BHP

NEWS RELEASE

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BHP approves investment in Jansen Stage 1 potash project

BHP has today approved US$5.7 billion (C$7.5 billion) in capital expenditure for the Jansen Stage 1 (Jansen S1) potash project in the province of Saskatchewan, Canada.

BHP Chief Executive Officer, Mike Henry, said Jansen is aligned with BHP's strategy of growing our exposure to future facing commodities in world class assets, which are large, low cost and expandable.

"This is an important milestone for BHP and an investment in a new commodity that we believe will create value for shareholders for generations," Mr Henry said. Jansen is located in the world's best potash basin and is expected to operate up to 100 years. Potash provides BHP with increased leverage to key global mega-trends, including rising population, changing diets, decarbonisation and improving environmental stewardship.

"In addition to its merits as a stand-alone project, Jansen also brings with it a series of high returning growth options in an attractive investment jurisdiction. In developing the Jansen project, BHP has had ongoing positive engagement and collaboration with First Nations and local communities, and with the provincial and federal governments. Jansen is designed with a focus on sustainability, including being designed for low GHG emissions and low water consumption." Mr Henry added.

Jansen S1 is expected to produce approximately 4.35 million tonnes of potash per annum[1], and has a basin position with the potential for further expansions (subject to studies and approvals). First ore is targeted in the 2027 calendar year, with construction expected to take approximately six years, followed by a ramp up period of two years.

Jansen S1 includes the design, engineering and construction of an underground potash mine and surface infrastructure including a processing facility, a product storage building, and a continuous automated rail loading system. Jansen S1 product

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[1] The Jansen S1 project will convert approximately 20% of the 5.23 billion tonnes Measured and Indicated Mineral Resources into Ore Reserve (see Appendix 1).

will be shipped to export markets through Westshore, in Delta, British Columbia and the project includes funding for the required port infrastructure.

We anticipate that demand growth will progressively absorb the excess capacity currently present in the industry, with opportunity for new supply expected by the late 2020s or early 2030s. That is broadly aligned with the expected timing of first production from Jansen. Beyond the 2020s, the industry's long run trend prices are expected to be determined by Canadian greenfield solution mines. In addition to consuming more energy and water than conventional mines like Jansen, solution mines tend to have higher operating costs and higher sustaining capital requirements.

At consensus prices[2], the go-forward investment on Jansen is expected to generate an internal rate of return of 12 to 14 per cent, an expected payback period of seven years from first production and an underlying EBITDA margin of approximately 70 per cent given its expected first quartile cost position.

We have previously acknowledged the US$4.5 billion (pre-tax) of capital invested to date has resulted in a significant initial outlay and that our approach would be different if considering the project again today. The investment to date includes construction of the shafts and associated infrastructure (US$2.97 billion[3] scope of work), as well as engineering and procurement activities, and preparation works related to Jansen S1 underground infrastructure. The construction of two shafts and associated infrastructure at the site is 93 per cent complete and expected to be completed in the 2022 calendar year. To date approximately 50 per cent of all engineering required for Jansen S1 has been completed, significantly de-risking the project. If the investment to date were to be included, the full cycle project would yield a much lower internal rate of return.

As part of our 2021 financial results, we have assessed the carrying value of the existing Potash asset base as at 30 June 2021 and have recognised a pre-tax impairment charge of US$1.3 billion (US$2.1 billion after tax). The impairment charge against our Potash assets reflects an analysis of recent market perspectives and the value that we would now expect a market participant to attribute to our investments to date.

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[2] Price assumptions reflect average of CRU and Argus prices. Average 2027–2037: US$341/t CRU and US$292/t Argus. IRR = Expected Jansen Stage 1 IRR across approximately 100 year mine life. Jansen Stage 1 IRR is post-tax, nominal and reflects the range of the average CRU and Argus prices, and excludes expenditure on shafts and essential services consistent with previous disclosure.

[3] The US$2.97 billion current scope of work for Jansen is part of approximately US$4.5 billion that has been invested on the project since 2008 ahead of the sanction decision on Jansen Stage 1. Approximately US$220 million of the US$2.97 billion approved for the current scope of work, expected to be completed in the 2022 calendar year, is not yet spent. Sustaining capital for Jansen Stage 1 is expected to be approximately US$15/t (real) long term average +/- 20% in any given year.

Mr Henry said, “Jansen will create at least 3,500 jobs during peak construction and 600 in operation. Jansen S1 will have a gender balanced workforce and approximately 20 per cent of local First Nations employees. In construction and in ongoing operations we will continue to enable local and indigenous businesses. Building on our more than ten-year presence in Saskatchewan, we have signed agreements that provide tangible mutual benefits including jobs and training, small business development and procurement with six First Nations communities around the site, the first of their kind in the potash industry. We appreciate the support we have received from the federal and provincial governments to encourage investment in the country and province.”

Further information on BHP can be found at: **bhp.com**

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APPENDIX 1

Executive Summary

First time reporting of Jansen Ore Reserves

Table 1. Jansen Mineral Resources (inclusive of Ore Reserves) as at 30 June 2021 in 100% terms reported in accordance with ASX Listing Rules 2019

Ore type	Measured Resources				Indicated Resources				Inferred Resources				Total Resources			
	Mt	% K_2O	% Insol.	% MgO	Mt	% K_2O	%I nsol.	% MgO	Mt	% K_2O	% Insol.	% MgO	Mt	% K_2O	% Insol.	% MgO
LPL	5,230	25.6	7.7	0.08	–	–	–	–	1,280	25.6	7.7	0.08	6,510	25.6	7.7	0.08

Table 2. Jansen Ore Reserves as at 30 June 2021 in 100% terms reported in accordance with ASX Listing Rules 2019

Ore type	Proved Reserves				Probable Reserves				Total Reserves				Reserve life (years)	BHP interest (%)
	Mt	% K_2O	% Insol.	% MgO	Mt	% K_2O	%I nsol.	% MgO	Mt	% K_2O	% Insol.	% MgO		
LPL	–	–	–	–	1,070	24.9	7.5	0.1	1,070	24.9	7.5	0.1	94	100

Footnotes for Table 1 and Table 2

(1) The information in this report relating to Mineral Resources and Ore Reserves is based on and fairly represents information and supporting documentation compiled by B Németh (MAusIMM) and O Turkekul (APEGS) for Mineral Resources, and J Sondergaard (MAusIMM) for Ore Reserves. All Competent Persons are members of the Australasian Institute of Mining and Metallurgy (AusIMM) or a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX and Joint Ore Reserves Committee websites. All Competent Persons are employees of BHP and have sufficient experience that is relevant to the style of mineralization, type of deposit under consideration and to the activity being undertaken to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. All Competent Persons confirm that they have no conflict of interest, perceived or otherwise, and consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

(2) The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

(3) Mineral Resources are stated for the Lower Patience Lake (LPL) potash unit. A seam thickness of 3.96 metres from the top of the 406 clay seam was applied.

(4) Measured Resources grade has been assigned to Inferred Resources.

(5) 25.6 %K_2O grade is equivalent to 40.5%KCl content using the mineralogical conversion factor of 1.583.

(6) MgO% is used as a measure of carnallite ($KCl.MgCl_2.6H_2O$) content where per cent carnallite equivalent = %MgO x 6.8918.

(7) Tonnages are reported on an in-situ moisture content basis, estimated to be 0.3%.

(8) Tonnages are rounded to nearest 10 million tonnes.

1 Introduction

This report is issued in support of the declaration of Mineral Resources and Ore Reserves for the Jansen potash project as at 30 June 2021. The Mineral Resources and Ore Reserves are reported in accordance with the relevant assessment criteria contained in Table 1 of the JORC Code (2012) and is described further below.

This report outlines the key underlying assumptions and outcomes supporting the Jansen Ore Reserves and the Jansen Definition Phase Study (DPS), equivalent to a Feasibility Study.

The Jansen potash project is located in the province of Saskatchewan, Canada, and is approximately 150 kilometres east of Saskatoon (Figure 1).

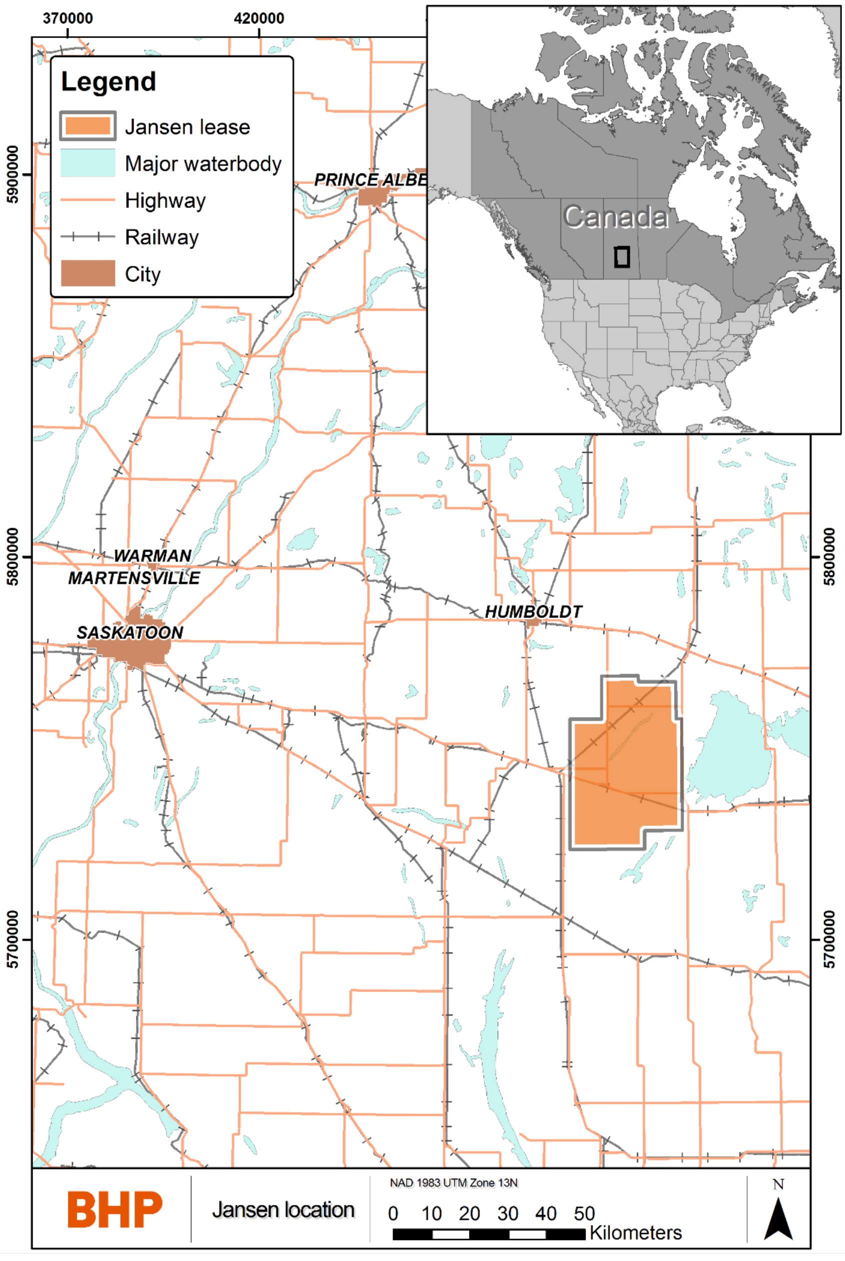

Figure 1. Jansen potash project location map

2 Tenure

Potash mineral tenure is governed by the Crown Minerals Act and the Subsurface Mineral Tenure Regulations of the Province of Saskatchewan. The Province of Saskatchewan is known as the *Crown*.

Subsurface mineral rights, which are titled separately from surface rights are divided into half mile by half mile or smaller parcels. Subsurface mineral rights may be owned by the *Crown*, or freehold by individuals or corporations.

For the Jansen potash project, the majority of subsurface mineral rights are owned by the *Crown*. The Jansen potash project is located exclusively within the boundaries of the *Crown* Subsurface Mineral Lease (*KLSA 011A).* The rights conveyed by Crown Subsurface Mineral Lease *KLSA011A* are wholly owned by BHP and provide BHP with security of tenure for the life of the mine.

The *Crown* Subsurface Mineral Lease comprises an area covering the mine plan with a half mile buffer, known as the '*Core Lands*' and an additional area, known as '*Expansion Lands'* (Figure 2). The *Expansion Lands* are located between the lease boundary and the *Core Lands* and are leased subject to a performance metric (built productive capacity of 3.2 Mt of potassium chloride (KCl) per annum by the 21st anniversary of the lease).

BHP has also acquired access to the majority of the freehold subsurface mineral rights parcels within the *Crown KLSA 011A* lease perimeter, either through lease agreements with the registered owners or through purchase.

Table 3 summarises the tenure areas for the different mineral ownership structures.

Table 3. Jansen potash project mineral rights ownership structure

Ownership type	Area (acres)	Area km^2
***Crown* lease (*KLSA 011A*)**	**261,102**	**1,056.7**
"*Core Lands"*	157,998	
and "*Expansion Lands"*	103,104	
Freehold leased or owned	22,233	90.0

A small number of mineral rights parcels within the perimeter of the *Crown* lease have not been acquired. The Jansen mine plan and corresponding Ore Reserves, and Mineral Resources estimates only consider lands where BHP holds mineral rights through lease agreements or ownership.

Figure 2 summarises the *KLSA 011A* lease boundary, the *Core Lands*, the *Expansion Lands*, the acquired subsurface mineral parcels (yellow), and the acquired surface land covering the Jansen surface development.

BHP makes annual lease payments and will make royalty payments to the Crown under KLSA 011A and to individual freehold owners that BHP has agreements with. Rates are set by The Subsurface Mineral Tenure Regulations.

The Jansen potash project is located in an area used for agriculture. As required by a foreign company operating in Saskatchewan, BHP holds in good standing a permanent Farmland Security Board Exemption Order enabling BHP to secure the surface lands required for all current and foreseeable Jansen development and infrastructure needs as shown in Figure 2.

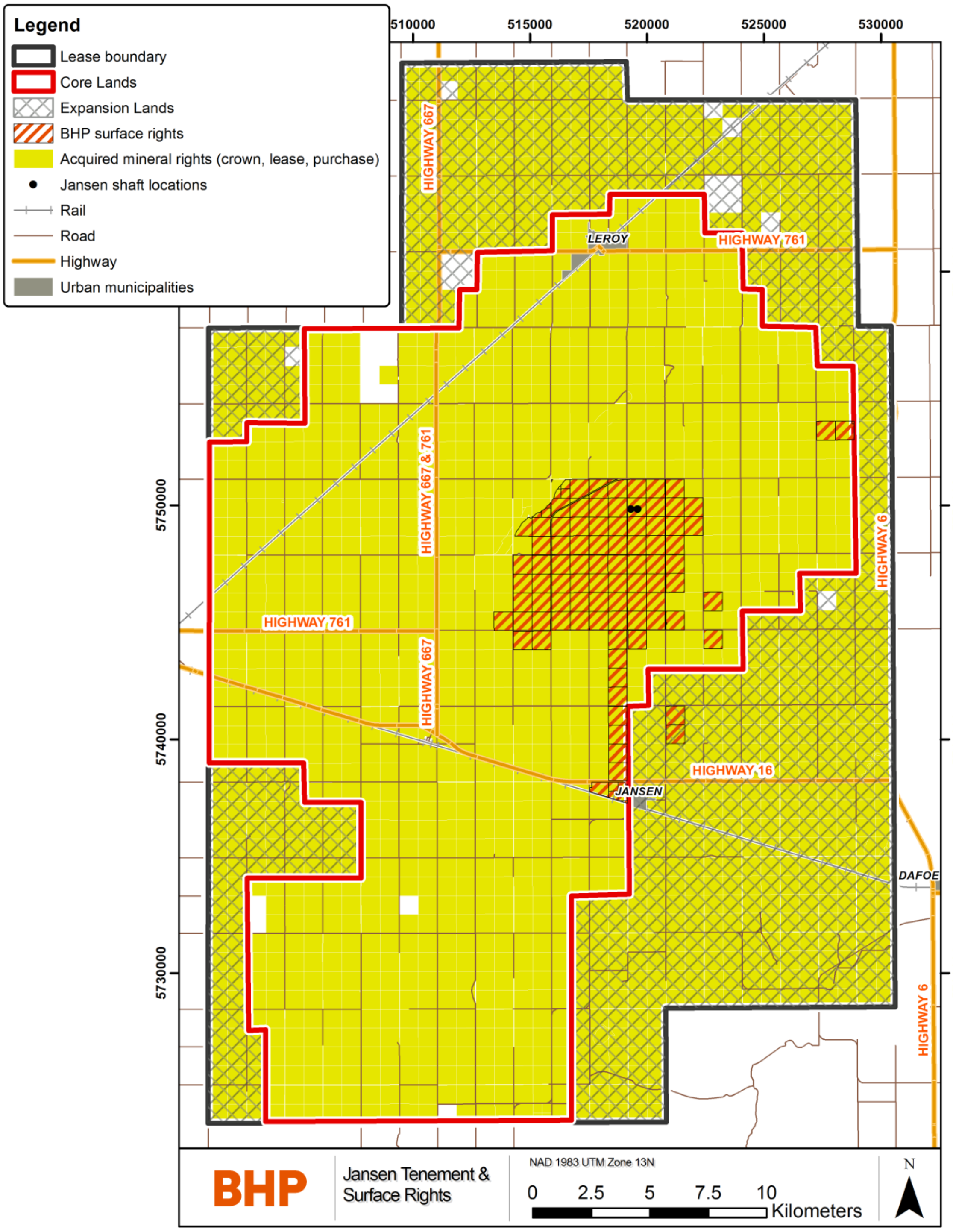

Figure 2. Jansen subsurface lease tenure and surface land ownership

The Jansen potash project Environmental Impact Statement has received Ministerial Approval. A Heritage Resource Impact Assessment (HRIA) was completed to support the submission of the Jansen Environmental Impact Statement. An additional HRIA is under review by the Saskatchewan Heritage Conservation Branch and is not expected to have any impact to the project execution or mine operations.

It is the opinion of the Competent Person that holding these mineral leases/titles provides the right to mine, and is of a sufficient level of tenure and approval to support the declaration of Ore Reserves in all reporting jurisdictions in which BHP publicly reports its Mineral Resources and Ore Reserves. This position is supported by the following:

- The mineral leases/titles held by BHP provide the right to mine and BHP has a legal right to renew tenure.
- All currently required permits and approvals for the Jansen potash project are in good standing and there are no known impediments related to future permits.
- The Jansen potash project's publicly reported Mineral Resources represents a long-life asset, providing sufficient time to plan and build infrastructure and mining operations that satisfy all provincial regulations.

3 Geology

The Jansen potash deposit is located within the Williston Basin, a large, intracratonic, structurally simple, and horizontally bedded sedimentary basin. The Williston Basin extends from southern Saskatchewan, Canada into the northern states of the United States of America. Figure 3 shows the extents of potash distribution with the Williston Basin.

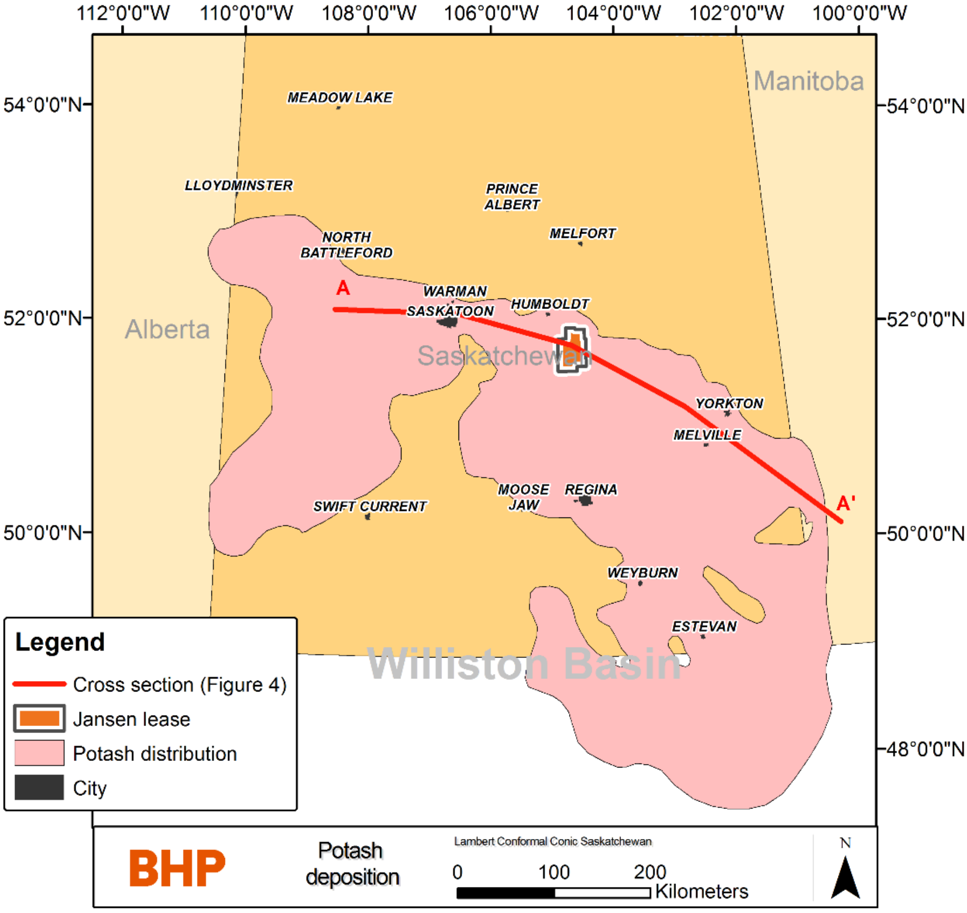

Figure 3. Map of potash distribution within the Williston Basin (modified from Fuzesy (1982))

Deposition of sediments in the basin began during the Cambrian geological time period, followed by an intense period of limestone, dolomite, evaporite, sandstone, and shale deposition during the geological time periods Ordovician, Silurian, and Devonian ending with Cretaceous sediments. Figure 4 shows a schematic cross section focussed on members of interest in the Jansen area, location of the cross section A-A' shown in Figure 3.

Figure 5 shows the full stratigraphic column from surface, including the key members for the Jansen potash project area.

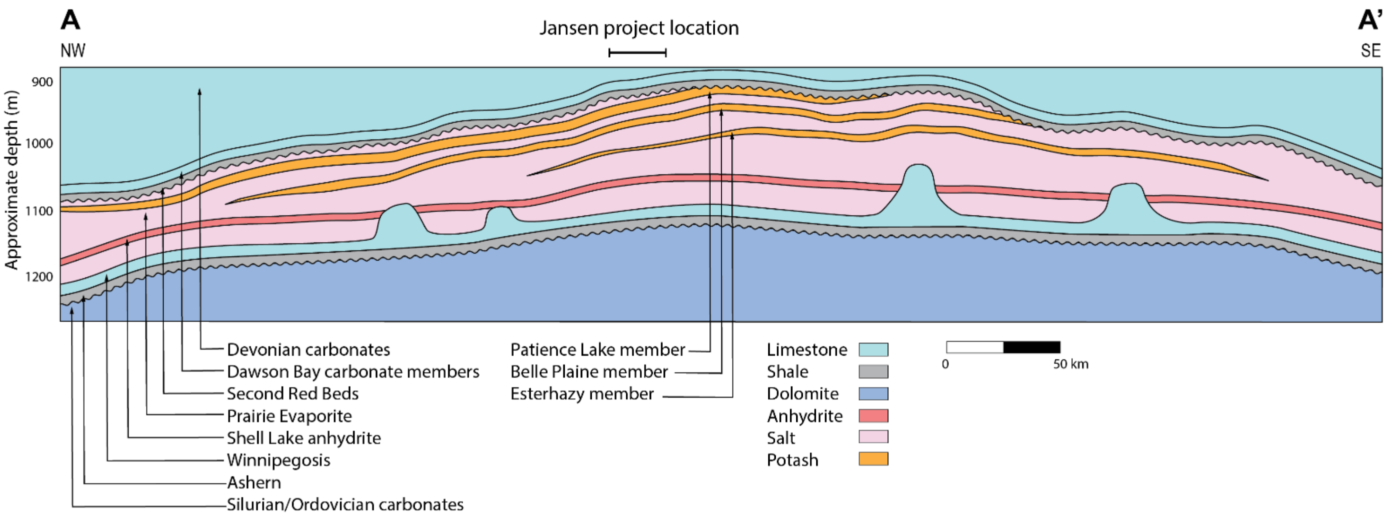

Figure 4. Schematic geological section showing the potash members of the Prairie Evaporite Formation. The location of the section is shown on Figure 3.

The potash beds are approximately 900 metres below surface at the top of the Prairie Evaporite Formation (Figure 4 and Figure 5). There are three main potash bearing members present in the Prairie Evaporite Formation. Two are present in the Jansen area consistently, those being the Patience Lake and Belle Plaine members.

These potash members were deposited in regionally extensive (hundreds of kilometres), horizontal layers during the repeated, cyclical periods of evaporation of a shallow, inland sea during the Devonian Period. Mineralization within the potash layers consists of a layered, repetitive sequence of sylvite (KCl) with halite (NaCl) and thin layers of insoluble dolomitic clay material (clay seams). Carnallite ($KCl.MgCl_2.6H_2O$), a mineral which can impact processing and ground stability, occasionally occurs in place of sylvite within the potash layer.

The Patience Lake member is further subdivided into Upper Patience Lake (UPL) and Lower Patience Lake (LPL) sub-members. The LPL sub-member is the potash horizon targeted for Jansen.

Unconformably above the Prairie Evaporite is the Dawson Bay Formation that includes the Second Red Beds member and the Dawson Bay carbonate members on top.

3.1 Lower Patience Lake Geology

The LPL sub-member is an approximately five metres thick potash unit interspersed with thin clay seams. The LPL top is marked by a thin, distinct clay seam (named the 406) that is overlain by an approximately 2.5 metres thick halite unit (Figure 5 and Figure 6). The bottom of the LPL unit is marked by a disseminated clay seam (named the 401). The mineralization of the LPL is restricted to the 406 to 401 interval. The clay seams are consistent throughout the potash basin and the Jansen area and can be easily correlated between the drill holes. The LPL is subdivided into four mineralization cycles by BHP for detailed geological characterization of the potential mining horizon.

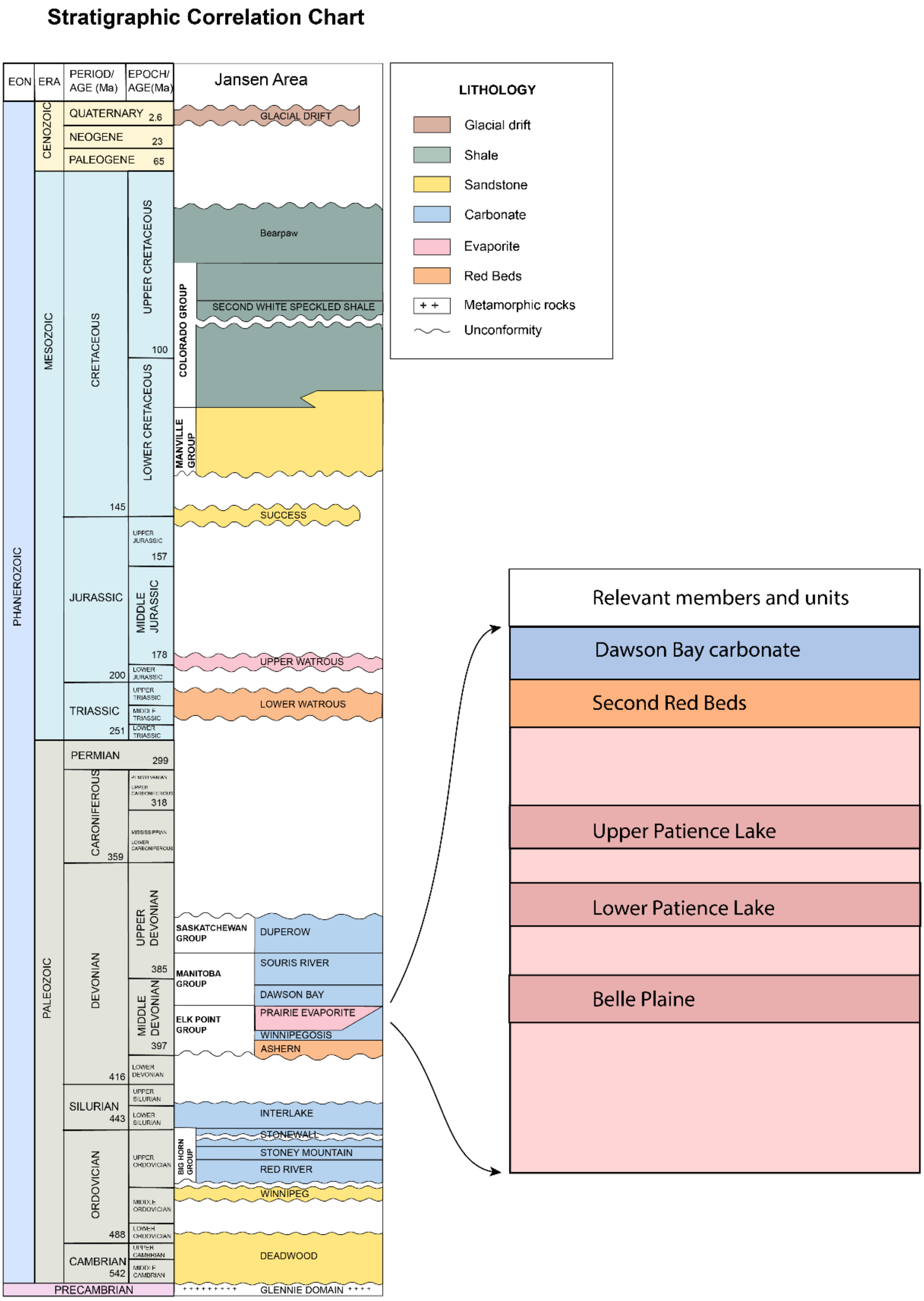

Figure 5. Stratigraphic column for Jansen area

Figure 6 shows the connection between the data and interpretation from left to right, with a gamma ray curve from one of the exploration drill holes (panel a)), the subdivision of the Patience Lake member into sub-members (panel b)) and the interpretation of the LPL member into depositional cycles including the clay seams with names (panel c)).

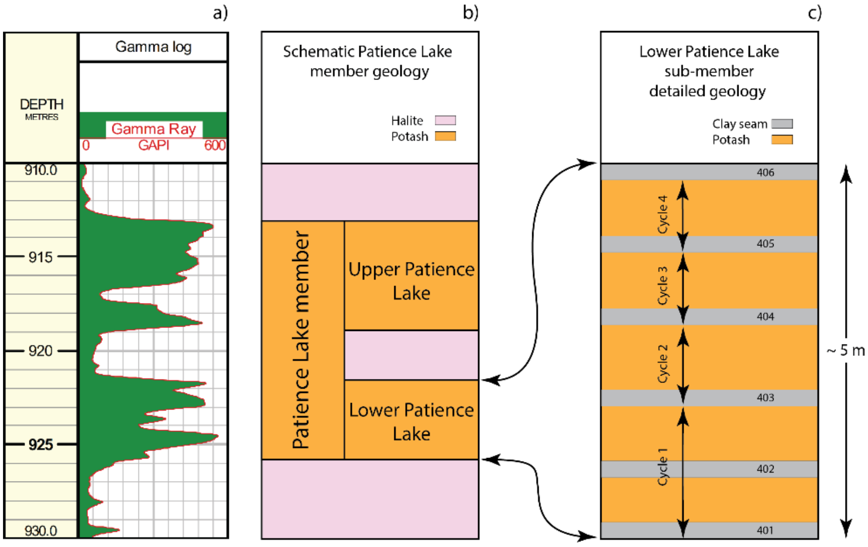

Figure 6 Detailed stratigraphy of the Patience Lake Member.

The geology of the basin and its geological formations are well known from extensive exploratory drilling for hydrocarbons and minerals and from geophysical data collected since 1959. This basin wide geological information is publicly available from the Saskatchewan Geological Survey in the form of maps, cross-sections, drill hole-based formation contact identification, core from historical drill holes, and other publications. Potash exploration drill hole information is confidential for the first five years after drilling, afterwards it becomes publicly available.

It is the Competent Persons' opinion that Saskatchewan's potash deposition geology is well understood based on mining in the region for 60 years. The data collected for the Jansen potash project and interpretation based on the data collected is consistent with this understanding.

4 Data acquisition

4.1 Overview of data collection

BHP uses a consistent method of data acquisition for exploration drilling and seismic surveying. Figure 7 shows a plan of all the drill hole collar locations with the seismic programs and Table 4 provides a listing of all drill holes.

The Jansen potash project had two phases of drilling, historic (1952 and 1965) including 26 drill holes and the BHP program (2008 – 2009) including 24 drill holes. The following lists summarizes the acquired data from each drilling campaign.

<u>Historical drilling campaign</u>

- Historical drill hole collar location surveys and core assay data acquired from the Saskatchewan Ministry of Energy and Resources database

<u>BHP drilling campaign</u>

- Drill hole collar coordinates surveying before and after drilling
- Geophysical logging of drill holes including a standard potash industry logging suite (nuclear and acoustic), nuclear magnetic resonance, and image logs using industry standard tools and calibration methods
- Drill hole downhole surveying. The downhole deviation data is measured during acoustic tool logging with magnetic methods
- Core samples from drill holes following defined procedures, with quality assurance and quality control (QAQC) targets set and monitored
- Hydrogeological data, including formation pressure and hydraulic conductivity, using standard reservoir evaluation methods and procedures

The drilling was supported with seismic data acquisition campaigns, conducted between 2007 and 2010. These seismic programs consisted of:

- Wide spaced 2D seismic reconnaissance survey lines to map regional geology and structural trends
- 3D seismic surveys using Saskatchewan potash industry standard acquisition parameters and methods for detailed resource characterization

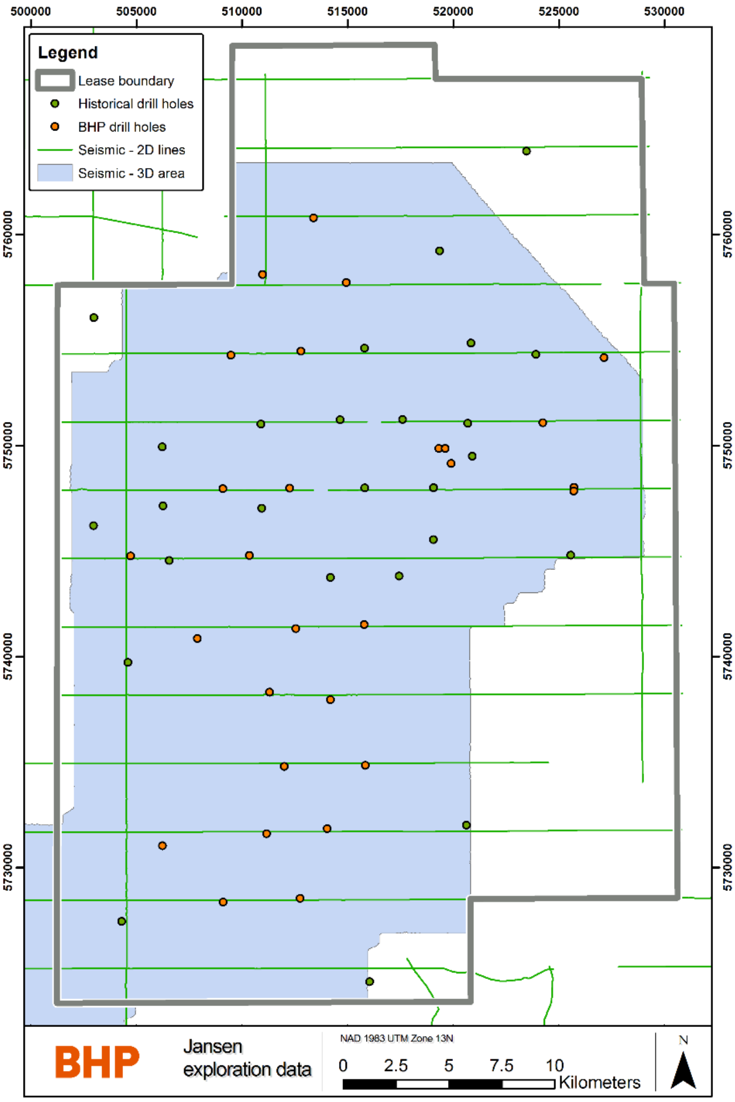

Figure 7. Jansen potash project exploration data

Table 4. Jansen Drill hole information with drill hole collar locations and depths in NAD83 UTM Zone 13 datum and projection

BHP ID	CWI	Drill hole type	Easting (m)	Northing (m)	KB elevation (m)	Total depth (m)	Hole dip	LPL intersection Type	DEPTH of 406 (m)	W. AVG K_2O (%)*	W. AVG INSOL. (%)*	Thickness (m)
07-01	SK0001200	Historic exploration	504598.4	5739717.0	539	996.7	Vertical	Potash	984.35	25.7	-	3.96
07-02	SK0011162	Historic exploration	506560.6	5744544.0	538	993.6	Vertical	Potash	965.73	26.8	-	3.96
07-03	SK0011129	Historic exploration	502979.1	5746198.5	542	1002.8	Vertical	Carnallite	-	-	-	-
07-04	SK0009464	Historic exploration	506262.8	5747138.5	537	973.8	Vertical	Potash	944.09	26.2	-	3.96
07-05	SK0011265	Historic exploration	506225.2	5749925.5	544	982.7	Vertical	Potash	946.80	23.2	-	3.96
07-06	SK0007349	Historic exploration	502991.2	5756045.5	551	1033.6	Vertical	Carnallite	-	-	-	-
08-01	SK0011401	Historic exploration	520908.5	5749484.5	544	964.7	Vertical	Potash	931.87	25.7	-	3.96
08-03	SK0012931	Historic exploration	523917.4	5754314.5	541	938.5	Vertical	Potash	904.07	26.2	-	3.96
08-04	SK0011508	Historic exploration	520847.4	5754837.0	540	935.7	Vertical	Potash	911.66	23.9	-	3.96
08-05	SK0004216	Historic exploration	520626.1	5732004.0	529	1025	Vertical	Potash	Missing data	-	-	-
08-08	SK0009433	Historic exploration	514190.5	5743747.5	550	990	Vertical	Potash	956.52	26.6	-	3.96
08-09	SK0011403	Historic exploration	517441.4	5743801.0	544	990.6	Vertical	Potash	955.85	-	-	3.96
08-10	SK0011482	Historic exploration	519061.4	5745531.0	544	977.8	Vertical	Potash	947.62	-	-	3.96
08-11	SK0011267	Historic exploration	519060.1	5747989.5	546	978.1	Vertical	Potash	Missing data	-	-	-
08-12	SK0011383	Historic exploration	515813.7	5747978.0	547	978.4	Vertical	Potash	946.74	24.6	-	3.96
08-13	SK0011128	Historic exploration	520687.2	5751039.0	541	957.4	Vertical	Potash	928.97	-	-	3.96
08-14	SK0011358	Historic exploration	517609.3	5751220.0	547	960.7	Vertical	Potash	933.36	29.2	-	3.96
08-15	SK0011376	Historic exploration	514644.0	5751209.5	544	981.5	Vertical	Potash	948.20	24.4	-	3.96
08-16	SK0011483	Historic exploration	515795.3	5754604.0	546	947.9	Vertical	Potash	915.98	-	-	3.96
08-17	SK0011268	Historic exploration	519360.3	5759215.0	544	935.7	Vertical	Potash	901.60	27.0	-	3.96
08-18	SK0010280	Historic exploration	510902.5	5751009.0	542	957.4	Vertical	Potash	925.68	23.6	-	3.96
08-19	SK0011164	Historic exploration	510928.9	5747022.0	549	991.2	Vertical	Anomalous	-	-	-	-
09-08	SK0005768	Historic exploration	516047.1	5724592.0	533	1158.2	Vertical	Anomalous	-	-	-	-
09-14	SK0016476	Historic exploration	504306.9	5727442.5	544	1217.7	Vertical	Anomalous	-	-	-	-
11-03	SK0011269	Historic exploration	525569.7	5744790.0	536	951.9	Vertical	Carnallite	-	-	-	-
11-04	SK0016602	Historic exploration	523465.3	5763933.0	543	1068.3	Vertical	Carnallite	-	-	-	-
JANS-01	SK0096962	BHP exploration	525725.0	5748010.0	535	955	Vertical	Potash	907.62	25.6	8.2	3.96
JANS-02	SK0097093	BHP exploration	519077.8	5747990.0	542	1189.4	Vertical	Potash	944.08	27.3	7.1	3.96
JANS-03	SK0097373	BHP exploration	512260.0	5747969.0	539	1041	Vertical	Potash	953.63	25.1	5.4	3.96
JANS-04	SK0099773	BHP exploration	512550.0	5741315.0	547	1653	Vertical	Potash	965.22	26.1	10.0	3.96
JANS-05	SK0097369	BHP exploration	509090.0	5747951.0	538	1033.1	Vertical	Anomalous	-	-	-	-
JANS-06	SK0097371	BHP exploration	512790.0	5754460.0	543	1009	Vertical	Potash	921.33	25.3	6.8	3.96

BHP ID	CWI	Drill hole type	Easting (m)	Northing (m)	KB elevation (m)	Total depth (m)	Hole dip	LPL intersection Type	DEPTH of 406 (m)	W. AVG K_2O (%)*	W. AVG INSOL. (%)*	Thickness (m)
JANS-07	SK0097525	BHP exploration	509477.0	5754270.0	541	1014	Vertical	Potash	929.24	27.2	6.0	3.96
JANS-08	SK0097758	BHP exploration	514940.0	5757717.0	545	991	Vertical	Potash	918.49	26.5	6.8	3.96
JANS-09	SK0098546	BHP exploration	524242.0	5751070.0	539	1005	Vertical	Potash	914.24	26.4	7.3	3.96
JANS-10	SK0097759	BHP exploration	510355.0	5744777.0	535	1043.8	Vertical	Potash	959.66	28.8	5.3	3.96
JANS-11	SK0098554	BHP exploration	515791.0	5741510.0	540	1064	Vertical	Potash	956.23	24.7	9.0	3.96
JANS-12	SK0097756	BHP exploration	509111.0	5728363.0	524	1260	Vertical	Potash	991.04	24.8	9.8	3.96
JANS-13	SK0097757	BHP exploration	512005.0	5734785.0	534	1080	Vertical	Potash	990.78	25.7	6.5	3.96
JANS-14	SK0097760	BHP exploration	511301.0	5738302.0	545	1080	Vertical	Anomalous	-	-	-	-
JANS-15A	SK0098703	BHP exploration	507883.0	5740844.0	534	1081.4	Vertical	Potash	982.97	27.5	6.5	3.96
JANS-16	SK0098629	BHP exploration	514190.0	5737950.0	536	1073	Vertical	Potash	983.11	28.6	6.5	3.96
JANS-17	SK0098673	BHP exploration	515839.9	5734839.5	530	1062.1	Vertical	Potash	969.51	24.5	6.5	3.96
JANS-18	SK0098630	BHP exploration	514029.0	5731835.0	527	1061	Vertical	Potash	979.29	22.6	8.6	3.96
JANS-19	SK0098628	BHP exploration	512756.0	5728540.0	527	1095	Vertical	Potash	1002.33	25.7	9.0	3.96
JANS-20	SK0098631	BHP exploration	506240.0	5731025.0	537	1106	Vertical	Potash	1006.52	23.7	6.9	3.96
JANS-21	SK0099041	BHP exploration	511166.0	5731593.0	529	1083.7	Vertical	Potash	985.04	24.2	7.9	3.96
JANS-22	SK0099894	BHP exploration	513393.0	5760780.0	545	999	Vertical	Carnallite	-	-	-	-
JANS-23	SK0099896	BHP exploration	510968.0	5758090.0	543	1008	Vertical	Carnallite	-	-	-	-
JANS-24	SK0099895	BHP exploration	527149.3	5754160.0	539	981	Vertical	Potash	901.56	26.0	7.2	3.96
JANS-D01	SK0128103	BHP brine disposal	519906.7	5749140.5	546	1513.2	Vertical	Potash	934.04	-	-	-
JANS-G1	SK0122400	BHP geotechnical	519809.5	5749866.5	546	588.8	Vertical	-	-	-	-	-
JANS-M1	SK0121457	BHP monitoring	525707.1	5747829.5	535	1515	Vertical	Carnallite	-	-	-	-
JANS-M2A	SK0121767	BHP monitoring	504719.1	5744758.5	534	1570	Vertical	Potash	965.80	-	-	-
JANS-P1	SK0100817	BHP shaft pilot hole	519320.0	5749850.0	542	1035	Vertical	Potash	939.0	26.1	5.6	3.96
JANS-P2	SK0100816	BHP shaft pilot hole	519620.0	5749850.0	542	1036	Vertical	Potash	936.95	26.8	5.5	3.96

*Sample length weighted average calculation (compositing) of % K_2O and % insoluble is done from top of the 406 seam. In drill holes that have no or non-continuous geochemical data in the 3.96 m interval the % K_2O and % insoluble values are not composited; however, some of these drill holes can still contribute to the layers of the resource model if the corresponding interval is continuously sampled. Historical drill hole insoluble data is not used.

4.2 Drilling and logging

The spacing between drill holes is approximately 3.6 kilometres. The drill hole spacing is supported by both geological considerations and aligned with Saskatchewan Potash industry practices (Figure 7).

All drill holes were vertical, considered by the Competent Persons as appropriated for the horizontal, gentle dipping potash horizons.

The drilling method used for both the historical and BHP acquired drill holes employed standard petroleum industry rotary drilling and coring techniques in full compliance with Saskatchewan drilling regulations and industry standards. Continuous rotary coring, that provided approximately 8.5 centimetre diameter core, was used from the Dawson Bay Formation through the potash beds of the Prairie Evaporite Formation to obtain subsurface samples. The overall core recovery was approximately 100 per cent with no core recovery less than 99 per cent.

Core from BHP drill holes were geologically logged to identify the potash and interbedded clay seams, supported with downhole geophysical logs. Photographs were taken of the whole core and cut core prepared for analysis.

A quarter sample of all core is provided to the Saskatchewan Subsurface Geological Laboratory for storage and public access, this includes the historic and BHP drill holes.

4.3 Surveys

All surveys for the project are referenced to coordinate system of Universal Transverse Mercator Zone 13N and North American Datum 1983 (UTM NAD83 Zone 13N). The survey data was acquired by certified surveyors.

Surface topography was mapped using aerial surveying techniques with one metre horizontal and 0.5 metre vertical accuracy.

Downhole deviation of BHP's drill holes was measured with a petroleum industry standard deviation tool based on the magnetic method. Historical drill hole collars were surveyed using terrestrial based techniques and the drill holes are assumed to be vertical. Based on the nature of the deep drilling, and BHP's Saskatchewan drilling experience, it was concluded that the possible historical drill hole deviation would not be significant and there is no impact on the measured mineralization thickness.

Seismic data, shot and receiver points, and BHP drill hole collars were surveyed using Real Time Kinematic or Post-Processed Kinematic Global Positioning System surveys. The approximate accuracy of these surveys is 0.5 metres horizontally and vertically.

4.4 Sampling and analytical procedures

Historical drilling (1952-1965) contributed 1,170 samples with variable sampling interval thicknesses to the exploration data set. Historical drill hole samples collected by Kerr-McGee Corporation were processed in their internal laboratory (Kerr-McGee Research Laboratory) by titration method.

During BHP's drilling campaign (2008, 2009) 3,956 samples were collected. The length of the samples was variable (average sample length 15 centimetres) to capture key geological features. The sampling was continuous through the UPL, LPL, and BP potash sub-members. The drill hole core was split, with one quarter of the sample used for geochemical analysis, half was used for metallurgical testing, and one quarter submitted to the Saskatchewan Subsurface Geological Laboratory for archival.

Sampling protocols and procedures are aligned with industry standard practices. The sample preparation protocols (crushing and pulverising sizing requirements, etc.) at laboratories meet standards defined in contracts in line with ISO standards, with QAQC targets established. Saskatchewan Research Council Analytical laboratory analysed all the geochemical samples using the Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES) method. Metallurgical testing of all metallurgical samples was conducted in SGS Lakefield Ltd. laboratory. Both laboratories are ISO/IEC 17025 certified.

4.5 Quality of assay data and laboratory tests

BHP potash has defined a program to ensure an appropriate level of confidence in the accuracy and the precision of the geochemical data derived core samples. This program includes standards, blanks and duplicates.

BHP standards were inserted to check the accuracy and precision of the laboratory in addition to the internal standards inserted by the laboratory as part of their own QAQC program. Blanks were inserted to check for cross contamination during the pulverization and analytical stages and as a check on analytical precision and accuracy. Site duplicates are included to test representativity of taking a split of the coarsely crushed drill core for the analytical work. BHP inserted laboratory duplicates and the contract laboratory inserted repeat duplicates to test laboratory precision (reproducibility) of the various analyses performed.

All the BHP control samples were inserted hidden to the laboratory as a standard industry practice.

Analytical results were monitored during the program and any discrepancies that were observed were immediately addressed. The analytical laboratory produced good quality, precise and accurate data that is suitable for resource estimation.

The BHP collected assay data were checked against geophysical logging data for every hole. The process provides additional verification of the collected assay sample data. To validate the contracted laboratory analyses, a sub-set of 193 samples was analysed by another validation laboratory and compared to the contracted laboratory results.

Historical drill holes represent approximately 50% of the total drill holes. The historical data collected (1956-1965) has no QAQC data available. BHP has verified the quality of this information through a review of the geology of the cores (relogging) and statistical comparisons against the BHP collected data. The statistical analysis showed that the quality of the K_2O geochemical analysis done on the historical data is statistically not different from the analysis done on the BHP collected samples. Therefore, the historical K_2O values were found to be suitable to be used in resource estimation. The LPL sub-member is the most consistent of the potash-bearing units of the Patience Lake Formation at Jansen. LPL extent and continuity are well understood from drill hole intersections. The clay seams present in the LPL are very consistent throughout the Jansen area and the entire Saskatchewan Potash basin. The 406 and 401 clay seams typically bound the mineralization and are easily correlated between the drill holes.

The deposit shows limited grade variability. This is demonstrated by the relatively simple mineral composition characteristics, lack of structural complexity, and the continuous nature of the mineralization. The K_2O grade average from Table 4 is 25.6% and 25.9% for the historic and BHP drill holes respectively.

The statistical analysis done on the historical insoluble analysis indicated that these measurements contain a systematic bias compared to the BHP data, therefore insoluble data from the historical drill holes was not used in the resource estimation.

4.6 Quality of seismic data

Quality of seismic data were continuously monitored during acquisition, including environmental noise, instrument performance, and other metrics, based on these, appropriate actions were taken to preserve high data quality. Shot point and receiver point coordinate surveys were independently validated by a third party before acceptance. During seismic data processing, industry standard quality control steps were followed rigorously to ensure the high quality of the 2D sections and 3D volumes with the direct oversight by BHP.

4.7 Sample security – chain of custody

Chain of custody protocols were implemented, covering the sampling process from core collection at the drilling site, through sampling at the core laboratory, and to sample delivery to the analytical laboratory. These included:

- Boxing, labelling, and sealing of the core at the drill site before transferring to the laboratory preparation facility
- Photographing the core at the drill site then before and after sample selection
- Despatch requests were sent with the samples and emailed directly to the laboratory
- Laboratory confirmation of sample receipt
- Emailing the analysis results directly to BHP
- Returning leftover samples to BHP for storage

Additionally, in the core laboratory, before sampling, the core was verified against the in-situ collected geophysical logs and any discrepancies were addressed.

4.8 Database management and security

BHP exploration data is managed internally using processes and systems that follow the BHP data management procedures and protocols. The BHP potash exploration database has a security model, which restricts user access to those with supervisor approval. All primary data sources for the drill holes are stored on a secure server that is backed up routinely.

Historical drill hole data was manually entered from the copies sourced from the Saskatchewan Ministry of Energy and Resources database. An internal review of the data entered against the source files was completed and entry errors corrected.

Seismic processed data is stored on a dedicated server with restricted access. Copies of the seismic survey field data and the processed data are also stored in a commercial secure geophysical data storage facility. The geophysical well log data collected for the exploration drill holes are similarly archived at the geophysical logging service companies.

BHP's modelling work procedures require statistical checks to ensure the data used for interpretation is the same as the exploration database source data.

4.9 Physical parameters

In situ physical properties are measured using standard petroleum industry geophysical tools deployed in all BHP drill holes. The density logs measured in the drill holes are calibrated against density measurements completed on core samples as part of the rock mechanics testing program.

4.10 Audits and reviews

An independent internal review of the sampling and data collection was undertaken after the completion of the BHP drilling program at Jansen in 2012, and on the geophysical data collection and interpretation in 2015. No material risks to the project were identified and all key recommendations have been completed.

It is the Competent Person's opinion that the data acquisition activities performed at Jansen includes sufficient controls to ensure the data is reliable.

5 Resource estimation

The resource estimation process that BHP follows is well established, consistent with industry practices, and based on the integration of 3D seismic data and drill hole information. A set of procedures governs geological interpretation, estimation and reporting of Mineral Resources including peer reviews.

Documentation of the resource modelling work used for reporting is stored electronically in a secure centralised location. These documents contain information on deposit extents, geometry, detailed geological and geostatistical modelling, data preparation including compositing, and classification parameters.

The resource is a marine evaporite deposited in a vast shallow sea that extended laterally for many hundreds of kilometres. The mineralization is therefore extremely uniform on a several hundred-kilometre scale (Figure 4). Clay seams present within the mineralization can be correlated across the entire extent of the mineralization units. These marker seams allow a reliable way to identify the different mineralized units and estimate their properties.

Geological features posing a hazard to mining are included in the model. Carnallite zones and no-potash anomalies are part of the resource model but are excluded from the Mineral Resource.

Site visits have been undertaken periodically, particularly during the drilling and seismic programs, by the Competent Persons and other BHP representatives involved in resource development activities.

Competent Persons also provided geological support for the construction and detailed infrastructure design of the Jansen shafts and have observed and logged the LPL potash unit in the shafts during construction.

5.1 Assumptions

Cut-off parameters

The Mineral Resources are constrained stratigraphically, from the top of the 406 clay seam contact with the salt unit to a thickness of 3.96 metres. The style of mineralization and the mining method does not support selective mining based on quality cut-off values. The horizontal extent of the resource is defined by the occurrence of mapped anomalies and by a boundary that is 800 metres away from the lease edge.

Mining factors

The mineralization will be mined with continuous boring machines in a single pass within the stratigraphic bounds of the seam. During mining, it is expected that dilution from low-grade material cut from outside the stratigraphic markers may occur to maintain ground stability. The dilution is accounted for in the Ore Reserve.

Metallurgical factors

Carnallite anomalies are mapped and included in the resource model with appropriate mineralogical parameters, as magnesium from the carnallite can interfere with ore processing. Insoluble content is also included as a resource model parameter because insoluble material is required to be removed during processing.

The moisture content of the LPL sub-member is estimated to be 0.3 percent based on analytical testing.

Environmental factors

Brine waste from processing operation will be disposed into an aquifer approximately 400 metres below the LPL mining horizon.

The solid salt waste from processing will be temporarily stored on the surface in a tailings management area, together with the insoluble fraction of the mineralization.

The estimation of these volumes is based on the resource and subsequent reserve model parameters, and environmental precipitation model. The related Environmental Impact Statement has been submitted to, and approved by, the Saskatchewan Ministry of Environment.

5.2 Estimation and modelling techniques

Geological modelling techniques employed by BHP rely on the close integration of drill hole data and 3D seismic information.

Drill hole data interpretation is based on drill core and collected downhole geophysical data. Detailed mapping of geology relies on the identification of clay seams and related features and is based on visual core logging, geochemical assay data (BHP and historical drill holes), and geophysical data from BHP drill holes, including high-resolution acoustic televiewer data.

The 3D seismic data is first matched to drill hole data using standard geophysical techniques. This is followed by the mapping of geological horizons throughout the seismic volume and by the identification and mapping of structural geological features. Quantitative interpretation of the seismic data includes inversion of the seismic data using advanced seismic techniques to generate volumes of physical properties that reflect the geology of the deposit.

Drill hole and seismic data interpretations undergo an internal peer review process to ensure accuracy and consistency. Datasets are cross-checked and verified against each other to ensure the consistency of interpretation.

Mineralization domains are established based on information generated by the quantitative interpretation of the seismic data. The domains within the LPL Mineral Resources include: the mineralization, areas of extensive no-potash anomalies, carnallite anomalies, and areas with structural features that pose a hazard to mining. The established domains are verified against drill hole data.

Due to the horizontally continuous nature of the deposit, lack of structural complexity, and proposed extraction method, the resource is modelled on a two-dimensional grid. The resource is divided into layers, or plies, based on geological factors and mining constraints. The primary and thickest layer contains the bulk of the resource and the highest grade. Additional thinner layers above and below are included to model the resource outside of the main zone.

Drill hole data preparation for resource modelling starts with identification and recording of clay seam locations, followed by the compositing of geochemical assays and physical property data from well logs over the defined model layers. Intervals with missing data are automatically excluded from the process. Correlations between physical properties of the resource are established and noted for use during the resource estimation process.

Information from the inverted seismic volumes are extracted for the LPL level. This information, together with the composited drill hole data, are used to generate the resource model. The modelling grid spatial dimension is set to 30 metres by 30 metres, which corresponds to the seismic survey bin size. This ensures that the full detail of the geological information, captured by the seismic survey, is used in the resource modelling process.

The estimation of qualities (K_2O, MgO, insoluble) and density was performed using the co-located co-kriging approach, where the hard data are the composited drill hole information and the soft data are the seismic information. This methodology allows the integration of high-resolution seismic data and sparse drill hole data without the loss of spatial resolution, and an increase in the confidence in the estimate due to integration of all available data. Properties are estimated in a sequential manner to ensure the observed correlations are preserved. In carnallite domains, the grade and physical property values are assigned to cells due to the limited data availability from drill holes. In no-potash domains the grade is assigned and physical property values co-estimated.

Validation of the estimates include:

- visual validation of models
- global statistical comparison of volume weighted average cell grades to both raw and de-clustered drill hole grades
- comparison to previous resource estimates

An internal peer review process is also followed and documented throughout each resource estimation step.

The Competent Person considers that the resource estimation process is adequate to support the Jansen Mineral Resources.

6 Mineral Resource statement

6.1 Classification

The classification of Mineral Resources takes in account two main factors:

- exploration data coverage (2D seismic, 3D seismic, and drill hole data)
- estimation uncertainty

The resource estimate is classified as measured when it is based on a resource model that integrates 3D seismic and drill hole information and the estimated uncertainty of predicted tonnage and grade estimates are less than ±10 per cent over an approximate annual production area.

The resource estimate is classified as indicated when it is based on a resource model that integrates 3D seismic and drill hole information and the estimated uncertainty of predicted tonnage and grade estimates are less than ±15 per cent over an approximate annual production area.

The resource is classified as Inferred where the presence of the intact Prairie Evaporite Formation is confirmed by 2D seismic data with line spacing no wider than 4,000 metres and a sufficient number of drill hole intersections are available to infer the presence of the LPL sub-member.

The areal extent of the classified Mineral Resources is shown in Figure 8.

6.2 Discussion of relative accuracy/confidence

The relative accuracy and confidence of the resource estimate is deemed appropriate for the intended purpose of global resource reporting and medium to long-term mine planning. Accuracy and confidence in the resource estimate due to different factors that contribute to the estimate, the estimation parameters, and outcomes of validation were considered when classifying the resource.

6.3 Mineral Resources declared

Table 1 contains the statement of LPL potash Mineral Resources as at 30 June 2021. The declared classified Mineral Resources are shown in plan view in Figure 8. Zones within the tenure boundary that have not been classified represent areas where no mineralization is present due to the presence of carnallite or no-potash anomalies, areas of hazardous geological features, stand-off around tenure boundaries, or where BHP does not have tenure rights.

The Competent Person considers the classification approach and methodologies applied are appropriate for this deposit.

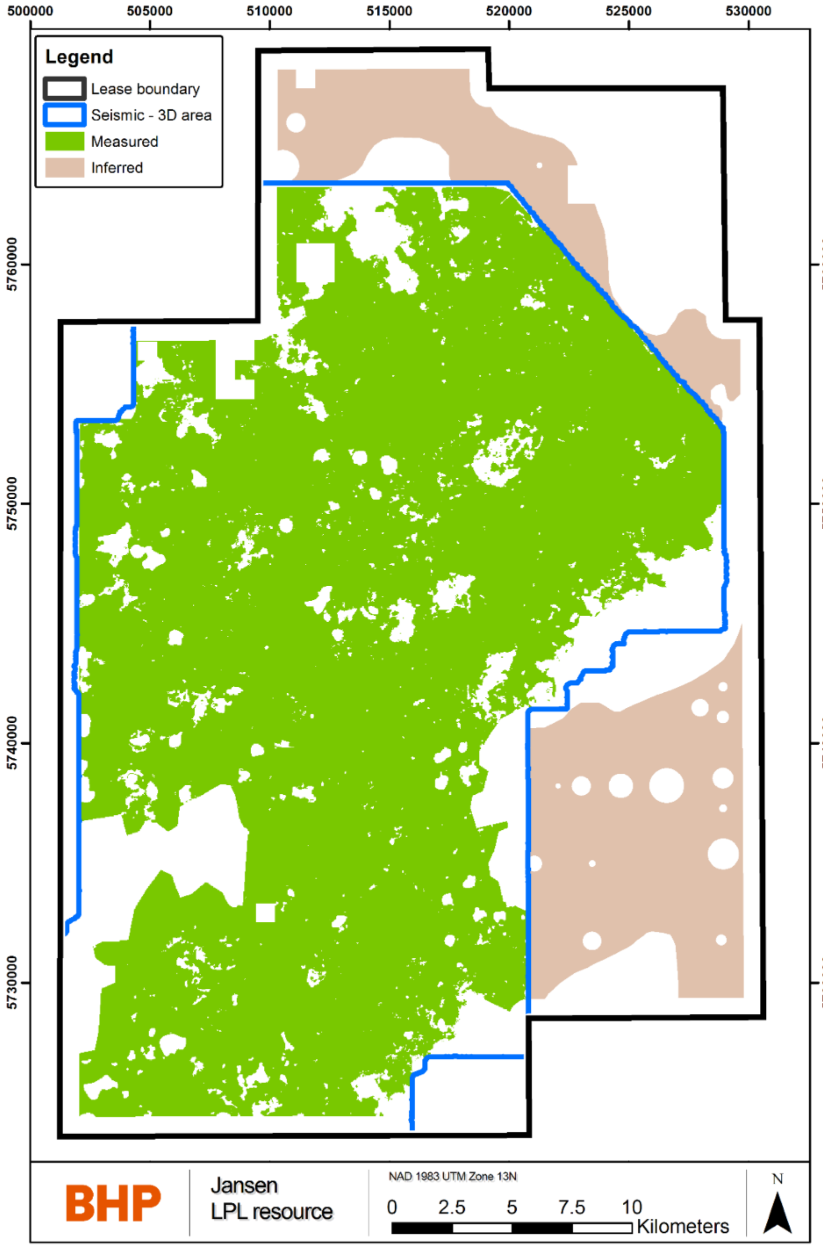

Figure 8 Plan of the Jansen LPL classified Mineral Resource

7 Independent Review

The Jansen Mineral Resources were independently reviewed by a third party in May 2020. The review did not identify any major issues with the geological model or resource estimate. All issues identified were addressed and no further update to the resource estimate has been made. No changes in the geological modelling or resource estimate processes have been implemented since the 2020 review.

The resource estimation methodology was also the subject of several project-level independent reviews and audits as part of the BHP internal assurance program.

8 Future Work

Future exploration work programs will continue underground to prepare for commencement of operations. This will include various underground data collection programs to inform mine design and development.

9 General mine planning criteria

The approved mine plan for the Jansen Ore Reserves is the life of mine plan for the Definition Phase Study (DPS), equivalent to Feasibility Study level, completed in Fiscal Year 2021 (FY2021) in accordance with the BHP requirements for Major Capital Projects.

9.1 Assumptions

9.1.1 Mineral Resources estimate for conversion to Ore Reserves

The Jansen potash project DPS resource model and estimate have been used for the mine planning and conversion to the Ore Reserves as at 30 June 2021. The Mineral Resources reported are inclusive of the Ore Reserves.

9.1.2 Site visits

The Ore Reserves Competent Person has periodically completed site visits focussing on the early construction associated with the shafts, camp construction, water supply and treatment facilities, temporary and permanent utilities and offsite road infrastructure.

9.1.3 Study Status

The Jansen potash project DPS supported the conversion of Mineral Resources to Ore Reserves. The study demonstrated that the proposed mine plan was technically achievable, economically viable, and considered all material modifying factors.

The first phase of operations for Jansen (Stage 1) has a well-defined scope and mature project execution plan. Project value drivers have been benchmarked, providing confidence in estimates, understanding of risks and controls. The project has been subject to a recent series of external and internal independent reviews delivering a bottom-up review of capital cost, schedule, production capacity, and operating cost.

9.1.4 Cut-off parameters

Ore Reserves are defined by the LPL stratigraphic unit with the top identified by the contact between the 406 clay seam and overlying halite consistent with the Mineral Resources. The production mining system can excavate a height range of 3.7 metres to 4.4 metres, which is informed by the deposit thickness. Mining dilution is captured in the mine plan for planned overcut of the 406 clay seam, and where required for cutting the overlying halite unit for ground stability.

Carnallite and no-potash anomalies were interpreted from seismic data and modelled but are not included in the declared Mineral Resources. The mine design avoids large scale carnallite and no-potash anomalies. Some smaller scale anomalies are included within the mine design and therefore in plant feed. This dilution is required since no waste handling system exists.

The combined dilution tonnage of planned carnallite zones and no-potash anomalies is less than 10 million tonnes of the declared 1,070 million tonnes. These anomalies are represented in (Figure 9) in white within the green Measured Resources distribution. It should be noted that these volumes are not reported as Mineral Resources and that they are included in the mine design as shown in Figure 9.

Diluting carnallite zones were assigned qualities of 14 per cent K_2O, 5 per cent insoluble and 7 per cent MgO. Diluting no-potash zones were assigned qualities of 10 per cent K_2O, with insoluble and MgO values co-located and co-kriged.

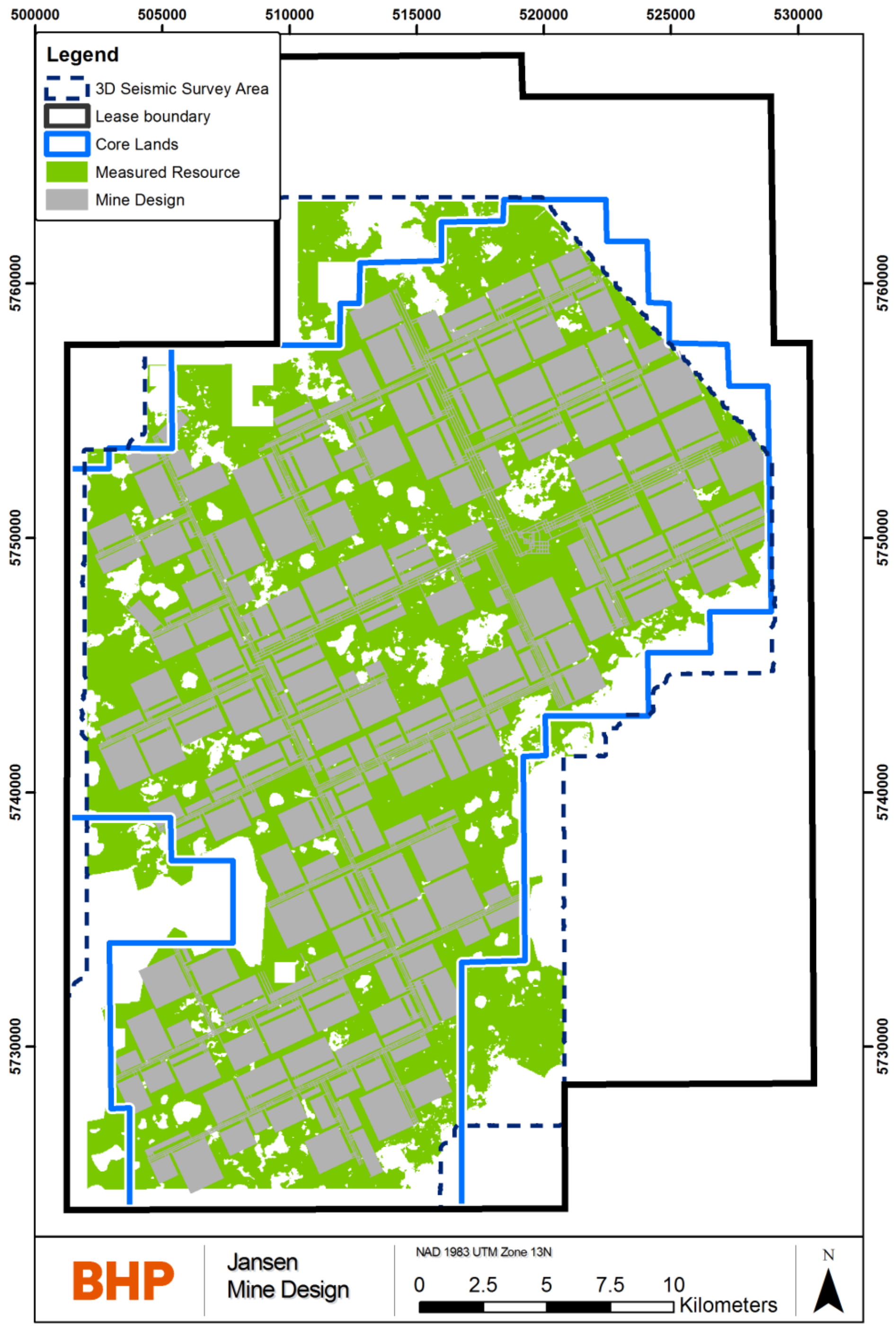

Figure 9 Jansen mine design with Measured Resource

9.1.5 Mining factors

The deposit is relatively two-dimensional (laterally extensive and relatively thin) and is “soft rock” thus amenable to mining using track-mounted boring machines, roof-mounted or floor-mounted conveying systems, and ancillary rubber-tired mining and transport equipment. The primary method of extraction is continuous mining using long room and pillar method within the Lower Patience Lake (LPL) sub-member. The LPL mining zone at Jansen ranges in depth below the surface from 840 metres in the north to 1,010 metres in the south.

The mine is designed to avoid the occurrence of water inflow from over lying aquifers through management of the extraction ratio, such that as time dependent creep of the pillars occur, the overlying strata withstands the mining induced stresses and remains intact. Production panel mining extraction ratio ranges between 41 per cent to 44 per cent and long term travelways have a reduced extraction ratio of 15 per cent for stress shielding.

Hydraulic conductivity measurements taken in drill holes and on core samples show that the carbonate members of the Dawson Bay Formation have low permeability or low inflow deliverability potential, but may pose potential risk of water inflow if hydraulically connected to vertically adjacent aquifers. The mine therefore treats the carbonates of the Dawson Bay Formation as having a high permeability as an inflow risk mitigation.

The geotechnical parameters have been supported and developed by external consultants and Jansen potash project geotechnical subject matter experts. The parameters were developed after comprehensive empirical and numerical modelling analysis. Including benchmarking studies of the deposit assessing; the geological conditions, depth, extraction ratio, extraction rates, and expected useful life of the entries. The pillar widths are based upon the study outcomes and recommendations, and guide the mine design, with depth and overburden type forming the calculation basis of the in-situ stress for the Prairie Evaporite. Pillars within the mining horizon are used to enable safe mining of entries, maintain entry stability throughout their required life, and maintain the integrity of the overlying strata. Figure 10 and Table 5 describe pillar type and dimensions.

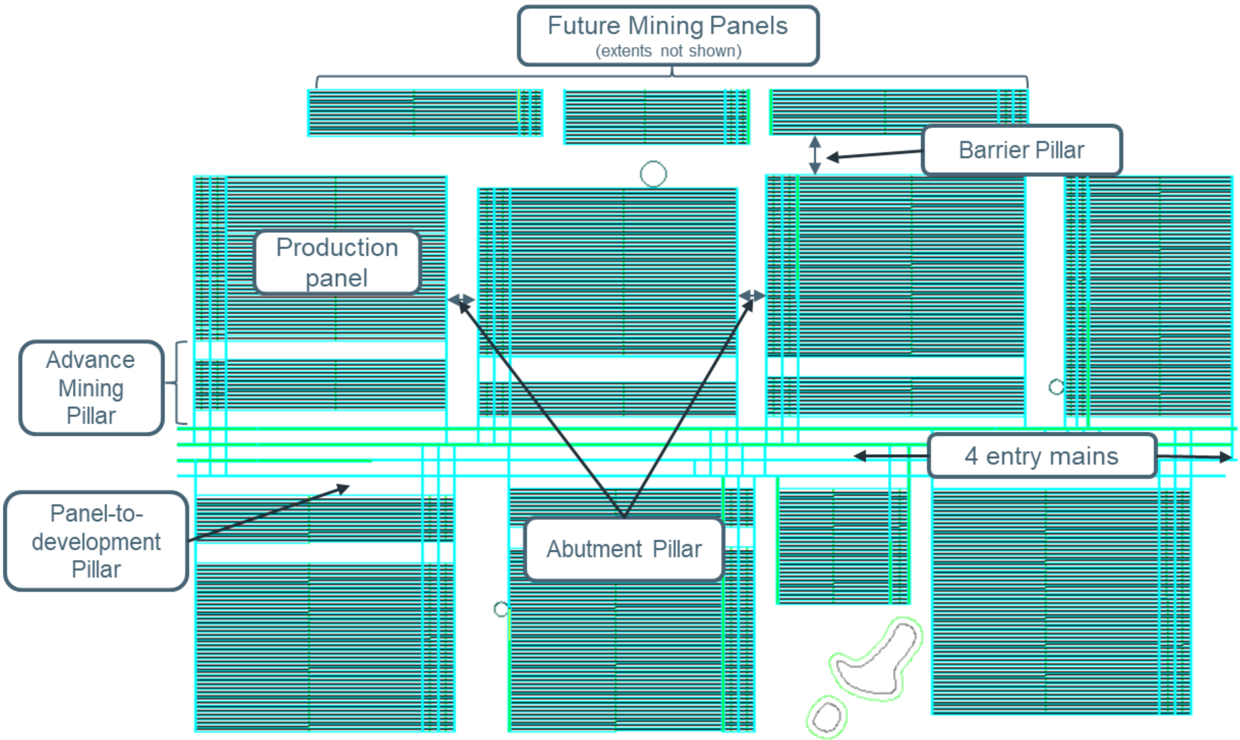

Figure 10 Typical pillar types

Table 5 Pillar type and dimensions

Pillar Name/Type	Distance (m)	Note
Shaft (pillar diameter)	4,000	Production mining exclusion zone
Mainline entry	100	
Block entry	60	
Advance mining	500	Function of distance to end of mining block
Panel to development	150	
Abutment	150	
Barrier	300	
Town limit	500	Standoff from demarked town limit
Production panel	15 – 17	Varies with depth
Collapse – Class 1, 2, 3	300, 300, 50	
Drill hole – Historic, BHP (pillar diameter)	180, 100	Historical refers to all holes pre 2008
Brine disposal well (pillar diameter)	200	

Mechanically-anchored rock bolts are the planned ground support method for the mine. The support pattern is based on overlying salt beam thickness and/or a change in material characteristics. When the overlying strata is thinner than the practical limit of rock bolt ground support, the strata will be excavated and become part of the processing stream as dilution. This dilution arising from mining overcut/undercut is combined with the dilution arising from orebody heterogeneity, as described in Section 9.1.4, to generate diluted process plant ore feed. The Ore Reserves estimate is considered to be fully diluted for reporting purposes.

Roof beam thickness thresholds are listed in Table 6. Ground management in anomalous areas typically occurs in the form of ground support through rock bolts, cribbing, localized decreased extraction rate, and rarely with room abandonment.

Table 6 Roof beam thickness thresholds

Entry Type	Cut	Bolt
Production	0 to 30 cm	30 to 50 cm
Development	0 to 50 cm	>50 cm

The production mining rooms are excavated in two passes, yielding a 12 metres wide opening of varying length. Production pillar widths vary with deposit depth between 17 metres and 15 metres. Mining height is variable between 3.7 metres and 4.4 metres, with an average cutting height of 3.8 metres; the stability of strata overlying the 406 clay seam drives cut heights greater than the targeted mineralised zone. With the exception of the shaft pillar area, all excavations are expected to occur in the LPL. Ore losses between mining face and the ore processing plant have not been considered.

Borer miners and accompanying Extendable Belt System (EBS) make up the selected mining system for continuous mining in production rooms. A network of conveyor belts transport the ore from the working face to the shaft area for hoisting at the Service shaft. Production mining is supported by a fleet of continuous mining machines, battery haulers, Load Haul Dump units, maintenance vehicles, and personnel carriers.

The mining system test (MST) program was identified for de-risking the unique aspects of the integrated mining system design and has demonstrated system capability. The Competent Person considers that the selected configuration is appropriate and the risks are understood.

Underground excavation of the shaft pillar and district development will be completed during mine development. The shaft pillar contains infrastructure including mine facilities, mine utilities, ventilation infrastructure, and the bulk material handling system.

The mine conveyor network is designed to transport ore from each mining face to the shaft pillar. The shaft pillar contains a series of conveyors and storage or buffers prior to flask loading, where the ore is hoisted to surface for processing. The three main conveyor system configurations are panel, block and mainline conveyors (Figure 11).

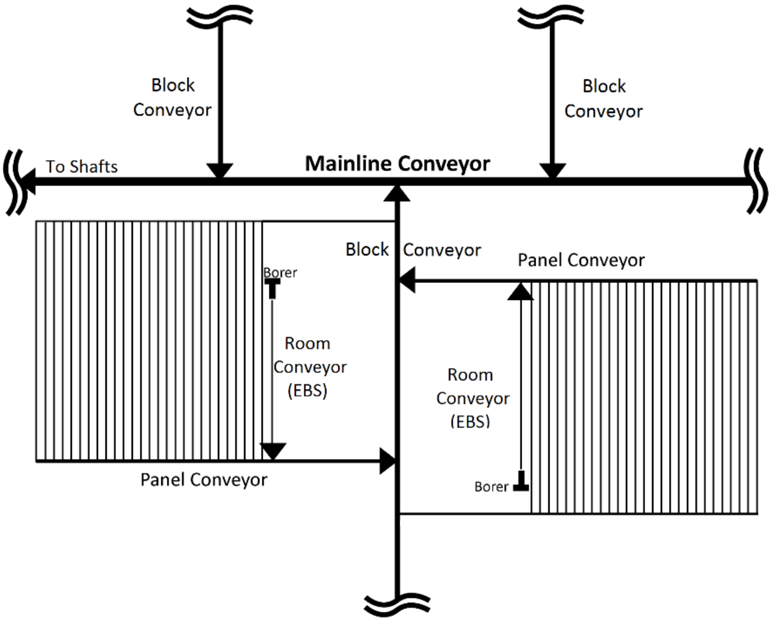

Figure 11 Conveyor type and application

The mine will begin initial production following the construction of the main bulk material handling facilities to enable ore flow through the main ore storage bin, surge bin, service shaft loadout, and service shaft hoisting systems. Following the completion of performance testing of the first borer/EBS mining system the operation will move forward to full capacity. Handover to Operations will occur at designated boundaries in the east and north districts.

The Production Volume Estimate (PVE) model is a comprehensive dynamic simulation model of the entire value chain from which production capacity changes are weighed against capital expenditures (CAPEX) and operating expenses (OPEX) differentials to yield an incremental net present value.

The outputs from the PVE model include the range on the individual production variables as well as the combined and correlated range for integrated production capacity. Key variables impacting integrated production capacity are run-of-mine (ROM) ore throughput, potash grade, and potash recovery. The ranges of each variable and integrated production capacity are shown in Table 7. In the Competent Person opinion, the ranges are reasonable and have been developed with external guidance.

Table 7 Ranges of production variables and integrated production capacity

	Range	Expected
Steady-state average Run of Mine (ROM) throughput (Mtpa ROM)	9.9 to 13.1	11.45
Life of Mine average grade (% K_2O)	21.3 to 26.3	24.8
Life of Mine average recovery (%)	86.5 to 95.9	92.5
Integrated production capacity (Mtpa product)	3.45 to 5.19	4.35

9.1.6 Metallurgical factors

Conveyors will transport ore from the Service shaft to the processing plant or the raw ore stage building. The ore will then be crushed and screened before being fed to the wet scrubbing circuit, where it will mix with brine in the pulping tank. Salts (which contain the potash) will be separated from the insoluble material, then pumped to a flotation circuit to form a potash concentrate. The concentrate is then transferred to a centrifuge to remove the brine to form a concentrate cake. The fine salts are then mixed with reagents. The processing circuit will produce two types of saleable potash; a standard-sized and granular sized product. From the processing plant, the saleable potash will be loaded on to potash railcars and hauled to Westshore Terminals in Delta, British Columbia. A simplified process flow block diagram for the Jansen processing facilities is shown in Figure 12 and the physical site layout is shown in Figure 13.

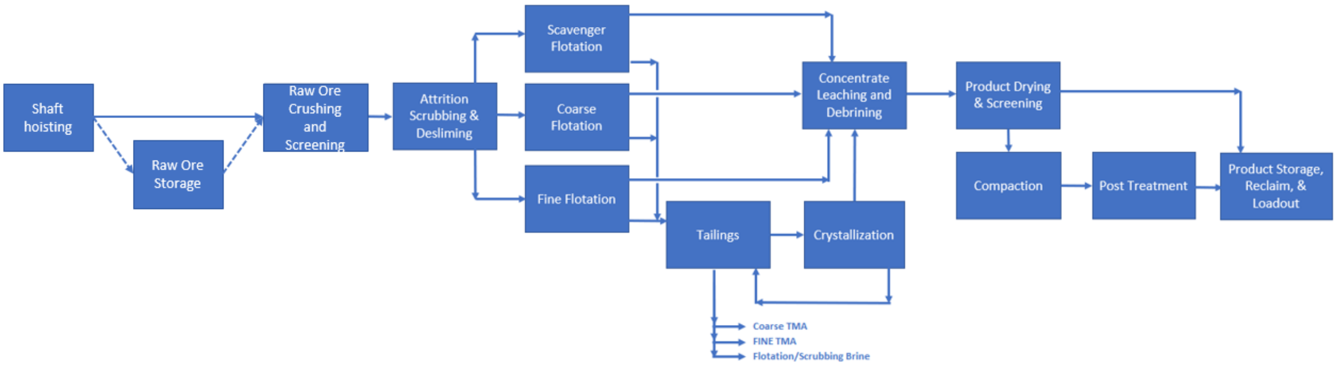

Figure 12 Jansen Process block flow diagram

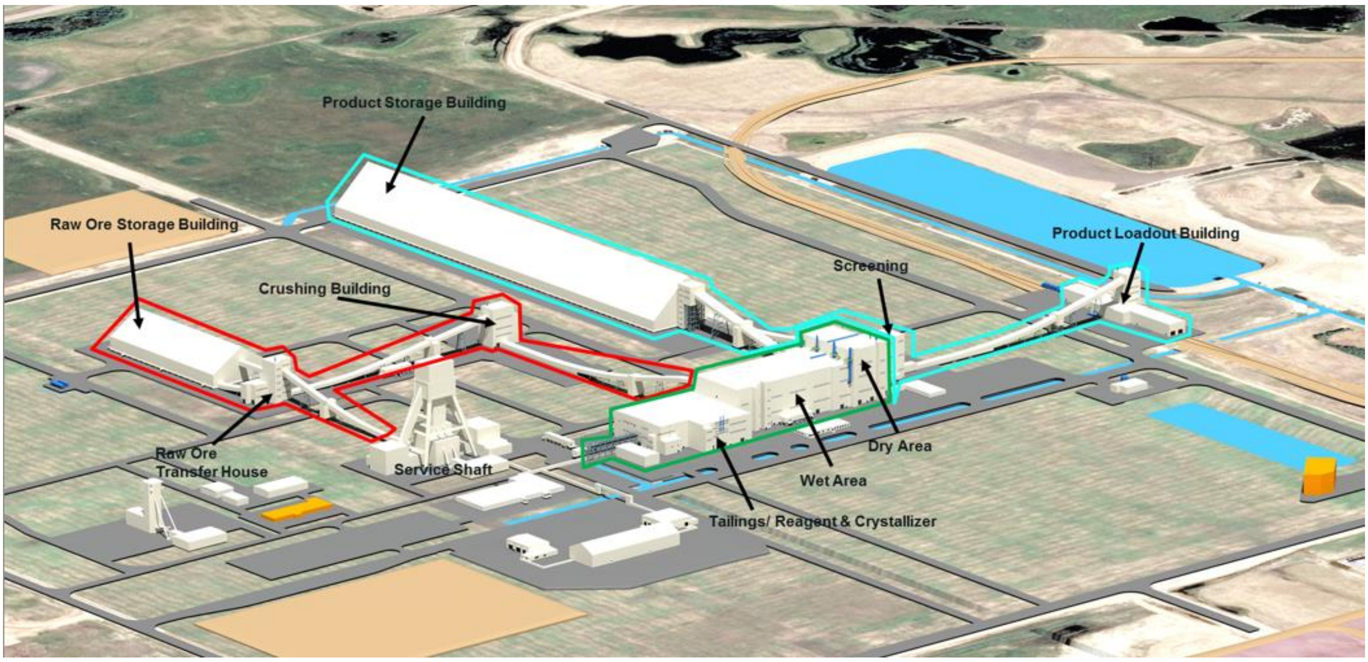

Figure 13 Processing sub-areas

The process design of the plant is based on three principal processing considerations:

- **K:** Target mineral recovery
- **Mg:** Potential negative effect on flotation recovery
- **Insoluble Mineral Content:** Gangue minerals to be removed prior to flotation

Run-of-mine ore grade variability is expected to be low, as all production sources are effectively blended through the bulk materials handling network. The ore variability identified through the DPS ranged mine plans will be readily managed within the plant design capacity regarding recovery and reagent dosage rates.

Metallurgical Test Work

The metallurgical test program included the following validation tests and were performed with pilot scale equipment:

- feed chemical analysis
- attrition-scrubbing
- hydrocyclone water insoluble removal
- rougher hydrofloat flotation
- scavenger hydrofloat flotation
- regrind column flotation
- fine column flotation
- slime pneumatic flotation
- settling tests for thickener sizing
- hot leaching tests of flotation tails
- reagent scoping testing
- concentrate leaching

Metallurgical test work was first conducted between 2008 and 2009 by SGS Lakefield to investigate potash recovery using core samples representing the LPL mining horizon of the Jansen orebody. Subsequent flotation test work was conducted in 2015 at the Eriez Flotation Division in USA. Test work was completed by the Saskatchewan Research Council (SRC) in Saskatoon between August 2016 and August 2017 on the remaining Jansen ore and a surrogate ore sourced from another operation.

Additional metallurgical test work was completed using LPL material from the shaft sinking program in 2018, achieving 91 per cent recovery. Construction of the slimes recovery circuit occurs three years post first product, increasing expected recovery by 2 per cent to yield an expected plant recovery of 93 per cent. The Jansen process utilizes proven technology and equipment for treating Saskatchewan potash ore with the projected recovery of KCl higher than historically attained by Saskatchewan mines. The Jansen flotation circuits utilize modern flotation cells with proven performance for specific flotation applications from ultra-fine to coarse potash.

Jansen will produce a minimum K_2O product grade of 60.2 per cent for granular product and 60.5 per cent for standard product. The port facility will have accommodations for off-specification product storage.

A product quality program is to be developed to ensure product quality through the process stream and product material handling.

There are no known deleterious elements within the deposit.

The run of mine (ROM) quality used for plant design in DPS was based on averaged weekly mine plan data over the life of mine. Notably, the vast majority of ROM quality fall within the process design criteria, and where the ROM quality falls outside of the process design criteria, reducing plant throughput rate renders all ROM material processable.

9.1.7 Environmental

BHP received Ministerial Approval from the Ministry of Environment (MOE) for the Project in 2011. Since the approval, further engineering and project optimization was completed which resulted in changes to the mine plan, site layout and schedule. To address the changes, two submissions were made to the MOE under Section 16 of the *Environmental Assessment Act* in November 2017 and approval(s) were received in April 2018.

Surface subsidence effects were considered in the environmental assessment undertaken. The effects of mining activities on the surface will be monitored and reported to the Government of Saskatchewan. No material changes to surface watershed are anticipated.

A Conceptual Closure Plan (CCP) has been developed as part of the DPS and considers production at Stage 1 level plus potential future expansion. The abandonment and reclamation requirements for the project are regulated by federal, provincial and municipal legislation, BHP standards, EIS Commitments, and International Standards and Guidelines. The closure plans will comply with all requirements.

The tailings management area (TMA) at closure will consist of the fine and coarse areas. The fine tailings are expected to take roughly 50 years to consolidate to enable access for equipment to grade, recontouring, placement of appropriate cover, and revegetated. The coarse TMA will be closed and reclaimed through either natural or enhanced dissolution and is derived from the total tailings created during the mine life. The reclamation of coarse tailings involves long-term dissolution by precipitation, and the collection and disposal of the resulting brine through brine disposal wells into the Winnipeg-Deadwood Formation.

Closure costs are derived from a conceptual closure plan and are realised the year after last production.

Heritage

In 2009, a Heritage Resource Impact Assessment (HRIA) was completed to support the submission of the Jansen Environmental Impact Statement (EIS). The HRIA involved pedestrian surveys, documentation of existing heritage features and informal interviews. Three heritage sites were identified, one prehistoric archaeological site and two historic built heritage sites. The Heritage Conservation Branch (HCB) determined that no further work was required at the two historic built heritage sites. With respect to the third site, a Heritage Resource Impact Assessment (HRIA) was completed in May 2021. The assessment was submitted and is currently under review by the Saskatchewan Heritage Conservation Branch and is not expected to have any impact to the project execution or mine operations.

9.1.8 Social Factors

BHP is committed to working with Indigenous Communities including the local First Nations communities and Métis regions identified in the Jansen potash project Environmental Impact Statement. There are six primary First Nations in the vicinity of the Jansen potash project. BHP has entered into Relationship Agreements with all six, comprising of Kawacatoose, Day Star and Muskowekwan First Nations in 2013 (refreshed in 2020), Beardy's and Okemasis Cree Nation and Fishing Lake First Nation in 2014, and George Gordon First Nation in 2020.

9.1.9 Infrastructure

The major infrastructure requirements for the Jansen Potash Project are:

- a fully lined service shaft with permanent hoists, equipped with steel guides and loading/unloading to accommodate two skips and a service cage
- a fully lined production shaft for return air and emergency egress, mine ventilation
- shaft pillar area with skip loading facilities, conveyor networks, raw ore storage bin, refuge chambers, workshops, materials management areas, offices, mobile equipment battery charging stations, and parking areas
- a surface ore processing plant
- non-process infrastructure, including a tailings management area, administration building, warehousing, workshops, utilities, rail, and port facility to ship product to overseas markets

On-site infrastructure includes power distribution, raw water storage and distribution, potable water treatment, fire water distribution, diesel fuel storage and distribution, natural gas distribution, ancillary buildings and facilities, tailing management area, sewage system, waste collection, site drainage, on-site roads, on-site rail, communications and technology infrastructure, the process control system, and the temporary construction facilities. On-site utilities will be distributed in a combination of pre-cast trenches, direct buried cables, and buried pipes for water, sanitary effluent, and natural gas.

Offsite utilities are provided by the *Crown* corporations of the province of Saskatchewan while the offsite roads are owned by either the local Rural Municipality or the provincial government. Refer to Figure 1 for Saskatchewan primary road network detail and refer to Figure 2 for the acquired lands for surface development. The electrical, water, natural gas, and communication utilities required for production are established at Jansen site. Rail spurs connecting to Class 1 rail networks will be constructed. Approximately 7 km of rail spur adjacent to the Jansen mine site will be owned and operated by BHP.

The tailing management area (TMA) stores solid reject material from the process. Approximately 80 per cent of the overall tailings volume is coarse tailings with the remainder as fine tailings. Once deposited, coarse tailings form geotechnically stable piles. The TMA is designed with additional capacity to manage rainfall events. Brine from the TMA is collected in the coarse tailings area and recovered for use in the process plant. Excess brine is sent to a brine disposal well system, where it is injected into the Deadwood Formation approximately 400 metres below the potash mining horizon. Design aspects of the TMA were generally completed in accordance with the Canadian Dam Association Dam Safety Guidelines and the Saskatchewan Ministry of Environment (MoE). The coarse and fine tailings areas are sized to accommodate storage of tailings produced over the life of the mine.

Construction delivery to site occurs by road. During operation, the majority of deliveries to site will arrive by road, with the exception of one reagent (de-dusting oil) which will arrive by rail.

Outbound transportation consists of distribution of potash using rail from the Jansen site.

The port terminal, located in Delta, British Columbia, Canada, will unload, store, and load shipping vessels.

10 Market and commodity price assumptions

10.1 Cost factors

As part of the Jansen DPS, an estimate was developed to determine the operating costs and sustaining capital costs (OPEX) associated with the Jansen potash project once in operation. The estimate includes:

- mining operations and maintenance
- processing operations and maintenance
- non-process infrastructure (NPI) operations and maintenance
- indirect costs including costs associated with the Saskatoon Integrated Operations Centre (IOC)
- logistics including port and rail
- property taxes (including Municipal taxes and School taxes)
- carbon costs and applicable sales tax

The OPEX inputs and drivers have been primarily sourced from bottom-up estimates, operational experience and benchmarking, budget quotes from potential vendors, design specifications, and currently contracted rates where applicable. Cost estimate classification is aligned with AACE International recommended practice 18R-97. The mine gate operating cost estimate for Jansen DPS is developed to a Class 2 accuracy level for all areas from the mine face up to and including rail wagon loading. Port costs have been developed between Class 1 and Class 3. Rail freight rates have estimated and reviewed by reputable third parties.

Sustaining capital has been estimated for the project and based on:

- elements of the life cycle cost analysis that meet the sustaining capital threshold
- capital required for expanding the underground operations to sustain the Jansen Stage 1 capacity
- estimated allowances for small projects and driven by hazard reduction and optimizations within the site

Contingency has been applied to all sustaining capital based on an uncertainty analysis that was conducted utilizing external subject matter experts.

Similar to sustaining capital, an uncertainty analysis was completed on the operating cost estimate and scope areas developed which resulted in a level of contingency that was applied to each of the cost areas.

Costs reflect all applicable taxes (e.g. corporate income tax, potash production tax, royalties, etc.).

Closure costs, including closure capital and rehabilitation costs, are considered after mining is complete and developed using a site-specific costing model developed by a third party. The closure cost estimate is made up of a direct cost estimate for each of the reclamation activities identified, monitoring and post-closure costs, and indirect costs.

Escalation was calculated using Jansen potash Project escalation model populated with escalation data obtained from a reputable third-party provider. Escalation was calculated through to project completion. This was completed for each currency represented in the estimate using the BHP foreign exchange rate protocols.

10.2 Revenue factors

BHP utilises a common process for generation of commodity prices and foreign exchange (FOREX) rate across the business and Jansen uses the FY2021 Potash price and FOREX from the approved price protocol informed by BHP Group. These potash commodity price protocols include short-run and long-run marginal estimates. The price protocols and the process that establishes them is commercially sensitive and is not disclosed in this report.

First product is expected in 2027, with construction expected to take six years.

Revenue is based upon achieving the expected integrated steady state production capacity of 4.35 million tonnes per annum potash at a combined product grade of 60.4 per cent K_2O, averaged between granular and standard product produced, over the estimated 94 year life of the mine (Table 7). The run-of-mine ore grade from the DPS mine plan was used on a period basis to determine the process recovery.

There have been no price penalties realised from off-specification product in the DPS.

10.3 Market assessment

Potash plays a critical role in providing the world's agriculture with potassium, an essential and non-substitutable crop nutrient. Potassium (K) is one of three essential macronutrients that plants need to thrive, along with nitrogen (N) and phosphorus (P). Potassium nutrient is supplied to crops in three ways: 1) through the application of mineral fertilizers; 2) through organic manures and crop residues; and, 3) from the native mineral content of the soil.

Potassium chloride or Muriate of Potash (MOP) is the most abundant and lowest-cost source of potash, accounting for more than 90 per cent of the primary demand. MOP is consumed principally as fertilizer, although numerous industrial end-uses make up a small minority of the market. As fertilizer, it is most commonly used straight or physically blended with other fertilizers ('bulk-blends'), but it can also be processed into other forms of potash or NPK compound fertilizers.

Incremental potash demand growth is mainly attributable to rising food demand and its associated crop production, and the intensity of potash fertilizer to support that crop production. The vast majority of crops are grown for human food chain and population growth is expected to be the major driver of incremental crop production, with rising calorie intake and changing dietary patterns responsible for most of the remainder.

The five largest potash consumers of MOP (Brazil, China, India, Indonesia, and the United States of America) account for roughly two-thirds of the global market.[1] Demand growth in the next decade is ranged between 1 per cent and 3 per cent, compared to historical growth of approximately 2.4 per cent per annum in the previous decade.[2] Peak demand for potash is not expected within the next 100 years, but the rate at which demand grows above the rate of population growth is projected to decline. Supply depletion is relatively low at 1.5 percent and due to the homogenous nature of underground potash deposits; mine lives are typically very long.

Natural occurrences of potash suitable for fertilizer production are geographically quite scarce, but a number of very large deposits are present in a few key locations globally. Deposits are primarily in underground seams extracted by conventional underground mining or solution mining, and from brine lakes through evaporation and processing. More than three-fifths of MOP production today comes from three major basins in Canada, Russia, and Belarus. Four companies represent a large proportion of potash industry production.

Jansen plans to sell two agricultural potash grades to retain simplicity while ensuring sufficient market access. Sales will be made to geo-diverse customers to provide access to a globally competitive market and protect against individual regional uncertainties. The Competent Person notes that no sales contracts are in place and considers there to be reasonable time to secure sales contracts prior to first production.

10.4 Economic

Calculation of the net present value (NPV) was conducted using discount rates, estimated inflation and tax rates per BHP protocols.

Sensitivity testing completed during the DPS used a range of prices, FOREX and cost scenarios demonstrates a positive NPV.

The DPS determined a mine plan and production schedule that is technically achievable and economically viable.

11 Ore Reserves estimation

The approved mine plan for Jansen is the life of mine plan for the Jansen DPS and was completed in FY2021, in accordance with the BHP requirements for Major Capital Projects. Mine schedules are optimised on value and take into consideration operational and capital costs, production system constraints and market conditions. As noted, some no-potash anomalies and carnallite areas excluded from the declared Mineral Resource are treated as dilution in the Ore Reserve.

11.1 Reserves generation

Ore Reserves within the LoM schedule are generated from the process described in Section 9 of this report to produce mining models and mine designs. The Ore Reserves are classified in accordance with the guidance provided by the JORC 2012 Code.

11.2 US SEC compliance

The US SEC have updated the reporting codes effective from the first full financial year after 1 January 2021. BHP will provide an Ore Reserves estimate compliant with the Regulation S-K, Title 17 subpart 229 in our FY2022 Form 20-F submission.

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[1] CRU

[2] Forecast average growth per annum of MOP shipments 2019-20 to 2030 (BHP range)

12 Ore Reserves statement

12.1 Classification

The Probable Ore Reserves are comprised of Measured Mineral Resources because the targeted mineralised zone has not been exposed to any significant degree to validate the modifying factors. At the writing of this report, the LPL has been exposed in the wall of each shaft. A minimal shaft station has been excavated in the Service shaft on the UPL member and no lateral development completed to date. Given the minimal amount the orebody has been physically revealed, there remains some uncertainty with respect to the planned pillar sizes and the overlying roof beam thickness which correlate to the total recoverable tonnes and mining dilution, respectively.

12.2 Discussion of relative accuracy/confidence

The relative accuracy and therefore confidence of the Ore Reserves estimates is deemed appropriate for their intended purpose of global Ore Reserves reporting and long-term production planning. The application of modifying factors effecting the accuracy and confidence as stated in Section 9 are taken into consideration during classification of the model and are therefore addressed by the Competent Person in the attributed Reserve classification.

In the Competent Person's view, the Jansen potash project DPS achieves the required level of confidence in the modifying factors to provide a sound basis for estimation of an Ore Reserve through:

- Strong project processes and governance used to estimate the Ore Reserves
- Lease wide coverage with 3D seismic provides high confidence in mine design
- Long room and pillar mining operations are highly repeatable with simple operating strategies
- High degree of third-party review of isolated components of the Ore Reserves
- 50+ years of Saskatchewan potash basin mining provides strong foundation for operational experience
- The deposit lacks structural complexity and is horizontally continuous.

12.3 Ore Reserves declared

Table 2 presents the statement of Ore Reserves for Jansen potash project LPL ore type as at 30 June 2021. The declared reserve life is estimated at 94 years at the expected nominated production rate.

The reference point of the declared Ore Reserves is ROM ore delivered to the Mill for processing.

13 Reconciliation

No mine production has occurred to date.

14 Independent review

Individual components of the Jansen DPS have been independently reviewed by internal and external consultants. Approval of the Jansen potash project is considered material given the first-time commodity reporting of Ore Reserves, therefore an external review was completed in CY21 that focussed on the process used by BHP to support the Jansen Ore Reserves. This process review was conducted by Golder Associates Ltd. (Member of WSP). There were no material issues identified with the Ore Reserve estimation process and no major outcomes or major recommendations for improvement from this review.

15 References

Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC), 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Fuzesy, A., 1982, Potash in Saskatchewan: Saskatchewan. Geological Survey, Rep. 181.

BHP. (17 June 2021). *Potash briefing.* https://www.bhp.com/media-and-insights/news-releases/2021/06/potash-briefing/

16 Acknowledgement

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https://gisappl.saskatchewan.ca/Html5Ext/Resources/GOS_Standard_Unrestricted_Use_Data_Licence_v2.0.pdf"

The Stratigraphic column in Figure 5 is modified from the Saskatchewan Geological Survey, 2014.