TECHNICAL REPORT

MINERAL BRINE RESOURCES OF THE SEVIER LAKE PLAYA, MILLARD COUNTY UTAH

REPORT DATE:
MAY 31, 2012
REPORT EFFECTIVE DATE:
MAY 1, 2012

ENERGY, MINING, AND ENVIRONMENTAL CONSULTANTS

NORWEST CORPORATION

TECHNICAL REPORT

MINERAL BRINE RESOURCES OF THE SEVIER LAKE PLAYA, MILLARD COUNTY, UTAH

Submitted to:
EPM MINING VENTURES INC.

Report Date:
May 31, 2012

Report Effective Date:
May 1, 2012

Norwest Corporation
136 E. South Temple, 12th Floor
Salt Lake City, UT
84111 USA
Tel: (801) 539-0044
Fax: (801) 539-0055
Email slc@norwestcorp.com

www.norwestcorp.com

Author:
LAWRENCE D. HENCHEL, PG

NORWEST
CORPORATION

CERTIFICATE OF QUALIFICATIONS

I, Lawrence D. Henchel, PG of Salt Lake City, Utah, do hereby certify that:

1. I am currently employed as a Vice President by Norwest Corporation, 136 East South Temple, Suite 1200, Salt Lake City, Utah, USA 84111.
2. I graduated with a Bachelor of Science Degree in Geology from Saint Lawrence University, Canton, NY, USA in 1978.
3. I am a Registered Member of The Society for Mining, Metallurgy and Exploration, Inc.
4. I have worked as a geologist for a total of twenty-nine years since my graduation from university, both for mining and exploration companies and as a consultant specializing in coal and industrial minerals. I have worked with industrial minerals such as potash, trona, nahcolite, phosphate and gypsum over the past 20 years of my career in the United States, Mongolia, Africa and the Middle East.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for all sections of the technical report titled "Technical Report, Mineral Brine Resources of the Sevier Lake Playa, Millard County, Utah" dated May 31, 2012 (the "Technical Report") relating to the Sevier Lake Property, **with an effective date of May 1, 2012**.
7. I personally inspected the Sevier Lake Property on March 25, 2010 and on August 1, 2011.
8. I have had prior experience with the deposit that is the subject to the Technical Report in that I was retained by EPM Mining Ventures in 2011 to prepare a technical report on the past exploration activities and historical development work on the Sevier Lake mineral brines.
9. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
11. I have read NI 43-101 and the Technical Report, and the parts of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.

Dated at Salt Lake City, Utah this 31st day of May 2012.

"ORIGINAL SIGNED AND SEALED BY"

Lawrence D. Henchel, PG
Vice President Geologic Services, Norwest Corporation

NORWEST CORPORATION

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1 SUMMARY

EPM Mining Ventures Inc. (EPM) commissioned Norwest Corporation in March 2012 to prepare a Technical Report for its potassium mineral leases in Millard County, Utah, referred to as the Sevier Lake Project. This technical report presents resource estimates of the mineral brine occurring as groundwater within the lakebed and has been prepared in accordance with National Instrument 43-101 (NI 43-101) and Form 43-101F1. Sevier Lake is a terminal playa, a typically dry lakebed, with no drainage routes and infrequent incursions of surface water. The property is considered a potential source of potash (KCl or K_2SO_4), halite (NaCl), and other related minerals, of which sulfate of potash (SOP) is the targeted compound.

EPM is a corporation domiciled in Yukon Territory, Canada, with headquarters in Salt Lake City, Utah, and listed on the TSX Venture Exchange. The corporation operates the mineral development project through its wholly-owned subsidiary Peak Minerals Inc. (Peak Minerals) and through Emerald Peak Minerals (Emerald Peak), of which Peak Minerals holds a 40% membership interest.

1.1 LOCATION

The property is located in southwestern Utah, approximately 140 miles southwest of Salt Lake City, and is defined by the geographical boundaries of the Sevier Dry Lake, as shown in Figure 4.1. The property is situated between Delta, Utah, 30 miles to the northeast, and Milford, Utah 25 miles to the south-southeast. The lakebed covers an area of approximately 130,000 acres and is approximately 26 miles long by an average of 8 miles wide.

The property is accessed by paved US and state highways that travel west from Interstate 15 (I-15), and then by generally improved gravel roads surrounding the lakebed. Lakebed travel is best approached with light-weight vehicles such as ATV's or wide-tread snow cats. The Union Pacific Railroad maintains a rail line between Salt Lake City and Las Vegas, Nevada, which is located approximately 12 miles to the east of the lakebed. The Black Rock siding of the line is accessible by improved gravel road from the south end of the project area.

1.2 TENURE

The Sevier Lake property is controlled through state and federal potassium or potash leases, comprised of 95,801.76 acres of federal leases and 6,409.48 of state leases. The state leases, belonging to the Utah School and Institutional Trust Lands Administration (SITLA), were awarded to EPM through a competitive bidding process in September 2008 and are controlled through Emerald Peak. The federal leases, administered by the United States Bureau of Land

Management (BLM), were also acquired through competitive bidding, awarded in April 2011 and controlled through Peak Minerals.

LUMA Resources Inc., (LUMA) the second-highest bidder for a portion of the federal lease tracts, was awarded 22,009.97 acres at the north end of the lakebed due to federal restrictions on the total acreage that can be controlled by a single entity in one US state. Peak Minerals has entered into a Cooperative Development Agreement with LUMA that provides for Peak Minerals gaining development and operational control of LUMA's federal potassium leases. The agreement is intended to develop the joint leases as a combined property in a unitized manner similar to oil and gas industry arrangements. The agreement establishes the goal of working to create this unit with the regulating federal and state agencies. While there has been no decision by the agencies formally creating a Unit Operating Agreement, it is likely to be successfully adopted given that the BLM was the originator of the unitized approach to the liquid mineral commodity and it is supported by the BLM, SITLA, EPM and LUMA.

1.3 GEOLOGY

The brine deposit on the property is formed within a terminal lakebed as a result of desert (drought) conditions that have persisted in the property area over recent (Quaternary) geologic time. The property is located within the Basin and Range physiographic province covering most of the western continental United States. The terminal Sevier Lake was formed within one of many north trending grabens formed during the Basin and Range orogeny over the Miocene period. The north trending mountains surrounding Sevier Lake are remnant up-thrown horst blocks adjacent to down-thrown grabens occupied by the present-day lakebed.

During the subsequent Pleistocene period the property was largely submerged by Lake Bonneville. Gradual receding of Lake Bonneville, followed by smaller Lake Gunnison and ultimately Sevier Lake, resulted in the accumulation of unconsolidated clay and marl in the down-thrown graben. The accumulation of minerals eroded from the drainage area supplying the lake, coupled with persistent drought conditions have altered the chemistry of the groundwater in the dry lakebed sediments to that of a mineral saturated brine.

The Great Salt Lake, adjacent Bonneville Salt Flats and Pilot Valley, located 150 miles north of Sevier Lake, are modern day corollaries to Sevier Lake brine deposit. The Great Salt Lake is also a terminal lake playa formed from the progressive drying up of Lake Bonneville, followed by Lake Gunnison to present day salt flats and remnant waters. There are currently two active halite and potash manufactures located in this region, both producing halite and potash products from solar evaporation ponds.

1.4 MINERALIZATION

The brines found in the Sevier Lake playa sediments are the target mineralization. The mineral chemistry of the brines indicates that potash can be extracted from them following precipitation of brine salts from solar evaporation ponds and subsequent plant processing. Other products derived from the brines using the same process include halite and bitterns. Minor concentrations of bromine, borates, uranium and lithium have been noted in salts crystallised in playa sediments.

The top 100 feet (ft) of the deposit can be characterized as follows:

- Salt crust up to 18 inches (in) thick
- Lateral zonation in crust mineral chemistry
- Variations in brine saturations both laterally and with depth
- Variation in sediment grain-size distribution
- Artesian brine flow in select areas
- Elevated concentrations of Na, K, Mg, Ca, Cl and SO_4 in the brines.

These features influence to varying degrees the target brine extent (volume) and potential for production of potash, halite, and bitterns from the brines. The focus of the mineral resource estimates presented in this report are two shallow brine horizons separated by a thin (~15 centimeters (cm)), relatively dry layer of stiff clay. The combined upper and lower aquifer horizons vary from 40ft to 100ft (12 meters (m) to 30m) in depth from surface and are limited at the base by another stiff clay horizon. Drilling to date is insufficient to accurately determine a brine resource potential below these shallow aquifers.

1.5 EXPLORATION AND DEVELOPMENT

Historic development efforts included the drilling of over 700 shallow auger holes across the lakebed with the goal of defining a brine resource within 20ft (6m) of surface. The work done in the 1970's and 1980's by Crystal Peak Minerals Corporation (CPMC) provided a wealth of data on brine chemistry and sediment characterization, as well as data on evaporation ponds and brine phase chemistry. A large solar evaporation impoundment was build and pilot scale precipitation of halite and potash conducted using fractional crystallization techniques. CPMC and a subsequent developer ultimately let their leases lapse back to the government.

A comprehensive exploration program was initiated once EPM gained control of the majority of the lakebed. A total of 426 drill holes were completed by EPM between August 2011 and April 2012, covering both federal and state leases. The drilling was conducted using direct push rigs that drilled to a nominal 50ft (15m) depth and a mini-sonic rig that drilled to a nominal 100ft (30m) depth. Brine sampling wells were established in both types of holes, the direct push holes being temporarily cased for short-term brine sampling and the mini-sonic holes mainly completed with a packed-well installation that will allow future hydrologic testing.

Brine samples were collected and analyzed for key chemical constituents related to ionic components of potash and related compounds. Sediment cores were analyzed for moisture content and density for determination of interstitial brine volumes.

1.6 BRINE MINERAL RESOURCES

A brine mineral resource was defined using EPM's current drilling and analytical data. The mineral resource is segmented into a shallow zone extending from surface to an average of approximately 19ft (5.8m) and a deeper zone that extends to an average depth of approximately 69.6ft (21.2m). The zones are separated by a thin (~15cm) horizon of relatively dry, stiff clay.

The brine resource estimate was developed using MineSight® three-dimensional block modeling software. The geological model from which the brine mineral resources are estimated was based on the analyses and descriptions of brine and aquifer sediment samples taken at regular depth intervals from vertically-oriented drillholes collared on the lakebed surface.

The estimated brine mineral resources and associated major dissolved cations and anions for the upper brine aquifer and lower brine aquifer are summarized in Table 1.1. Mineral resource plans illustrating the distribution of brine resources by levels of assurance within 3m elevation intervals for the upper and lower brine aquifer are illustrated in Figure 14.14. Table 1.2 outlines tonnages of mineral equivalent compounds that could be created using the available cations and anions in the brine resource listed in Table 1.1. The equivalent compounds outlined in Table 1.2 assume a 100% recovery of the brine from the upper and lower brine aquifer. Studies to determine the practical brine recovery percentage from the lakebed are currently underway.

The author is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors that could materially affect the resource estimate.

The accuracy of resource estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources will be recoverable. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

TABLE 1.1
BRINE MINERAL RESOURCE SUMMARY AND MAJOR DISSOLVED CATIONS AND ANIONS

Lease	Category	Potassium (K)		Sulphate (SO_4)		Chlorine (Cl)		Sodium (Na)		Magnesium (Mg)	
		Wt %	Mt[1]	Wt %	Mt	Wt %	Mt	Wt %	Mt	Wt %	Mt
State	Measured	0.287	0.456	1.386	2.202	8.057	12.812	6.601	10.506	0.364	0.579
	Indicated	0.240	0.062	1.625	0.432	7.532	1.981	6.527	1.732	0.295	0.077
	Measured plus Indicated	0.281	0.519	1.425	2.634	7.987	14.794	6.591	12.237	0.356	0.656
	Inferred	0.254	0.012	1.761	0.082	8.315	0.386	7.410	0.344	0.342	0.016
Federal	Measured	0.279	8.539	2.093	63.994	8.232	251.578	6.933	212.127	0.341	10.430
	Indicated	0.249	2.841	2.133	24.342	7.073	80.480	6.588	75.254	0.308	3.510
	Measured plus Indicated	0.272	11.381	2.104	88.337	7.952	332.058	6.842	287.381	0.333	13.940
	Inferred	0.254	2.391	2.458	23.129	7.512	70.705	6.680	62.884	0.324	3.045
LUMA	Measured	0.244	0.348	1.941	2.775	6.923	9.897	6.620	9.465	0.369	0.527
	Indicated	0.241	0.981	1.958	7.963	6.685	27.192	6.585	26.790	0.367	1.494
	Measured plus Indicated	0.242	1.329	1.953	10.738	6.749	37.089	6.594	36.255	0.368	2.021
	Inferred	0.228	1.614	1.949	13.783	6.590	46.602	6.464	45.712	0.359	2.539
Total	**Measured**	**0.278**	**9.343**	**2.065**	**68.971**	**8.177**	**274.287**	**6.905**	**232.098**	**0.343**	**11.536**
	Indicated	**0.247**	**3.885**	**2.084**	**32.738**	**6.986**	**109.653**	**6.586**	**103.776**	**0.325**	**5.081**
	Measured plus Indicated	**0.269**	**13.228**	**2.071**	**101.709**	**7.837**	**383.940**	**6.806**	**335.874**	**0.338**	**16.617**
	Inferred	**0.244**	**4.017**	**2.267**	**36.995**	**7.150**	**117.692**	**6.592**	**108.940**	**0.340**	**5.600**

[1]Million metric tonnes

TABLE 1.2
MINERAL EQUIVALENT COMPOUNDS FROM BRINE RESOURCE

Lease Area	Classification	Tonnes Mt (Million metric tonnes)				
		Potash	Bitterns	Bitterns	Salt Cake	Halite
		K_2SO_4	$MgCl_2$	$MgSO_4$	Na_2SO_4	NaCl
State	Measured	1.017	1.136	1.435	0.733	19.719
	Indicated	0.139	0.151	0.191	0.300	3.079
	Measured plus Indicated	1.156	1.287	1.626	1.033	22.798
	Inferred	0.026	0.031	0.039	0.053	0.598
Federal	Measured	19.033	20.452	8.696	48.614	389.464
	Indicated	6.333	6.883	8.696	20.568	124.172
	Measured plus Indicated	25.366	27.335	34.534	69.182	513.635
	Inferred	5.329	5.972	7.544	20.952	122.357
LUMA	Measured	0.776	1.033	1.305	1.931	15.040
	Indicated	2.186	2.930	3.702	5.624	41.212
	Measured plus Indicated	2.962	3.963	5.007	7.554	56.253
	Inferred	3.598	4.979	6.290	10.024	70.681
Total	**Measured**	**20.826**	**22.621**	**11.436**	**51.277**	**424.222**
	Indicated	**8.659**	**9.964**	**12.589**	**26.492**	**168.463**
	Measured plus Indicated	**29.485**	**32.585**	**41.167**	**77.769**	**592.686**
	Inferred	**8.953**	**10.982**	**13.874**	**31.029**	**193.636**

1.7 RECOMMENDATIONS

The author is of the opinion that the Sevier Lake Project has sufficient merit to warrant additional development work. The density of drilling on the Sevier Lake property is adequate for the delineation of in-place mineral resources, but additional data and testing, as well as a current prefeasibility or feasibility study, are required before an estimate of a mineral “reserve” can be made. The report includes a recommendation and cost estimate for the completion of such a program, tasks of which include:

- Detailed hydrologic characterization
- Geotechnical study
- Additional drilling to bring more of the LUMA lease areas into measured plus indicated assurance categories.
- Engineering, market and economic analysis (PEA or prefeasibility level).

Hydrologic characterization will be necessary to establish a brine mineral reserve that can be recoverable and sustainable for a sufficient period of time to make the enterprise commercially feasible. Additional hydrologic data collection will be required and it is likely that additional testing wells will be needed to target specific characterization efforts. Key items that will need to be addressed in order to define a sustainable brine reserve include flow rates, recoverability, specific yield, and fluid flow simulation models.

Geotechnical studies will be required to provide design criteria for impoundments and dykes on the lakebed surface and for facilities such as a processing plant, product stockpiles and possible tailings site. It is also recommended that the understanding of the characterization of the brine resource be expanded to bring the entire lakebed and both shallow and deep aquifers into measured plus indicated categories of assurance. Increasing drill density in the north end of the lakebed and providing additional complete penetrations of the lower aquifer will likely provide additional confidence in a larger brine resource.

Estimated costs for completing a program addressing these items is summarized in Table 1.3.

TABLE 1.3
EPM DEVELOPMENT BUDGET SUMMARY

Item	Estimated Cost
Hydrologic and Geotechnical Work	$1,575,000
Engineering Study	$250,000
Additional Drilling	$277,000
Total	**$2,102,000**

The estimated costs related to an engineering study are based on the undertaking of a robust Preliminary Economic Analysis (PEA) of the project. EPM may decide to progress to a Preliminary Feasibility level analysis without first completing a PEA, depending on the confidence in that the acquired data will support accurate assessment of economic viability.

2 INTRODUCTION

EPM Mining Ventures (EPM) controls 102,211 acres of federal and state potash leases at Sevier Lake, Millard County, Utah. Additional federal potash leases totalling 22,010 acres are held through a Cooperative Development Agreement with LUMA Minerals LLC (LUMA), the addition of which comprises the 124,221acre property. Sevier Lake is a terminal playa, a typically dry lakebed, with no drainage routes and infrequent incursions of surface water. The property is considered a potential source of potash (KCl or K_2SO_4), halite (NaCl), and other related minerals, of which sulfate of potash (SOP) is the targeted compound.

This report incorporates information that was originally described in a prior technical report titled "Technical Report, Sevier Lake Property, Millard County, Utah" dated May 20, 2011 (2011 Report). The 2011 Report was prepared by Norwest Corporation (Norwest) for EPM and described the geologic setting, results of past exploration activities and historic development efforts at the Sevier Lake property.

EPM is a corporation domiciled in Yukon Territory, Canada, with headquarters in Salt Lake City, Utah, and listed on the TSX Venture Exchange. Norwest has prepared this report at the request of EPM. As requested, this Technical Report has been prepared in accordance with the current requirements of National Instrument 43-101, including topics specified in Form 43-101F1. Norwest has reviewed the document "Mineral Brine Projects and National Instrument 43-101 Standards of Disclosure for Mineral Projects (OSC Staff Notice 43-704, July 22, 2011) and addresses considerations specific to mineral properties involving brine-hosted deposits in this report.

2.1 TERMS OF REFERENCE

The purpose of the report is to describe material changes that have occurred since the 2011 technical report, including a description of drilling, sampling and other exploration activities, characterization of mineral concentrations within the lake's groundwater (brine), and present current resource modeling and reporting results. The effective date of this report is May 1, 2012.

Norwest developed a resource estimate and technical report for the Sevier Lake property as per the following Terms of Reference (Scope of Work):

- Compile well data and brine chemistry assays from recent exploration program into comprehensive project database.
- Perform geostatistical analysis of brine chemistry data.
- Create 3D block model of resource area.
- Determine assurance category criteria from statistical analysis results.

- Estimate brine resource quantity and quality by assurance category.
- Produce narrative and materials addressing geology and resources in a NI 43-101 Technical Report.

2.2 SOURCES OF INFORMATION

This Technical Report utilizes base data acquired in preparation of the 2011 Report, including topographic, cultural, infrastructure and other publicly available GIS information. Historic data presented in the 2011 Report is summarized herein and has been used for guidance during the planning and execution of the recent exploration program and as a source of background data for this report. The most comprehensive presentation of historic exploration and development work is found in the Utah Geological Society's 2006 report[1], which serves as a compendium of the history of minerals exploration in the Sevier Lake region of western Utah, as well as the presentation of drill hole and auger samples results and simulated results of brine beneficiation to produce halite and potash products. An interview was conducted with the paper's author, Wally Gwynn, on March 12, 2010.

Historic drilling or assay data were not used in the creation of the current geologic model from which the reported resource estimates are derived. All lithologic and brine characterization data used in the model and resource estimates were acquired during EPM's exploration program that was conducted between August 2011 and April 2012. The exploration program was planned and implemented by Norwest, who supplied geologic staffing throughout the program, in conjunction with EPM personnel and contractors.

The exploration program consisted of a combination of direct push (Geoprobe) holes and mini-sonic core holes. Complete geologic data in the form of lithologic logs, core photos, penetrometer results, survey data, and assay results were made available by EPM for the preparation of this report and resource estimation. Assay data included values for a select suite of analytes pertinent to chemical characterization of the mineral brine, brine density and TDS measurements, plus moisture content and soil density values from core samples.

2.3 PERSONAL INSPECTION

The author visited the site on March 25, 2010 and again at the commencement of exploration activities on August 1, 2011. As Norwest personnel under the supervision of the author had a continued involvement with the exploration program over its entire 6 month duration, he is

[1] J. Wallace Gwynn, History and Mineral Resource Characterization of Sevier Lake, Millard County, Utah, Miscellaneous Publication 06-6, Utah Geological Survey, 2006 (ISBN 1-55791-753-1)

satisfied that the procedures and protocols followed during this program were professionally performed and adhered to current international standards. Mr. Henchel is a Qualified Person under the requirements of NI 43-101.

The author certifies that he has supervised and is responsible for the work as described in this report. The report is based on and limited by circumstances and conditions referred to throughout the report and on information at the time of this investigation. The author has exercised reasonable skill, care and diligence to assess the information acquired during the preparation of this report.

The accuracy of resource estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources or reserves will be recoverable.

3 RELIANCE ON OTHER EXPERTS

Norwest has prepared this report specifically for EPM. The findings and conclusions are based on information developed by Norwest available at the time of preparation and data supplied by outside sources, primarily data made available by EPM. Although Norwest staff participated in the exploration phase of the project on a contractual basis, Norwest has not conducted any fieldwork, other than site visits, and did not independently drill, take samples or subject any samples to analysis specific to the preparation of this report.

The authors have not relied on other experts in the preparation of this report. A search of mineral titles and tenures on the Bureau of Land Management (BLM) and the Utah School and Institutional Lands Administration (SITLA) websites showed the federal and state potash leases to be in good standing. The existence of encumbrances to the tenures has not been investigated. Other Norwest personnel assisted in the compilation of project data, statistical analysis and modeling of the data and with other information contained within. All work was reviewed and deemed reasonable for this level of study by the author.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

The property is located in southwestern Utah situated in the central portion of Millard County and is defined by the geographical boundaries of the Sevier Dry Lake with approximate center at latitude 38°57'59.88" N and longitude 113°07'4.33" W, or at 4313105N, 314505E using UTM WGS84 coordinates. The general location of the property is illustrated in Figure 4.1.

The property is situated approximately 140 miles southwest of Salt Lake City, Utah, between the towns of Delta, Utah (30 miles to the northeast) and Milford, Utah (25 miles to the south-southeast). The lakebed covers an area of approximately 130,000 acres and is approximately 26 miles long by an average of 8 miles wide.

The mineral deposits described in this report occur over the entire lakebed of the Sevier Dry Lake and immediate shoreline areas. The lake is dry for most of the year but is occasionally covered with very shallow meteoric water during the winter and spring months. The lake was originally fed with fresh water from the drainage of the Sevier River watershed. Presently, and for numerous decades, the water in the river rarely reaches the lake due to reservoir management and appropriation for crop irrigation upstream. The lakebed can be traversed by foot or by specialized wide-track vehicles when in a drier state during the summer and fall months.

4.2 PROPERTY MINERAL CONTROL

The leased lands for the Sevier Dry Lake potash project are predominantly lands of the United States, administered by the Bureau of Land Management (BLM), with isolated 640 acre sections belonging to the Utah School and Institutional Trust Lands Administration (SITLA). The leases are controlled by three entities:

- Peak Minerals Inc. (Peak Minerals), an indirect wholly-owned subsidiary of EPM Mining Ventures Inc. (EPM)
- LUMA Resources LLC (LUMA)
- Emerald Peak Minerals LLC (Emerald Peak).

A small amount of land along the outer margins of the lakebed has not been leased. Figure 4.2 shows the location of the various mineral tenure areas.

Table 4.1 summarizes the relationship of entities controlling the potash leases involved with the project. EPM directly controls, or has financial investments and has entered into agreements with, each of the entities.

TABLE 4.1
SUMMARY AND GENERAL DESCRIPTION OF SEVIER LAKE LEASES

Leaseholder	Peak Minerals Inc.	Emerald Peak Minerals LLC	LUMA Resources Inc.
Relationship to EPM	Indirect Wholly Owned Subsidiary	Peak Minerals holds a 40% Membership Interest	Contractual
Contractual Agreements	100% Owned via Peak Minerals Canada LTD	40% Membership Interest Owned by Peak Minerals with Commercial Services Agreement for Leasehold Operations	Cooperative Development Agreement for Leasehold Operations
Acres Held	95,801.76	6,409.48	22,009.97
Leases Secured on	April 5, 2011	September 1, 2008	April 5, 2011
Lease Descriptions	See Table 4.2/A.1	See Table 4.3/A.2	See Table 4.4/A.3

These investments and agreements provide for operational control of the leases by EPM as described below:

- BLM Potassium Leases issued to Peak Minerals – On April 5, 2011, Peak Minerals leased federal potassium leases covering 95,801.76 acres of land on the Sevier Lake by competitive bid from the BLM. Peak Minerals is an indirect wholly-owned subsidiary and the U.S. operating company for EPM, which controls Peak Minerals via Peak Minerals Canada Ltd.

- BLM Potassium Leases issued to LUMA – On April 5, 2011, LUMA leased federal potassium leases covering 22,009.97 acres of land on the Sevier Lake by competitive bid from the BLM. Peak Minerals has a Cooperative Development Agreement dated July 15, 2011 with LUMA that provides for Peak Minerals gaining development and operational control of LUMA's federal potassium leases.

- SITLA Potash Leases issued to Emerald Peak – On September 1, 2008, Emerald Peak leased SITLA potassium leases covering 6,409.48 acres of land on the Sevier Lake by competitive bid from the State of Utah. Peak Minerals owns a 40% membership interest in Emerald Peak and has a Commercial Services Agreement granting Peak Minerals development and operational rights on these lands.

TABLE 4.2
SUMMARY OF FEDERAL POTASH MINERAL LEASES CONTROLLED BY EPM

UTU Number	Acreage	UTU Number	Acreage
88387	1,929.01	88412	1,798.33
88388	1,920.00	88413	2,421.09
88389	1,280.00	88414	2,400.77
88390	1,280.00	88415	1,982.65
88391	2,487.76	88416	1,933.20
88392	1,920.00	88417	2,396.57
88393	1,283.38	88418	1,920.00
88394	2,560.00	88419	2,395.65
88395	2,032.74	88420	2,394.72
88396	1,280.00	88421	1,920.00
88397	1,280.00	88422	2,406.53
88398	1,335.32	88423	2,393.82
88399	1,921.63	88424	1,869.64
88401	1,922.86	88425	1,728.85
88402	1,920.00	88426	2,560.00
88403	1,366.56	88427	2,559.21
88404	1,281.88	88428	2,560.00
88405	1,919.40	88429	2,557.64
88406	1,918.55	88430	2,556.07
88407	1,917.81	88443	1,280.00
88408	1,917.09	88457	1,886.40
88409	1,918.37	88461	2,393.45
88410	2,510.11	88462	2,548.83
88411	1,924.48	88463	1,911.39
Total Acres		**95,801.76**	

Peak Minerals and LUMA entered into the Cooperative Development Agreement on July 15, 2011. The agreement is intended to develop the joint leases as a combined property, similar to the way an oil and gas field can be unitized between several different leaseholders. The agreement establishes the goal of working to create this unit with the regulating federal and state agencies. While there has been no decision by the agencies formally creating a Unit Operating Agreement, it is likely to be successfully adopted given that the BLM was the originator of the unitized approach to the liquid mineral commodity and it is supported by the BLM, SITLA, EPM and LUMA.

TABLE 4.3
SUMMARY OF STATE POTASH MINERAL LEASES CONTROLLED BY EPM

Lease Number	Acreage
ML 51479	640.00
ML 51480	1,286.24
ML 51481	1,280.00
ML 51482	1,920.00
ML 51483	1,283.24
Total Acres	**6,409.48**

TABLE 4.4
SUMMARY OF FEDERAL POTASH MINERAL LEASES CONTROLLED BY LUMA

UTU Number	Acreage
88444	2,554.50
88445	2,557.18
88446	1,358.44
88448	2,012.41
88449	2,115.47
88450	2,129.20
88451	2,048.40
88452	1,953.40
88453	1,799.62
88455	1,561.35
88456	1,920.00
Total Acres	**22,009.97**

With the support of the BLM, SITLA, Emerald Peak, and LUMA; Peak Minerals intends to unitize the leases and operate and develop them under a Unit Operating Agreement designed to, among other things, obligate the lessors and the lessees to a development and production allocation arrangement that will grant Peak Minerals the sole rights to develop and operate the potassium resources on the Sevier Lake. Work has begun on this document and EPM anticipates that an executed Unit Operating Agreement will be in place in early 2013.

Currently, Peak Minerals owns a 100% leasehold interest in federal potassium leases comprising 95,801.76 acres. The leases grant full rights of access and rights to utilize the surface for leasehold mining activities. The term of the leases is 20 years from the date of issuance, April 5, 2011, and for so long thereafter as Peak Minerals complies with certain rental, minimum royalty, and minimum annual production requirements as well as other terms and conditions of the leases. Minimum production and minimum royalty requirements do not commence until the sixth lease year. The leases are subject to readjustment at the end of each 20-year term.

The same terms described above apply to the federal potassium leases in which record title is held by LUMA. Peak Minerals will have development and operational control of these leases under the terms of its Cooperative Development Agreement dated July 15, 2011 and under a Unit Agreement or similar Agreement and Unit Operating Agreement that will be entered into by Peak Minerals, LUMA, and Emerald Peak.

The State of Utah SITLA potash leases are owned 100% by Emerald Peak. They grant full rights of access and rights to use the surface and subsurface for uses “reasonably incident to the mining of leased substances”. The term for all of the leases is for 10 years from the effective date of September 8, 2008, and for so long thereafter as leased substances are being produced in paying quantities. Peak Minerals owns 40% of the membership interest in Emerald Peak and also has the contractual commitment from Emerald Peak to enter into a Unit Agreement or Similar Agreement and Unit Operating Agreement. These agreements will name Peak Minerals as operator and give Peak Minerals the sole right to develop and operate the SITLA Leases along with the Federal Leases.

The LUMA potassium leases are subject to the same federal royalty rates as the Peak Minerals federal potassium leases, described below. The leases are also subject to a 1.25% overriding royalty on production allocated to the LUMA leases in favor of LUMA or its designee. Beginning in 2015, Emerald Peak is also entitled to receive a 7.5% overriding royalty on all potassium production allocated to the SITLA leases.

Norwest has reviewed the Federal and State mineral lease documents and find that they appear to be valid and reasonable for the operation of potash extraction within lease boundaries. No formal legal review or further due diligence has been performed.

4.3 PROPERTY WITH BLM MINERAL LEASES

Potash is defined by regulation under 43 CFR 3500 and The Mineral Leasing Act of 1920 as a solid “leasable” mineral. BLM issues leases in two different ways for solid leasable minerals, other than coal and oil shale: competitive issues in areas there is a mineral deposit; and competitive leases through a bidding process.

EPM was awarded their leases under the competitive bidding process. Review of the lease documents determined that the following rents, royalties and stipulations apply to the EPM lease:

- Production royalty on gross value of potassium compounds FOB to market
  - Lease years 1-5 = 2.0 percent
  - Lease years 6-20 = 5.0 percent
- Minimum production/minimum royalty
  - Minimum royalty equals $3.00 per acre beginning in the year 6
  - If minimum production royalties do not exceed requirements in year 6 on, the minimum royalty is paid
- Rental and royalty
  - Lease year 1 = $0.25 per acre (or fraction thereof)
  - Lease years 2 - 5 = $0.50 per acre (or fraction thereof)
  - Lease yeas 6 – 20 = $1.00 per acre (or fraction thereof)
- Lease term
  - Perpetuity provided lessee complies with terms and conditions of lease
  - Terms and conditions of lease renegotiated every 20 years.
- Diligence requirements
  - Cancellation of lease pursued at end of 20 year lease term if potassium compounds are not being produced in profitable quantities.

The lease stipulates that the greater amount between rent and royalty is to be paid. Other stipulations carried by the lease were reviewed and found to be standard regulations pertaining to protection of the environment and human health, property reclamation and reporting requirements. The BLM requires that an Exploration Plan and Environmental Assessment be submitted prior to the commencement of any exploration activities as well as an approved Notice of Intent (NOI) from the Utah Division of Oil, Gas and Mining (DOGM). Mining operations on the lease will require an approved Plan of Operations from the BLM and a mining permit approval from DOGM.

4.4 PROPERTY WITH UTAH STATE MINERAL LEASES

The Utah State Mineral leases, managed by SITLA are effective for 10-year terms. Uncompetitive leases require SITLA Board approval. The State leases controlled by EPM are renewable annually for an initial term of ten years. Annual maintenance fees are $4.00 per acre. State royalties payable to SITLA are 5% gross value f.o.b. the mine. The leases held by EPM stipulate that mineral production must commence by September 1, 2018.

4.5 PROPERTY ENVIRONMENTAL LIABILITIES

An Environmental Assessment (EA) of the leaseholds was conducted in 1987 by the BLM. The CPMC development and operational plans were reviewed and the leasehold area surveyed for such environmental concerns as wildlife habitat, threatened and endangered species, cultural/archaeological resources and impact to recreational opportunities. A "Finding of No Significant Impact" (FONSI) was issued in October 1987, the result being that the project would not require an Environmental Impact Statement in order to proceed.

Recently the area has undergone two EA's conducted by the BLM. The first was performed prior to the lease sale in 2011 to determine the potential impacts from leasing the minerals for development. No significant impacts were identified and the leases were offered for bid. As a follow up to the leasing EA, the BLM completed a second EA to assess the impacts of exploration drilling. Again, no significant impacts were identified and the exploration program was successfully initiated and completed.

There are no known encumbrances or environmental liabilities associated with the property. Norwest has not performed any research in these areas but recommends a records search to establish the same.

4.6 SIGNIFICANT FACTORS AND RISKS

Other than normal market risks, the major potential risk to Peak Minerals' ability to perform work and develop the leases is the federal permitting and National Environmental Policy Act (NEPA) process. These processes cannot actually deny Peak Minerals the leasehold rights granted it to develop the potassium resources. However, the long time frames involved in these processes and the potential appeals of the approvals by environmental groups can result in considerable delays in project commencement.

Two separate petitions were filed in 2011 by the environmental organization Southwest Utah Wilderness Alliance that attempted to invalidate the BLM's original leasing decision and to halt exploration activities on the lake bed. The Interior Board of Land Appeals (IBLA) has ruled against both petitions, supporting the BLM's leasing decision and allowing the exploration program to be successfully completed. The petitions have not been withdrawn by SUWA and appeals may be pending.

Uncertainty of weather conditions must be considered a risk factor in an operation that is to utilize solar evaporation in its extraction process. Adverse weather conditions that affect the net evaporation rates cannot be predicted, but the historic weather records and trends support an environment conducive for solar evaporation. Fresh water inundation from the Sevier River is also a potential risk, but one that may be mitigated through a surface water management plan.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 PROPERTY ACCESS

Major air access to the property is via the Salt Lake City International Airport. Daily commuter flights are available to Cedar City, Utah approximately 50 miles to the south of the town of Milford. Access by vehicle from Salt Lake City is south via Interstate 15 (I-15) approximately 85 miles to the town of Nephi, then via State Route (SR) 132 for 85 miles to the town of Lynndyl and then following US Highway 6 to the city of Delta. The northern margin of the lake is accessed by traveling southwest another 11 miles along US 6.

The properties southern end can be accessed by travelling north from Cedar City on SR-130 and then SR-21 approximately 55 miles to the town of Milford. North from Milford SR-257 travels a distance of about 23 miles to the Black Rock railroad siding of the Union Pacific railroad. The southern end of the property is accessed by traveling west from Black Rock on secondary improved gravel roads for an additional 13 miles to the lakebed.

Two secondary north-south trending improved gravel roads run along the west and east sides of the property. The road on the eastern side narrows and is less well maintained than the Steamboat Pass Road on the west. Numerous unimproved roads and jeep trails lead from these north-south routes to the edge of the lakebed. Travel on the lake varies seasonally depending on the amount of moisture on the salt pan. The margins of the lakebed can support a pickup truck in places but use of normal vehicles is risky due to their weight and likelihood of becoming mired in the relatively soft lake sediments. Lakebed travel is best approached with ATV’s and has been creatively addressed by the use of snow cats with extra wide treads. Recent exploration activities, being performed during a period of unusually wet lakebed conditions, used marsh buggies commonly employed in the bayous of the southern United States as rig platforms, as well as air-propelled boats for personnel and equipment transport.

5.2 CLIMATE

The project area is semi-arid with 8.11 inches (20.6cm) average annual precipitation measured at the town of Delta (Rasmussen, 1997). Vegetation consists of low brush and sage on the margins of the Sevier Lake playa while the playa is devoid of vegetation due to periodic flooding and formation of a salt crust on surface resulting from evaporation of brines near the surface.

Regional climate statistics from nearby towns and weather stations show an average maximum temperature of 66.4°F, ranging between a high in July of 93.0°F and a low in January of 40.2°F. Minimum temperatures averaged 33.5°F, ranging between a high in July of 55.9°F and a low in January of 13.8°F. Extremes range from a record low of -34°F to a record high of 105°F.

The climate of the project area is important in that proposed harvesting of the brine minerals is through the use of large-scale, shallow solar evaporation impoundments. The ideal conditions for this type of process occur in an area that is arid, relatively hot and windy. The early developers of the project established two weather stations that recorded climatic conditions at the lakebed for a period during the late 1970's. Data from the period of late June through early September 1979 (Gwynn) shows daytime temperatures to average about 86°F and nighttime temperatures about 54°F. Wind speeds recorded during spring through fall averaged 15 to 20 miles per hour.

Exploration activities can be conducted year-round, as proven by the 2011/2012 program which conducted drilling activities from November through April on the federal leases. Potential mining operations will likely face climatic challenges related to decreased solar evaporation during winter months; however, it is envisioned that management of multiple pond systems at varying stages of development would provide sufficient feed stockpiles to keep operations going all year.

5.3 LOCAL RESOURCES

The nearby towns of Delta and Milford are small material supply centers and sources of local labor. Milford's population in the 2010 census was 1,420 and Delta's 5,018. Both towns are on the Union Pacific Railroad line connecting Salt Lake City and Las Vegas – Milford has Union Pacific facilities for its workers, as it is the halfway point between the two major cities. The proximity of the railroad and the Black Rock siding is attractive from a market access standpoint.

Labor would likely be recruited both locally and from throughout Utah and the Rocky Mountain west. The southwest Utah region has a history of mining for precious and base metals, alunite (a sulfate of potassium and alumina), and uranium, and likely will be a source for both skilled and unskilled labor. The operations producing both potash and halite from brine at the Great Salt Lake and Intrepid Potash Inc.'s Wendover, Nevada facility suggest the availability of personnel skilled in the crystallization, harvesting and processing aspects of brine mineral production.

5.4 INFRASTRUCTURE

The property has undergone a limited amount of development with no known mining or commercial mineral harvesting having taken place to date. Largely in an undisturbed natural state, the property has no permanent dwellings or structures until recent construction of a warehouse and storage area at the southern end of the lakebed by EPM. There are two completed operational water supply wells, managed by the BLM for stock use, located just off of the dry lakebed with small storage tanks at the wellheads. The road connecting the southern portion of the lake to the State Road 257 has been upgraded with road base in anticipation of the future siting of a minerals processing plant in that area. Figures 5.1 and 5.2 show the local infrastructure surrounding the project with topography and satellite image respectively.

Development work within the lakebed is limited to the excavation of a 4.8 mile long brine collection canal, dug into the lakebed sediments approximately 20ft deep and bermed along the edges several feet above the lake surface as well as several evaporation ponds which were to be feed by the canal by a series of feeder dikes. The canal, ponds and feeder dikes remain in place in the south central margin of the lakebed, although the canal has been largely silted in.

Access to power sources suitable for a commercial processing operation are being investigated. There are two nearby electric power corridors and there is sufficient electricity being supplied in the region from coal, geothermal and wind power plants. Sources of natural gas would be through Questar, the regional distributor, and a take-off point has yet to be determined.

The Sevier Lake area has no perennial streams and excepting for short periods of unusual weather conditions, no appreciable surface water incursion from the Sevier River. Water to support the processing of minerals crystallized from the brines would have to be sourced from groundwater. EPM is in the process of obtaining sufficient groundwater rights, has submitted water right applications to the State Engineer’s office and continues investigating groundwater sources.

Potential plant siting is also being investigated. Historic development plans have targeted the south end of the lake due to its proximity to rail and road transportation. EPM has established its initial facilities in this location as well. The relatively flat valley bottom south of the lake provides sufficient area for facilities, waste and product storage.

5.5 PHYSIOGRAPHY

The property encompasses the dry Sevier Lake playa. The lake is located in western Utah's Sevier Desert in a broad valley 10 to 15 miles wide. The lake is bounded on the east by the Cricket Mountains, and by the Black Hills portion of the House Range on the west. The San Francisco Mountains lie just to the south of the lake, and the Wah Wah Mountains to the southwest, with Wah Wah valley between them. The dry Wah Wah Lake playa is located within the Wah Wah valley and is 5 miles south of Sevier Lake, with similar physiographic conditions. To the north of Sevier Lake is the gently south-sloping surface of the Sevier Desert. The lakebed covers an area of approximately 130,000 acres at an altitude of about 4,514ft above mean sea level (AMSL). The mountains east and west of the Sevier Lake are at an altitude of generally above 8,000ft AMSL.

The Sevier River is the main source of water that flows into the terminal Sevier Lake playa. Inflow to Sevier Lake from the Sevier River is minimal, if any, during most years because of the heavy demand for irrigation water upstream. Satellite imagery acquired from August1999 through August 2002 (Gwynn, 2006) indicates water to be on the surface of Sevier Lake typically during November through April, though likely amounting to several inches in depth and sourced from local atmospheric conditions. During the remainder of the year, May through October, the lake's surface appears to be dry.

During the period from 1983 through 1985, Sevier Lake filled with water, due to the above-average inflow from the Sevier River. At its peak, the depth of surface water was nearly 13ft above the lakebed, as reported by Larry Sower of CPMC (Gwynn, 2006). From 1986 through 1988, inflow to the lake was reduced significantly and the depth of the water declined. According to Gwynn (2006) water of abnormal depth was probably present on the lake from 1913 to1915 and from 1922 to 1923.

Record snowfall and precipitation through the winter and spring of 2011 caused unusually high water levels in the numerous reservoirs along the course of the Sevier River. Consequently, water management authorities found it necessary to release the retained water during the fall and early winter of 2011, rather than in the spring when it is needed for irrigation and utilized before reaching the lakebed. The exploration activities conducted from November 2011 to April 2012 had to deal with surface water ranging from several inches to several feet in depth.

6 HISTORY

As early as the late 1800's various topographic surveys were conducted in the Sevier Lake region. In 1869, the US Army Corps of Engineers lead by First Lieutenant George M. Wheeler determined the true position of the lake (Gwynn, 2006). Between 1869 and 1977, most mapping work in the region focused on improving topographical and surface geology information with scientific studies undertaken in the 1960's for the purpose of assessing the lakebed mineralogy and brine chemistry. These studies served as basis for more detailed exploration and bulk sampling by Crystal Peak Minerals Corporation (CPMC) starting in 1977.

6.1 CPMC OWNERSHIP

CPMC assembled a 133,000 acre lease holding position that encompassed the entire bed of Sevier Lake, encompassing the current project area. Four deep holes were drilled by CPMC in 1978 to depths ranging from 705 to 975ft to test the chemical composition of the deep sediments and brines. During the period 1979 to 1983, over 700 20ft deep auger wells were completed by CPMC throughout the playa to test the composition of the brine and sediments, thickness of salt crust and to characterise the mineralogy and brine content of the lake sediments. A deep brine test well was installed in 1988 to evaluate the brine composition near the 200ft depth level.

Weather stations were established to measure climatic conditions and Class-A evaporation pans were erected to determine fresh-water evaporation rates. Small-scale evaporation ponds were constructed on the floor of the lake to determine brine evaporation rates and to study the phase chemistry of evaporating brines and precipitated salts. The flooding of Sevier Lake between 1983 and 1988 proved a major setback to the project as up to 13ft of water covered the lake's surface, destroying the weather stations and some of the experimental ponds, and stopping work on the project.

After the period of flooding, CPMC resumed its work on the lake. A 3.5 mile long protective dike, separating the lake into a north half and south half, was designed but never constructed. This dike would have been located at Needle Point. Interior dikes of a 3,000 acre solar evaporation pond system were constructed; a north trending, 4.8 mile long brine collection canal was dredged and roads and a campsite were constructed. The solar evaporation pond system was completed in 1987, and more than 1 million tons of salt was precipitated from the brine to create permanent salt floors in the ponds of sufficient thickness to support heavy salt-harvesting equipment. Salt and high-magnesium chloride brine were produced in 1989 and 1990 and test ponds operated to produce low-grade potash salts. In addition, engineering designs for salt washing, drying, bagging, and load-out facilities were completed, and CPMC developed a flow sheet for the future production of potassium sulfate.

The demise of the Sevier Lake project, however, came with the death of Mr. W.D. Haden, the project's Houston, Texas financier. Upon Mr. Haden's death, funding for the project was terminated. In May 1993, representatives of CPMC filed the "Relinquishments on Federal Potassium Leases" papers. After CPMC performed the required reclamation work, their Sevier Lake Project was abandoned.

6.2 SALADA OWNERSHIP

Salada Minerals LLC (Salada) assembled 15,360 acres of Federal sodium leases in 1997, covering only the south end of the playa. Salada also held 1,280 acres in five separate sections of potassium leases from the State of Utah. Salada's lease holds also went through the EA process, culminating in a FONSI decision by the BLM issued in June 1997.

It is Norwest's understanding that Salada's lease holdings were relinquished and that Salada performed no exploration or mining. However, both CPMC and Salada did estimate potential tonnages of halite (NaCl) and potash (KCl) as well as other product mineral assemblages that could be produced from Sevier Lake brines.

6.3 EPM OWNERSHIP

EPM, through Emerald Peak, acquired five State leases in September 2008 and completed four wells in the southern portion of the lake to monitor and confirm brine chemistry. EPM acquired its 48 federal potassium leases by competitive bid in April 2011. LUMA acquired its 11 federal potassium leases on the same date and entered into the Cooperative Development Agreement with EPM on April 5, 2011.

An exploration and brine sampling program consisting of 21 holes was initiated by EPM on the SITLA leases during the month of August 2011. Following a lengthier federal permitting process, a full-scale program of exploration, brine and sediment sampling, and hydrologic well installation and testing was initiated in November 2011. The field component of the program was completed in April 2012 and has now moved into hydrological data collection and analysis. This technical report is a culmination of the brine resource exploration work conducted by EPM since August 2011 and reports activities, results and conclusions from the exploration drilling and sampling as well as current brine resource estimates.

There has been no known commercial extraction operation on the property. As previously stated, CPMC performed some limited test production but not on a commercial scale.

6.4 HISTORICAL PRODUCT TONNAGE ESTIMATES

Godbe (1984) representing CPMC and Rasmussen (1997) representing Salada estimated the potential tonnages of halite, salt cake, potash and bitterns that could be produced from salts resulting from solar evaporation of brines collected from the first 20ft of sediment below the Sevier Lake playa. Both CPMC and Salada estimated the theoretical tonnages of precipitated K, Mg, Na, Cl and SO_4 from the average brine chemistries and then using the molecular mass of these ions to calculate tonnages. The following potential products were estimated from these ions:

- Halite ($NaCl$)
- Salt Cake ($NaSO_4$)
- Potash (KCl or K_2SO_4)
- Bitterns ($MgCl_2$ and Mg_2SO_4).

The average brine chemistries used for the tonnage estimates appear to be derived from analyses of brine samples collected from CPMC drill holes and brine collection canal. The average brine chemistries could not be confirmed by Norwest. Given that the data available at the time of this report are from unverifiable historical documents, lack documentation of sampling or laboratory methods, and reported prior to NI 43-101 guidelines being established, these historic estimates are not considered to be National Instrument 43-101 compliant. The historical tonnage estimates provided by Godbe (1984) and Rasmussen (1997) should be viewed as providing a theoretical basis for the potential to produce potash and/or other salt products from Sevier Lake. Although the past work was significant, EPM intentionally did not pursue a validation of historic data, but moved forward with a plan to define a current resource using new drilling and sampling data.

6.5 CPMC TONNAGE ESTIMATES

Area of leases controlled by CPMC nearly covered the entire Sevier Lake and Godbe's (1984) tonnage estimates for the first 20ft (6m) of the playa best illustrate the entire lake's potential to produce a range of salt products from the brines. Godbe's product tonnage estimates are based on the assumptions outlined in Table 6.1 and the tonnages estimates are listed in Table 6.2.

Based on the available data that has been reviewed, the assumptions used by CPMC appear to be conservative with the exception of the 140,000 acres which are slightly larger than the playa surface area of 130,000 acres. The 10,000 additional acres are most likely the lateral area of the lake between the low and high water marks. The percent intra-formational brine (25%) used in Godbe's calculations is less than the water saturation levels determined from CPMC auger samples, which suggest an average saturation level of 30%. Additionally, the brine density of 64lb/ft^3 (1.03g/cc) is less than an average of approximately 71lb/ft^3 (1.13 g.cc) calculated from brine sample data.

TABLE 6.1
CPMC ASSUMPTIONS FOR TONNAGE ESTIMATES

Area Acres	140,000
Depth Feet	20
Percent Intra-formational Brine	25
Density Brine (lb/ft^3)[1]	64
Mtons Brine to 20ft Depth	975.74

[1]Density of water at $62lb/ft^3$ plus addition of 2 lbs salt

TABLE 6.2
CPMC PRODUCT TONNAGE ESTIMATES[1]

Ions	Brine Wt %	Mtons[2] Ions	Atomic Mass	Theoretical Product	Mtons[2] Product	Product Type
Na	7.20	70.25	23.0	KCl	6.69	Potash
Cl	11.25	109.77	35.5	$MgCl_2$	8.39	Bitterns
Mg	0.435	4.24	24.3	$MgSO_4$	10.60	Bitterns
K	0.36	3.51	39.1	Na_2SO_4	18.64	Salt Cake
SO_4	2.16	21.08	96.1	NaCl	163.29	Halite
Total	-	208.86	-	-	207.61	

[1]Not NI-43-101 Compliant
[2]Million tonnes

Differences in total tonnages for the ions and products are most likely associated with rounding errors in the calculations and are viewed as materially insignificant. Theoretical tonnage estimates of KCl can be replaced by K_2SO_4 on a 1:1 ratio (Godbe, 1984).

6.6 SALADA TONNAGE ESTIMATES

Salada's lease areas included only southern portions of the Sevier Lake, i.e. the area south of Needle Point. Rasmussen's (1997) product tonnage estimates are based on the assumptions outlined in Table 6.3 and the tonnage estimates are listed in Table 6.4

The assumptions used by Salada for percent intra-formational brine and density appear to be closer to the values determined from the auger sampling than the CPMC estimates. The average brine chemistries are within expected ranges based on brine chemical analyses determined from the auger samples as presented in Section 12. Differences in total tonnages for the ions and products are most likely associated with rounding errors in the calculations and are viewed as materially insignificant.

TABLE 6.3
SALADA ASSUMPTIONS FOR TONNAGE ESTIMATES

Area Acres	16,640
Depth Feet	20
Percent Intra-formational Brine	28
Density Brine (lb/ft^3)	71
Mtons Brine to 20ft Depth	144.44

TABLE 6.4
SALADA PRODUCT TONNAGE ESTIMATES[1]

Ions	Brine Wt %	Mtons[2] Ions	Atomic Mass	Theoretical Product	Mtons[2] Product	Product Type
Na	6.88	9.910	23	KCl	0.963	Potash
Cl	11.175	16.100	35.5	$MgCl_2$	1.17	Bitterns
Mg	0.411	0.592	24.3	$MgSO_4$	1.48	Bitterns
K	0.35	0.504	39.1	Na_2SO_4	2.74	Salt Cake
SO_4	1.29	1.870	96.1	NaCl	24.37	Halite
Total	-	28.98	-	-	30.72	

[1]Not NI 43-101 Compliant
[2]Million tonnes

Both the CPMC and Salada tonnage estimates do not comply to any current international codes for the reporting of mineral resources and are presented for the historical perspective of product tonnage estimates of the first 20ft below the playa surface. EPM is not treating these as current mineral resource or mineral reserve estimates. A qualified person has not performed sufficient work to classify these estimates as current mineral resources or mineral reserves.

NI 43-101 compliant resource estimates current as of May 1, 2012 have been performed for EPM based on their 2011/2012 drilling program and are presented in Section 14 of this report.

7 GEOLOGICAL SETTING AND MINERALIZATION

Sevier Lake is located within the Basin and Range physiographic province. Basin and Range physiographic province covers over a tenth of the continental United States, including all of Nevada and parts of Idaho, eastern Oregon, Utah, Arizona, and south-eastern California. Basin and Range province formation began during the Miocene, approximately 24 to 25 million years ago, during the Basin and Range orogeny. In this formative period, east-west extension or stretching of the continental crust caused normal faulting that resulted in uplifted north-south trending mountains (horsts) and intervening, down-dropped (grabens), and sediment-filled valleys. It is in one of these north-south trending sediment-filled valleys where the Sevier Lake terminal playa was formed.

7.1 SEDIMENTATION AND ASSOCIATED MINERALIZATION

The subsequent Pleistocene period was characterised by the deposition of lacustrine shore deposits from Lake Bonneville along the high lying areas surrounding Sevier Lake. As Lake Bonneville receded from its maximum extent from southern Idaho to south-western Utah, a fresh water lake (Lake Gunnison) remained in the Sevier Desert Basin. Lake Gunnison emptied into the Great Salt Lake to the north through the Old River Bed (Rasmussen, 1997) north of the Sevier River. Further decline in the Lake Gunnison water levels ended with the present day isolation of the Great Salt Lake in the north and Sevier Lake in the south, as can be seen in Figure 4.1. Continued desert-forming conditions and drought through the quaternary period to present contributed to the current brine accumulation in unconsolidated lacustrine and alluvial sediments below the playa surface.

Figure 7.1 shows that the north-south trending mountains surrounding Sevier Lake have exposed Palaeozoic basement rocks as a result of uplift during the Basin and Range orogeny. The Cricket Mountains in the east expose Cambrian-age quatzites and limestones while the Black Hills/House Range Mountains in the west are composed of Ordovician-age dolomites. Below the lakebed and on the lower-lying margins of the surrounding mountains, a layered series of sedimentary deposits and erosion features of Pleistocene and Quaternary age have been surface mapped and observed from drill cuttings. These largely unconsolidated sediments are composed of a mix of sand, marl and clay. The courser grained sandy and marly layers contain saturated and semi-saturated levels of brine and water that have accumulated in the subsurface over the dry Quaternary period.

As suggested by Case and Cook (1979), the depth to bedrock may be as deep as 4,500ft. Four wells drilled by CPMC on the margins of the playa show the basin sediment to be a minimum of 975ft deep as no Palaeozoic bedrock was encountered in these holes. EPM drilled a hole in lake sediments to 400ft in depth as well. Lithologic logs of these holes illustrate mainly fine grained, gray-green to brown clays with minor amounts of gypsum, sand, silt, salt, and carbonaceous and vegetal material from surface to total depth.

7.2 GEOLOGIC STRUCTURE

A detailed structural study of the Sevier Lake region was undertaken by Case and Cook (1979) after completing a gravity survey in the area. Their interpretation of the Sevier Lake structure is illustrated in Figures 7.2 and 7.3. Figure 7.4 shows an additional interpretation incorporating some of the lithologic intercepts from surrounding water wells and deep lake exploration holes. Between Sevier Lake and the Cricket Mountains to the east, there is a major north-south trending normal fault zone, designated as the East Sevier Lake fault zone. It has a total vertical displacement of over 4,000ft with down-throw on the west. This fault zone forms the east margin of the east-tilted Sevier Lake graben, and the west margin of the east-tilted Cricket Mountains horst. The Sevier Lake graben is bordered on the west by the West Sevier Lake fault zone. The graben that underlies Sevier Lake reportedly consists of two separate fault blocks, designated as the northern and southern blocks. These two blocks have been displaced differentially with respect to each other and with respect to the adjacent mountain blocks.

7.3 MINERALIZATION

Composition of the crust covering the Sevier Lake playa consists of evaporite minerals and is up to 18in thick as determined from drilling and augering data. These evaporite minerals forming the crust tend to be zoned on the playa surface with halite ($NaCl$) being the dominant mineral in the center of the lakebed, followed by glauberite ($Na_2Ca(SO_4)_2$) and then gypsum ($CaSO_4$) near the playa shore, (Gwynn, 2006 and Rasmussen, 1997).

Soluble salts in the sediment-hosted brine are the target mineralization of current development work. The source of soluble salts in the brine comes from the erosion and leaching of Palaeozoic-era bedrock in the Sevier and Bear River drainages. Observation and sampling of playa sediments and brine have identified the following features that characterize the top 100ft of the deposit:

- Salt crust up to 18in thick
- Lateral zonation in crust mineral chemistry
- Variations in brine saturations both laterally and with depth
- Variation in sediment grain-size distribution
- Artesian brine flow in select areas
- Elevated concentrations of Na, K, Mg, Ca, Cl and SO_4 in the brines.

These features influence to varying degrees the target brine extent (volume) and potential for production of potash, halite, and bitterns from the brines. The focus of the resource estimates presented in this report are two shallow brine horizons separated by a thin (15cm), relatively dry, layer of stiff clay. The combined upper and lower aquifer horizons vary from 40ft to 100ft (12m to 30m) in depth from surface and are limited at the base by another stiff clay horizon. Drilling to date is insufficient to accurately determine a brine resource potential below these shallow aquifers.

Past and present development efforts have focused on using large-scale solar evaporation ponds to extract salt compounds from the brine through concentration and fractional crystallization. The extent to which the mineralization can support an ongoing operation of extraction is unclear and there is no guarantee that commercial extraction is feasible at this time.

8 DEPOSIT TYPES

The deposit type is a terminal lakebed brine deposit. The brine deposit is sedimentary in origin and composed of the natural concentration of mineral salts in the groundwater of a terminal lakebed, also referred to as a playa. The brine is contained within the unconsolidated lakebed sediments composed primarily of clay and marl. While the sediments may be of future economic interest due to their significant mineral content, development efforts to date have primarily focused on the mineral content found in the brine.

Most of the world's potash occurrences are found in subsurface bedded salt deposits that can yield high-grade ore amenable to underground mining or in-situ recovery (ISR) extraction. The playa lakes of Utah and of "salars", a similar physiographic environment found along the eastern Andes region of Chile and Argentina, are areas where vast resources of brines have been identified. These mineral brines are sought for not only their potash but for other valuable minerals such as lithium and boron.

The market refers to two types of potash: muriate of potash (MOP or KCl) and sulphate of potash (SOP or K_2SO_4). Ninety-six percent of the potash used in fertilizer is in the form of MOP; the remainder is from SOP, which typically commands a premium price. SOP does not occur naturally, but is produced through beneficiation and processing. Brine deposits rich in sulfates are more likely to produce SOP than chloride-rich brines.

Figure 8.1 shows the location of Sevier Lake in relation to the other two mineral brine occurrences, the Great Salt Lake and the Great Salt Lake Desert, where respectively the Great Salt Lake Minerals Corporation (GSL) and Intrepid Potash Inc. (Intrepid) are producing potash products. While the two operations both produce potash, GSL produces SOP by solar evaporation of the brackish surface waters of the Great Salt Lake while Intrepid produces MOP through solar evaporation of brine collected as groundwater through an extensive canal system leading to their solar evaporation ponds near Wendover, Nevada. The Intrepid operation is the closest corollary to Sevier Lake in that the brine occurs as groundwater hosted in fine-grained sediments and evaporites; however, the brine chemistry at their Wendover operation is most suitable for MOP production.

8.1 MINERAL DEPOSIT TYPE

The mineral salts typically found in solution may be precipitated from the brine by solar evaporation as has occurred since the ancestral lake became landlocked. The most common evaporite mineral is halite (NaCl). Other less common precipitated minerals include glauberite ($Na_2Ca(SO_4)_2$), gypsum ($CaCO_3$) and thernadite (Na_2CO_3).

Major element concentrations in the brine include: sodium (Na), magnesium (Mg), potassium (K), chlorine (Cl), as well as the chemical compound sulfate (SO_4). Additional elements and chemical compounds present in low concentrations include lithium (Li), uranium (as U_3O_8), boron (as B_2O_3) and bromine (Br_2). The natural concentration of these elements in the brine (groundwater) provides an opportunity to produce halite (NaCl), potash (KCl or K_2SO_4) and bitterns ($MgCl_2$ or $MgSO_4$) by means of precipitation, harvesting and processing of mineral salts from solar evaporation ponds located on the lakebed surface. SOP is the targeted mineral compound of the development efforts of the Sevier Lake project.

9 EXPLORATION

Numerous exploration programs and scientific studies have been focused on the Sevier Lake deposit, climate, sediment and brine characterization, and potential for production of potash and related minerals. These works are historic and have only marginal context to the objective of defining a current mineral resource for the property that is NI 43-101 compliant. The Norwest 2011 Technical Report describes past exploration and development work in some detail, and Gwynn in rather more depth. Key items to note include the 1979 gravity survey of Case and Cook relative to delineation of potential depth of basin sediments and the CPMC exploration campaigns consisting of over 700 shallow auger holes, several deep holes RC and excavation of a brine collection canal at the south end of the lake.

A current topographic survey has been conducted to locate the collars of the boreholes drilled during the 2011/2012 exploration program and to accurately define the lakebed margin and delineate the potential resource area. This data was incorporated into the geologic model used in the current resource estimate.

A series of wells and trenches have been completed for the purpose of hydrological characterization of the brine resource. Wells have been completed for pump tests and other hydrologic tests. As the field program has just recently concluded, testing work is now in progress and results to become available pending data collection and analysis.

No downhole wireline geophysical surveys were conducted. Besides the Case and Cook gravity survey, the author is not aware of any other ground or areal geophysical surveys that may have been performed.

10 DRILLING

10.1 HISTORIC DRILLING

The great majority of historic drilling was conducted by CPMC. More than 700 4.5in diameter auger holes were completed between 1979 and 1983. The holes extracted lakebed sediments down to a depth of 20ft from surface and were cased with 2in diameter slotted PVC pipe to the end-of-hole. Attempts were made by CPMC to auger every quarter-section however the program was unable to cover the entire lakebed before the project was discontinued. Composite brine samples were extracted from those holes containing brine and sediment samples were taken at 5ft intervals. Sediment and brine samples from the auger holes were used for the following purposes:

- Mapping of surface crust
- Mapping of surface mineral chemistries
- Determining sediment mineralogy
- Testing of brine water chemistry
- Measuring sediment sample water saturation levels
- Determining depth and extent of brine within 20ft from surface
- Performing particle size analysis of sediment samples.

CPMC conducted additional deeper exploration and several other wells were completed between by other parties between 2003 and 2008. The past exploration is significant in providing an historical baseline for brine chemistry and also identifying potential for developing the property into a shallow-aquifer SOP operation. EPM considered a validation program that might use the CPMC drill results but determined that a current data collection program would provide the accuracy and current characterization required for future resource and reserve reporting.

10.2 CURRENT EPM DRILLING PROGRAM

EPM began planning and implementing a drilling program in the spring of 2011 after its federal leaseholds were awarded. Exploration permits for the SITLA leases were approved in 2011 and it was determined to start with a first phase of exploration drilling on the state areas in order to test methodology, procedures and protocol. The federal leases were approved for exploration activities and drilling commenced on these on November 7, 2011. A total of 404 exploration holes were drilled on both state and federal leases, with drilled footage totaling 15,866.3ft (4,757.6m). An additional 10 wells were drilled as twin pairs on federal leases for future hydrologic monitoring, bringing the total holes drilled during the exploration phase to 414. No holes were drilled on the LUMA lease area.

Statistics for the EPM 2011/2012 drilling are presented in Tables 10.1 and 10.2, with detailed data for each hole included in Appendix B as Table B.1. Locations of the various well types are illustrated in Figure 10.1. All holes drilled during the EPM program were of vertical orientation.

TABLE 10.1
EPM 2011/2012 PROGRAM – HOLE TYPES

EPM Lease	Direct Push	Shallow Sonic	Deep Sonic	Auger	Monitor Twins	Total
Federal	357	23	1	0	10	391
State	17	4	1	1	0	23
Total	**374**	**27**	**2**	**1**	**0**	**414**

TABLE 10.2
EPM 2011/2012 PROGRAM – EXPLORATION HOLE DEPTH SUMMARY

EPM Lease	Number Holes	Minimum Depth		Maximum Depth		Average Depth		Total	
		ft	m	ft	m	ft	m	ft	m
Federal	381	15.0	4.6	497.0	151.5	37.1	11.4	14,508.2	4,422.2
State	23	20.0	6.1	265.0	80.8	59.0	18.0	1,358.1	414.0
Total	**404**	**15.0**	**4.6**	**497.0**	**151.5**	**38.3**	**11.7**	**15,866.3**	**4,836.1**

10.2.1 State Leases

Field activities on the state leases commenced on August 1, 2011 and lasted for approximately one month. During that period 22 holes were completed using a Geoprobe direct push rig or a mini-sonic rig. An auger rig was tested on one hole but proved unsuitable both from a rate of penetration perspective but also due to its unsuitable sample quality. Two to four holes, typically located 2,500 to 3,500ft (760m to 1,070m) apart, were drilled on seven of the ten state license blocks. The plan was laid out with the locations occurring in the center of each square mile section and at the center of each quarter section.

The direct push rig drilled a 3.25in diameter hole and produced a 2in diameter soil core in a plastic sample tube, which was opened and logged at the wellsite by a Norwest geologist. The completed hole was then cased with 2" PVC from bottom to 2.5ft (0.75m) above the lakebed surface. The casing was factory slotted from near TD to typically within 5 to 10ft (1.5m to 3m) of surface and then cement placed around a solid piece of casing. A filter sock was secured to the open bottom end of the casing to prevent sediment incursion. Figures 10.2 and 10.3 are photographs showing the installation of casing and an example of a completed well during the state lease field program.

A mini-sonic rig also was in operation and completed four shallow (<100ft/30m) holes and one deep hole to 240ft (73m). The rig ran a 6 by 4 configuration, drilling a 6in hole and producing a nominal 3.5in core. The holes were completed in a similar fashion as the direct push holes with slotted casing from total depth to near surface, except for the deep hole, which was screened at two different intervals to evaluate a deep and shallow brine horizon.

The state program showed that much of the sediment consisted of fine-grained clays with thin interbedded horizons of silt or sand. The clays were, however, commonly saturated to a depth of 40 to 50ft, where a layer of stiff, relatively dry clay was encountered. This basal clay commonly brought the direct push rig to refusal, or a condition of extremely slow penetration and the holes were usually terminated at this point.

10.2.2 Federal Leases

The federal lease program lasted from early November through mid-April 2012. The objective of the program was to complete brine sampling locations at a sufficient density throughout all of the EPM leasehold areas to enable a resource estimate of predominantly measured plus indicated assurance categories. A statistical analysis using brine chemistry data and a preliminary model of select ion concentrations indicated that a 3,000ft (900m) and 5,000ft (1,500m) radius from brine sample locations could be used for delineating measured and indicated assurance areas. A plan was developed using an approximate 3,000ft (900m) hole spacing for the federal lease areas. Drilling generally progressed from the south end of the lake northward.

The drilling effort was conducted using one or two direct push rigs working in conjunction with a mini-sonic rig. The direct push rig(s) utilized a system creating a 2.25in hole and yielding a 1in soil core. Direct push sample tubes from the federal program were not removed from the plastic sleeves, but instead were logged at the wellsite through the sleeve, pocket penetrometer measurements taken at core sleeve ends, labeled with depths and sealed at the tubing ends. Areas of core loss were noted in the field. This procedure was implemented to accommodate laboratory moisture content analysis without losing moisture from the core due to atmospheric conditions at the wellsite. The core was later opened, photographed and logged in the laboratory prior to moisture content analysis. Direct push holes were completed with 1in PVC casing slotted from TD to within 5 to 10ft of surface. A surface seal was obtained by pushing a solid piece of 4in schedule 40 PVC through the halite surface crust surrounding the 1in casing to a depth of 3 to 4ft below the lakebed surface.

The mini-sonic rig utilized for the federal program was equipped with an 8 by 6 configuration, creating an 8in hole and producing a 6in core. Core samples were laid out for logging by a Norwest geologist, photographed, logged, tested at intervals with a pocket penetrometer, and moisture content samples removed and sealed. The mini-sonic holes were then completed with 4in slotted PVC, approximately half of the wells from total depth to 5 to 10ft from surface, the others completed at targeted horizons for further hydrologic testing. Planned test wells were gravel packed through target intervals and otherwise grouted to surface.

The federal program faced some unique challenges in drilling operations and transportation of personnel and equipment due to a buildup of surface water at the north end of the lake. This situation was caused by the unusual influx of surface water from the Sevier River, which typically dries up prior to reaching its junction with the lakebed. Standing water reaching 1 to 2ft in depth was present in the north throughout most of the federal program and required the rigs to be mounted on amphibious marsh and cargo buggies, with haulage to and from the drill locations performed by air-boat. Figures 10.5 and 10.6 portray some of the conveyance methods utilized during this period.

While the state and federal drilling programs were conducted in a fashion common with those for other mineral commodities, i.e. that sediment core was extracted and logged for key physical properties and sent to laboratory for further analysis, the true target of the drilling programs was to identify a resource of mineral brine. The characterization of the sediments was primarily to identify the volume of lakebed that contained brine-saturated sediments and to quantify its saturation through moisture content analyses.

The drilling program is judged to be successful in these objectives after completion of modeling and statistical analysis of the acquired data. The program also established a network of hydrologic testing installations that will lead to further characterization of the brine aquifer. It is the author's opinion that there are no aspects of the drilling program that could materially impact the accuracy and reliability of the results.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sampling during the EPM 2011/2012 program involved both unconsolidated sediment samples and samples of the liquid brine. The sediment samples were taken primarily to quantify their level of saturation and the brine samples to characterize chemical composition and density. The objective of this sampling program was to identify the in-place resource of ions necessary to produce potash and related mineral compounds through fractional crystallization.

11.1 SAMPLING METHOD AND APPROACH

11.1.1 Sediment Sampling

Sampling of the lakebed sediments was conducted only during the federal program. The sampling program was developed after the completion of the state program and the recognition of the need to acquire accurate moisture content and sediment density data. Sediment sampling protocols and procedures were developed as well as performed by Norwest geologists. It was performed in two ways, depending on whether the sample was taken from a direct push or from a sonic hole.

Direct push core remained in the plastic sample sleeves while a precursory lithologic description was made from open tube ends and features visible through the plastic. Initially the tubes were cut into two 2.5ft lengths but later the procedure was modified to work with the full, uncut 5ft core section. Core loss was noted and logged where it occurred. Field measurements of sediment compaction were taken at the tube ends using a pocket penetrometer and recorded on the log.

Immediately after logging the core tubes were sealed with plastic core caps from the tubing manufacturer. Red and black colored caps were used to confirm top and bottom of the core run. The caps were then sealed with tape and top and bottom depths marked on the tube in permanent marker. Sample ID's were also marked on the core tube, comprised of hole name and depth interval, and documented on the wellsite log and the chain of custody (COC) form.

Sealed core was boxed and checked against the COC form. The sealed core boxes were then transported directly to the Intermountain GeoEnvironmental Services Inc. (IGES) laboratory in Salt Lake City by project personnel (predominantly Norwest staff) with original COC forms that were signed by laboratory personnel on receipt. IGES is an independent geotechnical engineering firm and rock mechanics laboratory and is certified by AASHTO Materials Reference Laboratory (AMRL) accreditation.

Sampling of sediment on a sonic rig site was initially targeted at providing moisture content data below the typical 50ft range of the direct push rigs in order to characterize the saturation of the lower shallow aquifer. During this stage of the sonic program, a 5ft longitudinal slice of core was sampled at successive intervals below 50ft below ground surface (bgs) and sealed in 1 gallon plastic bags, which were labeled with unique field sample ID's. Approximately 10 bags were then stored in a lexan sonic core tube, sealed and labeled for transport to the laboratory. Later in the federal program the procedure was modified to acquire 10ft samples from surface to total depth using the methodology described above. In all instances, final transportation of the samples to the IGES laboratory was performed by project personnel, predominantly Norwest staff members with direct COC sign-off at the laboratory.

11.1.2 Brine Sampling

Sampling of the mineral brine was conducted during both the state and federal programs. The sampling procedures and protocols were developed by CH2M HILL (HILL), in consultation with EPM and Norwest, as part of their role as project consultants responsible for the sample well installations and further hydrologic characterization of the brine aquifers. Brine sampling was performed by HILL personnel after the well installation was completed and after a minimum 48 hour stabilization period had elapsed.

Prior to sampling, the water level and total well depth was documented using an electronic sounding tape.

Low-flow peristaltic pumps were used for sampling the wells. The wells were purged prior to samples being taken. Polyethylene tubing attached to a weight was lowered down the well to specified depths. Because the intention was to collect samples representative of conditions after re-equilibration and to minimize disturbance of the water column, the wells were sampled with the minimal amount of purging deemed necessary.

The procedure for purging and sampling included the following instructions:

- Slowly lower a peristaltic pump tube to the uppermost sampling interval.
- Purge the well at a flow rate of between approximately 100mL/min and 500mL/min.
- Purge until the turbidity has visually improved, not to exceed 15 minutes (note that the upper interval is often fairly clean and the necessary purge time is often less than 15 minutes).
- Collect samples at the same flow rate of between 100mL/min and 500mL/min
- Lower the pump tubing to the next sampling interval and repeat the above steps. Note that for most direct push wells, we assume there are two sampling intervals.

For wells where it was suspected that a substantial volume (greater than a gallon or so) of fresh water may have entered the top of the well boring or casing during drilling and well construction, additional well purging was performed before sampling with the peristaltic pump. At least two borehole volumes were purged from these wells using a submersible pump. To minimize clogging of the filter pack material and collapse of formation around the filter sock and well screen, relatively low pump rates (no greater than about 1gpm) were used. After this purging, the well was allowed to re-equilibrate for at least 24 hours before sampling according to the peristaltic pump procedures above, or after the well has returned to 90% of its initial volume (not exceeding 48 hours from purging).

Samples were collected at approximate 25ft intervals, with at least three intervals sampled in each well during the state program. The federal program sampled fewer intervals, as review of the assay results showed the low variability of the brine column. The nominal 50ft direct push wells were then sampled at two horizons, typically at 10ft (3m) and 35ft (10.7m) depths. A small number of the final sonic holes were sampled once near the bottom of the screened well interval. Check samples were collected as part of the QA/QC program.

11.2 Sample Preparation, Security and Analyses

11.2.1 Sample Preparation and Security

Sample preparation and security for sediment samples is discussed in Section 11.1.1 above. Sample preparation and security protocol for brine samples was designed by HILL, with collaboration of EPM and Norwest.

Samples were collected in two 250-milliliter (mL) bottles, for a total sample volume of 500 ml. The cation sample bottles contained nitric acid to preserve metal speciation, and the anion bottles contained no preservative. The samples were labelled according to the well, depth interval, date and time.

For quality assurance, blind field duplicates were submitted at the rate of one per 10 samples. American West Analytical Laboratories (AWAL), an independent laboratory located in Salt Lake City, ran method blanks, lab control samples and matrix spike/matrix spike duplicates (MS/MSD) at the rate of one per 20 samples to conform with their NELAP (National Environmental Laboratory Accreditation Program) certification.

All samples were kept in a cooler on ice to maintain a temperature between 0 and 6 degrees Celsius (°C). Samples remained in the sole possession of the sampler until delivered to AWAL or securely stored to prevent tampering. COC forms were used to document the handling of the samples, and custody seals placed on the cooler lids. Final transportation and delivery of the samples to AWAL was performed by the HILL samplers who obtained direct COC sign-off at the laboratory.

11.2.2 Analytical Program

All brine sample analyses sampled from the Sevier Lake wells were performed by AWAL at their Salt Lake City facility. They also analyzed blanks prepared by HILL which were inserted as blind control samples in the analysis chain. A total of 870 brine analyses had been completed at the time of this report – a small number of samples from the final hydrology holes were still being analyzed when the brine quality models were completed.

AWAL is accredited by the National Environmental Laboratory Accreditation Council (NELAC) and all analyses were performed in accordance to the NELAC Institute protocols. It was engaged by EPM on a contractual basis and is independent of the issuer.

Samples were analyzed for the cations magnesium, sodium, and potassium(Mg2+, Na+, K+,), anions chloride and sulfate (Cl-, $SO_4$2-), and specific gravity (i.e., density). At a rate of one sample per section (on any section where four or more holes are drilled), analyses were made for lithium, bromine and barium (Li+, Br2, Ba), Total Dissolved Solids (TDS) and other trace minerals. Table 11.1 shows lists the analytes included in the EPM analytical program and their test methods.

TABLE 11.1
BRINE ANALYSES AND METHODS

Analysis	Test Performed	Minimum Reporting Limit	Description
Total Dissolved Solids	SM2540C	500	Ion Chromatography
Density (Specific Gravity)	E300.0	0	Gravimetric Test of Known Volume
Chlorides (Cl)	E300.0	5000	Ion Chromatography
Sulfates (SO_4)	SM2710F	3750	Total Dissolved Solids Dried at 100°C ±4°C
Sodium	SW6010C	10000	Inductively Coupled Plasma Optical Emission Spectroscopy
Potassium	SW6010C	1000	Inductively Coupled Plasma Optical Emission Spectroscopy
Magnesium	SW6010C	1000	Inductively Coupled Plasma Optical Emission Spectroscopy

Eighty-five blind check brine samples were introduced for QA/QC purposes. Alternative laboratories or analytical methods were not compared in the procedures and protocols of this project.

Sediment samples were analyzed by IGES for moisture content using ASTM method DD2216, which is the determination of moisture content by reduction in mass by drying. Due to the quantity of gypsum identified in the sediments, the modified temperature of 140F (60C) was used in the drying process instead of the normal, higher drying temperature of 230F (110C). This is done in instances where hydrous minerals, such as gypsum, render their hydrous component at the higher temperature as water, thus skewing the reported moisture content. Analysis of moisture content data at both temperatures showed the higher drying temperature yielded an average moisture content 3% higher than the lower temperature.

After review of the original and blind brine sample comparisons, the author is of the opinion that the reported results for the analytes of importance to this brine resource estimate are accurate. Sample preparation and security measures are found to be of high standards and do not compromise the results used in this report.

12 DATA VERIFICATION

12.1 DRILLING AND SAMPLING METHODS

Norwest geologist have been active in assisting EPM with their Sevier Lake field drilling and sampling program starting in August 1, 2011 and ending in April 2012. During that period Norwest observed the field data collection procedures that included drilling methods, core logging and brine sampling. In addition, Norwest assisted in the transportation of the sediment samples from the site to AWAL laboratories and IGES laboratories in Salt Lake City. The location of 25% of the drill holes was independently verified using a hand held GPS by Norwest field geologists.

12.2 SURFACE MAPPING

Norwest compared the lakebed boundary mapping completed by Sunrise Engineering Inc. in April 2011 and used in the geologic model with the lakebed boundary sourced from the public domain AGRC.utah.gov (AGRC) web site. The EPM mapped lakebed boundary tracked the AGRC boundary without any materially significant differences. There was only a 0.7% difference in lakebed area between the AGRC data and the EPM mapped boundary.

12.3 DATABASE

All field exploration data were entered into Excel tables on-site or at temporary residences located in the nearby towns of Delta or Milford. Norwest was actively involved in compiling the field data. Data from laboratories was supplied in digital and printed form. Comparisons were conducted by Norwest between the digital and printed assay certificates and no errors or omissions were observed. The field data and laboratory data were integrated into a single Excel database that was used for geologic modeling and resource estimation purposes.

12.4 LABORATORY ANALYSES

AWAL laboratories (brine analyses) and IGES laboratories (sediment analyses) were observed by Norwest to have their own internal QAQC procedures. The low nugget effect observed in the geostatistical analysis of the sample results indicated that the sample values are repeatable within laboratory detection limits. Splitting of sediment samples of duplicate testing was observed to be impractical due to the unconsolidated nature of the sample material.

For quality assurance, blind field duplicates were submitted at the rate of one per ten samples. AWAL laboratories as obliged by their NELAP (National Environmental Laboratory Accreditation Program) certification to run method blanks, lab control samples and matrix spike/matrix spike duplicates (MS/MSD) at the rate of one per 20 samples. Common control limits for the relative percent difference (RPD) is ±20% or ± the reporting limit.

The author is satisfied that the recorded data has been properly acquired and that sufficient validation has been performed to make it acceptable for use in the estimation of a current brine mineral resource.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

The Sevier Lake property is an exploration stage property and current metallurgical testing and process engineering are being initiated by EPM but no data is available to report at this time.

A number of studies involving brine processing from Sevier Lake have been performed in the past but are not current or are based on historical data. CPMC performed processing work that involved test trenches, pilot and full scale solar evaporation ponds, and commissioned some process engineering. They spent considerable effort in evaluating the phases of brine chemistry through evaporative concentration stages.

EPM commissioned a process engineering study completed in 2009 that assessed project feasibility including the aspects of mineral processing. This study was used internally as a move-forward decision tool that initiated their current development efforts. The study addressed process flow from brine extraction systems to solar evaporation and fractional crystallization stages and on to plant feed, SOP crystallization and drying. EPM has initiated an advanced engineering and economic study based on current brine resource data that will address brine processing and related areas.

14 MINERAL RESOURCE ESTIMATES

14.1 OVERVIEW

The brine resource estimate was prepared by Norwest Project Manager Derek Loveday, (Pr Sci. Nat.) and Norwest geologist Brandon Alger under the supervision of Larry Henchel (Vice President). Mr. Henchel is the Qualified Person for the estimate.

Brine estimates are not "solid mineral deposits" as defined under the 2010 CIM definition standards. However, there are sufficient similarities to mineral deposits that the guidelines published by the CIM and referenced in NI 43-101 provide a useful guide to brine estimation reporting. Norwest used the principle of the NI 43-101 disclosure standards, the general format of Form NI 43-101F1 in preparing the report on the estimate, and considered recommendations in the CIM best practice guidelines for mineral resource estimation when preparing the estimate.

The brine resource estimate was developed using MineSight® three-dimensional block modeling software. The geological model from which the brine resources are reported is based on the analyses and descriptions of brine and aquifer sediment samples taken at regular depth intervals from vertically orientated drill holes collared on the lakebed surface.

14.2 MODEL DATABASE

The geologic model database comprises three components, namely: topography, surface mapping and drill hole data. Each component is described separately below:

14.2.1 Topography

The lakebed surface represents the top surface limit of the brine aquifer. To the naked eye the lakebed surface appears flat with little or no obvious changes in elevation across the lakebed. To obtain an accurate measure the true elevation of the lakebed surface the surveyed drill hole collar locations and lakebed survey points were used to define the lakebed surface elevation for brine resource modeling purposes.

14.2.2 Surface Mapping

There was no geological mapping of the playa surface because of the generally uniform nature of the playa surface geology. Surface mapping is limited to surveying the boundary of the playa surface which was used to both define the limits of the brine aquifer and to determine the elevation of lakebed in conjunction with drill hole collar surveys.

14.2.3 Drill Hole Data

The following brine resource parameters were acquired from drill hole sampling of brine and host sediments:

- Penetrometer measurements
- Gravimetric moisture content in weight percent (Wt %)
- Specific gravity (SG) of brine and solid host rock (sediments)
- Cation in mg/l brine for: Mg^{2+}, Na^{+} and K^{+}
- Anion in mg/l brine for: Cl^{-} and SO_4^{2-}

Each of the above parameter is discussed below:

Penetrometer Measurements

The penetrometer results provided an indirect and relative measure of moisture content. The lower values (0 to 2.0 tons per square foot (tsf)) generally representing intervals of elevated moisture content and higher values (<2.0tsf) represent intervals of low moisture content of approximately 30% by weight or less. These penetrometer results together with lithologic descriptions and moisture content (Wt %) were used to identify an upper high-moisture zone and lower low-moisture zone in the brine aquifer.

Moisture Content

The gravimetric moisture content was measured for all sediment samples and is considered to be an equivalent measure of porosity given that all lakebed sediment samples were observed to be 100 percent saturated. The univariate statistics for modeled moisture content is listed in Table 14.1.

TABLE 14.1
SEDIMENT MOISTURE CONTENT UNIVARIATE STATISTICS

Parameter	No. Samples n	Minimum (Wt %)	Maximum (Wt %)	Mean (Wt %)	Median (Wt %)	Standard Deviation
Gravimetric Moisture	2313	6.02	75.58	44.45	43.85	8.51

Specific Gravity

The SG of the brine was measured for all brine samples together with cation and anion analyses. The sediment SG was not determined for all samples and was limited to 25 samples randomly distributed across the property. The univariate statistics for brine SG is listed in Table 14.2. The average sediment SG together with modeled brine SG and sediment moisture content is used to calculate the brine resource tonnes using the formula:

Brine Tonnes = BV * BSG = $\left(\frac{AV*MT}{MT+\frac{1}{SGS}}\right)*BSG$

Where:

- BV=brine volume (m^3)
- AV=aquifer volume (m^3)
- MT=sediment moisture content (Wt%/100)
- SGS= sediment SG
- BSG = brine SG

TABLE 14.2
SPECIFIC GRAVITY UNIVARIATE STATISTICS

Parameter	No. Samples n	Minimum	Maximum	Mean	Median	Standard Deviation
Brine SG	870	0.98	1.21	1.1	1.1	0.0325
Sediment SG	25	2.749	2.987	2.880	2.877	0.0634

Cation and Anion Analyses

The reason for the measurement of the most commonly occurring cations and anions in the brine samples is to determine the theoretical salt products including potash (K_2SO_4 or KCl) that could be precipitated from brine in solar evaporation ponds. In order to calculate the relative proportion of cations and anions in the lakebed brine deposit all cation and anion analyses were converted to weight percent (Wt%) equivalent values from the laboratory reported mg/l units. The univariate statistics for the modeled cations and anions are listed in Table 14.3.

TABLE 14.3
CATION AND ANION UNIVARIATE STATISTICS

Parameter	No. Samples n	Minimum (Wt %)	Maximum (Wt %)	Mean (Wt %)	Median (Wt %)	Standard Deviation
Magnesium Mg^{2+}	870	0.079	1.596	0.348	0.331	0.108
Sodium Na^{+}	870	3.085	16.667	6.918	6.750	1.612
Potassium K^{+}	870	0.062	0.763	0.280	0.273	0.068
Chlorine Cl-	870	1.443	26.239	8.350	7.866	2.679
Sulphate SO_4^{2-}	870	0.775	6.771	2.273	2.099	0.858

14.3 Database Validation

Prior to modeling the model database was subject the following standard checks for inconsistencies:

- Drill hole sample depth intervals and survey locations
- Drill hole collar elevations against regional public domain survey data
- Lakebed boundary mapping versus regional public domain lakebed mapping
- Anomalous values in moisture content, specific gravity and brine chemistry
- Comparison between penetrometer results and moisture content
- Comparison between laboratory assay certificates versus electronic records.

All observed inconsistencies and apparent errata were resolved following checks of the base data or consultation with the affected parties, namely: EPM, consultant services, drilling contractors and laboratories.

14.4 Geologic Model

The brine resources were reported from a 3D block model that covers the extent of the Sevier lake boundary. All spatially referenced data used in the model has been converted from the source Central Utah NAD83 State Plane coordinate system to the metric UTM Zone 12 WGS84 datum. All elevation and depth data has been converted from the source imperial units (feet) to metric units (meters).

14.4.1 Spatial Correlation

The geometry of the brine aquifer was determined from the correlations of drill hole lithogic descriptions, penetrometer results and moisture content measurements. The brine aquifer is confined to within the boundary of the lakebed surface. On the lakebed boundary there is a clear transition from surface soil to a gypsum-halite duricrust. Below the duricrust an upper and lower brine aquifer has been correlated. The contact between the upper brine aquifer and lower brine aquifer from a hydrologic and brine chemistry perspective is observed to be gradational.

The upper brine aquifer has generally high moisture contents, averaging 40% moisture or greater with penetrometer readings below the minimum detection limit. The contact between the upper and lower brine aquifer is gradational and was characterized by a transition to sediments of lower moisture content and penetrometer readings above the minimum detection limit. In addition the contact included a 0.3m thick or less drier clay zone with penetrometer readings of approximately 2.5tsf. The basal limit of the lower brine aquifer is characterized by a transition from moderately moist sediments to a consolidated clay with penetrometer results beyond the maximum detection limit (>4.75tsf). There was also a color change in the sediments from medium olive grey in the lower brine aquifer to a reddish brown color in the underlying consolidated clay.

The thickness of the upper brine aquifer averages 5.77m thick and is generally consistent across the lakebed as indicated in Table 14.4 brine aquifer thickness statistics generated from the drill hole records. The lower brine aquifer is penetrated by fewer drill holes as indicated in Table 14.4 and is interpreted to be average 15.33m thick.

TABLE 14.4
UPPER AND LOWER BRINE AQUIFER THICKNESS

Brine Aquifer	No. Intercepts n	Minimum (m)	Maximum (m)	Mean (m)
Upper	403	1.52	9.91	5.77
Lower	24	4.88	25.66	15.33

Wireframe surfaces were constructed of the upper and lower brine aquifer contacts using grid estimates of topography and aquifer thickness from the drill hole records. The top contact for the upper brine aquifer is represented by a wireframe surface of the lakebed topography that was sourced from grid estimates of drill hole collar and lakebed surveys. The brine aquifer floor elevation wireframe surfaces were generated from grid estimates of upper and lower brine thickness that were subtracted from the reference topography grid. The lakebed topography and brine aquifer grid estimation parameters are listed in Table 14.5.

TABLE 14.5
MODEL GRID ESTIMATION PARAMETERS

Parameter	Description
Grid Spacing	100m(X), 100m (Y)
Estimation Algorithm	Topography - Triangulation
	Brine Thickness - Inverse Distance Power 2
	Brine Floors - Topography Less Brine Thickness

Cross-sections illustrating the subsurface extent of the top and bottom brine aquifers are illustrated in Figure 14.1. Color contours plots of the brine aquifer thickness are illustrated in Figure 14.2 and brine aquifer floor elevations are illustrated in Figure 14.3. The top and bottom brine aquifer contact surfaces were used to construct wireframe solids that were in turn used to code the 3D block model with ore versus waste blocks using a majority code. The 3D block model parameters are outlined in Table 14.6

TABLE 14.6
BLOCK MODEL PARAMETERS

Parameter	Description
Coordinate System	UTM Zone 12 WGS84 datum
Units	metric
Block Size	100m(X), 100m(y), 1,5m (Z)
Model Easting (X) Range	304400 to 330000
Model Northing (Y) Range	4285800 to 4332000
Model Elevation (Z) Range	1335 to 1383

14.4.2 Moisture and Brine Grade Interpolation

The estimation of moisture content and brine grade (cations and anions) and specific gravity into the 3D block model was influenced by the results of geostatistical analyses of the source drill hole sample data. Frequency distribution plots (histograms) of sample moisture content and brine chemistry were used to identify outliers in the sample data. The moisture and brine grade histograms are illustrated in Figure 14.4. 3D semi-variogram analyses charts with 3D grade trend plots are illustrated in Figure 14.5.

The histogram and semi-variogram analyses of the sediment and brine sample data have been used as a guideline to determine appropriate estimation algorithms, top cuts and ranges for brine resource classification. The semi-variogram analyses of the sample data using 1.5m thick regular composites indicate a low nugget affect for the sample data and generally isotropic grade trends as indicated in the semi-variogram charts in Figure 14.5. Table 14.7 outlines the moisture and brine grade estimation methods used for the 3D block model.

TABLE 14.7
GEOLOGIC MODEL ESTIMATION METHODS

Parameter	Resource Classification	Minimum No. Samples (n)	Maximum No. Samples (n)	Maximum Search Distance (m)
1st Pass Estimates	Measured	3	50	1,500
2nd Pass Estimates	Indicated	3	100	3,000
3rd Pass Estimates	Inferred	1	200	6,000

The brine resource classification is influenced by the results of the semi-variogram analysis of the brine cation and brine anion sample data. The best fit experimental variogram illustrated in Figure 14.5 indicate a maximum range to sill of approximately 3000m beyond which the relationship between sample grade pairs is viewed as random or inferred. The search ranges outlined in Table

14.7 are also used to tag the block estimates as measured (1st pass), indicated (2nd pass) or inferred (3rd pass).

The moisture and brine grade estimates were not matched with respective upper and lower brine aquifer intervals because of the gradational contacts between brine aquifers. Instead a narrow initial vertical search radius has been used to simulate the vertical stratification of moisture and brine grade as reflected in the sample data. The distribution in estimated moisture content at 3.0m elevation intervals is illustrated in Figure 14.6. Similarly the distribution of brine cation and anion estimates at 3.0m elevation intervals is illustrated in Figure 14.7 through Figure 14.11.

14.4.3 Model Validation

The block model estimates were validated against the source drill hole sample database by comparing the drill hole sample data against the nearest block estimates. This comparison is best illustrated with the aid of swath plots that compare the mean drill hole sample grades with mean block estimates at regular intervals across the model area. The north-south oriented swath plots are illustrated in Figure 14.12 and east-west orientated swath plots are illustrated in Figure 14.13. No overestimation or underestimation trends were observed in any of the swath plots illustrated in Figure 14.12 and Figure 14.13.

14.5 RESOURCE STATEMENT

The estimated brine resources and associated major dissolved cations and anions for the upper brine aquifer and lower brine aquifer are listed in Table 14.8. Resource plans illustrating the distribution of brine resources by levels of assurance within 3m elevation intervals for the upper and lower brine aquifer are illustrated in Figure 14.14. Table 14.9 outlines tonnages of mineral equivalent compounds that could be created using the available cations and anions in the brine resource listed in Table 14.8. Given that sufficient sulphate is present in the brine to utilize all the potassium ions, equivalent SOP (K_2SO_4) from the measured plus indicated brine are calculated to be approximately 29.5Mt. The equivalent compounds outlined in Table 14.9 assume a 100% recovery of the brine from the upper and lower brine aquifer. Studies to determine the practical brine recovery percentage from the lakebed are currently underway.

The mineral brine resource is considered to have the potential for extraction based on empirical assessments of brine chemistry, moisture content values, estimated resource area and volume and field observations of fluid transmissivity in the two aquifer zones during drilling, casing and purging of the wells for sampling. Static water levels in the wells stabilize rapidly and wells occasionally exhibit artesian flow. The Intrepid Potash Wendover Facility, a property in the region having similar geology and being essentially a northern extension of the same paleo-lake, is cited as a correlative and has been an operating commercial enterprise producing potash and related products for the past 75 years.

TABLE 14.8
ESTIMATED BRINE RESOURCES AND MAJOR DISSOLVED CATIONS AND ANIONS

Classification	Brine Aquifer	Lease	Moisture (Wt%)	Volume Aquifer (Mm^3)	Sediment SG	Brine SG	Volume Brine (Mm^3)	Tonnes Brine (Mt)	Potassium (K) Wt %	Potassium (K) Mt	Sulphate (SO_4) Wt %	Sulphate (SO_4) Mt	Chlorine (Cl) Wt %	Chlorine (Cl) Mt	Sodium (Na) Wt %	Sodium (Na) Mt	Magnesium (Mg) Wt %	Magnesium (Mg) Mt
Measured	Upper	State	42.34	98	2.88	1.122	54	61	0.293	0.178	1.454	0.881	8.343	5.052	6.624	4.011	0.369	0.223
		Federal	45.85	2,186	2.88	1.104	1,244	1,373	0.284	3.898	2.164	29.720	8.554	117.492	6.976	95.810	0.344	4.719
		LUMA	41.46	113	2.88	1.094	61	67	0.234	0.157	1.910	1.281	6.975	4.676	6.635	4.448	0.373	0.250
		Total	45.50	2,397	2.88	1.104	1,359	1,501	0.282	4.233	2.124	31.881	8.475	127.219	6.946	104.268	0.346	5.193
	Lower	State	38.32	168	2.88	1.118	88	99	0.283	0.279	1.340	1.321	7.871	7.760	6.587	6.495	0.361	0.356
		Federal	41.94	2,790	2.88	1.105	1,526	1,686	0.275	4.641	2.032	34.275	7.951	134.086	6.897	116.317	0.339	5.710
		LUMA	41.76	127	2.88	1.095	69	76	0.252	0.191	1.968	1.494	6.875	5.221	6.607	5.017	0.364	0.276
		Total	41.73	3,085	2.88	1.105	1,684	1,861	0.275	5.111	1.993	37.090	7.902	147.067	6.869	127.829	0.341	6.343
	Combined	State	39.80	266	2.88	1.120	142	159	0.287	0.456	1.386	2.202	8.057	12.812	6.601	10.506	0.364	0.579
		Federal	43.65	4,976	2.88	1.105	2,770	3,060	0.279	8.539	2.093	63.994	8.232	251.578	6.933	212.127	0.341	10.430
		LUMA	41.62	240	2.88	1.095	131	143	0.244	0.348	1.941	2.775	6.923	9.897	6.620	9.465	0.369	0.527
		Total	43.38	5,482	2.88	1.105	3,043	3,362	0.278	9.343	2.051	68.971	8.158	274.287	6.903	232.098	0.343	11.536
Indicated	Upper	State	36.99	6	2.88	1.120	3	3	0.331	0.011	1.621	0.055	9.537	0.323	7.429	0.252	0.393	0.013
		Federal	39.90	71	2.88	1.111	38	42	0.290	0.122	1.803	0.757	9.310	3.909	6.790	2.851	0.362	0.152
		LUMA	40.49	174	2.88	1.092	94	102	0.237	0.242	1.915	1.957	6.882	7.034	6.659	6.806	0.377	0.385
		Total	40.24	250	2.88	1.098	134	148	0.254	0.375	1.876	2.769	7.634	11.266	6.714	9.909	0.373	0.551
	Lower	State	36.35	42	2.88	1.091	21	23	0.221	0.051	1.625	0.377	7.142	1.658	6.374	1.480	0.275	0.064
		Federal	41.25	1,834	2.88	1.105	996	1,100	0.247	2.720	2.144	23.585	6.959	76.571	6.581	72.403	0.305	3.358
		LUMA	41.33	513	2.88	1.093	279	305	0.242	0.738	1.971	6.006	6.617	20.158	6.560	19.985	0.364	1.109
		Total	41.18	2,388	2.88	1.102	1,296	1,428	0.246	3.510	2.098	29.969	6.889	98.387	6.573	93.867	0.317	4.531
	Combined	State	36.43	47	2.88	1.095	24	27	0.240	0.062	1.625	0.432	7.532	1.981	6.527	1.732	0.295	0.077
		Federal	41.20	1,905	2.88	1.105	1,034	1,142	0.249	2.841	2.133	24.342	7.073	80.480	6.588	75.254	0.308	3.510
		LUMA	41.12	687	2.88	1.093	372	407	0.241	0.981	1.958	7.963	6.685	27.192	6.585	26.790	0.367	1.494
		Total	41.09	2,639	2.88	1.102	1,430	1,576	0.247	3.885	2.078	32.738	6.959	109.653	6.586	103.776	0.322	5.081
Measured plus Indicated	Upper	State	42.04	104	2.88	1.122	57	64	0.296	0.189	1.464	0.936	8.414	5.375	6.671	4.263	0.370	0.237
		Federal	45.66	2,257	2.88	1.104	1,282	1,415	0.284	4.020	2.155	30.477	8.579	121.401	6.970	98.661	0.344	4.871
		LUMA	40.87	286	2.88	1.093	155	169	0.236	0.399	1.913	3.238	6.919	11.710	6.649	11.253	0.376	0.636
		Total	45.00	2,648	2.88	1.104	1,494	1,649	0.279	4.608	2.102	34.650	8.400	138.486	6.925	114.177	0.348	5.744
	Lower	State	37.93	210	2.88	1.113	109	122	0.273	0.330	1.403	1.698	7.742	9.419	6.547	7.975	0.348	0.420
		Federal	41.66	4,624	2.88	1.105	2,522	2,787	0.265	7.361	2.078	57.860	7.590	210.657	6.776	188.720	0.326	9.068
		LUMA	41.42	640	2.88	1.093	348	381	0.244	0.930	1.971	7.500	6.670	25.379	6.569	25.002	0.364	1.385
		Total	41.49	5,473	2.88	1.104	2,980	3,289	0.262	8.621	2.039	67.059	7.463	245.454	6.740	221.697	0.331	10.874
	Combined	State	39.29	314	2.88	1.116	166	186	0.281	0.519	1.425	2.634	7.987	14.794	6.591	12.237	0.356	0.656
		Federal	42.97	6,881	2.88	1.105	3,804	4,202	0.272	11.381	2.104	88.337	7.952	332.058	6.842	287.381	0.333	13.940
		LUMA	41.25	926	2.88	1.093	503	550	0.242	1.329	1.953	10.738	6.749	37.089	6.594	36.255	0.368	2.021
		Total	42.63	8,121	2.88	1.104	4,473	4,938	0.268	13.228	2.060	101.709	7.775	383.940	6.802	335.874	0.337	16.617
Inferred	Upper	State	0.00	0	2.88	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Federal	37.58	4	2.88	1.119	2	2	0.294	0.006	1.593	0.033	9.443	0.195	6.551	0.135	0.376	0.008
		LUMA	40.78	99	2.88	1.091	54	58	0.229	0.134	1.960	1.145	6.613	3.864	6.474	3.783	0.356	0.208
		Total	40.67	103	2.88	1.092	55	60	0.231	0.140	1.948	1.178	6.709	4.059	6.477	3.918	0.357	0.216
	Lower	State	39.11	8	2.88	1.109	4	5	0.254	0.012	1.761	0.082	8.315	0.386	7.410	0.344	0.342	0.016
		Federal	39.80	1,610	2.88	1.092	860	939	0.254	2.385	2.459	23.097	7.507	70.510	6.681	62.749	0.323	3.038
		LUMA	40.14	1,108	2.88	1.092	594	649	0.228	1.480	1.948	12.638	6.588	42.738	6.463	41.929	0.359	2.331
		Total	39.94	2,726	2.88	1.092	1,458	1,593	0.243	3.877	2.249	35.816	7.135	113.633	6.594	105.022	0.338	5.384
	Combined	State	39.11	8	2.88	1.109	4	5	0.254	0.012	1.761	0.082	8.315	0.386	7.410	0.344	0.342	0.016
		Federal	39.80	1,614	2.88	1.092	862	941	0.254	2.391	2.458	23.129	7.512	70.705	6.680	62.884	0.324	3.045
		LUMA	40.19	1,207	2.88	1.092	648	707	0.228	1.614	1.949	13.783	6.590	46.602	6.464	45.712	0.359	2.539
		Total	39.97	2,829	2.88	1.092	1,514	1,653	0.243	4.017	2.238	36.995	7.119	117.692	6.590	108.940	0.339	5.600

TABLE 14.9
MINERAL EQUIVALENT COMPOUNDS FROM BRINE RESOURCE

Lease Area	Classification	Tonnes Mt (Million metric tonnes)				
		Potash	Bitterns	Bitterns	Salt Cake	Halite
		K_2SO_4	$MgCl_2$	$MgSO_4$	Na_2SO_4	NaCl
State	Measured	1.017	1.136	1.435	0.733	19.719
	Indicated	0.139	0.151	0.191	0.300	3.079
	Measured plus Indicated	1.156	1.287	1.626	1.033	22.798
	Inferred	0.026	0.031	0.039	0.053	0.598
Federal	Measured	19.033	20.452	8.696	48.614	389.464
	Indicated	6.333	6.883	8.696	20.568	124.172
	Measured plus Indicated	25.366	27.335	34.534	69.182	513.635
	Inferred	5.329	5.972	7.544	20.952	122.357
LUMA	Measured	0.776	1.033	1.305	1.931	15.040
	Indicated	2.186	2.930	3.702	5.624	41.212
	Measured plus Indicated	2.962	3.963	5.007	7.554	56.253
	Inferred	3.598	4.979	6.290	10.024	70.681
Total	**Measured**	**20.826**	**22.621**	**11.436**	**51.277**	**424.222**
	Indicated	**8.659**	**9.964**	**12.589**	**26.492**	**168.463**
	Measured plus Indicated	**29.485**	**32.585**	**41.167**	**77.769**	**592.686**
	Inferred	**8.953**	**10.982**	**13.874**	**31.029**	**193.636**

The author is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other factors that could materially affect the resource estimate.

The accuracy of resource and reserve estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources will be recoverable.

15 MINERAL RESERVE ESTIMATES

Mineral reserves are not reported as this is an exploration stage property.

16 MINING METHODS

Likely mining methods include a combination of open trenches and production wells. Current hydrologic studies are underway to assess the best methods for brine extraction. Fractional crystallization of brine through solar evaporation produces a solid precipitate that lines the pond bottom and is harvested by analogous producing operations with mechanized equipment such as scrapers and trucked to processing facilities. This process is indicative of a method that will be considered by EPM.

17 RECOVERY METHODS

This is an exploration stage property and recovery methods are still being addressed.

18 PROJECT INFRASTRUCTURE

The project is in early stages and current infrastructure is limited to facilities from which the exploration project was conducted. The project will require power and water supply and a rail loadout facility. A significant component of the potential infrastructure needs will be related to impoundment dikes for the evaporation ponds.

19 MARKETS AND CONTRACTS

Current market conditions for potash, particularly for SOP, are good. There are, however, no guarantees that the property will commercially produce potash or have similar market conditions at such time as the property does come into production. There are no contracts in place that will be material to the project.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

The project area has remnants of past mining. Recently, the area has been the topic of two Environmental Assessments (EA) conducted by the BLM who controls the majority of the minerals and surface lands, while Utah School and Institutional Trust Lands Administration (SITLA) also controls interspersed sections of the mineral resource and surface lands.

The EAs were prepared to address the potential impacts from leasing the minerals for the development, and for an extensive exploration program associated with the early stages of project development. The potash leasing EA titled Sevier Lake was completed by the BLM in February, 2011 (EA DOI-BLM-UT-W020-2010-014-EA). Since leasing by itself assumes minimal impacts to the environment, no significant impacts were identified. The EA and subsequent lease sale resulted in approximately 117,812 acres (95,802 to EPM and 22,010 to LUMA) being approved for leasing.

As a follow-up to the leasing EA, BLM completed a second EA to cover exploration drilling. The Sevier Dry Lake Exploratory Testing EA was completed in October, 2011 (Environmental Assessment DOI-BLM-UT-W020-2011-00150EA). The EA covered brine resource confirmation drilling, hydrology analysis and a screening-level geotechnical investigation. The drilling program included shallow and deep borings at 426 locations across the lease property. Exploration work was widely distributed across the lease, but did not cover significant acreage and had flexibility locating drill holes to avoid sensitive environmental issues or areas.

Moving the project into production will require the proponent to obtain several approvals and major permits. These include:

a) NEPA Action Associated with Full-Scale Production Project
b) U.S. Army Corps of Engineers (ACOE) Clearance
c) Utah Division of Oil, Gas and Mining Large Mine Permit
d) Utah Division of Water Quality Groundwater Discharge Permit
e) Utah Division of Air Quality Approval Order
f) Utah State Engineer Approval for Water Appropriations.

20.1 NEPA ACTION

While the BLM has completed two EAs for the project (leasing and exploration), NEPA will be triggered by the Plan of Development (POD) submitted for the project. The POD for construction and mining could be considered under the EA process. However, the size and scope of the project could result in BLM deciding to complete an Environmental Impact Statement (EIS). The EIS is more comprehensive, and takes more time to complete depending on sensitive issues and opposition. However, based upon environmental resources identified in the EAs, major hurdles are not apparent. It could be more complicated if right-of-ways across federal land managed by BLM impact sensitive environmental resources. COE clearance on potential wetlands may be the only exception, and could require avoidance or mitigation if wetlands are impacted. This is discussed under ACOE section below.

20.2 UTAH DIVISION OF OIL, GAS AND MINING LARGE MINE PERMIT

The project would be regulated under the hardrock mining regulations administered by Utah Division of Oil, Gas and Mining (DOGM). The large mine permit application requires that the mining and reclamation plan be described thoroughly, impacts minimized, and financial warranty be posted to cover disturbances should the operator leave the area before completing reclamation. The DOGM permit process generally takes about one year. Complex mining operations can take longer. However, the mining process associated with this project is not overly complex and should be able to complete the permit process within the one-year period.

20.3 CORPS OF ENGINEERS CLEARANCE

Based upon information provided to Norwest by the client, surveys of potential wetlands are underway. Once the delineation report is completed, the ACOE will need to make a determination on the presence or absence of wetlands or other waters of the U.S. If wetlands or waters of the U.S. are impacted by the project the Project may qualify under a Nationwide Permit, depending on the nature of the activity and the amount of wetlands/waters of the U.S. disturbed.. If the Project does not qualify under a Nationwide Permit (typically under 0.5 acre of wetland/waters of the U.S. disturbance) an individual permit will be required. This is a “federal action” and will also trigger NEPA, similar to the submittal of the POD for the mining operation. Typically Nationwide Permits are sought to reduce the timeline for approval. However, if an individual permit is required, it could be processed within the same NEPA analysis associated with the mining operation. The ACOE would be a cooperating agency during the NEPA process. Impacts to wetlands or waters of the U.S. will require mitigation.

20.4 UTAH DIVISION OF WATER QUALITY GROUNDWATER DISCHARGE PERMIT

The Division of Water Quality (DWQ) can issue a “permit by rule” if no discharge to groundwater is anticipated, or issue a site specific groundwater discharge permit for the project if they determine that a discharge to groundwater is possible. Under the later scenario, DWQ will develop points of compliance and associated concentration limits for constituents of concern. As a follow-up to the discharge permit, DWQ will also issue a construction permit based upon detailed plans submitted by the applicant that describes the control measures or control technology of the project to meet the compliance limits. Most of the shallow groundwater in the area contains elevated TDS levels, which is the likely constituent of concern and therefore an insignificant issue. However, protection of fresh water sources from brine solution with elevated TDS could be more of a challenge depending upon how isolated hydrologically the fresh water is from high TDS water once mining has occurred. DWQ could set a compliance limit in the fresh water zone(s) to protect it. Appropriate control measures, and negotiating the compliance limit and point of compliance can be negotiated with DWQ to enhance the ability to meet established limits.

20.5 UTAH DIVISION OF AIR QUALITY APPROVAL ORDER

In Utah, any source that emits a regulated pollutant is required to apply for an Approval Order. The project is located in a relatively clean airshed designated as “attainment” or unclassified. Attainment means that it meets the current ambient air quality standards established to protect public health. Larger (“major”) sources in attainment areas need to undergo Prevention of Significant Deterioration (PSD) review to insure the air quality will be protect from pollution associated with a new source. Typically mining projects without large combustion sources that emit fine particulates or other gaseous emissions can be regulated as a minor source since fugitive emissions do not count in determining your potential to emit. One exception on including fugitive emissions is if you are a “listed” source by EPA, then fugitive emissions such as road dust must be considered in determining your emissions. The Sevier Lake project is not an EPA listed source, and it is feasible that it could be permitted as a minor source under State rules. The client has provided correspondence to Utah Division of Air Quality (DAQ) that memorializes conversations with DAQ that confirms this approach. While modeling for coarse particulates (10 microns) is required, compliance with the ambient standards for particulates and other gaseous pollutants such as SO_2 and NOx should not present a challenge for the Sevier Lake project.

20.6 UTAH STATE ENGINEER APPROVAL FOR WATER APPROPRIATIONS

The Utah State Engineer (SE) regulates water appropriations in the State. Water must be appropriated before it can be diverted and used for a beneficial use such as mining or other uses. Appropriations can take several years to be approved by the SE. In 2010, three applications were submitted by Emerald Peak to appropriate water. It was determined that the originally applications over-estimated water use, and 2 of the 3 applications for a total of 420,000 acre feet per year, of which 20,000 acre feet of fresh water as opposed to brine water were withdrawn. Since the original applications were withdrawn, Peak Minerals and Emerald Peak/SITLA have submitted new applications for considerably less water (243,000 acre feet brine, 2,500 acre feet fresh) for consideration by the SE. EPM personnel reported that by reducing the volume of fresh water from 20,000 acre feet per year to approximately 2,500 acre feet per year, that the SE seems willing to move forward with approving the applications. This process still could take some time, and informal discussions may not yield the intended results.

20.7 SUMMARY

The Sevier Lake project seems to be on a reasonable course to meet all environmental thresholds required to launch the project. The NEPA process by BLM will likely be a long lead-time item. The NEPA process will likely incorporate the ACOE issues and process. Additionally, issues with water appropriations will present a continued challenge until some confirmation that the SE is going to approve the applications is provided

21 CAPITAL AND OPERATING COSTS

Capital and Operating Costs have not been prepared or reviewed for this report.

22 ECONOMIC ANALYSIS

This report is for an exploration stage property and reports resources only. Current economic analysis has not been completed and this report does not purport to represent any future economic viability of the reported resource.

23 ADJACENT PROPERTIES

There are no adjacent properties relevant to this report.

24 OTHER RELEVANT DATA AND INFORMATION

There are no relevant data or information applicable to this report, other than sources referenced in Section 27.

25 INTERPRETATION AND CONCLUSIONS

EPM has recently completed a brine drilling and sampling program on the Sevier Lake playa for the purposes of developing a potash production facility on the lakebed surface. EPM's Federal and State potassium-potash leases cover 102,211.2 acres plus an additional 22,009.97 acres through a Cooperative Agreement between LUMA and EPM.

Previous (pre-2000) exploration and development on the lakebed surface was identified to be no longer current and is not used in the findings of this report. In 2011 a drilling and sampling program on the lakebed was commissioned by EPM. A total of 426 holes were completed by EPM during their 2011 to 2012 exploration project. This drilling has been sufficient to delineate a shallow mineral brine resource to an average depth of 65ft (20m).

A mineral resource has been estimated for important ions related to potash crystallization, including a potassium measured plus indicated resource of 13.2Mt and an inferred resource of 4.0Mt. Given that sufficient sulphate is present in the brine to utilize all the potassium ions, theoretical SOP (K_2SO_4) from the measured plus indicated brine are calculated to be approximately 29.5Mt. The resource estimate was reported from a 3D block model using MineSight® software.

Preliminary evaluations indicate a potential for extraction based on observations made during well purging and testing of pilot extraction trenches. Additionally, correlative operations in the region support the likelihood of economic extraction due to their similar geologic settings and related processing methods. No current feasibility studies that include detailed hydrologic or geotechnical evaluations, market studies or economic evaluations have been performed.

26 RECOMMENDATIONS

The author considers the Sevier Lake property to be of sufficient merit to warrant additional exploration and development work. Key components of this work would include the following components:

- Detailed hydrologic characterization
    - Basin recharge
    - Sustainable extraction rates
    - Volume of Extractable Brine
    - Potential evaporation pond leakage
- Geotechnical study
    - Impoundment dikes
    - Surface water control dike
    - Facilities
- Additional drilling to bring more of the LUMA lease areas into measured plus indicated assurance categories.
- Engineering, market and economic analysis (PEA or prefeasibility level).

Hydrologic characterization will be necessary to establish a brine reserve that can be recoverable and sustainable for a sufficient period of time to make the enterprise commercially feasible. Additional hydrologic data collection will be required and it is likely that additional testing wells will be needed to target specific characterization efforts. Key items that will need to be addressed in order to define a sustainable brine reserve include flow rates, recoverability, specific yield, and fluid flow simulation models.

Geotechnical studies will be required to provide design criteria for impoundments and dykes on the lakebed surface and for facilities siting. The system of dykes required for solar evaporation ponds for a multi-commodity operation will be extensive as the areal extent of each pond is large. Processing plant, product storage and possible tailings facilities will require geotechnical information for their design as well.

It is also recommended that the understanding of the characterization of the brine resource be expanded to bring the entire lakebed and both shallow and deep aquifers into measured plus indicated categories of assurance. Increasing drill density in the north end of the lakebed and providing additional complete penetrations of the lower aquifer will likely provide additional confidence in a larger brine resource.

The acquisition of the data discussed above will allow EPM to move towards higher levels of engineering and economic evaluation. Costs have been estimated for each of these components and are presented below. Table 26.1 shows a budget summary of the recommended task categories. Tables 26.2 and 26.3 show the budget detail of the hydrologic/geotechnical and resource drilling components.

TABLE 26.1
EPM DEVELOPMENT BUDGET SUMMARY

Item	Estimated Cost
Hydrologic and Geotechnical Work	$1,575,000
Engineering Study	$250,000
Additional Drilling	$277,000
Total	**$2,102,000**

TABLE 26.2
HYDROLOGIC AND GEOTECHNICAL CHARACTERIZATION TASKS AND BUDGET

Component	Task	Task Cost	Total Cost
Basin Recharge	Subsurface Flow Assessment		
	Well design	$25,000	
	Install new deep wells and nested pairs	$750,000	
	Surface Recharge Determination	$75,000	
	Sevier River Study	$50,000	
	Other Recharge Study	$50,000	
	Task Total		**$950,000**
Sustainable Extraction Rates	Long Term Well Testing	$200,000	
	Trench Investigations	$150,000	
	Task Total		**$350,000**
Extractable Brine Volume	Install Additional Wells For Aquifer Properties	$100,000	
	Aquifer Analysis	$25,000	
	Task Total		**$125,000**
Evaporation Pond Leakage	Infiltration Testing	$75,000	
	Task Total		**$75,000**
Geotechnical Assessment	Field Test Facilities Site	$50,000	
	Analysis	$25,000	
	Task Total		**$75,000**
	Total Project Cost		**$1,575,000**

TABLE 26.3
ADDITIONAL DRILLING ITEMS AND BUDGET

Drilling and Coring	$165,000
Logistics and Site Prep	$50,000
Lab Analysis Brine	$22,000
Lab Analysis Sediment	$10,000
Field Supervision	$30,000
Total	**$277,000**

The estimated costs related to an engineering study are based on the authors recommendation to undertake a robust Preliminary Economic Analysis (PEA) of the project. EPM may decide to progress to a Preliminary Feasibility level analysis without first completing a PEA if the acquired data provides sufficient confidence that it will support accurate assessment of economic viability.

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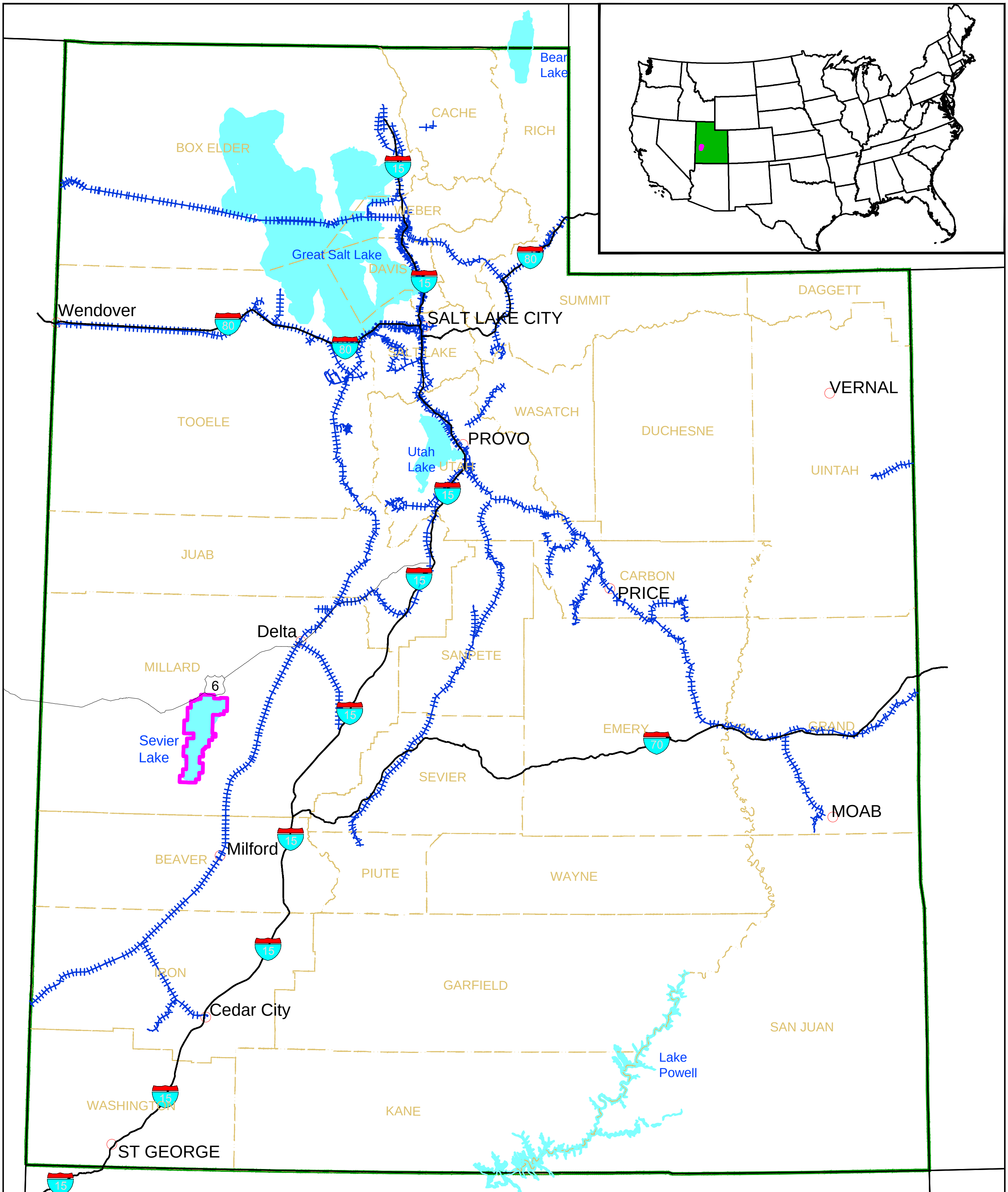
28 ILLUSTRATIONS



LEGEND

- Freeway
- City or Town
- Sevier Lake Project
- Railroad
- Counties
- Major Lakes

N

0 20 40 60
KILOMETERS

0 10 20 30
MILES

UTM NAD 83 Z 12
METERS

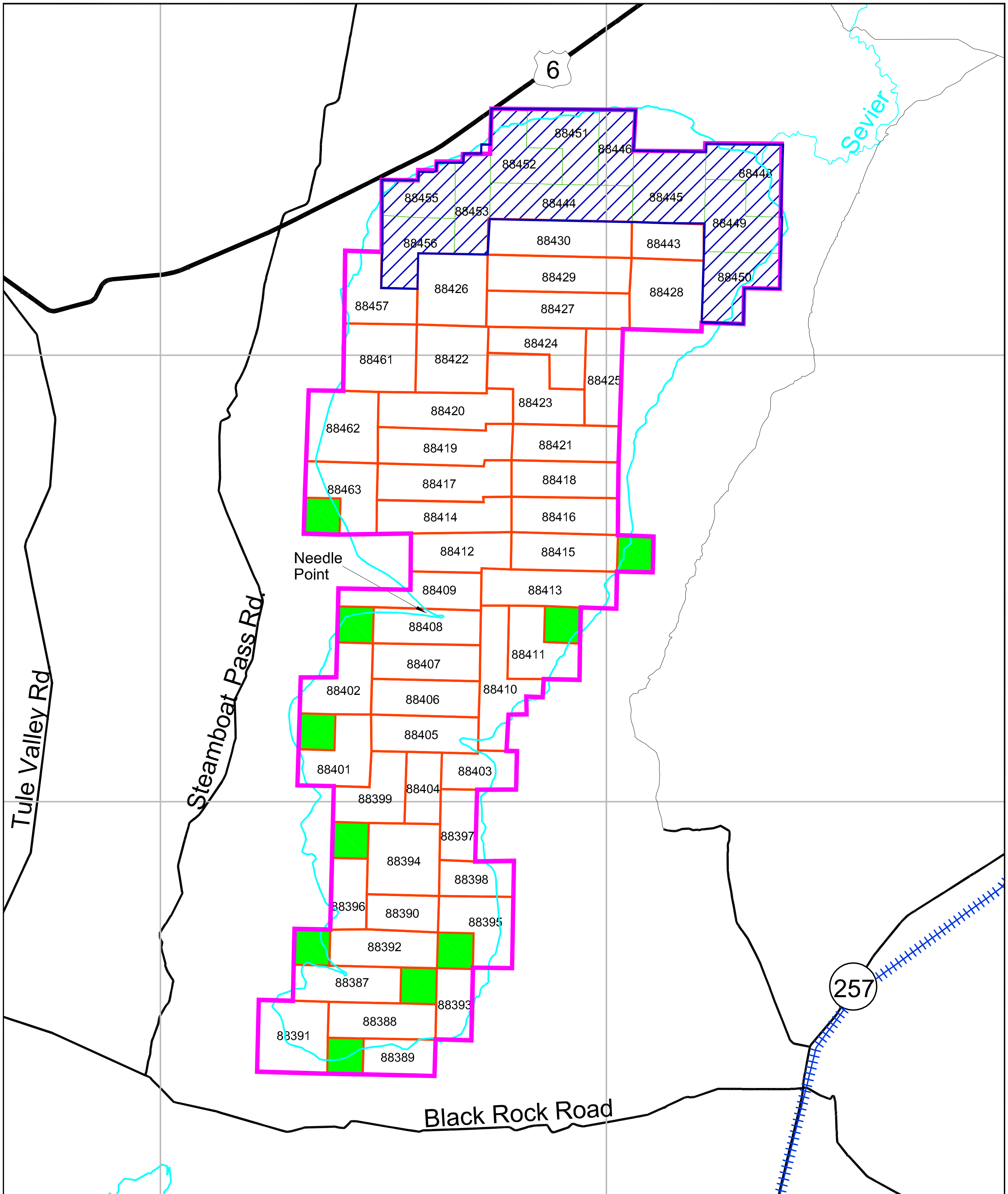
FIGURE 4.1

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

GENERAL
LOCATION MAP

DATE: 04/11/2012	SCALE:
FILE: 418-3\Loc	As Shown

NORWEST CORPORATION



LEGEND

- LUMA LEASE OUTLINE
- LUMA LEASES
- LEASE OUTLINE
- FEDERAL TRACTS
- STATE LEASES
- LAKE BOUNDARIES
- MAJOR ROAD
- RAILROAD

0 2 4 6
KILOMETERS

0 1 2 3
MILES

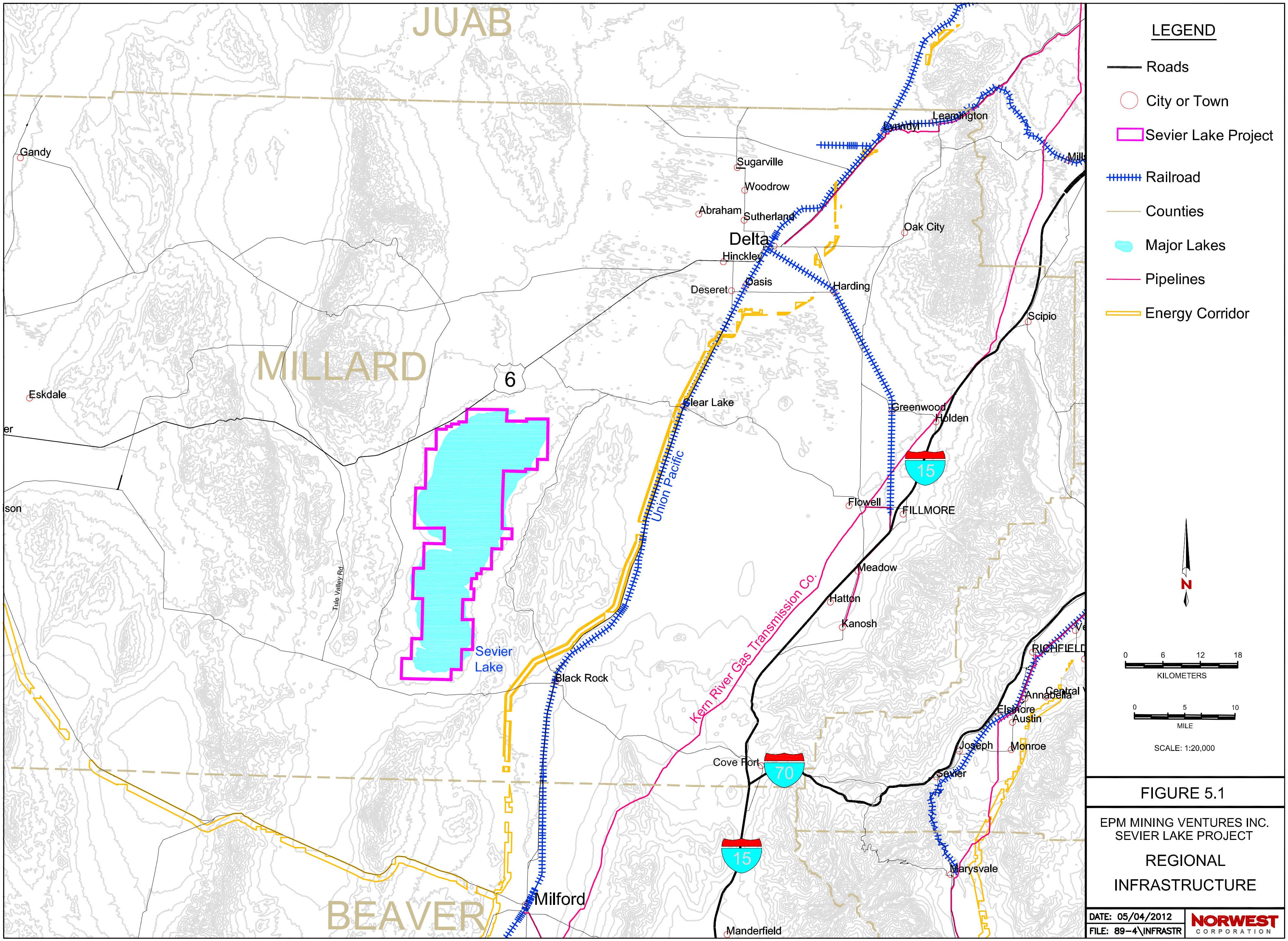
N

FIGURE 4.2

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

MINERAL LEASE AREAS

DATE: 04/22/2011	SCALE: 1"=6,000'	NORWEST CORPORATION
FILE: FIG 6.1		



JUAB
MILLARD
BEAVER
Gandy
Eskdale
Sugarville
Woodrow
Abraham
Sutherland
Delta
Hinckley
Deseret
Oasis
Harding
Lynndyl
Leamington
Oak City
Scipio
Clear Lake
Union Pacific
Greenwood
Holden
Flowell
FILLMORE
Meadow
Hatton
Kanosh
Kern River Gas Transmission Co.
Sevier Lake
Black Rock
Tule Valley Rd
6
15
70
Cove Fort
RICHFIELD
Annabella
Elsinore
Austin
Joseph
Monroe
Sevier
Marysvale
Milford
Manderfield
LEGEND
Roads
City or Town
Sevier Lake Project
Railroad
Counties
Major Lakes
Pipelines
Energy Corridor
N
0 6 12 18
KILOMETERS
0 5 10
MILE
SCALE: 1:20,000
FIGURE 5.1
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
REGIONAL
INFRASTRUCTURE
DATE: 05/04/2012
FILE: 89-4\INFRASTR
NORWEST
CORPORATION

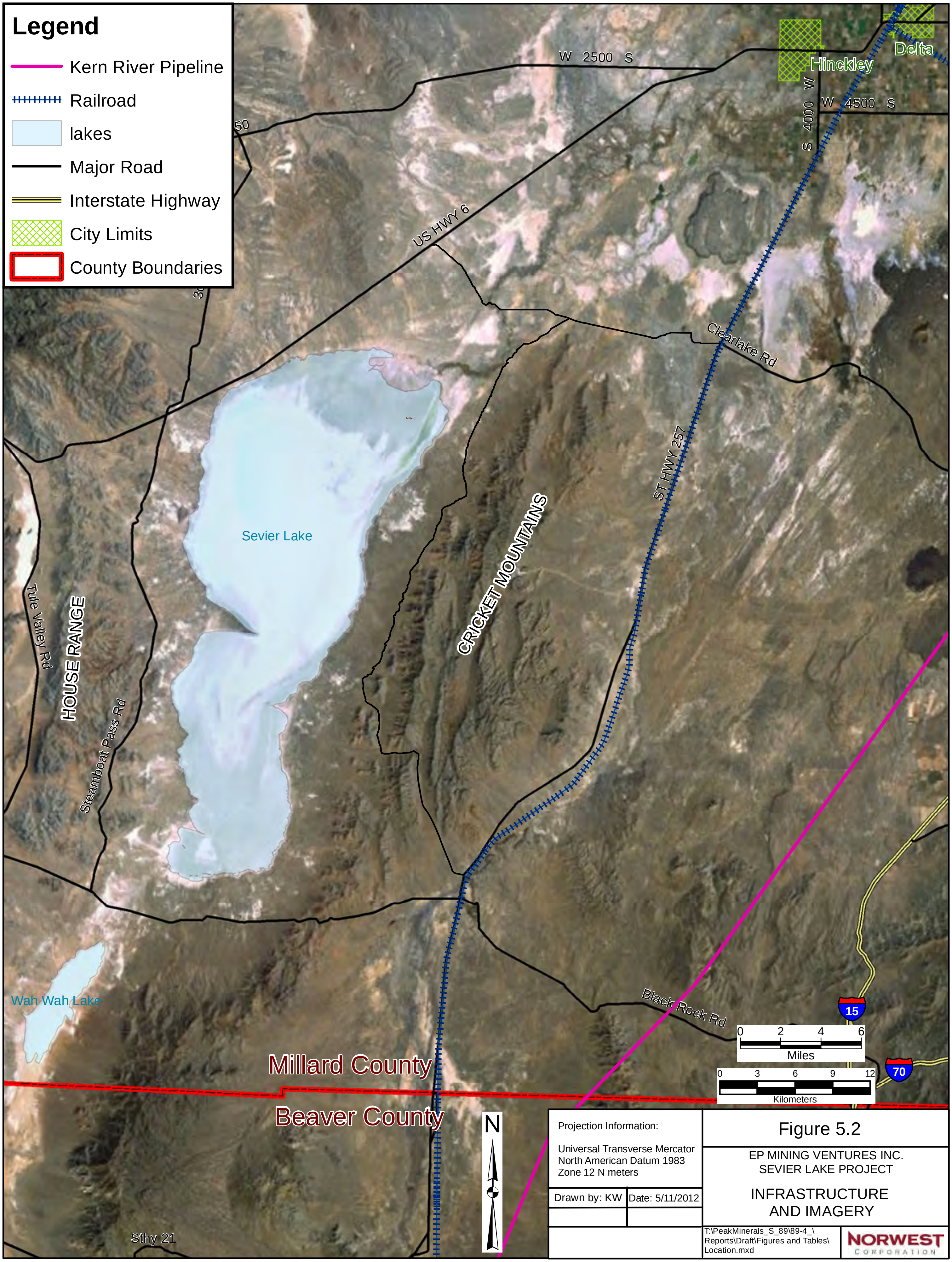
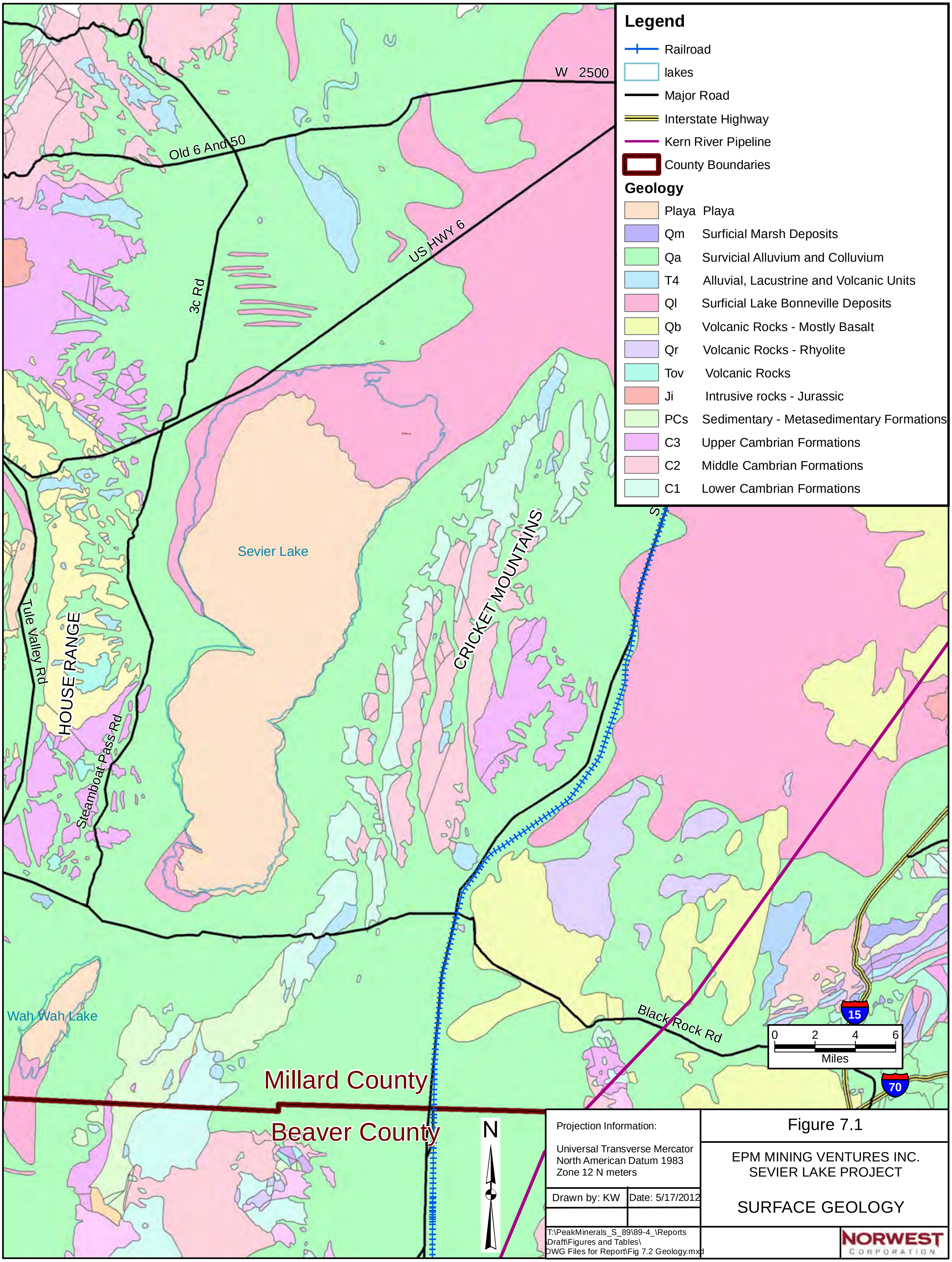


Figure 5.2

EP MINING VENTURES INC.
SEVIER LAKE PROJECT

INFRASTRUCTURE AND IMAGERY



Legend
Railroad
lakes
Major Road
Interstate Highway
Kern River Pipeline
County Boundaries
Geology
Playa Playa
Qm Surficial Marsh Deposits
Qa Survicial Alluvium and Colluvium
T4 Alluvial, Lacustrine and Volcanic Units
Ql Surficial Lake Bonneville Deposits
Qb Volcanic Rocks - Mostly Basalt
Qr Volcanic Rocks - Rhyolite
Tov Volcanic Rocks
Ji Intrusive rocks - Jurassic
PCs Sedimentary - Metasedimentary Formations
C3 Upper Cambrian Formations
C2 Middle Cambrian Formations
C1 Lower Cambrian Formations
W 2500
Old 6 And 50
US HWY 6
3c Rd
Sevier Lake
CRICKET MOUNTAINS
HOUSE RANGE
Tule Valley Rd
Steamboat Pass Rd
Wah Wah Lake
Black Rock Rd
15
70
0 2 4 6
Miles
Millard County
Beaver County
N
Projection Information:
Universal Transverse Mercator
North American Datum 1983
Zone 12 N meters
Drawn by: KW
Date: 5/17/2012
T:\PeakMinerals_S_89\89-4_\Reports Draft\Figures and Tables\DWG Files for Report\Fig 7.2 Geology.mxd
Figure 7.1
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
SURFACE GEOLOGY
NORWEST CORPORATION

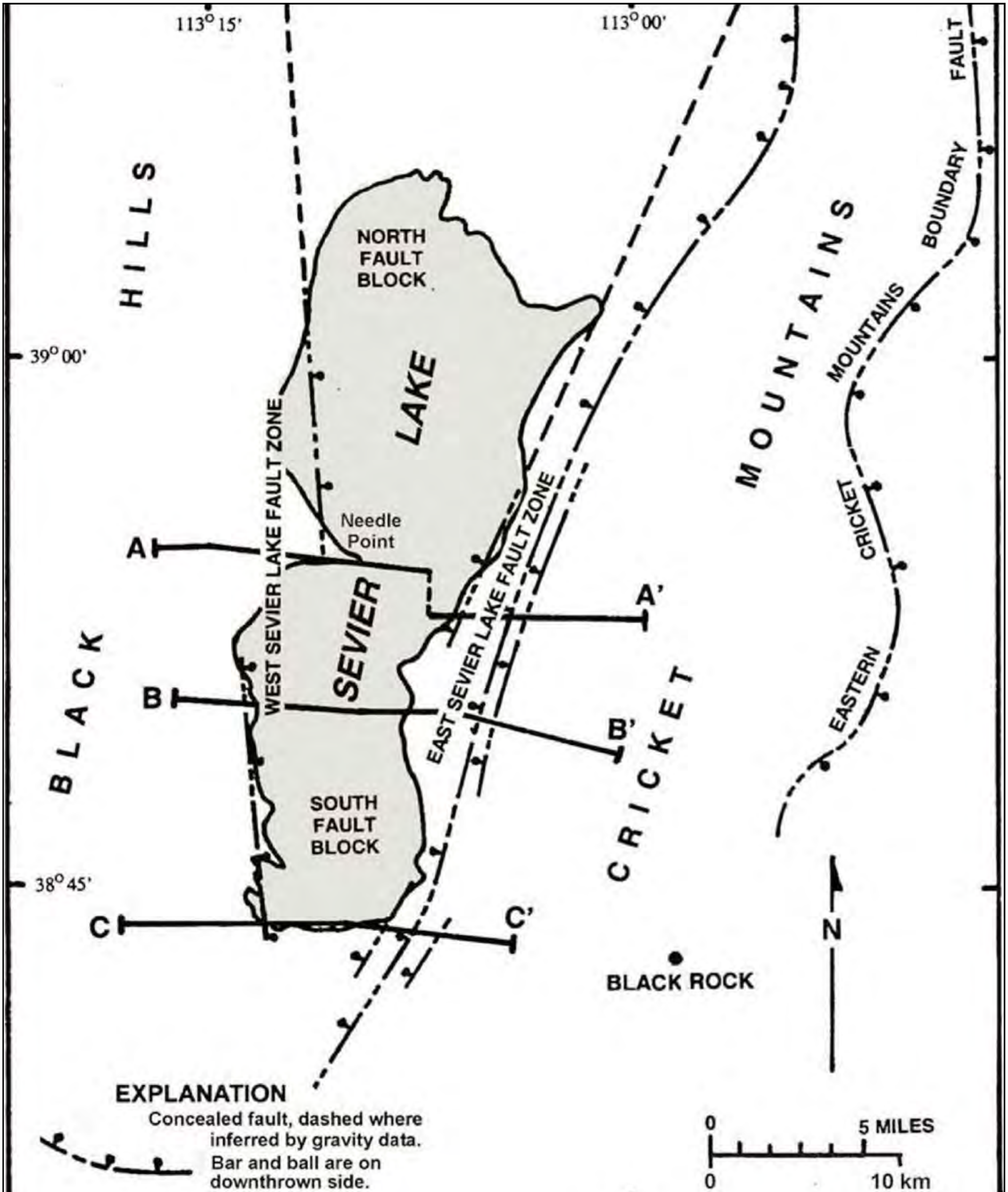


FIGURE 7.2

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

GRAVITY SURVEY INTERPRETATION CASE AND COOK (1979)

DATE: 03/17/2010
FILE: LAKEPOINTSUTM
SCALE: 1"=10,000'
NORWEST CORPORATION

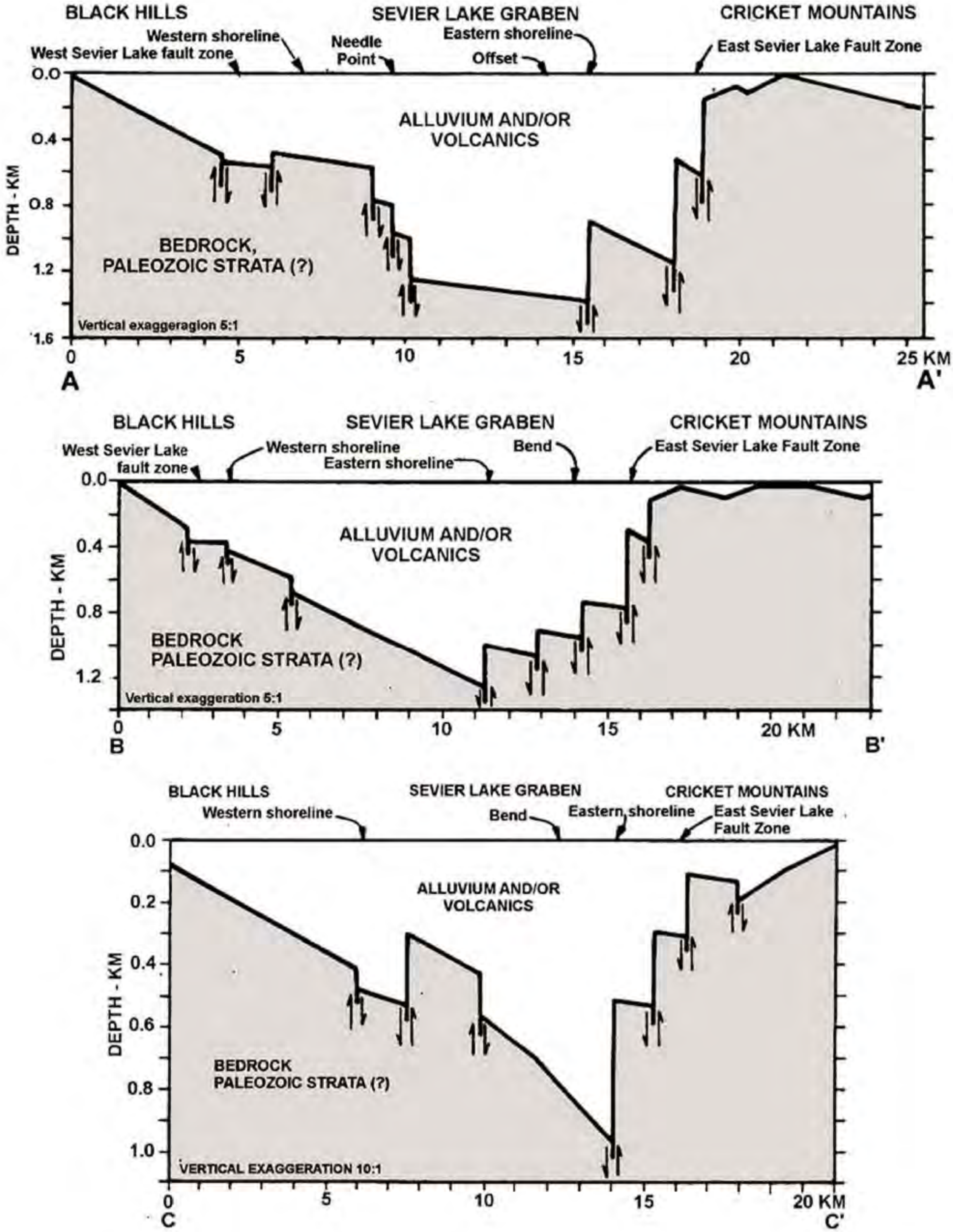


FIGURE 7.3

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

GRAVITY SURVEY
SECTIONS
CASE AND COOK (1979)

DATE: 03/11/2010	SCALE: NTS	NORWEST CORPORATION
FILE: XSEC		

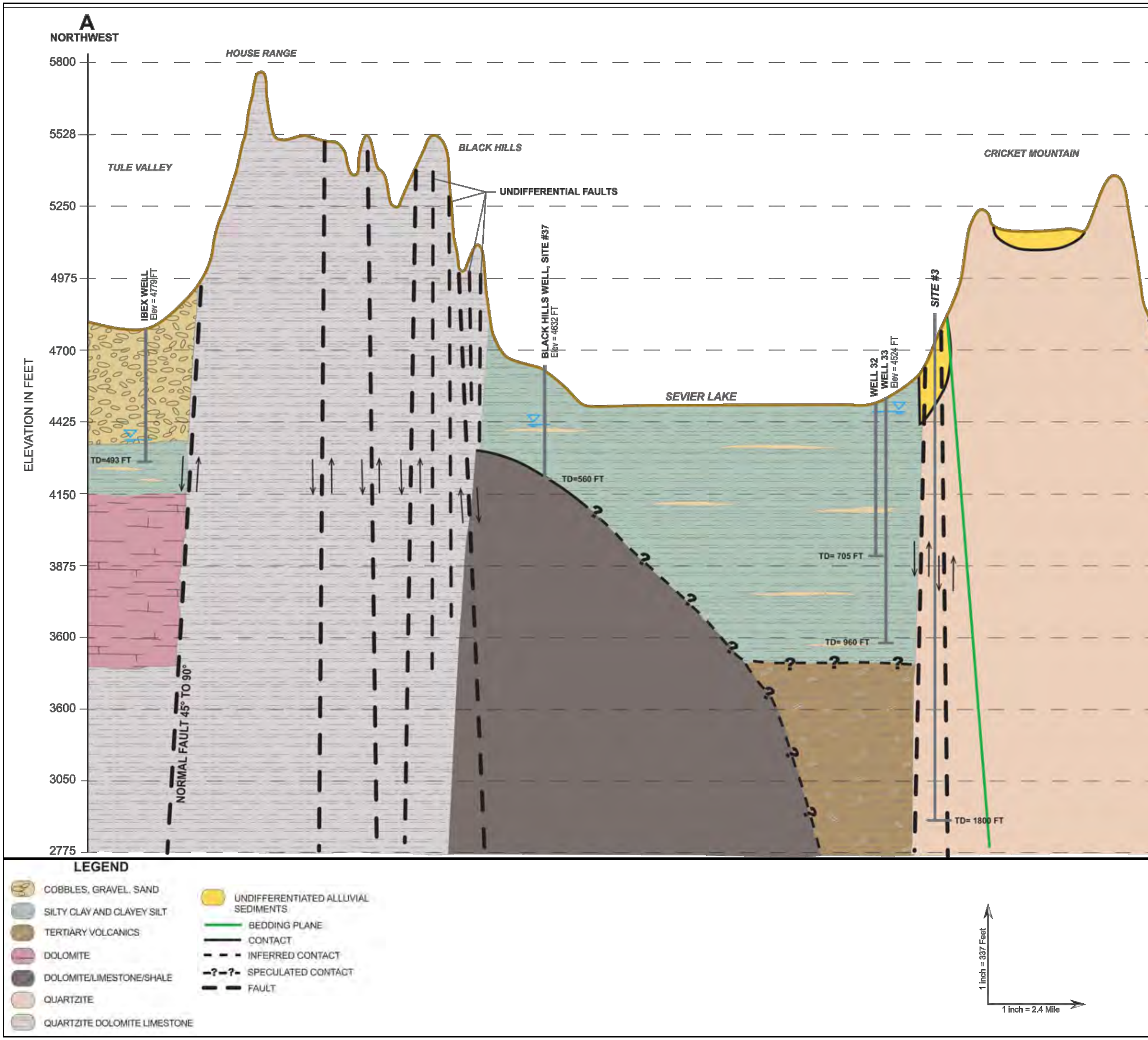


FIGURE 7.4

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

SCHEMATIC
CROSS SECTION

DATE: 05/08/2012
FILE: XSEC
PROJECT: 89–4

NORWEST CORPORATION

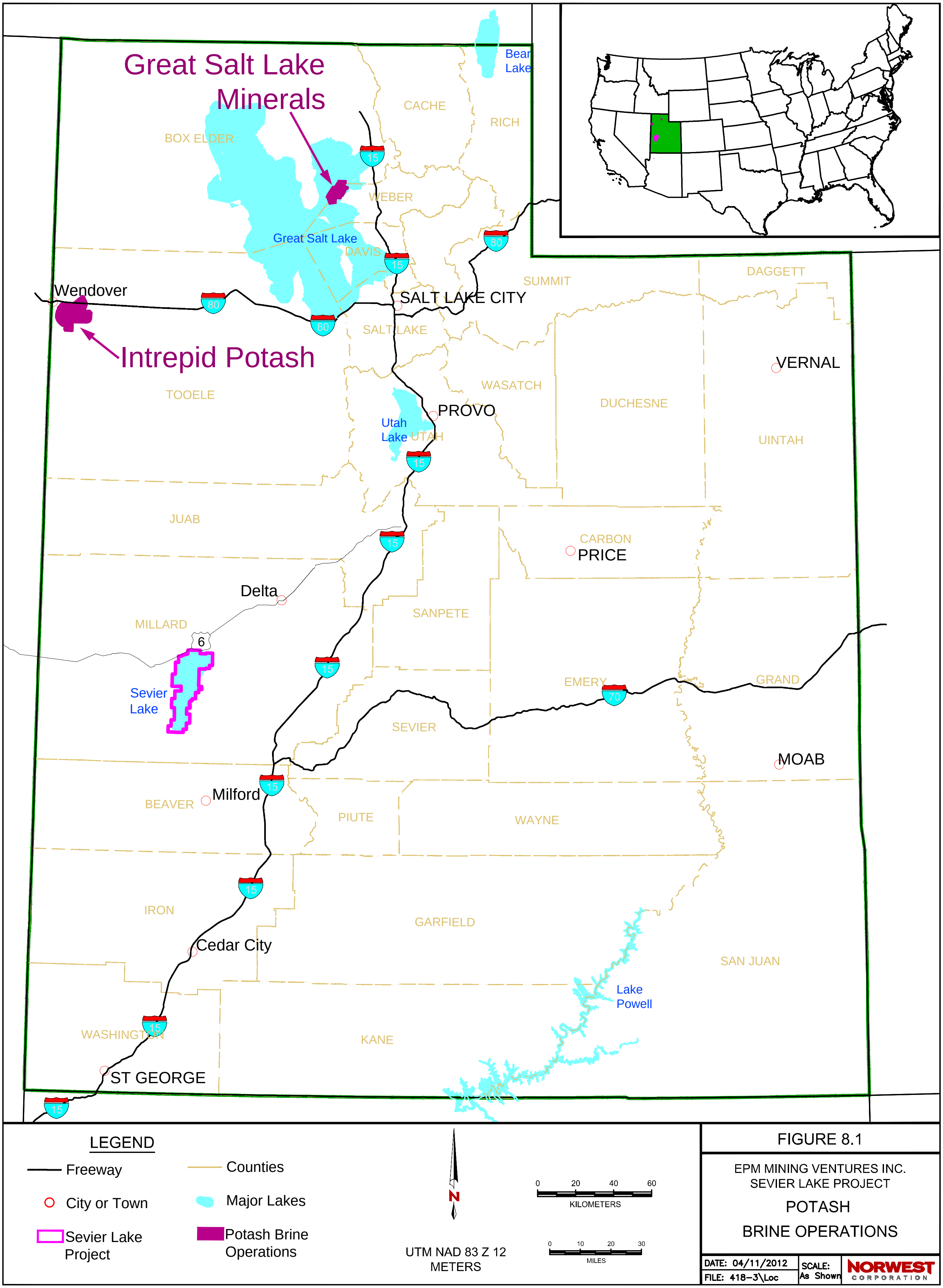
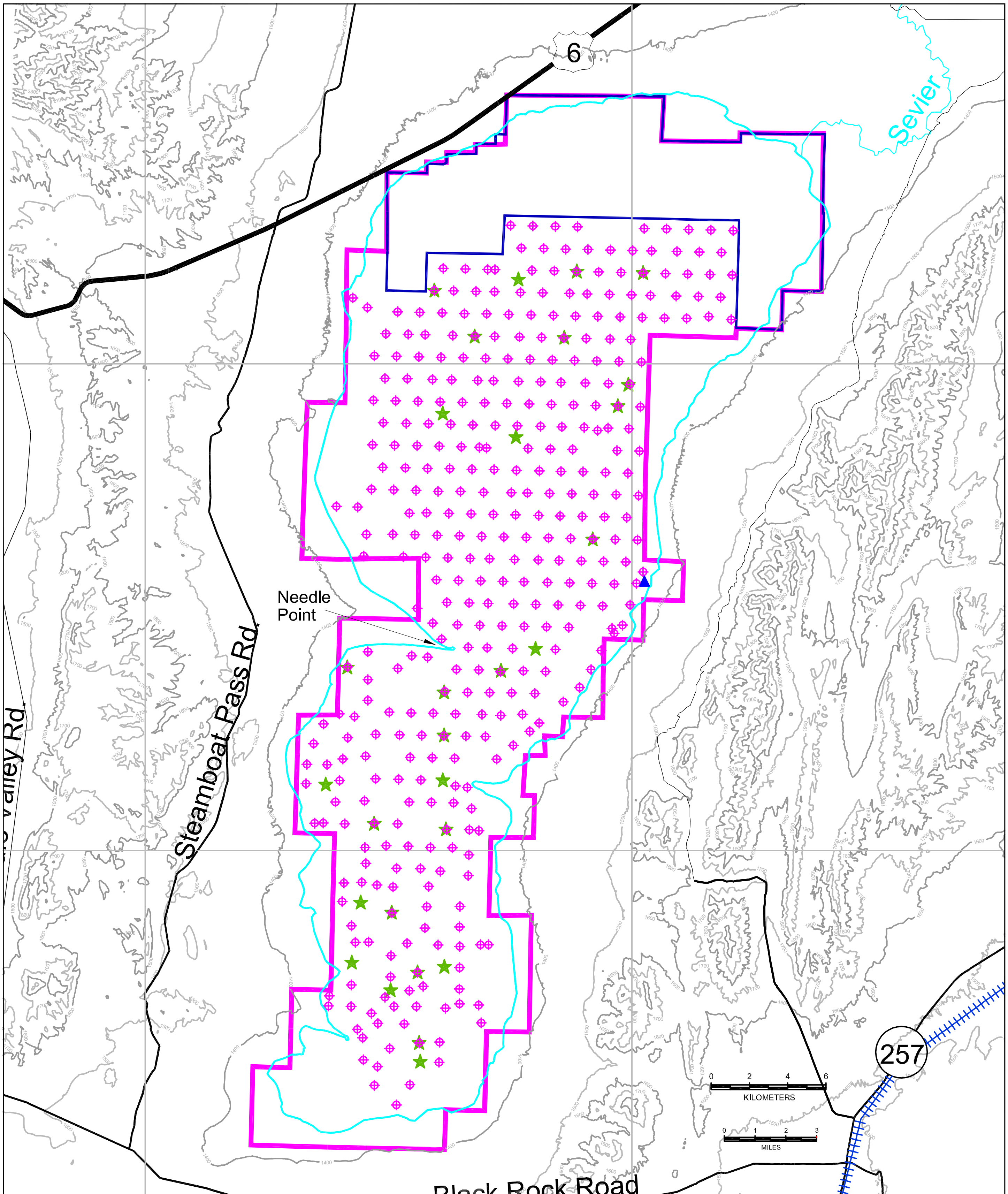


FIGURE 8.1
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
POTASH
BRINE OPERATIONS



LEGEND

- DIRECT PUSH DRILLHOLES
- SONIC DRILLHOLES
- AUGER DRILLHOLES
- LAKE BOUNDARIES
- MAJOR ROAD
- RAILROAD
- EPM LEASES
- LUMA LEASES

N

FIGURE 10.1

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

TOPOGRAPHY AND DRILLHOLE LOCATION MAP

DATE: 05/10/2012	SCALE: 1:5500	NORWEST CORPORATION
FILE: 89-4 fig10.1		

FIGURE 10. 2 PHOTO OF DIRECT PUSH HOLE CASING INSTALLATION

FIGURE 10.3 DIRECT PUSH HOLE CASED COMPLETION

FIGURE 10.4 PONTOON CARGO BUGGY AND BARGE

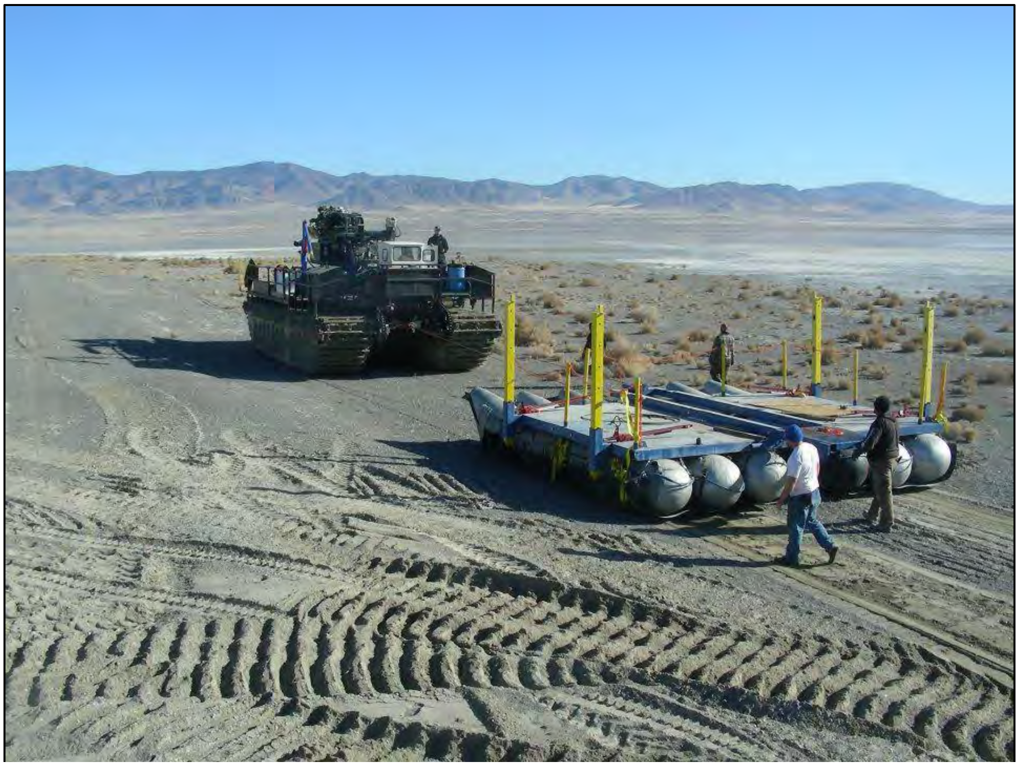
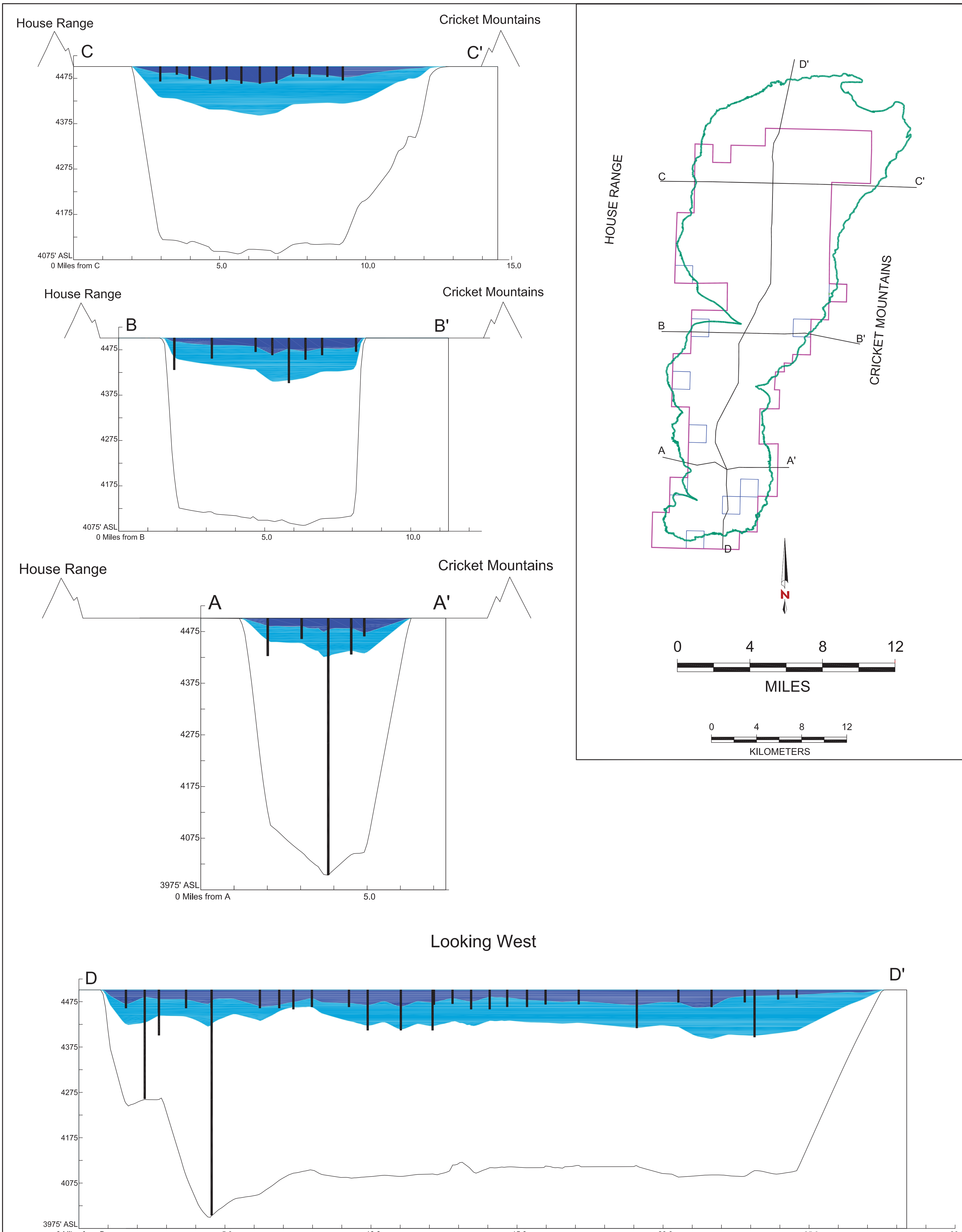


FIGURE 10.5 AIR-BOAT FOR PERSONNEL AND EQUIPMENT TRANSPORT



LEGEND

- LAKE BOUNDARIES
- CROSS SECTION LINE

CROSS SECTIONS

- SHALLOW BRINE RESOURCE
- INTERMEDIATE TRANSITION BRINE RESOURCE
- DRILLHOLES IN CROSS SECTION

*Mountains are not to Scale

FIGURE 14.1

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

CROSS SECTION VIEWS
LINES ON PLAN VIEW

DATE: 05/10/2012	SCALE: VARIABLE	NORWEST CORPORATION
FILE:5358\MODEL		

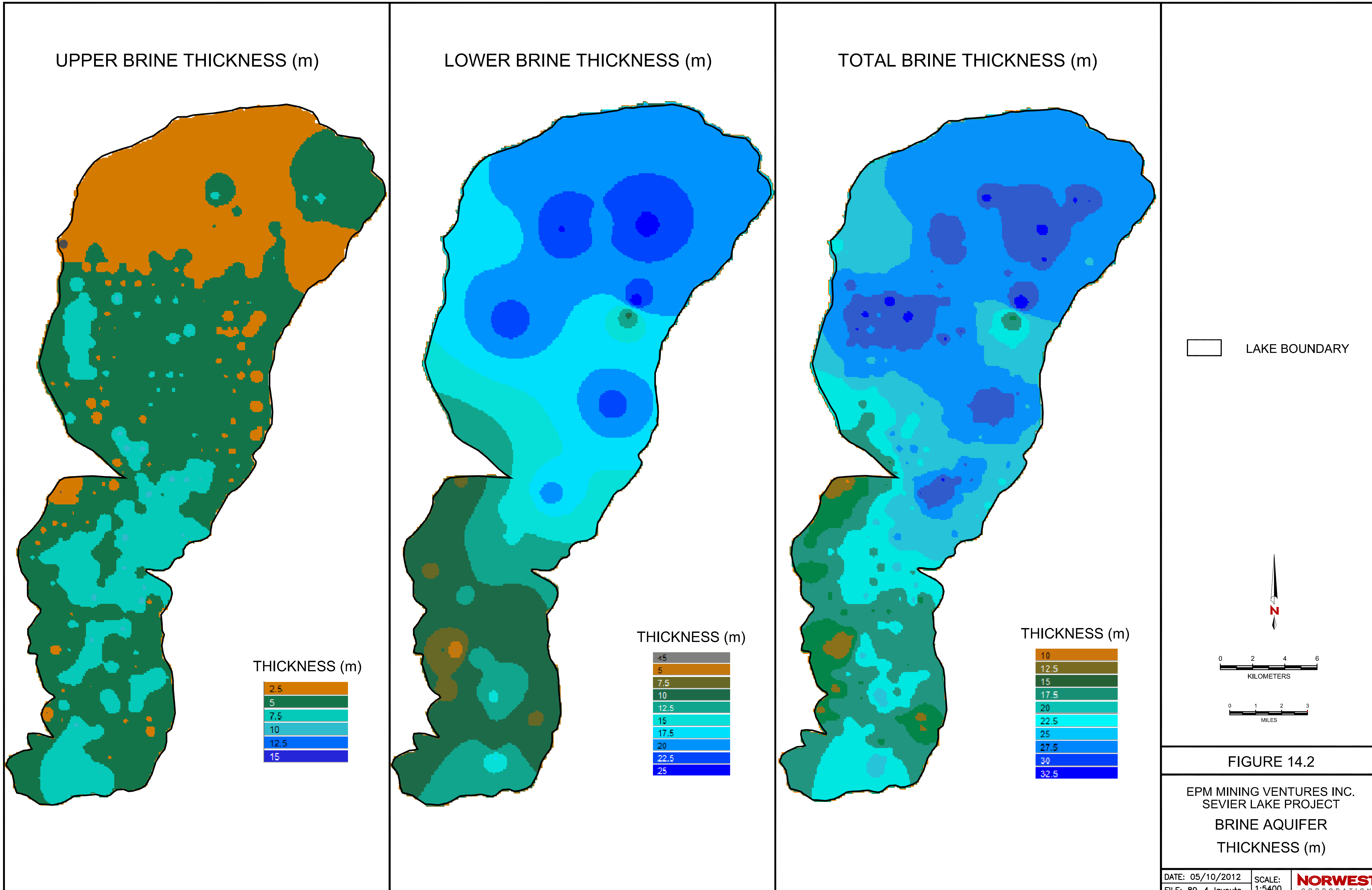


FIGURE 14.2

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

BRINE AQUIFER THICKNESS (m)

DATE: 05/10/2012 | SCALE: 1:5400
FILE: 89-4 layouts

NORWEST CORPORATION

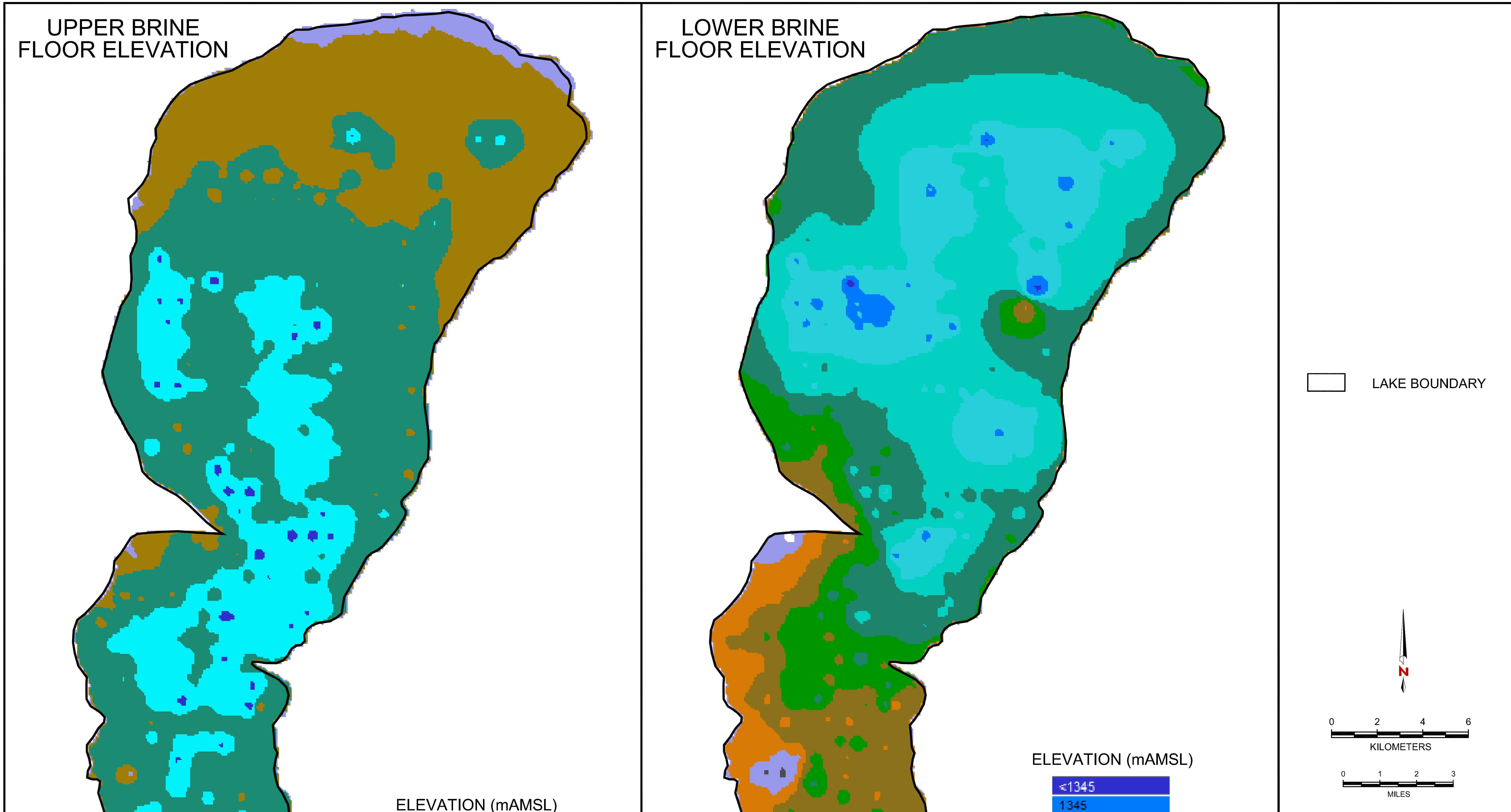


FIGURE 14.3

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

BRINE AQUIFER

FLOOR ELEVATION (mAMSL)

DATE: 05/10/2012 FILE: 89-4 layouts	SCALE: 1:4200	NORWEST CORPORATION

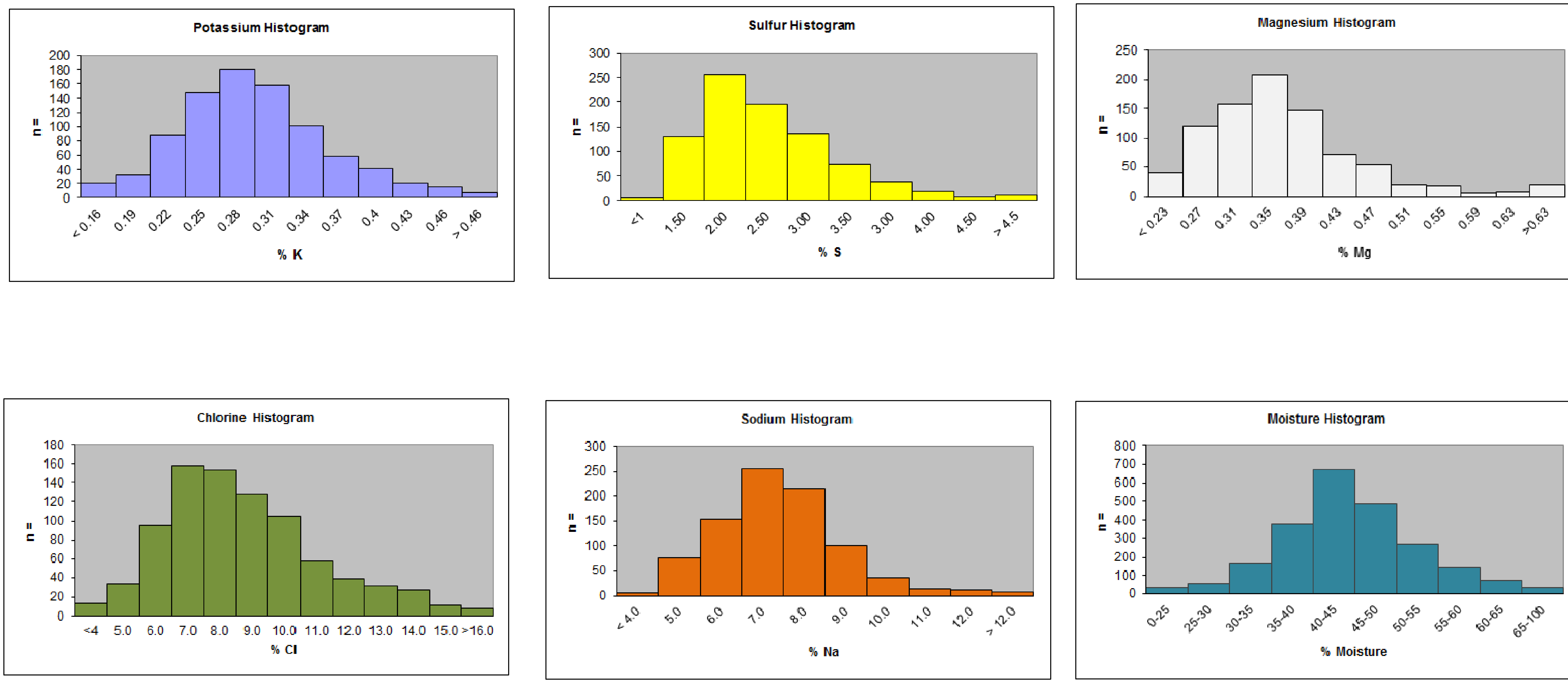


FIGURE 14.4

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

HISTOGRAMS

ASSAYS AND MOISTURE

DATE: 05/10/2012
FILE: 89-4 FIG 14.4

NORWEST CORPORATION

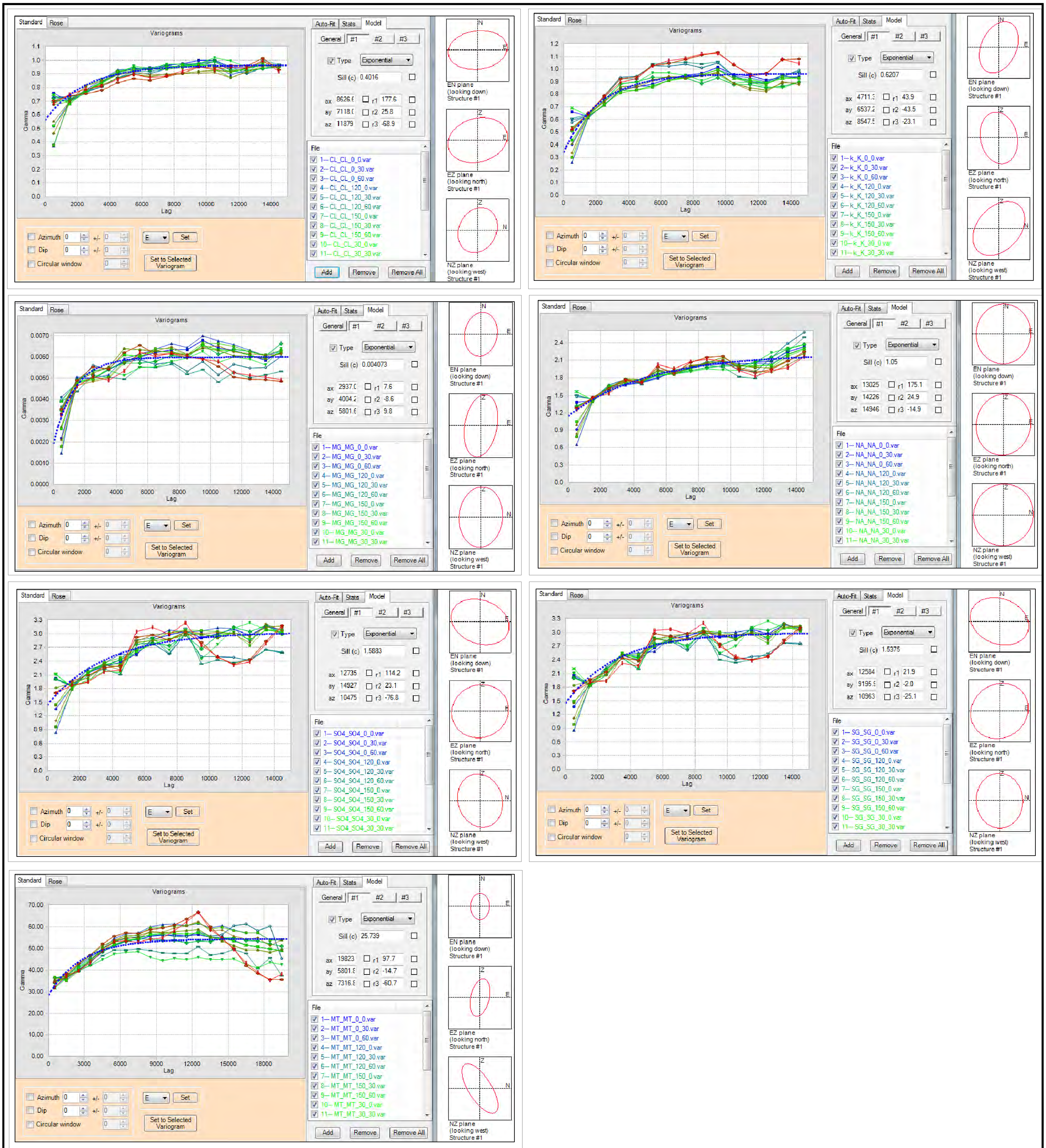


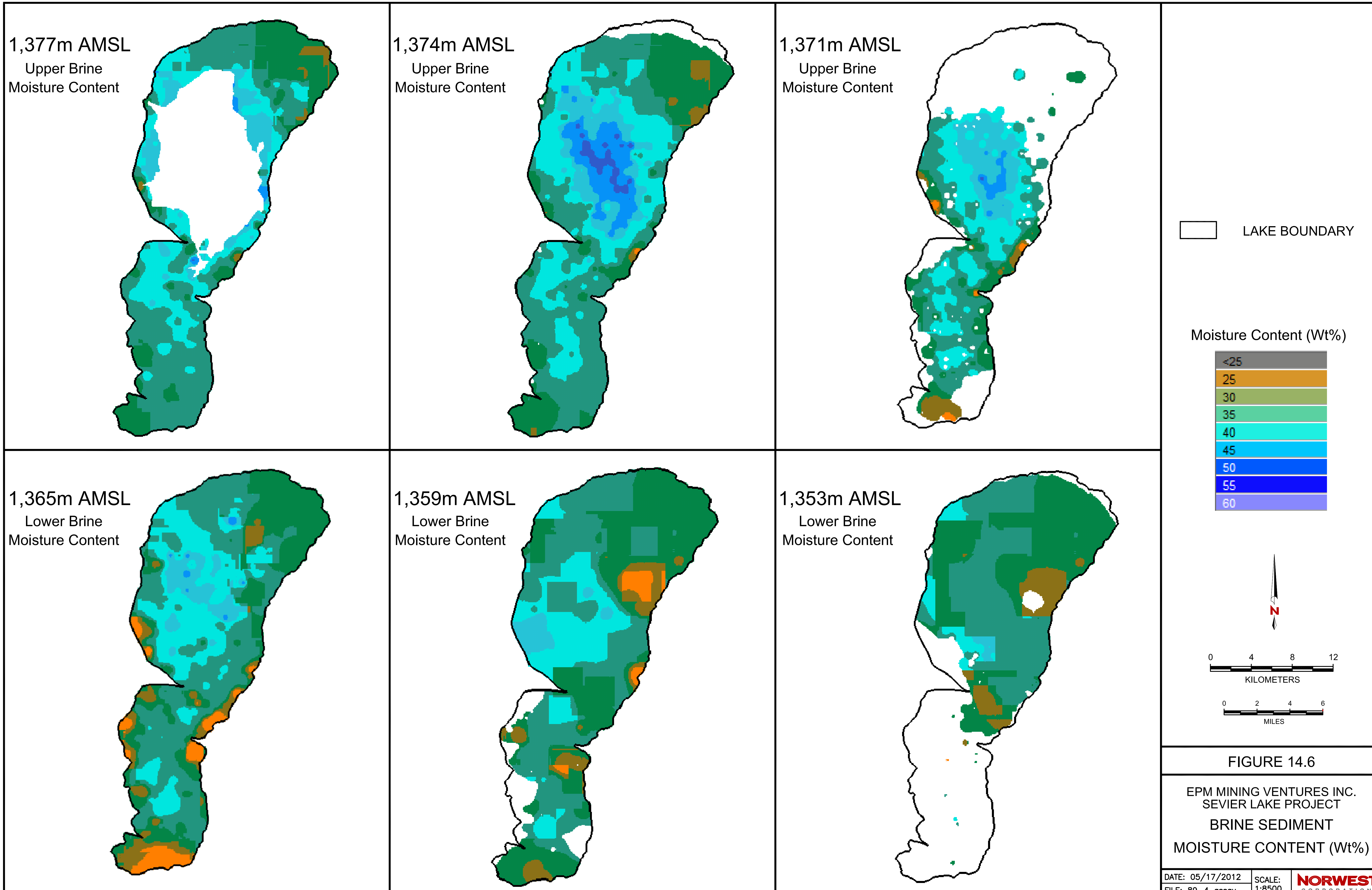
FIGURE 14.5

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

SEMI-VARIOGRAMS
AND GRADE TREND ELLIPSES

DATE: 05/11/2012
FILE: 89-4 FIG 14.5

NORWEST CORPORATION


1,377m AMSL
Upper Brine
Moisture Content
1,374m AMSL
Upper Brine
Moisture Content
1,371m AMSL
Upper Brine
Moisture Content
1,365m AMSL
Lower Brine
Moisture Content
1,359m AMSL
Lower Brine
Moisture Content
1,353m AMSL
Lower Brine
Moisture Content
LAKE BOUNDARY
Moisture Content (Wt%)
<25
25
30
35
40
45
50
55
60
N
0 4 8 12
KILOMETERS
0 2 4 6
MILES
FIGURE 14.6
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
BRINE SEDIMENT
MOISTURE CONTENT (Wt%)
DATE: 05/17/2012
FILE: 89-4 assay
SCALE: 1:8500
NORWEST
CORPORATION

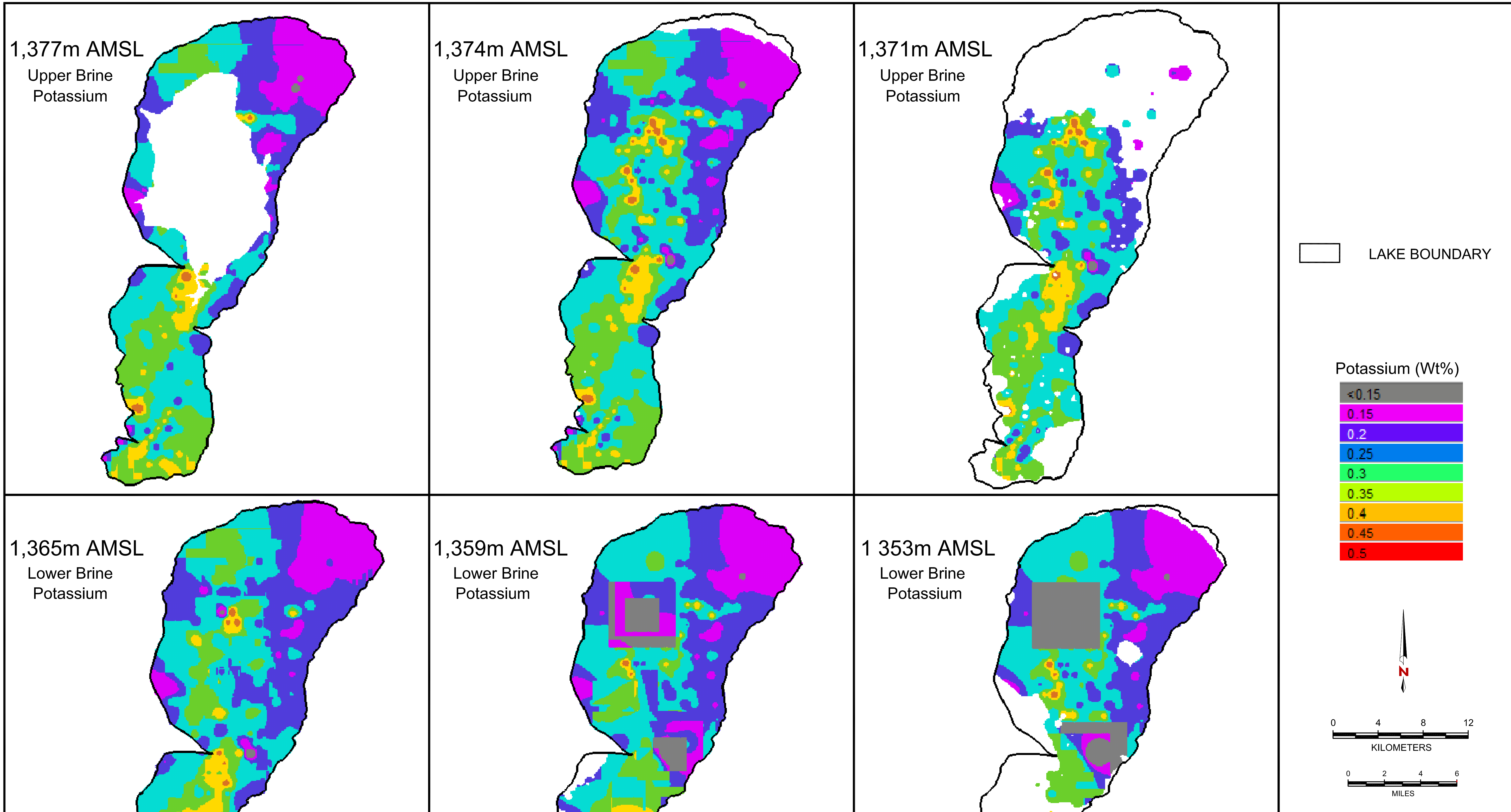


FIGURE 14.7

EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

BRINE AQUIFER
POTASSIUM (Wt%)

DATE: 05/16/2012
FILE: 89-4 assay

SCALE:
1:8500

NORWEST
CORPORATION

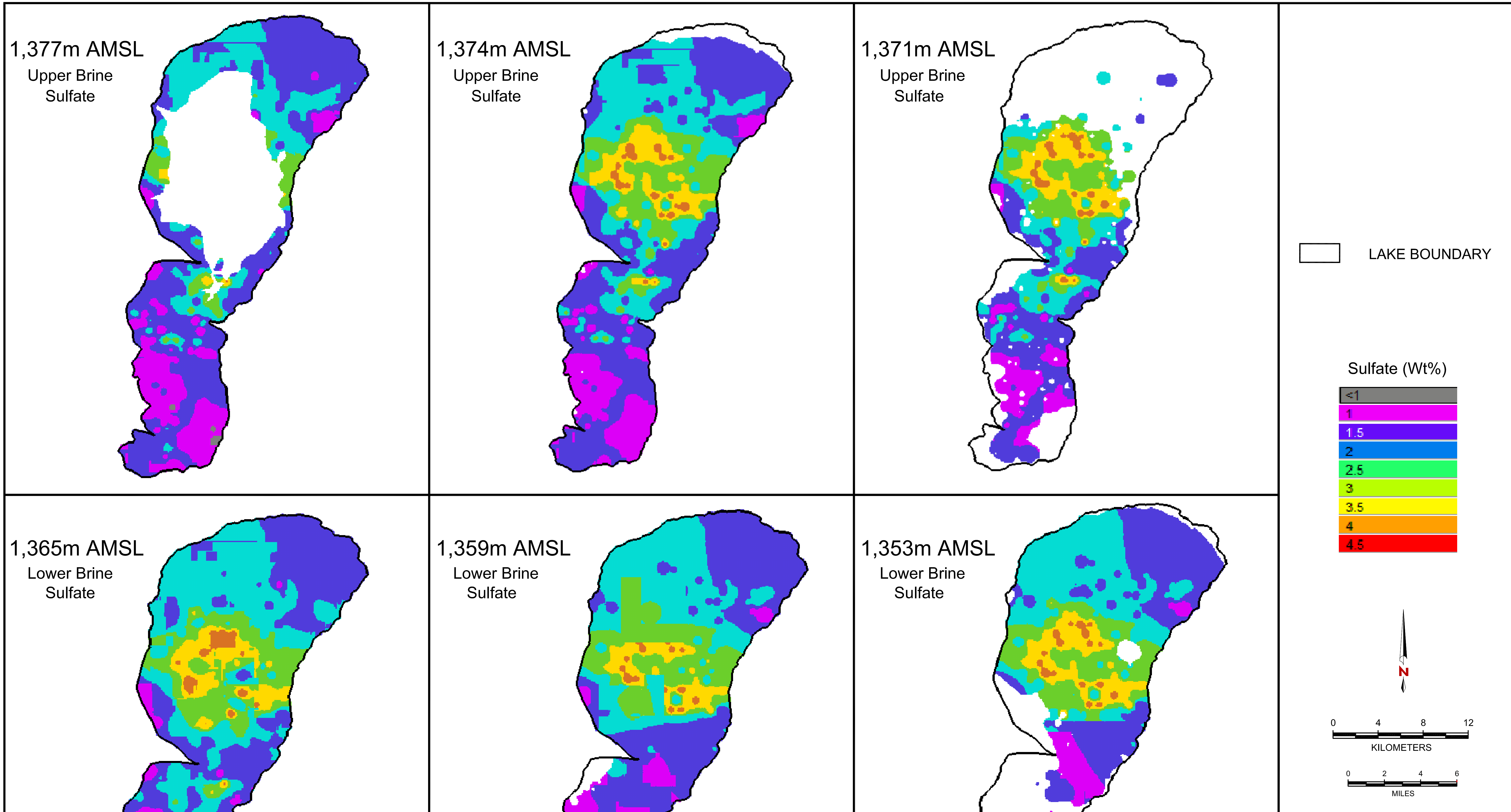
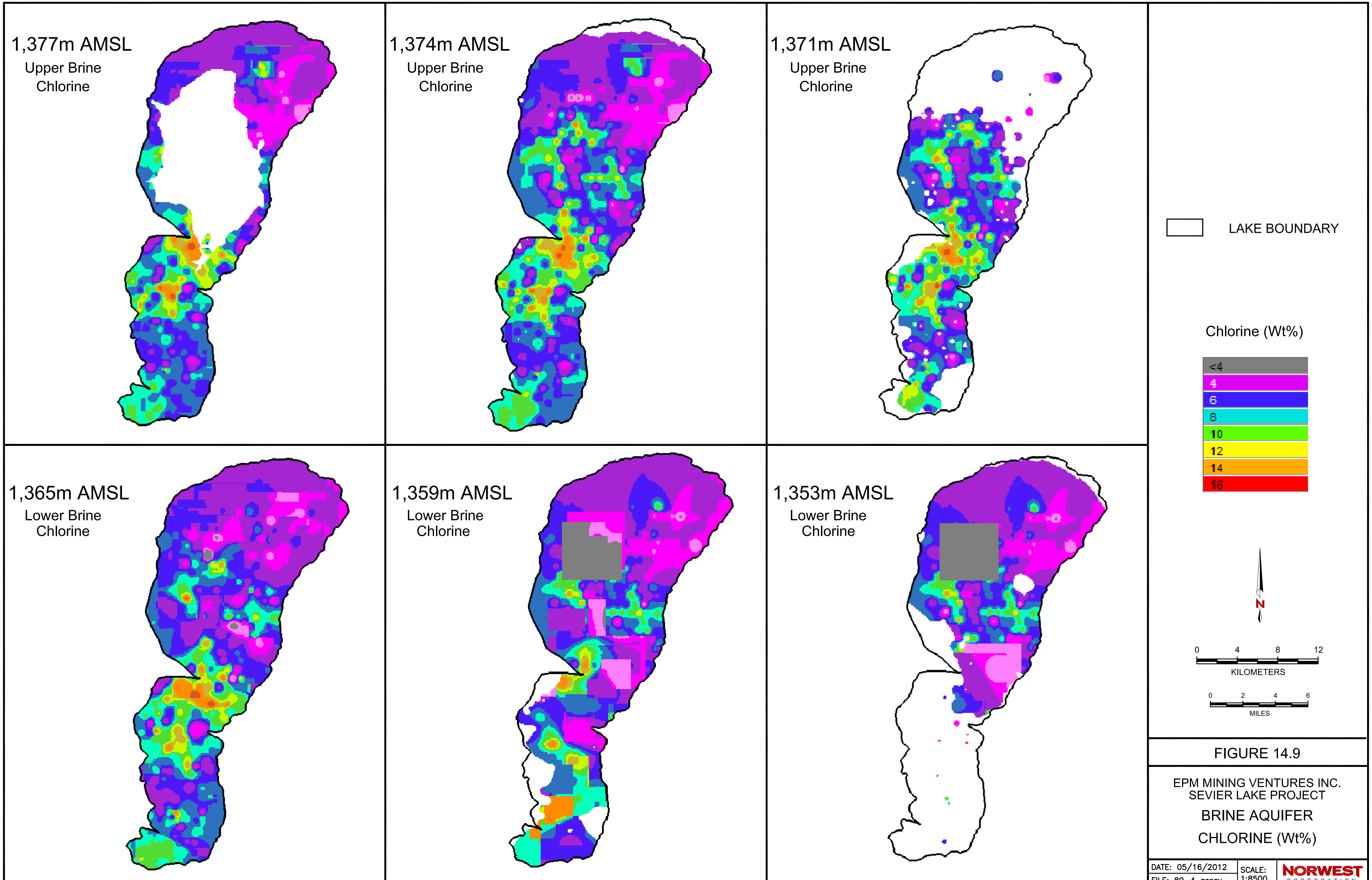


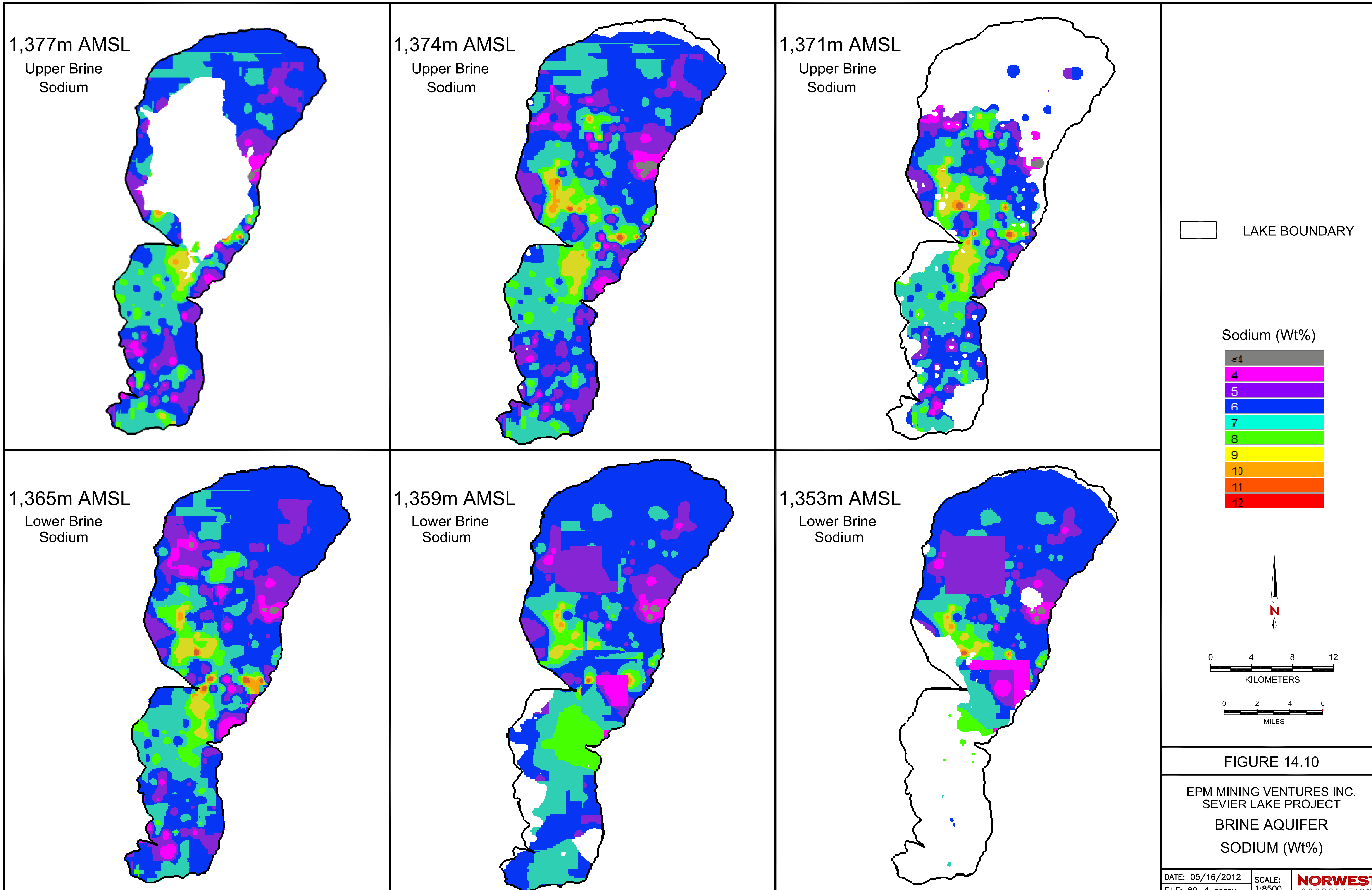
FIGURE 14.8

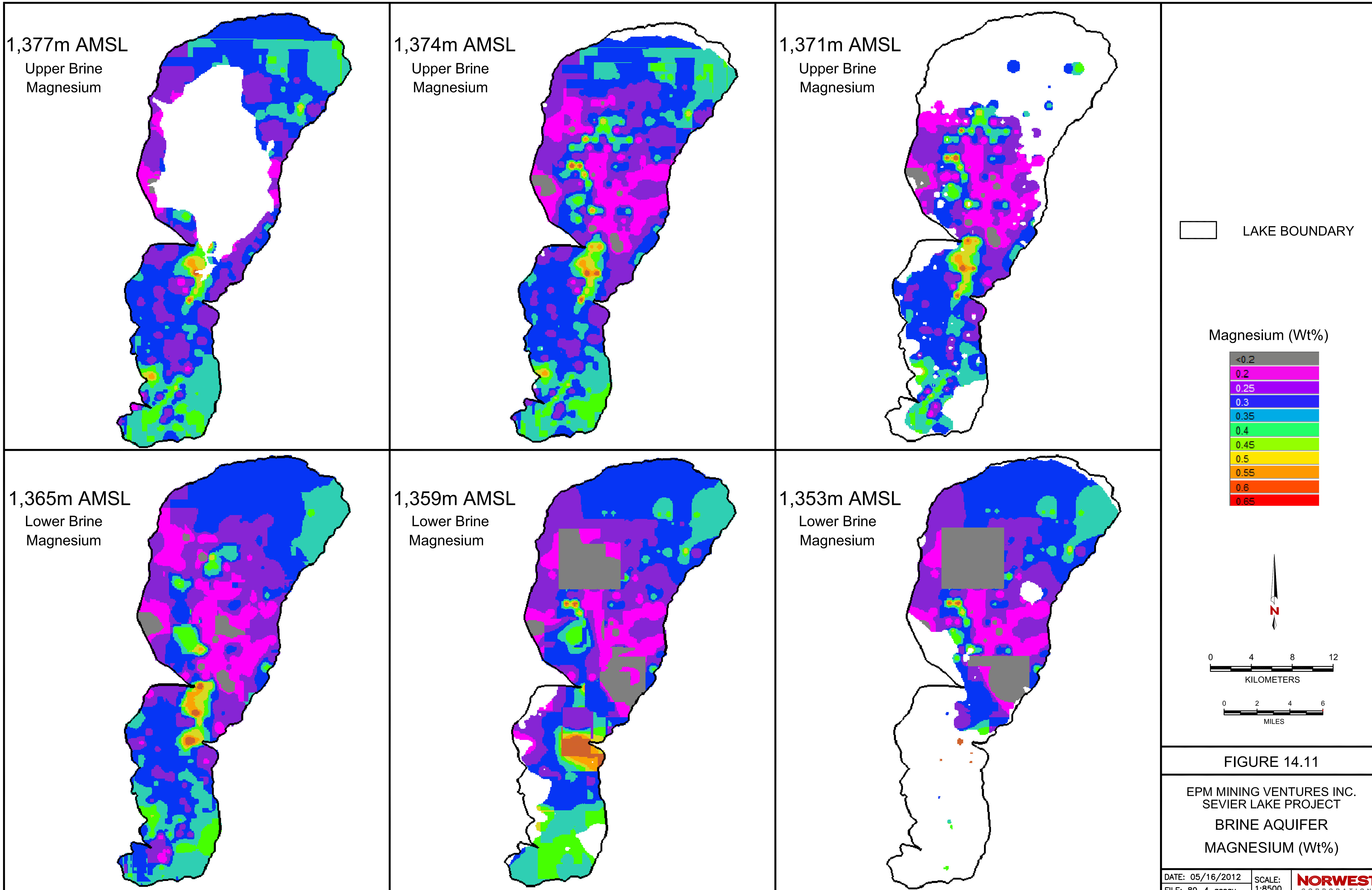
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

BRINE AQUIFER
SULFATE (Wt%)

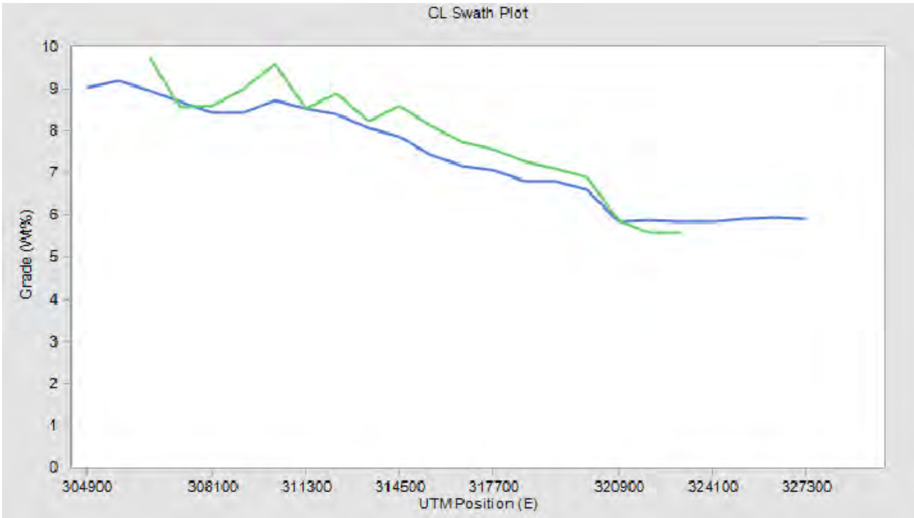
DATE: 05/16/2012
FILE: 89-4 assay
SCALE: 1:8500
NORWEST CORPORATION

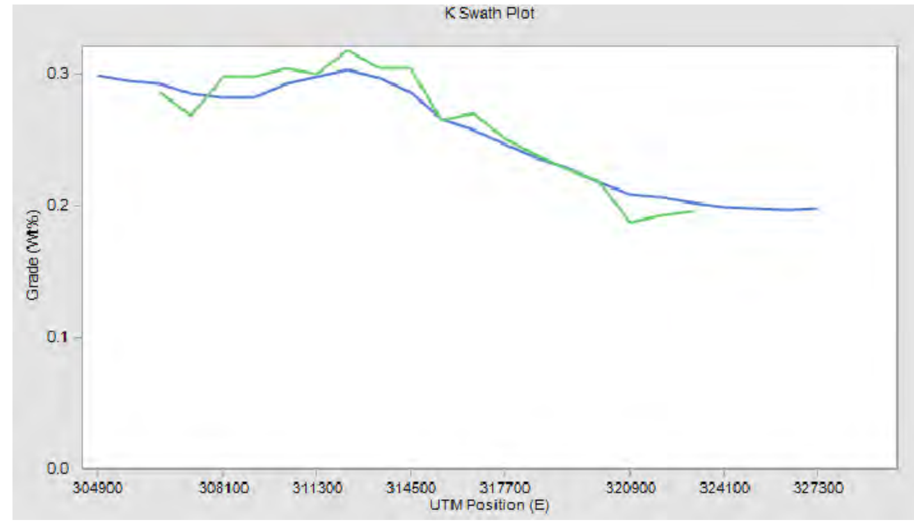

1,377m AMSL
Upper Brine
Chlorine
1,374m AMSL
Upper Brine
Chlorine
1,371m AMSL
Upper Brine
Chlorine
1,365m AMSL
Lower Brine
Chlorine
1,359m AMSL
Lower Brine
Chlorine
1,353m AMSL
Lower Brine
Chlorine
LAKE BOUNDARY
Chlorine (Wt%)
<4
4
6
8
10
12
14
16
N
0 4 8 12
KILOMETERS
0 2 4 6
MILES
FIGURE 14.9
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
BRINE AQUIFER
CHLORINE (Wt%)
DATE: 05/16/2012
FILE: 89-4 assay
SCALE: 1:8500
NORWEST
CORPORATION

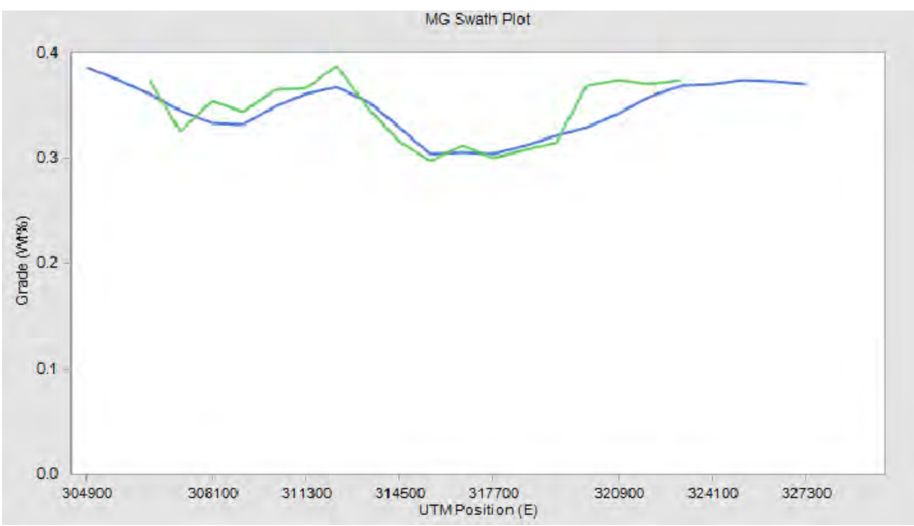

1,377m AMSL
Upper Brine
Sodium
1,374m AMSL
Upper Brine
Sodium
1,371m AMSL
Upper Brine
Sodium
1,365m AMSL
Lower Brine
Sodium
1,359m AMSL
Lower Brine
Sodium
1,353m AMSL
Lower Brine
Sodium
LAKE BOUNDARY
Sodium (Wt%)
<4
4
5
6
7
8
9
10
11
12
N
0 4 8 12
KILOMETERS
0 2 4 6
MILES
FIGURE 14.10
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
BRINE AQUIFER
SODIUM (Wt%)
DATE: 05/16/2012
FILE: 89-4 assay
SCALE: 1:8500
NORWEST
CORPORATION

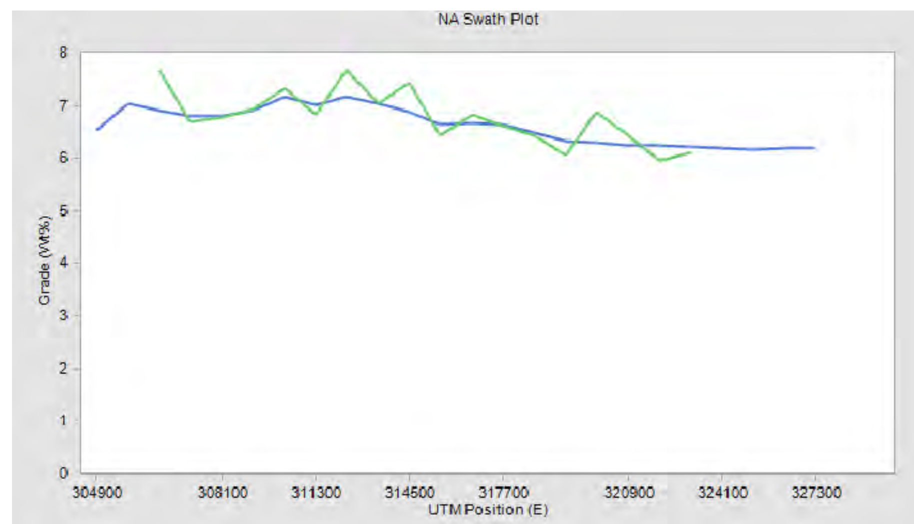


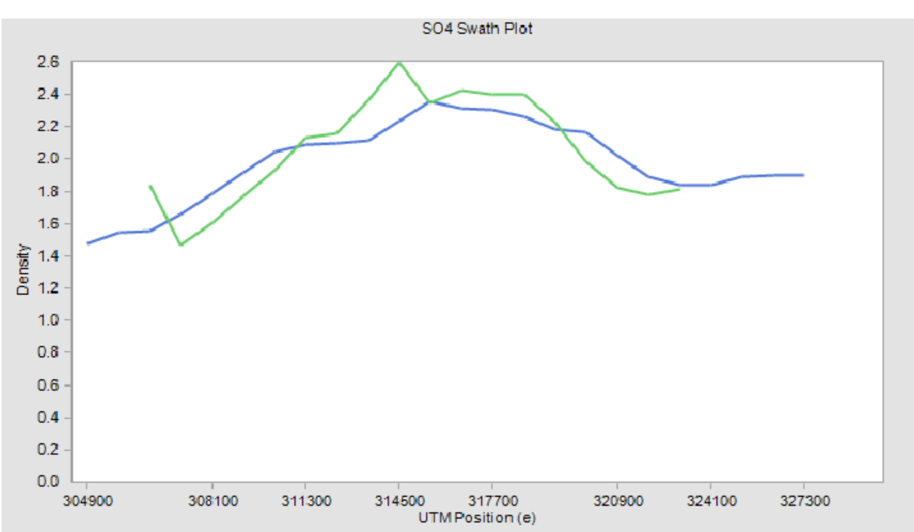
1,377m AMSL
Upper Brine
Magnesium
1,374m AMSL
Upper Brine
Magnesium
1,371m AMSL
Upper Brine
Magnesium
1,365m AMSL
Lower Brine
Magnesium
1,359m AMSL
Lower Brine
Magnesium
1,353m AMSL
Lower Brine
Magnesium
LAKE BOUNDARY
Magnesium (Wt%)
<0.2
0.2
0.25
0.3
0.35
0.4
0.45
0.5
0.55
0.6
0.65
N
0
4
8
12
KILOMETERS
0
2
4
6
MILES
FIGURE 14.11
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
BRINE AQUIFER
MAGNESIUM (Wt%)
DATE: 05/16/2012
FILE: 89-4 assay
SCALE:
1:8500
NORWEST
CORPORATION

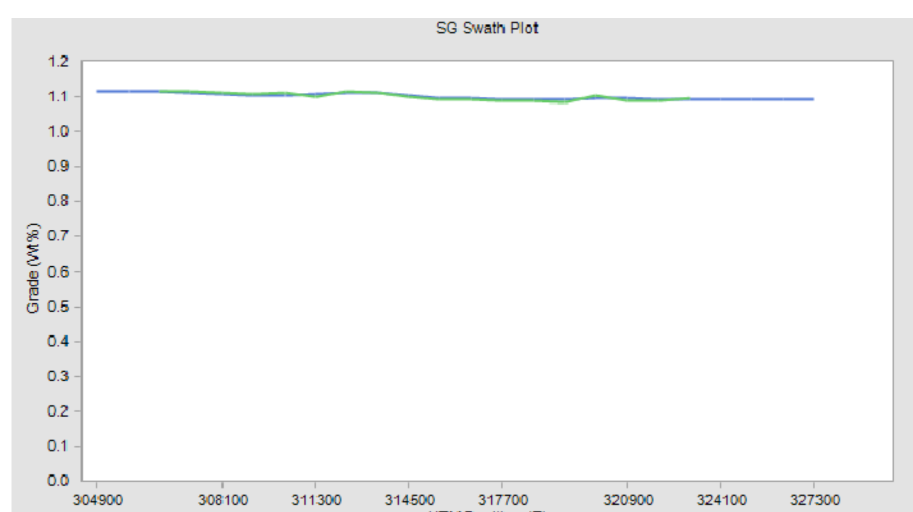


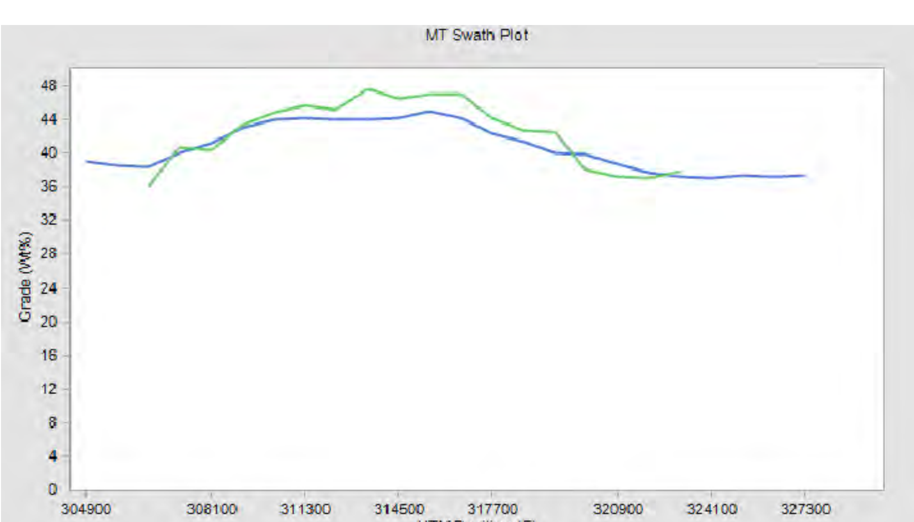












LEGEND

Composite Drillhole Data

Interpolated Block Model Data

FIGURE 14.12

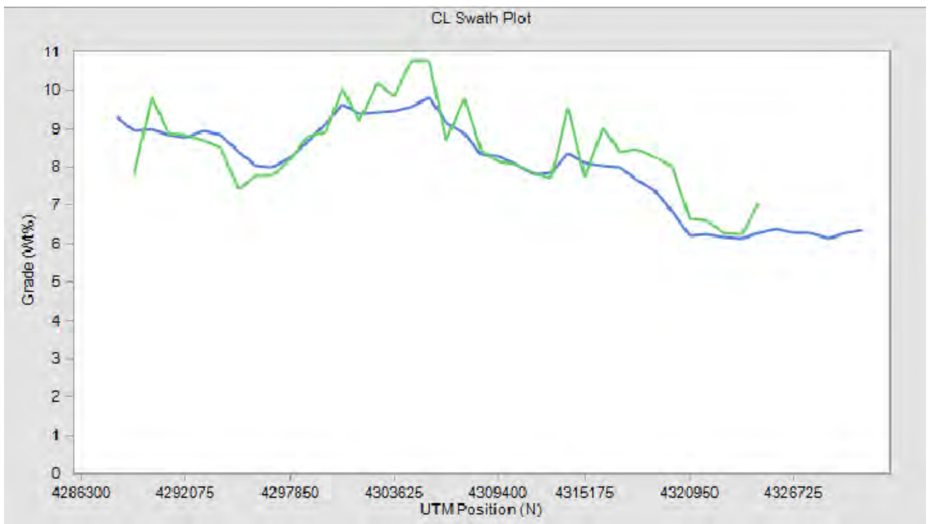
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

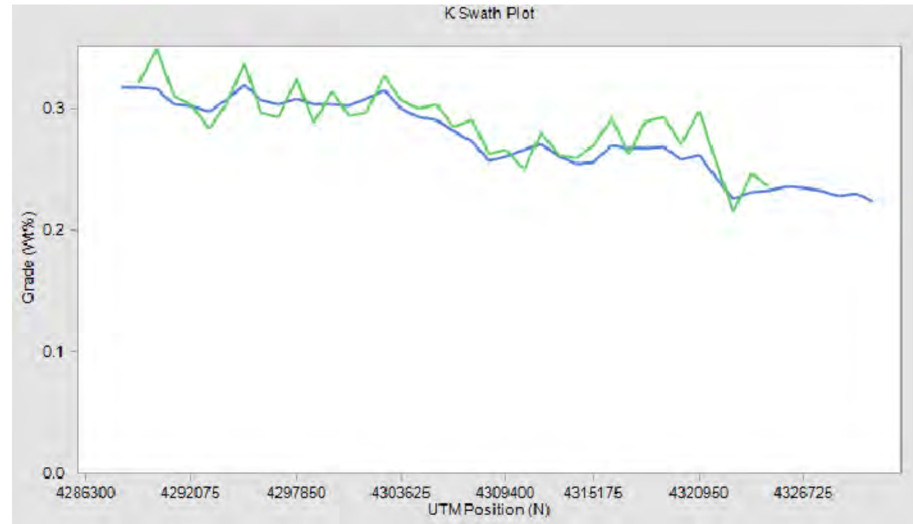
SWATH PLOTS

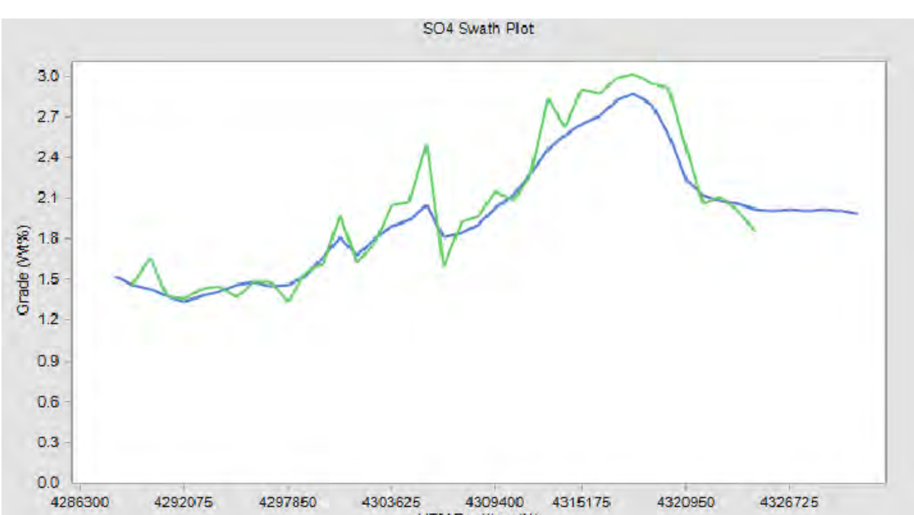
NORTH-SOUTH INTERVALS

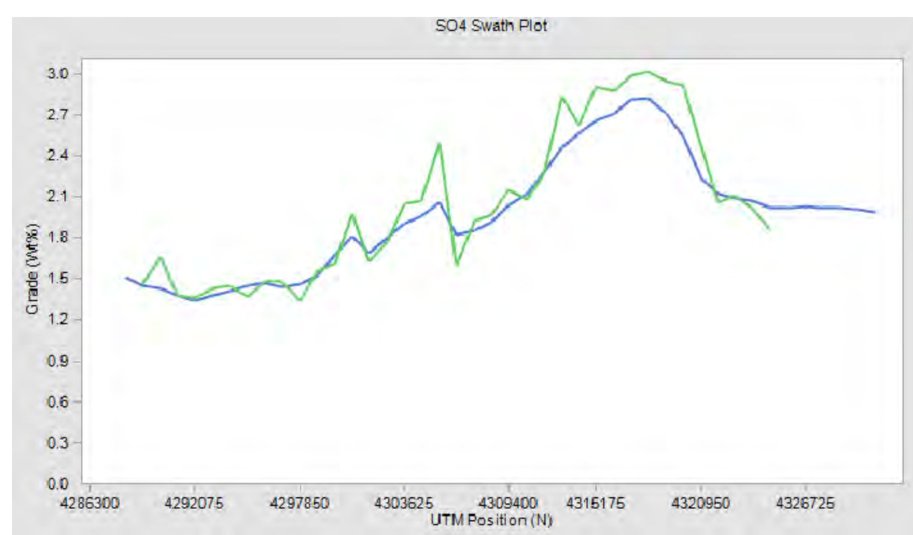
DATE: 05/14/2012
FILE: 89-4 FIG 14.12

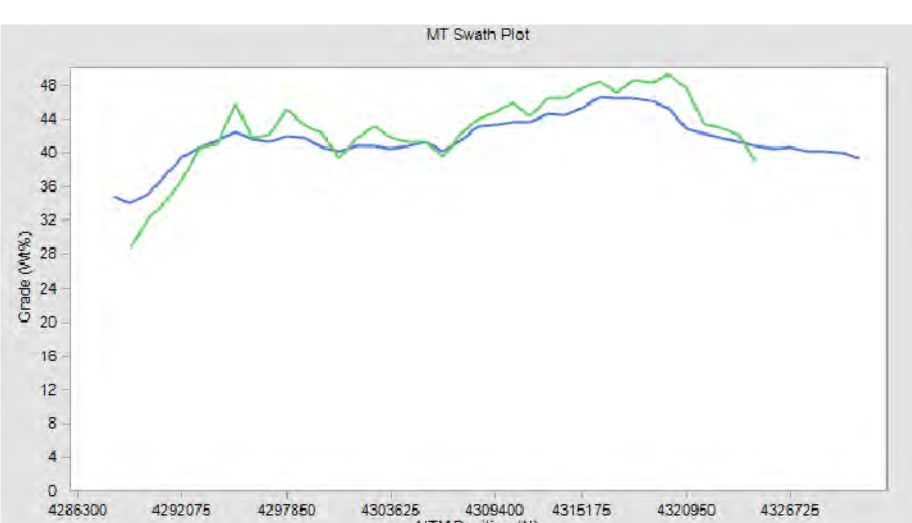
NORWEST CORPORATION











LEGEND

Composite Drillhole Data

Interpolated Block Model Data

FIGURE 14.13

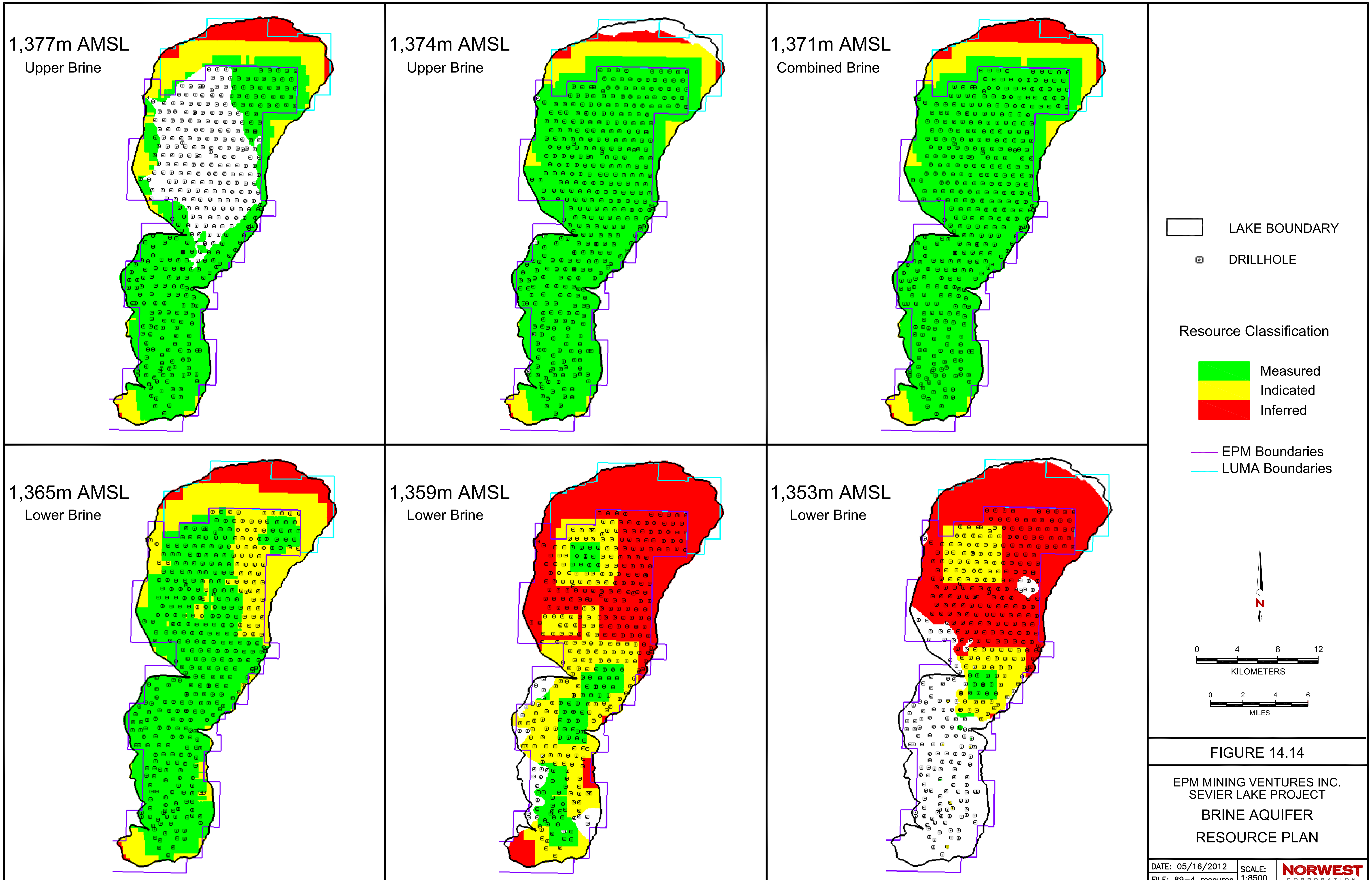
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT

SWATH PLOTS

EAST-WEST INTERVALS

DATE: 05/14/2012
FILE: 89.4 FIG-14-13

NORWEST CORPORATION


1,377m AMSL
Upper Brine
1,374m AMSL
Upper Brine
1,371m AMSL
Combined Brine
1,365m AMSL
Lower Brine
1,359m AMSL
Lower Brine
1,353m AMSL
Lower Brine
LAKE BOUNDARY
DRILLHOLE
Resource Classification
Measured
Indicated
Inferred
EPM Boundaries
LUMA Boundaries
N
0 4 8 12
KILOMETERS
0 2 4 6
MILES
FIGURE 14.14
EPM MINING VENTURES INC.
SEVIER LAKE PROJECT
BRINE AQUIFER
RESOURCE PLAN
DATE: 05/16/2012
FILE: 89-4 resource
SCALE:
1:8500
NORWEST
CORPORATION

29 APPENDIX A

Table A.1 Detail of EPM Federal Potassium Tracts, Lease UTU-87112A

Detail of the EPM Federal Potassium Tracts, Lease UTU 87112A					
UTU #	Township	Range	Section	Lots	Acres
88387	Township 24 South	Range 12 West, SLM	section 3	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	1,929.01
			section 4	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
			section 5	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
88388	Township 24 South	Range 12 West, SLM	section 9	(all)	1,920.00
			section 10	(all)	
			section 11	(all)	
88389	Township 24 South	Range 12 West, SLM	section 14	(all)	1,280.00
			section 15	(all)	
88390	Township 23 South	Range 12 West, SLM	section 26	(all)	1,280.00
			section 27	(all)	
88391	Township 24 South	Range 12 West, SLM	section 7	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	2,487.76
			section 8	(all)	
			section 17	(all)	
			section 18	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	
88392	Township 23 South	Range 12 West, SLM	section 33	(all)	1,920.00
			section 34	(all)	
			section 35	(all)	
88393	Township 24 South	Range 12 West, SLM	section 1	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	1,283.38
			section 12	(all)	
88394	Township 23 South	Range 12 West, SLM	section 14	(all)	2,560.00
			section 15	(all)	
			section 22	(all)	
			section 23	(all)	
88395	Township 23 South	Range 11 West, SLM	section 30	lots 1-12, E1⁄2 (all)	2,032.74
			section 31	lots 1-12, E1⁄2 (all)	
	Township 23 South	Range 12 West, SLM	section 25	(all)	
88396	Township 23 South	Range 12 West, SLM	section 21	(all)	1,280.00
			section 28	(all)	
88397	Township 23 South	Range 12 West, SLM	section 12	(all)	1,280.00
			section 13	(all)	
88398	Township 23 South	Range 11 West, SLM	section 19	lots 1-12, E1⁄2 (all)	1,335.32
	Township 23 South	Range 12 West, SLM	section 24	(all)	
88399	Township 23 South	Range 12 West, SLM	section 3	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	1,921.63
			section 9	(all)	
			section 10	(all)	
88401	Township 23 South	Range 12 West, SLM	section 4	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	1,922.86
			section 5	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
	Township 22 South	Range 12 West. SLM	section 33	(all)	
88402	Township 22 South	Range 12 West, SLM	section 21	(all)	1,920.00
			section 28	(all)	
			section 29	(all)	
88403	Township 23 South	Range 11 West, SLM	section 6	lots 1-14, S1⁄2NE1⁄4, SE1⁄4 (all)	1,366.56

Detail of the EPM Federal Potassium Tracts, Lease UTU 87112A					
UTU #	**Township**	**Range**	**Section**	**Lots**	**Acres**
	Township 23 South	Range 12 West, SLM	section 1	lots 1-4, S1/2N1/2, S1/2 (all)	
88404	Township 23 South	Range 12 West, SLM	section 2	lots 1-4, S1/2N1/2, S1/2 (all)	1,281.88
			section 11	(all)	
88405	Township 22 South	Range 12 West, SLM	section 34	lots 1-4, E1/2W1/2, E1/2 (all)	1,919.40
			section 35	(all)	
			section 36	(all)	
88406	Township 22 South	Range 12 West, SLM	section 25	(all)	1,918.55
			section 26	(all)	
			section 27	lots 1-4, E1/2W1/2, E1/2 (all)	
88407	Township 22 South	Range 12 West, SLM	section 22	lots 1-4, E1/2W1/2, E1/2 (all)	1,917.81
			section 23	(all)	
			section 24	(all)	
88408	Township 22 South	Range 12 West, SLM	section13	(all)	1,917.09
			section14	(all)	
			section 15	lots 1-4, E1/2W1/2, E1/2 (all)	
88409	Township 22 South	Range 12 West, SLM	section 9	lots 3, 4, E1/2SW1/4, SE1/4	1,918.37
			section 10	lots 3, 4, E1/2SW1/4, SE1/4	
			section11	(all)	
			section 12	(all)	
88410	Township 22 South	Range 11 West, SLM	section 18	lots 1-4, E1/2 (all)	2,510.11
			section 19	lots 1-4, E1/2 (all)	
			section 29	lots 1-4, S1/2N1/2, SW1/4	
			section 30	lots 1-6, S1/2NE1/4, SE1/4 (all)	
			section 31	lots 1-4, E1/2 (all)	
88411	Township 22 South	Range 11 West, SLM	section 17	(all)	1,924.48
			section 20	(all)	
			section 21	lots 1-4, E1/2W1/2, E1/2 (all)	
88412	Township 22 South	Range 12 West, SLM	section 1	lots 1-4, S1/2N1/2, S1/2 (all)	1,798.33
			section 2	lots 1-4, S1/2N1/2, S1/2 (all)	
	Township 22 South	Range 11 West, SLM	section 6	lots 1-6, S1/2NE1/4, SE1/4 (all)	
88413	Township 22 South	Range 11 West, SLM	section 7	lots 1-4, E1/2 (all)	2,421.09
			section 8	(all)	
			section 9	(all)	
			section 10	lots 1-7, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4 (all)	
88414	Township 21 South	Range 12 West, SLM	section 34	(all)	2,400.77
			section 35	(all)	
			section 36	(all)	
	Township 21 South	Range 11 West, SLM	section 31	lots 1-6, NE1/4, N1/2SE1/4 (all)	
88415	Township 22 South	Range 11 West, SLM	section 3	lots 1-7, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4 (all)	1,982.65
			section 4	lots 1-4, S1/2N1/2, S1/2 (all)	

Detail of the EPM Federal Potassium Tracts, Lease UTU 87112A					
UTU #	**Township**	**Range**	**Section**	**Lots**	**Acres**
			section 5	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
88416	Township 21 South	Range 11 West, SLM	section 32	lots 1-4, N1⁄2, N1⁄2S1⁄2 (all)	1,933.20
			section 33	lots 1-4, N1⁄2, N1⁄2S1⁄2 (all)	
			section 34	lots 1-4, N1⁄2, N1⁄2S1⁄2 (all)	
88417	Township 21 South	Range 12 West, SLM	section 25	(all)	2,396.57
			section 26	(all)	
			section 27	(all)	
	Township 21 South	Range 11 West, SLM	section 30	lots 1-4, E1⁄2 (all)	
88418	Township 21 South	Range 11 West, SLM	section 27	(all)	1,920.00
			section 28	(all)	
			section 29	(all)	
88419	Township 21 South	Range 12 West, SLM	section 22	(all)	2,395.65
			section 23	(all)	
			section 24	(all)	
	Township 21 South	Range 11 West, SLM	section 19	lots 1-4, E1⁄2 (all)	
88420	Township 21 South	Range 12 West, SLM	section 13	(all)	2,394.72
			section 14	(all)	
			section 15	(all)	
	Township 21 South	Range 11 West, SLM	section 18	lots 1-4, E1⁄2 (all)	
88421	Township 21 South	Range 11 West, SLM	section 20	(all)	1,920.00
			section 21	(all)	
			section 22	(all)	
88422	Township 21 South	Range 12 West, SLM	section 1	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	2,406.53
			section 2	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
			section 11	(all)	
			section 12	(all)	
88423	Township 21 South	Range 11 West, SLM	section 7	lots 1-4, E1⁄2 (all)	2,393.82
			section 8	(all)	
			section 16	(all)	
			section 17	(all)	
88424	Township 21 South	Range 11 West, SLM	section 4	lots 1-4, S1⁄2 (all)	1,869.64
			section 5	lots 1-4, S1⁄2 (all)	
			section 6	lots 1-5, SE1⁄4 (all)	
			section 9	(all)	
88425	Township 21 South	Range 11 West, SLM	section 3	lots 1-4, S1⁄2 (all)	1,728.85
			section 10	(all)	
			section 15	(all)	
88426	Township 20 South	Range 12 West, SLM	section 25	(all)	2,560.00
			section 26	(all)	
			section 35	(all)	
			section 36	(all)	
88427	Township 20 South	Range 11 West, SLM	section 31	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	2,559.21
			section 32	(all)	

Detail of the EPM Federal Potassium Tracts, Lease UTU 87112A					
UTU #	**Township**	**Range**	**Section**	**Lots**	**Acres**
			section 33	(all)	
			section 34	(all)	
88428	Township 20 South	Range 11 West, SLM	section 25	(all)	2,560.00
			section 26	(all)	
			section 35	(all)	
			section 36	(all)	
88429	Township 20 South	Range 11 West, SLM	section 27	(all)	2,557.64
			section 28	(all)	
			section 29	(all)	
			section 30	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	
88430	Township 20 South	Range 11 West, SLM	section 19	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	2,556.07
			section 20	(all)	
			section 21	(all)	
			section 22	(all)	
88443	Township 20 South	Range 11 West, SLM	section 23	(all)	1,280.00
			section 24	(all)	
88457	Township 20 South	Range 12 West, SLM	section 28	lots 1-18, W1⁄2NW1⁄4 (all)	1,886.40
			section 33	lots 1-18 (all)	
			section 34	(all)	
88461	Township 21 South	Range 12 West, SLM	section 3	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	2,393.45
			section 4	lots 1-7, S1⁄2NE1⁄4, SE1⁄4NW1⁄4, E1⁄2SW1⁄4, SE1⁄4 (all)	
			section 9	lots 1-4, E1⁄2, E1⁄2W1⁄2 (all)	
			section 10	(all)	
88462	Township 21 South	Range 12 West, SLM	section 16	lots 1-4, E1⁄2, E1⁄2W1⁄2 (all)	2,548.83
			section 17	(all)	
			section 20	(all)	
			section 21	lots 1-4, E1⁄2, E1⁄2W1⁄2 (all)	
88463	Township 21 South	Range 12 West, SLM	section 28:	lots 1-4, E1/2, E1/2W1/2	1,911.39
			section 29:	(all)	
			section 33:	lots 1-4, E1/2, E1/2W1/2	
				TOTAL ACREAGE:	**95,801.76**

Table A.2 State Potash Mineral Leases Controlled By EPM

Lease Number	Legal Description				Acres
	Township	Range	Section	Lots	
ML 51479	Township 21S	Range 12W, SLM	section 32	all	640.00
ML 51480	Township 22S	Range 11W	section 2	lots 1-7	1,286.24
			section 16	all	
ML 51481	Township 22S	Range 12W	section 16	all	1,280.00
			section 32	all	
ML 51482	Township 23S	Range 12W	section 16	all	1,920.00
			section 32	all	
			section 36	all	
ML 51483	Township 24S	Range 12W	section 2	lots 1-4, S½N½, S½	1,283.24
			section 16	all	
Total Acres					**6,409.48**

Table A.3 Federal Potash Mineral Leases Controlled By LUMA

UTU #	Township	Range	Section	Lots	Acres
88444	Township 20 South	Range 11West, SLM	section 15	all	2,554.50
			section 16	all	
			section 17	all	
			section 18	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	
88445	Township 20 South	Range 11 West, SLM	section 11	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	2,557.18
			section 12	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
			section 13	all	
			section 14	all	
88446	Township 20 South	Range 11 West, SLM	section 3	lots 1-12, S1⁄2 (all)	1,358.44
			section 10	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
88448	Township 20 South	Range 10 West, SLM	section 7	lots 1-12, E1⁄2 (all)	2,012.41
			section 8	all	
			section 17	all	
88449	Township 20 South	Range 10 West, SLM	section 18	lots 1-12, E1⁄2 (all)	2,115.47
			section 19	lots 1-12, E1⁄2 (all)	
			section 20	lots 1-4, S1⁄2N1⁄2, S1⁄2 (all)	
88450	Township 20 South	Range 10 West, SLM	section 29	all	2,129.20
			section 30	lots 1-12, E1⁄2; (all)	
			section 31	lots 1-12, E1⁄2 (all)	
88451	Township 20 South	Range 11 West, SLM	section 4	lots 1-12, S1⁄2 (all)	2,048.40
			section 5	lots 1-12, S1⁄2 (all)	
			section 9	all	
88452	Township 20 South	Range 11 West, SLM	section 6	lots 1-14, E1⁄2SW1⁄4, SE1⁄4 (all)	1,953.40
			section 7	lots 1-4, E1⁄2W1⁄2, E1⁄2 (all)	
			section 8	all	
88453	Township 20 South	Range 12 West, SLM	section 12	lots 1, 3-5, 7-17	1,799.62
			section 13	all	
			section 24	all	
88455	Township 20 South	Range 12 West, SLM	section 11	lots 1, 2, 4,6-11	1,561.35
			section 14	all	
			section 15	lots 1-15, SW1⁄4NE1⁄4, SE1⁄4NW1⁄4, NE1⁄4SW1⁄4, NW1⁄4SE1⁄4 all	
88456	Township 20 South	Range 12 West, SLM	section 22	all	1,920.00
			section 23	all	
			section 27	all	
				TOTAL ACREAGE:	**22,009.97**

30 APPENDIX B

Appendix B

Full Well ID	Drilling Method	Coordinates UTM WGS84			Date Started	Date Complete	Total Depth	Screened Interval		Casing Type
		Easting	Northing	Elev.				From	To	
CC1	DP	306644	4303546	1377.7	8/17/11	8/17/11	39.0	9.0	39.0	2" PVC
CC2	DP	307475	4303534	1377.6	8/17/11	8/18/11	40.0	9.7	39.7	2" PVC
DD1	DP	306609	4302751	1377.7	8/17/11	8/17/11	36.0	6.0	36.0	2" PVC
DD3	Sonic	307437	4302706	1377.7	8/20/11	8/21/11	85.0	5.0	65.0	2" PVC
DP1-11-100	DP	309545	4291125	1378.7	11/7/11	11/7/11	50.0	5.0	50.0	1"PVC
DP1-11-101	DP	310050	4291872	1378.5	11/7/11	11/7/11	40.0	5.0	40.0	1"PVC
DP1-11-102	DP	310644	4292882	1378.3	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC
DP1-11-103	DP	311143	4293597	1378.2	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC
DP1-11-104	DP	311424	4294429	1378.1	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC
DP1-11-105	DP	312036	4296122	1378.0	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC
DP1-11-106	DP	311494	4296824	1377.8	11/9/11	11/9/11	40.0	5.0	40.0	1"PVC
DP1-11-107	DP	311572	4297694	1377.7	11/9/11	11/9/11	30.0	5.0	30.0	1"PVC
DP1-11-108	DP	311651	4298530	1377.6	11/9/11	11/9/11	35.0	5.0	35.0	1"PVC
DP1-11-109	DP	313271	4298974	1377.8	11/9/11	11/9/11	30.0	5.0	30.0	1"PVC
DP1-11-110	DP	313304	4299822	1377.7	11/9/11	11/9/11	35.0	5.0	35.0	1"PVC
DP1-11-111	DP	312937	4297711	1377.8	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP1-11-112	DP	312918	4296868	1378.0	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP1-11-113	DP	312925	4296063	1378.0	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP1-11-114	DP	313779	4296134	1378.2	11/10/11	11/10/11	30.0	5.0	30.0	1"PVC
DP1-11-115	DP	314108	4296133	1379.8	11/10/11	11/10/11	30.0	5.0	30.0	1"PVC
DP1-11-116	DP	312921	4295194	1378.8	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP1-11-117	DP	312908	4294314	1378.2	11/11/11	11/11/11	35.0	5.0	35.0	1"PVC
DP1-11-118	DP	312338	4293528	1378.3	11/11/11	11/11/11	35.0	5.0	35.0	1"PVC
DP1-11-119	DP	311193	4294999	1378.0	11/11/11	11/11/11	40.0	5.0	40.0	1"PVC
DP1-11-120	DP	310853	4294243	1378.1	11/11/11	11/11/11	30.0	5.0	30.0	1"PVC
DP1-11-121	DP	310226	4293599	1378.2	11/11/11	11/11/11	30.0	5.0	30.0	1"PVC
DP1-11-122	DP	309559	4292902	1378.3	11/11/11	11/11/11	30.0	5.0	30.0	1"PVC
DP1-11-123	DP	313234	4302596	1377.2	11/12/11	11/12/11	25.0	NA	NA	NA
DP1-11-124	DP	312749	4302659	1377.3	11/12/11	11/12/11	25.0	3.0	23.0	1"PVC
DP1-11-125	DP	313409	4301729	1377.4	11/12/11	11/12/11	35.0	5.0	35.0	1"PVC
DP1-11-126	DP	312384	4300872	1377.6	11/12/11	11/12/11	35.0	5.0	35.0	1"PVC
DP1-11-127	DP	313322	4300859	1377.6	11/12/11	11/12/11	40.0	3.5	38.5	1"PVC
DP1-11-128	DP	313715	4300819	1377.6	11/13/11	11/13/11	35.0	5.0	35.0	1"PVC
DP1-11-129	DP	314444	4303762	1377.1	11/13/11	11/13/11	30.0	5.0	30.0	1"PVC
DP1-11-130	DP	315127	4304324	1377.1	11/13/11	11/13/11	35.0	5.0	35.0	1"PVC
DP1-11-131	DP	315802	4304901	1377.2	11/17/11	11/17/11	35.0	5.0	35.0	1"PVC
DP1-11-132	DP	316191	4305243	1377.1	11/17/11	11/17/11	35.0	5.0	35.0	1"PVC
DP1-11-133	DP	317184	4306110	1377.1	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP1-11-134	DP	317852	4306704	1377.1	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP1-11-135	DP	318323	4307439	1377.1	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP1-11-136	DP	318735	4308224	1377.1	11/17/11	11/17/11	20.0	5.0	20.0	1"PVC
DP1-11-137	DP	319270	4308932	1377.1	11/17/11	11/17/11	25.0	5.0	25.0	1"PVC
DP1-11-138	DP	319618	4309263	1377.1	11/18/11	11/18/11	29.0	4.5	29.5	1"PVC
DP1-11-139	DP	319930	4310098	1377.1	11/18/11	11/18/11	40.0	5.0	40.0	1"PVC
DP1-11-140	DP	320462	4311452	1377.0	11/18/11	11/18/11	25.0	5.0	25.0	1"PVC
DP1-11-141	DP	308937	4292312	1378.6	11/19/11	11/19/11	35.0	5.0	35.0	1"PVC
DP1-11-142	DP	308964	4291402	1379.2	11/19/11	11/19/11	35.0	5.0	35.0	1"PVC
DP1-11-143	DP	309419	4290355	1379.7	11/19/11	11/19/11	40.0	5.0	40.0	1"PVC
DP1-11-144	DP	310877	4290382	1378.9	11/19/11	11/19/11	40.0	5.0	40.0	1"PVC
DP1-11-145	DP	310324	4289555	1379.1	11/19/11	11/19/11	30.0	5.0	30.0	1"PVC
DP2-11-200	DP	308716	4292660	1378.3	11/7/11	11/7/11	39.0	4.0	39.0	1"PVC
DP2-11-201	DP	309293	4293318	1378.2	11/7/11	11/7/11	39.5	4.5	39.5	1"PVC
DP2-11-202	DP	309856	4293978	1378.0	11/7/11	11/7/11	40.0	5.0	40.0	1"PVC
DP2-11-203	DP	310081	4294817	1378.0	11/8/11	11/8/11	45.0	5.0	45.0	1"PVC
DP2-11-204	DP	310102	4295683	1377.8	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC
DP2-11-205	DP	310765	4296193	1377.8	11/8/11	11/8/11	40.0	5.0	40.0	1"PVC

DP2-11-206	DP	310139	4297445	1377.6	11/9/11	11/9/11	40.0	5.0	40.0	1"PVC
DP2-11-207	DP	310183	4298510	1377.5	11/9/11	11/9/11	40.0	5.0	40.0	1"PVC
DP2-11-208	DP	309522	4298586	1377.6	11/9/11	11/9/11	40.0	5.0	40.0	1"PVC
DP2-11-209	DP	309064	4299476	1377.5	11/9/11	11/9/11	45.0	5.0	45.0	1"PVC
DP2-11-210	DP	309034	4300128	1377.4	11/10/11	11/10/11	24.0	4.0	24.0	1"PVC
DP2-11-211	DP	308201	4301103	1377.4	11/10/11	11/10/11	40.0	5.0	40.0	1"PVC
DP2-11-212	DP	307317	4301140	1377.7	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP2-11-213	DP	306964	4301131	1377.8	11/10/11	11/10/11	34.0	4.0	34.0	1"PVC
DP2-11-214	DP	308476	4296913	1377.8	11/10/11	11/10/11	35.0	5.0	35.0	1"PVC
DP2-11-215	DP	308634	4296234	1378.0	11/11/11	11/11/11	45.0	5.0	45.0	1"PVC
DP2-11-216	DP	309176	4296246	1377.9	11/11/11	11/11/11	40.0	5.0	40.0	1"PVC
DP2-11-217	DP	308471	4294485	1378.2	11/11/11	11/11/11	40.0	5.0	40.0	1"PVC
DP2-11-218	DP	308458	4293599	1378.4	11/11/11	11/11/11	40.0	5.0	40.0	1"PVC
DP2-11-219	DP	307529	4293618	1378.6	11/11/11	11/11/11	30.0	5.0	30.0	1"PVC
DP2-11-220	DP	307815	4302003	1377.6	11/12/11	11/12/11	35.0	5.0	35.0	1"PVC
DP2-11-221	DP	307988	4302881	1377.5	11/12/11	11/12/11	40.0	5.0	40.0	1"PVC
DP2-11-222	DP	308123	4303766	1377.4	11/12/11	11/12/11	45.0	5.0	45.0	1"PVC
DP2-11-223	DP	308324	4304636	1377.4	11/12/11	11/12/11	40.0	5.0	40.0	1"PVC
DP2-11-224	DP	307978	4305622	1377.4	11/12/11	11/12/11	35.0	5.0	35.0	1"PVC
DP2-11-225	DP	308599	4305510	1377.4	11/13/11	11/13/11	40.0	5.0	40.0	1"PVC
DP2-11-226	DP	309152	4306177	1377.4	11/13/11	11/13/11	35.0	5.0	35.0	1"PVC
DP2-11-227	DP	309152	4307025	1377.3	11/13/11	11/13/11	35.0	5.0	35.0	1"PVC
DP2-11-228	DP	310381	4307490	1377.3	11/13/11	11/13/11	44.0	4.0	44.0	1"PVC
DP2-11-229	DP	306920	4304395	1377.6	11/13/11	11/13/11	35.0	5.0	35.0	1"PVC
DP2-11-230	DP	307330	4305203	1377.4	11/17/11	11/17/11	35.0	5.0	35.0	1"PVC
DP2-11-231	DP	310957	4308006	1377.5	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP2-11-232	DP	311608	4307947	1377.6	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP2-11-233	DP	312186	4308692	1377.2	11/17/11	11/17/11	30.0	5.0	30.0	1"PVC
DP2-11-234	DP	311816	4309348	1377.2	11/17/11	11/17/11	44.0	4.0	44.0	1"PVC
DP2-11-235	DP	311175	4309953	1377.1	11/18/11	11/18/11	35.0	5.0	35.0	1"PVC
DP2-11-236	DP	308980	4312104	1376.9	11/18/11	11/18/11	34.0	4.0	34.0	1"PVC
DP2-11-237	DP	309090	4312993	1376.9	11/18/11	11/18/11	30.0	5.0	30.0	1"PVC
DP2-11-238	DP	307857	4314142	1376.9	11/19/11	11/19/11	29.5	4.5	29.5	1"PVC
DP2-11-239	DP	308734	4314118	1376.9	11/19/11	11/19/11	38.0	3.0	38.0	1"PVC
DP2-11-240	DP	308532	4322708	1376.7	11/20/11	11/20/11	15.0	5.0	15.0	1"PVC
DP2-11-241	DP	309132	4322313	1376.7	11/20/11	11/20/11	30.0	5.0	30.0	1"PVC
DP3-11-102	DP	309856	4319408	1376.9	1/10/12	1/10/12	32.5	7.5	32.5	1" PVC
DP3-11-114	DP	310293	4318482	1377.0	1/10/12	1/10/12	37.5	7.5	37.5	1" PVC
DP3-11-115	DP	309379	4318503	1377.1	1/9/12	1/9/12	42.5	7.5	42.5	1" PVC
DP3-11-127	DP	309781	4317580	1377.0	1/10/12	1/10/12	37.5	7.5	37.5	1" PVC
DP3-11-139	DP	310253	4316654	1376.8	1/10/12	1/10/12	32.5	7.5	32.5	1" PVC
DP3-11-140	DP	309339	4316676	1377.1	1/9/12	1/9/12	42.5	7.5	42.5	1" PVC
DP3-11-152	DP	309762	4315751	1377.0	1/10/12	1/10/12	42.5	7.5	42.5	1" PVC
DP3-11-164	DP	310213	4314825	1377.0	1/10/12	1/10/12	37.5	7.5	37.5	1" PVC
DP3-11-165	DP	309298	4314847	1377.0	1/9/12	1/9/12	37.5	7.5	37.5	1" PVC
DP3-11-176	DP	310856	4313863	1377.0	1/10/12	1/10/12	37.5	7.5	37.5	1" PVC
DP3-11-184	DP	313830	4312911	1376.5	1/12/12	1/12/12	32.5	7.5	32.5	1" PVC
DP3-11-186	DP	312000	4312954	1376.7	1/12/12	1/12/12	42.5	7.5	42.5	1" PVC
DP3-11-187	DP	311087	4312976	1376.7	1/11/12	1/11/12	42.5	7.5	42.5	1" PVC
DP3-11-188	DP	310173	4312997	1376.7	1/9/12	1/9/12	42.5	7.5	42.5	1" PVC
DP3-11-189	DP	319752	4311860	1377.0	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC
DP3-11-190	DP	318837	4311881	1376.9	1/12/12	1/12/12	37.5	7.5	37.5	1" PVC
DP3-11-191	DP	317923	4311902	1376.7	1/12/12	1/12/12	22.5	7.5	22.5	1" PVC
DP3-11-192	DP	317009	4311922	1376.6	1/12/12	1/12/12	27.5	7.5	27.5	1" PVC
DP3-11-194	DP	315180	4311965	1376.6	1/12/12	1/12/12	32.5	7.5	32.5	1" PVC
DP3-11-195	DP	314149	4311989	1376.6	1/12/12	1/12/12	27.5	7.5	27.5	1" PVC
DP3-11-196	DP	313352	4312008	1376.6	1/12/12	1/12/12	32.5	7.5	32.5	1" PVC
DP3-11-197	DP	312438	4312030	1376.8	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC

DP3-11-198	DP	311523	4312051	1377.0	1/12/12	1/12/12	42.5	7.5	42.5	1" PVC
DP3-11-199	DP	310610	4312072	1376.9	1/9/12	1/9/12	42.5	7.5	42.5	1" PVC
DP3-11-200	DP	320190	4310979	1377.1	1/11/12	1/11/12	27.5	7.5	27.5	1" PVC
DP3-11-201	DP	319274	4310956	1377.0	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC
DP3-11-202	DP	318360	4310977	1376.9	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC
DP3-11-203	DP	317447	4310998	1376.8	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC
DP3-11-204	DP	316532	4311020	1376.8	1/11/12	1/11/12	42.5	7.5	42.5	1" PVC
DP3-11-205	DP	315565	4311042	1376.7	1/11/12	1/11/12	32.5	7.5	32.5	1" PVC
DP3-11-206	DP	314704	4311061	1376.7	1/7/12	1/7/12	32.5	7.5	32.5	1" PVC
DP3-11-208	DP	312875	4311103	1377.0	1/6/12	1/6/12	27.5	7.5	27.5	1" PVC
DP3-11-209	DP	311961	4311125	1377.2	1/6/12	1/6/12	47.5	7.5	47.5	1" PVC
DP3-11-210	DP	318798	4310052	1377.0	1/5/12	1/5/12	27.5	7.5	27.5	1" PVC
DP3-11-211	DP	317883	4310073	1377.0	1/5/12	1/5/12	37.5	7.5	37.5	1" PVC
DP3-11-213	DP	316055	4310115	1376.8	1/6/12	1/6/12	37.5	7.5	37.5	1" PVC
DP3-11-214	DP	315141	4310136	1376.8	1/6/12	1/6/12	37.5	7.5	37.5	1" PVC
DP3-11-215	DP	314088	4310161	1376.7	1/6/12	1/6/12	37.5	7.5	37.5	1" PVC
DP3-11-216	DP	313312	4310179	1376.9	1/6/12	1/6/12	42.5	7.5	42.5	1" PVC
DP3-11-217	DP	312398	4310201	1377.1	1/6/12	1/6/12	42.5	7.5	42.5	1" PVC
DP3-11-218	DP	319187	4309129	1377.1	1/5/12	1/5/12	37.5	7.5	37.5	1" PVC
DP3-11-219	DP	317406	4309170	1377.0	1/5/12	1/5/12	42.5	7.5	42.5	1" PVC
DP3-11-220	DP	316492	4309192	1376.9	1/5/12	1/5/12	47.5	7.5	47.5	1" PVC
DP3-11-221	DP	315577	4309213	1376.8	1/5/12	1/5/12	42.5	7.5	42.5	1" PVC
DP3-11-223	DP	313750	4309256	1376.8	1/5/12	1/5/12	42.5	7.5	42.5	1" PVC
DP3-11-224	DP	312835	4309277	1377.0	1/5/12	1/5/12	57.5	7.5	57.5	1" PVC
DP3-11-225	DP	316859	4308268	1377.1	1/4/12	1/4/12	37.5	7.5	37.5	1" PVC
DP3-11-227	DP	315101	4308309	1376.8	1/4/12	1/4/12	42.5	7.5	42.5	1" PVC
DP3-11-228	DP	314054	4308334	1376.7	1/4/12	1/4/12	47.5	7.5	47.5	1" PVC
DP3-11-229	DP	313273	4308352	1376.9	1/4/12	1/4/12	42.5	7.5	42.5	1" PVC
DP3-11-230	DP	316452	4307363	1377.0	1/4/12	1/4/12	37.5	7.5	37.5	1" PVC
DP3-11-231	DP	315538	4307384	1377.0	1/4/12	1/4/12	47.5	7.5	47.5	1" PVC
DP3-11-233	DP	313709	4307426	1376.9	1/4/12	1/4/12	37.5	7.5	37.5	1" PVC
DP3-11-234	DP	312790	4307449	1379.0	1/3/12	1/3/12	32.5	7.5	32.5	1" PVC
DP3-11-235	DP	316012	4306457	1377.1	12/20/11	12/20/11	42.5	7.5	42.5	1" PVC
DP3-11-236	DP	315063	4306482	1377.0	12/20/11	12/20/11	37.5	7.5	37.5	1" PVC
DP3-11-237	DP	314155	4306493	1376.9	12/21/11	12/21/11	37.5	7.5	37.5	1" PVC
DP3-11-238	DP	313248	4306504	1377.2	12/21/11	12/21/11	42.5	7.5	42.5	1" PVC
DP3-11-239	DP	312311	4306540	1378.0	1/3/12	1/3/12	37.5	7.5	37.5	1" PVC
DP3-11-242	DP	315499	4305605	1377.2	12/20/11	12/20/11	37.5	7.5	37.5	1" PVC
DP3-11-243	DP	314615	4305554	1377.1	12/20/11	12/20/11	37.5	7.5	37.5	1" PVC
DP3-11-244	DP	313842	4305596	1376.9	12/21/11	12/21/11	37.5	7.5	37.5	1" PVC
DP3-11-245	DP	312752	4305616	1376.9	12/18/11	12/18/11	42.5	7.5	42.5	1" PVC
DP3-11-246	DP	311837	4305649	1377.2	12/18/11	12/18/11	32.5	7.5	32.5	1" PVC
DP3-11-247	DP	310926	4305661	1377.3	12/17/11	12/17/11	32.5	7.5	32.5	1"PVC
DP3-11-248	DP	310024	4305690	1377.3	12/17/11	12/17/11	37.5	7.5	37.5	1"PVC
DP3-11-249	DP	313979	4304683	1377.1	12/17/11	12/17/11	42.5	7.5	42.5	1"PVC
DP3-11-250	DP	313181	4304706	1377.0	12/17/11	12/17/11	47.5	7.5	47.5	1"PVC
DP3-11-252	DP	311366	4304739	1377.2	12/17/11	12/17/11	37.5	7.5	37.5	1"PVC
DP3-11-253	DP	310454	4304755	1377.2	12/17/11	12/17/11	37.5	7.5	37.5	1"PVC
DP3-11-254	DP	309475	4304779	1377.4	12/17/11	12/17/11	57.5	7.5	57.5	1"PVC
DP3-11-255	DP	312719	4303793	1377.2	12/16/11	12/16/11	51.5	6.5	51.5	1"PVC
DP3-11-256	DP	311800	4303813	1377.3	12/16/11	12/16/11	22.5	2.5	22.5	1"PVC
DP3-11-257	DP	310887	4303832	1377.3	12/16/11	12/16/11	37.5	2.5	37.5	1"PVC
DP3-11-259	DP	309060	4303882	1377.4	12/16/11	12/16/11	42.5	2.5	42.5	1"PVC
DP3-11-261	DP	311329	4302902	1377.2	12/16/11	12/16/11	37.5	7.5	37.5	1"PVC
DP3-11-262	DP	310416	4302932	1377.4	12/16/11	12/16/11	37.5	7.5	37.5	1"PVC
DP3-11-263	DP	309468	4302950	1377.4	12/16/11	12/16/11	47.5	7.5	47.5	1"PVC
DP3-11-264	DP	312672	4301960	1377.4	12/16/11	12/16/11	37.5	7.5	37.5	1"PVC
DP3-11-265	DP	311760	4301985	1377.4	12/15/11	12/15/11	37.5	7.5	37.5	1"PVC

DP3-11-266	DP	310847	4301996	1377.3	12/15/11	12/15/11	37.5	2.5	37.5	1"PVC
DP3-11-268	DP	309013	4302046	1377.5	12/15/11	12/15/11	47.5	2.5	47.5	1"PVC
DP3-11-270	DP	309413	4301125	1377.5	12/15/11	12/15/11	47.5	7.5	47.5	1"PVC
DP3-11-271	DP	310374	4301101	1377.4	12/15/11	12/15/11	42.5	2.5	42.5	1"PVC
DP3-11-272	DP	312626	4300119	1377.7	12/15/11	12/15/11	42.0	2.0	42.0	1"PVC
DP3-11-273	DP	311720	4300129	1377.6	12/15/11	12/15/11	32.5	2.5	32.5	1"PVC
DP3-11-274	DP	310807	4300180	1377.5	12/14/11	12/14/11	37.5	5.7	40.7	1"PVC
DP3-11-275	DP	309898	4300203	1377.6	12/14/11	12/14/11	42.5	2.5	42.5	1"PVC
DP3-11-276	DP	312124	4299159	1377.7	12/14/11	12/14/11	40.7	5.7	40.7	1"PVC
DP3-11-277	DP	311314	4299263	1377.6	12/14/11	12/14/11	52.5	2.5	52.5	1"PVC
DP3-11-278	DP	310330	4299275	1377.6	12/14/11	12/14/11	42.5	2.5	42.5	1"PVC
DP3-11-65	DP	310373	4322138	1376.8	1/9/12	1/9/12	37.5	7.5	37.5	1" PVC
DP3-11-77	DP	309893	4321235	1376.7	1/9/12	1/9/12	32.5	7.5	32.5	1" PVC
DP3-11-89	DP	310333	4320310	1376.8	1/10/12	1/10/12	32.5	7.5	32.5	1" PVC
DP3-11-90	DP	309418	4320332	1376.8	1/9/12	1/9/12	37.5	7.5	37.5	1" PVC
DP3-12-001	DP	324169	4325476	1377.7	1/24/12	1/24/12	27.5	7.5	27.5	1" PVC
DP3-12-002	DP	323247	4325497	1377.7	1/24/12	1/24/12	32.5	7.5	32.5	1" PVC
DP3-12-003	DP	322338	4325521	1377.6	1/24/12	1/24/12	22.5	7.5	22.5	1" PVC
DP3-12-004	DP	321424	4325542	1377.4	1/24/12	1/24/12	22.5	7.5	22.5	1" PVC
DP3-12-005	DP	320506	4325559	1377.3	1/24/12	1/24/12	22.5	7.5	22.5	1" PVC
DP3-12-008	DP	317768	4325630	1377.1	1/23/12	1/23/12	32.5	7.5	32.5	1" PVC
DP3-12-009	DP	316855	4325647	1376.7	1/23/12	1/23/12	22.5	7.5	22.5	1" PVC
DP3-12-010	DP	315934	4325664	1376.7	1/23/12	1/23/12	17.5	7.5	17.5	1" PVC
DP3-12-011	DP	315017	4325690	1376.7	1/23/12	1/23/12	32.5	7.5	32.5	1" PVC
DP3-12-012	DP	323683	4324575	1377.7	1/23/12	1/23/12	32.5	7.5	32.5	1" PVC
DP3-12-013	DP	322773	4324594	1377.7	1/23/12	1/23/12	32.5	7.5	32.5	1" PVC
DP3-12-014	DP	321854	4324617	1377.6	1/23/12	1/23/12	27.5	7.5	27.5	1" PVC
DP3-12-015	DP	320810	4324640	1377.4	1/23/12	1/23/12	27.5	7.5	27.5	1" PVC
DP3-12-016	DP	320031	4324653	1377.3	1/23/12	1/23/12	27.5	7.5	27.5	1" PVC
DP3-12-017	DP	319125	4324676	1377.2	1/23/12	1/23/12	22.5	7.5	22.5	1" PVC
DP3-12-018	DP	318198	4324700	1377.2	1/24/12	1/24/12	22.5	7.5	22.5	1" PVC
DP3-12-019	DP	317283	4324714	1377.0	1/24/12	1/24/12	37.5	7.5	37.5	1" PVC
DP3-12-020	DP	316376	4324740	1376.7	1/23/12	1/23/12	27.5	7.5	27.5	1" PVC
DP3-12-021	DP	315460	4324759	1376.7	1/23/12	1/23/12	22.5	7.5	22.5	1" PVC
DP3-12-022	DP	324124	4323648	1377.8	1/25/12	1/25/12	32.5	7.5	32.5	1" PVC
DP3-12-023	DP	323211	4323668	1378.0	1/25/12	1/25/12	32.5	7.5	32.5	1" PVC
DP3-12-024	DP	322295	4323689	1377.8	1/25/12	1/25/12	37.5	7.5	37.5	1" PVC
DP3-12-025	DP	321378	4323707	1377.5	1/25/12	1/25/12	32.5	7.5	32.5	1" PVC
DP3-12-026	DP	320467	4323731	1377.5	1/24/12	1/24/12	27.5	7.5	27.5	1" PVC
DP3-12-027	DP	319557	4323751	1377.2	1/24/12	1/24/12	27.5	7.5	27.5	1" PVC
DP3-12-028	DP	318639	4323773	1377.3	1/24/12	1/24/12	27.5	7.5	27.5	1" PVC
DP3-12-029	DP	317725	4323794	1377.2	1/24/12	1/24/12	32.5	7.5	32.5	1" PVC
DP3-12-030	DP	316808	4323820	1376.7	1/26/12	1/26/12	22.5	7.5	22.5	1" PVC
DP3-12-031	DP	315898	4323838	1376.8	1/26/12	1/26/12	42.5	7.5	42.5	1" PVC
DP3-12-032	DP	314372	4323873	1376.8	1/26/12	1/26/12	37.5	7.5	37.5	1" PVC
DP3-12-033	DP	314071	4323881	1376.8	1/27/12	1/27/12	17.5	7.5	17.5	1" PVC
DP3-12-034	DP	313156	4323901	1376.8	1/27/12	1/27/12	37.5	7.5	37.5	1" PVC
DP3-12-035	DP	312246	4323923	1376.8	1/27/12	1/27/12	27.5	7.5	27.5	1" PVC
DP3-12-036	DP	323648	4322744	1377.7	1/25/12	1/25/12	37.5	7.5	37.5	1" PVC
DP3-12-037	DP	322733	4322766	1377.7	1/25/12	1/25/12	37.5	7.5	37.5	1" PVC
DP3-12-038	DP	321820	4322789	1377.6	1/25/12	1/25/12	32.5	7.5	32.5	1" PVC
DP3-12-039	DP	320761	4322804	1377.4	1/26/12	1/26/12	37.5	7.5	37.5	1" PVC
DP3-12-040	DP	319987	4322831	1377.3	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-041	DP	319078	4322849	1377.3	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-042	DP	318163	4322872	1377.2	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-043	DP	317444	4322900	1377.1	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-044	DP	316336	4322915	1376.8	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-045	DP	315419	4322935	1376.8	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC

DP3-12-046	DP	314355	4322965	1376.8	1/27/12	1/27/12	42.5	7.5	42.5	1" PVC
DP3-12-047	DP	313594	4322981	1376.8	1/27/12	1/27/12	42.5	7.5	42.5	1" PVC
DP3-12-048	DP	312677	4322998	1376.8	1/27/12	1/27/12	32.5	7.5	32.5	1" PVC
DP3-12-049	DP	311883	4323018	1376.8	1/27/12	1/27/12	32.5	7.5	32.5	1" PVC
DP3-12-050	DP	324084	4321816	1377.8	1/25/12	1/25/12	17.5	7.5	17.5	1" PVC
DP3-12-051	DP	323160	4321939	1377.6	1/25/12	1/25/12	22.5	7.5	22.5	1" PVC
DP3-12-052	DP	322252	4321868	1377.5	1/25/12	1/25/12	27.5	7.5	27.5	1" PVC
DP3-12-053	DP	321342	4321883	1377.3	1/25/12	1/25/12	42.5	7.5	42.5	1" PVC
DP3-12-054	DP	320426	4321902	1377.4	1/26/12	1/26/12	27.5	7.5	27.5	1" PVC
DP3-12-055	DP	319514	4321924	1377.4	1/30/12	1/30/12	22.5	7.5	22.5	1" PVC
DP3-12-056	DP	318601	4321949	1377.4	1/28/12	1/28/12	22.5	7.5	22.5	1" PVC
DP3-12-057	DP	317684	4321965	1377.1	1/28/12	1/28/12	22.5	7.5	22.5	1" PVC
DP3-12-058	DP	316775	4321988	1376.8	1/28/12	1/28/12	22.5	7.5	17.5	1" PVC
DP3-12-059	DP	315856	4322008	1376.8	1/28/12	1/28/12	27.5	7.5	27.5	1" PVC
DP3-12-060	DP	314938	4322025	1376.8	1/28/12	1/28/12	22.5	7.5	22.5	1" PVC
DP3-12-061	DP	314032	4322055	1376.8	1/27/12	1/27/12	47.5	7.5	47.5	1" PVC
DP3-12-062	DP	313119	4322059	1376.8	1/27/12	1/27/12	32.5	7.5	32.5	1" PVC
DP3-12-063	DP	312201	4322094	1376.8	1/27/12	1/27/12	27.5	7.5	27.5	1" PVC
DP3-12-064	DP	311285	4322114	1376.9	1/27/12	1/27/12	37.5	7.5	37.5	1" PVC
DP3-12-066	DP	319951	4320999	1377.1	1/30/12	1/30/12	32.5	7.5	32.5	1" PVC
DP3-12-067	DP	319100	4321019	1377.1	1/30/12	1/30/12	22.5	7.5	22.5	1" PVC
DP3-12-068	DP	318122	4321041	1376.9	1/30/12	1/30/12	18.0	8.0	18.0	1" PVC
DP3-12-069	DP	317209	4321062	1376.5	1/30/12	1/30/12	22.0	7.0	22.0	1" PVC
DP3-12-069MW	DP	317209	4321062	1376.5	1/30/12	1/30/12	22.5	7.5	22.5	1" PVC
DP3-12-070	DP	316293	4321084	1376.7	1/30/12	1/30/12	37.5	7.5	37.5	1" PVC
DP3-12-071	DP	315381	4321105	1376.6	1/30/12	1/30/12	37.5	7.5	37.5	1" PVC
DP3-12-072	DP	314363	4321129	1376.7	1/30/12	1/30/12	37.5	7.5	37.5	1" PVC
DP3-12-073	DP	313550	4321148	1376.5	1/30/12	1/30/12	32.5	7.5	32.5	1" PVC
DP3-12-074	DP	312638	4321170	1376.6	1/30/12	1/30/12	37.5	7.5	37.5	1" PVC
DP3-12-075	DP	311505	4321197	1376.7	1/30/12	1/30/12	27.5	7.5	27.5	1" PVC
DP3-12-076	DP	310807	4321214	1376.6	1/31/12	1/31/12	17.5	7.5	17.5	1" PVC
DP3-12-078*	DP	320398	4320077	1377.2	2/1/12	2/1/12	27.5	7.5	27.5	1" PVC
DP3-12-079	DP	319474	4320096	1377.2	1/31/12	1/31/12	22.5	7.5	22.5	1" PVC
DP3-12-080	DP	318559	4320117	1377.0	1/31/12	1/31/12	22.5	7.5	22.5	1" PVC
DP3-12-081	DP	317645	4320138	1376.6	1/31/12	1/31/12	22.5	7.5	22.5	1" PVC
DP3-12-082	DP	316732	4320160	1376.7	1/31/12	1/31/12	32.0	7.0	32.0	1" PVC
DP3-12-083	DP	315817	4320181	1376.7	1/31/12	1/31/12	37.5	7.5	37.5	1" PVC
DP3-12-084	DP	314903	4320202	1376.6	1/31/12	1/31/12	42.5	7.5	42.5	1" PVC
DP3-12-085	DP	313988	4320224	1376.7	1/31/12	1/31/12	37.5	7.5	37.5	1" PVC
DP3-12-086	DP	313074	4320246	1376.6	1/31/12	1/31/12	37.5	7.5	37.5	1" PVC
DP3-12-086MW	DP	313074	4320246	1376.6	1/31/12	1/31/12	22.5	7.5	22.5	1" PVC
DP3-12-087	DP	312160	4320267	1376.7	1/31/12	1/31/12	37.5	7.5	37.5	1" PVC
DP3-12-088	DP	311246	4320289	1376.8	1/31/12	1/31/12	37.5	7.5	37.5	1" PVC
DP3-12-093	DP	318083	4319214	1376.5	2/1/12	2/1/12	17.5	7.5	17.5	1" PVC
DP3-12-094	DP	317084	4319238	1376.7	2/1/12	2/1/12	17.5	7.5	17.5	1" PVC
DP3-12-095	DP	316255	4319257	1376.7	2/1/12	2/1/12	22.5	7.5	22.5	1" PVC
DP3-12-096	DP	315340	4319278	1376.6	2/1/12	2/1/12	27.5	7.5	27.5	1" PVC
DP3-12-097	DP	314316	4319302	1376.7	2/1/12	2/1/12	32.5	7.5	32.5	1" PVC
DP3-12-098	DP	313669	4319318	1376.7	2/1/12	2/1/12	22.5	7.5	22.5	1" PVC
DP3-12-099	DP	312598	4319343	1376.7	2/1/12	2/1/12	21.0	6.0	21.0	1" PVC
DP3-12-100	DP	311803	4319362	1376.8	2/1/12	2/1/12	37.5	7.5	37.5	1" PVC
DP3-12-101	DP	310769	4319387	1376.8	2/1/12	2/1/12	22.5	7.5	22.5	1" PVC
DP3-12-103	DP	320350	4318230	1376.9	1/16/12	1/16/12	27.5	7.5	27.5	1" PVC
DP3-12-104	DP	319432	4318267	1377.1	1/18/12	1/18/12	27.5	7.5	27.5	1" PVC
DP3-12-105	DP	318520	4318289	1376.7	2/2/12	2/2/12	17.5	7.5	17.5	1" PVC
DP3-12-106	DP	317605	4318310	1376.5	2/2/12	2/2/12	22.5	7.5	22.5	1" PVC
DP3-12-107	DP	316692	4318332	1376.3	2/2/12	2/2/12	22.5	7.5	22.5	1" PVC
DP3-12-108	DP	315777	4318353	1376.2	2/1/12	2/1/12	22.5	7.5	22.5	1" PVC

DP3-12-109	DP	314863	4318374	1375.9	2/1/12	2/1/12	37.5	7.5	37.5	1" PVC
DP3-12-110	DP	313950	4318396	1376.1	2/1/12	2/1/12	22.5	7.5	22.5	1" PVC
DP3-12-111	DP	313034	4318418	1376.5	2/1/12	2/1/12	37.5	7.5	37.5	1" PVC
DP3-12-112	DP	312120	4318438	1376.6	1/20/12	1/20/12	42.5	7.5	42.5	1" PVC
DP3-12-113	DP	311207	4318460	1376.7	1/20/12	1/20/12	47.5	7.5	47.5	1" PVC
DP3-12-116	DP	319878	4317334	1377.0	1/16/12	1/16/12	27.5	7.5	27.5	1" PVC
DP3-12-117	DP	319022	4317364	1376.9	1/18/12	1/18/12	27.5	7.5	27.5	1" PVC
DP3-12-118	DP	318040	4317391	1376.7	1/20/12	1/20/12	17.5	7.5	17.5	1" PVC
DP3-12-119	DP	317123	4317411	1376.5	1/20/12	1/20/12	22.5	7.5	22.5	1" PVC
DP3-12-120	DP	316248	4317435	1376.5	1/20/12	1/20/12	42.5	7.5	42.5	1" PVC
DP3-12-121	DP	315295	4317451	1376.4	1/20/12	1/20/12	22.5	7.5	22.5	1" PVC
DP3-12-122	DP	314387	4317468	1376.5	1/20/12	1/20/12	22.5	7.5	22.5	1" PVC
DP3-12-123	DP	313468	4317492	1376.5	1/20/12	1/20/12	27.5	7.5	27.5	1" PVC
DP3-12-124	DP	312555	4317516	1376.7	1/20/12	1/20/12	42.5	7.5	42.5	1" PVC
DP3-12-125	DP	311643	4317539	1376.7	1/20/12	1/20/12	42.5	7.5	42.5	1" PVC
DP3-12-126	DP	310727	4317556	1376.8	1/20/12	1/20/12	37.5	7.5	37.5	1" PVC
DP3-12-128	DP	320313	4316415	1376.9	1/16/12	1/16/12	22.5	7.5	22.5	1" PVC
DP3-12-129	DP	319393	4316435	1376.9	1/18/12	1/18/12	22.5	7.5	22.5	1" PVC
DP3-12-130	DP	318591	4317258	1376.7	1/20/12	1/20/12	27.5	7.5	27.5	1" PVC
DP3-12-130*	DP				2/2/12	2/2/12	22.0	7.0	22.0	1" PVC
DP3-12-131	DP	317563	4316486	1376.7	1/19/12	1/19/12	32.5	7.5	32.5	1" PVC
DP3-12-132	DP	316651	4316499	1376.7	1/19/12	1/19/12	42.5	7.5	42.5	1" PVC
DP3-12-133	DP	315735	4316524	1376.7	1/19/12	1/19/12	22.5	7.5	22.5	1" PVC
DP3-12-134	DP	314022	4316546	1376.8	1/19/12	1/19/12	27.5	7.5	27.5	1" PVC
DP3-12-135	DP	313733	4316572	1376.7	2/3/12	2/3/12	27.5	7.5	27.5	1" PVC
DP3-12-136	DP	312990	4316589	1376.8	1/19/12	1/19/12	27.5	7.5	27.5	1" PVC
DP3-12-137	DP	312082	4316617	1376.8	1/19/12	1/19/12	32.5	7.5	32.5	1" PVC
DP3-12-138	DP	311175	4316635	1376.8	1/19/12	1/19/12	37.5	7.5	37.5	1" PVC
DP3-12-141	DP	319836	4315507	1377.0	1/16/12	1/16/12	22.5	7.5	22.5	1" PVC
DP3-12-142	DP	318916	4315539	1376.8	1/18/12	1/18/12	22.5	7.5	22.5	1" PVC
DP3-12-143	DP	317996	4315564	1376.4	1/18/12	1/18/12	37.5	7.5	37.5	1" PVC
DP3-12-144	DP	317085	4315577	1376.6	1/18/12	1/18/12	32.5	7.5	32.5	1" PVC
DP3-12-145	DP	316201	4315600	1376.7	2/3/12	2/3/12	27.5	7.5	27.5	1" PVC
DP3-12-146	DP	315257	4315624	1376.7	1/18/12	1/18/12	22.5	7.5	22.5	1" PVC
DP3-12-147	DP	314339	4315657	1376.7	1/18/12	1/18/12	27.5	7.5	27.5	1" PVC
DP3-12-148	DP	313430	4315670	1376.8	1/19/12	1/19/12	37.5	7.5	37.5	1" PVC
DP3-12-149	DP	312517	4315692	1376.9	1/19/12	1/19/12	22.5	7.5	22.5	1" PVC
DP3-12-150	DP	311601	4315704	1376.8	1/19/12	1/19/12	42.5	7.5	42.5	1" PVC
DP3-12-151	DP	310687	4315726	1376.9	1/19/12	1/19/12	37.5	7.5	37.5	1" PVC
DP3-12-153	DP	320280	4314581	1376.9	1/16/12	1/16/12	22.5	7.5	22.5	1" PVC
DP3-12-154	DP	319350	4314618	1376.9	1/18/12	1/18/12	32.5	7.5	32.5	1" PVC
DP3-12-155	DP	318431	4314635	1376.7	1/18/12	1/18/12	32.5	7.5	32.5	1" PVC
DP3-12-156	DP	317533	4314656	1376.6	1/16/12	1/16/12	27.5	7.5	27.5	1" PVC
DP3-12-157	DP	316616	4314673	1376.5	1/16/12	1/16/12	32.5	7.5	32.5	1" PVC
DP3-12-158	DP	315703	4314697	1376.6	1/16/12	1/16/12	32.5	7.5	32.5	1" PVC
DP3-12-159	DP	315041	4314706	1376.7	1/16/12	1/16/12	27.5	7.5	27.5	1" PVC
DP3-12-160	DP	313906	4314721	1376.7	1/16/12	1/16/12	37.5	7.5	37.5	1" PVC
DP3-12-161	DP	312955	4314760	1376.8	2/3/12	2/3/12	22.5	7.5	22.5	1" PVC
DP3-12-162	DP	312040	4314760	1376.9	1/14/12	1/14/12	27.5	7.5	27.5	1" PVC
DP3-12-163	DP	311127	4314804	1376.9	1/14/12	1/14/12	32.5	7.5	32.5	1" PVC
DP3-12-166	DP	319792	4313688	1376.9	1/13/12	1/13/12	27.5	7.5	27.5	1" PVC
DP3-12-167	DP	318877	4313709	1376.9	1/13/12	1/13/12	22.5	7.5	22.5	1" PVC
DP3-12-168	DP	317962	4313729	1376.7	1/13/12	1/13/12	27.5	7.5	27.5	1" PVC
DP3-12-169	DP	317049	4313750	1376.8	1/14/12	1/14/12	27.5	7.5	27.5	1" PVC
DP3-12-170	DP	316172	4313771	1376.4	2/3/12	2/3/12	37.5	7.5	37.5	1" PVC
DP3-12-171	DP	315220	4313793	1376.5	1/14/12	1/14/12	32.5	7.5	32.5	1" PVC
DP3-12-172	DP	314306	4313815	1376.7	1/14/12	1/14/12	32.5	7.5	32.5	1" PVC
DP3-12-173	DP	313392	4313836	1376.8	1/14/12	1/14/12	27.5	7.5	27.5	1" PVC

DP3-12-174	DP	312478	4313858	1376.8	1/14/12	1/14/12	27.5	7.5	27.5	1" PVC
DP3-12-175	DP	311564	4313880	1376.9	1/14/12	1/14/12	27.5	7.5	27.5	1" PVC
DP3-12-177	DP	320229	4312763	1376.8	1/13/12	1/13/12	22.5	7.5	22.5	1" PVC
DP3-12-177*	DP				2/3/12	2/3/12	17.5	7.5	17.5	1" PVC
DP3-12-178	DP	319314	4312784	1376.9	1/13/12	1/13/12	17.5	7.5	17.5	1" PVC
DP3-12-179	DP	318400	4312805	1376.7	1/13/12	1/13/12	27.5	7.5	27.5	1" PVC
DP3-12-180	DP	317486	4312826	1376.6	1/13/12	1/13/12	27.5	7.5	27.5	1" PVC
DP3-12-181	DP	316572	4312848	1376.4	1/13/12	1/13/12	27.5	7.5	27.5	1" PVC
DP3-12-182	DP	315658	4312869	1376.4	1/13/12	1/13/12	32.5	7.5	32.5	1" PVC
DP3-12-183	DP	314743	4312889	1376.5	1/13/12	1/13/12	32.5	7.5	32.5	1" PVC
DP3-12-185	DP	312914	4312932	1376.3	2/3/12	2/3/12	22.5	7.5	22.5	1" PVC
DP3-12-189*	DP	310333	4320310	1376.8	2/3/12	2/3/12	22.5	7.5	22.5	1" PVC
DP3-12-190*	DP	309418	4320332	1376.8	2/3/12	2/3/12	32.0	7.0	32.0	1" PVC
DP3-12-193	DP	316152	4311942	1376.6	2/3/12	2/3/12	42.5	7.5	42.5	1" PVC
DP3-12-201*	DP	315934	4325664	1376.7	2/3/12	2/3/12	32.0	7.0	32.0	1" PVC
DP3-12-207	DP	313789	4311083	1376.8	2/3/12	2/3/12	22.5	7.5	22.5	1" PVC
DP3-12-212	DP	316969	4310094	1376.8	2/3/12	2/3/12	37.5	7.5	37.5	1" PVC
DP3-12-222	DP	314664	4309234	1376.8	2/3/12	2/3/12	22.5	7.5	22.5	1" PVC
DP3-12-232MW1	DP				2/4/12	2/4/12	27.5	22.5	27.5	1" PVC
DP3-12-232MW2	DP				2/4/12	2/4/12	17.5	7.5	17.5	1" PVC
DP3-12-239MW1	DP				2/4/12	2/4/12	37.5	27.5	37.5	1" PVC
DP3-12-239MW2	DP				2/4/12	2/4/12	22.5	12.5	22.5	1" PVC
DP3-12-251MW1	DP				2/4/12	2/4/12	37.5	27.5	37.5	1" PVC
DP3-12-251MW2	DP				2/4/12	2/4/12	22.5	12.5	22.5	1" PVC
DP3-12-260MW1	DP				2/4/12	2/4/12	27.5	22.5	27.5	1" PVC
DP3-12-260MW2	DP				2/4/12	2/4/12	17.5	12.5	17.5	1" PVC
DP3-12-078	DP	320398	4320077	1377.2	1/17/12	1/17/12	32.5	7.5	32.5	1" PVC
DP3-12-091	DP	319917	4319161	1377.3	1/16/12	1/16/12	27.5	7.5	27.5	1" PVC
DP3-12-092	DP	319036	4319186	1377.2	1/18/12	1/18/12	32.5	7.5	32.5	1" PVC
II1	DP	308169	4298673	1377.6	8/15/11	8/15/11	48.5	3.5	48.5	2" PVC
II2	DP	308901	4298702	1377.6	8/16/11	8/16/11	45.2	5.2	45.2	2" PVC
JJ1	DP	308094	4297908	1377.7	8/15/11	8/15/11	46.0	5.0	46.0	2" PVC
JJ2	Sonic	308862	4297869	1377.7	8/17/11		100.4	9.0	99.0	2" PVC
OO1	DP	307563	4294035	1378.4	8/7/11	8/7/11	40.5	5.5	40.5	2" PVC
OO8	DP	312918	4293707	1378.5	8/5/11	8/5/11	51.0	10.5	50.5	2" PVC
OO9	DP	313707	4293654	1378.7	8/2/11	8/2/11	45.0	7.0	45.0	2" PVC
PP10	DP	313809	4292923	1378.7	8/4/11	8/4/11	50.0	9.6	49.6	2" PVC
QQ7	DP	311266	4292101	1378.5	8/1/11	8/2/11	48.5	5.0	50.0	2" PVC
QQ7-Sonic	Sonic	311264	4292107	1378.5	9/5/11	9/15/11	100.3	9.0	99.0	4" PVC
QQ8	DP	312096	4292133	1378.5	8/6/11	8/6/11	53.0	7.3	52.3	2" PVC
RR7	Sonic	311300	4291323	1378.7	8/30/11	9/5/11	240.0	50.0	60.0	4" PVC
RR9	DP	312076	4291305	1378.7	8/6/11	8/7/11	49.0	8.3	48.3	2" PVC
S13	Auger	320519	4311014	1377.0	10/4/11	10/5/11	40.5	7.0	37.0	4" PVC
SN1-11-300	Sonic	310076	4294263	1378.1	11/18/11	11/19/11	62.5	10.0	60.0	4"PVC
SN1-11-301	Sonic	310137	4297464	1377.7	11/20/11	11/20/11	70.0	10.0	70.0	4"PVC
SN1-11-302	Sonic	308486	4295402	1378.1	11/21/11	11/29/11	73.0	6.8	66.8	4"PVC
SN1-11-303	Sonic	312290	4295205	1378.1	11/30/11	11/30/11	70.0	10.0	70.0	4"PVC
SN2-11-400	Sonic	311195	4295004	1378.0	12/13/11	1/10/12	497.0	235-355	347-497	4"PVC
SN3-12-112-4	Sonic	312220	4317964	1376.6	3/5/2012	3/6/2012	99.0	54.0	99.0	4"PVC
SN3-12-133-4	Sonic	315236	4316993	1376.6	2/6/12	2/7/12	84.0	54.0	84.0	4" PVC
SN3-12-226-1	Sonic	316054	4308288	1377.0	1/26/2012	2/1/2012	84.0	54.0	84.0	4" PVC
SN3-12-232	Sonic	314624	4307403	1376.9	1/22/2012	1/24/2012	99.0	9.0	99.0	4" PVC
SN3-12-239	Sonic	312281	4306473	1377.9	1/19/2012	1/20/2012	89.0	9.0	89.0	4" PVC
SN3-12-251	Sonic	312282	4304725	1377.1	1/8/12	1/8/12	89.0	9.0	89.0	4" PVC
SN3-12-260	Sonic	312238	4302900	1377.4	1/12/12	1/13/12	89.0	9.0	89.0	4" PVC
W2	DP	309152	4308172	1377.3	8/18/11	8/18/11	40.2	0.2	40.2	2" PVC

X1	DP	308319	4307552	1377.3	8/18/11	8/18/11	40.0	9.7	39.7	2" PVC
X3	Sonic	308307	4307549	1377.3	8/22/011	8/23/11	70.0	5.0	65.0	2" PVC
SN3-12-045-4	Sonic	315326	4323466	1376.8	2/17/2012	2/18/2012	99.0	9.0	99.0	4"PVC
SN3-12-112-D	Sonic	312216	4317967	1376.6	3/10/2012	3/22/2012	275.0	90.0	160.0	4"PVC
SN3-12-073	Sonic	313550	4321125	1376.6	3/26/2012	3/27/2012	100.0	10.0	100.0	4"PVC
SN3-12-069	Sonic	317209	4321065	1376.6	4/3/2012	4/3/2012	100.0	10.0	100.0	4"PVC
SN3-12-049	Sonic	311884	4323020	1376.8	3/27/2012	3/28/2012	100.0	10.0	100.0	4"PVC
SN3-12-029	Sonic	317725	4323792	1377.1	3/30/2012	3/30/2012	100.0	10.0	100.0	4"PVC
SN3-12-053R	Sonic	319840	4319128	1377.2	4/11/2012	4/11/2012	100.0	10.0	100.0	4"PVC
SN3-12-270	Sonic	309413	4301128	1377.5	4/18/2012	4/18/2012	80.0	10.0	80.0	4"PVC
SN3-12-126S	Sonic	312349	4300874	1377.6	4/17/2012	4/18/2012	70.0	10.0	70.0	4"PVC
SN3-12-026	Sonic	320464	4323731	1377.4	4/10/2012	4/10/2012	100.0	10.0	100.0	4"PVC
SN3-12-104	Sonic	319430	4318265	1377.1	4/13/2012	4/13/2012	74.0	9.0	74.0	4"PVC
SN3-12-179	Sonic	318400	4312805	1376.7	4/14/2012	4/15/2012	100.0	10.0	100.0	4"PVC