed in 2013 as part of the geotechnical and hydrogeological investigation of the proposed surface facility sites; however, data applicable for use in polyhalite exploration was not collected.

It is Golder's opinion that the focus on exploration drilling, downhole geophysics, drillhole sampling, and analytical programs conducted on the Project Property is appropriate for the geological setting and style of polyhalite mineralization present within the Project area and the absence of surface exploration geochemical sampling and analytical programs and the absence of exploration geophysical programs does not negatively impact the Project.

10.0 DRILLING

10.1 Drilling Summary

Exploration activities on the Project area took place during four exploration programs:

- Phase 1 (2009)
- Phase 2A (2010)
- Phase 2B (2011)
- Phase 3A (2012)

All four exploration programs were conducted by ICP; there is no known polyhalite or potash exploration work performed on the Project Property prior to commencement of the ICP programs. The four ICP exploration programs focused on exploration drilling and associated downhole wireline geophysical and analytical programs.

A total of 32 drillholes totaling 47,879 feet of drilling were completed during the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration programs. A summary of the 32 ICP drillholes is presented in Table 10.1 while the ICP drillhole locations are presented in Figure 10.1.

Drillhole spacing throughout the Project Property is variable, with a mean spacing of approximately 10,870 feet (range of 2,400 feet to 25,000 feet) across most of the Property, with an area of focused drilling with a mean spacing of approximately 6,000 feet (range of 2,400 feet to 15,000 feet) in the core potential mining area.

10.2 Exploration Procedures & Methodology

The exploration procedures and methods employed by ICP and their exploration contractors were well documented via a series of drilling, surveying, sampling, and analyses guideline documents prepared by ICP. A flow chart summarizing the exploration program procedures and responsibilities, modified from the ICP documentation, is presented in Figure 10.2.

Detailed guidelines were implemented for all exploration planning, implementation, data collection, and data archiving procedures. Organized and detailed hard copy (in the form of binders/folders) and digital folder documentation files are available for each of the 32 ICP drillholes.

The following sections detail the exploration drilling program procedures and methodology employed by ICP during the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration programs.

10.2.1 Drilling Methodology

All 32 drillholes were drilled by Stewart Brothers Drilling Company and were drilled vertically using a wireline drill rig capable of switching between rotary and diamond core drilling. Drilling was performed using a mud and water mixture for the upper part of the drillhole and a saline mud mixture for the lower part of the drillhole including the targeted polyhalite mineralization.

Table 10.1: Summary of ICP Drillholes

Exploration Program	Drillhole Name	Easting	Northing	Collar	Dip	Total Depth	Rotary Drilling (ft)	Core Drilling (ft)	Core Recovery	Side Tracks	Drilling End Date
1	ICP-001	776,952	484,140	3,633	-90	1,434	1,354	80	no data	0	09/11/2009
1	ICP-002	768,853	481,331	3,701	-90	1,550	1,450	100	no data	0	14/11/2009
1	ICP-003	785,071	473,171	3,690	-90	1,583	1,466	117	no data	0	19/11/2009
1	ICP-043	736,171	495,629	3,561	-90	1,017	955	62	no data	0	11/12/2009
1	ICP-047	731,688	483,717	3,519	-90	1,057	950	107	no data	0	03/12/2009
1	ICP-051	757,275	484,598	3,747	-90	1,521	1,460	61	no data	0	19/12/2009
2A	ICP-042	760,044	475,098	3,727	-90	1,510	1,470	40	93%	3	23/06/2010
2A	ICP-045	752,561	470,630	3,692	-90	1,447	1,397	50	100%	0	07/07/2010
2A	ICP-048	748,357	484,609	3,678	-90	1,349	1,270	79	96%	0	15/07/2010
2A	ICP-056	768,016	462,690	3,667	-90	1,517	1,477	40	100%	0	16/08/2010
2A	ICP-061	767,904	451,133	3,627	-90	1,481	1,423	58	100%	0	08/08/2010
2A	ICP-062	788,751	454,399	3,632	-90	1,594	1,541	53	100%	0	23/07/2010
2A	ICP-063	779,035	452,735	3,587	-90	1,529	1,489	40	80%	0	01/08/2010
2B	ICP-005	789,877	462,427	3,627	-90	1,567	1,487	80	95%	2	27/02/2011
2B	ICP-046	772,897	465,395	3,673	-90	1,563	1,483	80	97%	3	28/01/2011
2B	ICP-053	760,295	469,862	3,694	-90	1,469	1,392	77	98%	3	13/02/2011
2B	ICP-058	791,673	451,512	3,624	-90	1,570	1,490	80	97%	0	14/04/2011
2B	ICP-059	783,013	451,667	3,608	-90	1,565	1,485	80	99%	0	21/04/2011
2B	ICP-076	773,683	456,578	3,657	-90	1,565	1,485	80	100%	0	05/04/2011
2B	ICP-078	779,760	462,100	3,664	-90	1,602	1,540	63	46%	4	28/03/2011
3A	ICP-083	764,714	453,207	3,635	-90	1,466	1,436	30	100%	3	07/12/2012
3A	ICP-084	765,609	447,288	3,577	-90	1,485	1,425	60	100%	1	02/12/2012
3A	ICP-085	770,883	447,367	3,596	-90	1,533	1,476	57	100%	3	21/10/2012
3A	ICP-086	773,874	449,021	3,609	-90	1,522	1,512	10	100%	2	12/10/2012
3A	ICP-087	775,388	447,170	3,610	-90	1,515	1,505	10	100%	2	25/09/2012
3A	ICP-088	770,812	453,836	3,652	-90	1,566	1,516	50	95%	3	10/01/2013
3A	ICP-089	778,291	446,756	3,615	-90	1,550	1,531	20	100%	2	01/09/2012
3A	ICP-090	766,339	456,256	3,648	-90	1,503	1,472	31	100%	3	14/01/2013
3A	ICP-092	779,790	444,239	3,624	-90	1,566	42	1,524	100%	0	24/03/2013
3A	ICP-093	782,887	442,231	3,600	-90	1,562	1,501	61	100%	2	19/02/2013
3A	ICP-095	851,048	438,539	3,364	-90	1,561	1,542	19	100%	0	04/11/2012
3A	ICP-097	788,418	438,679	3,582	-90	1,561	1,528	33	100%	4	14/11/2012

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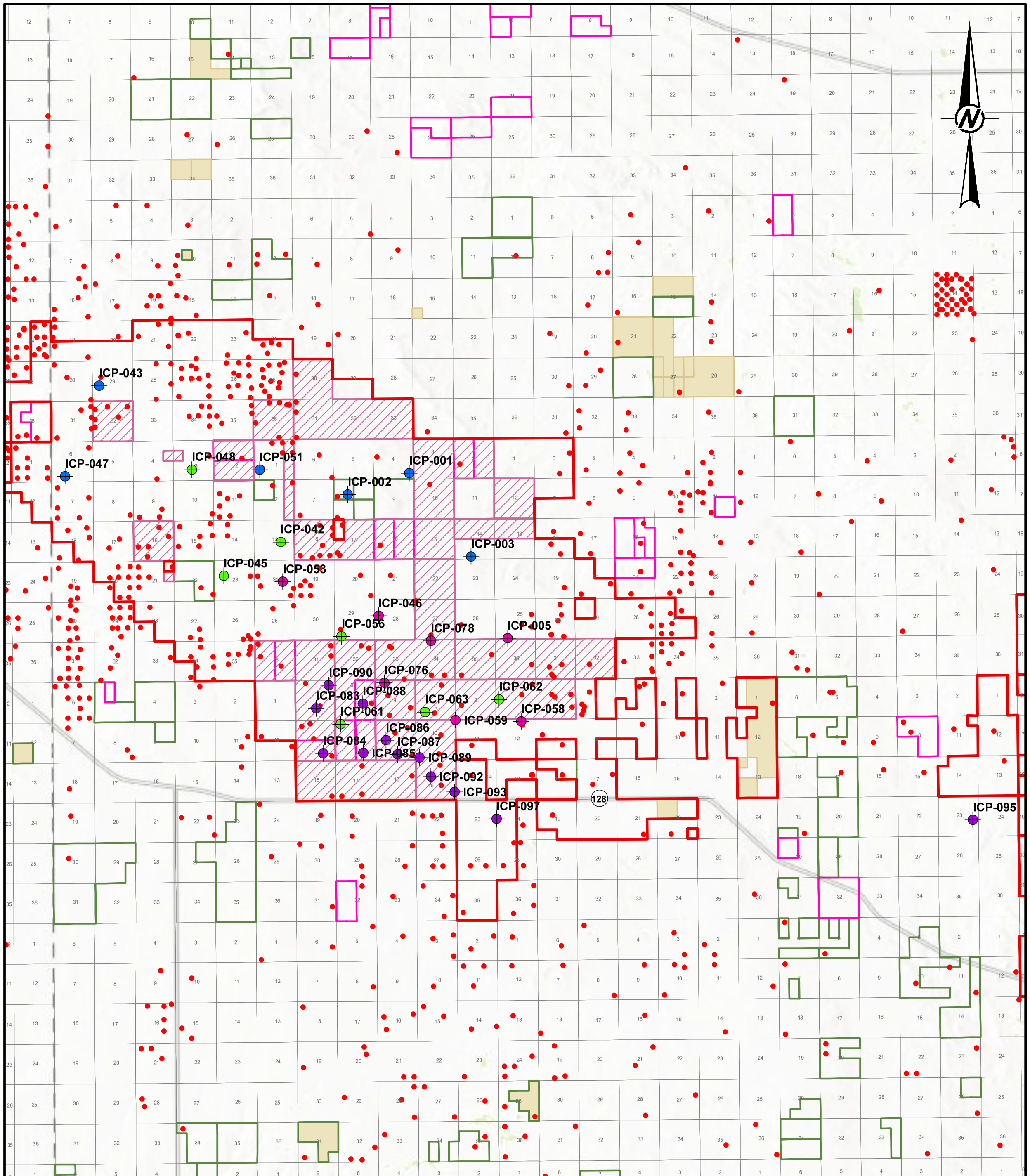

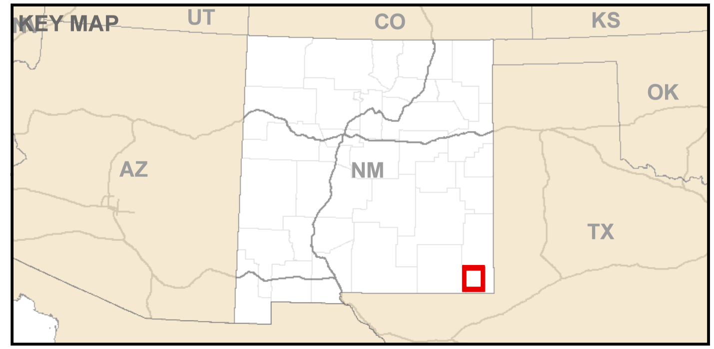

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section

ICP Drill Holes by Phase

- Phase 1 Drill Hole
- Phase 2A Drill Hole
- Phase 2B Drill Hole
- Phase 3A Drill Hole
- Oil/Gas Well

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
ICP DRILLHOLE LOCATION MAP

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
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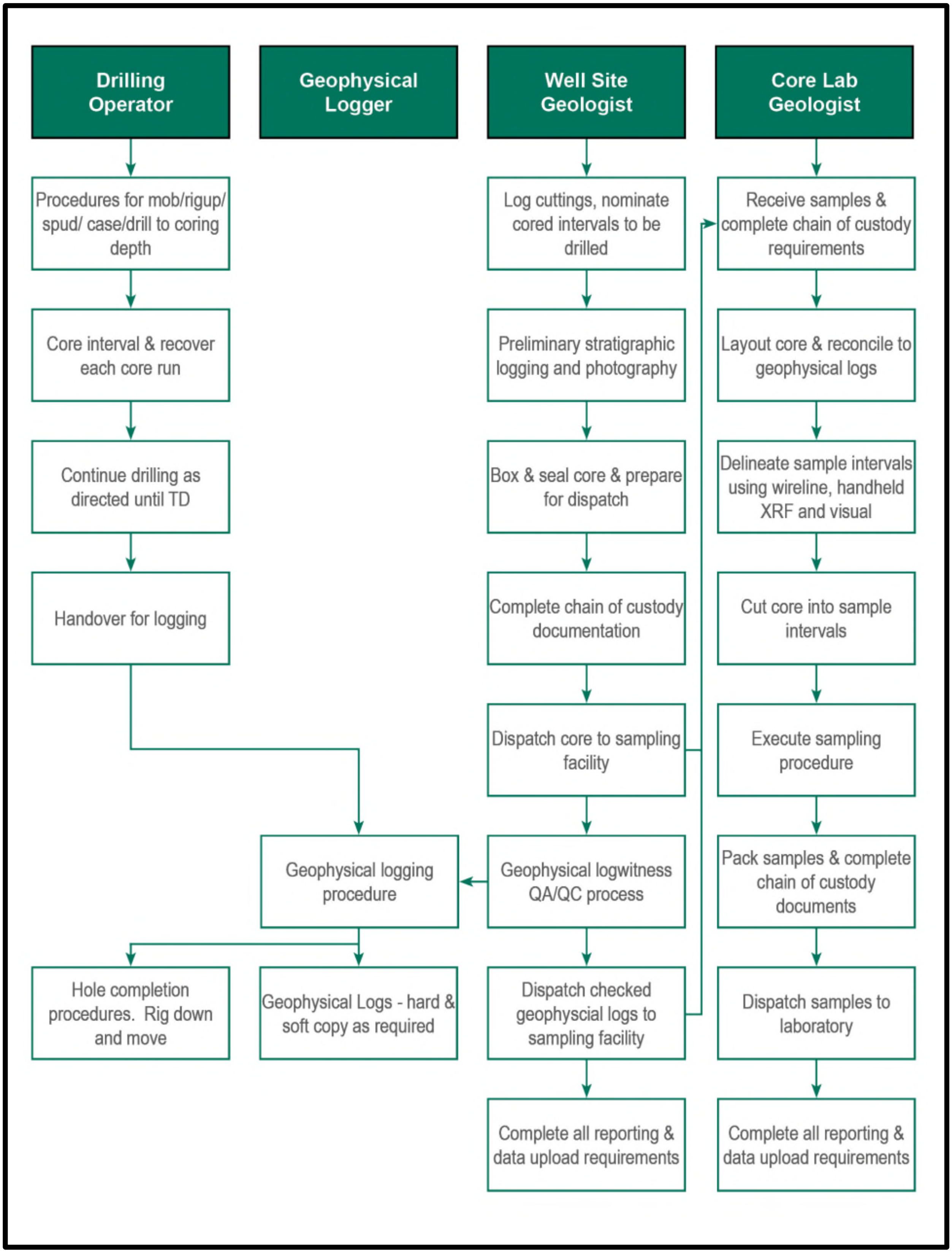
Figure 10.2: ICP Exploration Procedures Flowchart



Drilling was a combination of rotary drilling from the casing down to the coring point, followed by coring through the target interval. In the Phase 1 and Phase 2A programs coring ran from the coring point to the total depth of the drillhole, while in Phase 2B and Phase 3A a sump (typically 30 feet to 40 feet deep) was rotary drilled below the cored interval to allow space for the geophysical tools below the target zone. Rotary drilling forms the bulk of the total drilling footage at 44,548 feet (93% of the 47,880 feet of total drilling footage) compared to 3,331 feet of core drilling (7% of the total drilling footage).

The rotary drilling across the four drilling programs was performed using a variety of different bit diameters, ranging from 5-inch to 12-inch outside diameters. Drillhole diameter reductions and casing of the upper portions of the drillholes were planned to allow for optimizing return and drilling efficiency.

The coring point was set to allow for a safety buffer of core above the predicted top of the polyhalite zone. The actual safety buffer interval, measured from the coring point to the top of the polyhalite, varied from program to program as follows:

- Phase 1: mean safety buffer of 48 feet, range of 24 feet to 89 feet
- Phase 2A: mean safety buffer of 25 feet, range of 18 feet to 49 feet
- Phase 2B: mean safety buffer of 50 feet, range of 39 feet to 59 feet
- Phase 3A: mean safety buffer of 13 feet, range of 0 feet to 31 feet, with two instances where polyhalite roof was missed and had to be cored using a side cut.

Coring was performed using a variety of core barrel diameters, with 4.9-inch and 6.0-inch being the most common. Core barrel lengths also varied over the four exploration programs, ranging in length from 10 feet to 40 feet.

Upon completion of drilling activity, the drillholes were reamed and flushed. Downhole wireline positional and geophysical surveys were then performed (refer to Item 10.2.2 for a discussion of drillhole surveying) before the drillholes were cemented and marked with a casing monument.

10.2.2 Drillhole Survey Methodology

Prior to commencement of drilling, all ICP drillhole collar locations were formally surveyed by an independent professional land surveyor registered with the state of New Mexico. Post drilling coordinates were verified by a professional land surveyor employed by ICP.

Upon completion of drilling activity downhole directional and geophysical surveys were performed on all 32 ICP drillholes. Century Wireline Services performed the downhole surveys for all drillholes completed during each of the four exploration programs. The geophysical logs performed on the drillholes varied from one program to another as summarized in Table 10.2.

Table 10.2: Summary of Wireline Geophysical Surveys Performed on ICP Drillholes

Exploration Program	Drillhole Name	Res	DIL	Sonic	3-arm Caliper	Comp Dens	Spec Gamma	Neutron	Telev
1	ICP-001	x		x	x				
1	ICP-002	x		x	x				
1	ICP-003	x		x	x				
1	ICP-043	x		x	x				
1	ICP-047	x		x	x				
1	ICP-051	x		x	x				
2A	ICP-042	x	x	x	x	x	x	x	x
2A	ICP-045	x	x	x	x	x	x	x	
2A	ICP-048	x	x	x	x	x	x	x	
2A	ICP-056	x	x	x	x	x	x	x	
2A	ICP-061	x	x	x	x	x	x	x	
2A	ICP-062	x	x	x	x	x	x	x	
2A	ICP-063	x	x	x	x	x	x	x	
2B	ICP-005	x		x	x	x	x	x	
2B	ICP-046	x		x	x	x	x	x	
2B	ICP-053	x		x	x	x	x	x	
2B	ICP-058	x		x	x	x	x	x	
2B	ICP-059	x		x	x	x	x	x	
2B	ICP-076	x		x	x	x	x	x	
2B	ICP-078	x		x	x	x	x	x	
3A	ICP-083	x		x	x	x	x	x	
3A	ICP-084	x		x	x	x	x	x	
3A	ICP-085	x		x	x	x	x	x	
3A	ICP-086	x		x	x	x	x	x	
3A	ICP-087	x		x	x	x	x	x	
3A	ICP-088	x		x	x	x	x	x	
3A	ICP-089	x		x	x	x	x	x	
3A	ICP-090	x		x	x	x	x	x	
3A	ICP-092	x		x	x	x	x	x	
3A	ICP-093	x		x	x	x	x	x	
3A	ICP-095	x		x	x	x	x	x	
3A	ICP-097	x		x	x	x	x	x	

Note: "X" denotes survey performed; Res = resistivity; DIL = dual induction; Comp Dens = compensated density; Spec Gamma = spectral gamma ray; Televˌ= optical televiewer.

10.2.3 Core Handling & Visual Logging Methodology

Initial description of the rotary cuttings and drill core was performed at the drill rig by the ICP drill site geologist while drilling was underway. This included describing and photographing material prior to packaging cuttings and core for transport back to the ICP core facility, located in Hobbs, New Mexico.

The ICP core facility is a secure, climate controlled facility with well-organized indoor space for logging, sample selection, and sample preparation work, and for cuttings, drill core, and analytical reject storage.

Detailed rotary cuttings and drill core descriptive logging was performed at the ICP core facility by the ICP core lab geologist and core lab technical personnel. The drill core was laid out on logging benches, photographed, lithological and structural features were marked on the core, and sampling intervals were identified by visual inspection and handheld XRF.

The drill core was then split by ICP core lab technical personnel using a dry core saw. Samples selected for analyses, along with field Quality Assurance and Quality Control (QA/QC) samples (refer Item 11.5 for a discussion of analytical QA/QC procedures and results) were packaged for shipment to the third party analytical laboratories.

The remaining core was photographed again after sampling and then returned to the core boxes for storage on shelves inside the ICP core facility.

10.3 Drilling Results

A summary of the results for each of the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration programs are presented in the following sections.

10.3.1 Phase 1 Exploration Program Summary of Results

During the Phase 1 exploration program, conducted from November through December 2009, a total of six drillholes totaling 8,162 feet (7,635 feet of rotary drilling and 527 feet of core drilling) were drilled by Stewart Brothers Drilling Company. The mean total depth of the drillholes was 1,360 feet with a range of 1,017 feet to 1,583 feet.

Coring was performed using a 4.9-inch diameter by 40-foot long double core barrel (no split inner tube). Golder was not provided with any data or observations regarding core recovery for the Phase 1 drilling program; however, a review of the core interval photographs suggest core recoveries in the 80% to 100% range as encountered in the other drilling programs discussed below.

All six drillholes intercepted the targeted polyhalite bed, with polyhalite thicknesses ranging from 4.0 feet to 6.3 feet (mean thickness of 5.0 feet).

All six drillholes had downhole directional surveys completed and all six were geophysically logged by Century Wireline Services. Geophysical wireline logging included resistivity, sonic and 3-arm caliper on all six drillholes.

A total of 113 analytical samples from the six polyhalite intercepts and roof and floor anhydrite were submitted to The Mineral Lab, located in Golden Colorado and to H&M Analytical Services, located in Allentown New Jersey, for analyses by x-ray diffraction (XRD) (quantitative) and x-ray fluorescence (XRF) (quantitative and semi-quantitative) methods, and to ALS Chemex, located in Reno Nevada for inductively coupled plasma optical emission spectrometry (ICP-OES) analyses. Sample selection, preparation, chain of custody, and analytical procedures and results are discussed in Item 11.0 of this TR.

10.3.2 Phase 2A Exploration Program Summary of Results

During the Phase 2A exploration program, conducted from June through August 2010, a total of seven drillholes totaling 10,427 feet (10,067 feet of rotary drilling and 360 feet of core drilling) were drilled by Stewart Brothers Drilling Company. The mean total depth of the drillholes was 1,490 feet with a range of 1,349 feet to 1,594 feet.

Coring was performed using a 4.9-inch diameter by 40-foot long double core barrel (no split inner tube). In addition to the primary core runs targeting the polyhalite mineralization and surrounding anhydrite, a total of three side track cuts were drilled in one individual drillhole to provide additional sample mass for analytical work. Core recovery was very good in both the primary core runs and the side track cuts, with a mean recovery of 96% (ranging from 80% to 100%).

All seven drillholes intercepted the targeted polyhalite bed, with polyhalite thicknesses ranging from 4.2 feet to 6.3 feet (mean thickness of 5.4 feet).

All seven drillholes had downhole directional surveys completed and all seven were geophysically logged by Century Wireline Services. Geophysical wireline logging included resistivity, dual induction, sonic, compensated density, spectral gamma ray, neutron and 3-arm caliper on all seven drillholes. In addition, an optical televiewer was run on a single drillhole (ICP-042).

A total of 120 analytical samples from the seven polyhalite intercepts and roof and floor anhydrite were submitted to The Mineral Lab and to H&M Analytical Services for analyses by XRD (quantitative) and XRF (quantitative and semi-quantitative) methods and to ALS Chemex for ICP-OES analyses. Sample selection, preparation, chain of custody and analytical procedures and results are discussed in Item 11.0 of this TR.

10.3.3 Phase 2B Exploration Program Summary of Results

During the Phase 2B exploration program, conducted from January through April 2011, a total of seven drillholes totaling 10,901 feet (10,361 feet of rotary drilling and 540 feet of core drilling) were drilled by

Stewart Brothers Drilling Company. The mean total depth of the drillholes was 1,557 feet with a range of 1,469 feet to 1,602 feet.

Coring was performed using a 4.9-inch diameter by 20 feet and 40 feet long double core barrels (no split inner tube). In addition to the primary core runs targeting the polyhalite mineralization and surrounding anhydrite, a total of 12 side track cuts were drilled in four of the seven drillholes (between two and four sidetracks per drillhole) in order to provide additional sample mass for analytical work. Core recovery was very good in both the primary core runs and the side track cuts, with a mean recovery of 90% (ranging from 47% to 99%). The single instance of core recovery less than 95% (47% in ICP-078) was a result of dissolution during the drilling process; the core run interval was replicated in a subsequent side track cut and 85% recovery was achieved for the 20-foot interval.

All seven drillholes intercepted the targeted polyhalite bed, with polyhalite thicknesses ranging from 4.5 feet to 5.5 feet (mean thickness of 5.0 feet).

All seven drillholes had downhole directional surveys completed and all seven were geophysically logged by Century Wireline Services. Geophysical wireline logging included resistivity, sonic, compensated density, spectral gamma ray, neutron, and 3-arm caliper on all seven drillholes.

A total of 157 analytical samples from the seven polyhalite intercepts and roof and floor anhydrite were submitted to H&M Analytical Services for analyses by XRD (quantitative) and XRF (quantitative and semi-quantitative) methods. Sample selection, preparation, chain of custody, and analytical procedures and results are discussed in Item 11.0 of this TR.

10.3.4 Phase 3A Exploration Program Summary of Results

During the Phase 3A exploration program, conducted from August 2012 through March 2013, a total of 12 drillholes totaling 18,390 feet (16,485 feet of rotary drilling and 1,905 feet of core drilling) were drilled by Stewart Brothers Drilling Company. The mean total depth of the drill holes was 1,533 feet with a range of 1,466 feet to 1,566 feet.

Coring was performed using a 6-inch diameter by 10-foot long double core barrel (no split inner tube). In addition to the primary core runs targeting the polyhalite mineralization and surrounding anhydrite, a total of 25 side track cuts were drilled in 10 of the 12 drillholes (between one and four sidetracks per drillhole) to provide additional sample mass for analytical work. There were two instances where the coring point in the drillhole ended up being deeper than the polyhalite mineralization depth and therefore no polyhalite was recovered in the primary core runs; however, in both instances the polyhalite mineralization was fully recovered in subsequent side track cuts. Core recovery was very good in both the primary core runs and side track cuts, with a mean recovery of 99% (ranging from 95% to 100%).

Eleven of the 12 drillholes intercepted the targeted polyhalite bed, while one drillhole (ICP-095) did not intercept any polyhalite mineralization. ICP-095 is the furthest eastward exploration drillhole on the Property (see Figure 10.1: ICP Drillhole Location Map). Given its position close to the eastern margin of the basin and in proximity to the Capitan Reef complex, the absence of polyhalite mineralization in ICP-095 is interpreted to be a result of depositional processes rather than post depositional structural modification. The polyhalite thicknesses for the 11 intercepts ranged from 4.9 feet to 6.1 feet (mean thickness of 5.4 feet).

All 12 drillholes had downhole directional surveys completed and all 12 were geophysically logged by Century Wireline Services. Geophysical wireline logging included resistivity, sonic, compensated density, spectral gamma ray, neutron, and 3-arm caliper on all 12 drillholes.

A total of 265 analytical samples from the 11 polyhalite intercepts and roof and floor anhydrite were submitted to H&M Analytical Services for analyses by XRD (quantitative) and XRF (quantitative and semi-quantitative) methods. Sample selection, preparation, chain of custody and analytical procedures and results are discussed in Item 11.0 of this TR.

10.4 Interpretation of Drilling Results

The drillhole data from the Phase 1, Phase 2A, Phase 2B, and Phase 3A drilling, downhole geophysical, core logging, and sampling programs were reviewed and interpreted by ICP senior geologists during the exploration campaigns. Drillhole lithology and grade data was used in conjunction with downhole geophysical logs to confirm the tops picks for the key geological units including the polyhalite top and bottom surface as well as the tops of various overburden, interburden, and underburden geological units.

The ICP interpretations for the key geological unit top picks and the polyhalite top and bottom picks were reviewed by the Golder QP. The interpretive review included checking tabular data against digital copies of downhole geophysical logs and analytical results to ensure the picks were consistent and honoring geological and geochemical boundaries. Drillhole sections and plan maps were prepared for review during the iterative modeling process to confirm the correlation of the polyhalite domains and the geological surfaces between drillholes.

Where differences of interpretation were identified, these were discussed with ICP personnel and changes were made prior to finalization of the geological model. One significant change over the previous interpretation was the introduction of the subdivision of the polyhalite unit into three domains. The polyhalite domaining interpretation was performed by the Golder QP using the drillhole lithology and grade data.

A detailed discussion of the interpretive geology and geological modelling process is presented in Item 14.0 of this TR.

10.5 Drilling Factors Impacting Accuracy & Reliability of Results

Based on a review of the documentation, data, and observations compiled from the exploration programs, it is the QP's opinion that the Phase 1, Phase 2A, Phase 2B, and Phase 3A drilling, downhole geophysical, core logging, and sampling programs were carried out by ICP in accordance with appropriate professional methodologies and procedures, including those presented in the CIM Exploration Best Practice Guidelines (August 2000 edition). All components of the program were well documented during implementation by ICP personnel as well as IPC third-party contractors.

The overall drill core recovery was very good (mean of 96%, range of 46% to 100%) and the spatial distribution of the polyhalite intercepts and sample composites provides sufficient data points to establish a reasonable interpretation of the polyhalite Mineral Resource.

The Golder QP is not aware of any factors or concerns regarding the accuracy and reliability of the drilling, logging and sampling results from the ICP Phase 1, Phase 2A, Phase 2B, and Phase 3A drilling, downhole geophysical, core logging, and sampling programs.

11.0 SAMPLING PREPARATION, ANALYSES, & SECURITY

11.1 Sample Summary

Sampling activities on the Project area took place during four exploration programs:

- Phase 1 (2009)
- Phase 2A (2010)
- Phase 2B (2011)
- Phase 3A (2012)

All four exploration sampling programs were conducted by ICP; there is no known polyhalite or potash sampling or analytical work performed on the Project Property prior to commencement of the ICP programs.

A total of 646 samples were collected from a total of 32 ICP drillholes in the Project area. Sampling efforts were focused on the polyhalite bed and immediate roof and floor anhydrite units during all four exploration programs. Both the polyhalite and the surrounding anhydrite were sampled on a ply basis with each unit broken out into multiple short sample lengths; the ply sample results were later composited by polyhalite domain and by anhydrite unit for modelling and estimation purposes.

The polyhalite interval was sampled in its entirety in all 31 intercepts (ICP-095 did not intercept polyhalite). The roof and floor anhydrite was typically sampled for 1.3 feet (range of 0.28 feet to 3.65 feet) to provide confirmation of the interpreted lithological and grade boundaries. The mean sample interval length in the polyhalite was 0.39 feet, ranging from 0.10 feet to 0.70 feet while the mean sample interval length in the anhydrite was 0.37 feet, ranging from 0.12 feet to 0.79 feet.

All Phase 1, Phase 2A, Phase 2B and Phase 3A samples were submitted to The Mineral Lab and H&M for sample preparation and XRD and XRF analyses. Phase 1 and Phase 2A were also submitted to Actlabs for ICP-OES analyses.

The following sections detail the sample selection, collection, transport, preparation and analyses procedures and methodology employed by ICP during the Phase 1, Phase 2A, Phase 2B and Phase 3A sampling and analytical programs.

11.2 Sample Selection Methodology & Procedures

The following section is summarized from the ICP Core Sample Handling and Processing Protocol documents.

The first step in processing the drill core was depth correction. This was done to reconcile discrepancies in depth recorded by the driller and wireline logger the correct depth for geological modeling and mine planning. The depth correction also helps reconcile the position and interval of lost core intervals. Depth correction was overseen and approved by a senior geologist. The amount of a depth shift and the explanation of all evidence supporting the shift must be documented in writing and entered into the core processing record.

Depth correcting was conducted by comparing the driller depths and wireline log depths for casing bottom and key lithology changes. The most confident depth is selected for the corrected depth if there is a discrepancy between the driller depths and the wireline log depths. Corrected depths are marked in red permanent marker. The core is compared to the final prints of the wireline logs to verify or modify the initial core loss intervals documented in the field.

The whole core is photographed with a Canon EOS Rebel T1i camera mounted on a stationary tri-pod. The camera is passed over the core on a rolling table to keep consistent parameters for all photographs. Each photograph contains depth labels, color scale, and a gray scale. The individual photographs are archived and stitched together using computer software to create a single photograph containing well name, lithologic contacts, ruler, color and gray scale.

Core cutting geometry may be modified depending on the diameter of the core, length of individual core pieces, strength of core, and size of sampled required. In general, the whole core is cut lengthwise into two halves (H1 and H2). One half –H1—is the cut into two quarters (Q1 and Q2). One quarter (Q1) is canted (C1) which consist of cutting the outer curved potion of the quarter core off. This is conducted to eliminate the possibility of sending core altered by the drilling fluid to the lab for analysis.

The half core (H2) or a quarter of the 6 inch (Q1,Q2) is sanded in two stages with 60 grit then 220 grit sandpaper and photographed again using the same methods used to photograph the whole core.

All retained core (e.g.H2, Q2, and C1) are individually vacuum sealed in less than two foot intervals in 6 MIL poly tubing with a 1/6 size desiccant packs, humidity indicators; and index cards with well name and interval labeled. All vacuum sealed core intervals are replaced in the appropriate core boxes with adjusted depths labeled on two sides, in red marker, and maximum temperature indicators placed on the inside of the boxes. Core boxes are stacked five boxes high on a back shelf for long term storage after the core is processed.

The canted quarters or a ‘plank’ cut from an uncanted quarter are the basis for analytical samples. If a plank is used the outer 0.5 inch is cut from the plank to eliminate any alteration zone created by the drilling fluid. This is equivalent to the canting the quarter. The sample quarter or plank is cut in 3” to 6” interval lengths, and planks are cut longitudinally in half to provide two sticks. A quarter or one of the two sticks are submitted as analytical samples. The samples are assigned a unique sample number from a sample book in which is recorded the well name, sample interval, and a sample description. The samples are individually vacuum sealed in 6” x 10” 3 mil polyethylene bags with its respective blind number and sent to the lab. Multiple core runs may be sent to the lab in a batch, but a single core run is never split between two batches.

Three reference materials, two standards and one analytical blank, are sent to the lab with each batch. Standards may vary between drilling campaigns but are always validated before use in a drilling campaign. Standards include $K_2Mg_2(SO_4)_3$ (langbeinite) and $K_2Ca_2Mg(SO_4)_4{\cdot}2H_20$ (polyhalite) Analytical blanks include ACS reagent grade $CaSO_4{\cdot}2H_2O$ (gypsum) and ACS reagent grade K_2SO_4 (arcanite).

A chain of custody is completed for each batch of samples sent to the lab; documenting the sample numbers contained in the batch, shipment date, and mode of transfer. A signed copy of the chain of custody is returned to Intercontinental Potash when the package is delivered to the lab.

11.3 Sample Preparation & Analytical Methodology and Procedures

11.3.1 Analytical Laboratory

The following section is summarized from the ICP Core Sample Handling and Processing Protocol documents.

Quantitative XRD and XRF analyses were the standard methods used to analyze the drill core samples. The samples were reduced to a powder before any testing commenced. The entire amount of each sample was crushed with a jaw crusher to <6mm and then ground in a Retsch RM100 motorized mortar and pestle to a fine powder (-325 mesh) that is suitable for XRD analyses.

Quantitative XRD: A small amount of each fine powder was placed into a standard sample holder and put into a Panalytical X'pert MPD Pro X-ray diffractometer using copper (Cu) radiation at 40KV/40mA. Scans were run over the range of 10° - 80° with a step size of 0.0156° and a counting time of 100 seconds per step. Once the diffraction patterns had been collected, ICDD and ICSD databases were used to identify the phases. Finally, the quantitative phase analysis was performed with a Rietveld Refinement analysis, which is considered the gold standard for such work with a typical accuracy of about 1%.

Quantitative and Semi-quantitative XRF: The fluorescence samples were mixed with 20% Paraffin and pressed in a die at 30 tons for 5 minutes to produce a standard 40mm XRF specimen. Each pellet was then tested on a Bruker S4 Wavelength Dispersive X-ray Fluorescence Spectrometer for elements between sodium (Na) and uranium (U). This analysis uses a spectrometer that is a sequential instrument that examines one element at a time using Kilovolt (KV) settings, filters, collimators and monochromators that are optimized for each element.

Semi-quantitative analysis was then performed with the aid of a Fundamental Parameters method that is a standardless technique. This method takes into account the fluorescence yield, absorption and matrix effects to estimate the atomic chemical analysis. This technique has an accuracy of about 5% for the major elements.

Full quantitative analyses were performed for sodium (Na), chlorine (Cl), magnesium (Mg), sulfur(S), potassium (K), and calcium (Ca). The remaining trace elements were analyzed by a semiquantitative analysis based on a Fundamental Parameters method. Thus, the results are a hybrid of fully quantitative for the major elements (with error ≈ 1%) and semiquantitative for the trace elements (with errors ≈10%).

11.3.2 Analytical Results

XRD and XRF Analyses were performed by The Mineral Lab and H&M on a total of 646 samples from 31 ICP drill holes. ICP also submitted 233 samples from the Phase 1 and Phase 2A drill holes to Actlabs for ICP-OES analyses. Box plots for polyhalite, anhydrite, halite and magnesite content (wt. %) in the polyhalite domains are presented in Figure 11.1. Box plots for the major oxides content (wt. %) in the polyhalite domains are presented in Figure 11.2.

Figure 11.1: Polyhalite Domain Grade Parameter Box Plots

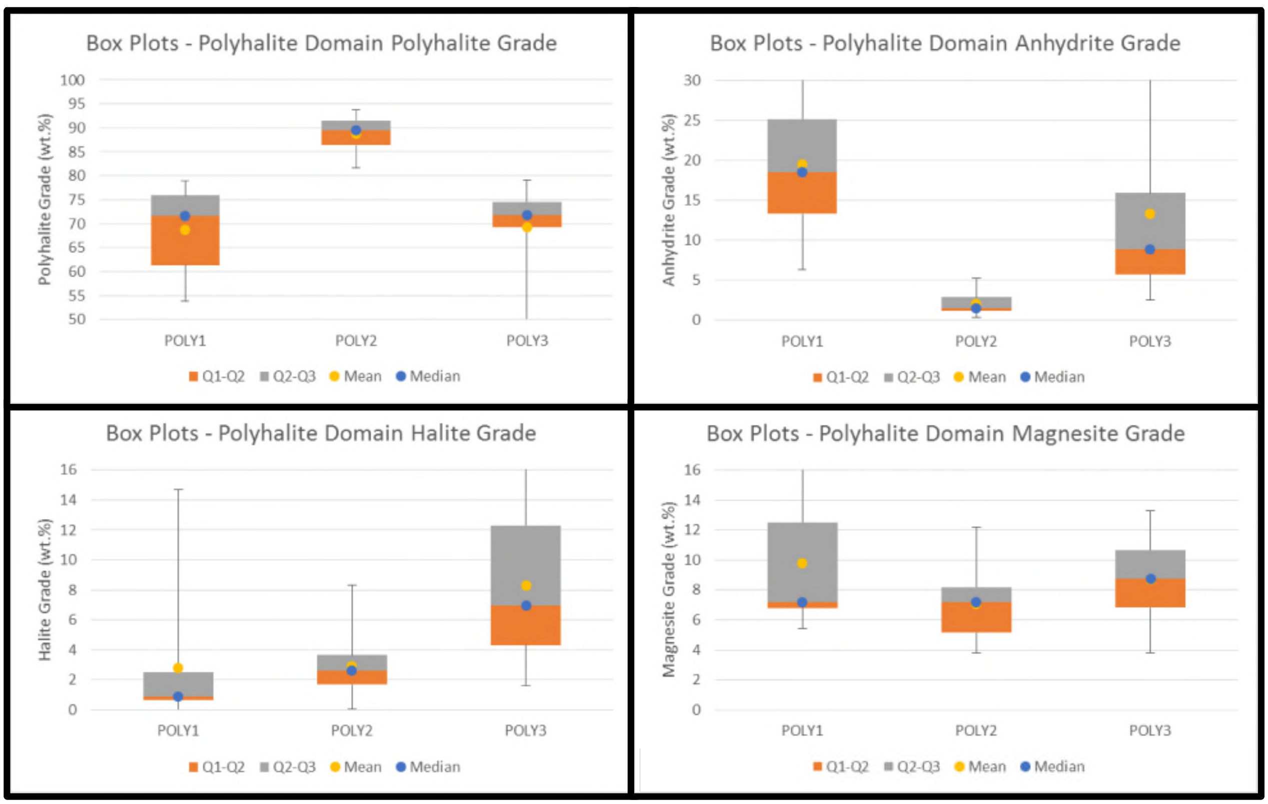
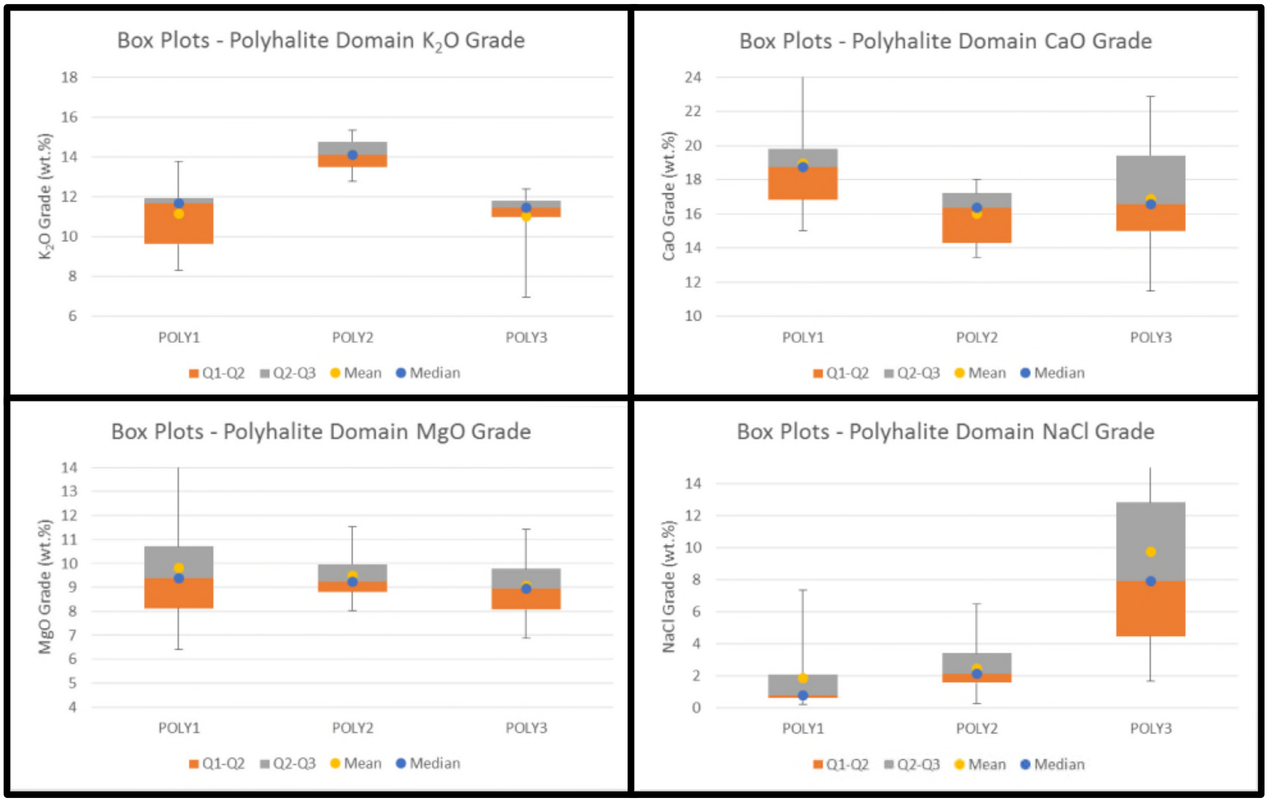


Figure 11.2: Polyhalite Domain Oxide Parameter Box Plots



11.4 Sample Security

The ICP core facility is a secure, climate controlled building located in Hobbs New Mexico. The core facility has a 650 square foot office space and a 1,890 square foot warehouse space for core handling. The core handling area includes benches for logging and sampling, a saw room and splitter for primary sample preparation, and storage racks for core boxes, cuttings samples and analytical reject material. The core is stored in covered cardboard core boxes on the core racks prior to logging and sampling activities. Once the core has been logged and sampled, the remaining un-sampled core was carefully reorganized in the core box, any open space resulting from removal of core for sampling was filled with an extruded foam spacer and the core boxes were returned to the core racks. During some phases of drilling the core boxes in the storage racks also were wrapped with tamper resistant tape.

The drill core and sample packaging was performed by ICP drill site and core shed geologists and core technicians under the supervision of senior ICP personnel.

11.5 Quality Assurance & Quality Control Methodology and Procedures

11.5.1 Quality Assurance & Quality Control Program Summary

ICP implemented a comprehensive analytical QA/QC program during the Phase 1, Phase 2A, Phase 2B and Phase 3A sampling and analytical programs, which included the insertion of blind certified reference material (CRM) standards, duplicates and blanks to evaluate analytical precision, accuracy and potential contamination during the sample preparation and analytical process. The QA/QC samples were inserted by ICP geologists and core technicians during the drill core sampling process.

The QA/QC sample summary and insertion rates for the ICP Phase 1. Phase 2A, Phase 2B and Phase 3A sampling programs are presented in Table 11.1. A total of 141 QA/QC sample were submitted, representing 22% of the total sample count of 787 samples for Phase 1, Phase 2A, Phase 2B, and Phase 3.

Table 11.1: QA/QC Sample Summary

Field QA/QC Sample Type	Pulp/Coarse	Type	QA.QC Sample Coun	QA/QC Insertion Rate (total sample count = 787)
Standard Reference Material	SRM02	Granular langbeinite	18	2%
	SRM02B	Granular langbeinite	12	2%
	SRM04	Granular polyhalite	20	3%
CRM Sub-Total			50	6%
Duplicates	Coarse	Field Duplicates	72	9%
Duplicates Sub-Total			72	9%
Blanks	SRM06	Gypsum Reagent (NoahTech)	15	2%
	SRM08	Potassium Chloride Fertilizer (IRMM)	1	0.1%
	SRM07	Arcanite Reagent (NoahTech)	3	0.4%
Blanks Sub-Total			19	2%
Total Field QA/QC Samples			**141**	**18%**

11.5.2 Quality Assurance and Quality Control Program Results and Interpretation

The following sections present the details of insertion frequency and results for analytical QA/QC samples including CRM, duplicates and blanks. All QA/QC samples were submitted as blind samples, inserted randomly with the regular samples and without identifiers or indication of grade such that they could not be readily identified by the laboratory sample preparation or analytical personnel.

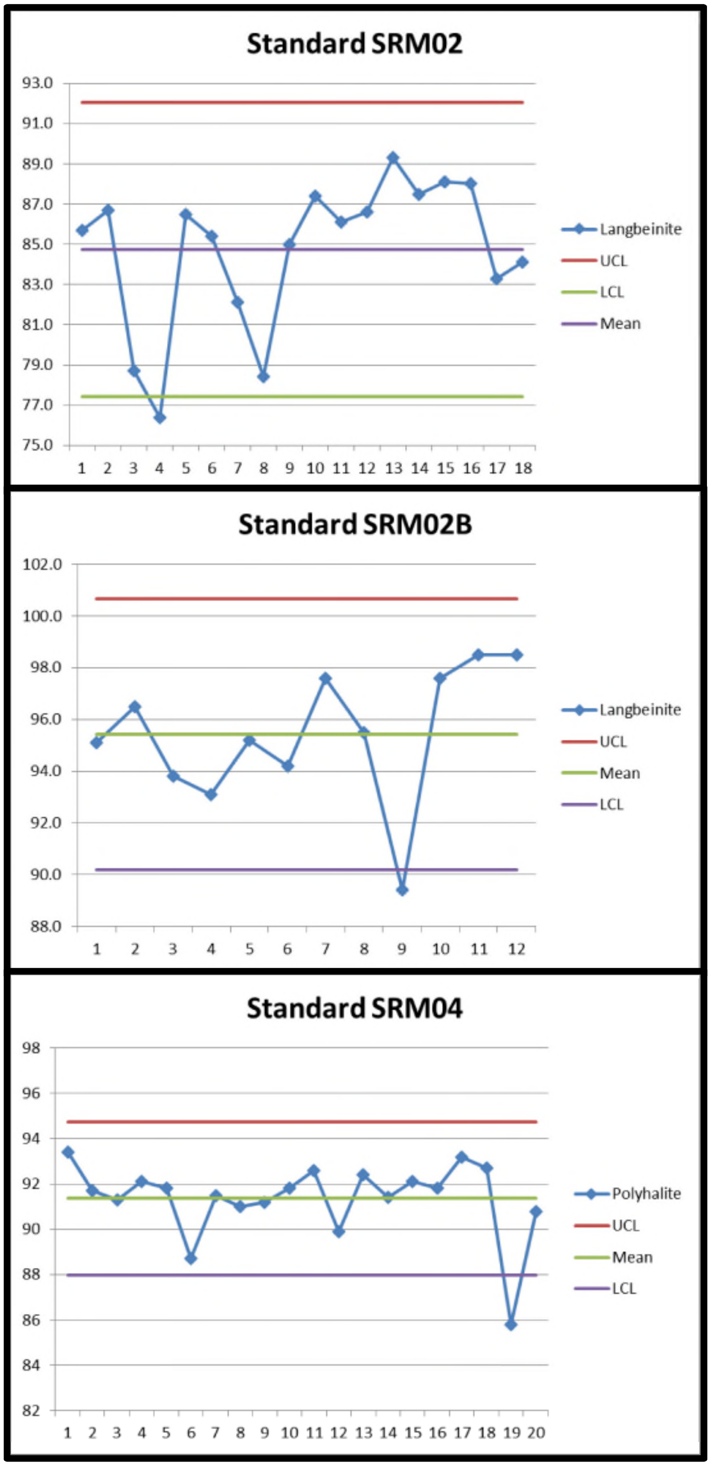
11.5.2.1 Blind Certified Reference Material Standards

ICP submitted 50 in house prepared blind CRM standards to evaluate the H&M laboratory analytical accuracy. The CRM standards were prepared from bulk samples of granular langbeinite and granular polyhalite. The following standards were used by ICP:

- SRM02 – Granular langbeinite (Prepared bulk, exhausted in Phase 3A)
- SRM02B – Granular langbeinite (Introduced in Phase 3A, material from bulk supply of SRM02)
- SRM04 – Granular polyhalite (Prepared bulk, from H17 core)

A total of 50 CRM standards were submitted to H&M for XRF and XRD analyses. Golder independently prepared and evaluated QA/QC control charts for the analytical results for each of the CRM standards used by ICP (Figure 11.3). There were 3 instances CRM standards exceeding the lower control limit. All of the remaining CRM standards analyzed fell within the control limits.

Figure 11.3: CRM Standards QA/QC Control Charts

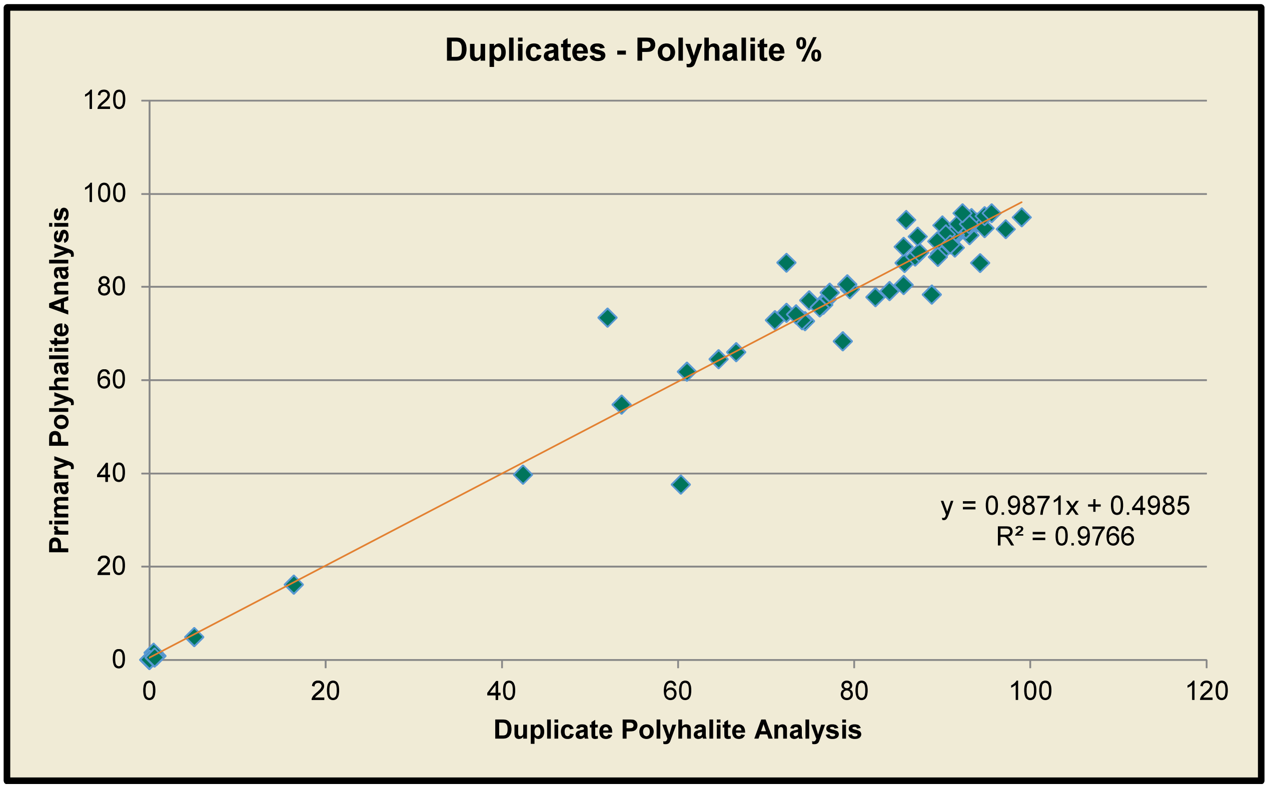


11.5.2.2 Blind Duplicate Samples

ICP submitted 72 blind coarse duplicate samples to evaluate H&M laboratory analytical precision. The blind coarse duplicate samples were prepared from split core duplicates.

A total of 72 blind duplicate samples were submitted to H&M for XRF and XRD analyses. Golder independently prepared and evaluated QA/QC control charts for the analytical results for each of the duplicate analyses used by ICP (Figure 11.4). There were a small number of duplicates that showed variation from the original result but they are likely due to isolated and minor grade variations within the samples as all other QA/QC controls from the batches were within their tolerances.

Figure 11.4: Blind Duplicates QA/QC Control Chart

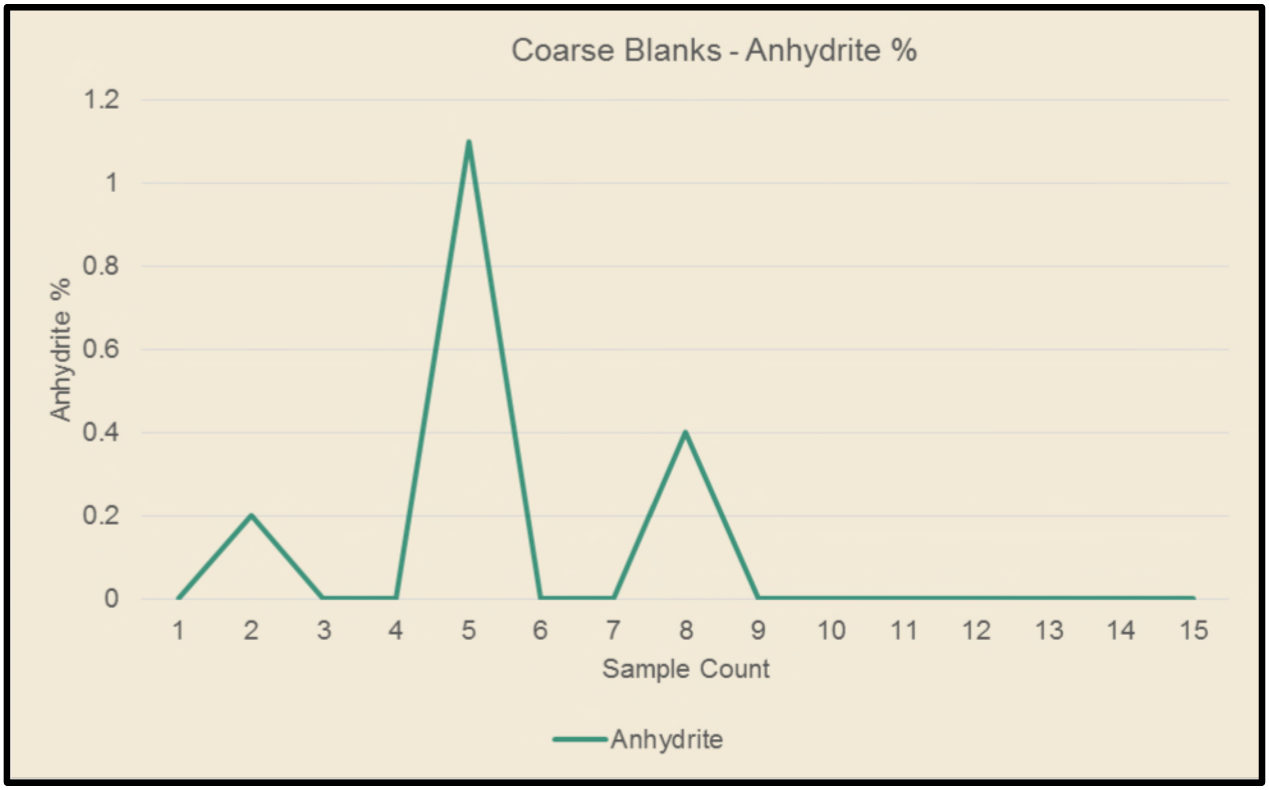


11.5.2.3 Blind Blank Samples

ICP submitted 19 blind coarse blank samples to evaluate H&M laboratory sample preparation and analytical procedures. The blind coarse blank samples were prepared from commercially purchased reagent gypsum, arcanite and potassium chloride fertilizer.

A total of 19 blind blank samples were submitted to H&M for XRF and XRD analyses. Golder independently prepared and evaluated QA/QC control chart for the analytical results for the blank analyses used by ICP (Figure 11.5). There were a small number of blanks that showed variation from the original result but they are likely due to isolated and minor grade variations within the samples as all other QA/QC controls from the batches were within their tolerances.

Figure 11.5: Coarse Blanks QA/QC Control Chart



11.6 Qualified Person Comment on Analytical Quality Assurance and Quality Control Program

It is the Qualified Person's opinion that the ICP QA/QC protocol applied during the Phase 1, Phase 2A, Phase 2B and Phase 3A drilling, sampling and analytical programs were appropriate, followed and well documented during the programs. It is Golder's opinion that the insertion frequency and methodology for field QA/QC samples (18% of total sample population) is appropriate. It is also Golder's opinion that analytical samples showing no significant bias and that the quality of the ICP analytical results can be considered reliable for use in estimating Mineral Resources. Golder does recommend that ICP add a check (umpire) assay component to their analytical QA/QC program using a secondary independent laboratory.

11.7 Qualified Person Statement on Sampling, Analysis, & Quality Control

It is Golder's opinion that appropriate chain of custody, sample selection, sample preparation, analysis and QA/QC procedures were followed during the sample selection, preparation and analytical process for the ICP Phase 1, Phase 2A, Phase 2B and Phase 3A exploration campaign sampling programs. It is Golder's opinion that the samples collected during the four exploration campaign sampling programs were of high quality and were representative of the polyhalite mineralization within the ICP Ochoa Project with no significant sample bias.

12.0 DATA VERIFICATION

12.1 Data Verification Procedures

12.1.1 ICP Drilling Program Data Verification

As Golder personnel were not involved during the planning and implementation of the ICP Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration drilling programs for the Project, the primary quality control and data verification measures taken were in the form of a desktop review of the data and observations provided by ICP. The key areas of the ICP exploration program data and observation verification carried out by Golder are presented in the following sections.

12.1.2 Drillhole Collar Location Verification

The Golder QP responsible for exploration data verification visited a total of 5 of the 32 ICP drillhole locations during the personal inspection site visit for the purpose of verifying and documenting the reported drillhole locations. Golder also recorded the collar coordinates for the two ICP water wells located to the east of the proposed mining area. The drillholes and wells visited during the site visit are presented in Figure 12.1. The drillholes visited were selected at random by the Golder QP while in the field in order to ensure there was no bias in drillhole selection by the ICP personnel. The drillholes were selected in a manner to allow for representative spatial coverage across the extent of the potential mining area.

Drillhole collar monuments, indicating the drillhole name, completion date, and depth, were photographed (Figure 12.2 and Figure 12.3) and drillhole collar coordinates for each of the five drillholes and two wells were recorded using a handheld non-differential GPS. The handheld GPS coordinates were compared to the surveyed collar coordinates and differences in easting and northing were calculated. The results of the collar coordinate comparison are presented in Table 12.1. The differences between the drillhole verification coordinates and the surveyed collar coordinates are less than 15 feet and are well within the error limits of the handheld GPS.

Table 12.1: Site visit drillhole collar coordinate comparison

Drillhole or Well Name	Golder Site Visit GPS Coordinates (ft)*		ICP Surveyed Coordinates (ft)*		Difference (ft)	
	Northing	Easting	Northing	Easting	Northing	Easting
ICP-078	462,084.65	779,755.95	462,099.97	779,760.47	-15.32	-4.52
ICP-089	446,753.85	778,282.70	446,756.46	778,291.03	-2.61	-8.33
ICP-090	456,246.38	766,346.20	456,255.79	766,339.02	-9.41	7.18
ICP-092	444,225.24	779,794.54	444,238.67	779,789.50	-13.43	5.04
ICP-097	438,670.84	788,405.94	438,678.93	788,417.63	-8.09	-11.69
ICP-WS-01	452,659.93	848,682.41	452,652.43	848,689.52	7.50	-7.11
ICP-WS-02	454,155.81	848,694.33	454,154.62	848,696.15	1.19	-1.82

Note*: all coordinates in NM State Plane East, NAD83 datum

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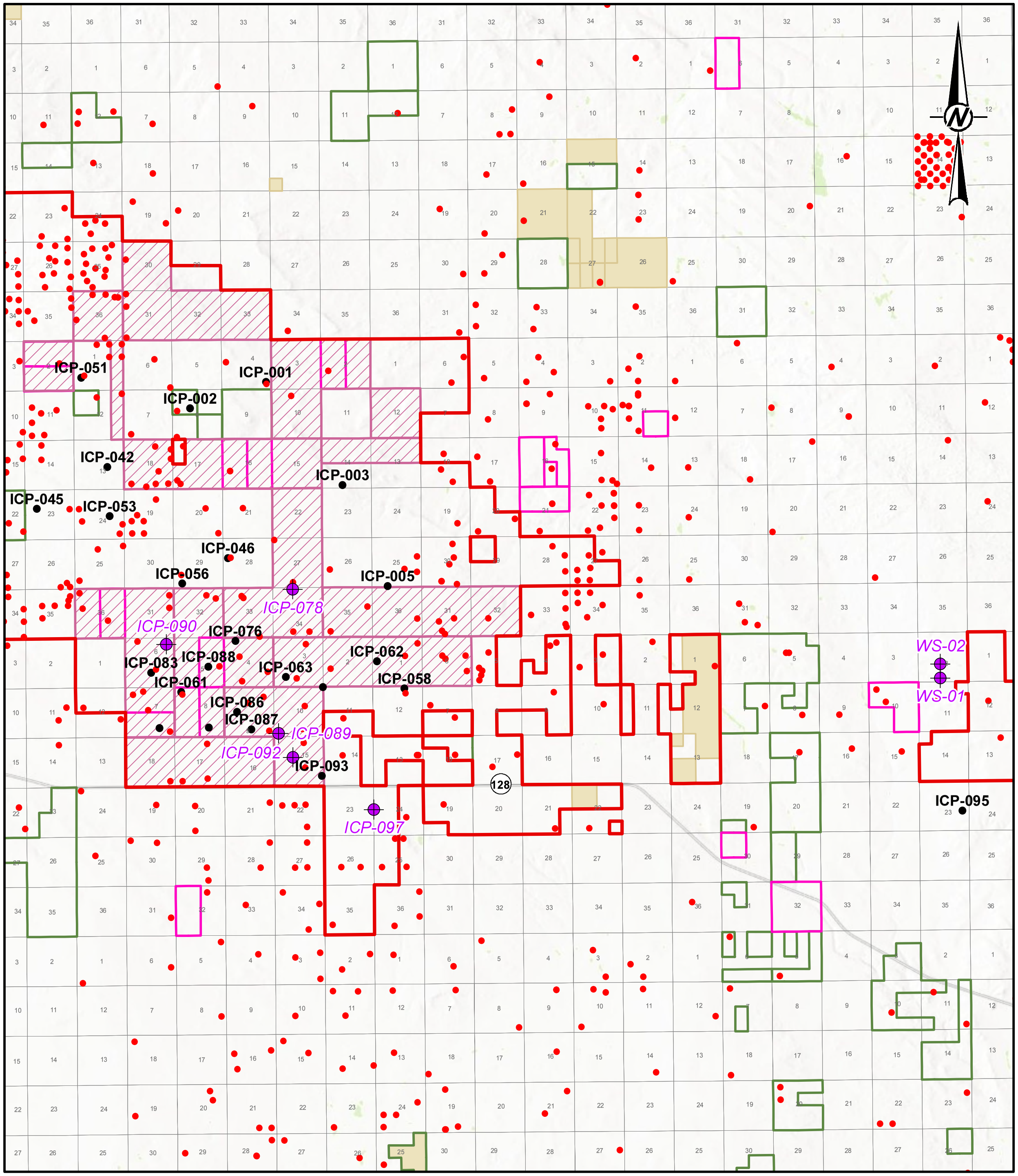
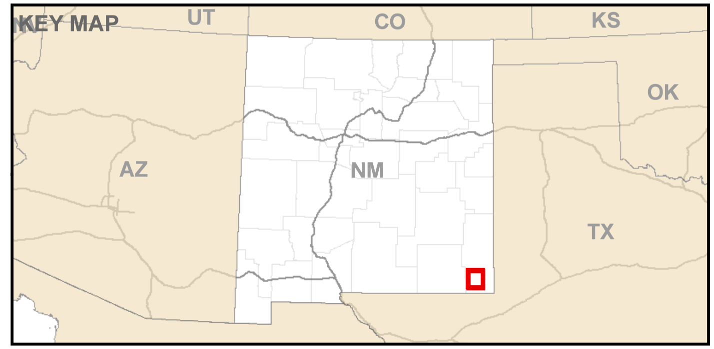




LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP Drill Hole
- Oil/Gas Well

September 2016 QP Site Visit

- QP Surveyed Drill Hole

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
DRILLHOLES VISITED DURING QUALIFIED PERSON SITE VISIT

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	12.1

0 1 in

Figure 12.2: ICP-097 Drillhole Collar Monument Visited During QP Site Visit

Figure 12.3: ICP-090 Drillhole Collar Monument Visited During QP Site Visit

12.1.3 Drillhole Logging & Sampling Procedure Verification

Golder did not actively participate in the implementation of the Phase 1, Phase 2A, Phase 2B, and Phase 3A ICP exploration drilling programs for the Project. Golder has reviewed the procedures and methodology and the resultant data and observations from the core logging, sampling, and laboratory analytical programs used during the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration programs. During the recent personal inspection site visit the Golder Qualified Person visited the ICP core storage and logging facility, located in Hobbs, New Mexico, and was able to discuss and walk through the core storage, core handling, core splitting, descriptive logging, and sampling procedures (Figure 12.4 through Figure 12.6) with ICP personnel who were responsible for performing the work completed during the exploration programs.

Figure 12.4: Drillhole ICP-085 Laid Out on Core Logging Bench at the ICP Core Facility

Figure 12.5: Core Logging and Storage at the ICP Core Facility

Figure 12.6: Core Boxes Stored in the ICP Core Facility

Golder Associates

12.1.4 Geological Data & Interpretation Verification

Geological data and interpretation verification performed by Golder was in the form of a desktop review of the descriptive logs, downhole geophysical logs, core photographs, sample interval data, and analytical data to ensure the geological database was free from typographic errors or omissions.

Golder reviewed each of the 32 ICP drillholes using all available data for each drillhole. Geological unit tops picks for all significant geological surfaces, including polyhalite top and polyhalite bottom picks, were provided by ICP. All tops picks were reviewed against the downhole geophysical logs and the analytical results and where minor errors or omissions were identified Golder performed these adjustments.

12.1.5 Analytical Data Verification

Analytical data verification performed by Golder includes cross referencing the spreadsheet analytical data against PDF copies of the H&M laboratory certificates to ensure the analytical database was free from typographic errors or omissions. Analytical data for the polyhalite units and the roof and floor anhydrite units was reviewed in detail by Golder to ensure the dataset was free of any miscorrelations, errors, and/or omissions.

Golder independently compiled and performed a review of the ICP field QA/QC results from the Phase 1, Phase 2A, Phase 2B, and Phase 3A analytical programs, including cross referencing the spreadsheet QA/QC analytical data against PDF copies of the H&M laboratory certificates to ensure the analytical QA/QC database was free from typographic errors or omissions. In addition, Golder independently prepared and evaluated QA/QC control charts and cross plots for analytical blank, certified reference material standards, and duplicate analyses to evaluate the analytical QA/QC results. Golder’s review of the QA/QC program results is presented in detail in Item 11.0 of this TR.

Golder did not independently collect drill core samples to submit for independent analyses.

12.2 Limits on Data Verification

Golder did not actively participate in the implementation of the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration drilling, sampling, and analytical programs and Golder’s QP site visit was performed in September 2016, well after the April 2013 completion of the Phase 3A drilling program; therefore, Golder cannot comment on the direct observation of implementation of exploration drilling, logging, sampling, and analytical procedures and methodologies implemented during the ICP exploration work on the Property. However, it is Golder’s opinion that the verified data and observations are consistent with data and observations collected using the exploration procedures and methodologies provided by ICP and it is reasonable to infer that these processes were implemented by ICP throughout the Phase 1, Phase 2A, Phase 2B, and Phase 3A exploration programs.

12.3 Qualified Person Statement on Data Verification

It is Golder's opinion that the exploration data and observations from the 32 ICP drillholes completed during the Phase 1, Phase 2A, Phase 2B, and Phase 3A drilling and sampling programs have been appropriately verified for the purpose of completing a geological model, estimating Mineral Resources, and preparing an NI 43-101 compliant Mineral Resource estimate TR.

13.0 MINERAL PROCESSING & METALLURGICAL TESTING

Metallurgical test work for polyhalites in New Mexico and Texas was completed by the USBM in the 1920s and 1930s for evaluating the potential of producing SOP and other fertilizers. Subsequent to the USBM studies, PCA completed test work in the 1950s to evaluate the potential for large scale developments of potash projects in New Mexico. Several test programs were completed by IC Potash between 2011 and 2013 to confirm the test work completed by the USBM and PCA and for the 2014 Study completed by Agapito and SNC Lavalin. The 2014 Study included five unit processes (crushing/washing, calcination, leaching, crystallization/evaporation and granulation) for the production of three SOP products (soluble, standard, and granular) at a nominal capacity of 715,000 tons per year. Table 13.1 summarizes the identified mineralogy in the Ochoa mineralized material from samples in the SGS Lakefield test program.

Table 13.1: Mineralogy Results by X-Ray Diffraction

Quantitative Description	Mineral	Composition
Major	Polyhalite	$K_2Ca_2Mg(SO_4)_4 \cdot 2H_2O$
Moderate	Anhydrite	$CaSO_4$
Minor	Magnesite	$MgCO_3$
Trace	Halite[1]	NaCl

Note: 1. Tentative identification due to low concentrations

The proposed mineral processing presented in this PEA is based on the strategy that mining would be focused on the high-grade polyhalite bed grading higher than 85% polyhalite. The processing scheme would produce two fertilizer products for market: raw granule product and pelletized product. This approach has simplified the process operations from the previous process flow sheet in the 2014 Study.

13.1 Metallurgical Test Programs

Historical test programs are summarized in Item 13.0 of the 2014 Study.

With the new strategy for producing the aforementioned fertilizer products, the relevant historical test work is for crushing to determine the size distribution of the feed material. To date, no metallurgical or processing work has been completed specifically for the pelletizing of polyhalite only. The processing flow sheet would crush the ROM polyhalite in roll crushers and classify to size gradation for a raw granular fertilizer product and to collect generated fines along with crushed polyhalite to form a pelletized fertilizer product.

The mineral processing for the raw granulated product would consist of physical separations and would not require any chemical treatments or other processes. The process would include crushing and sizing by vibrating screens. For the pelletized product, a portion of the raw granulated material and collected fines would be fed to the pelletizing circuit. Thus, 100% of the ROM polyhalite would be recovered in the two fertilizer products and available for sale.

No additional test work was completed for this PEA.

Crushing tests were completed for the 2014 Study at the SGS Lakefield laboratory (2012) and RDi Laboratory (2012). Table 13.2 and Table 13.3 summarize the crushing results by size and chemical assays for the SGS Lakefield program.

One roll crusher test was completed at RDi as summarized in Table 13.4 with the feed material sizes and tabulated passing sizes, but no chemical assays were done on the different screen fractions.

Table 13.2: Roll Crusher Results: .25-inch Feed Cumulative Percent Passing Size-by-Size Assays

Size		Weight	Cumulative Passing Distribution, %					
Mesh	µm	%	SiO_2	Al_2O_3	MgO	CaO	Na_2O	K_2O
1/2"	12,700	99.3	99.2	98.2	99.2	99.2	99.9	99.3
3/8"	9,510	95.6	97.0	95.4	95.7	95.6	96.4	95.5
3	6,730	84.2	89.7	88.0	84.6	83.9	94.4	83.3
4	4,750	61.7	70.7	68.5	62.3	61.2	71.8	60.6
6	3,350	44.5	56.3	57.3	45.5	43.7	54.6	43.2
8	2,360	34.0	48.3	49.3	35.1	33.1	44.6	32.6
10	1,700	27.1	41.3	41.9	28.2	26.3	37.2	25.8
14	1,180	21.1	34.7	36.7	22.2	20.3	29.8	19.8
20	850	17.4	31.1	33.3	18.5	16.7	25.4	16.1
28	600	14.3	38.0	30.1	15.3	13.5	21.3	13.1
35	425	12.3	25.6	24.9	13.2	11.6	18.4	11.1
48	300	10.6	23.7	26.0	11.6	10.1	15.9	9.59
65	212	9.48	21.9	24.0	10.4	8.99	13.7	8.48
100	150	8.59	20.5	22.3	9.47	8.14	11.7	7.65
150	106	7.88	19.4	21.3	3.30	7.48	10.1	7.00
200	75	7.51	18.6	20.3	8.47	7.13	9.37	6.57

Table 13.3: Roll Crusher Results: 10 Mesh Feed Cumulative Percent Passing Size-by-Size Assays

Size		Weight	Cumulative Passing Distribution, %					
Mesh	µm	%	SiO_2	Al_2O_3	MgO	CaO	Na_2O	K_2O
10	1,700	100	100.0	100.0	100.0	100.0	100.0	100.0
14	1,180	82.6	85.7	84.2	83.1	82.4	84.2	82.3
20	850	67	73.1	73.7	68.1	67.6	68.5	67.3
28	600	52.6	61.4	60.6	54.0	53.0	53.9	52.5
35	425	43.5	53.5	51.3	45.0	43.8	44.2	43.2
48	300	35.7	45.9	32.4	37.2	35.9	34.8	35.2
65	212	30.5	40.3	38.7	31.9	30.9	27.9	30.1
100	150	26	34.8	33.1	27.3	26.5	21.4	25.8
150	106	23	31.4	30.0	24.2	23.5	16.6	22.8
200	75	20.4	29.3	27.7	21.9	20.8	13.6	20.2

Table 13.4: Roll Crusher Results by Percent Passing Sizes

Size		Weight
Mesh	µm	% Passing
14	1,180	67.0
20	850	50.1
28	600	38.9
35	425	29.2
48	300	23.8
65	212	19.3
100	150	15.0
150	106	12.9
200	75	10.0

Process testing was conducted at NOVOPRO for using cage packtor grinding in the crushing circuit after roll crushing. The results of this test work are summarized in Table 13.5.

Table 13.5: Results of Cage Packtor Grinding by Percent Passing Sizes

Size		Weight Retained (%)	Cumulative Weight (%)	Weight Retained (%)	Cumulative Weight (%)
Inch	MM				
0.5000	12.7000	38.70	38.70	0.00	0.00
0.3750	9.5100	21.68	60.38	0.00	0.00
0.2500	6.3500	18.68	79.06	0.00	0.00
0.1870	4.7600	0.00	79.06	15.50	15.50
0.1320	3.3600	0.00	79.06	10.87	26.37
0.1250	3.1800	7.81	86.87	0.00	26.37
0.0937	3.1800	0.00	86.87	12.42	38.79
0.0661	2.3800	13.13	100.00	10.82	49.61
0.0234	1.6800	0.00	100.00	26.29	75.90
0.0117	0.5950	0.00	100.00	9.08	84.98
0.0083	0.2100	0.00	100.00	4.76	89.74
0.0059	0.1490	0.00	100.00	2.30	92.04
0.0041	0.1050	0.00	100.00	5.22	97.26
0.0000	0.0000	0.00	100.00	2.74	100.00

No assays were done of the individual size fractions. This test work showed that fewer fines were produced at the higher speed rates in the Cage Packtor and roll crushing is a viable method for crushing the ROM ore.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Definition of Mineral Resources

For estimating the polyhalite Mineral Resources for the Project, Golder has applied the definitions of "Mineral Resource" as set forth in the CIMDS.

Under CIMDS, a Mineral Resource is defined as:

> "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling."

Mineral Resources are subdivided into categories of Measured, Indicated, and Inferred, with the level of confidence reducing with each category. Mineral Resources are always reported as in-situ tonnage and are not adjusted for mining losses or mining recovery.

14.2 Mineral Resource Estimation Methodology

14.2.1 General

Geological modeling and subsequent Mineral Resource estimation was performed under the supervision of the Golder QP in accordance with Golder's internal modeling and Mineral Resource estimation guidelines and in accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (May 2003 edition).The geological data compilation, interpretation, geological modeling, and Mineral Resource estimation methods and procedures are described in the following sections.

14.2.2 Geological Database

Golder compiled all available drillhole data including drillhole collar records, down-hole geological tops picks, sample interval and analytical results from the 32 ICP drillholes into a master geological database. In addition to the ICP drillholes, an additional 1,048 oil and gas wells from the New Mexico state drilling database were imported into the master geological database. All 32 of the ICP drillholes and 878 of the 1,048 oil and gas wells included geological tops picks representing the downhole depth for the top of key geological units, including formation and member tops as well as key lithological contacts such as the top and bottom of the polyhalite domain.

Golder performed standard data integrity checks on the ICP and oil and gas well base data including evaluating for duplicate drillholes, duplicate geological tops and sample records, checking for out of order geological tops picks, and sample interval overlaps. Where possible, records in digital spreadsheet files were cross checked against PDF scans of state drillhole survey records, lab certificates, and scans of handwritten geological descriptive logs and other original paper records to ensure the data set was free from any errors or omissions. No significant errors or omissions were identified during the base data review process; several minor errors or omissions were identified and were rectified by Golder based on supporting documentation (e.g., lab certificates) and discussions with ICP personnel responsible for managing the base data.

The validated geological database included downhole lithology records from 32 ICP drillholes totaling approximately 47,000 feet of drilling and 646 analytical samples. In addition to the ICP drillholes 1,048 oil and gas wells totaling approximately 17,000,000 feet of drilling were also included in the geological database; data model spatial extents limits and data integrity reviews reduced the final count of oil and gas wells used for modelling purposes to 718 drillholes totaling approximately 7,000,000 feet of drilling. Once the data integrity checks were completed, the drillhole survey, geological tops picks, and analytical data were formatted for correlation reviews and geological modeling.

14.2.3 Geological Interpretation

Golder performed a review of the ICP geological tops picks for the 32 ICP drillholes and the 878 oil and gas wells where tops picks were provided. The ICP tops picks were checked against downhole geophysical logs for the ICP drillholes and for a random selection of oil and gas wells to ensure there were no errors or omissions and to confirm the presence of correlatable surfaces at the depths identified. The drillhole and oil and gas well data was then imported into MineScape™.

Geological tops picks for the polyhalite top and polyhalite bottom in the ICP drillholes were checked against the individual sample analytical results to ensure there were not mismatches between the polyhalite domain in the lithology data and the contact between polyhalite and overlying and underlying anhydrite in the analytical data. A number of minor adjustments were made to the polyhalite top and polyhalite bottom depths in the lithology data to ensure the polyhalite domain depth intervals were consistent with the analytical results.

14.2.4 Polyhalite Domaining

Following the review of the geological tops picks, based on discussions with ICP personnel, Golder subdivided the overall polyhalite interval, defined by the polyhalite top and polyhalite bottom surfaces, into three laterally correlatable polyhalite domains based on vertical grade zoning within the polyhalite interval. The purpose of introducing the polyhalite domains is to allow for more selective modeling and therefore potentially selective mining by limiting the impact of geological dilution (grade smearing) from the low grade upper and lower contact/transitional zones.

Using a geological grade boundary of 80% polyhalite, Golder sub-divided the polyhalite interval into the following three domains:

- POLY1 – narrow upper low grade contact domain with individual sample polyhalite grades ranging from 50% to 79%. This domain represents the transitional upper contact between the polyhalite and the overlying anhydrite unit.
- POLY2 – thick target domain with individual sample polyhalite grades all in excess of 80%. This domain represents the core of the potentially economic polyhalite mineralization.
- POLY3 – variable thickness (generally thicker than the upper transitional contact zone) lower low grade contact domain with individual sample polyhalite grades ranging from 50% to 79%. This domain represents the transitional lower contact between the polyhalite and the underlying anhydrite unit.

A summary of the polyhalite thickness, polyhalite grade, and anhydrite grade for each polyhalite domain is presented in Table 14.1. Polyhalite thickness and grade parameters by domain for each of the ICP drillholes are presented in Figure 14.1.

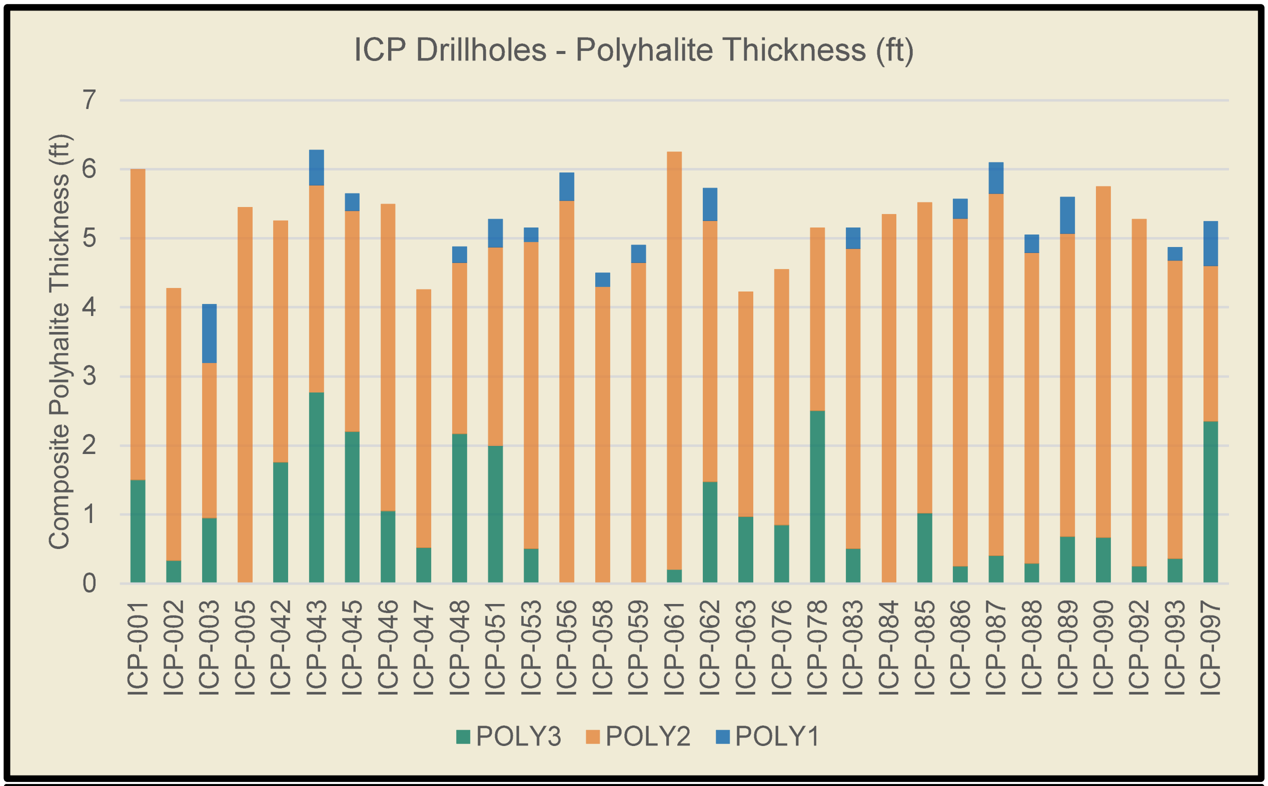
Table 14.1: Polyhalite Domain Summary Thickness and Grade Statistics

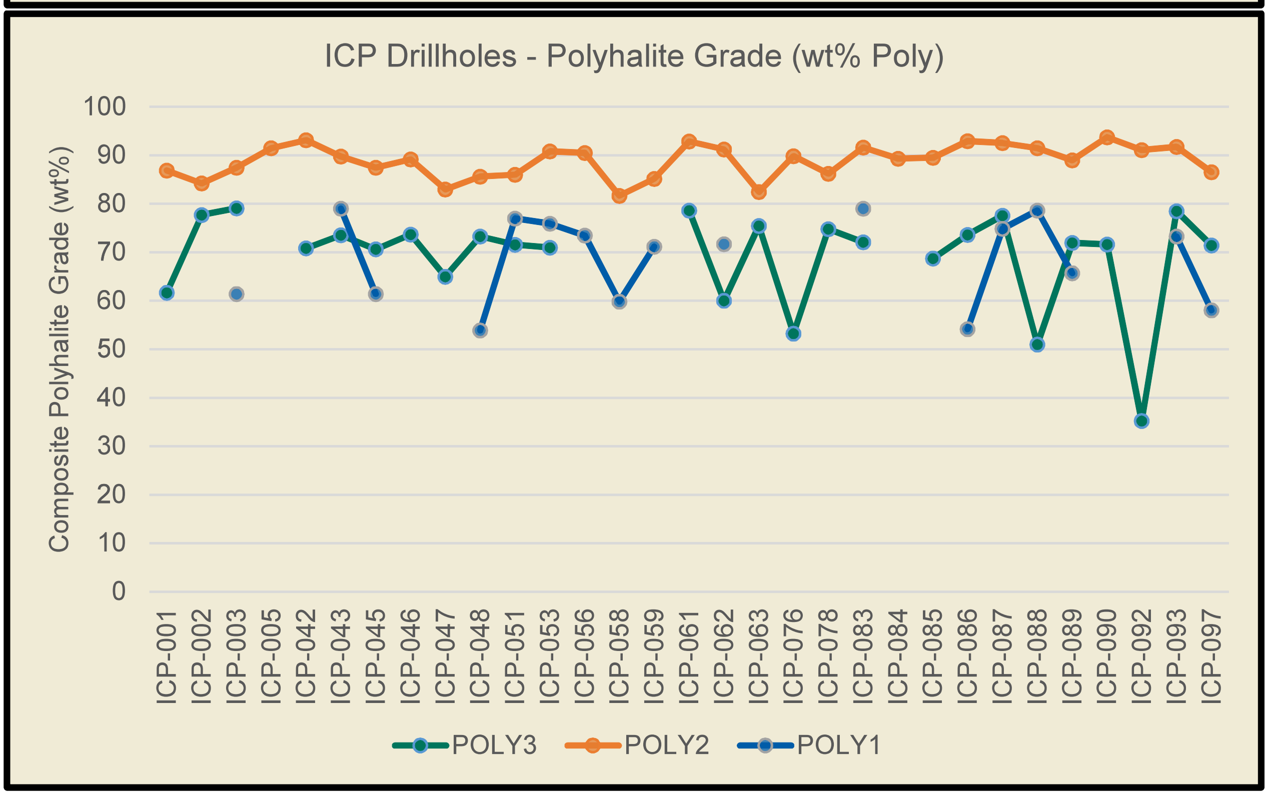
Polyhalite Domain	Composite Intercept Count	Mean Composite Thickness (ft)	Min Composite Thickness (ft)	Max Composite Thickness (ft)
POLY1	17	0.38	0.19	0.85
POLY2	31	4.12	2.25	6.05
POLY3	26	1.10	0.20	2.77
Total	**74**	**2.20**	**0.19**	**6.05**

Polyhalite Domain	Composite Intercept Count	Mean Composite Polyhalite Content (%, by XRD)	Min Composite Polyhalite Content (%, by XRD)	Max Composite Polyhalite Content (%, by XRD)
POLY1	17	68.33	53.90	79.00
POLY2	31	89.27	81.68	93.75
POLY3	26	70.42	35.20	79.13
Total	**74**	**85.14**	**35.20**	**93.75**

Polyhalite Domain	Composite Intercept Count	Mean Composite Anhydrite Content (%, by XRD)	Min Composite Anhydrite Content (%, by XRD)	Max Composite Anhydrite Content (%, by XRD)
POLY1	17	18.87	6.30	40.10
POLY2	31	2.15	0.36	5.19
POLY3	26	10.47	2.56	53.20
Total	**74**	**4.27**	**0.36**	**53.20**

Figure 14.1: ICP Drillhole Polyhalite Domain Thickness and Grade Plots





The three polyhalite domains are bounded by the polyhalite top and polyhalite bottom surfaces from the geological tops picks in the ICP drillholes, enabling them to be interpolated into the oil and gas wells, where only the polyhalite top and polyhalite bottom surfaces are available as picked from the downhole geophysical logs (no grade data available to apply the domaining schema to the oil and gas wells). The overall polyhalite unit structure uses the polyhalite top and polyhalite bottom surfaces from both the ICP drillholes and the oil and gas wells while the internal domaining of the polyhalite unit is controlled by the ICP drillholes.

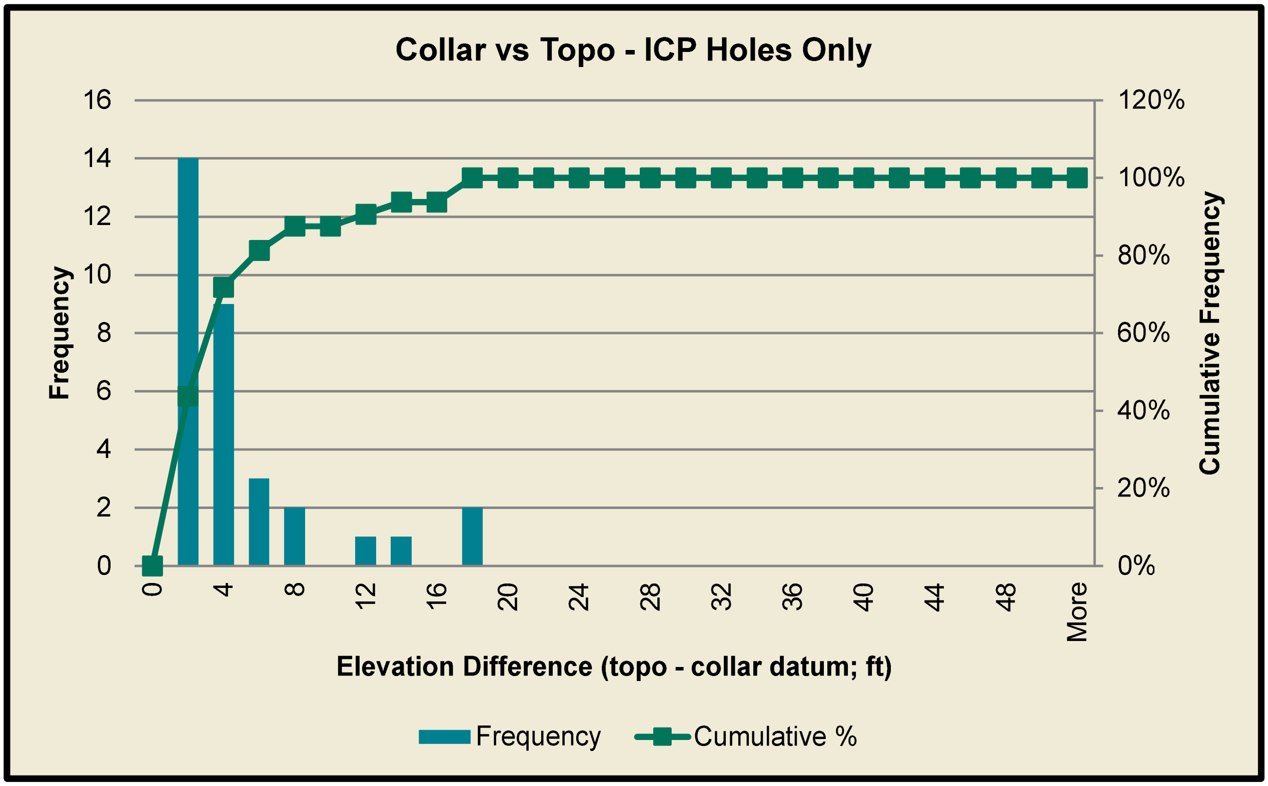
14.2.5 Topographic Model

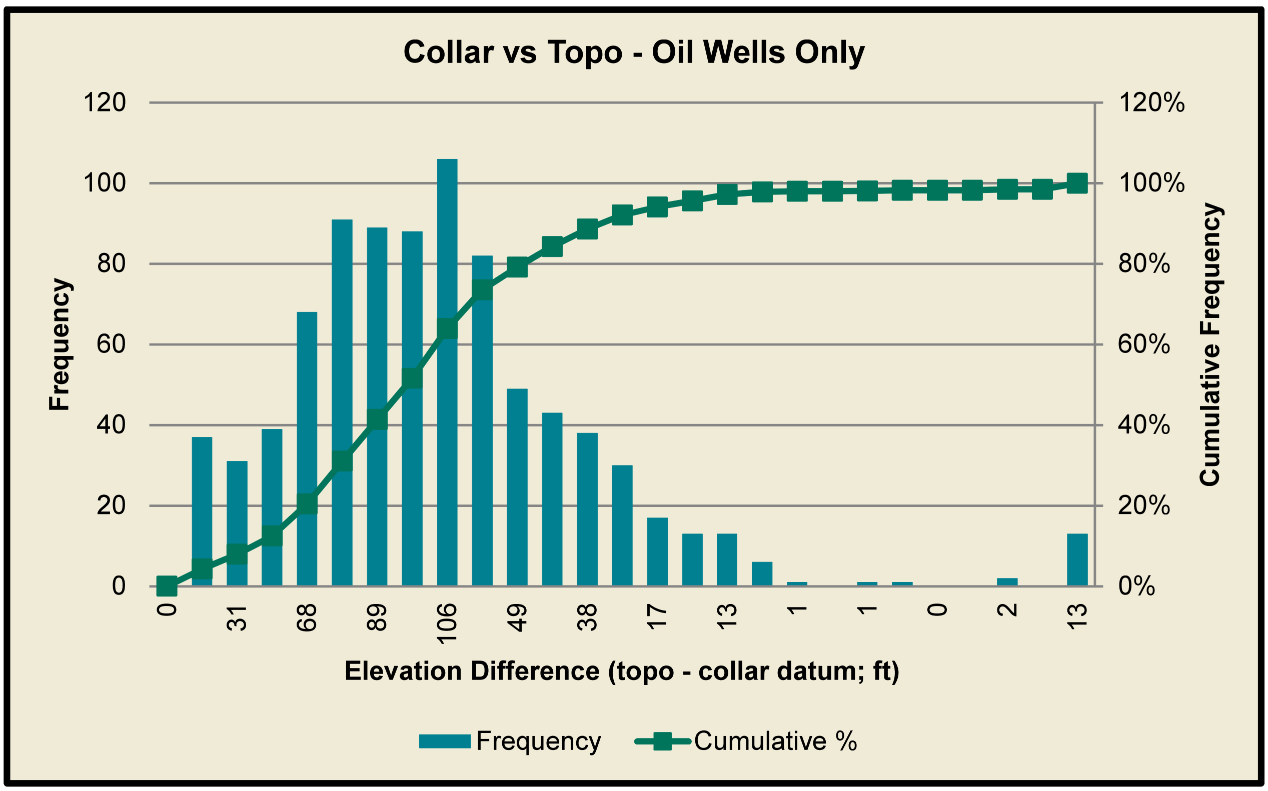
A topographic surface grid model was generated by Golder using ASCII xyz data extracted from 1/3 arc second raster source files hosted on the United States Geological Survey (USGS) public domain National Map download website (accessed July 20, 2016). The ASCII xyz data were visually reviewed in Blue Marble Global Mapper™ software to ensure there were no significant outliers or areas of missing data. The ASCII xyz data was then imported into the MineScape StratModel™ application of the ABB MineScape geological modelling and mine planning software package, where the xyz data was gridded using a 50-foot by 50-foot regularized grid. Due to the large area covered by the Project, Golder applied a limiting polygon to the data during the gridding process to avoid unnecessarily increasing the file size by gridding topography well outside of the areas of interest.

The modeled topographic surface was contoured on 5-foot intervals and a rainbow shaded topography surface was generated to allow for visual inspection to ensure there were no elevation outliers or areas of missing data in the modeled surface.

As an additional check, spot checks of the topography surface were performed using the drillhole and oil and gas well collar coordinates and elevations. It should be noted that many of the oil and gas wells and some of the drillholes in the database have their elevation datum set to the Kelly Bushing elevation on the drill rig rather than at ground level; therefore, some discrepancy between collar elevation and topography model elevation is expected. Histograms of collar versus topography elevation difference were prepared for the ICP drillholes only and for the oil and gas wells only (Figure 14.2). Overall the ICP drillholes show good agreement between the collar datum elevation and the modelled topography elevation with only four drillholes with differences in excess of 8 feet. Golder identified 67 oil well collars that have collar vs topo differences in excess of 25 feet, including 13 wells with differences between 50 feet and 450 feet.

Figure 14.2: Collar Versus Topography Elevation Histograms





14.2.6 Stratigraphic & Structural Model

Golder developed a 3D stratigraphic and structural model for the Project area using the StratModel. The model was developed as a gridded surface model using a 500-foot by 500-foot grid cell size.

The model comprises gridded structure surfaces for each modeled geological surface from the tops picks, as well as the three polyhalite domain intervals. The structure grids created represent the unit roof, floor, vertical thickness (roof minus floor) and true thickness. The modeled units are presented in stratigraphic order in Table 14.2. The modeled units in the context of the stratigraphic sequence are presented in Figure 14.3.

The model data included validated drillhole collar survey records, lithology data, sample intervals, and analytical results for all 32 ICP drillholes as well as 718 oil and gas wells. The topography used in the model was the 50-foot by 50-foot gridded topography model discussed in the previous section.

A finite element method interpolator was used for all geological unit roof surfaces, polyhalite interval roof and floor surfaces, and trend calculations while a planar interpolator was used for thickness calculations. The geological model extents, presented in Figure 14.4, extended well beyond the limits of the ICP license areas and ICP drillholes to ensure regional stratigraphic and structural trends were accounted for in the model.

Table 14.2: Geological Model Units in Stratigraphic Order

Model Unit	Model Code	Unit/Surface Name	Feature Type	Description
1	RUSTT	Rustler Formation	surface	formation top surface
2	APH01	APH_01	surface	top surface subdivision of Forty-Nine Member
3	APH02	APH_02	surface	top surface subdivision of Forty-Nine Member
4	MAGET	Magenta Member	surface	member top surface
5	TAMAT	Tamarisk Member	surface	member top surface
6	HALTT	Upper Halite	surface	top surface subdivision of Tamarisk Member
7	UAN	Upper Anhydrite	surface	top surface subdivision of Tamarisk Member
8	POLYT	Top Polyhalite	surface	top surface polyhalite unit
9	POLY1	Polyhalite 1 domain	interval	upper polyhalite domain interval
10	POLY2	Polyhalite 2 domain	interval	middle polyhalite domain interval
11	POLY3	Polyhalite 3 domain	interval	lower polyhalite domain interval
12	POLYB	Base Polyhalite	surface	bottom surface polyhalite unit
13	LAN	Lower Anhydrite	surface	top surface subdivision of Tamarisk Member
14	BPH01	BPH_01	surface	top surface subdivision of Tamarisk Member
15	BPH02	BPH_02	surface	top surface subdivision of Tamarisk Member
16	CULET	Culebra Member	surface	member top surface
17	LMEDT	Los Medanos Member	surface	member top surface
18	SALDT	Salado Formation	surface	formation top surface

Figure 14.3: Stratigraphic Column with Model Codes

System	Series	Formation	Member	Unit		Top Code	Bottom Code
Permian	Ochoan	Rustler Formation	Forty-Nine Member	A5		RUSTT	APH_01
				M4		APH_01	APH_02
				A4		APH_02	MAGET
			Magenta Member			MAGET	TAMAT
			Tamarisk Member	A3		TAMAT	HALTT
				H3	Halite	HALTT	POLYT
					POLY1	POLY1_Roof	POLY2_Roof
					POLY2	POLY2_Roof	POLY3_Roof
					POLY3	POLY3_Roof	POLY3_Floor
					H3A	POLYB	BPH_01
					H3S	BPH_01	BPH_02
				A2		BPH_02	CULET
			Culebra Member			CULET	LOS_MEDANOS
			Los Medanos Member			LMEDT	SALDT
		Salado Formation				SALDT	-

Note: Formation, Member and unit names as presented in SNC Lavalin (2014)

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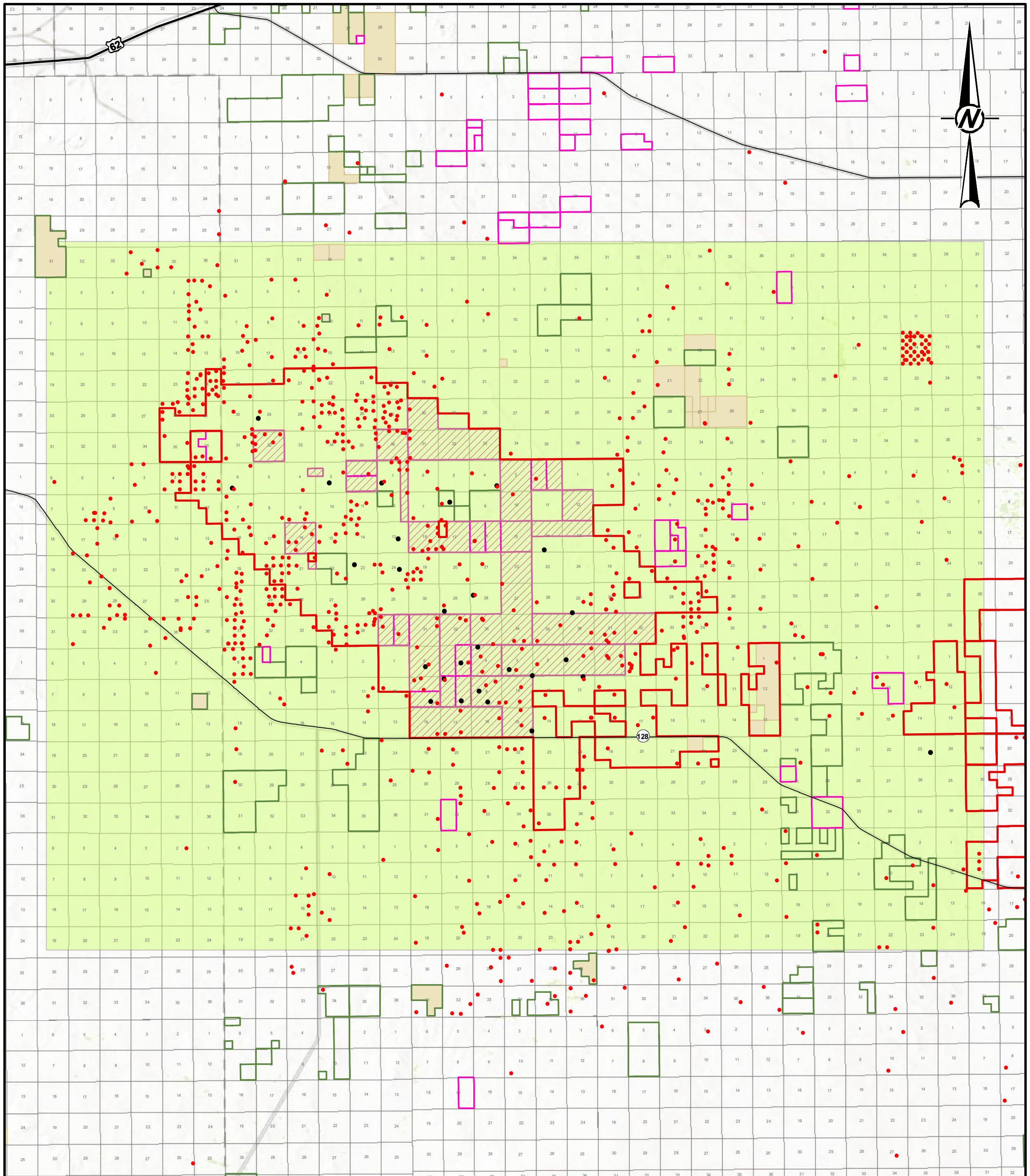
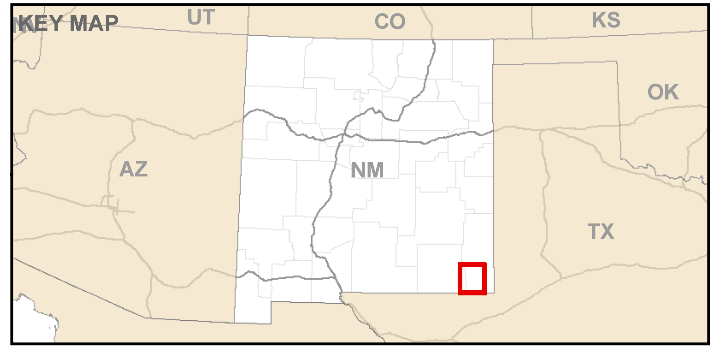




LEGEND
- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- Geological Model Extent
- ICP Drill Hole
- Oil/Gas Well

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 25,000 50,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
GEOLOGICAL MODEL SPATIAL EXTENTS

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	14.4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A
0 1 in

The structural and stratigraphic model was developed through an iterative process of model building, statistical review of model versus drillhole data, and visual review of plan isopleth maps and geological sections. Golder made revisions to the interpretative data where necessary to improve the model structure where necessary.

The model is developed as an iterative process of gridding, checking results, adding interpretive controls, and rerunning the process until the model reasonably reflects the data and overall geological interpretation. The result is a refined model that honors the base data and is free of interpretive errors or omissions.

Model checks performed include preparation of geological cross-sections and isopleth maps for each geological surface and all three polyhalite domains in the model. Representative cross sections through the potential mining area are presented in Figure 14.5. The polyhalite thickness isopach maps for each of the three polyhalite domains are presented in Figure 14.6 through Figure 14.8.

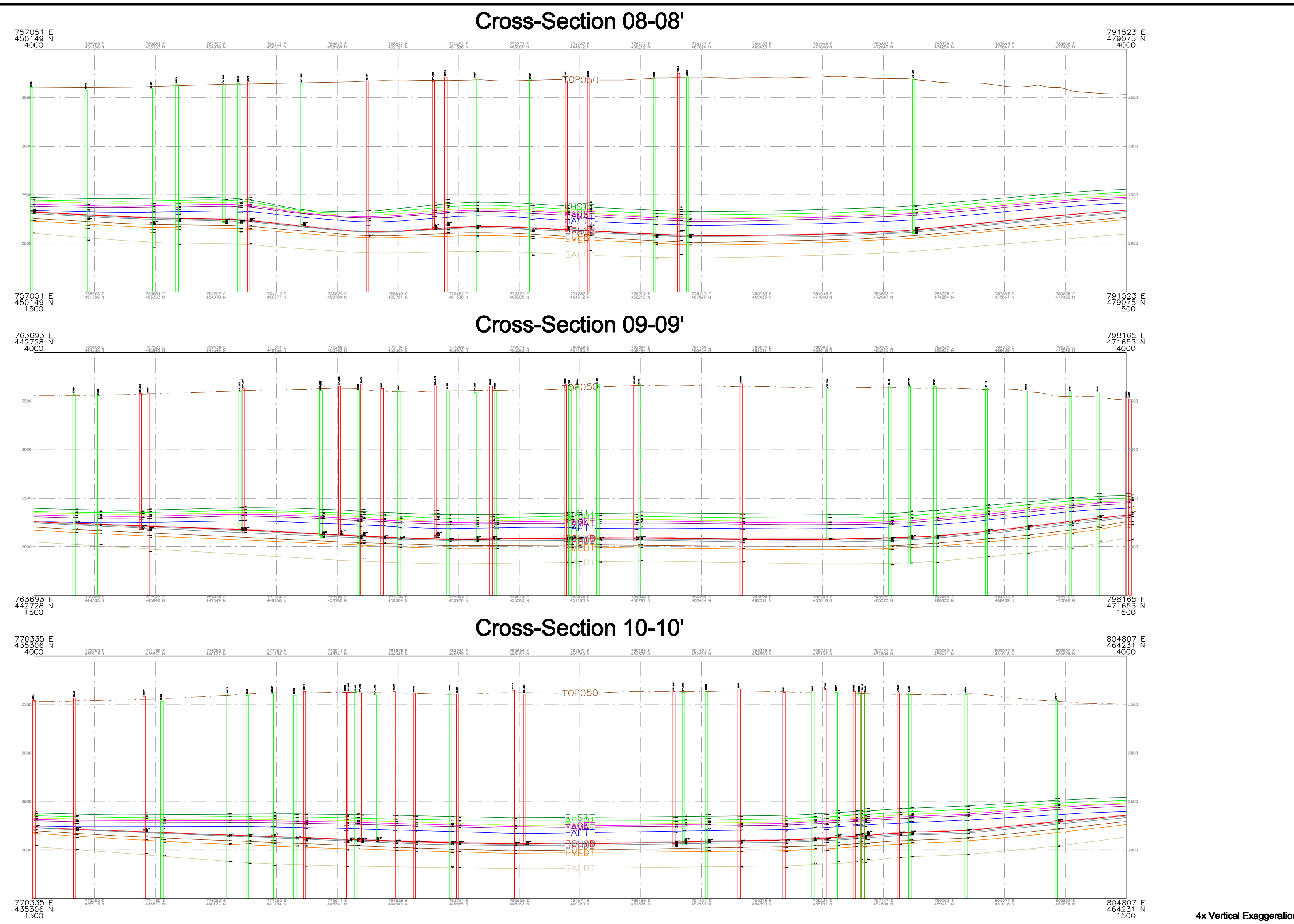
The elevation and thickness isopleths were compared against structure postings from the drillholes to ensure the model was representative of the base data. The model was also validated numerically using comparative statistics between drillhole unit thickness and elevation data and the resultant modeled unit thicknesses and elevations to ensure the model was honoring the input drillhole data. Any potential outliers or issues identified in the visual inspection and statistical review were followed up on to ensure the model was free from erroneous data or interpolation errors.

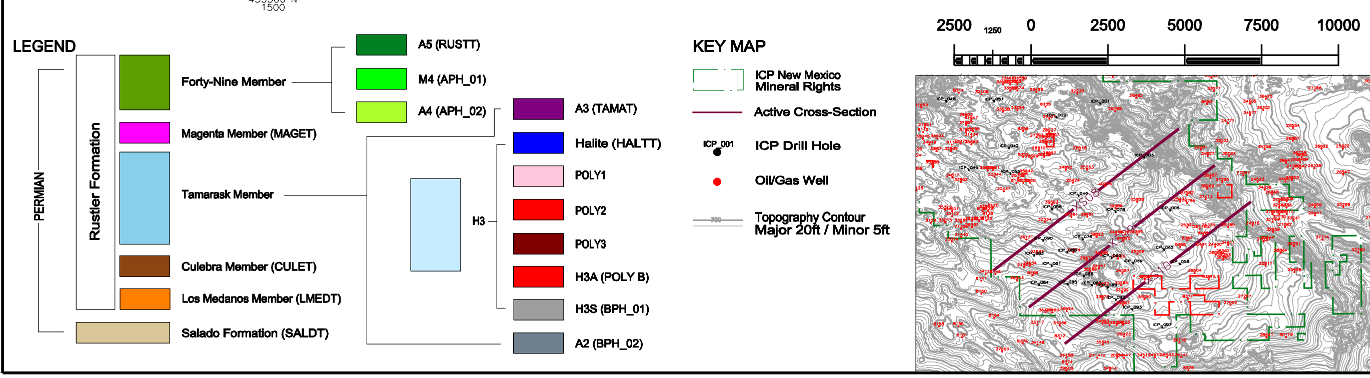
The geological model went through several iterations of internal review with the Golder project team as well as model review meetings with the client project team prior to being finalized. The final stratigraphic model provides the basis for volumetric estimates for polyhalite Mineral Resources, constraining the polyhalite quality model.

14.2.7 Density

To facilitate the conversion of modeled volumes to mass (short tons) Golder applied a default wet basis density of 173.5 pcf for the three modeled polyhalite domains. This is the same default polyhalite density applied in previous Mineral Resource estimates for the Project and is supported by a limited number of polyhalite density analyses reported in the 2014 Study.

Golder recommends that future sampling and analytical programs include obtaining additional density results for each of the individual polyhalite domains to allow for density modeling and improved conversion of modeled volume to mass. Golder also recommends obtaining density results for the anhydrite and halite units in the hanging wall and footwall of the polyhalite mineralization to allow for density modeling and improved conversion of modeled volume to mass for the dilution material.





CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
REPRESENTATIVE CROSS SECTIONS
THROUGH THE POTENTIAL MINING AREA

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-10-27
PREPARED	JS
DESIGN	JS
REVIEW	JdW
APPROVED	JdW

PROJECT No.	CONTROL	Rev.	FIGURE
1659743			14.5

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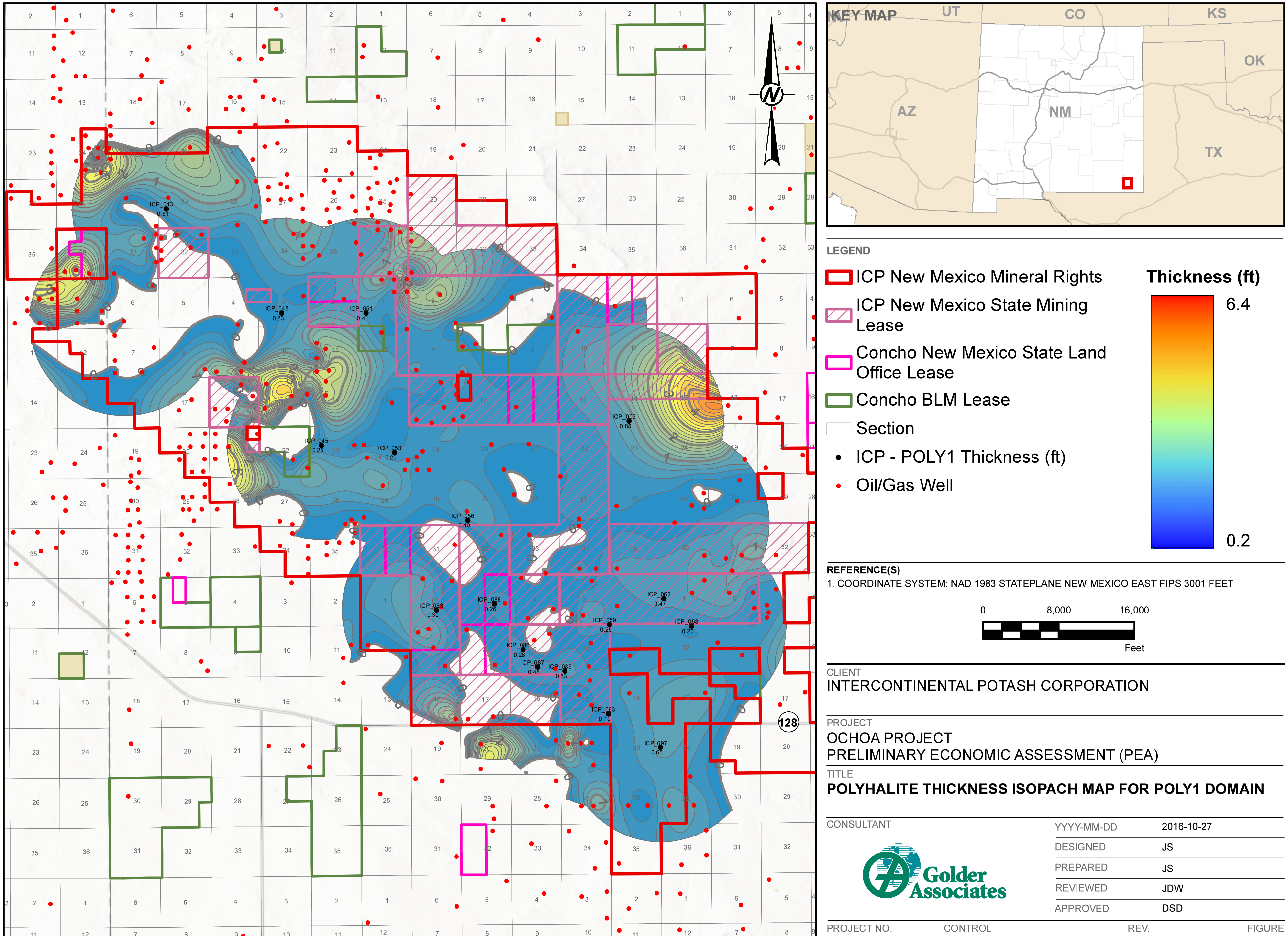

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY1 Thickness (ft)
- Oil/Gas Well

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
POLYHALITE THICKNESS ISOPACH MAP FOR POLY1 DOMAIN

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO. 1659743 CONTROL 0001 REV. 0 FIGURE **14.6**

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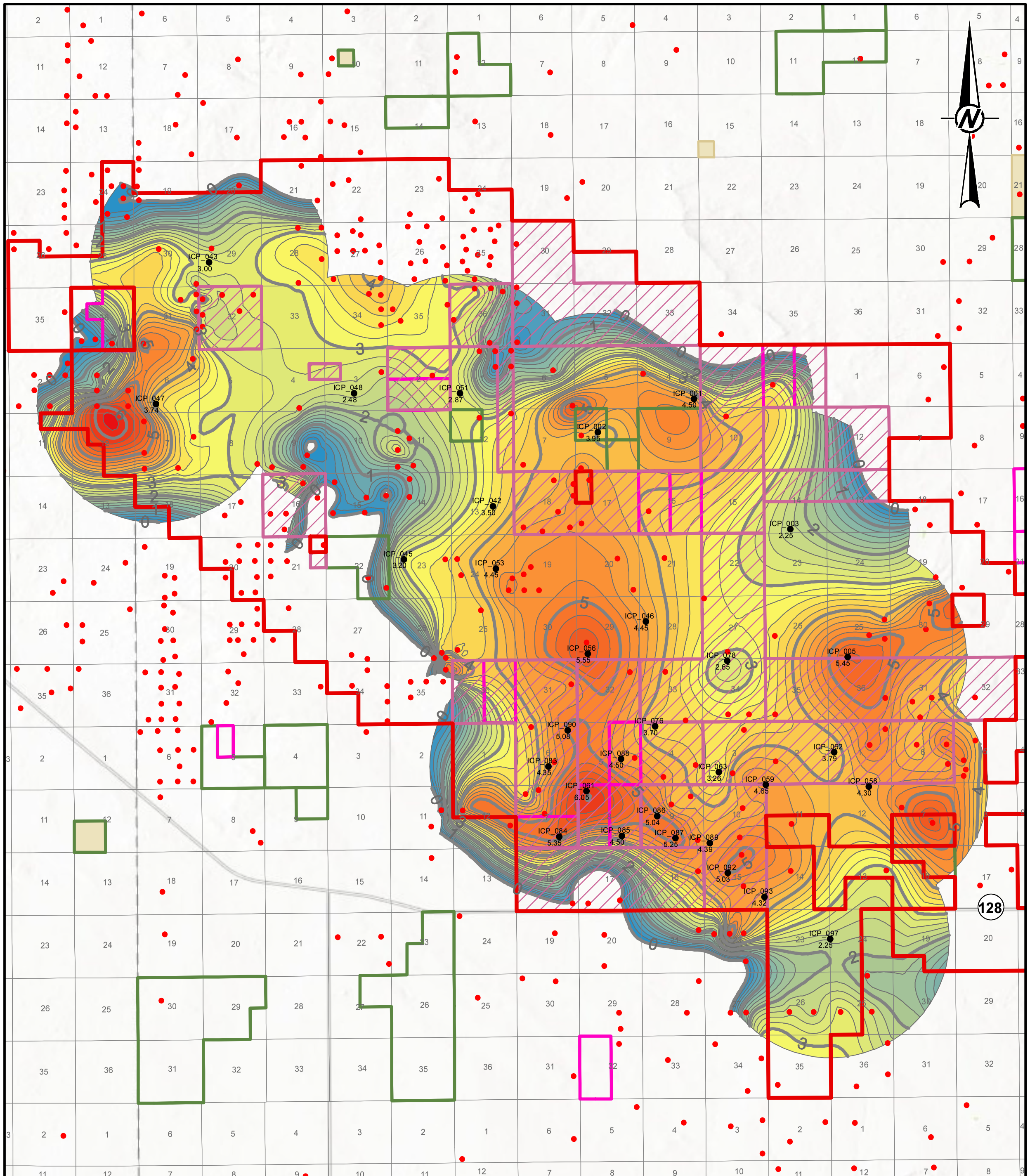
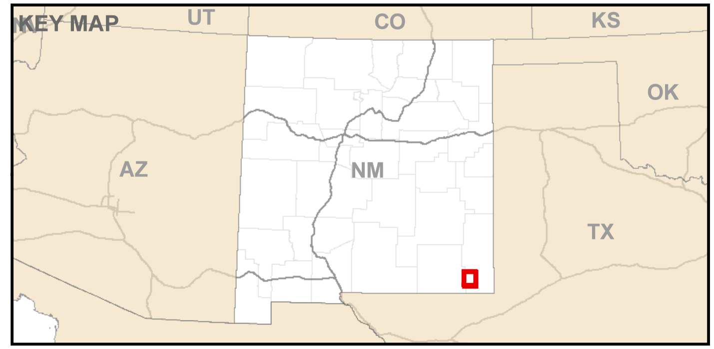
0 1 in

PATH: G:\GAI PROJECTS\1659743 ICP Ochoa PEA LOCAL\GIS\MapFiles\Fig14.7_Poly2_Thick_ANSI_A.mxd





LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY2 Thickness (ft)
- Oil/Gas Well

Thickness (ft)

6.4

0.2

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000

Feet

CLIENT

INTERCONTINENTAL POTASH CORPORATION

PROJECT

OCHOA PROJECT

PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE

POLYHALITE THICKNESS ISOPACH MAP FOR POLY2 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	14.7

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A

0 1 in

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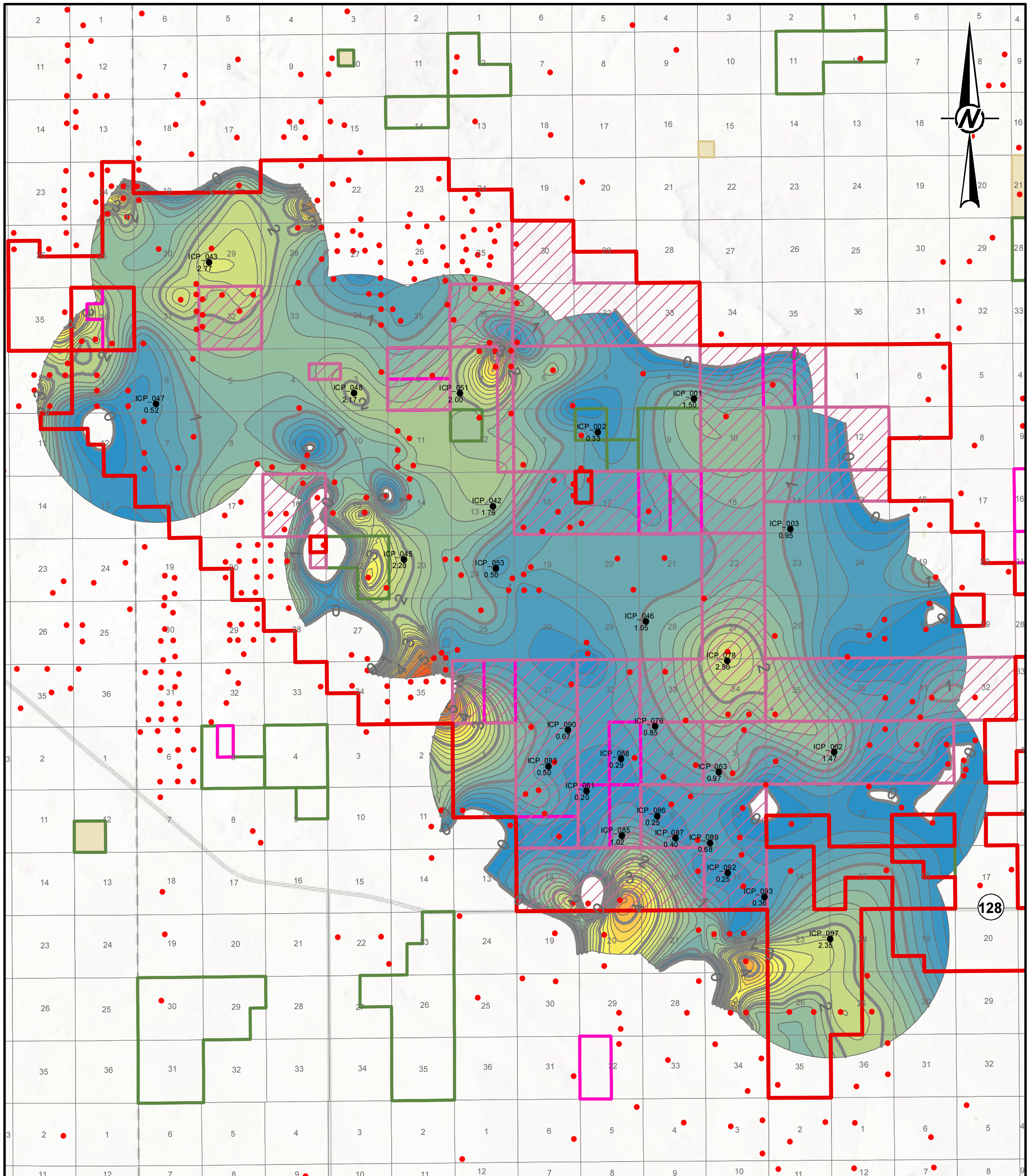

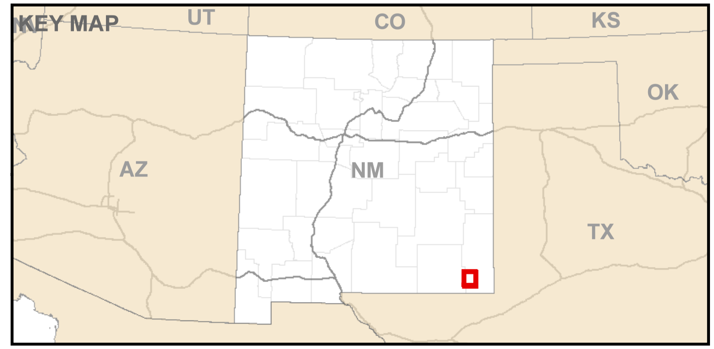

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY3 Thickness (ft)
- Oil/Gas Well

Thickness (ft)

6.4

0.2

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
POLYHALITE THICKNESS ISOPACH MAP FOR POLY3 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	**14.8**

14.2.8 Grade Model

Following completion of the final stratigraphic and structural model, Golder developed a 3D grade model for the Project area using MineScape StratModel. The model was developed as a gridded surface model comprising regularized gridded surfaces for each modeled grade parameter for each of the three individual polyhalite domains.

The interpolation of analytical data was controlled in the grade model by the framework of the three polyhalite domains defined in the final stratigraphic and structural model such that grade from individual samples could only be interpolated/extrapolated within the polyhalite domain in which the sample fell. As the polyhalite domain boundaries in the structure model were defined using the individual grade sample intervals, there were no instances where an individual sample spanned a domain boundary.

The grade model data included validated drillhole analytical results from 31 ICP drillholes (1 ICP drillhole did not intercept polyhalite). The individual drillhole grade samples were imported into the model and composited on a polyhalite domain basis using the domains from the stratigraphic and structural model, creating a single composite sample interval for each polyhalite domain intersected in each drillhole. The grade parameters for the composite polyhalite domain intervals were effectively length weighted as a default density of 173.5 pcf was applied to each of the three polyhalite domains.

Golder performed a review of the summary statistics of the polyhalite domain composite grade data to ensure there were no outliers or errors present in the composited grade data as well as to identify any instances where there is insufficient data for gridding; a minimum of three composites with appropriate spatial distribution across the extents of the domain are required for gridding of the individual domain specific grade parameters. The grade parameters selected for modeling and excluded from modeling are presented in Table 14.3.

Once the polyhalite domain grade composites were validated the data was gridded for each modeled grade parameter on a polyhalite domain basis using a finite element method interpolator and the same 500-foot by 500-foot grid cell size that was used in developing the stratigraphic and structural model. Grade isopleth plan maps for each modeled grade parameter were prepared on a polyhalite domain basis. The polyhalite grade parameter maps for each of the three polyhalite domains are presented in Figure 14.9 through Figure 14.11.

The grade isopleth maps were visually compared against thickness weighted drillhole composite postings to ensure the modeled grade parameters were honoring the drillhole grade data. Any potential outliers or issues identified in the visual inspection and statistical review were followed up on to ensure the model was free from erroneous data or interpolation errors prior to commencing with the Mineral Resource estimation process.

Table 14.3: Grade Parameters Included and Excluded from Grade Model

Grade Parameter	Model Code	Sample Count	Use in Model	Grade Parameter	Model Code	Sample Count	Use in Model
Polyhalite	Poly	530	Yes	Gypsum	Gyps	3	No
Anhydrite	Anhy	533	Yes	Langbeinite	Lang	0	No
Halite	Halt	490	Yes	Leonite	Leon	0	No
Magnesite	Magt	642	Yes	Hexahydrite	Hexh	0	No
Protoenstatite	Pens	161	Yes	Kainite	Kain	0	No
Grossular	Grss	68	Yes	Sylvine	Sylv	7	No
NaCl	NaCl	644	Yes	Others	Othr	1	No
SO_3	SO_3	645	Yes	Magnesium Sulfate	Msul	2	No
CaO	CaO	645	Yes	Quartz	Qrtz	7	No
K_2O	K_2O	565	Yes	Dolomite	Dolo	0	No
MgO	MgO	565	Yes	Arcanite	Arcn	0	No
H_2O + CO_2 (by difference)	LOI	176	Yes	Magnesium Chloride	Mchl	2	No
Al_2O_3	Al_2O_3	644	Yes	Akermanite	Aker	1	No
SiO_2	SiO_2	646	Yes	Hexaaqua Magnesium Chlorate	Hmchl	0	No
MnO	MnO	304	Yes	$MgCO_3$	$MgCO_3$	80	No
TiO_2	TiO_2	229	Yes	Na_2O	Na_2O	1	No
CuO	CuO	391	Yes	Cl	Cl	1	No
Fe_2O_3	Fe_2O_3	646	Yes	Br	Br	116	No
SrO	SrO	644	Yes	Rb	Rb	0	No
CoO	CoO	288	Yes				
ZnO	ZnO	162	Yes				

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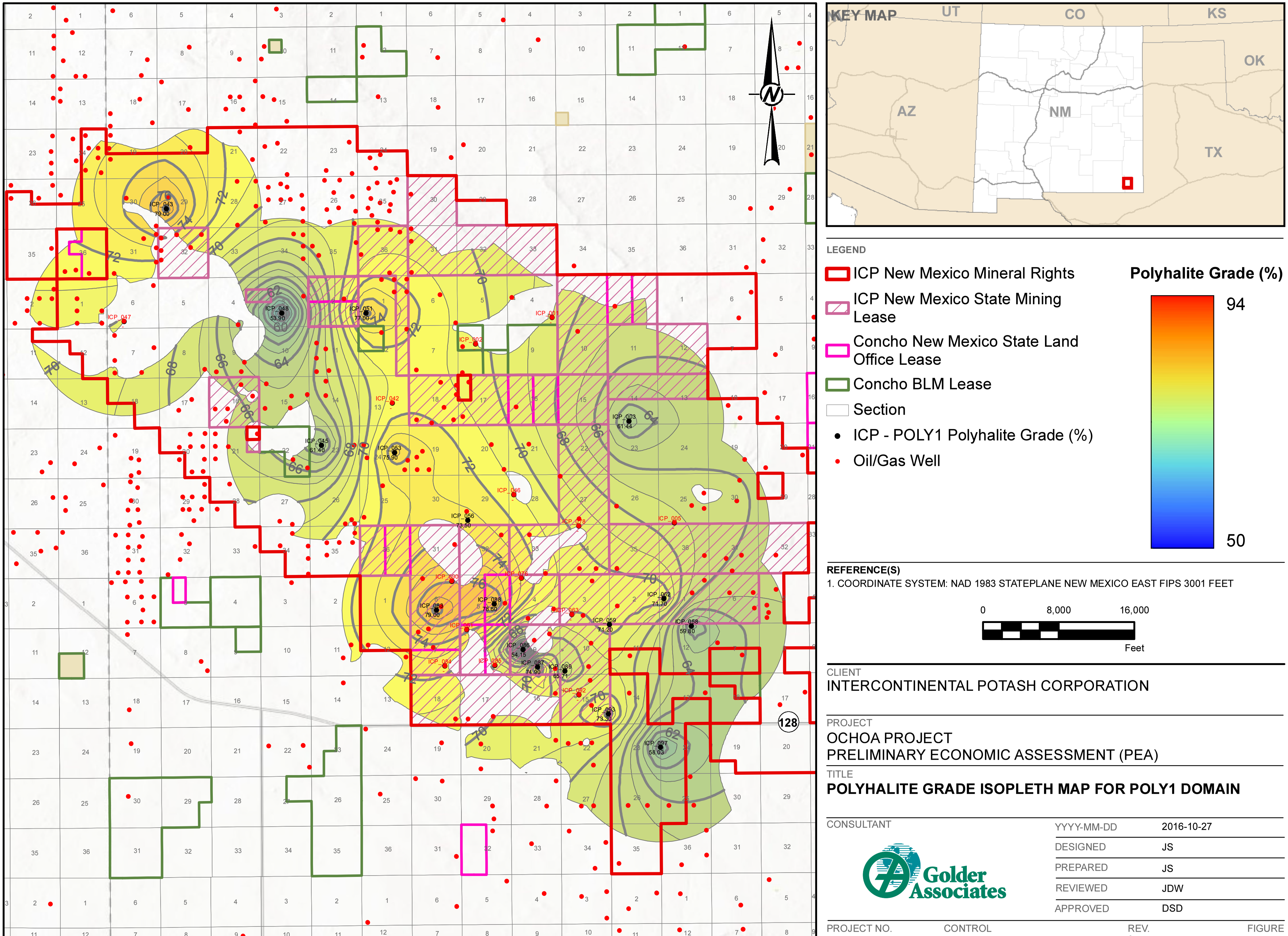

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY1 Polyhalite Grade (%)
- Oil/Gas Well

Polyhalite Grade (%)

94

50

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000

Feet

CLIENT

INTERCONTINENTAL POTASH CORPORATION

PROJECT

OCHOA PROJECT

PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE

POLYHALITE GRADE ISOPLETH MAP FOR POLY1 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	**14.9**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A

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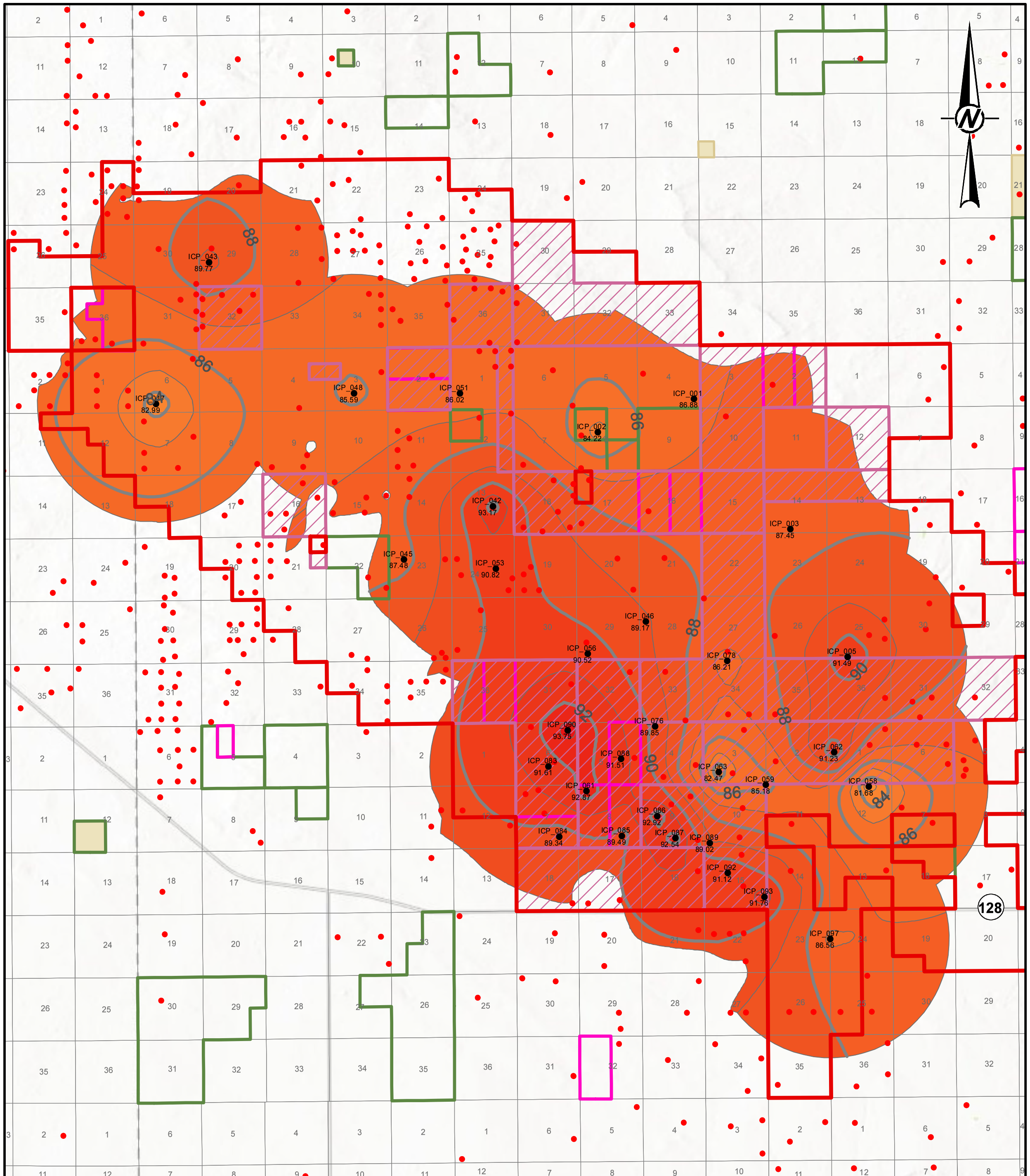

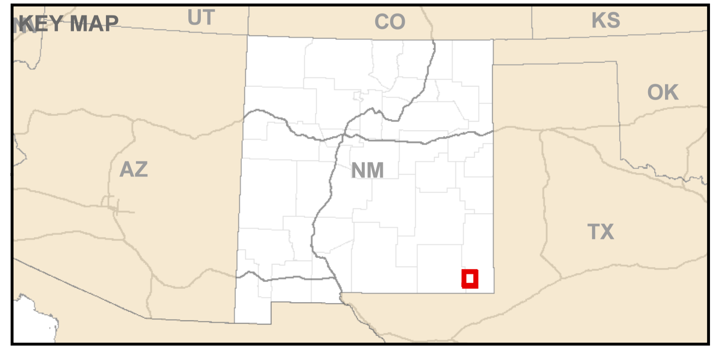

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY2 Polyhalite Grade (%)
- Oil/Gas Well

Polyhalite Grade (%)

94

50

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
POLYHALITE GRADE ISOPLETH MAP FOR POLY2 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	14.10

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A

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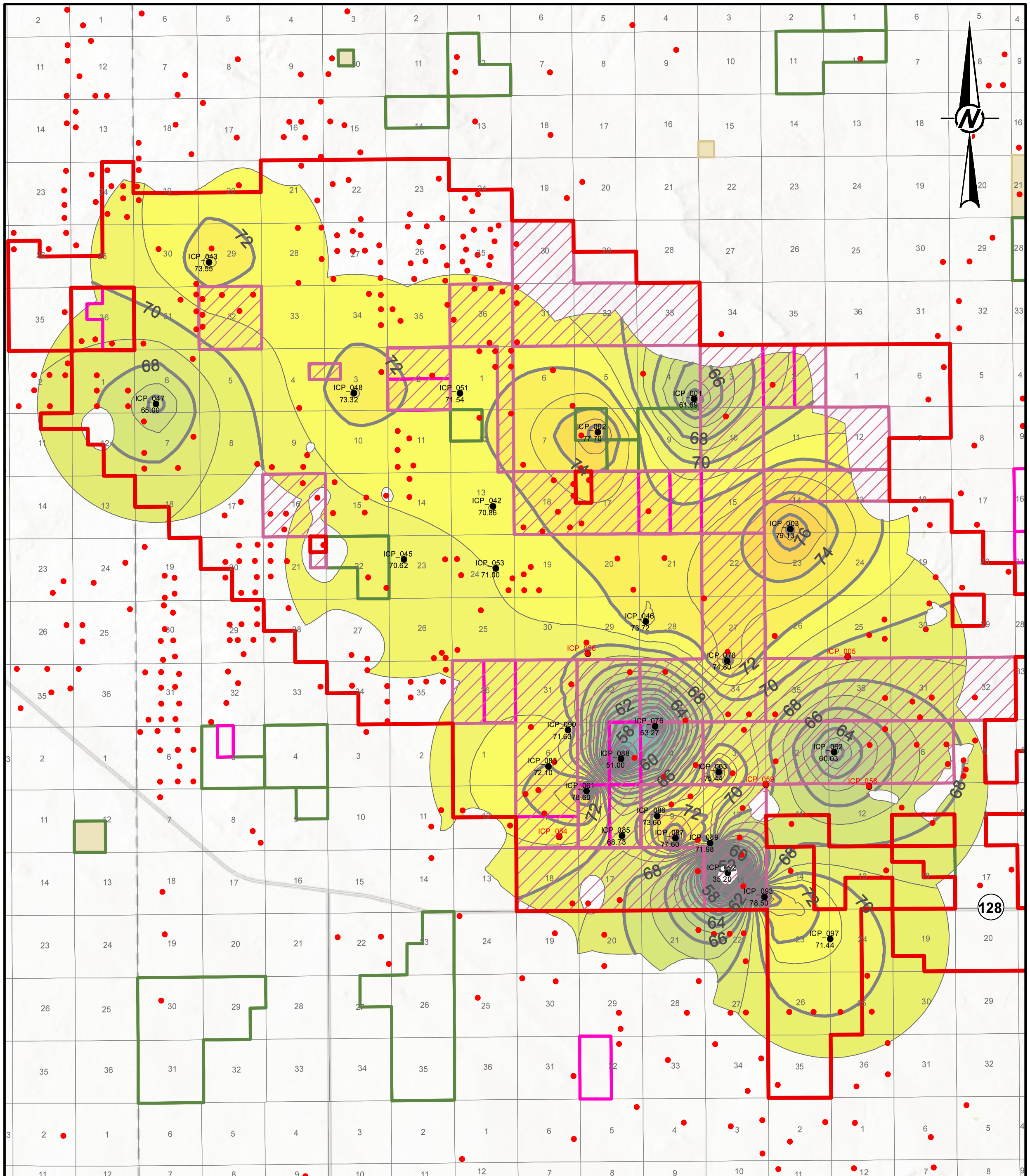
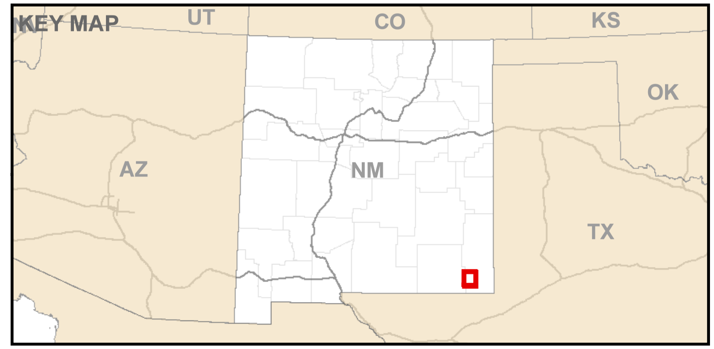




LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY3 Polyhalite Grade (%)
- Oil/Gas Well

Polyhalite Grade (%)

94

50

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000 Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
POLYHALITE GRADE ISOPLETH MAP FOR POLY3 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	**14.11**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM: ANSI A

14.3 Statistical and Geostatistical Analyses

Golder performed a statistical and geostatistical evaluation of the polyhalite domain thickness and grade parameters for all 32 ICP drillholes. Box plots for thickness, polyhalite, and anhydrite content (wt. %) are presented by polyhalite domain in Figure 14.12. Univariate statistics for thickness by polyhalite domain are presented in Table 14.4, while univariate statistics for select grade parameters by polyhalite domain are presented in Table 14.5.

Figure 14.12: Polyhalite Domain Thickness and Polyhalite Grade Box Plots

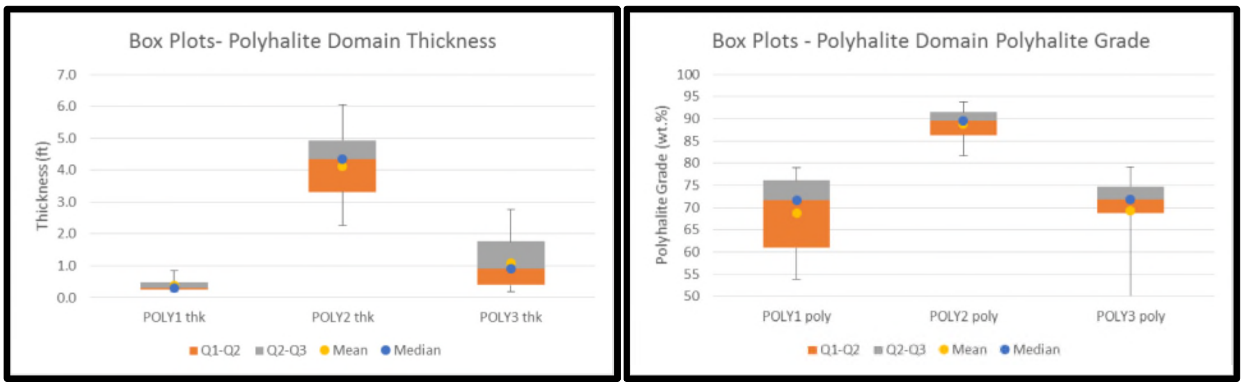


Table 14.4: Univariate Statistics for the Modeled Polyhalite Domains

Polyhalite Domain	Comp. Count	Mean (ft)	Min (ft)	Max (ft)	Median (ft)	Var	Std Devn	C.V
POLY1	17	0.38	0.19	0.85	0.30	0.03	0.18	0.47
POLY2	31	4.12	2.25	6.05	4.35	1.00	1.00	0.24
POLY3	26	1.10	0.20	2.77	0.90	0.63	0.79	0.72
Total	74	2.20	0.19	6.05	1.88	3.39	1.84	0.84

Note: Comp = composite; Min = minimum; Max = maximum; Var = variance; Std Devn = standard deviation; C.V = coefficient of variation; ft = feet.

Table 14.5: Univariate Statistics for the Composite Grade Parameters by Domain

Model Code	Domain	Comp. Count	Mean (wt.%)	Min (wt.%)	Max (wt.%)	Median (wt.%)	Var	Std Devn	C.V
POLY	POLY1	17	68.74	53.90	79.00	71.70	74.55	8.63	0.13
POLY	POLY2	31	88.86	81.68	93.75	89.49	10.94	3.31	0.04
POLY	POLY3	26	69.31	35.20	79.13	71.81	96.22	9.81	0.14
ANHY	POLY1	17	19.50	6.30	40.10	18.50	89.82	9.48	0.49
ANHY	POLY2	31	2.09	0.36	5.19	1.52	1.65	1.28	0.62
ANHY	POLY3	26	13.34	2.56	53.20	8.91	135.39	11.64	0.87
HALT	POLY1	12	2.81	0.00	14.69	0.88	16.79	4.10	1.46
HALT	POLY2	31	2.90	0.09	8.34	2.63	3.54	1.88	0.65
HALT	POLY3	26	8.28	1.63	19.49	6.97	23.33	4.83	0.58
MAGT	POLY1	17	9.76	5.40	22.95	7.20	24.60	4.96	0.51
MAGT	POLY2	31	7.09	3.81	12.21	7.15	5.65	2.38	0.34
MAGT	POLY3	26	8.67	3.80	13.28	8.75	7.27	2.70	0.31
PENS	POLY1	7	0.61	0.00	1.00	0.70	0.16	0.41	0.66
PENS	POLY2	13	0.64	0.00	1.52	0.70	0.25	0.50	0.77
PENS	POLY3	12	0.59	0.00	1.43	0.67	0.19	0.44	0.75
GRSS	POLY1	7	0.14	0.00	0.50	0.00	0.03	0.18	1.29
GRSS	POLY2	13	0.19	0.00	0.51	0.09	0.04	0.21	1.12
GRSS	POLY3	12	0.32	0.00	0.70	0.33	0.06	0.24	0.75
SiO_2	POLY1	17	1.71	0.71	3.90	1.58	0.54	0.74	0.43
SiO_2	POLY2	31	1.02	0.43	1.96	0.92	0.17	0.42	0.41
SiO_2	POLY3	26	1.24	0.43	2.26	1.18	0.29	0.54	0.43
Al_2O_3	POLY1	17	0.22	0.08	0.54	0.23	0.01	0.12	0.53
Al_2O_3	POLY2	31	0.13	0.05	0.27	0.12	0.00	0.06	0.47
Al_2O_3	POLY3	26	0.16	0.06	0.28	0.15	0.01	0.08	0.47
CaO	POLY1	17	18.96	15.02	25.61	18.76	8.14	2.85	0.15
CaO	POLY2	31	15.99	13.46	17.99	16.37	2.19	1.48	0.09
CaO	POLY3	26	16.89	11.51	22.85	16.58	10.96	3.31	0.20
Fe_2O_3	POLY1	17	0.17	0.04	0.41	0.16	0.01	0.09	0.54
Fe_2O_3	POLY2	31	0.11	0.03	0.27	0.10	0.00	0.06	0.55
Fe_2O_3	POLY3	26	0.13	0.03	0.45	0.12	0.01	0.09	0.68
MgO	POLY1	17	9.82	6.42	14.84	9.40	5.77	2.40	0.24
MgO	POLY2	31	9.48	8.03	11.55	9.25	0.83	0.91	0.10
MgO	POLY3	26	9.07	6.89	11.43	8.94	1.45	1.20	0.13

Note: Comp = composite; Min = minimum; Max = maximum; Var = variance; Std Devn = standard deviation; C.V = coefficient of variation; wt.% = weight percent. See Table 14.3 for grade parameter model code definitions.

Table 14.5: Univariate Statistics for the Composite Grade Parameters by Domain (cont.)

Model Code	Domain	Comp. Count	Mean (wt.%)	Min (wt.%)	Max (wt.%)	Median (wt.%)	Var	Std Devn	C.V
K_2O	POLY1	17	11.13	8.33	13.77	11.65	2.02	1.42	0.13
K_2O	POLY2	31	14.10	12.78	15.33	14.10	0.53	0.73	0.05
K_2O	POLY3	26	11.01	6.98	12.38	11.44	1.81	1.34	0.12
TiO_2	POLY1	17	0.01	0.00	0.05	0.00	0.00	0.01	1.21
TiO_2	POLY2	31	0.00	0.00	0.02	0.00	0.00	0.01	1.83
TiO_2	POLY3	26	0.01	0.00	0.02	0.01	0.00	0.01	1.11
MnO	POLY1	17	0.01	0.00	0.04	0.01	0.00	0.01	1.16
MnO	POLY2	31	0.00	0.00	0.01	0.00	0.00	0.00	1.45
MnO	POLY3	26	0.01	0.00	0.02	0.01	0.00	0.01	0.94
LOI	POLY1	7	13.27	8.17	21.65	12.30	15.73	3.97	0.30
LOI	POLY2	11	12.85	11.50	20.27	12.14	5.77	2.40	0.19
LOI	POLY3	10	10.60	8.26	18.12	10.08	7.33	2.71	0.26
NaCl	POLY1	17	1.82	0.19	7.33	0.78	4.81	2.19	1.20
NaCl	POLY2	31	2.46	0.24	6.49	2.14	1.97	1.41	0.57
NaCl	POLY3	26	9.75	1.65	25.02	7.94	42.00	6.48	0.66
SO_3	POLY1	17	46.20	37.88	51.79	47.83	14.07	3.75	0.08
SO_3	POLY2	31	47.10	41.85	50.31	46.91	3.00	1.73	0.04
SO_3	POLY3	26	43.09	34.77	47.66	43.53	14.25	3.77	0.09
CuO	POLY1	17	0.01	0.00	0.01	0.01	0.00	0.00	0.94
CuO	POLY2	31	0.01	0.00	0.02	0.01	0.00	0.01	0.79
CuO	POLY3	26	0.01	0.00	0.01	0.01	0.00	0.00	0.79
SrO	POLY1	17	0.93	0.14	1.69	0.87	0.11	0.33	0.35
SrO	POLY2	31	1.04	0.61	1.51	1.05	0.05	0.23	0.22
SrO	POLY3	26	0.98	0.58	1.44	0.95	0.07	0.26	0.26
CoO	POLY1	10	0.00	0.00	0.01	0.00	0.00	0.00	1.53
CoO	POLY2	20	0.00	0.00	0.01	0.00	0.00	0.00	1.36
CoO	POLY3	16	0.01	0.00	0.01	0.01	0.00	0.00	0.67
ZnO	POLY1	10	0.00	0.00	0.01	0.00	0.00	0.00	3.00
ZnO	POLY2	20	0.00	0.00	0.01	0.00	0.00	0.00	2.38
ZnO	POLY3	16	0.00	0.00	0.01	0.00	0.00	0.00	3.87
RD	POLY1	17	2.78	2.78	2.78	2.78	0.00	0.00	0.00
RD	POLY2	31	2.78	2.78	2.78	2.78	0.00	0.00	0.00
RD	POLY3	26	2.78	2.78	2.78	2.78	0.00	0.00	0.00

Note: Comp = composite; Min = minimum; Max = maximum; Var = variance; Std Devn = standard deviation; C.V = coefficient of variation; wt.% = weight percent. See Table 14.3 for grade parameter model code definitions.

Golder developed semi-variograms (variograms) for thickness and polyhalite content (wt. %) for each of the three polyhalite domains and thickness variograms for the total polyhalite thickness (POLY ALL = POLY1+POLY2+POLY3) using the following variogram parameters and methodology:

- All variograms were modeled as absolute variograms using a spherical model and two structures.
- All variograms were modeled as omni-directional variograms due to limited, broad-spaced data (resulting in single digit parings at most lag intervals) with no clear geological directional anisotropy at this stage.
- The variogram lag distance was set to 5,000 feet.
- The variogram sill was set to approximate the total variance of thickness for thickness variograms and total variance of polyhalite and anhydrite grade for the individual grade variograms.
- Due to a lack of close spaced drilling, the variogram nugget modeled was set to approximately 10% of the variogram sill unless clear trends in mid to long range variography suggested otherwise.

The thickness and grade variogram ranges for each polyhalite domain are presented in Table 14.6. The omni-directional variograms for thickness and polyhalite grade for the three polyhalite domains and the directional thickness variograms for the total polyhalite domain are presented in Figure 14.13 through Figure 14.16. The variogram ranges for both thickness (30,000 feet to 45,000 feet) and polyhalite grade (20,000 feet to 30,000 feet) parameters were fairly consistent across all three polyhalite domains as well as the total polyhalite domain (POLY ALL). The POLY2 variograms generated were the best of the set, owing to more robust data sets and lower thickness and grade variability within the domain.

Golder notes that the data set used for geostatistical analysis is still limited, with a large portion of the data still based on the wide spread drilling; at present there are no sample pairs within 2,500 feet in the thickness and polyhalite grade data sets and many of the parings in the 2,500 feet to 5,000 feet range are in single digits. This limits the ability to reliably model short range variability. Golder recommends that ICP conduct a targeted geostatistical drilling and analytical program in the future to evaluate the impact of short range variability on thickness and grade parameters. This generally takes form of a tight cross or grid pattern of infill drillholes to allow for evaluation of variability inside the regular wide spaced drilling used to delineate the Mineral Resource. The close-spaced geostatistical drilling will aid in developing a more robust database for use in statistical and geostatistical analyses of thickness and grade parameters for each of the polyhalite domains.

Table 14.6: Thickness and Grade Variogram Ranges by Polyhalite Domain

Polyhalite Domain	Parameter	Intercept Count	Variogram Model	Major Axis Orientation	Nugget	Sill	Variogram Range (ft)
POLY1	polyhalite (wt%)	17	spherical, 2 structure	omni-directional	8	89	30,000
POLY1	thickness (ft)	17	spherical, 2 structure	omni-directional	-	-	-
POLY2	polyhalite (wt%)	31	spherical, 2 structure	omni-directional	1	11.9	20,000
POLY2	thickness (ft)	31	spherical, 2 structure	omni-directional	0.2	1.15	30,000
POLY3	polyhalite (wt%)	26	spherical, 2 structure	omni-directional	10	85	30,000
POLY3	thickness (ft)	26	spherical, 2 structure	omni-directional	0.05	0.7	30,000
POLY ALL	thickness (ft)	417	spherical, 2 structure	160° azimuth	0.05	0.54	45,000

Note: POLY 1 thickness did not generate a reliable thickness variogram for modelling purposes

Figure 14.13: POLY1 Domain – Polyhalite Grade Variogram and Model

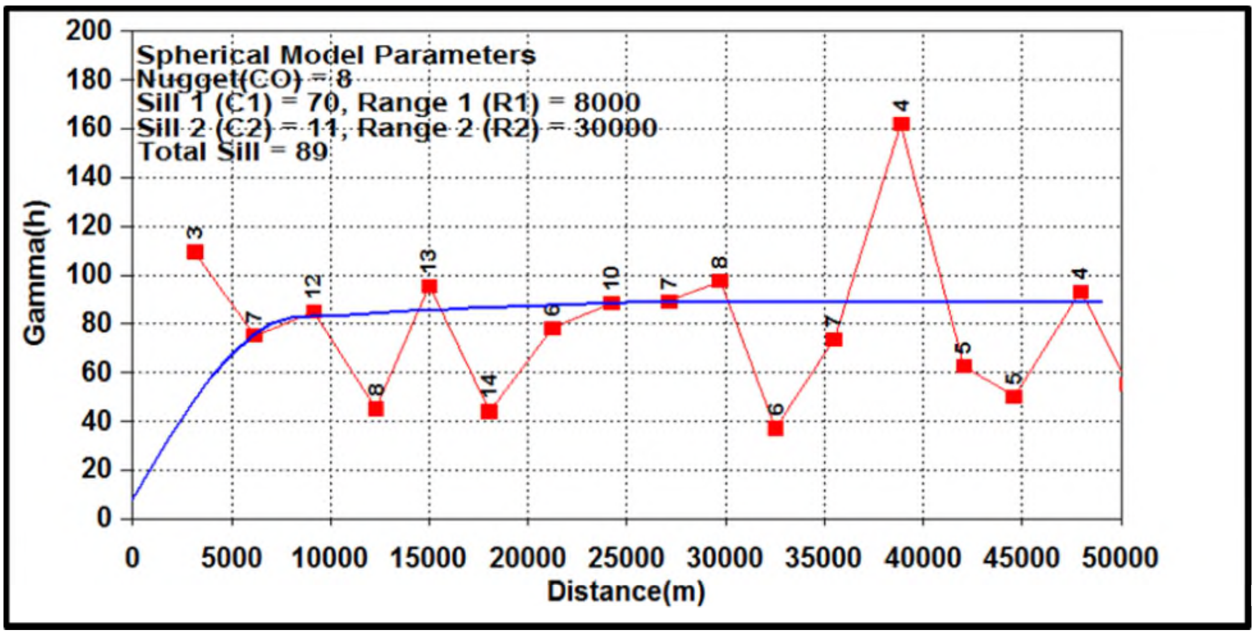
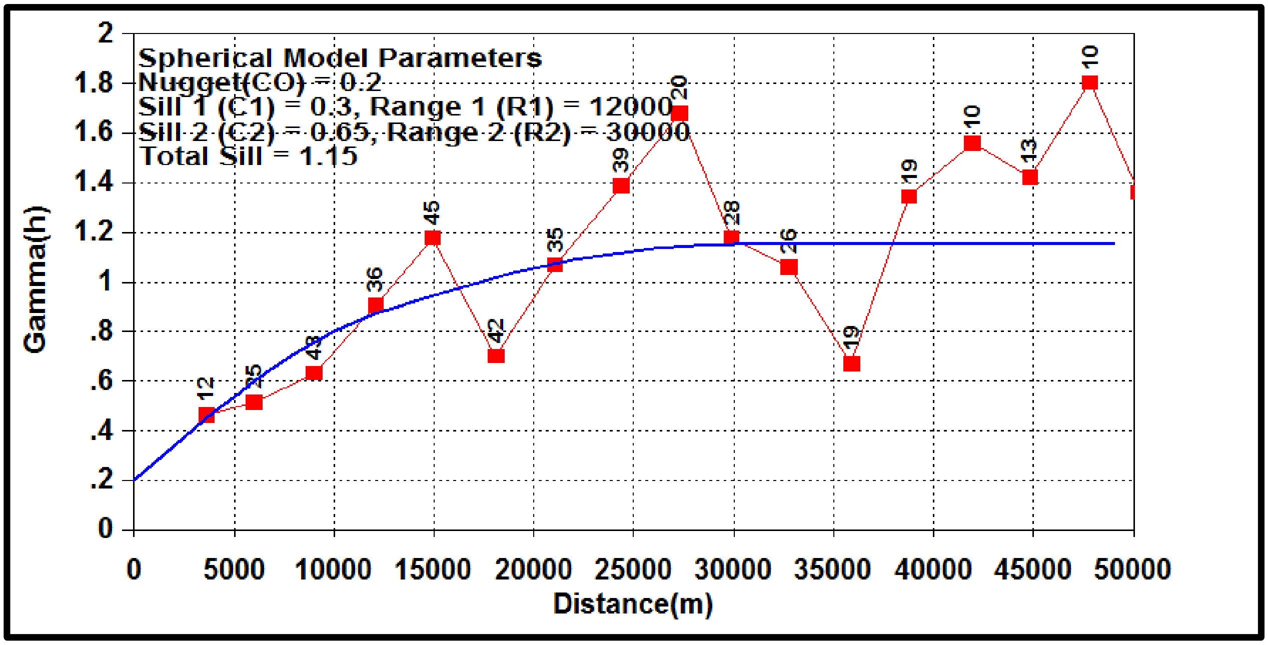


Figure 14.14: POLY2 Domain – Thickness (top) and Polyhalite Grade (bottom) Variograms and Models



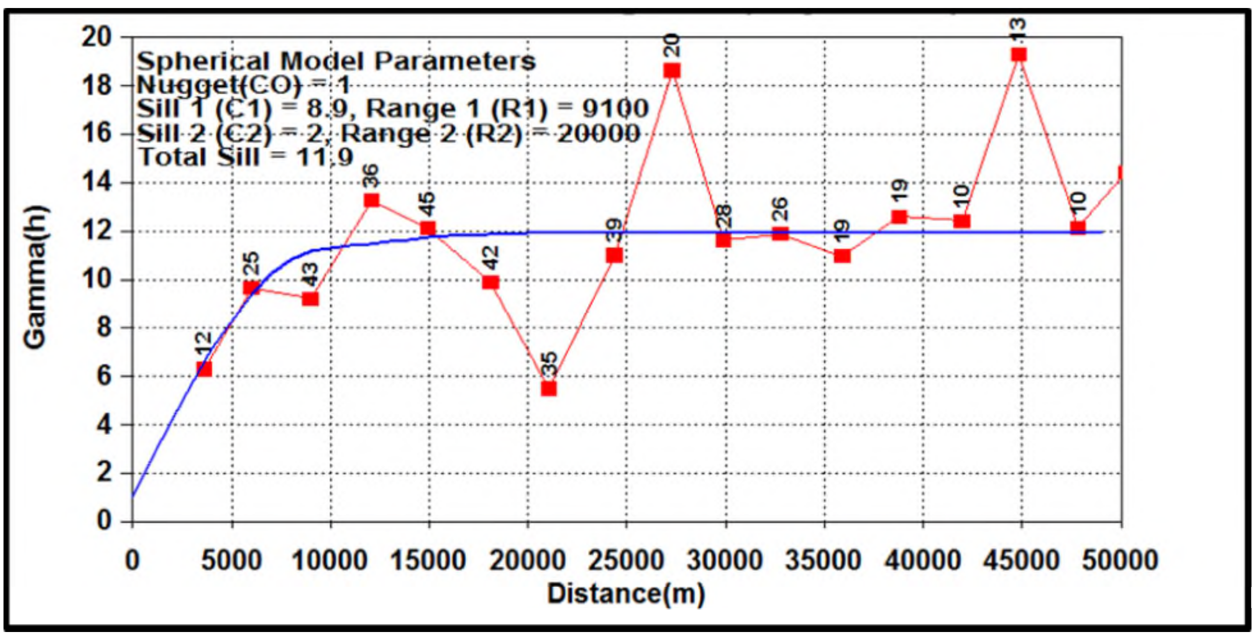
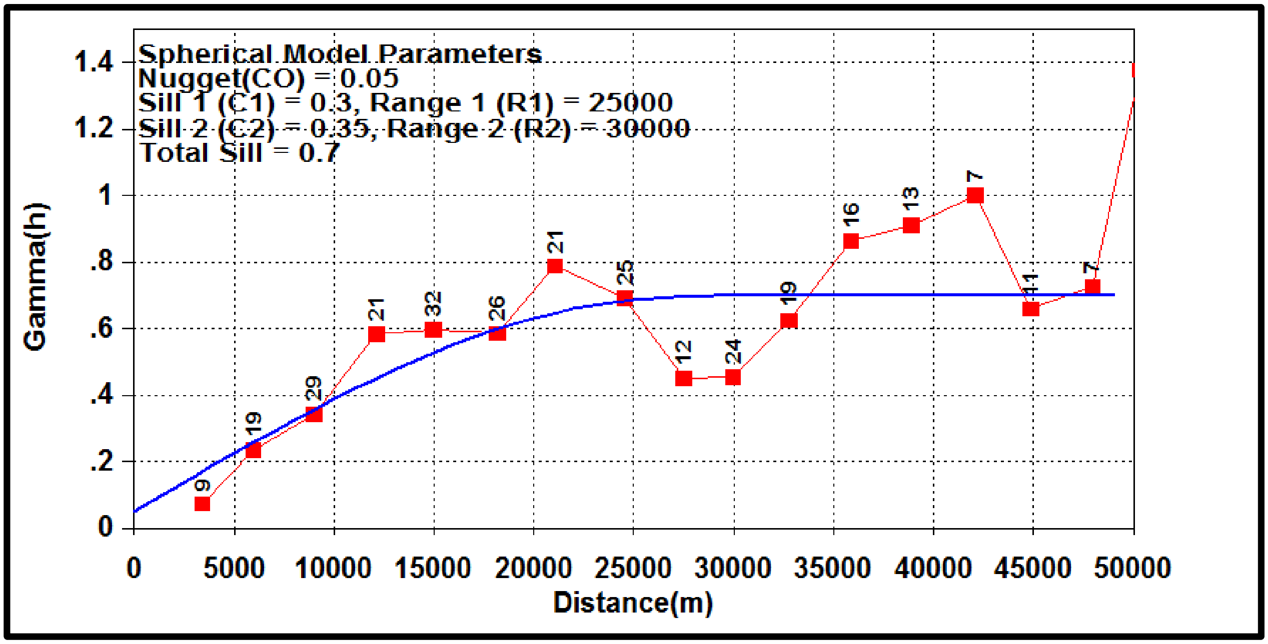


Figure 14.15: POLY3 Domain – Thickness (top) and Polyhalite Grade (bottom) Variograms and Models



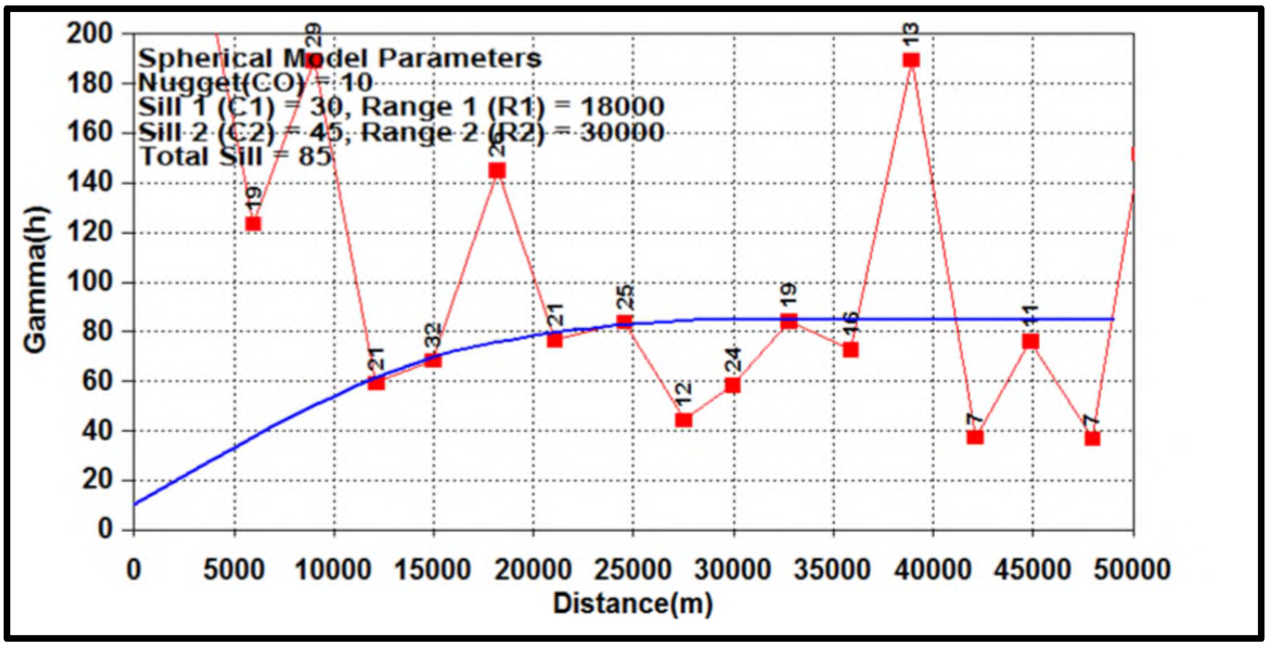
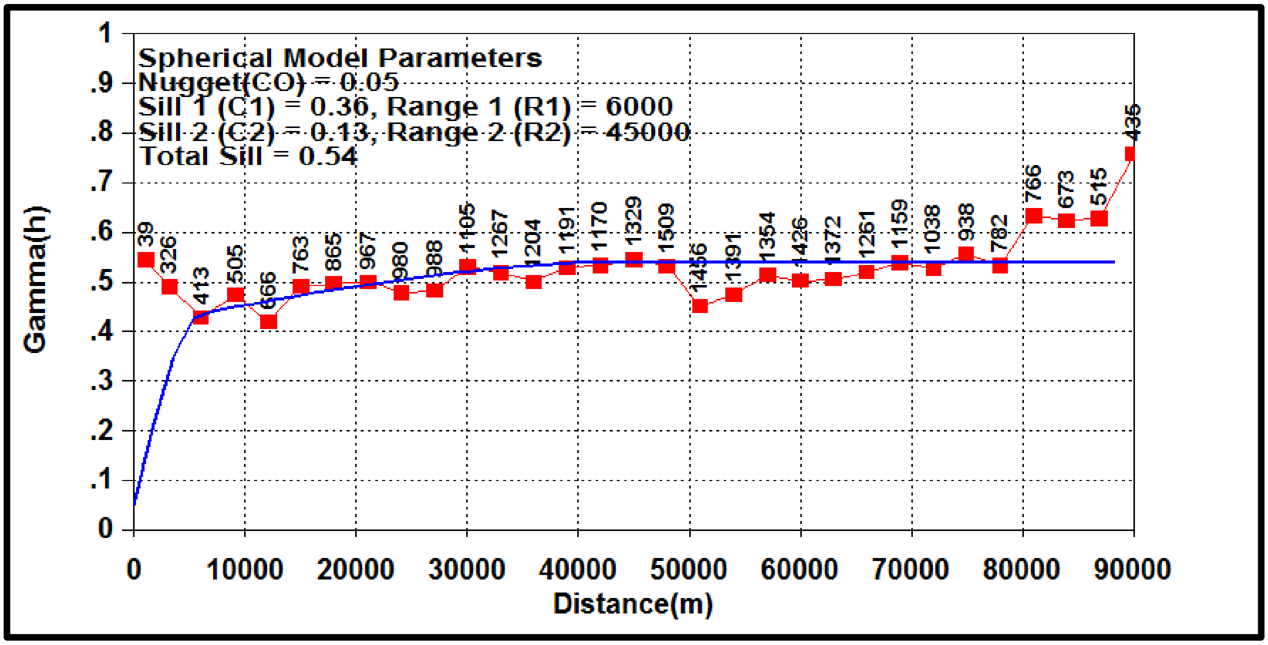
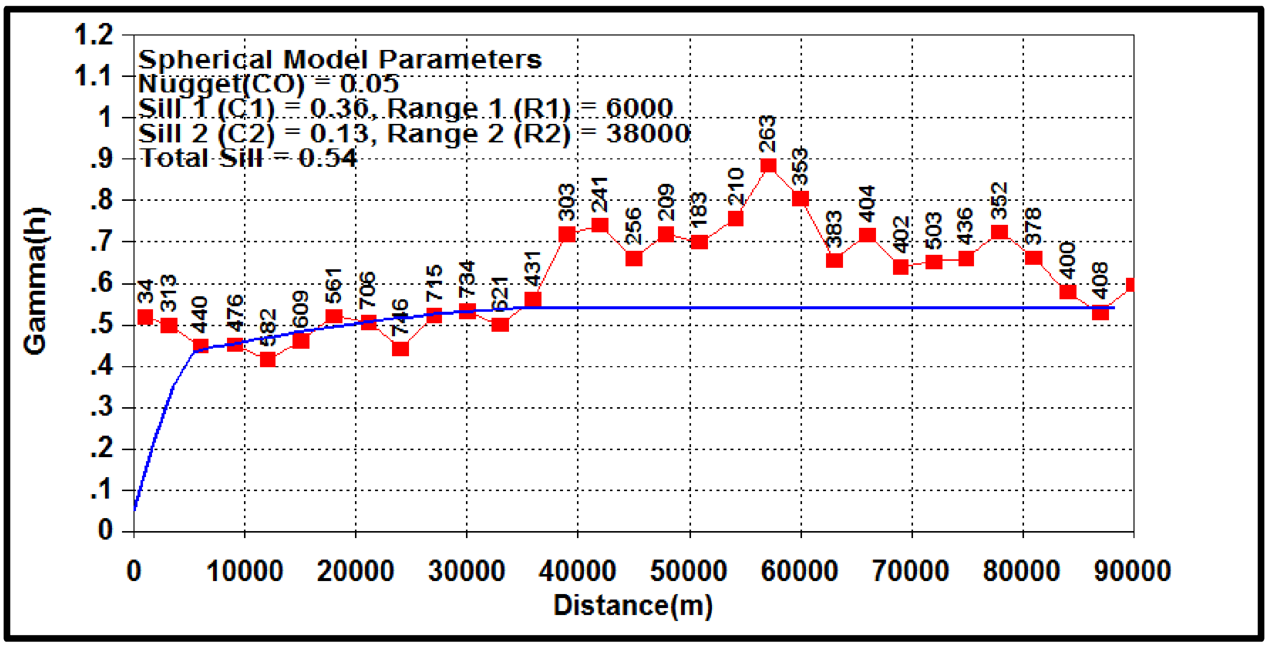


Figure 14.16: POLY ALL Domain – Thickness Major (top) and Orthogonal Axes (bottom) Variograms and Models





14.4 Mineral Resource Estimation & Classification

Using the final stratigraphic and structural model and the final grade model, Golder estimated polyhalite Mineral Resources for the Project using MineScape StratModel. Polyhalite Mineral Resources were estimated for each of the three polyhalite domains included in the geological model.

As per NI 43-101 guidelines and CIMDS definitions the Mineral Resources were reported as in-situ tonnage and were not adjusted for mining losses, dilution, or mining recovery. A 4.0-foot minimum mining thickness and 85% polyhalite cut-off grade was applied to evaluate the reasonable prospect for economic extraction using likely mining methods.

Mineral Resource volumes and grade were estimated for each polyhalite domain using the corresponding unit roof and floor grids from the structural grid model and grade parameters from the grade model. The estimated volumes were then converted to short tons by applying a default polyhalite density of 173.5 pcf for each of the three polyhalite domains.

Golder performed categorization of the polyhalite Mineral Resources according to the CIMDS definitions as referenced in NI 43-101. Mineral Resources were categorized into Measured, Indicated, and Inferred Mineral Resources using area of influence polygons around points of observation. A point of observation is defined as a complete intercept of the polyhalite domain (both roof and floor intercepted). The area of influence distances were based on the variogram ranges for the polyhalite domains; given that the POLY2 domain has the most robust data set, generated the best variograms, and represented the bulk of the target zone in terms of thickness and volume, the Golder QP made the decision to use the POLY2 variography to establish the classification parameters for all three domains.

The variogram range was used to establish the spacing between points of observation for the Inferred Mineral Resource category, with half of the variogram range representing the spacing between points of observation for the Indicated Mineral Resource category and one quarter of the variogram range representing the spacing between points of observation for the Measured Mineral Resource category. As the classification distances is applied as a distance from a point of observation, half of the spacing was used for the classification radii for each category. The classification parameters for the ICP Ochoa Project polyhalite Mineral Resource estimate are presented in Table 14.7.

Table 14.7: ICP Ochoa polyhalite Mineral Resource Classification Parameters

Resource Class	Polyhalite Composite Grade Cut-off	Polyhalite Minimum Thickness Cut-off (ft)	Distance from Point of Observation (radius, ft)	Distance from Point of Observation (radius, miles)
Measured	85%	4.0	3,330	0.63
Indicated	85%	4.0	6,660	1.26
Inferred	85%	4.0	10,000	1.89

Mineral Resource categorization was performed individually for each polyhalite domain using drillhole intercepts on the floor of the unit for the location of the point of observation. The area of influence polygons were generated on the floor surface for each domain rather than on the horizontal plane to allow for the dip of stratigraphy.

14.5 Statement of Mineral Resources

Golder has estimated polyhalite Mineral Resources for the Project. As per NI 43-101 guidelines, Golder is reporting only in-situ polyhalite Mineral Resources as the necessary modifying factor studies have not been completed to a minimum of a PFS-level of study as of the effective date of the current PEA level Mineral Resource estimate.

A minimum grade cut off of 85% polyhalite and a minimum thickness of 4.0 feet have been applied; no dilution, recovery, or other mining factors have been applied to the in-situ Mineral Resource estimate and no Mineral Reserves are being reported at this time.

Golder performed categorization of the polyhalite Mineral Resources for the Project according to the CIMDS definitions as referenced in NI 43-101. Mineral Resources were categorized into Measured, Indicated, and Inferred Mineral Resource using AOI polygons around POB.

Mineral Resource volumes and grade were estimated for each polyhalite domain falling within the AOI polygons and where polyhalite domain thickness and grade was above the minimum grade and minimum thickness cut-offs. The volumes estimated polyhalite Mineral Resources were then converted to short tons using the default density of 173.5 pcf (wet basis).

Based on an evaluation of the drillhole spacing and geological continuity of the polyhalite domains, Golder has applied the following Mineral Resource classification schema:

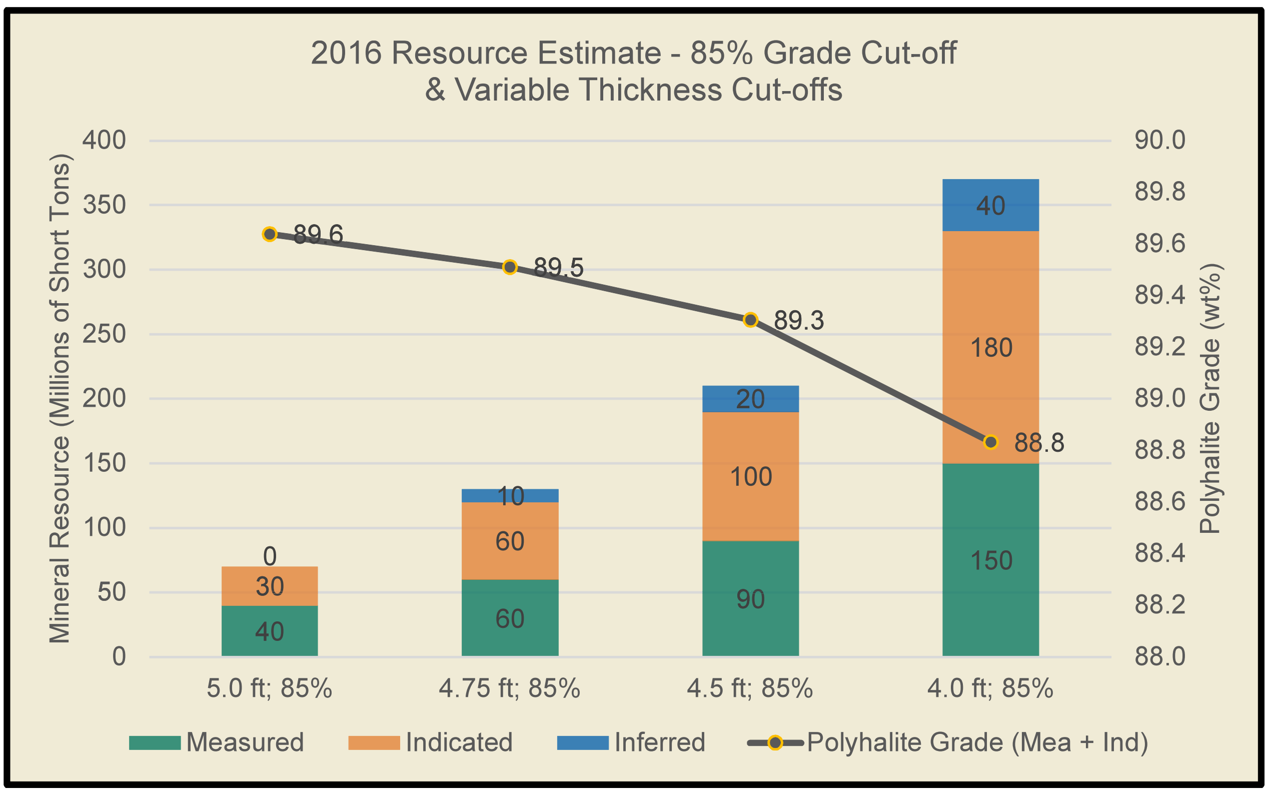
- Measured Mineral Resources - 0-foot to 3,330-foot AOI radius around POB (6,660-foot spacing)
- Indicated Mineral Resources - 3,330-foot to 6,660-foot AOI radius around POB (13,320-foot spacing)
- Inferred Mineral Resources - 6,660-foot to 10,000-foot AOI radius around POB (20,000-foot spacing)

No Mineral Resources were categorized beyond the Inferred Mineral Resource classification distance of 10,000 feet from a POB.

As per the CIMDS definition of Mineral Resources, a key requirement in the estimation of Mineral Resources is that they must have a reasonable prospect for economic extraction. As part of the evaluation of reasonable prospect for economic extraction, Golder ran a series of polyhalite Mineral Resource estimate cases with variable conceptual minimum mining thickness and polyhalite grade cut-offs applied. The range of conceptual minimum mining thickness and polyhalite grade cut-offs applied in the scenarios were based on proposed mining method and head grade considerations presented in Item 13.0, Item 16.0, and Item 17.0, and elsewhere in this TR. The purpose of performing the minimum mining thickness and cut-off grade scenarios was to evaluate the potential for extraction using likely mining methods.

Based on mining method and head grade considerations, the 4.0-foot minimum mining thickness and 85% polyhalite cut-off grade scenario was selected as the preferred base case Mineral Resource estimate by the Golder QP and is the scenario used in all stated current Mineral Resource estimates in this TR. The 4.0-foot minimum mining thickness and 85% polyhalite cut-off grade scenario was also the base case Mineral Resource estimate used for mine planning activities presented in Item 16.0 of this TR. The results of the minimum mining thickness and cut-off grade scenarios are presented in Figure 14.17.

Figure 14.17: Mineral Resource Estimate Cut-off Scenario Results



A summary of the classified polyhalite Mineral Resources is presented in Table 14.8. Due to the application of thickness and cutoff grades in the estimation process, the reported polyhalite Mineral Resource occurs entirely within the POLY2 domain. The Mineral Resource classification map for the POLY2 domain is presented in Figure 14.18.

Table 14.8: 2016 Mineral Resource (as at September 30, 2016)

Resource Class	Thickness (ft)	Area (ft2 x10^6)	Volume (ft3 x10^6)	Mass (tons x10^6)	Polyhalite (wt.%)	Anhydrite (wt.%)	Halite (wt.%)	Magnesite (wt.%)
Measured	4.65	360	1,690	150	89.92	2.13	3.25	6.41
Indicated	4.61	820	3,770	180	88.83	2.11	2.79	6.92
Mea + Ind	*4.63*	*1,180*	*4,280*	*330*	*89.33*	*2.12*	*3.00*	*6.69*
Inferred	4.60	930	4,300	40	88.70	2.11	2.77	7.00

Note: area, volume and mass rounded to nearest ten million; ft = feet; wt.% = weight percent

Although the polyhalite Mineral Resources presented in this TR are believed to have a reasonable expectation of being extracted economically, they are not Mineral Reserves. Estimation of Mineral Reserves requires additional modifying factors studies performed to a minimum of a PFS level of study. Mine planning, processing, environmental, economic, marketing, and other modifying factors studies that will provide further insight into prospects for development and extraction of the Mineral Resource are presented at a PEA level of study in this TR.

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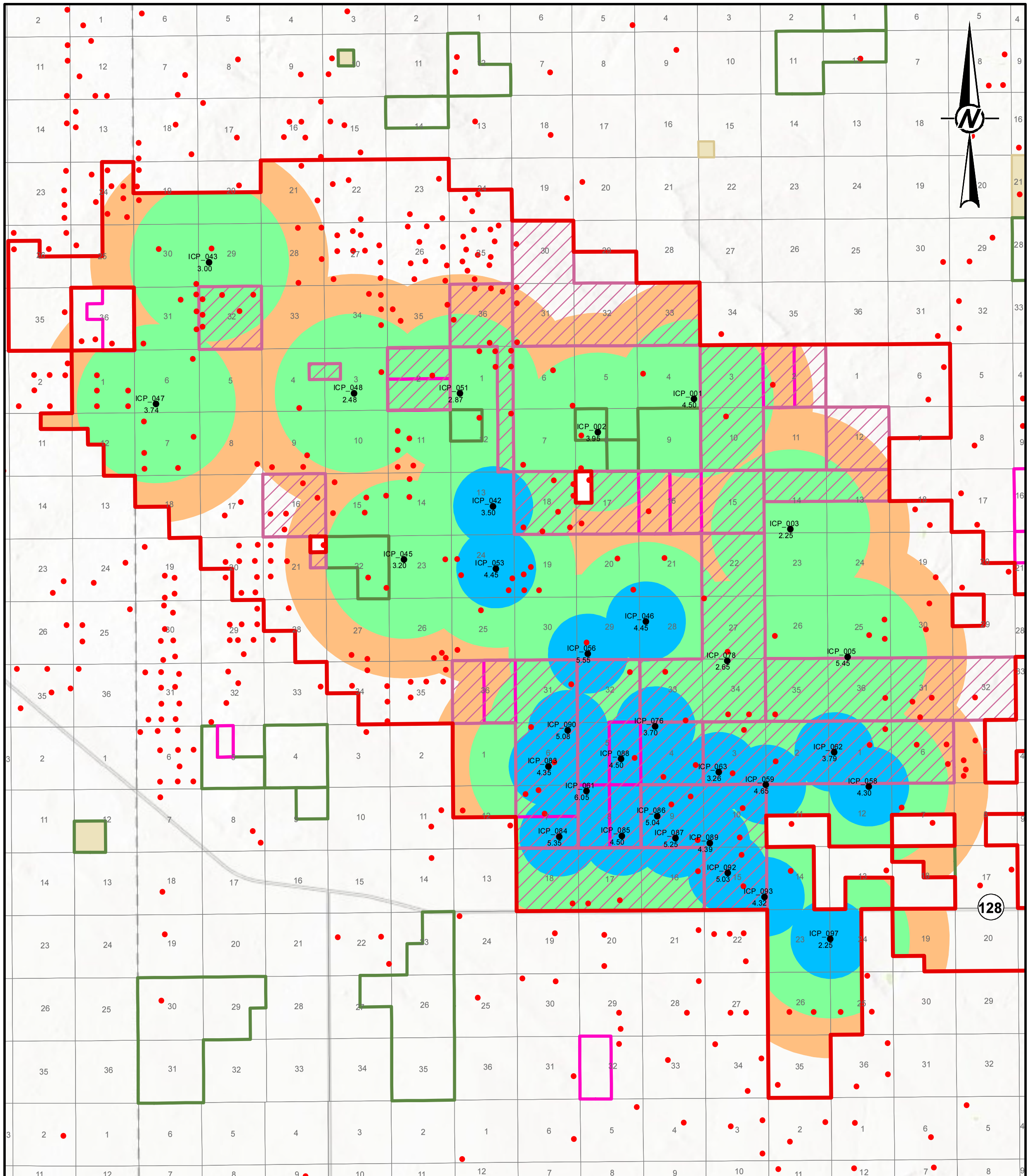

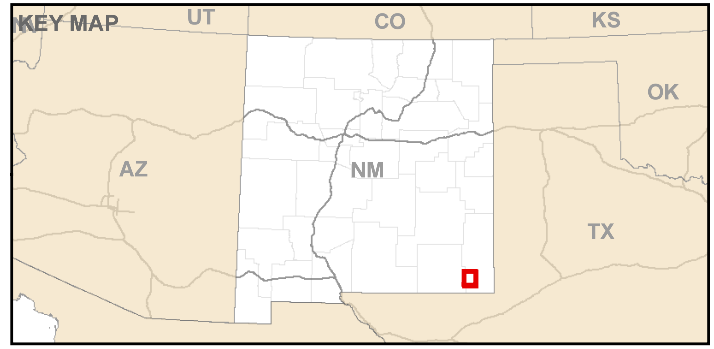

LEGEND

- ICP New Mexico Mineral Rights
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Section
- ICP - POLY2 Thickness (ft)
- Oil/Gas Well

Mineral Resource Classification (ROI, ft)

- Measured Resource Polygon (radius 3,300 ft)
- Indicated Resource Polygon (radius 6,600 ft)
- Inferred Resource Polygon (radius 10,000 ft)

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
MINERAL RESOURCE CLASSIFICATION MAP FOR POLY2 DOMAIN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	JS
PREPARED	JS
REVIEWED	JDW
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
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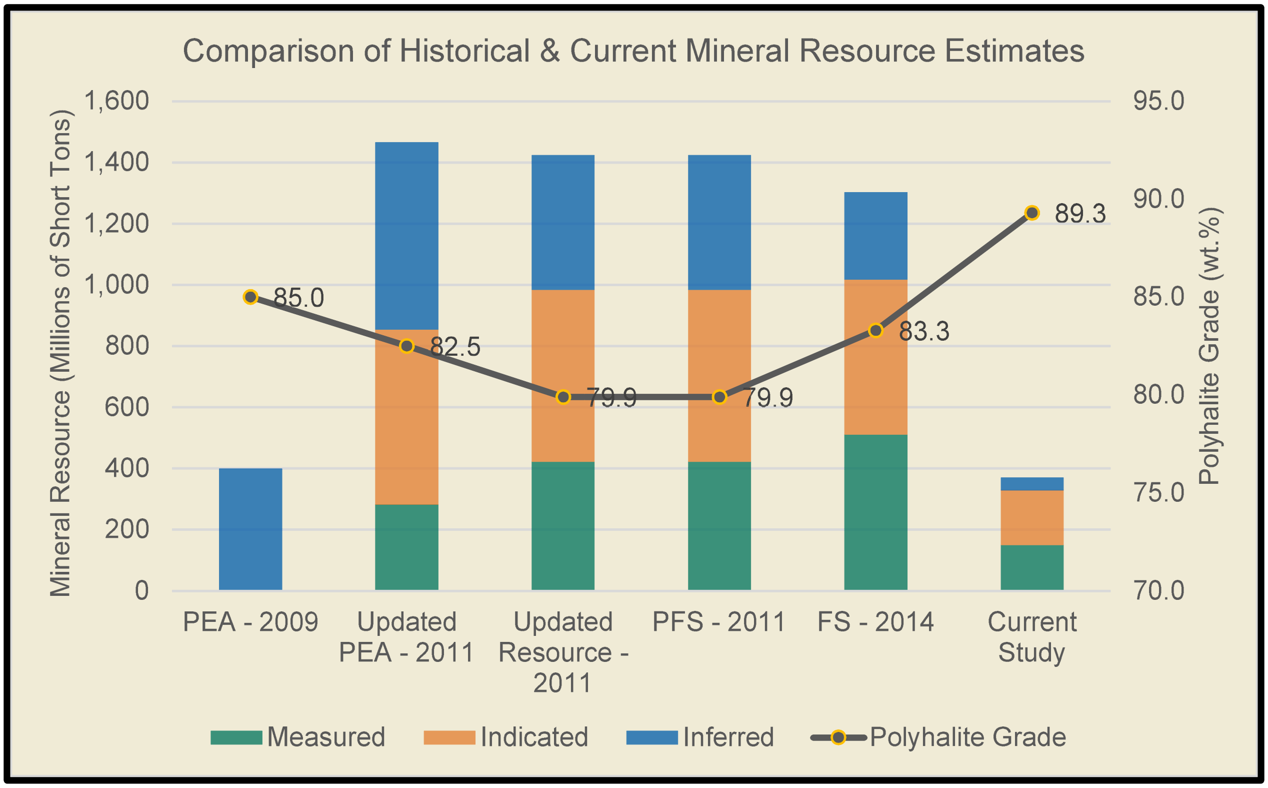
14.6 Comparison with Previous Mineral Resource Estimates

A comparison of the polyhalite Mineral Resource estimates prepared by Golder (this PEA) and the previous Mineral Resource estimates for the Project (see Item 6.5 of this Report for a discussion of historical Mineral Resource estimates) is presented in Figure 14.19.

Figure 14.19: Comparison of Historical and Current Mineral Resource Estimates



Note: the various studies presented here use varying grade and thickness cut-offs, classification parameters and geological domains; all studies prior to the current study report Mineral Resources for the entire polyhalite bed while the current study reports Mineral Resources only for the POLY2 domain.

The current polyhalite Mineral Resource estimate displays a reduction of 930 Mt (Measured plus Indicated plus Inferred Mineral Resource categories; -70% difference) compared to the 2014 Study polyhalite Mineral Resource estimate. The primary reasons for the differences between the two Mineral Resource estimates are primarily due to:

- differences in domaining of the polyhalite unit; previous studies used the entire polyhalite bed whereas thickness and grade constraints applied to the polyhalite domains in the current study have resulted in Mineral Resources reported only for the POLY2 domain.
- applied cut-off grades; an 85% polyhalite grade cut-off was applied in the current polyhalite Mineral Resource estimate versus a 65% polyhalite grade cut-off in the 2014 Study.
- A reduction in the Inferred Mineral Resource classification distances between the current and previous studies based on statistical and geostatistical analyses of the polyhalite thickness and grade data.

The current study model is a better constrained model than those previously developed, with the domaining of the polyhalite bed allowing for better evaluation and control over geological dilution of the targeted polyhalite mineralization. The refined geological model and the resultant Mineral Resource estimate are a better reflection of the Mineral Resource available for potential future economic extraction for the proposed mining method, material handling and processing and product/market considerations presented in this PEA.

15.0 MINERAL RESERVE ESTIMATES

At the current stage, there are no Mineral Reserves declared for the Ochoa Project. To support a mineral reserve estimate, a prefeasibility or feasibility study is required.

16.0 MINING METHODS

The proposed underground mine at Ochoa will provide 2.0 Mtpy of high grade polyhalite to the Ochoa processing facility. Low profile continuous mining equipment generally used in salt, potash, coal, and other bedded deposits is proposed for the Project. Shuttle cars or articulated haulers transfer material from the continuous miners to feeder breakers. From the feeder breakers, material is conveyed to a production shaft where the shaft skip transfers material directly into the surface storage bins. The production shaft will also serve as a ventilation exhaust while a service shaft will support men, materials, and fresh air intake.

The initial mine construction period including shaft sinking, underground infrastructure, and surface construction is expected to take 3 years. Following this stage, there is a ramp-up period of 3 years to reach full production of 2.0 Mtpy. The total production life of the mine is estimated at 42 years.

16.1 Geotechnical Considerations

Previous geotechnical studies have been completed on the Ochoa project, including the following;

- 2014 Study
- Numerical Study of the Influence of Underground Mining on Well bore Integrity, Golder, September 2015

The Ochoa polyhalite bed consists of a strong, hard, brittle, microcrystalline material that does not exhibit viscoelastic properties. The hard, brittle bed is sandwiched between layers of ductile halite beds that exhibit time-dependent creep behavior typical of halite deposits. Halite is interbedded with other strata both above and below the polyhalite unit (e.g. anhydrite, dolomite, mudstones). As a result of the different physical characteristics of polyhalite versus other salts (i.e. brittle response rather than creep), standard Carlsbad potash practices regarding pillar behavior cannot be assumed to hold true for the Ochoa Mine design.

In previous studies, a comprehensive geotechnical mine design evaluation was conducted for estimating the pillar sizes, entry widths, ground support practices, and anhydrite roof standup time. In addition, shaft lining design and surface subsidence were also evaluated. Previous core drilling, laboratory testing, core photographs, geologist's logs, and physical properties testing of selected drilling program cores were the basis for the geotechnical mine design. Selected core samples were tested by AAI at its Grand Junction, Colorado, rock mechanics laboratory. Also, geotechnical testing of core holes near the shaft location were continuously cored from surface through the points of interest. Core logging conducted by AAI entailed describing and classifying the unconsolidated (soil) and consolidated (rock) materials retrieved from the drill hole as coring advanced.

For the purposes of this PEA, and based on the previous studies undertaken by AAI, the following key geotechnical assumptions were made to evaluate the new project design:

- Production panel maximum extraction ratio is 70%.
- Room dimensions are 32 feet wide. Pillar dimensions are 39 feet wide (square pattern).
- Entries into panels are 23-foot wide rooms and 28 foot pillars.
- Anhydrite will not be mined in the production panels.
- Polyhalite bed 1 will be left in the back and supported whenever possible.
- Production panel ground support will consist of 4-foot long, #6 Grade bolts on a 5-foot by 5-foot pattern.
- Main conveyor drifts will mine out the anhydrite bed above the polyhalite. This roof would be supported with longer bolts for long-term support.
- Well bore protection pillars of 200-foot radius will be left in place.
- Shaft pillar distance is 1,500 feet to any production panels.

It should be noted that in the 2014 Study, pillar design was conducted using 3D numerical (Itasca FLAC3D, Version 5, 2014) and empirical modeling techniques. 3D modeling was used to evaluate the 90% and 60% extraction ratios. Modeling results indicated that the 90% extraction ratio may be problematic, and a 60% extraction ratio was adopted for the 2014 Study. Modeling results indicate that higher extraction ratios up to 75% may be possible. This PEA adopted a 70% extraction ratio with the square pillar design. In future studies, modelling of the final mine layout should be completed to confirm the pillar design.

16.2 Mining Method Selection

The Ochoa deposit is a bedded deposit similar to the Carlsbad potash deposits currently being mined in the New Mexico region. The room-and-pillar mining method was chosen since it is well-matched to the deposit characteristics. Heavy duty underground room-and-pillar continuous mining equipment similar to that used in potash, coal, and trona mining is planned. For the PEA, extraction is limited to 70% in the production panels. Long-life main entries are protected with barrier pillars, as are abandoned and existing gas, oil, and disposal wells. See Figure 16.1 for the typical main and panel layout.

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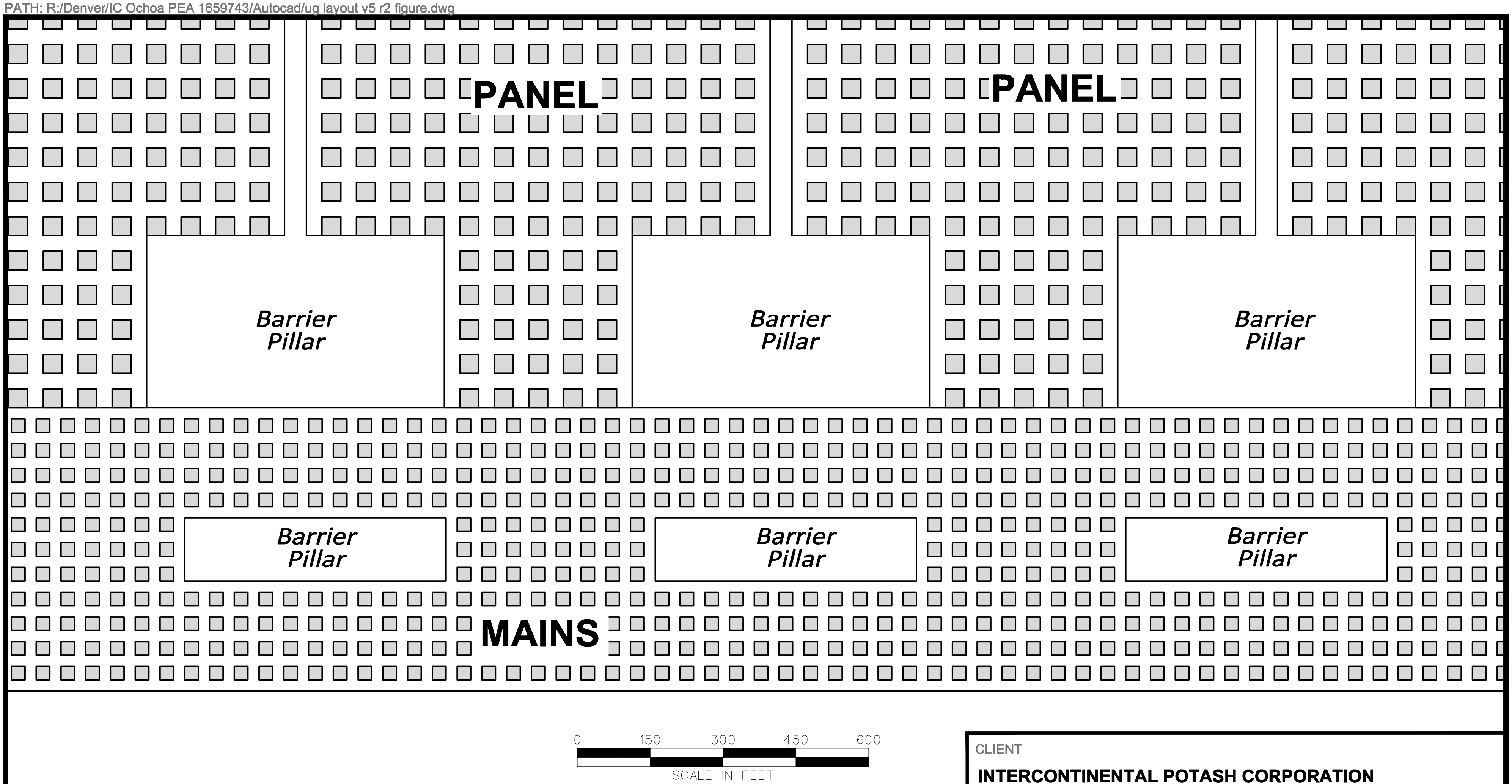

CLIENT	INTERCONTINENTAL POTASH CORPORATION
PROJECT	OCHOA PROJECT PRELIMINARY ECONOMIC ASSESSMENT (PEA)
TITLE	TYPICAL MAINS AND PANEL LAYOUT WITH NOMENCLATURE
CONSULTANT	Golder Associates
YYYY-MM-DD	2016-10-27
PREPARED	WJS
DESIGN	WJS
REVIEW	CH
APPROVED	DSD

PROJECT NO.	CONTROL	Rev	FIGURE
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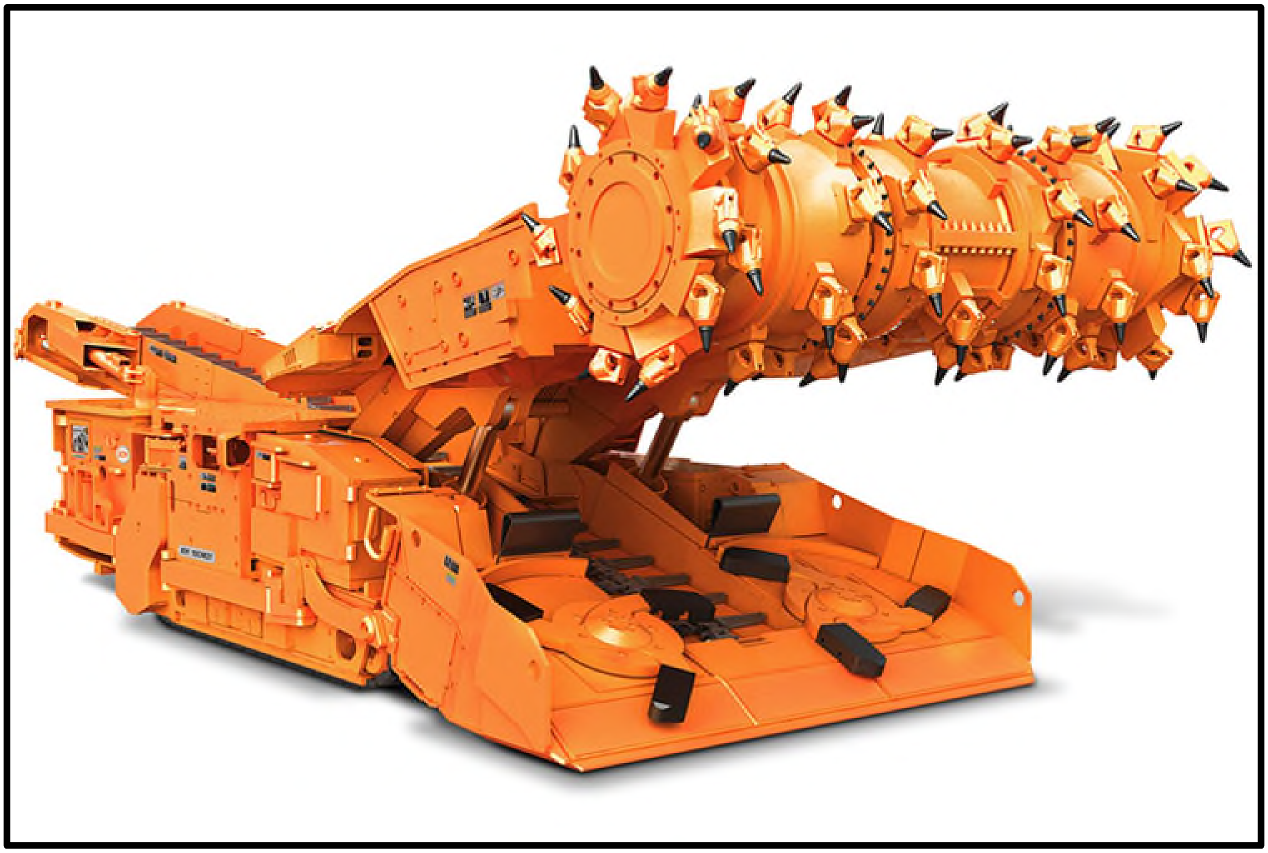
16.3 Mining Equipment

The PEA considers two continuous miner models to produce from varying thickness polyhalite areas as recommended by Joy Global Inc. Miners will target the highest grade polyhalite bed (POLY2). Smaller CMs will be used in thinner areas to maximize grade and tons mined while the thicker zones and main conveyor drifts will be excavated with larger CM's. Figure 16.2 below shows the Joy 14CM27 miner which represents the larger machine that would cut the mains. This miner has a minimum mining height of 57 inches. The smaller machine contemplated would mine in lower seam areas down to a height of 48 inches.

Figure 16.2: Drum Type Continuous Miner



Source: joyglobal.com

Primary and support mining equipment requirements for the proposed Ochoa underground mine are summarized in Table 16.1.

Table 16.1: Mobile Equipment Requirements

Description	Quantity
Production Equipment	
Continuous Miner - Large	3
Continuous Miner - Small	5
Articulated Haulers	4
Shuttle Cars	8
Dual-Boom Roof Bolters - Mains	2
Dual-Boom Roof Bolters - Panels	4
Feeder Breakers	8
Support Equipment	
Diesel Scoop	2
Section Forklift	4
Supply Trailer	4
Personnel Transportation	4

16.3.1 Cuttability

Polyhalite is an evaporite rock, and evaporite rocks are well known to be difficult to cut mechanically, even at low compressive and/or tensile strengths, because they have high fracture toughness. Fracture toughness is defined as a rock's resistance to fracturing and the propagation of pre-existing cracks (Joy 2013). Good correlations have not been reported between values and rock cuttability for evaporites such as potash, anhydrite (gypsum), trona, and salts, although they are sedimentary rocks. Because the unconfined compressive strength (UCS) values of polyhalite range upwards of 15,000 pounds per square inch, and it is hard, brittle, and generally fine-grained, the cuttability of the material with a drum-type continuous miner is a major factor in determining the productivity rate of the equipment. This in turn determines the number of production machines, the necessary support infrastructure, haulage requirements, and mining personnel required to meet the annual ROM tonnage target. Therefore, determining a feasible mining rate is a key component to the economics of the Project.

To ascertain the cuttability of the Ochoa polyhalite, a series of tests were conducted on core samples by the Colorado School of Mines and Joy. The results of these tests indicate that polyhalite ores can be cut by mechanical means provided the drums and pics are specifically configured for the polyhalite. Furthermore, limited bit life will be a considerable cost associated with the miners due to higher expected forces required to promote chipping and propagation of polyhalite.

For the purposes of the PEA, Golder has relied on these previous test results to estimate productivity and costs associated with continuous mining equipment. Further testing is recommended in the next level of study to confirm the lower expected mechanical availability of the smaller CMs.

16.4 Mine Layout

Figure 16.3 shows a conceptual layout for the mains, panels, and division between smaller and larger CMs. This layout also considers mineral rights boundaries and surface facility location (yellow box). This general layout has not been optimized; however, it is configured to develop main entries through the center of the thickest polyhalite resource contours.

Utilizing drum type continuous miners in a room and pillar arrangement allows selective mining to target the high-grade polyhalite seam. In practice, tight quality standards must be applied to stay within the target zone and maintain the minimum accepted product grade of 85%.

Well bore protection pillars must be avoided with main entries and panels. Panels are driven perpendicular to the mains and define mining districts that extend up to 8,000 feet. Many panels are shorter than this length and will vary based on polyhalite grade and thickness necessary to meet minimum product quality levels.

Constraints including well bore protection pillars and mineral rights boundaries must be considered in future designs. These constraints may limit productivity or eliminate areas for production panel access and therefore must be mitigated in the mine layout. A detailed mine layout should be completed at the next level of study to optimize the layout while considering all constraints.

The Ochoa room and pillar mine is accessed by two shafts that are located north of NM 128 and directly to the east of Brinninstool Road. The shafts are approximately 1,525 feet in depth and will be dedicated as a production shaft and service shaft. Underground shops, warehouse, dispatch, and miscellaneous infrastructure will be located near the shaft bottom area. Details of this configuration will be designed in the next level of study.

A ventilation shaft is required for mining to the north and will be developed approximately midway through the mine life.

The extents of the underground mine were determined based on grade and thickness contours of the resource model. The mine was configured in areas where a minimum mining height of 4 feet existed at a minimum mining grade of 87% polyhalite. After dilution, the overall grade produced is greater than the minimum product grade of 85%. Mining panels were clipped by the contour and subdivided to allow mining with a larger continuous miner to occur in the thicker, higher grade areas of the mining extent.

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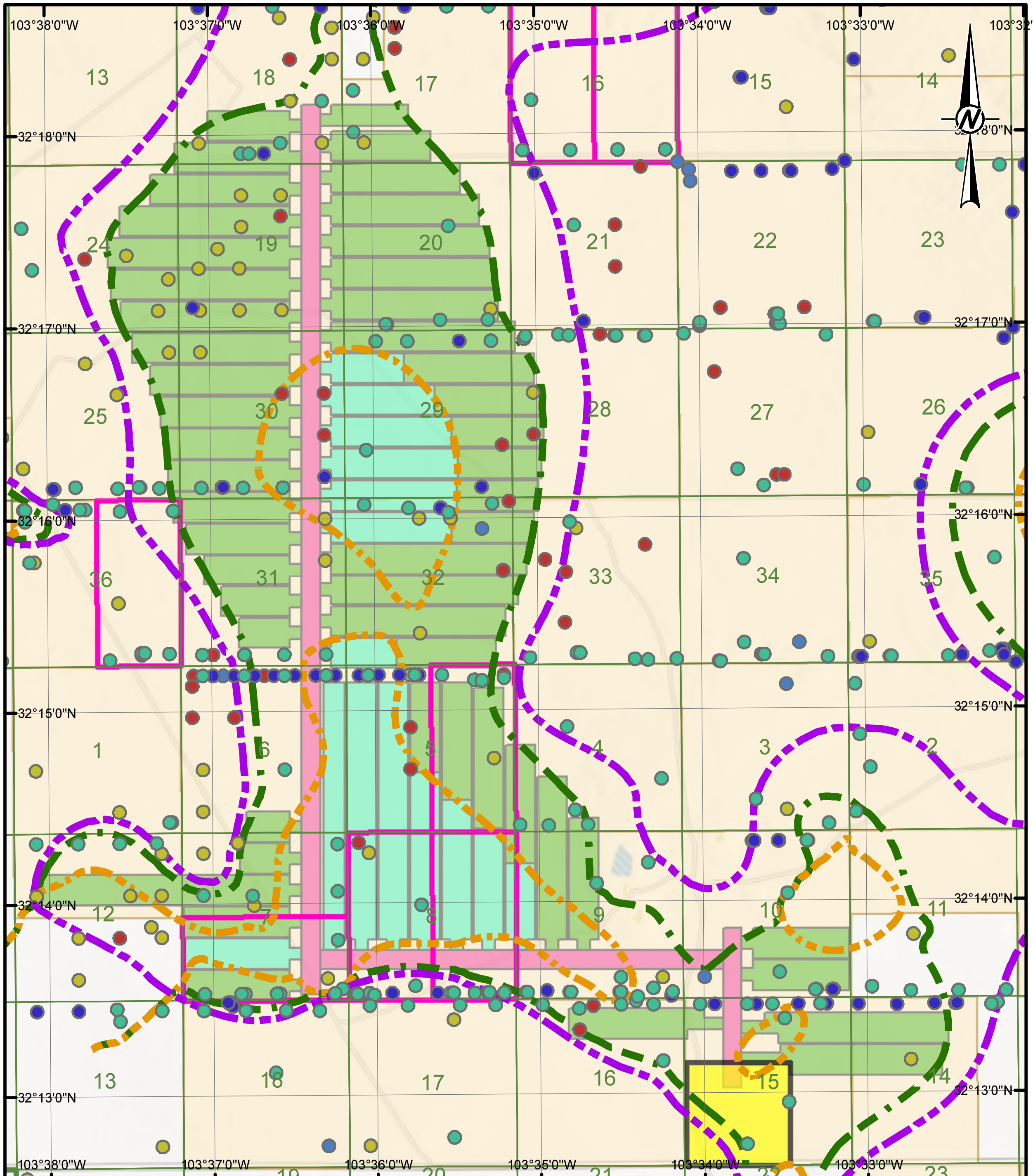

LEGEND

- 57 inch Panel
- 48 inch Panel
- Main
- Poly2 Thickness > 4 ft
- 85% Polyhalite Cutoff - 48"
- 85% Polyhalite Cutoff - 57"
- ICP Mining Rights
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Surface Facility
- Section

Well Buffer (200ft)

- Active
- New
- Cancelled APD
- Plugged, Site Released
- Other

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 5,000 10,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
SITE LAYOUT AND MINING LIMITS

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	CH
PREPARED	JF
REVIEWED	CH
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	16.3

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16.5 Dilution

As discussed in Item 14.0, the target seam of polyhalite has been subdivided into three units based on polyhalite grade. With the stringent grade limits required for a direct ship product, dilution control of the lower grade POLY1 and POLY 3 units during mining is critical. Equipment has been selected to allow selective mining of the high grade POLY2 unit; however, there are no visual markers for the boundaries between the units. Mining of the POLY2 unit will be controlled by the accuracy of the geological model and the engineering and grade control process.

Allowances have been included in the mining cycle time and the underground labor estimates to allow regular geological sampling of the roof, floor, and ribs to update the geological model as mining progresses. Meetings have been held with Joy Global to discuss the capability of the selected continuous mining machines to maintain roof and floor elevations based on engineering design.

Even with these controls in place, it has been assumed that dilution from the POLY1 and POLY3 units will occur during the mining cycle. Dilution estimates used in the 2014 Study of 2 inches from the roof and 4 inches from the floor have been assumed for the mining model and are included in the ROM annual grades. It is reasonable to expect that navigating the continuous miners through the target zone will result in out-of-seam dilution (OSD). Adding this dilution to the planned mining seam results in a shipped grade of over 87% polyhalite.

16.6 Mine Services

16.6.1 Ventilation

The ventilation system for Ochoa will meet MSHA's metal/non-metal ventilation Category III (gassy mine) regulatory requirements (US Government Publishing Office 2016). This designation has been voluntarily incorporated into the Ochoa design due to the presence of petroleum wells and high concentrations of wells in the mine area.

Main mine fans are located on surface and push air down the service shaft. Fresh air is directed through the intake air mains to the active production headings. Each production heading is provided its own split of fresh air and exhaust air is directed into the return air mains where it is directed up the production shaft and is exhausted from the mine.

Total airflow requirements were based on the MSHA minimum airflow for longwall and continuous miner sections of 9,000 cubic feet per minute (CFM) through the last open crosscut before the working face (US Government Publishing Office 2016). To achieve the minimum airflow at the working face an allowance of 35,000 CFM at the last permanent stopping in each section was assumed. Additional allowances were included for areas with high ventilation requirements such as belt power stations, battery charging stations, and underground mine infrastructure.

After all considerations, a total airflow requirement of 1,066,000 CFM was calculated for the Ochoa underground mine. A ventilation model was not completed at this level of study and additional ventilation engineering work is required to determine final fan selection and to develop ventilation plans for the life of mine stages.

16.6.2 Mine Dewatering

The groundwater inflows for the Ochoa mine are only expected to be encountered during the construction of the access shafts. Both shafts will pass through water bearing strata and will be designed to reduce the risk of inflows into the underground mine.

The underground water management system will be designed to handle to maximum predicted inflow for the shafts in case of emergency, while the day to day water management system will only need to handle water used in the underground shops and facilities. For the purpose of the PEA a specific mine dewatering system has not been planned.

16.7 Production Schedule

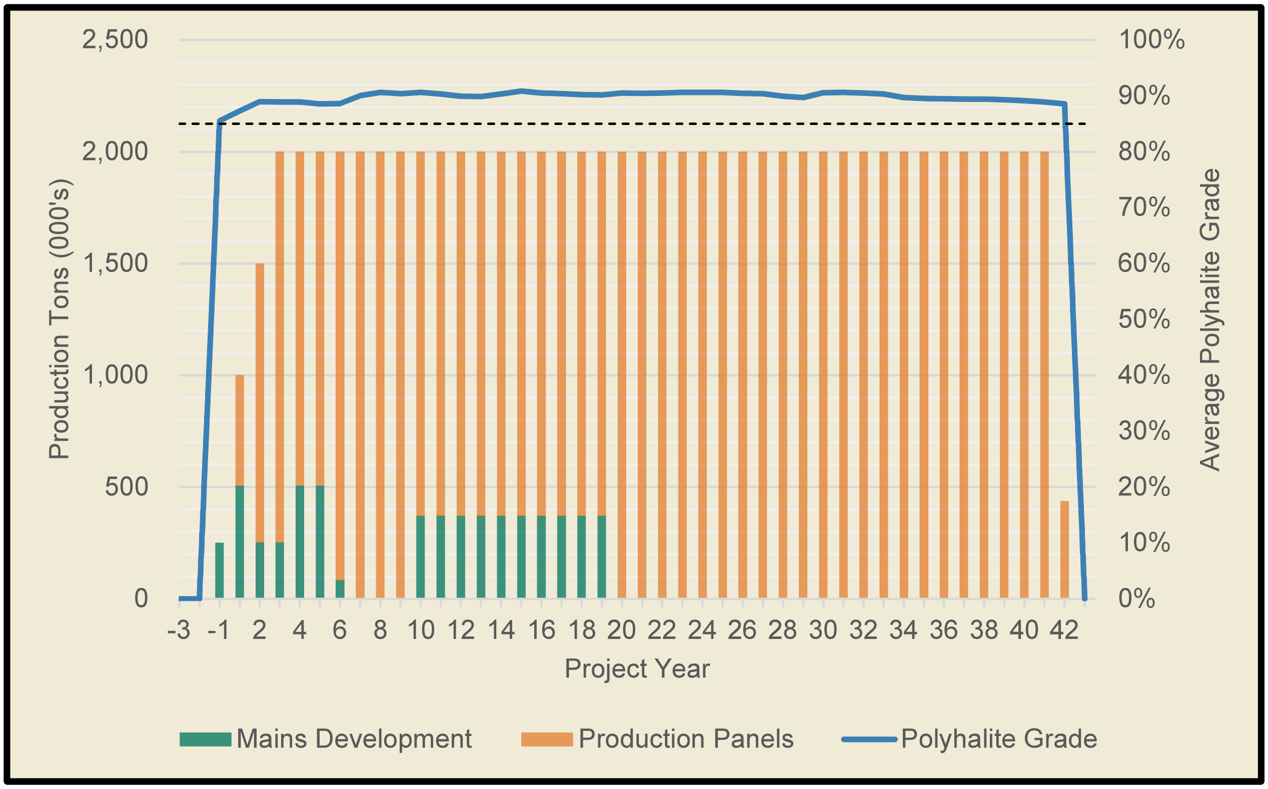
Mineral Reserves have not been calculated as a part of this PEA; however, the Mineral Resource model includes material classifications for measured, indicated, and inferred resources. This PEA is preliminary in nature, and includes Inferred Mineral Resources that are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized. Table 16.2 shows the distribution of Mineral Resources contained within the PEA underground mine design.

Table 16.2: Ochoa Mineral Resources Contained Within PEA Underground Design

Resource Classification	Tons	Average Grade
Measured	52,053,194	90.2%
Indicated	25,072,452	89.7%
Total	**77,125,646**	**90.0%**
Inferred	4,060,284	88.8%

The proposed production schedule for Ochoa is shown in Figure 16.4. It includes a 3-year pre-production period, 3-year production ramp up to full production, and approximately 38 years of steady state production, followed by a 1-year ramp down. A total of 81.2 Mt at an average grade of 89.9% Polyhalite have been included in the production schedule.

Figure 16.4: Ochoa PEA Production Schedule



The annual average polyhalite grades shown in Figure 16.4 were estimated by approximating annual areas of extraction and querying the geological model. Variations in grade due to extraction ratio, barrier pillar, and well bore protection pillars were not considered.

16.8 Mine Labor

The peak estimated workforce for the Ochoa project during full production is 301 personnel per year. This estimate includes both mine and process plant operations personnel, as well as technical services and administrative support. Table 16.3 summarizes the life of mine average labor.

Table 16.3: Ochoa Life of Mine Average Labor

Area	Personnel
G&A	
Mine	18
Process	34
G&A Sub-Total	*52*
Mine Operations	
Shaft Operations	16
Continuous Miners and Support	163
Mine Sub-Total	*179*
Process Operations	
Plant	42
Warehouse	8
Rail Yard	20
Process Total	70
Total Labor	***301***

16.9 Conclusions & Comments

The purpose of the Ochoa PEA mine plan is to evaluate an alternate mine production rate and an alternative processing facility from the 2014 Study. The mine plan was produced to a level of detail sufficient to complete a PEA and economic modeling on the Project.

The primary concerns identified in the PEA are the following:

- Polyhalite is strong, brittle (microcrystalline structure), and non-viscoelastic (no creep).
- The strong microcrystalline structure and high UCSs increase cuttability difficulty, requiring high horsepower, heavy-duty continuous miners. This has been considered in the operating costs and productivity estimates. Not meeting expected cutting rates would negatively affect the Project economics. Cuttability testing should continue in the next phase of study to confirm cutting rates and appropriate miner configuration.
- The immediate anhydrite roof features a thin mudstone parting that exhibits little to no adhesion to the roof above the parting horizon. The parting ranges from about 3 inches to around 18 inches above the top of the polyhalite bed. Although the intent would be to leave polyhalite in the roof, ground support is planned to secure ground during production.
- The mine floor is weaker than the polyhalite, which may result in additional dilution with the heavy continuous miners. Higher dilution would negatively affect the Project economics.
- There are over 750 gas and oil wells penetrating the mineralized bed on the Property or near it in the region. Mine layouts would need to be optimized to avoid well bore pillars.
- Grade control may be difficult at times as bed extents are hard to determine visually. This could cause mined grade to decrease, which would negatively affect the Project economics. Formal grade control systems will need to be considered in future studies.
- Mains and submains and respective barrier pillars must be designed to minimize convergence over an extended time.

- Groundwater inflows during shaft construction must be controlled.
- Methane has not been detected in or near the mineralized zone, but the mine must be designed as a gassy mine due to the presence of the gas and oil wells.
- Adequate ventilation is required for potential methane migration from corrupt well bores, diesel particulate matter (DPM), and respirable dust or K40 radon daughters, if present.
- Polyhalite is incombustible and polyhalite dust is considered non-explosive.

17.0 RECOVERY METHODS

17.1 Process Selection

The proposed process follows the strategy that the operation would be focused on mining the high grade polyhalite bed. The operational scheme would produce two fertilizer products for market:

- Raw granule product
- Pelletized product

This approach has simplified the process operations from the previous philosophy as the earlier design was to manufacture a potassium sulfate (SOP, K_2SO_4) product from the polyhalite mineralized material. That process required a refinement of the feed stock to control the grade of potassium within the final product. For this PEA, the product would remain a polyhalite composition ($K_2Ca_2Mg(SO_4)$•$2H_2O$) which is delivered to surface at a minimum grade of 85%. Mining dilution would occur underground; however, this dilution is made up of lower grade polyhalite that is included in the minimum 85% grade delivered to surface. Additional treatment of dilution from the mining operation within the feed stock is not considered nor addressed in this PEA.

Other than crushing test work conducted to determine the size distribution of the feed material, to date no metallurgical or processing work has been completed specifically oriented toward the ability to pelletize the polyhalite. The processing plant would crush polyhalite and classify to size gradation for a raw granular fertilizer product and to collect generated fines along with grinding crushed polyhalite to form a pelletized fertilizer product. The product size gradation targeted in this PEA would be in the 3 to 8 Tyler Equivalent Mesh range for each product.

The proposed process for the raw granulated product would be entirely mechanical, and would require no chemical treatments, additions, or nonstandard material handling processes. The process would focus on crushing and size classification as the primary objectives. The proposed process for the pelletized product is to convert a portion of the raw granulated material along with collected fines into a consistent, uniform, value-added marketable product.

Based upon the current approach by ICP and for the purpose of developing the process design criteria, recovery of polyhalite product from the feed stream produced from the mine is considered at 100% (no losses). This initial assessment is recognized as optimistic and would be expected to change with further defined lab work and pilot testing.

17.2 Process Design Criteria

Process Design Criteria were developed for the Ochoa Project with information from the following resources:

- IC Potash Corp's related experience and knowledge
- NI 43-101 Ochoa Project Feasibility Study dated March 7, 2014
- Metallurgical test report from NOVOPRO on test data from Gundlach and Hazen Research Inc. dated June 4, 2013

The initial plant design would recover and ship approximately 1 Mtpy of polyhalite. The production throughput would double to 2 Mtpy of polyhalite in Year 4 of operation. This PEA assumes product would be sold to market on an as-produced basis and not stockpiled for campaign shipment to seasonal markets.

Table 17.1 outlines the major process design criteria.

Table 17.1: Major Process Design Criteria

Criteria	Units	Amount
Operating Year	d	365
Plant Availability	%	77.8
Operating Hours per Year	h	6,332
Design Feed Rate (@ 2,000,000 stpy)	tph	338
Total Recovery	%	100
Production at 1,000,000 stpy:		
Raw Granulated Production Range	Mtpy	500,000 to 750,000
Pelletized Production Range	Mtpy	250,000 to 500,000
Production at 2,000,000 stpy:		
Raw Granulated Production Range	Mtpy	1,000,000 to 1,500,000
Pelletized Production Range	Mtpy	500,000 to 1,000,000

17.3 Process Description

The main process plant would be located in close proximity to the production shaft and adjacent ROM storage bins. The final product loadout facility would be located off-site north of the town of Jal, New Mexico, approximately 22 miles away. The main process plant would involve two key unit operations for handling and preparing the polyhalite feed into both a raw granule polyhalite product and a pelletized polyhalite product. A simplified process flow diagram is provided in Figure 17.1: Simplified Process Flow Diagram.

Figure 17.1: Simplified Process Flow Diagram

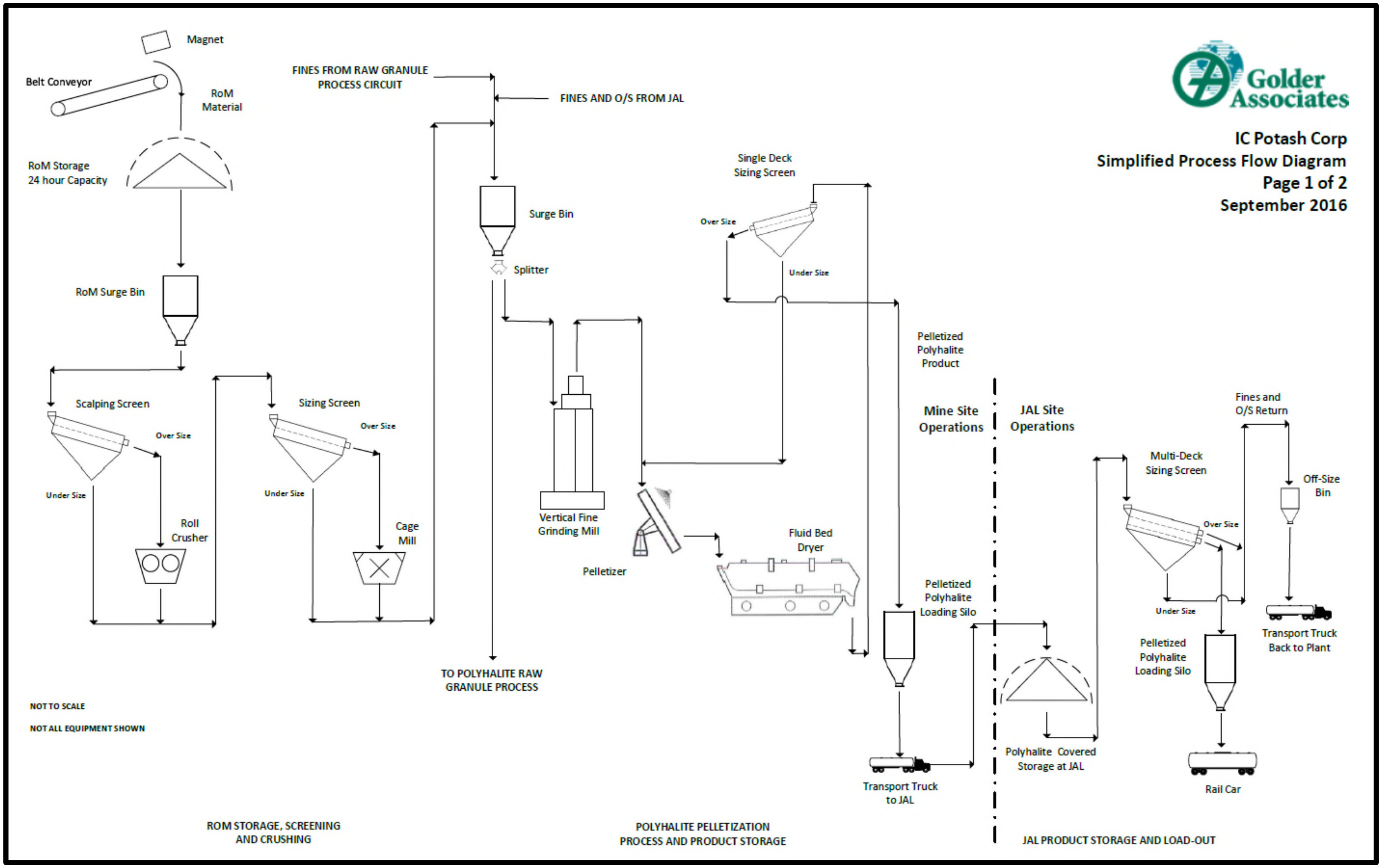
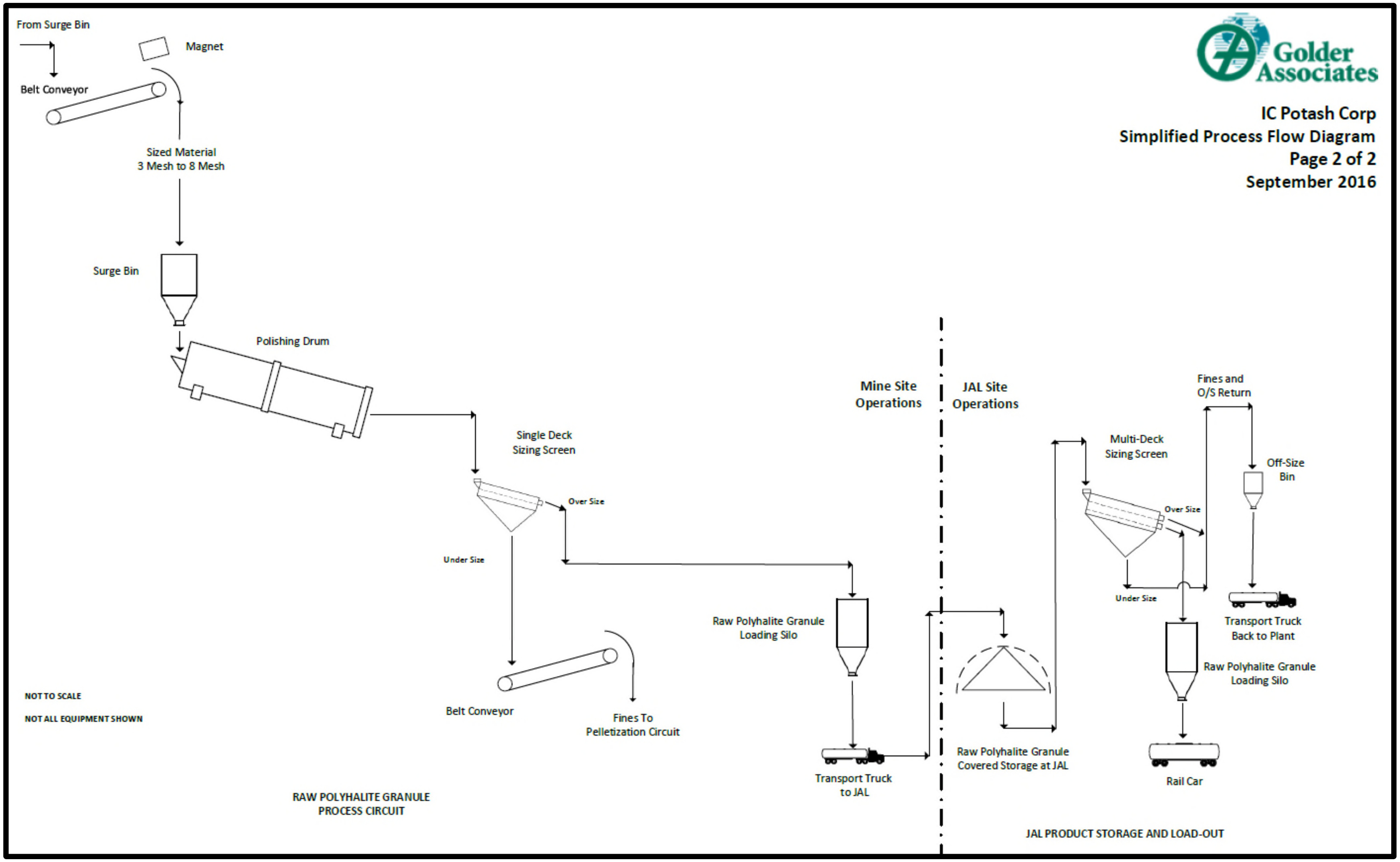


Figure 17.1: Simplified Process Flow Diagram (continued)



The proposed process facilities at the mine site would include the following:

- Primary stage screening and crushing
- Second stage screening and crushing
- Raw Granule Production Circuit
  - Product conditioning
  - Product screening
- Pelletized Production Circuit
  - Dry Grinding
  - Pre-conditioning
  - Pelletizing
  - Product Drying
  - Product Screening
- Products storage
- Truck loading

The offsite facilities at Jal would include the following:

- Truck unloading
- Product storage
- Product reclaim
- Railcar loading

Table 17.2 lists the major process equipment

17.4 Run-of-mine Stockpile

ROM material 4 inches and under would be received from the mine and transferred via conveyor to covered storage adjacent to the plant facilities. The storage would provide 24-hour surge capacity for the downstream operations. The transfer conveyor would be equipped with an overhead magnet to remove tramp iron from the ROM material prior to feeding into the downstream crushing plant operations.

Table 17.2: Major Equipment List

Description	Number of Units	Description	Number of Units
RoM Storage Screening & Crushing		**Polyhalite Pelletization Circuit**	
Belt Conveyor	1	Transfer Conveyor	1
Cross Belt Magnet	1	Cross Belt Magnet	1
RoM Covered Storage	1	Surge Bin	1
Storage Tripper Conveyor	1	Vertical Fine Grinding Mill	1
Storage Reclaim Rake	1	Transfer Conveyor	1
Vibrating Feeder	1	Loading Hopper	1
Double Deck Screen	1	Air Lock Feeder	
Roll Crusher	1	Pin Mixer	1
Under Crusher Conveyor	1	Conditioned Fines Conveyor	1
Loading Hopper	1	Disc Pelletizer	1
Double Deck Screen	1	Wet Pelletized Conveyor	1
Cage Mill	1	Fluid Bed Dryer with Gas Burner	1
Under Crusher Conveyor	1	Dry Pelletized Conveyor	1
Transfer Conveyor	1	Surge Bin	1
Surge Bin	1	Single Deck Screen	1
Diverter Gate	1	Pelletizer Feed Conveyor	1
Bag House Dust Collector	1	Pelletized Product Conveyor	1
		Bag House Dust Collector	1
Raw Polyhalite Granule Circuit		**Product Storage**	
Transfer Conveyor	1	Transfer Conveyors	4
Cross Belt Magnet	1	Bucket Elevators	5
Surge Bin	1	Surge Hopper	2
Polishing Drum	1	Weigh-belt Feeder	4
Transfer Conveyor	1	Loading Spouts	4
Loading Hopper	1	Product Silos	4
Double Deck Screen	1	Bin Vent Filters	4
Fines Transfer Conveyor	1	Bag House Dust Collector	1
Raw Product Transfer Conveyor	1	**Transfer Area**	
Bag House Dust Collector	1	Truck Weigh Scale	1

17.5 Crushing & Screening

The ROM material would be reclaimed from storage and transferred to the first stage crushing/screening circuit via a conveyor. The primary screens would be fed by an apron feeder. The +3 mesh material would be sent to a roll crusher to reduce the size from 4 inches to less than 1 inch. The roll crusher product would be returned to the primary screen for rescreening. The mid-sized material, 3 to 10 mesh, would be diverted to the cage mill feed bin. The -10 mesh screened undersize would be conveyed directly to the pelletizer feed surge bin.

The mid-size polyhalite material would be sent to the cage mill to further reduce the particle size. The finely crushed product would be screened, with the +10 mesh oversize transferred to a surge bin and the -10 mesh material transferred to the pelletizer feed surge bin.

The +10 mesh material from the surge bin would be diverted to either the raw granulated circuit or the pelletized circuit.

Dust collection equipment would be provided in the crushing plant to capture fines that would be transferred the pelletizer circuit.

17.6 Raw Granulated Circuit

The raw granulated circuit would produce a 3 to 10 mesh product for market. Material from the surge bin would be fed to a polishing drum for conditioning. The discharge from the drum would then be screened to remove fines and the sized material would be transferred via conveyor and stored in the raw granulated product silo. The fines would be transferred to the pelletizer circuit.

Dust collection equipment would be provided in the raw granulated plant to capture fines that would also be transferred the pelletizer circuit.

17.7 Pelletizer Circuit

17.7.1 Pelletizing

The pelletizer circuit would produce a further refined product. Polyhalite would be milled to a fine size fraction through a vertical grinding mill. The finely ground material would then be pre-conditioned with a binder in a pin mixer to help densify the feed material. After conditioning, the polyhalite material is fed onto a disc pelletizer. The combination of the tumbling agglomeration along with the addition of binder would help form a uniform, spherical pellet to the target size range of 3 mesh to 8 mesh. Once the polyhalite pellet reaches the target size it would be discharged from the disc pelletizer.

17.7.2 Drying & Loading

Because moisture is added during the pelletizing process step, the pellet product would need to be dried. The polyhalite product would be transported to a dryer. For this process, a fluid bed dryer is considered. The dried polyhalite pellets would be screened to ensure optimal sized pellets exit the process. The undersize and oversized pellets would be recycled back the pelletizer circuit for reprocessing. The desired sized material would be transferred via bucket elevators and conveyor to silos for storage. Each silo would feed its corresponding truck loading bay.

Dust collection equipment would be provided in the pelletizing plant and truck loading facility to capture and recycle fines back into the pelletizing circuit.

17.8 Offsite Product Storage & Loadout

17.8.1 Product Transfer, Unloading, & Storage

Both the polyhalite finished products would be trucked to the railcar loading site approximately 22 miles near Jal, New Mexico. Each product would be loaded onto its dedicated truck at the process plant loading area and transported over the public road system to the loadout facility. Highway trucks equipped with tandem mini-bottom-dump enclosed trailers could carry approximately 24 cubic yards of product. Upon arrival at the loadout facility, the trucks would dump their load into a product specific receiving hopper. Table 17.3 summarizes the number of trucks required at various levels of production.

Table 17.3: Truck Requirements

Tons per Year **Tons per Month** **Tons per Day**		**500,000** **41,667** **1,389**	**1,000,000** **83,333** **2,778**	**1,500,000** **125,000** **4,167**	**2,000,000** **166,667** **5,556**
Truck Capacity (tons)	**27.6**				
Trucks per Day		50	101	151	201
Trips per Truck per Day	**19.6**				
Trucks Hauling		2.6	5.1	7.7	10.3
Trucks Required		5	8	10	14

An opportunity exists to construct a rail line from the mine to Jal to eliminate haul trucks in the future. This should be considered in future studies.

The products would then be transferred by belt feeders onto the storage belt conveyors to a bucket elevator that discharges onto a belt tripper conveyor that would deliver the products into their respective dedicated storage areas. The truck unloading area would be equipped with a dust collection system to minimize dust during truck unloading processes. The collected dust would be returned to the process plant for reprocessing.

17.8.2 Product Reclaim & Railcar Loading

Each of the polyhalite products would be reclaimed from its dedicated storage facility via a reclaim drag conveyor loading a transfer conveyor. The transfer conveyor would feed into a bucket elevator which would discharge into its respective loading bin adjacent to the rail track. Product would be transferred via a conveyor and bucket elevator into a bulk weighing system for loading railcars.

The railcar loading area would be equipped with a dust collection system to minimize dust during the product transfer and rail car loading operation. The collected dust would be returned to the process plant for reprocessing.

18.0 PROJECT INFRASTRUCTURE

The Project is located on a greenfield site and would require the addition of infrastructure to support the operation. The infrastructure requirements for the Property comprise the following:

- Onsite roads for site access
- Main substation power supply and distribution
- Water supply, storage, and distribution
- Onsite buildings including offices, maintenance shops, warehousing, wash/locker room, security office, utility room, and electrical room
- Fuel and lubrication storage and containment
- Communications
- Natural gas supply
- Offsite rail loading
- Discards management

A proposed layout arrangement sketch is shown in Figure 18.1: General Arrangement of Ochoa Project Infrastructure at the end of this section.

18.1 Site Preparation

The Project site would be cleared and grubbed as required for site development at various project stages. Where required, soil would be stripped and preserved at onsite stockpiles for later spreading in areas to be restored with vegetation. Soil stockpiles would be located as part of engineered and designed landforms.

Roads and yard grading would be designed to balance cut-and-fill volumes and ensure positive drainage to storm water management facilities.

Storm runoff would be managed by constructing protective berms around all disturbed areas and surface facilities at the mine, process plant, and loadout facility sites. Berms would prevent clean water runoff from entering the Project site. Storm runoff within the sites would be contained and diverted to ditches leading to collection ponds that are sized for a 100-year, 24-hour storm event.

18.2 Site Access

The primary road to the Project is NM 128. The site can be approached from Carlsbad, west of the Property, or from Jal, east of the Property. The Project is planned to be located on the north side of NM 128 with the majority of the facilities accessed off of County Road 2, also known as Brinninstool Road. NM 128, which mainly passes through unpopulated semi-arid land, is a paved, two lane road. There are deceleration turn lanes in both directions on NM 128 at the intersection of Brinninstool Road. Study assumes access would be required off of Brinninstool Road to reach the mine shaft(s), administrative facilities, process facilities, and product loadout facilities. Site access would be through one of two security gates to control and direct the flow of traffic onto the operation.

18.3 Power Supply

It is estimated that this facility would require approximately 3 MW of connected power to support the start-up of both the mining and processing operations. The area is serviced by Xcel Energy and early discussions have been initiated for this service. The site would receive power from Xcel's existing grid to the Project's switching/metering substation. From there, 115-kV overhead lines will feed the Project's main substations at the process plant and mine facilities. From these main substations power would be further distributed to associated secondary substations, motor control center locations, and electrical rooms. Distribution from the main substation would be via a 12.4-kV and 4,160-V buried distribution systems.

18.4 Construction Power Supply

During the initial construction activities, the Project would rely on temporary diesel generated electricity until the construction substation becomes operational. Afterward, electrical power would be supplied for construction activities from the transmission line to the Project site.

18.5 Natural Gas Supply

Natural gas supply is required to support the process operations to fuel the pelletizer dryer and building services. The natural gas would be sourced from one of several suppliers in the region. For this PEA, it is assumed that a third party would be brought in to install a natural gas pipeline extension and route it to the Project site terminating at a pressure reducing station. Onsite supply of the gas would be via a metering and a low pressure onsite distribution system.

18.6 Water Systems

18.6.1 Water Supply

The Capitan aquifer has been identified by ICP as the water source for the Project at the well field site approximately 12 miles northeast of the site. Water wells WSO1 and WSO2 are already drilled and available for the pumping and distribution system. A pretreatment system would be located at the well site. The approach for the plant water supply would be to develop a 30% design of the three water support systems: raw process water (untreated), treated process water, and potable water.

18.6.2 Water Treatment & Storage

Raw water would be treated at the well site to remove hydrogen sulfide and slime forming bacteria. Raw water would be stored both at the well site for conveyance to the Project site and on the Project site. The raw water tank at the Project would also service as the water source for the fire protection system.

Due to the salinity level of the water from this aquifer, a WTP in the form of a multi-stage RO treatment facility would be required for the treated water supply. This WTP would be located adjacent to the process facility. Potable water would also require disinfection prior to distribution within the building services areas. Treated water would be stored on site in their respective tanks.

18.7 Fuel and Lubrication Storage & Distribution

Fuel and lubrication for the mobile equipment and product transport trucks would be delivered to site by a local suppliers. A fuel and lubrication facility, consisting of a number of double-wall storage tanks and dispensing facilities, would be located in proximity to the maintenance facility and surface vehicle parking and accessible via the second security entry gate.

18.8 Buildings

For the purpose of the Study the buildings in Table 18.1 have been included in the capital costs.

Table 18.1: Proposed Onsite Buildings

Building	Details
Process Structure	Steel structure with closed sides
Control Room/ Electrical Rooms	Modular design
Transformer room	Container or mobile unit
Administrative Building/ Change Rooms	Modular design
Security Entry Gate	Modular design
Maintenance shop	Pre-engineered steel structure
Warehouse	Fabric cover over steel structure

18.8.1 Operations Buildings

18.8.1.1 Process Structure

The process plant would be a stick-built constructed structure with roof, siding, and steel grating or concrete flooring. The layout would utilize a narrow foot print, to the extent possible, in order to minimize the area of disturbance. It would contain the crushing, screening, grinding, pelletization operations as well as the product storage and loadout facilities.

18.8.1.2 Control Room/Electrical Rooms

The control room would be adjacent to the process structure and of modular construction design. This would be the primary location for all process control system (PCS) hardware, including servers and operator workstations and would serve as the primary control center for all process operations. Electrical rooms would be located in proximity to the equipment they are serving. Electrical rooms would be prefabricated to the applicable codes and standards required.

18.8.2 Ancillary Buildings

18.8.2.1 Administrative Building

The administrative building would be strategically located to house and service administrative functions, the mine and process engineering functions, training, and the change room facilities. The building would be of modular design and include a reception area, offices, conference rooms, printing and file storage, first aid treatment rooms, training/conference rooms, a lunch room with kitchenette, washrooms, janitorial room, and a communications room.

18.8.2.2 Security Entry Gates

The main gate entrance to the Property would be a security control point located near the administration building. This would be the primary entry for all employees, suppliers, and site visitors to the site. There would also be a secondary gate entrance to the Property which will include a truck scale. This gate would service all product transfer traffic, as well as fuel supply trucks. Both locations would be staffed with security personnel to control and direct entry and egress from the Property.

18.8.2.3 Maintenance Shop

A surface maintenance shop would be located adjacent to the process facilities. This shop would be a single story, pre-engineered steel structure design divided into two maintenance areas. One area would be an open maintenance area for servicing light mobile equipment used to support the operation. The other end would be compartmented to provide dedicated areas for welding and electrical and instrumentation repairs for routine maintenance on process plant equipment.

18.8.2.4 Warehouse & Laydown Yard

The warehouse and laydown yard would be located in close proximity to the maintenance shop. It would be constructed using cost effective fabric over frame building structure. The laydown area would be a fenced in yard with a compacted, crushed gravel surface.

18.9 Communications

The Project would incorporate proven, reliable telecommunications systems. The surface operations system would consist of the following items:

- Outside plant fiber optic cabling system
- Building structured cabling system
- Local/wide area network (LAN/WAN), internet, and intranet services
- Voice over Internet Protocol (VoIP) telephone systems for voice and fax
- Mobile radio systems and antenna towers
  - Microwave link between process plant and loadout facility

- Security closed-circuit television (CCTV) and access control system
- UPS

The underground mining operations would use a two-way radio communication system that can be used on the surface and underground. A tunnel radio ultra-high frequency (UHF) system with surface antennas and leaky feeder cable underground that can track miners underground would be installed. There are radios that can be compatible with surface and underground mobile equipment, as well as those carried by mine personnel.

A battery-powered, MSHA-permissible phone system would also be included as a secondary communication system. This system would use a separate and isolated communication cable to provide a redundant system that can be used on the surface and underground, including hazardous locations.

18.10 Site Security Fencing

Two types of fencing would be used for the Project for security. A perimeter fence, 4 feet high with three strands of barbed wire, would be installed at each site. Safety fencing constructed of an 8-foot high chain link fence topped with three strands of barbed wire would be installed to protect personnel and Property in safety and security sensitive areas.

18.11 Rail Spur & Loading Facilities

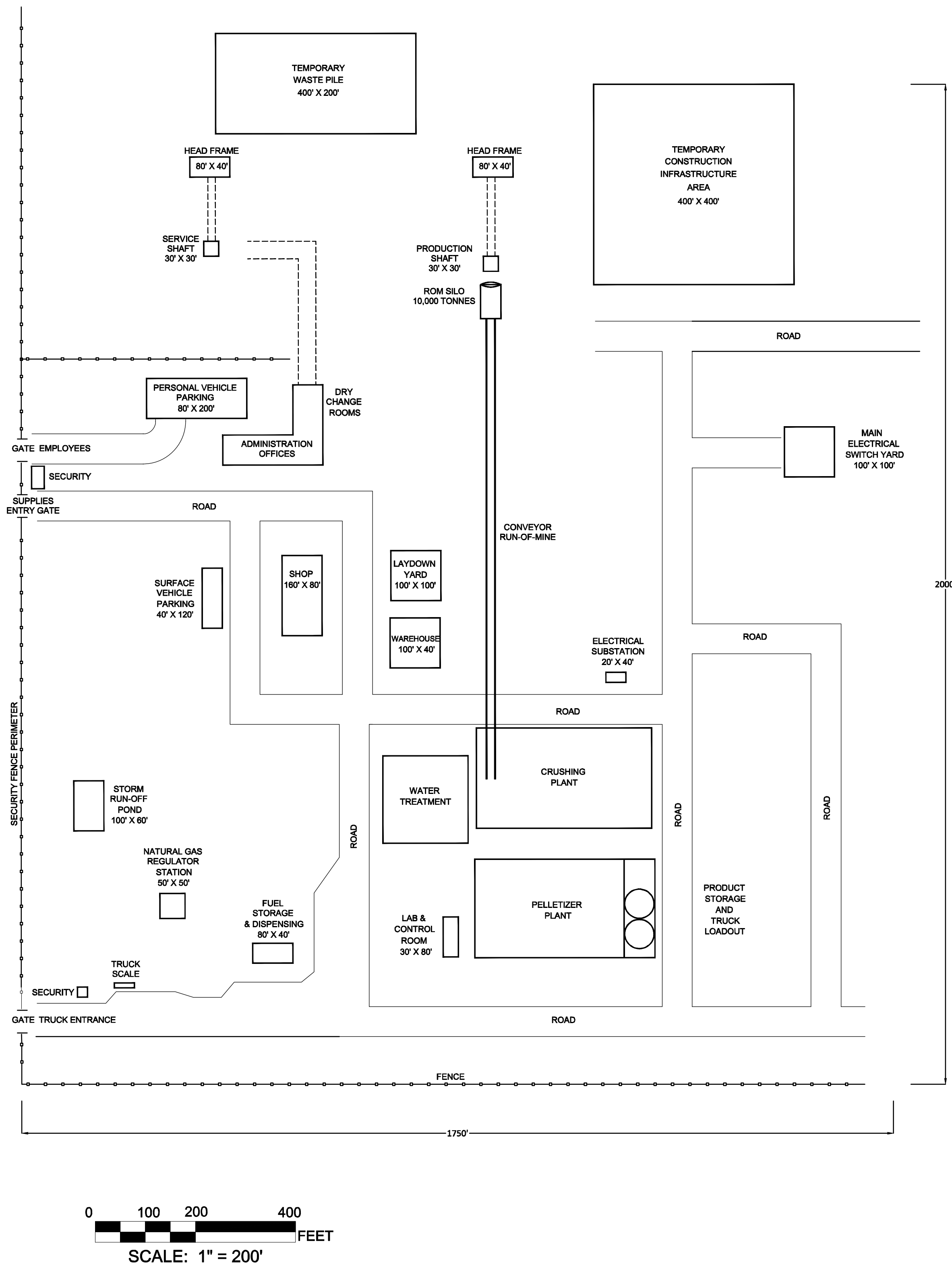
Primary shipment of product to market would occur via rail transport. During the initial operations, product would be trucked from the mine site to a rail installation that is located north of the town of Jal, New Mexico, approximately 22 miles from the Project site. A rail site off of the TNMR rail line has been selected to construct a loadout facility. This site would serve as the final product storage and loading facility for the granular and pelletized products.

Facilities and improvements to the site would include the following:

- Truck unloading facility
- Product transfer conveyors
- Product storage
- Product reclaim conveyors
- Product silos with weigh scales
- Rail car loading facility
- Rail switch turnouts to the TNMR line
- Rail yard gates and track
- Administration building for all office and personnel facilities

Site improvements would include access turn-out from NM 128, roads, site grading and storm water management, and employee and visitor parking.

IC_Ochoa 1659743/IC Potash planview facilities_GOLDER.dwg



CLIENT	INTERCONTINENTAL POTASH CORPORATION
PROJECT	OCHOA PROJECT PRELIMINARY ECONOMIC ASSESSMENT (PEA)
TITLE	GENERAL ARRANGEMENT OF OCHOA PROJECT INFRASTRUCTURE
CONSULTANT	Golder Associates
YYYY-MM-DD	2016-10-27
PREPARED	WJS
DESIGN	WJS
REVIEW	PD
APPROVED	LD
PROJECT NO.	1659743
CONTROL	0001
Rev	A
FIGURE	18.1

19.0 MARKET STUDIES & CONTRACTS

ICP proposes the development of their Ochoa polyhalite deposit to ship multiple crop nutrient products to domestic and international customers. Polyhalite fertilizer is currently a very small market with only ICL Fertilizers in the UK producing the product commercially in small capacities. In the US and the Americas, polyhalite would essentially signify a new fertilizer product.

19.1 Product Development

Since polyhalite is considered a new fertilizer product, ICP commissioned Upstream Resources LLC (Upstream) to perform an interim product development study to determine if Ochoa polyhalite test material possess mineralogical, chemical, and agronomical characteristics of a viable fertilizer (*Product Development Study, Interim Report,* September 16, 2016). In addition, Upstream compared test results against existing commercial products and hypothetical commercial products with the intent of providing guidance to engineering, marketing, and future product development activities.

In order to complete this PEA, a composite sample of Ochoa polyhalite was prepared. This test sample was used to compare with ICL Fertilizers (ICL), and Sirius Minerals PLC (Sirius), product information specification report.

The test results concluded that the Ochoa granular test product is similar to the ICL product in regards to nutrient content, nutrient availability, and dissolution characteristics. Also, the solubility of the Ochoa agronomic composite exhibits acceptable fertilizer properties in all size fractions. From these results, it is reasonable to infer that standard grade Ochoa product will be similar to the ICL standard product. In addition, there are no restrictions being placed on selection of size fraction to be used for future test work.

Golder has reviewed the Upstream Interim Study and summarizes the following key points:

- Analysis of granular and standard grade products determined quantitative mineral concentration; qualitative and semi-qualitative concentrations of major, minor and trace elements, dissolution rate and release concentrations of K, Mg, Ca, and S; and nutrient content and nutrient availability.
- Ochoa polyhalite concentration in the granular and standard test products is greater than or equal to 91.8% by weight; has a narrow range in polyhalite concentration between 91.8 to 95% across 10 size fractions from 5.60 mm to sub 0.106 mm; and contained less than or equal to 1.8% halite.
- Polyhalite content of Ochoa products is higher than ICL's two commercial products and is higher than the published mineral reserve grade of Sirius. Ochoa products contain less halite than ICL (no halite content is available for Sirius products).
- Solubility, nutrient content, and nutrient availability of Ochoa granular grade polyhalite is equivalent to ICL granular grade product.
- Solubility of Ochoa polyhalite is similar across 10 particle size ranges tested. Consequently, the target particle size for a granulated product was chosen to be 0.212 mm (US mesh 70).

- Based on the work conducted to date, Ochoa polyhalite has agronomical properties that support use as a fertilizer. Viable products likely include granular grade, standard grade, and granulated products.
- Ongoing and planned tests using these products include incubation (aka pot test), greenhouse trials, and micro-nutrient assessment for all three product types.

19.2 Market Study

The material presented herein references and relies upon a market study published by CRU Group (CRU) titled “Polyhalite Market Study” in July 2016 (CRU Study), published in July 2016. ICP commissioned the CRU Study for the use of polyhalite as a possible fertilizer with production levels of up to 3.2 Mtpy sold to markets in the US, Mexico, and Brazil. In addition, scenarios for the potential value of polyhalite products free on board (FOB) Jal, New Mexico, were assessed. Note that the Ochoa Project is currently planned for a maximum production rate of 2 Mtpy.

Golder has reviewed the CRU Study and summarizes the following key points:

- The Ochoa Project is well located in a region with more than eight decades of potash production. This is an industrial region with a long history of potash production from mines currently owned and operated by two large producers, (The Mosaic Company and Intrepid Potash). Because of this, the region has well-established expertise and infrastructure related to construction, operations and processing, and transport of potash.
- Polyhalite as a fertilizer is currently an extremely small market, with only ICL Fertilizers in the UK producing the product commercially in small volumes. In the US, and the Americas more generally, polyhalite would essentially represent a new fertilizer product.
- The granting of planning permission in June 2015 to Sirius for a large scale polyhalite mine in northern England has drawn attention to the potential for a polyhalite market to become established and compete with other potassium fertilizers. Should this Project secure financing and commence production as planned, it holds the potential to reshape the specialty potash sector and commoditize polyhalite, which has until now represented a niche fertilizer product with untested large scale commercial demand.
- Polyhalite is a source of low chloride potassium and three micro-nutrients (magnesium, sulfur, and calcium); however, its light nutrient density, particularly in potassium and magnesium, classifies it as a “low analysis” organic fertilizer.
- Polyhalite can be most closely compared with SOPM fertilizers based on its nutrient content.
- Polyhalite is well-suited for application to the high value and organic crops which are associated with higher grower margins and willingness to invest in balanced micro-nutrient fertilizer programs.
- CRU believes that there is strong demand potential for fertilizers such as polyhalite as a premium product, despite being relatively low analysis, because of the growing awareness among growers of the yield and quality benefits that can be associated with micro-nutrient applications.
- If produced in manageable quantities and properly positioned in the market, polyhalite should be able to achieve a low chloride premium price.
- The relatively low potassium content of polyhalite means the product will encounter significant challenges in any attempt to displace MOP and SOP from

nitrogen/phosphorous/potassium (NPK) blends; it will be most suited to low-potassium content blends.

- Sufficiency of calcium in North American soils and abundant availability of nutrient calcium via alternate low cost sources will limit the value attributable to calcium in polyhalite; this may hold some value in acidic soils of Brazil's *Cerrado* region.
- It will necessitate considerable time and effort to build up and maintain an effective distribution system and dealer network for polyhalite. However, Yara's shareholding in ICP may provide an important distribution outlet possibility.
- The K-Mg-S market is a relatively small market; polyhalite is likely to compete in this space with other SOPM branded fertilizers.
- Polyhalite would represent a new product in a mature K-Mg-S market; an advanced and sustained marketing effort and sales strategy will be necessary to position polyhalite as a premium fertilizer and overcome low brand recognition.

19.3 Potential Market

Based on the CRU research, K2O demand is forecast to grow at a compound annual growth rate (CAGR) of 1.2% in the US, 2.7% in Mexico, and 5.2% in Brazil between 2015 and 2020. Potassium Chloride (KCl, or MOP) accounts for approximately 90% of this demand. Brazil is the largest MOP market of the countries studied with an outlook for further strong demand growth.

However, when it comes to SOP and SOPM, the US is a far larger market in comparison with Brazil and Mexico. Both fertilizers are regarded as specialty fertilizer products valued for their low chloride potassium content and generally applied to high value fruit, vegetable, and nut crops that demonstrate intolerance to chloride.

SOPM is the fertilizer with which polyhalite can be most directly compared: CRU Consulting estimates total SOPM demand in the US in 2015 was the equivalent of 800,000 polyhalite tonnes (K2O basis). In addition, CRU estimates SOPM demand in the whole of Central and South America at the equivalent of 320,000 polyhalite tonnes (K2O basis).

CRU Consulting has estimated hypothetical polyhalite demand based on agronomic assumptions (crop nutrient uptake, soil conditions) related to reasonable application rates of polyhalite to acreage of higher value and irrigated crops for which the potential quality and yield benefits of secondary nutrient application are more likely to justify investment in polyhalite applications. Based on this agronomic demand model, CRU Consulting estimates that polyhalite demand potential by nation as the following:

- US - 5.8 million product tonnes
- Brazil - 3.4 million tonnes
- Mexico - 2.8 million tonnes

This total demand of 12,000,000 metric tonnes equates to approximately 13,200,000 short tons. These estimates are hypothetical and assume an environment of perfect information and full acceptance by all growers of the benefits of micro-nutrient fertilizer application. This is unlikely to occur without an extremely comprehensive marketing and educational campaign.

US SOPM suppliers have taken decades to build up a market for a higher analysis version of polyhalite to the equivalent of 800,000 tonnes (polyhalite product on K_2O basis). This puts in context the challenges associated with the formation of a polyhalite market to avail of the potential demand estimated.

19.4 Pricing

The existing polyhalite market is limited; therefore, data on traded polyhalite and its corresponding prices are also extremely limited. This poses challenges in estimating the market value of polyhalite as a commercial fertilizer. In order to estimate the value of polyhalite, CRU has researched evidence of polyhalite prices from the trade statistics available and analyzed the nutrient composition of polyhalite relative to other similar, more widely traded fertilizers.

The polyhalite price estimate presented here is determined by the derived market value of a unit of chloride-free potassium, magnesium, and sulfur based on observed market prices for nutrients contained in MOP, SOP, SOPM, SSP, and TSP. A basic assumption of these prices, therefore, is that the full market value of polyhalite's contained nutrients is obtained, which would be best achieved by polyhalite's positioning as a premium fertilizer product.

No value was attributed to calcium under this methodology. Finally, a penalty was applied to reflect polyhalite's lower nutrient density relative to the aforementioned fertilizers (which will necessitate the transportation, storage and application of higher tonnages for the equivalent nutrients). The value of polyhalite was then forecasted based on CRU's outlook for fertilizer nutrient market prices.

Based on nominal price forecasts for various production scenarios provided by CRU for polyhalite prices in the future, ICP has calculated the following real price curve for the project in US$/short ton by adjusting for inflation; considering polyhalite production ramp up and effect on pricing; and incorporating an expected rebound in fertilizer prices going forward. Beyond 2041, prices have been held constant for the remainder of the mine life (through 2061).

Figure 19.1: Polyhalite Production and Price Estimates

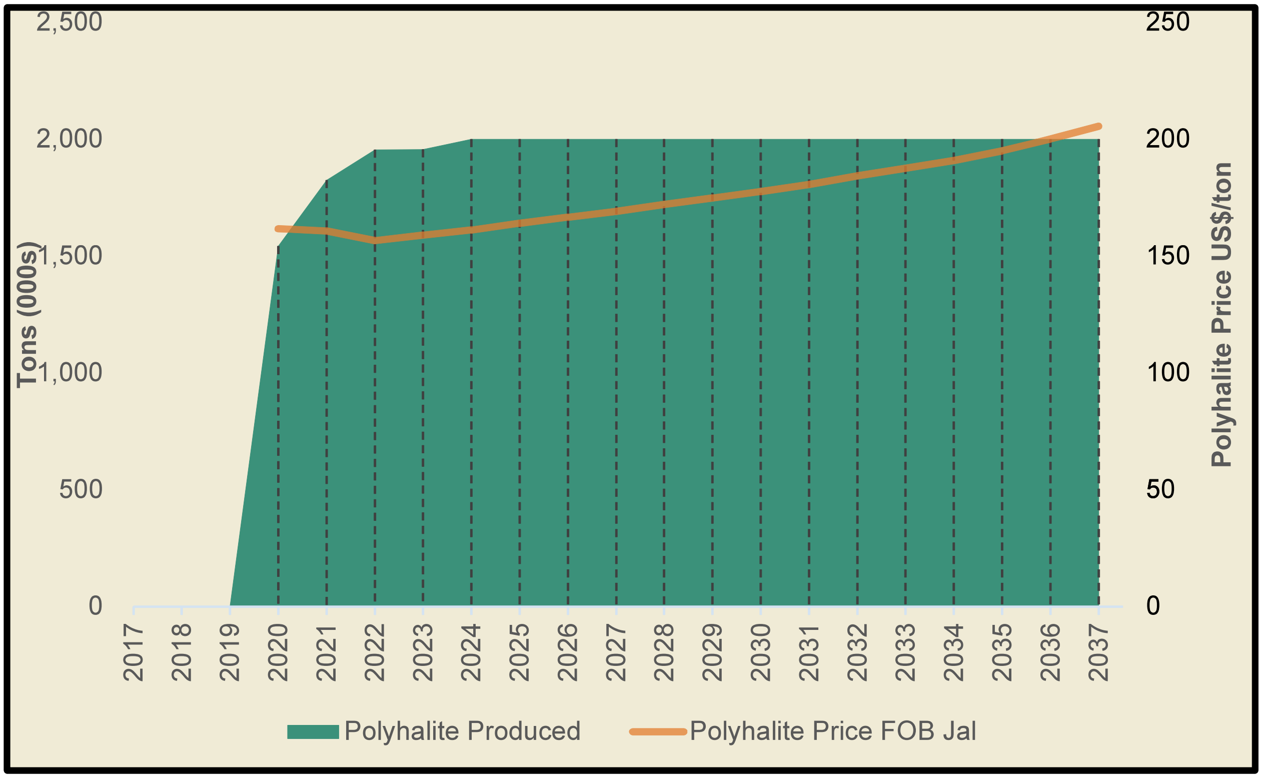


Table 19.1 summarizes polyhalite prices used in the cashflow model.

To attain these prices, ICP must position their marketing as a premium fertilizer product which can be sold both domestically and internationally. CRU suggest that polyhalite production be distributed half in the US market and half in international markets.

Oversupply of polyhalite is a threat to long term pricing and will diminish the premium fertilizer branding effort. With oversupply, the market may view polyhalite as a commoditized product, therefore negatively impacting ICP's value proposition. In this event, CRU estimate that this may potentially reduce polyhalite prices in the global market by over 50%.

ICP must ensure an orderly entry into the market with a focus on quality products and strong customer service fundamentals.

Table 19.1: Polyhalite Prices Used in the Cashflow Model

Count	Year	PEA Mtpy Produced	PEA Real Price (US$/ton)
1	2020	416,042	$162
2	2021	1,126,089	$161
3	2022	1,824,441	$157
4	2023	1,955,284	$159
5	2024	1,955,858	$161
6	2025	2,000,000	$164
7	2026	2,000,000	$167
8	2027	2,000,000	$169
9	2028	2,000,000	$172
10	2029	2,000,000	$175
11	2030	2,000,000	$178
12	2031	2,000,000	$181
13	2032	2,000,000	$184
14	2033	2,000,000	$188
15	2034	2,000,000	$191
16	2035	2,000,000	$195
17	2036	2,000,000	$200
18	2037	2,000,000	$206
19	2038	2,000,000	$212
20	2039	2,000,000	$218
21	2040	2,000,000	$224
22-42	2041-2061	2,000,000	$224

20.0 ENVIRONMENTAL STUDIES, PERMITTING, & SOCIAL OR COMMUNITY IMPACT

In the areas of environmental studies and permitting, Golder has relied on content of official documents, previous technical reports, and specific opinions from INTERA Incorporated of Albuquerque, New Mexico (INTERA). INTERA has been involved with environmental aspects at Ochoa for several years and provided support on behalf of ICP by providing documents and resources that contained relevant information to summarize the environmental status of the Project.

An Environmental Impact Statement (EIS) was authored by AECOM which has the following BLM/NM/PL reference number:

U.S Bureau of Land Management (BLM), 2014, Ochoa Mine Project, Final Environmental Impact Statement, BLM/NM/PL-14-02-3500, February 2014.

From this EIS, the Ochoa Project Record of Decision (ROD) was signed by the BLM on April 10, 2014 (BLM/NM/PL-14-02-3500). The ROD states in part:

> *Based on the analysis in the Ochoa Mine Project EIS, I have decided to approve the Preferred Alternative as it is described in Section 2.4.6 of the Final EIS and the MPO, to the extent that the proposal involves or affects public land or minerals as provided for by the 43 Code of Federal Regulations (CFR) 3590 regulations. This decision involves approval of the MPO and granting ROW requests. Following is a summary of the components of the Preferred Alternative:*
>
> - *Develop an underground mine to extract polyhalite over a 50-year period. The mine will be accessed by a shaft and a ramp (decline).*
> - *Construct and operate office and processing facilities*
> - *Final reclamation plans will be approved by the BLM.*
> - *Full development of up to eight brackish water wells in the Capitan Reef Aquifer and a new 11-mile water pipeline to serve the processing plant and mine operations.*
> - *Construction of a gas pipeline to serve the processing facilities.*
> - *Construction and stabilization of roads to access and manage operation of the mine and processing facilities, wells within the well field, and loadout facility.*
> - *Construction and operation of a railroad loadout facility near Jal, New Mexico, for shipment of the finished marketable potash product.*

- *At the completion of the project, all project surface components and all disturbed areas will be reclaimed and infrastructure would be decommissioned and returned to as close to the original condition as possible.*

- *ICP will ensure that co-development of fluid and solid mineral extraction will employ the following practices.*

  - *Establish 200-foot barrier pillars around all producing and plugged and abandoned oil and gas wells.*

  - *Implement gassy mine standards under Category IV of the Mine Safety and Health Administration (MSHA), 30 CFR Part 57.22003.*

  - *Develop Memoranda of Understanding (MOUs) with each oil and gas lessee and owners within the potential mine subsidence area to detail mutual coordination and management specific to each company and location of facilities.*

  - *Establish benchmarks for measuring successful co-development in consultation the BLM.*

  - *Prepare 5-year development plans for the mine and oil and gas development within the mine area and potential subsidence area.*

  - *Share the plans among companies to facilitate sequencing potash mine extraction and oil and gas development. Sequencing could be accomplished through time or in spatial extent.*

  - *Establish post-mining drilling islands to use for oil and gas wells.*

- *Overall co-development of fluid and solid mineral extraction will be managed by the BLM using the following practices.*

  - *Host meetings with all stakeholders in the vicinity of the mine to review the co-development process and discuss resource concerns. These coordination meetings will be held at least annually.*

  - *Encourage the development of MOUs between ICP and other stakeholders that may be affected by the mine and processing facilities. This may include companies that own and maintain infrastructure such as pipelines and roads, as well as* *landowners and state agencies with wells, roads, and structures within the potential subsidence area.*

- *The BLM will facilitate an appropriate dispute resolution (ADR) process based on BLM guidance, Collaborative Stakeholder Engagement and Appropriate Dispute Resolution Guide (BLM 2009). This ADR process will be used to resolve disputes between ICP and other co-development partners established through MOUs if the issues cannot be resolved using the voluntary cooperative efforts implemented by ICP. In practical terms, disputes will be resolved at the BLM Carlsbad Field Office. If necessary, the field office may seek help, support, and resources from the BLM District Office and State Office, as appropriate.*

- *ICP will submit reports on co-development efforts and activities to the BLM at least semi-annually.*

Other environmental permitting updates since the 2014 ROD include the following:

- New Mexico Environmental Department (NMED) Air Quality Permit was obtained in 2014 to reflect the previous design which included a chemical processing facility, (NMED Air Quality Bureau issued New Source Review Permit No. 5384 on July 30, 2014). This authorizes the construction of the proposed Processing Facility from the 2014 Study.
- Federal Prospecting Permits: Decision Record approving the conversion of 52 preference right lease (PRL) applications totaling 43,449 acres to preference right leases to be issued by the BLM to ICP on March 30, 2016 (AECOM 2016; BLM 2016a; BLM 2016b). See also Item 4.0.
- Federal PRLs: ICP holds 15 federal preference right leases totaling 14,774 acres.
- BLM Leasing Finding of No Significant Impact.
- BLM Decision Record on Leasing EA.
- New Mexico State land office business lease number 2158 authorized improvements to state lands for the use of 2 existing groundwater supply wells.

Table 20.1 lists the environment permits, leases, and approvals necessary to construct and operate the SOP Project. Future Ochoa Project studies must consider each permits applicability with respect to the new project design.

Table 20.1: Environmental and Other Regulatory Leases and Approvals

Permit	Statute	Agency	Timing	Progress
Air permit to construct (Prevention of Significant Deterioration [PSD] permit)	NMAC 20.2.72	Air Quality Bureau (AQB) of the New Mexico Environment Department (NMED)	30 day administrative review of application followed by 180 day technical review of application	Permit application was determined to be administratively completed by NMED AQB on December 12, 2013
Air permit to operate (PSD permit)	NMAC 20.2.74	AQB, NMED	6 months	Application will be submitted during construction
Federal Potassium Prospecting Permits	43 CFR Ch. 11	BLM	6 months	26 obtained
Federal PRLs	43 CFR Ch. 11	BLM	6 months	15 PRL obtained totaling 14,773.96 acres; the remaining 43,449.32 acres are protected as applications
State trust land mineral leases	NMAC 19.2.3	Commissioner of Public Lands of the NMSLO	1 year	18 obtained
State trust land water exploration permit	NMAC 19.2.10	NMSLO	1 month	Obtained
State trust land business lease	NMAC 19.2.10	NMSLO	2 months	Obtained
Notice of Intention to Drill Wells to Appropriate Non-potable Groundwater	NMAC 19.1.2	New Mexico Office of the State Engineer (NMOSE)	6 months	Completed
NMED groundwater discharge permit	NMAC 20.6.2	Ground Water Quality Bureau of the NMED	1 year	No application submitted
Mine drillholes that encounter water-Application for Permit to Drill a Well with No Consumptive Use of Water; Well Plugging Plan of Operations, and Artesian Well Plan of Operations	NMAC 19.27.4	NMOSE	2 months	Obtained

Permit	Statute	Agency	Timing	Progress
Section 404 Wetlands and Section 401 Water Certification permits	33 CFR 331.2	USACE	9 months	Obtained Jurisdictional Determination - permits not needed
National Pollutant Discharge Elimination System storm water permit: construction and operation	40 CFR 122	US Environmental Protection Agency	1 year	Obtained Jurisdictional Determination - permits not needed

The following items are from the 2014 Study and summarize results of previous environmental studies completed for the SOP Project:

Surface Water - Walsh (2013a) evaluated the ephemeral steams located from the Project plant site area to the loadout area. A *Request for Jurisdictional Determination of Four Drainages in Lea County, New Mexico* (Walsh 2013a) was made to the US Army Corps of Engineers (USACE). The USACE reviewed the studies and, in accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 (US Environmental Protection Agency 2013a), determined that there were no *Waters of the US* in these Project areas.

Air - ICP completed a preliminary emissions inventory (Class One Technical Services Inc. [COTS] 2012) to describe the potential maximum emission rates for certain gases and particulate matter. Calculated emission rates were developed based on equipment specifications for processing polyhalite mined at the Project. New Mexico Environmental Department Air Quality Board (NMAQB) accepted the modeling and determined that no baseline studies would be required for the Prevention of Significant Deterioration application. The air study was updated to reflect issuance of New Source Review Permit No. 5384 to determine its relevance to the Project. ICP submitted the Air Permit to Construct in November 2013 and the permit application was deemed administratively complete by the NMAQB in December 2012.

Soil – Native soil surface conditions within the Project area consist of relatively flat terrain with minor arroyos and low-quality semi-arid rangeland. Windblown sand dunes and limited bedrock exposures, caliche, and poorly developed soil horizons are the predominant soil features found on the Ochoa Project site.

The Project area contains 26 different soil associations, complexes, or map units consisting predominantly of fine sands and loamy fine sands. The top soil is caliche rubble and windblown sand. The northern portion of the Project is situated in sandy dune country. The soils are predominantly well drained, not very susceptible to water erosion, and highly susceptible to wind erosion. Most soils have a moderate restoration potential, but precipitation and soil depth are limiting factors to restoration.

Ecological – Walsh (2011, 2012a, 2012b, and 2013b) conducted baseline vegetation and wildlife surveys in the vicinity of the Project area in 2011 and 2012 and along the water pipeline ROW in 2013.

Vegetation surveys included recording general observations of plant communities and their dominant species and ground-truthing landfire geospatial vegetation data to create a vegetation map. The Project area contains six vegetation communities, including coppice dune and sand flat scrub, creosote desert scrub, mesquite shrubland, mesquite upland scrub steppe, mixed desert scrub steppe, and shinnery oak shrubland. These communities comprise essentially the same mix of shrub, herb, and grass species, with different combinations of dominant shrub and grass species differentiating community types.

Wildlife data and information was summarized from Walsh (2011, 2012a, 2012b, and 2013). A literature review was conducted as part of the wildlife survey to inform biologists of species that may be encountered on-site. Wildlife surveys were primarily observational and were conducted by vehicle and on foot, depending on accessibility. Habitat types known to provide forage, water, shelter, nesting areas, or thermal protection were identified and surveyed.

Wildlife signs such as nests, scat, tracks, and burrows observed during the survey were noted. Wildlife observations were recorded with a Trimble Global Positioning Satellite receiver unit. In 2012, the BLM requested additional surveys for reptiles and ungulates. Additionally, bat acoustical monitoring was conducted for 6 months from May through October 2012.

Surveys were conducted for the following:

- Lesser Prairie-Chicken leks
- Raptor nests
- Reptile pitfall traps
- Ungulate pellets
- Acoustical bats

Wildlife habitat is poor and does not support a diverse or unique wildlife population. Migratory birds and raptors are present throughout the area. There was no wildlife observed at the loadout facility. No threatened or endangered species were observed.

Cultural Resources – ICP conducted Class III Cultural Resource surveys of all exploration core hole locations and the proposed processing, shaft, and loadout areas. These studies identified three sites that require mitigation or avoidance at the processing area and one at the shaft area. Additionally, six sites at the loadout facility were identified for further study. Based on the updated Jal loadout design, the six sites at the Jal loadout facility will be avoided and will not require additional mitigation. The site near the shaft area will also be avoided through project design.

ICP received approval from the BLM and State Historic Preservation Office (SHPO) of the treatment plant for the three identified sites in the processing area. Data collection at these sites is underway and will be completed before construction starts.

20.1 Environmental Aspects of the New Project Design

Since the ROD and air quality permit were issued, ICP has re-assessed the Project to consider a direct ship product as outlined in Item 19.0. This change has resulted in the following key differences from the 2014 Study:

- Elimination of the chemical processing facility,
- Elimination of the evaporation ponds,
- No requirement for a tailings impoundment, (no tailings produced),
- Reduced water required (minimal process water),
- Reduction in injection well capacity due to less water requirements,
- Reduction in Reverse Osmosis (RO) plant requirements,
- Reduced area of surface disturbance, (approximately 1 mile square vs 4 miles square),
- Relocation of the surface facilities from the south side of NM 128 to the north side adjacent to Brinninstool road. This section of land was included in the 2014 Study which at that time supported the mine service shaft and associated facilities.
- Additional haul truck traffic along NM 128 to ship 2 Mtpy rather than 720,000 tpa in the 2014 Study.

Since the ROD, the BLM has not yet determined the extent of further NEPA compliance given the changes in the new project design. Future Ochoa Project studies must include a review of existing permits and permit applications with respect to the new project design parameters. It is possible that some of the previous work completed will be relevant for the new project design however in some cases, amendments or new permits will need to be prepared and filed.

Based on the key differences listed above, the new project design is likely to have a lower overall environmental impact which may result in lower compliance and reclamation costs. For the purposes of this PEA, indirect costs associated with environmental compliance and reclamation have been held constant relative to the 2014 Study.

20.2 Waste Management

The use of hazardous substances will be limited to only those necessary for the safe operation of the mine and processing facilities. All hazardous substances will be inventoried, used, stored, controlled, and disposed of in accordance with all applicable regulations.

Solid waste will be generated during construction, mining, and reclamation activities from office supplies, paper products, laboratory supplies, and other non-hazardous sources. These solid wastes will be disposed of in an appropriate waste disposal facility. Cleanup of spills may generate wastes such as soil, sorbent materials, and personal protective equipment. These wastes will be containerized and disposed of in an appropriate disposal facility.

20.3 Reclamation

Since the new project design eliminates the need for a tailings storage facility or evaporation ponds, site reclamation will be limited to the area impacted by the mine shafts, crushing and screening plant, waste piles, site buildings, and facilities. Reclamation activities would be addressed in accordance with relevant closure regulations and standards. Reclamation activities will return the site to pre-Project land uses, which include rangeland and ranching and hunting, unless otherwise specified by the BLM.

Reclamation activities at the Ochoa Project will begin after production ends. Mining activities and associated reclamation on BLM administered lands are governed by 43 CFR 3590 (MSHA 2011).

20.4 Community Impact

Southeastern New Mexico has a long history of petroleum and potash mining. Both industries are major contributors to the regional economy and support many satellite industries. There is local and regional support for the Project: the state of New Mexico and Lea County are supporters of development of the mining industry. Lea County and surrounding communities stand to benefit significantly from the Project, including the creation of over 250 direct permanent jobs and the payment of new tax revenue to the state and county.

20.5 Mine Safety and Health Regulations, Permits, Plans, & Approvals

The U.S. Department of Labor, Mine Safety & Health Administration (MSHA), will regulate occupational health and safety at the Project under Title 30 of the Code of Federal Regulations, Mineral Resources, Parts 1 through 199 (30 CFR Parts 1 through 199). Applicable sections of the CFR include the following;

- Title 30 CFR Parts 46 through 49, specify training requirements,
- Title 30 CFR, Subchapter G, Parts 40 through 49, covers the filing and other administrative requirements, including those governing independent contractors doing work at the Project site.
- Subchapter H covers education and training requirements in Parts 47 to 49 for the Project,
- Subchapter I covers the reporting requirements for accidents, injuries, illnesses, employment, and production,
- Subchapter K, Parts 56 to 58, covers the regulation of metal and non-metal mine safety and health,
- Subchapter M, Part 62, covers noise exposure limits and hearing conversation programs,
- Subchapter P, Part 100, outlines the criteria and procedures for assessment of civil penalties for violations of the Federal Mine Safety and Health Act of 1977 (United States Congress 1977),
- Subchapter Q, Part 104, covers patterns of violations assessments.

All the above Title 30 subchapters and parts are available online at www.msha.gov.

Table 20.2 lists applicable MSHA plans and submittals required for the Project, some of which may be required prior to commencement of any construction activities. Title 30 CFR Parts 1–199 provides the complete details of the rules and regulations.

Table 20.2: Listing of Required MSHA Plans

30 CFR Part	Plan or Submittal
41	Legal entity operating mine
47	Hazard Communication (HazCOM) program
48	Training plan
49	Mine Emergency Notification Plan
49	Escape and Evacuation Plan
57	Notification of commencement of operations
57	Mine Ventilation Plan
57	Rock Burst Control Plan (if rock burst occurs)
57	Escape and Evacuation Plan (includes firefighting plan)

The state of New Mexico has a mine safety office and specific limited regulations pertaining to underground mine health and safety. For the purpose of this PEA, Golder has assumed that Ochoa will be categorized under the same classification as “potash mining”. Potash mining is exempt from both the *New Mexico Hardrock Mining Act* and the *New Mexico Surface Mining Act* and is therefore not required to obtain mine closure and close-out permits. Mine registration must be obtained through the Mining and Minerals Division of the New Mexico Energy, Minerals, and Natural Resources Department under statute NMAC 19.7.1.

Application for registration must be submitted 6 months prior to operation and following the ROD. Future studies should confirm these assumptions.

21.0 CAPITAL & OPERATING COSTS

The PEA estimated capital cost is approximately US$733 million to construct the Project including direct, indirect, sustaining capital, and contingency. In addition, the operating cost has been estimated at US$44 per short ton mined, processed, and shipped to the Jal load out facility.

21.1 Ochoa Capital Cost Estimate

Initial capital costs are estimated at US$368 million with US$365 million of sustaining capital to support the life of mine operation. Initial capital is defined as costs associated with, mining, construction, and installation of all structures, materials, and equipment to support the Ochoa Project, as well as associated indirect and management costs until the mine ramps up to full production of 2 Mtpy.

The capital cost summary is highlighted in Table 21.1 by area.

Table 21.1: Ochoa Capital Cost Estimate Summary (US$000s)

Area (WBS / Description)	InitialCapital	SustainingCapital	TotalCapital
1.0 - Mine			
11000 General Site Mine	13,073	-	13,073
17000 Ancillary Buildings Mine	1,479	-	1,479
18000 Off Site Facilities	1,183	-	1,183
12100 Underground Mine Development	940	-	940
12200 Shaft Construction	77,514	58,135	135,649
12300 Mine Production Equipment	13,730	53,754	67,485
12400 Underground Support Equipment	9,320	70,365	79,685
Mine Sub-Total	**117,239**	**182,255**	**299,494**
2.0 - Process Facility			
21000 General Site - Process Plant	38,430	28,822	67,252
24000 Process Plant	71,337	96,304	167,641
25000 Product Loadout	11,501	15,526	27,027
27000 Ancillary Facilities - Process Plar	7,209	5,407	12,617
Process Sub-Total	**128,477**	**146,060**	**274,537**
3.0 - Jal Storage / Loading			
31000 General Site - Jal	12,164	9,123	21,286
36000 Jal Storage / Loading Facilities	20,151	27,204	47,355
37000 Ancillary Facilities - Jal	205	154	359
Jal Sub-Total	32,520	36,480	69,000
Total Direct Capital	**278,236**	**364,795**	**643,031**
4.0 - Indirect			
49100 EPCM	19,477	-	19,477
49200 Construction Support & Facilities	10,847	-	10,847
49300 Other Indirect Costs	17,864	-	17,864
Total Indirect Capital	**48,188**	**-**	**48,188**
Contingency	**41,735**	**-**	**41,735**
Total Capital	**368,159**	**364,795**	**732,954**

21.1.1 Basis of Estimate

Golder has prepared a conceptual capital cost estimate for the preferred alternative identified in the PEA with an accuracy level of ±40%. The estimating methodology relied on cost information presented in the 2014 Study. Costs for the PEA were developed using ratios, scale of operations factors, and other parametric and modelling techniques. Little, if any, deterministic estimating methods were used. Equipment and material pricing was obtained from Golder's database or appropriate suppliers.

The estimate follows the definition from AACE International Recommended Practice No. 47R-11 (Cost Estimate Classification System – As Applied in the Mining and Mineral Processing Industries, Revised July 6, 2012) for developing a Class 5 ("Concept or Scoping Study") level estimate.

Costs for the PEA were estimated using the following basis of estimate:

- The PEA is based upon Measured, Indicated, and Inferred Mineral Resources which do not have demonstrated economic viability for use in defining Mineral Reserves.
- Conventional mining using a room-and-pillar mining method similar to operations currently in use in the region would be used.
- A simplified process recovery that is entirely mechanical, requiring no chemical treatments, additions, or nonstandard material handling processes would be used.
- Mine/Plant Production Capacity of 2 Mtpy.
- In some cases such as mining equipment, actual vendor quotes were used.
- Initial capital is defined as costs required to meet the desired throughput rate of 2 Mtpy and includes mobile equipment, fixed equipment, materials, supplies, and construction costs.
- Continuous miner equipment costs assumes leasing and is therefore accounted for within operating costs.
- Engineering, procurement, and construction management costs were estimated at 7% of direct initial capital costs.
- A flat contingency of 15% has been applied to direct initial capital items.
- Indirect capital costs include owners cost, design, initial construction, spares, freight, and commissioning.
- Sustaining capital includes rebuilds and replacements as a function of initial capital for all fixed and mobile equipment.
- All costs are expressed in 2016 US Dollars with no allowance for escalation, currency fluctuation, or interest during construction.

21.1.2 Contingency

Contingency has been applied at 15% of direct initial capital costs. This cost element is lower than what is typical for PEA reports and is attributed to using higher levels of engineering work previously completed for the cost categories and are used as the basis for preparing this capital estimate.

21.1.3 Sustaining Capital

Sustaining capital costs are incurred after the Project has reached full planned production. Items included under this category are required to either replace worn-out or exhausted assets, or to support planned expansion of the mine that does not increase production capacity. Projects that improve operational efficiency, safety, or improve costs are generally considered sustaining capital.

The Ochoa mine sustaining capital estimate includes equipment rebuild and replacement costs, fixed equipment rebuild, ventilation system expansion, underground mine infrastructure, and shaft repairs over the life of mine. A 7-year depreciation schedule was used for major mobile equipment rebuild and/or replacement (depending on the units). Contingency has not been applied to sustaining capital estimates.

21.2 Operating Cost Estimate

Operating costs have been estimated to average $44 per short ton mined and processed. Table 21.2 summarizes the estimated production costs for the PEA. Direct operating costs relate to labor, fuel, power, natural gas, and consumables required for production.

Table 21.2: Ochoa Operating Cost Estimate Summary

Area	Total Cost (US$000)	Cost per Ton Mined
Mine	$1,954,499	24.07
Process Plant	$947,708	11.67
Jal Storage / Loading	$422,351	5.20
G&A Operations	$250,908	3.09
Total Operating Cost	**$3,575,466**	**44.04**

21.2.1 Mining Costs

A breakdown of the mine operating costs is summarized in Table 21.3.

Table 21.3: Mine Operating Cost Estimate Summary

Area	Total Cost (US$000)	Cost per Ton Mined
Labor		
Shaft Operations	$56,423	$0.69
Continuous Miner (Large)	$281,153	$3.46
Continuous Miner (Small)	$296,821	$3.66
Labor Sub-Total	**$634,397**	**$7.81**
Operating & Maintenance		
Hoisting	$67,358	$0.83
Continuous Miner (Large)	$302,537	$3.73
Continuous Miner (Small)	$513,282	$6.32
Conveyor Belts	$231,276	$2.85
Ventilation	$54,093	$0.67
Ancillary Equipment	$14,120	$0.17
Operating & Maintenance Sub-Total	**$1,182,664**	**$14.57**
Mine G&A		
Technical Services Labor	$73,378	$0.90
Environmental, H&S Labor	$26,260	$0.32
Administrative Expenses	$37,800	$0.47
G&A Sub-Total	**$137,437**	**$1.69**
Total Mine Operating Cost	**$1,954,499**	**$24.07**

The quantities for mining activities were driven by annual production targets specified by ICP. Productivity estimates were completed for entry development and production panels. These productivity estimates were then used to generate cycle sheets that were used to determine a production ramp-up schedule, and the total number of active miners required. General labor wages rates and salaries sourced from 2014 Study were used to estimate labor costs in the PEA. A burden of 40% was applied throughout. Mine equipment operating costs were calculated based on O&M, fuel consumption, power usage or factored from the 2014 Study.

21.2.2 Process Costs

A breakdown of the process operating costs is summarized in Table 21.4. These costs have been estimated based on throughput rates, power consumption, fuel consumption, equipment maintenance and wear parts, lubricants and labor requirements. General labor wages rates and salaries sourced from 2014 Study were used to estimate labor costs in the PEA. A burden of 40% was applied throughout.

Table 21.4: Process Operating Cost Estimate Summary

Area	Total Cost (US$000)	Cost per Ton Mined
Labor		
Process - Plant	129,937	1.60
Process - Warehouse	26,907	0.33
Rail yard	-	-
Labor Sub-Total	**156,844**	**1.93**
Operating & Maintenance		
Process O&M	631,627	7.78
Jal O&M	-	-
Operating & Maintenance Sub-Total	**631,627**	**7.78**
Process G&A		
Technical Services Labor	86,797	1.07
Environmental, H&S Labor	72,441	0.89
G&A Sub-Total	**159,238**	**1.96**
Total Process Operating Cost	**947,708**	**11.67**

21.2.3 Consumables Costs

Table 21.3 shows the assumptions for power costs and consumables used in the PEA model for operating costs.

Table 21.5: Summary of Operating Cost Assumptions used in the PEA

Item	Value assigned
Fuel cost – diesel	$3.95 / gal
Electrical power costs	$0.051 per kWh
Natural gas	$3.69 per MMBTU

For the PEA it has been assumed that power would be provided by Xcel Energy. No supplier has been identified for natural gas or fuel as yet.

21.2.4 General and Administration Costs

Costs associated with owner's mine operation, supervision, technical staff, safety, and administrative staff were calculated based on in-house data for similar operations. Annual salaries and hourly wages from the 2014 Study were used in the PEA economic model as required to develop the cost estimate.

Corporate general and administrative (G&A) costs include management, environmental, community relations, and general corporate costs. For the PEA, the FS costs were held constant assuming the same corporate structure would be required for the new project design.

21.3 Design, Build, Operate & Maintain Contracting Approach

ICP is considering a DBOM strategy for the Project with the intent to sign a commercial agreement covering all aspects of the Project construction and operation. Costs contained in this study are independent of any commercial agreement terms however are structured to cover the same overall principal characteristics of the Project.

21.4 Benchmarking

A search for similar projects was conducted in order to perform a benchmarking comparison. Since there are no direct ship polyhalite mines in North America, no local direct comparisons could be made. Table 21.6 shows other projects that provide a wide range of costs.

Due to the unique characteristics of the Ochoa Project, this benchmarking table should be used for overall cost ranges only and not used to compare individual cost items.

Table 21.6: Comparable Projects

Project	Commodity	Mining Method	Prod. Rate (tons/day)	Mining (US$/ton)	Processing/Milling (US$/ton)	G&A (US$/ton)
Elk Creek	Ferroniobium (FeNB)	Long Hole Stoping	3,000	$53.00	$135.75	8.11
Caribou	Zinc-Lead-Silver	Modified AVOCA	3,500	$25.22	$20.51	4.08
Lac des Iles	Multi-metal	Longhole/Sub-level Cave	5,000	$25.51	$6.72	3.55
Lac des Iles	Multi-metal	Longhole/Sub-level Cave	6,500	$23.13	$6.72	3.55
Hope Bay	Gold	Sub-Level Longhole Retreat	2,000	$60.58	$22.86	23.88
Sirius	Polyhalite	Room and Pillar - CMs	30,250	$11.10	$10.00	2.10
Sirius	Polyhalite	Room and Pillar - CMs	60,500	$8.70	$9.70	1.90
Ochoa FS	Polyhalite	Room and Pillar - CMs	11,000	$16.06	$20.73	1.64
Ochoa PEA	**Polyhalite**	**Room and Pillar - CMs**	**6,000**	**$24.07**	**$16.87**	**3.09**

22.0 ECONOMIC ANALYSIS

22.1 Introduction

The Ochoa Project has been assessed using a discounted cashflow (DCF) approach. This method projects yearly cash revenues and subtracts yearly cash outflows including operating costs, capital costs, royalties, and taxes. The resulting net annual cashflows are discounted back to the present date (third quarter of 2016) and totaled to determine net present values (NPVs at the selected discounted rates. The internal rate of return (IRR) is calculated as the discount rate that yields a zero NPV. The payback period is calculated as the years required to recover the initial capital.

All amounts are presented in US dollars, unless otherwise specified, and financial results are reported in a Microsoft Excel® based after-tax discounted cashflow model. This cashflow model considered the production rates, revenues, capital costs, operating costs, and taxes.

The results of the economic analysis represent forward-looking information that is subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

This PEA is preliminary in nature, and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized. As presented in Item 16.0, Inferred Resources have been included in the current mine plan, and as such are included in the economic analysis presented herein. To advance the study beyond the PEA level a Mineral Reserve estimate would have to be made and Inferred Resources would need to be upgraded or removed from the mine plan.

A single mine production scenario was evaluated in the cashflow model and sensitivity analysis were carried out for polyhalite selling price and initial capital costs.

22.2 Key Assumptions

Assumptions used in the development of the economic model are shown in Table 22.1.

Table 22.1: Key Financial Model Assumptions

Parameter	Assumption	Description
Units	Imperial	This model has been constructed using imperial tons.
Valuation Date	1-Jan-17	Assumed project construction start date of January 2017.
Discount Rate	8%	
Currency	US$	
Capital	US$368M	Initial Only (See Section 20 for details)
Sustaining	US$365M	Spread over 42 year mine life (See section 20)
Operating Cost	US$44/ton	Includes all site and corporate costs (see Section 20)
Inflation	-	No escalation or inflation has been applied to the DCF model
Royalty	6.7%	This percentage represents the effective total royalty as described in Section zz
Federal Tax	35%	Corporate tax rate of 35% was applied to profit as well as a 5.9% state tax
State Tax	5.90%	
Polyhalite Sale Price	Varies	See Item 19 for sales price summary
Exchange Rate	-	No exchange rates apply. All sales are Netback, FOB New Mexico

Financial Results

Using the base case described in this Report and discounted cashflow assumptions listed, the Ochoa Project has an estimated after-tax NPV of US$1,197 million at an 8% discount rate. This results in an after-tax IRR of 28%.

The financial results for the Ochoa PEA are presented in Table 22.2.

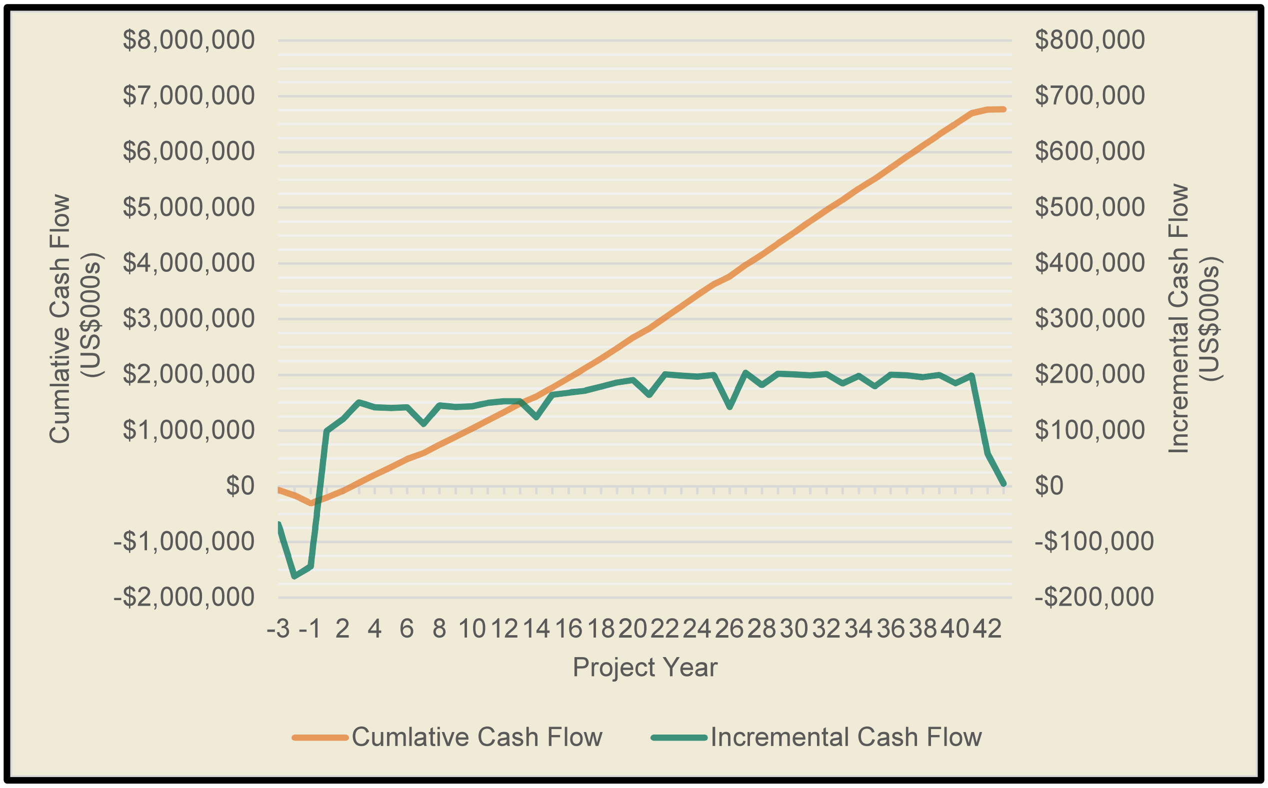
Table 22.2: Ochoa Project Financial Results

Economic Model Results	Total Cost (US$000)	$/st-Polyhalite
LoM Production	**-**	**81,186.00**
Gross Sales	16,503,664	203.28
Freight	-	-
Royalty	(1,097,494)	(13.52)
Gross Income (FOB-Plant)	**15,406,170**	**189.76**
Mine	1,954,499	24.07
Process Plant	947,708	11.67
Jal	422,351	5.20
G&A Operations	250,908	3.09
Direct Operating Cost	**3,575,466**	**44.04**
Ad Valorem	1,190,310	14.66
Severance	330,073	4.07
Operating Cost	**5,095,850**	**62.77**
Operating Profit	**9,257,396**	**114.03**
LoM Capital	(732,954)	-
Federal Income Tax	(2,467,755)	-
State Income Tax	(415,993)	-
Cash Flow	**6,693,619**	-
Net Present Value (8%)	**1,196,561**	-
IRR	**28.0%**	-
Payback (years)	**2.6**	-

22.3 Project Cashflows

Based on the estimates of project revenue, operating costs, and capital spending, the incremental and cumulative after-tax project cashflows are presented in Figure 22.1.

Figure 22.1: Ochoa Project Cashflows



The cumulative cashflow shown in Figure 22.1 shows a payback period of 2.6 years for the Ochoa Project. A summary of the cashflows in Figure 22.1 is provided in Table 22.3. See Appendix B for a detailed tabulation of the cashflow for the Project.

Table 22.3: Ochoa Project Cashflow Summary

Description	Units	Total or Average
RoM Ore	kst-RoM	**81,186**
Gross Income from Mining		
Polyhalite Produced	kst-dry	**81,186**
Market Price	$/ton	**-**
Gross Sales	$000s	**$16,503,664**
Freight	$000s	**$0**
Net Sales	$000s	**$16,503,664**
Royalty	$000s	**($1,097,494)**
Gross Income (FOB-Plant)	$000s	**$15,406,170**
Operating Cost		
Mine	$000s	**$1,954,499**
Process Facility	$000s	**$947,708**
Jal Storage / Loading	$000s	**$422,351**
G&A Operations	$000s	**$250,908**
Direct Operating	$000s	**$3,575,466**
Production Taxes		
Ad Valorem	$000s	**$1,190,310**
Severance	$000s	**$330,073**
Production Tax	$000s	**$1,520,384**
Operating Cost	$000s	**$5,095,850**
Tax Depreciation	$000s	**$684,766**
Amortization	$000s	**$368,159**
Total Operating Cost	$000s	**$6,148,774**
Operating Profit	$000s	**$9,257,396**
Working Capital		
Beginning Balance	$000s	**-**
Ending Balance	$000s	**-**
Change in Working Capital	$000s	**($0)**
Cash Flow		
Operating Profit	$000s	**$9,257,396**
Depreciation and Amortization	$000s	**$1,052,925**
LoM Capital	$000s	**($732,954)**
Federal Income Tax	$000s	**($2,467,755)**
State Income Tax	$000s	**($415,993)**
Working Capital	$000s	**($0)**
Cash Flow	$000s	**$6,693,619**
Cumulative Cash Flow	$000s	**-**

22.4 Sensitivity Analysis

A sensitivity analysis was conducted to identify the key variables that have a significant impact on the Project returns. The sensitivity analysis independently varied the following parameters:

- Polyhalite selling price
- Discounted cashflow rate
- Operating cost
- Initial capital cost

Each parameter was varied by -25% to +25% and the resulting NPV was charted. The results of the sensitivity analysis are presented in Figure 22.2 and Figure 22.3.

As can be seen in Figure 22.2 the Ochoa project NPV is most sensitive to polyhalite price and the Project discount rate. The Ochoa project IRR is most sensitive to the Polyhalite price as shown in Figure 22.3, and for all three IRR parameters that were analyzed, the Project IRR was greater than 20% after tax.

Figure 22.2: Ochoa NPV Sensitivity Analysis

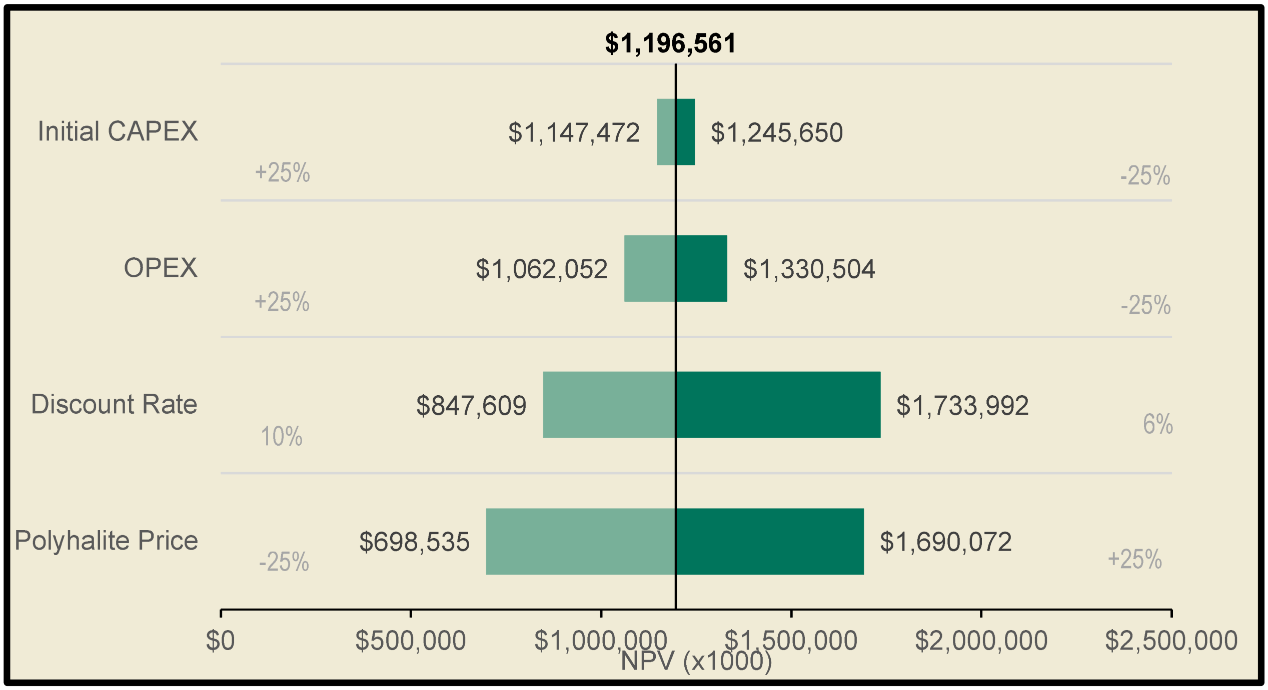
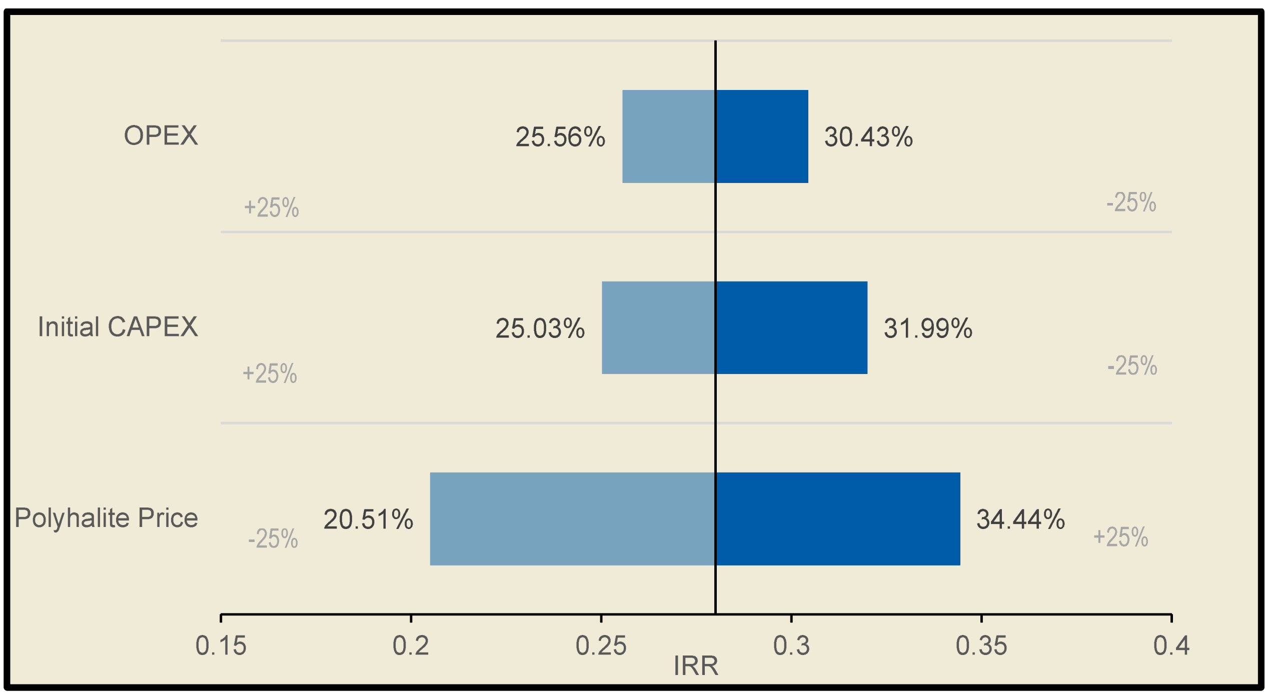


Figure 22.3: Ochoa IRR Sensitivity Analysis



23.0 ADJACENT PROPERTIES

The mineral and surface rights for properties adjacent to the Project Property (Figure 23.1) are held by the BLM, the New Mexico State Land Office, and numerous private entities. Mineral rights are separate from oil and gas rights and surface rights in New Mexico; as a result, oil and gas rights have been leased by the BLM and by the state to numerous petroleum exploration and exploitation companies for both the surrounding properties as well as some portions of the ICP mineral leases. There are several thousand currently producing and decommissioned oil and gas wells covering the ICP leases and surrounding area (Figure 23.2). Surface grazing rights are also leased by the BLM and the state to local cattle ranchers.

There has been no past or current polyhalite exploration or production activity on the properties surrounding the Project Property. The nearest mining operations are the producing and historical potash mines near Carlsbad, 25 to 30 miles west of the Project Property. Past and current potash exploration and production activity in the Carlsbad area has focused on sylvite and langbeinite potash mineralization (some with associated accessory polyhalite mineralization) from the underlying Salado Formation; there are no currently producing mines in North America where polyhalite mining and processing is the primary focus.

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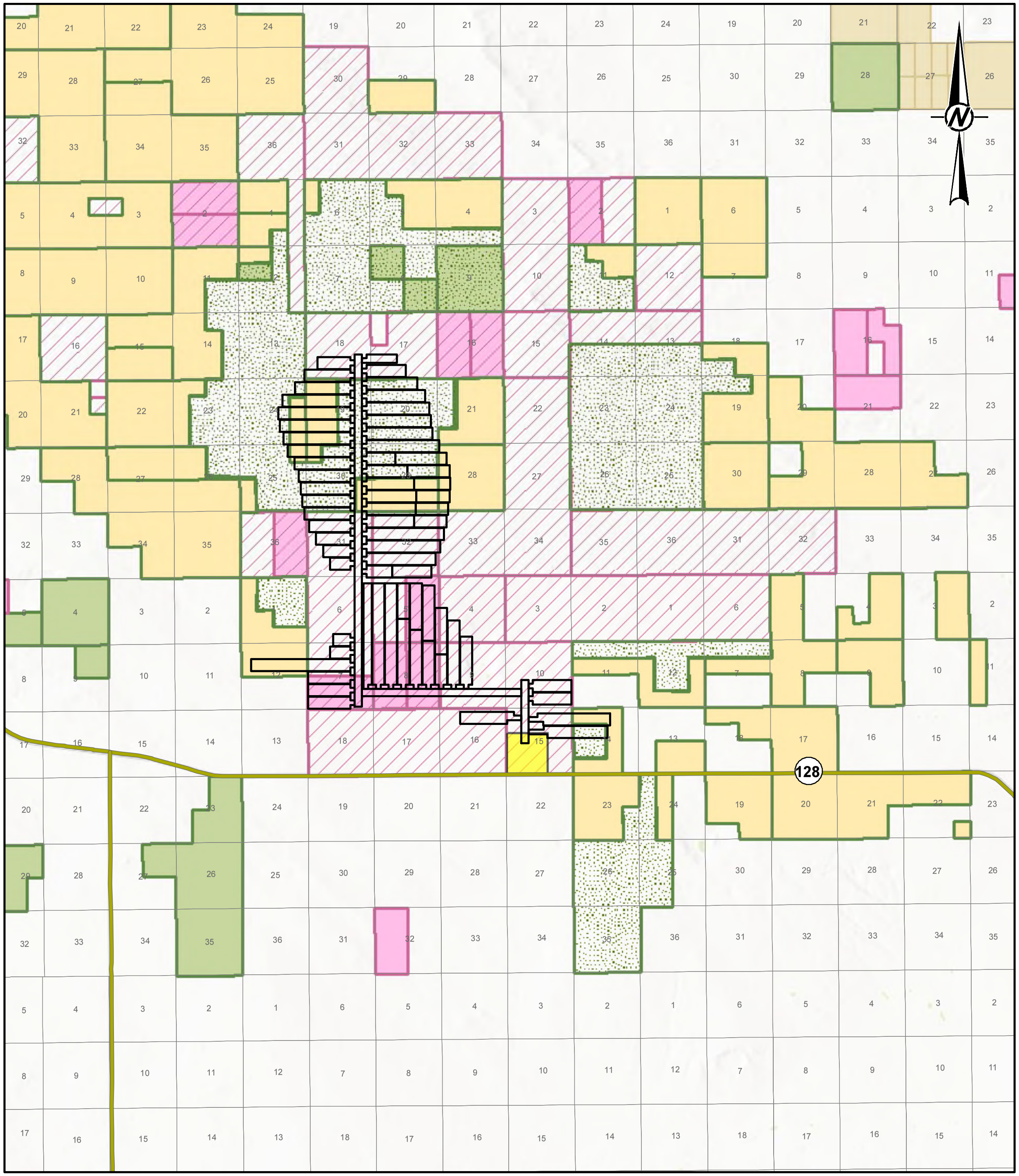

LEGEND

- ICP BLM Preference Right Lease
- ICP BLM Preference Right Lease Application
- ICP New Mexico State Mining Lease
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Surface Facility
- Underground Mine Plan
- Section
- Highway

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 8,000 16,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
LAND OWNERSHIP

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	CH
PREPARED	JF
REVIEWED	CH
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	23.1

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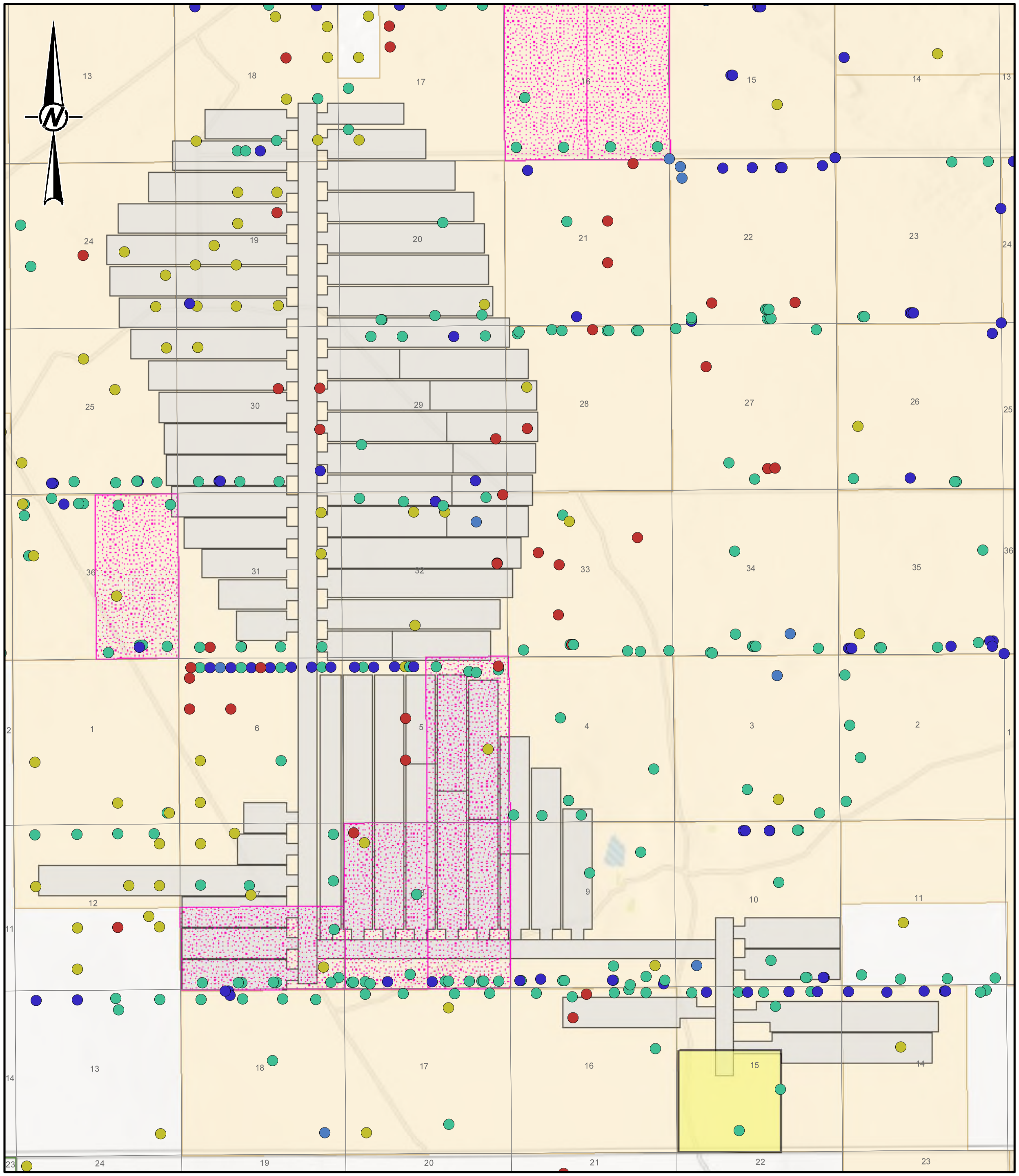

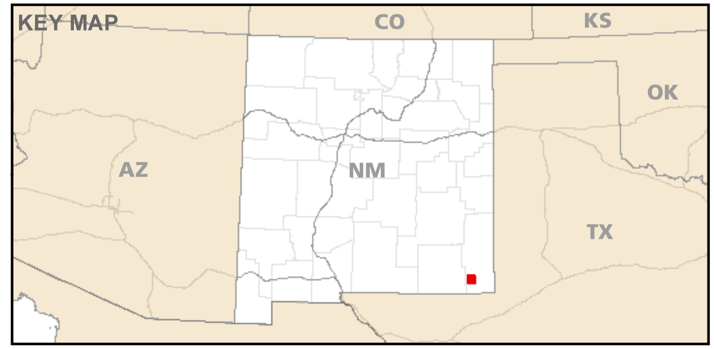

LEGEND

- Proposed Underground Layout
- ICP Mining Rights
- Concho New Mexico State Land Office Lease
- Concho BLM Lease
- Surface Facility
- Surface Water
- Section

Oil & Gas Wells

- Active
- New
- Cancelled Apd
- Plugged, Site Released
- Other

REFERENCE(S)

1. COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO EAST FIPS 3001 FEET

0 5,000 10,000
Feet

CLIENT
INTERCONTINENTAL POTASH CORPORATION

PROJECT
OCHOA PROJECT
PRELIMINARY ECONOMIC ASSESSMENT (PEA)

TITLE
OIL AND GAS WELL LOCATIONS

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-10-27
DESIGNED	CH
PREPARED	JF
REVIEWED	CH
APPROVED	DSD

PROJECT NO.	CONTROL	REV.	FIGURE
1659743	0001	0	**23.2**

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24.0 OTHER DATA & RELEVANT INFORMATION

There is no other relevant data or information for the Project within the scope of this PEA.

25.0 INTERPRETATION & CONCLUSIONS

The Ochoa Project contains sufficient polyhalite mineralization to be mined and processed as a direct application crop nutrient product under expected market conditions bearing in mind risk associated with mining property development.

The PEA considers all reasonably expected relevant factors in compilation of capital and operating costs in order to complete a cashflow model to assess economic viability.

Adequate mine design, permitting requirements, infrastructure estimates, process design, and marketing analysis were conducted to support the cashflow model to the PEA level. The PEA estimates an economically viable project with the capacity and polyhalite resources to produce 2 Mt of direct ship crop nutrient product per year for up to 42 years.

Other interpretations were the following:

- There is local support for the Project.
- Lea County and surrounding communities stand to benefit from the Project, including the creation of over 250 direct permanent jobs and the payment of new tax revenue to the state and county.
- Water wells have already been drilled for the Project water supply. These are located approximately 10 miles northeast of the Project location and are numbered WS01 and WS02. With the reduced water needs in the new Project design, only one well would be used at any given time. The second well would be used as a backup.
- NM 128 is a very busy highway that serves commerce and residential needs in the region. The condition of the road is fair to poor in some locations and would require upgrades to support Ochoa truck shipping. In addition, turn-out lanes would need to be added to improve traffic safety.
- The proposed Jal load-out facilities location is generally flat with some mined-out calichi pits present. Several wells are located in the area (some in production). The next level of study should confirm that the proposed design has considered local land owners and lease rights.
- Excel Energy has constructed an electrical substation adjacent to NM 128 that is approximately 1 mile from the Project site. This was built independently by Excel to support various business needs in the region as part of a broader infrastructure improvement program. ICP will be able to utilize this substation which is adequate for all project power needs.
- A natural gas plant is located adjacent to NM 128 that is less than 1 mile from the Project site. Although natural gas requirements for the new Project design have been reduced, the next level of study should confirm that a supply agreement can be reached with this plant.
- Brinninstool Road is situated adjacent to the Project site and intersects to NM 128. Although this road is used for oil and gas production and private ranch access, it would serve as the most logical site access. The next level of study should confirm the final access plan and truck route.
- With over 250 full-time jobs and corresponding secondary employment, housing for employees should be properly planned within the local communities. Based on the site visit

and subsequent discussions, this level of employment can be supported within the local communities including Jal, Hobbs and Carlsbad.

- The application of domaining within the polyhalite bed in the current study geological model has resulted in a better constrained model than those previously developed, with the domaining of the polyhalite bed allowing for better evaluation and control over geological dilution of the targeted polyhalite mineralization.
- The refined geological model and the resultant Mineral Resource estimate are a better reflection of the Mineral Resource available for potential future economic extraction for the proposed mining method, material handling and processing and product/market considerations presented in this PEA.

26.0 RECOMMENDATIONS

Based on the results of the PEA, the Ochoa project demonstrates potential economic viability. ICP is contemplating a design, build, operate, and maintenance contracting agreement to advance the project to construction stage. This approach may supersede the traditional study levels used for Project advancement. As a parallel effort, ICP should continue with community involvement and permitting activities necessary to comply with regulatory and social expectations.

Regardless of the overall Project approach, the PEA recommends that ICP complete a prefeasibility study to assess various trade-off options and advance the project to a higher level of confidence to reduce Project risk. The overall cost of the PFS is estimated between $700,000 and $1,000,000 and includes but is not limited to the specific items listed below:

- Complete metallurgical testing on representative samples from the Ochoa deposit to confirm data for design criteria, processing plans, and product specifications for granular and pelletized products.
- Design the processing plant and associated load-out facilities necessary to meet desired throughput.
- Advance product development testing to include incubation (aka pot test), greenhouse trials, and micro-nutrient assessment for all three product types.
- Continue ongoing market analysis efforts to develop a detailed polyhalite sales strategy. This should include confirmation of polyhalite sales pricing levels to meet long term objectives.
- Two direct ship crop nutrient products can be produced by incorporating generally accepted process technologies. Further study should confirm all product development assumptions are correct.
- Engage strategic vendors to secure long lead time items that need to be procured in order to meet project schedules. Vendors generally will provide this service as part of their overall sales plans at no cost.
- Conduct additional geotechnical modeling for pillar layout, extraction ratio and subsidence for the new project design.
- Perform additional geotechnical modelling to confirm roof and floor creep (convergence) that can be expected from mining activities. Although this level of movement may be minimal, mining equipment clearance must be considered for the next phase of mine planning and sequencing.
- Perform additional testing to confirm instantaneous cutting rates and that continuous miner equipment is appropriately configured to meet mining demands. This could be accomplished by engaging a key vendor to design and build a mining fleet specifically for Ochoa. The key mining equipment supplier would likely provide this service as part of their sales plan at no extra cost.
- Complete a more detailed mine design of shafts, mains, panels, and associated mine infrastructure. The mine design must be further optimized to avoid well bore protection pillars and sequencing.

- Confirm that previously performed hydrology studies are applicable to the new Project design. With the relocation of surface facilities and significantly reduced land area required in the PEA, there are opportunities to optimize hydrology impacts.
- Confirm that previously performed geochemistry studies are applicable to the new Project design. With the relocation of surface facilities and significantly reduced land area required in the PEA, there are opportunities to optimize geochemical impacts.
- Explore the possibility of extending the rail line to the plant for direct shipping thereby eliminating the need for both trucking to Jal and the Jal loadout, which may result in an overall cost savings. A preliminary rail study has already been performed. Costs associated with permitting and land acquisition should be considered as part of the next level of study.
- Since the ROD was issued, the Project characteristics have changed to eliminate the chemical processing facility, evaporation ponds, tailings impoundment, and injection wells. In addition, the new project design has a reduction of surface area disturbance and lower water requirements from wells. Future studies should consider these significant changes to amend the permit requirements and reclamation costs.
- The new Project design has a reduced requirement for surface disturbance and surface access rights. Land leases and land tenure negotiations should be completed as soon as practical.
- The Federal Prospecting Permits should be updated to reflect completion of EA and Record of Decision to convert 52 preference right lease (PRL) applications totaling 43,449 acres to preference right leases. Note that the BLM has not yet converted these applications to leases, but have completed the NEPA compliance and environmental permitting steps required to do so.

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Appendix A: Certificates of Qualified Persons

Certificate of Qualified Person

I, Daniel A. Saint Don, do hereby certify that:

(a) I am the Underground Mining Practice Leader at :
Golder Associates Inc.
44 Union Boulevard, Suite 300, Lakewood, Colorado USA 80228

(b) This certificate applies to the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated October 28, 2016.

(c) I am a member of the Association of Professional Engineers of Ontario (APEO). I graduated with a Bachelor of Science in Mining Engineering from Michigan Technological University, Houghton, Michigan, in 1987. I was granted a Masters of Business Administration (MBA), from Westminster College (the Gore School of Business), Salt Lake City, Utah, in 2007. I have worked as an Engineer for 29 years. My experience has included mine operations, technical services, and project development in various commodities and deposits including evaporite/sedimentary deposits.

As a result of my education, professional qualifications, and experience, I am a Qualified Person as defined in National Instrument 43-101.

(d) I performed a site visit to the Ochoa Project Site on September 8, 2016.

(e) I am responsible for the preparation of Item 2, Introduction; Item 16, Mining Methods; Item 19, Market Studies and Contracts; Item 20, Environmental Studies, Permitting and Social or Community Impacts; Item 22: Economic Analysis contributions to Item 1, Summary; Item 21, Capital and Operating Costs, Item 22, Economic Analysis, Item 25, Interpretation and Conclusions and Item 26 Recommendations of the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(f) I am independent of the issuer in accordance with the guidelines and requirements presented in Section 1.5 of the Instrument.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read the Instrument and Form 43-101F1 and the Companion Policy 43-101CP, and this technical report has been prepared in compliance with the guidelines presented in the Instrument, Form 43-101F1, and Form 43-101CP.

(i) As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Denver, Colorado this 28 of October, 2016.

Daniel A. Saint Don (signed by) SEAL

Daniel A. Saint Don, P.Eng.
Association of Professional Engineers of Ontario (Member No. 90226309)

Certificate of Qualified Person

I, Peter Critikos, do hereby certify that:

(a) I am a Mining Practice Leader - Infrastructure at :
Golder Associates Inc.
44 Union Boulevard, Suite 300
Lakewood, CO 80228

(b) This certificate applies to the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(c) I am a:
- Registered Professional Engineer in the State of Colorado (No. 29457)
- Registered Professional Engineer in the State of Idaho (No. 9446)
- Registered Professional Engineer in the State of Wyoming (No. 8871)
- Qualified Person with the Mining & Metallurgical Society of America (No. 1295QP)

I am a graduate of the Colorado School of Mines, Golden, Colorado, USA with a Bachelor of Science degree in Mine Engineering, December 1983. In addition, I graduated from North Eastern University, Boston, Massachusetts, USA with a Bachelor of Science degree in Mechanical Engineering, May 1986. I have worked as a mining and mechanical engineer for 30 years focusing in project development. My relevant experience for the purpose of the technical report includes involvement with the design and costing of material handling systems that include conveying, storing, sizing, classifying, as well as, the design and costing of associated infrastructure.

(d) I have not visited the subject property.

(e) I am responsible for the preparation of Items in 1.1.5 Recovery Methods, 1.1.6 Project Infrastructure, 17.0 Recovery Methods, 18.0 Project Infrastructure, 21.0 Capital & Operating Costs, and 26.0 Recommendations of the technical report titled *NI 43-101 Technical Report for the Ochoa Project dated* 28 October 2016.

(f) I am independent of the issuer in accordance with the guidelines and requirements presented in Section 1.5 of the Instrument.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read the Instrument and Form 43-101F1 and the Companion Policy 43-101CP, and this technical report has been prepared in compliance with the guidelines presented in the Instrument, Form 43-101F1, and Form 43-101CP.

(i) As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Denver, Colorado, this 28 of October, 2016.

Peter Critikos (signed by) SEAL

Peter Critikos, P.E.
Mining & Metallurgical Society of America (No. 1295QP)
Golder Associates Inc.

Certificate of Qualified Person

I, Jerry DeWolfe, do hereby certify that:

(a) I am an Associate and Senior Geologic Consultant at :
Golder Associates Ltd.
102, 2535 3rd Avenue S.E., Calgary, Alberta, Canada T2A 7W5

(b) This certificate applies to the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(c) I am a member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), and the Association of Professional Geoscientists of Ontario (APGO). I graduated with a Bachelor of Science with Honours in Geology, from Saint Mary's University, Halifax, Nova Scotia, Canada, in 2000. I graduated with a Masters of Science in Geology, from Laurentian University, Sudbury, Ontario, Canada, in 2006. I have worked as a geologist for 16 years. My experience has focused on exploration, mine geology and resource estimation of evaporites, phosphate, coal, oil shale and other stratigraphically controlled deposits, base metals deposits and precious metals deposits.

As a result of my education, professional qualifications, and experience, I am a Qualified Person as defined in National Instrument 43-101.

(d) I performed a site visit to the Ochoa Project Site most recently during September 8, 2016.

(e) I am responsible for the preparation of Item 6, History; Item 7, Geological Setting & Mineralization; Item 8, Deposit Types, Item 9, Exploration; Item 10, Drilling; Item 11, Sampling Preparation, Analyses and Security; Item 12, Data Verification; Item 14, Mineral Resource Estimates and Item 23, Adjacent Properties as well as contributions to Item 1, Summary; Item 25, Interpretation and Conclusions and Item 26 Recommendations of the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(f) I am independent of the issuer in accordance with the guidelines and requirements presented in Section 1.5 of the Instrument.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read the Instrument and Form 43-101F1 and the Companion Policy 43-101CP, and this technical report has been prepared in compliance with the guidelines presented in the Instrument, Form 43-101F1, and Form 43-101CP.

(i) As of the date of this certificate, to the best of my knowledge, information and belief, the parts of this Technical Report I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Calgary, Alberta this 28 of October, 2016.

Jerry DeWolfe (signed by)

SEAL

Jerry DeWolfe
Association of Professional Engineers and Geoscientists of Alberta
(Membership No. 101287)

Certificate of Qualified Person

I, Alva L. Kuestermeyer, do hereby certify that:

(a) I am a Project Mining Engineer - Metallurgy at :
Golder Associates, Inc.
44 Union Boulevard, Suite 300
Lakewood, Colorado 80228

(b) This certificate applies to the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(c) I am a member of the Society of Mining Engineers (SME) (Registered Member No. 1802010). I am the co-author of the technical report titled *NI 43-101 Technical Report for the Ochoa Project dated 29 October 2016*. I graduated with a B.S. in Metallurgical Engineering from South Dakota School of Mines and Technology (1973) and M.S. in Mineral Economics from Colorado School of Mines (1982). I have worked as a Metallurgical Engineer for 43 years specializing in mineral processing for crushing, screening, grinding and mineral beneficiation processes.

(d) I did not complete a site visit to the Ochoa Project Site.

(e) I am responsible for the preparation of Items in 1.1.4 Mineral Processing & Metallurgical Testing, 1.9 Recommendations, 3.7 Metallurgical Testing and Processing, 13.0 Mineral Processing & Metallurgical Testing, 17.0 Recovery Methods and 26.0 Recommendations of the technical report titled *NI 43-101 Technical Report for the Ochoa Project* dated 28 October 2016.

(f) I am independent of the issuer in accordance with the guidelines and requirements presented in Section 1.5 of the Instrument.

(g) I have not had prior involvement with the property that is the subject of the Technical Report.

(h) I have read the Instrument and Form 43-101F1 and the Companion Policy 43-101CP, and this technical report has been prepared in compliance with the guidelines presented in the Instrument, Form 43-101F1, and Form 43-101CP.

(i) As of the date of this certificate, to the best of my knowledge, information and belief, the parts of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Denver, Colorado, this 28 of October, 2016.

Alva L. Kuestermeyer (signed by) SEAL

Alva L. Kuestermeyer

SME (Registered Member No. 1802010).

Appendix B: Cashflow - Detail

Table B.1: Ochoa Project Cash Flow - Detail

Description	Units	Total or Average	-3	-2	-1	1	2	3	4	5	6	7	8
RoM Ore	kst-RoM	**81,186**	-	-	250	1,000	1,500	2,000	2,000	2,000	2,000	2,000	2,000
Gross Income from Mining													
Polyhalite Produced	kst-dry	**81,186**	-	-	-	1,250	1,500	2,000	2,000	2,000	2,000	2,000	2,000
Market Price	$/ton	**-**	-	-	-	162	161	157	159	161	164	167	169
Gross Sales	$000s	**$16,503,664**	-	-	-	202,500	241,500	314,000	318,000	322,000	328,000	334,000	338,000
Freight	$000s	**$0**	-	-	-	-	-	-	-	-	-	-	-
Net Sales	$000s	**$16,503,664**	-	-	-	202,500	241,500	314,000	318,000	322,000	328,000	334,000	338,000
Royalty	$000s	**($1,097,494)**	-	-	-	(13,466)	(16,060)	(20,881)	(21,147)	(21,413)	(21,812)	(22,211)	(22,477)
Gross Income (FOB-Plant)	$000s	**$15,406,170**	-	-	-	189,034	225,440	293,119	296,853	300,587	306,188	311,789	315,523
Operating Cost													
Mine	$000s	**$1,954,499**	1,627	9,907	13,236	31,693	39,259	46,772	46,772	47,377	47,377	47,377	47,377
Process Facility	$000s	**$947,708**	-	-	-	15,451	19,353	23,255	23,255	23,255	23,255	23,255	23,255
Jal Storage / Loading	$000s	**$422,351**	-	-	-	7,491	8,439	10,334	10,334	10,334	10,334	10,334	10,334
G&A Operations	$000s	**$250,908**	-	-	773	3,091	4,636	6,181	6,181	6,181	6,181	6,181	6,181
Direct Operating	$000s	**$3,575,466**	1,627	9,907	14,008	57,725	71,686	86,541	86,541	87,147	87,147	87,147	87,147
Production Taxes													
Ad Valorem	$000s	**$1,190,310**	-	-	-	14,605	17,418	22,647	22,935	23,224	23,657	24,089	24,378
Severance	$000s	**$330,073**	-	-	-	4,050	4,830	6,280	6,360	6,440	6,560	6,680	6,760
Production Tax	$000s	**$1,520,384**	-	-	-	18,655	22,248	28,927	29,295	29,664	30,217	30,769	31,138
Operating Cost	$000s	**$5,095,850**	1,627	9,907	14,008	76,381	93,934	115,468	115,837	116,811	117,363	117,916	118,285
Tax Depreciation	$000s	**$684,766**	-	-	-	43,309	75,426	56,134	41,590	30,413	30,190	35,633	26,237
Amortization	$000s	**$368,159**	-	-	-	4,549	6,823	9,098	9,098	9,098	9,098	9,098	9,098
Total Operating Cost	$000s	**$6,148,774**	1,627	9,907	14,008	124,238	176,183	180,699	166,524	156,321	156,651	162,647	153,619
Operating Profit	$000s	**$9,257,396**	(1,627)	(9,907)	(14,008)	64,796	49,257	112,420	130,329	144,266	149,537	149,142	161,904
Working Capital													
Beginning Balance	$000s	**-**	-	201	1,221	1,727	11,077	13,561	16,810	16,888	17,041	17,159	17,276
Ending Balance	$000s	**-**	201	1,221	1,727	11,077	13,561	16,810	16,888	17,041	17,159	17,276	17,354
Change in Working Capital	$000s	**($0)**	(201)	(1,021)	(506)	(9,350)	(2,484)	(3,249)	(78)	(153)	(117)	(117)	(78)
Cash Flow													
Operating Profit	$000s	**$9,257,396**	(1,627)	(9,907)	(14,008)	64,796	49,257	112,420	130,329	144,266	149,537	149,142	161,904
Depreciation and Amortization	$000s	**$1,052,925**	-	-	-	47,857	82,250	65,231	50,687	39,511	39,287	44,731	35,335
LoM Capital	$000s	**($732,954)**	(66,750)	(150,962)	(129,568)	(3,976)	(8,432)	(7,434)	(3,088)	(1,678)	(3,663)	(39,028)	(4,341)
Federal Income Tax	$000s	**($2,467,755)**	-	-	-	-	-	(13,949)	(31,069)	(35,764)	(37,335)	(36,922)	(41,206)
State Income Tax	$000s	**($415,993)**	-	-	-	-	-	(2,351)	(5,237)	(6,029)	(6,294)	(6,224)	(6,946)
Working Capital	$000s	**($0)**	(201)	(1,021)	(506)	(9,350)	(2,484)	(3,249)	(78)	(153)	(117)	(117)	(78)
Cash Flow	$000s	**$6,693,619**	**(68,577)**	**(161,890)**	**(144,082)**	**99,327**	**120,591**	**150,668**	**141,544**	**140,153**	**141,415**	**111,581**	**144,668**
Cumulative Cash Flow	$000s	**-**	(68,577)	(161,890)	(305,972)	(206,645)	(86,054)	64,614	206,157	346,310	487,725	599,307	743,974

Table B.1: Ochoa Project Cash Flow - Detail

Description	Units	9	10	11	12	13	14	15	16	17	18	19
RoM Ore	kst-RoM	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Gross Income from Mining												
Polyhalite Produced	kst-dry	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Market Price	$/ton	172	175	178	181	184	188	191	195	200	206	212
Gross Sales	$000s	344,000	350,000	356,000	362,000	368,000	376,000	382,000	390,000	400,000	412,000	424,000
Freight	$000s	-	-	-	-	-	-	-	-	-	-	-
Net Sales	$000s	344,000	350,000	356,000	362,000	368,000	376,000	382,000	390,000	400,000	412,000	424,000
Royalty	$000s	(22,876)	(23,275)	(23,674)	(24,073)	(24,472)	(25,004)	(25,403)	(25,935)	(26,600)	(27,398)	(28,196)
Gross Income (FOB-Plant)	$000s	321,124	326,725	332,326	337,927	343,528	350,996	356,597	364,065	373,400	384,602	395,804
Operating Cost												
Mine	$000s	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377
Process Facility	$000s	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255
Jal Storage / Loading	$000s	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334
G&A Operations	$000s	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181
Direct Operating	$000s	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147
Production Taxes												
Ad Valorem	$000s	24,811	25,243	25,676	26,109	26,542	27,119	27,551	28,128	28,850	29,715	30,581
Severance	$000s	6,880	7,000	7,120	7,240	7,360	7,520	7,640	7,800	8,000	8,240	8,480
Production Tax	$000s	31,691	32,243	32,796	33,349	33,902	34,639	35,191	35,928	36,850	37,955	39,061
Operating Cost	$000s	118,837	119,390	119,943	120,496	121,048	121,785	122,338	123,075	123,996	125,102	126,207
Tax Depreciation	$000s	10,325	8,279	6,638	6,096	6,262	10,204	12,303	9,617	7,796	6,598	6,472
Amortization	$000s	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098
Total Operating Cost	$000s	138,260	136,767	135,678	135,689	136,408	141,087	143,738	141,790	140,890	140,797	141,777
Operating Profit	$000s	182,864	189,958	196,648	202,238	207,120	209,909	212,859	222,275	232,510	243,805	254,027
Working Capital												
Beginning Balance	$000s	17,354	17,472	17,589	17,706	17,824	17,941	18,097	18,215	18,371	18,567	18,801
Ending Balance	$000s	17,472	17,589	17,706	17,824	17,941	18,097	18,215	18,371	18,567	18,801	19,036
Change in Working Capital	$000s	(117)	(117)	(117)	(117)	(117)	(156)	(117)	(156)	(196)	(235)	(235)
Cash Flow												
Operating Profit	$000s	182,864	189,958	196,648	202,238	207,120	209,909	212,859	222,275	232,510	243,805	254,027
Depreciation and Amortization	$000s	19,423	17,377	15,735	15,193	15,360	19,301	21,400	18,715	16,893	15,695	15,569
LoM Capital	$000s	(3,595)	(4,767)	(1,398)	(1,398)	(5,061)	(39,680)	(3,222)	(2,943)	(4,487)	(2,796)	(2,050)
Federal Income Tax	$000s	(48,267)	(50,476)	(52,543)	(54,225)	(55,659)	(56,269)	(57,027)	(59,957)	(63,082)	(66,486)	(69,515)
State Income Tax	$000s	(8,136)	(8,509)	(8,857)	(9,141)	(9,383)	(9,485)	(9,613)	(10,107)	(10,634)	(11,208)	(11,718)
Working Capital	$000s	(117)	(117)	(117)	(117)	(117)	(156)	(117)	(156)	(196)	(235)	(235)
Cash Flow	$000s	**142,171**	**143,466**	**149,468**	**152,550**	**152,259**	**123,619**	**164,279**	**167,827**	**171,005**	**178,776**	**186,078**
Cumulative Cash Flow	$000s	886,145	1,029,611	1,179,079	1,331,629	1,483,888	1,607,507	1,771,786	1,939,613	2,110,617	2,289,393	2,475,471

Table B.1: Ochoa Project Cash Flow - Detail

Description	Units	20	21	22	23	24	25	26	27	28	29	30
RoM Ore	kst-RoM	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Gross Income from Mining												
Polyhalite Produced	kst-dry	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Market Price	$/ton	218	224	224	224	224	224	224	224	224	224	224
Gross Sales	$000s	436,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000
Freight	$000s	-	-	-	-	-	-	-	-	-	-	-
Net Sales	$000s	436,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000
Royalty	$000s	(28,994)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)
Gross Income (FOB-Plant)	$000s	407,006	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208
Operating Cost												
Mine	$000s	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377
Process Facility	$000s	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255
Jal Storage / Loading	$000s	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334
G&A Operations	$000s	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181
Direct Operating	$000s	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147
Production Taxes												
Ad Valorem	$000s	31,446	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312
Severance	$000s	8,720	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960
Production Tax	$000s	40,166	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272
Operating Cost	$000s	127,313	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418
Tax Depreciation	$000s	6,434	9,971	11,981	9,624	8,172	6,770	15,070	21,246	18,578	16,291	12,612
Amortization	$000s	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098
Total Operating Cost	$000s	142,845	147,487	149,497	147,140	145,687	144,286	152,585	158,761	156,094	153,807	150,128
Operating Profit	$000s	264,161	270,721	268,711	271,068	272,521	273,922	265,623	259,447	262,114	264,401	268,080
Working Capital												
Beginning Balance	$000s	19,036	19,271	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505
Ending Balance	$000s	19,271	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505
Change in Working Capital	$000s	(235)	(235)	-	-	-	-	-	-	-	-	-
Cash Flow												
Operating Profit	$000s	264,161	270,721	268,711	271,068	272,521	273,922	265,623	259,447	262,114	264,401	268,080
Depreciation and Amortization	$000s	15,532	19,069	21,078	18,721	17,269	15,867	24,167	30,343	27,675	25,389	21,710
LoM Capital	$000s	(3,943)	(39,028)	(2,943)	(4,341)	(5,140)	(1,678)	(63,191)	(3,663)	(24,978)	(3,595)	(3,222)
Federal Income Tax	$000s	(72,513)	(74,260)	(73,557)	(74,382)	(74,890)	(75,381)	(72,476)	(70,314)	(71,248)	(72,048)	(73,336)
State Income Tax	$000s	(12,224)	(12,518)	(12,400)	(12,539)	(12,624)	(12,707)	(12,217)	(11,853)	(12,010)	(12,145)	(12,362)
Working Capital	$000s	(235)	(235)	-	-	-	-	-	-	-	-	-
Cash Flow	$000s	**190,779**	**163,749**	**200,891**	**198,529**	**197,136**	**200,024**	**141,906**	**203,959**	**181,554**	**202,001**	**200,869**
Cumulative Cash Flow	$000s	2,666,250	2,829,998	3,030,889	3,229,418	3,426,553	3,626,578	3,768,483	3,972,442	4,153,996	4,355,997	4,556,867

Table B.1: Ochoa Project Cash Flow - Detail

Description	Units	31	32	33	34	35	36	37	38	39	40	41	42	43
RoM Ore	kst-RoM	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	436	-
Gross Income from Mining														
Polyhalite Produced	kst-dry	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	436	-
Market Price	$/ton	224	224	224	224	224	224	224	224	224	224	224	224	224
Gross Sales	$000s	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	97,664	-
Freight	$000s	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Sales	$000s	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	448,000	97,664	-
Royalty	$000s	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(29,792)	(6,495)	-
Gross Income (FOB-Plant)	$000s	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	418,208	91,169	-
Operating Cost														
Mine	$000s	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	47,377	12,271	-
Process Facility	$000s	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	23,255	5,971	-
Jal Storage / Loading	$000s	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	10,334	3,409	-
G&A Operations	$000s	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	6,181	1,347	-
Direct Operating	$000s	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	87,147	22,999	-
Production Taxes														
Ad Valorem	$000s	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	32,312	7,044	-
Severance	$000s	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	8,960	1,953	-
Production Tax	$000s	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	41,272	8,997	-
Operating Cost	$000s	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	128,418	31,996	-
Tax Depreciation	$000s	11,522	10,586	9,831	8,892	9,955	10,270	8,152	7,394	6,824	7,936	8,660	6,264	3,882
Amortization	$000s	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	9,098	1,983	-
Total Operating Cost	$000s	149,038	148,102	147,347	146,408	147,471	147,786	145,667	144,910	144,340	145,452	146,176	40,243	3,882
Operating Profit	$000s	269,170	270,106	270,861	271,800	270,737	270,422	272,541	273,298	273,868	272,756	272,032	50,927	(3,882)
Working Capital														
Beginning Balance	$000s	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	4,745
Ending Balance	$000s	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	19,505	4,745	-
Change in Working Capital	$000s	-	-	-	-	-	-	-	-	-	-	-	14,760	4,745
Cash Flow														
Operating Profit	$000s	269,170	270,106	270,861	271,800	270,737	270,422	272,541	273,298	273,868	272,756	272,032	50,927	(3,882)
Depreciation and Amortization	$000s	20,619	19,684	18,929	17,990	19,053	19,368	17,249	16,492	15,921	17,034	17,757	8,247	3,882
LoM Capital	$000s	(4,487)	(1,398)	(18,244)	(4,316)	(23,859)	(2,943)	(2,943)	(5,885)	(2,050)	(17,126)	(3,663)	-	-
Federal Income Tax	$000s	(73,717)	(74,045)	(74,309)	(74,638)	(74,266)	(74,155)	(74,897)	(75,162)	(75,362)	(74,972)	(74,719)	(13,357)	-
State Income Tax	$000s	(12,427)	(12,482)	(12,526)	(12,582)	(12,519)	(12,500)	(12,625)	(12,670)	(12,704)	(12,638)	(12,596)	(2,252)	-
Working Capital	$000s	-	-	-	-	-	-	-	-	-	-	-	14,760	4,745
Cash Flow	$000s	**199,158**	**201,865**	**184,710**	**198,254**	**179,145**	**200,191**	**199,325**	**196,072**	**199,674**	**185,053**	**198,811**	**58,325**	**4,745**
Cumulative Cash Flow	$000s	4,756,025	4,957,890	5,142,600	5,340,854	5,519,999	5,720,190	5,919,515	6,115,587	6,315,261	6,500,314	6,699,125	6,757,450	6,762,196

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