

NI 43-101
PRELIMINARY ECONOMIC ASSESSMENT
AND TECHNICAL REPORT

ON THE

LONE MOUNTAIN PROPERTY
EUREKA COUNTY, NEVADA, USA

FOR

NEVADA ZINC CORPORATION

Submitted To: Bruce Durham
President & CEO
Nevada Zinc Corporation
141 Adelaide St. W
Suite 1660, Toronto, Ontario

Submitted By: Peimeng Ling & Associates Limited
39 Clovercrest Road
Toronto, Ontario

Qualified Persons: Peimeng Ling, M.Sc., P.Eng.
Fred Brown, P.Geo.
Garth Wilcox, P.Eng.
David Burga, P.Geo.
Jarita Barry, P. Geo.
Richard Sutcliffe, PH.D., P.Geo
Eugene Puritch, P.Eng., FEC, CET.

Effective Date: June 27, 2019

Signing Date: September 26, 2019

Table of Contents

1	SUMMARY	1
1.1	PROPERTY OVERVIEW	1
1.2	GEOLOGY AND MINERALIZATION	1
1.3	EXPLORATION STATUS	2
1.4	MINERAL RESOURCES ESTIMATE	3
1.5	METALLURGICAL TEST WORK	4
1.6	RECOVERY METHODS	6
1.7	ENVIRONMENTAL STUDIES AND PERMITTING	7
1.8	CAPITAL AND OPERATING COSTS	7
1.9	ECONOMIC ANALYSIS	9
1.10	CONCLUSIONS AND RECOMMENDATIONS	12
2	INTRODUCTION AND TERMS OF REFERENCE	13
2.1	TERMS OF REFERENCE	13
2.2	SCOPE AND DISCLAIMER	13
2.3	SOURCES OF INFORMATION	14
2.4	UNITS AND CURRENCY	15
3	RELIANCE ON OTHER EXPERTS	17
4	PROPERTY DESCRIPTION AND LOCATION	18
4.1	PROPERTY LOCATION	18
4.2	PROPERTY DESCRIPTION AND TENURE	19
4.3	PERMITS	25
5	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	27
5.1	ACCESS	27
5.2	CLIMATE	29
5.3	LOCAL RESOURCES	31
5.4	INFRASTRUCTURE	31
5.5	PHYSIOGRAPHY	31
6	HISTORY	33
6.1	HISTORIC PROPERTY EXPLORATION	33
6.2	PAST PRODUCING MOUNTAIN VIEW MINE	36
7	GEOLOGICAL SETTING AND MINERALIZATION	38
7.1	REGIONAL GEOLOGY	38
7.2	STRUCTURE	43
7.3	MINERALIZATION AND ALTERATION	44
7.4	DEPOSIT GEOLOGY	46
8	DEPOSIT TYPES	48
9	EXPLORATION	49
9.1	SOIL GEOCHEMISTRY	49
9.2	TRENCHES AND PITS	51
10	DRILLING	53
10.1	PROPERTY BEDROCK MAPPING	53
10.2	PHASE I DRILL PROGRAM	57
10.3	PHASE II DRILLING	59
10.4	PHASE III DRILLING	61
10.5	PHASE IV DRILLING	62
10.6	PHASE V DRILLING	64
10.7	PHASE VI CORE DRILLING	65
11	SAMPLE PREPARATION, ANALYSES AND SECURITY	67
11.1	SAMPLE PREPARATION	67
11.2	ANALYSIS	67
11.3	SECURITY	71
12	DATA VERIFICATION	72

12.1	DATABASE REVIEW	72
12.2	SITE VISIT AND DUE DILIGENCE SAMPLING	72
12.3	SUMMARY	74
13	MINERAL PROCESSING AND METALLURGICAL TESTING	75
13.1	INTRODUCTION	75
13.2	MINERALOGICAL TEST WORK	75
13.3	HEAVY LIQUID SEPARATION (HLS) TEST	79
13.4	FLOTATION TEST	85
13.5	FLOTATION CONCENTRATE ACID LEACH TEST	95
13.6	OTHER TEST WORK	98
13.7	TEST WORK CONCLUSION AND RECOMMENDATIONS	100
14	MINERAL RESOURCE ESTIMATES	102
14.1	INTRODUCTION	102
14.2	PREVIOUS MINERAL RESOURCE ESTIMATES	103
14.3	DATA SUPPLIED	103
14.4	EXPLORATORY DATA ANALYSIS	104
14.5	DENSITY	106
14.6	DOMAIN MODELLING	107
14.7	COMPOSITING	109
14.8	TREATMENT OF EXTREME VALUES	109
14.9	BLOCK MODEL	109
14.10	ESTIMATION AND CLASSIFICATION	109
14.11	INFERRED MINERAL RESOURCE ESTIMATE	110
14.12	CUT-OFF SENSITIVITY	111
14.13	VALIDATION	111
15	MINERAL RESERVE ESTIMATES	113
16	MINING METHODS	114
17	RECOVERY METHODS	115
17.1	INTRODUCTION	115
17.2	CRUSHING	115
17.3	GRINDING	116
17.4	FLOTATION	116
17.5	UTILITIES AND AUXILIARIES	118
18	PROJECT INFRASTRUCTURE	120
19	MARKET STUDIES AND CONTRACTS	121
20	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT	122
20.1	REQUIRED PERMITS AND STATUS	122
20.2	LOCAL PERMITTING	123
20.3	STATE PERMITTING	123
20.4	FEDERAL PERMITTING	124
20.5	ENVIRONMENTAL STUDIES AND PERMITTING	124
21	CAPITAL AND OPERATING COSTS	125
21.1	ASSUMPTIONS	125
21.2	COST ESTIMATE METHODOLOGY	125
21.3	CAPITAL COSTS	126
21.4	OPERATING COSTS	131
22	ECONOMIC ANALYSIS	135
22.1	PRINCIPAL ASSUMPTIONS	135
22.2	CASH FLOW FORECASTS	136
22.3	TAXES AND ROYALTIES	139
22.4	SENSITIVITY ANALYSIS	139
23	ADJACENT PROPERTIES	141
23.1	LOOKOUT MOUNTAIN PROJECT	141

23.2	GUNMAN PROJECT	141
24	OTHER RELEVANT DATA AND INFORMATION	143
25	INTERPRETATION AND CONCLUSIONS	144
25.1	MINERAL RESOURCES	144
25.2	PROCESSING	146
25.3	ENVIRONMENTAL	146
25.4	CONCLUSION	147
26	RECOMMENDATIONS AND PROPOSED BUDGET	148
27	REFERENCES	150
28	CERTIFICATES.....	151

LIST OF TABLES

TABLE 1-1 INFERRED MINERAL RESOURCES(1-5).....	4
TABLE 1-2 LONE MOUNTAIN PROJECT CAPITAL COSTS (GREENFIELD PLANT) - \$MILLION	8
TABLE 1-3 OPERATING COST SUMMARY.....	9
TABLE 1-4 SUMMARY OF COST, FINANCIAL OUTPUT FOR A FULL PRODUCTION YEAR	10
TABLE 1-5 SUMMARY OF PEA NPV, IRR AND PAYBACK	11
TABLE 1-6 PRE-TAX NPV SENSITIVITIES	11
TABLE 2-1 ABBREVIATION TABLE	16
TABLE 4-1 LIST OF LODE MINING CLAIMS FOR THE LONE MOUNTAIN PROPERTY	21
TABLE 4-2 LEASE PAYMENTS TO BE MADE TO OWYHEE (US\$)	24
TABLE 5-1 CLIMATE DATA FOR EUREKA, NEVADA.....	30
TABLE 6-1 HISTORICAL EXPLORATION ON THE LONE MOUNTAIN PROPERTY *	34
TABLE 6-2 LONE MOUNTAIN HISTORICAL DRILL CORE ASSAY RESULTS.....	35
TABLE 10-1 DRILL HOLE LOCATIONS, PHASE 1-6, LONE MOUNTAIN PROPERTY.....	53
TABLE 10-2 SIGNIFICANT PHASE I DRILL INTERCEPTS.....	58
TABLE 10-3 SIGNIFICANT PHASE II DRILL INTERCEPTS.....	61
TABLE 10-4 SIGNIFICANT PHASE III DRILL INTERCEPTS	62
TABLE 10-5 SIGNIFICANT PHASE IV DRILL INTERCEPTS.....	63
TABLE 10-6 SIGNIFICANT PHASE V DRILL INTERCEPTS	65
TABLE 10-7 SIGNIFICANT PHASE VI CORE DRILL INTERCEPTS	66
TABLE 11-1 PERFORMANCE OF CERTIFIED REFERENCE STANDARDS	69
TABLE 12-1 LONE MOUNTAIN SITE VISIT SAMPLE RESULTS FOR ZINC AND LEAD, NOVEMBER 2016	73
TABLE 13-1 SMITHSONITE ASSOCIATION DETAILS (IN %).....	77
TABLE 13-2 WILLEMITE ASSOCIATION DETAILS (IN %)	78
TABLE 13-3 LONE MOUNTAIN DEPOSIT - DIRECT HEAD ASSAYS.....	80
TABLE 13-4 LONE MOUNTAIN DEPOSIT - CALCULATED HEAD GRADE	80
TABLE 13-5 HLS TEST WORK SUMMARY.....	81
TABLE 13-6 MINUS 14 MESH MATERIAL HLS TEST RESULTS	82
TABLE 13-7 MINUS 1/2 INCH MATERIAL HLS TEST RESULTS.....	84
TABLE 13-8 MASTER COMPOSITE HEAD ASSAY DATA	86
TABLE 13-9 INITIAL ROUGHER FLOTATION TEST CONDITIONS.....	87
TABLE 13-10 INITIAL ROUGHER FLOTATION TEST RESULTS.....	87
TABLE 13-11 CLEANER FLOTATION TEST CONDITIONS.....	88
TABLE 13-12 CLEANER FLOTATION TEST RESULTS	88
TABLE 13-13 BULK FLOTATION RESULTS.....	90
TABLE 13-14 CONCENTRATE ASSAYS	91
TABLE 13-15 CONCENTRATE SMITHSONITE LIBERATION DETAILS (%)	93
TABLE 13-16 CONCENTRATE SMITHSONITE ASSOCIATION DETAILS (%)	94
TABLE 13-17 CONCENTRATE WILLEMITE/HEMIMORPHITE LIBERATION DETAILS (%).....	94
TABLE 13-18 CONCENTRATE WILLEMITE/HEMIMORPHITE ASSOCIATION DETAILS (%).....	94
TABLE 13-19 ZINC LEACH TEST FEED ASSAYS.....	95
TABLE 13-20 FLOTATION CONCENTRATE ACID LEACH TEST CONDITIONS	96
TABLE 13-21 FLOTATION CONCENTRATE ACID LEACH TEST FINAL ASSAYS	96
TABLE 13-22 LEACH TEST KEY ELEMENT CALCULATED EXTRACTION.....	98
TABLE 13-23 METSOL PROCESS FINAL PRODUCT KEY PARAMETERS.....	99
TABLE 14-1 DRILL HOLE DATABASE	104
TABLE 14-2 SUMMARY ASSAY STATISTICS	105
TABLE 14-3 ASSAY CORRELATION TABLE	106
TABLE 14-4 BLOCK MODEL SETUP.....	109
TABLE 14-5 INFERRED MINERAL RESOURCES ⁽¹⁻⁵⁾	110
TABLE 14-6 INFERRED MINERAL RESOURCES SENSITIVITY.....	111

TABLE 14-7 VALIDATION STATISTICS FOR BLOCK ESTIMATES	111
TABLE 20-1 PERMITS REQUIRED FOR LONE MOUNTAIN MINE (FEDERAL, STATE, COUNTY PERMITS, APPROVALS AND REGISTRATIONS)	122
TABLE 21-1 LONE MOUNTAIN PROJECT CAPITAL COSTS (GREENFIELD PLANT) - \$MILLION	127
TABLE 21-2 MINE PRE-DEVELOPMENT COSTS.....	128
TABLE 21-3 LONE MOUNTAIN PROCESS PLANT CAPITAL COSTS	129
TABLE 21-4 OPERATING COST SUMMARY	131
TABLE 21-5 MINE OPERATING COSTS (OPEN PIT)	131
TABLE 21-6 PROCESSING OPERATING COSTS	132
TABLE 21-7 MINE SITE AND PLANT LABOUR COSTS.....	133
TABLE 21-8 G&A COSTS.....	134
TABLE 22-1 ECONOMIC MODEL PARAMETERS.....	135
TABLE 22-2 SUMMARY OF COST, FINANCIAL OUTPUT FOR A FULL PRODUCTION YEAR	137
TABLE 22-3 SUMMARY OF PEA NPV, IRR AND PAYBACK	137
TABLE 22-4 LONE MOUNTAIN PROJECT ZINC CONCENTRATE CASH FLOW MODEL	138
TABLE 22-6 PRE-TAX NPV SENSITIVITIES	139
TABLE 26-1 RECOMMENDED PROGRAM AND BUDGET (CAD)	149

LIST OF FIGURES

FIGURE 4-1 PROPERTY LOCATION MAP	18
FIGURE 4-2 LODGE CLAIMS MAP FOR NEVADA ZINC CORPORATION'S LONE MOUNTAIN PROJECT.....	20
FIGURE 5-1 LONE MOUNTAIN PROPERTY LOCATION RELATIVE TO STATE OF NEVADA AND MAJOR HIGHWAYS	29
FIGURE 5-2 PHOTOGRAPH OF LONE MOUNTAIN SHOWING PHYSIOGRAPHY AND VEGETATION	32
FIGURE 7-1 REGIONAL MINERAL DEPOSITS OF THE EUREKA AREA	38
FIGURE 7-2 GEOLOGY OF THE NORTHERN PART OF THE LONE MOUNTAIN PROPERTY	40
FIGURE 7-3 STRATIGRAPHY OF THE LONE MOUNTAIN PROPERTY	42
FIGURE 7-4 CHAINMAN/LONE MOUNTAIN FORMATION CONTACTS	44
FIGURE 7-5 TIMA IMAGES OF MINERALIZATION IN THIN SECTION	46
FIGURE 9-1 SOIL GEOCHEMISTRY, LONE MOUNTAIN ZINC PROPERTY.....	50
FIGURE 9-2 HISTORIC SHAFTS, PITS, AND TRENCHES INVESTIGATED WITH PORTABLE XRF	52
FIGURE 10-1 DRILL HOLE LOCATIONS, LONE MOUNTAIN PROPERTY	56
FIGURE 10-2 PLAN VIEW OF SELECT DRILL HOLE LOCATIONS, LONE MOUNTAIN PROPERTY	57
FIGURE 10-3 IDEALIZED LONGITUDINAL PROJECTION PIERCE POINTS, LONE MOUNTAIN PROPERTY	60
FIGURE 11-1 LONE MOUNTAIN CHECK ASSAY RESULTS FOR ZINC: ALS VERSUS AAL (2014-2016)	70
FIGURE 11-2 LONE MOUNTAIN CHECK ASSAY RESULTS FOR LEAD: ALS VERSUS AAL (2014-2016)	70
FIGURE 12-1 LONE MOUNTAIN SITE VISIT SAMPLE RESULTS FOR ZINC, JUNE 2018.....	73
FIGURE 12-2 LONE MOUNTAIN SITE VISIT SAMPLE RESULTS FOR LEAD, JUNE 2018	74
FIGURE 13-1 ELEMENTAL DEPARTMENT (MASS % ZN) MASTER COMP	77
FIGURE 13-2 SMITHSONITE LIBERATION - MASTER COMP	78
FIGURE 13-3 WILLEMITE/HEMIMORPHITE LIBERATION - MASTER COMP	79
FIGURE 13-4 MASS YIELD -Zn RECOVERY & Ca, Mg REJECTION	81
FIGURE 13-5 ZINC GRADE/REC. vs. MASS PULL, -14M FEED	83
FIGURE 13-6 Zn RECOVERY & Zn GRADE vs. MASS RECOVERY, ½ INCH FEED.....	84
FIGURE 13-7 IMPACT OF CRUSHED SIZE ON RECOVERY AND GRADE	85
FIGURE 13-8 FLOTATION GRADE-RECOVERY RELATIONSHIP	89
FIGURE 13-9 MODAL MINERALOGY OF CONCENTRATE FROM FLOTATION TESTS F7 AND F8.....	92
FIGURE 13-10 ELEMENTAL ZINC DEPARTMENT OF CONCENTRATE FROM TEST F7 AND F8.....	93
FIGURE 13-11 Zn EXTRACTION KINETIC SAMPLE ASSAYS	97
FIGURE 13-12 KEY METAL EXTRACTIONS vs. ACID ADDITION.....	98
FIGURE 14-1 CORRELATION BETWEEN DENSITY AND GRADE.....	106
FIGURE 14-2 LONE MOUNTAIN MINERALIZED DOMAINS.....	108
FIGURE 17-1 LONE MOUNTAIN PROJECT ZINC RECOVERY PROCESS BLOCK DIAGRAM.....	115

1 SUMMARY

This technical report (“Report”) was prepared by Peimeng Ling and Associates Limited (“PL&A”) at the request of Mr. Bruce Durham, President and CEO of Nevada Zinc Corporation. This report is specific to the standards dictated by National Instrument 43-101, companion policy NI43-101 CP and Form 43-101 F1 (Standards of Disclosure for Mineral Projects) in respect to the Lone Mountain Project (“Project” or “Property”) and focuses on PL&A’s independent NI 43-101 compliant preliminary economic assessment (PEA) for the Lone Mountain Deposit.

1.1 PROPERTY OVERVIEW

The Lone Mountain Project is located within in the Eureka Mining District of Eureka County, Nevada, in southwestern USA. The centre of the Property is located at approximately 563,100 m E, 4,385,250 m N (UTM NAD83 Zone 11S) or Latitude 39° 36’53” N and Longitude 116° 15’54” W. The Project property holdings are held by Lone Mountain Zinc Ltd. (“Lone Mountain”), a Nevada corporation that is a wholly owned subsidiary of Nevada Zinc.

The property is located approximately 300 km east of Reno, Nevada, 28 km northwest of the town of Eureka and 7.5 km north of US Highway 50 and can be accessed by vehicles and helicopter via a number of charter companies based in the surrounding area.

Business activities in Eureka County are mainly based on agriculture and mining. As a consequence of the mining activity, the region supports an active mining workforce with significant resources for mineral exploration, mine development and mine operations.

1.2 GEOLOGY AND MINERALIZATION

The Lone Mountain Property is located within the Battle Mountain-Eureka Trend of Northern Nevada. This is a 56 km long mineralized trend containing both multi-million ounce, sedimentary-hosted (Carlin-type) gold deposits such as the Battle Mountain, Cortez and Ruby Hill Mines in addition to several significant Pb-Zn-Cu-Au-Ag deposits.

There are no comprehensive geological reports on the Lone Mountain Property and the information reported in Section 7 of this report is based primarily on internal reports and memoranda.

The zinc-lead mineralization of the Lone Mountain Property is constrained to the Devils Gate limestone/dolostone. There are two distinct types of mineralization found on the Property. The first type of mineralization is easily distinguishable from the grey host dolostone by its pink, red, yellow, orange to brown colour as described by Adair (2007) and produces both high and low grade zinc and occasionally lead assay results. This mineralization occurs in the brecciated dolostone of the Devils Gate Formation and is composed mainly of smithsonite and hemimorphite as fine grained aggregates or crystalline components filling voids in dolostone and limestone. The second type of mineralization is more difficult to define as there appears to

be no significant colour or textural differences to distinguish the mineralization from the fine to medium grained host dolostone. The mineralization is grey to grey-white and produces both high grade and low grade assay results. White crystalline and fine grained barite and carbonate (mostly calcite) veins are ubiquitous across the Property.

Nolan (1962) described the Eureka District mineralization as being categorized in five general types: irregular replacement deposits; bedded replacement deposits; fault zone deposits; disseminated deposits; and contact metasomatic bodies. Most of these types are found within limestone and dolomite, with dolomite being the most common host.

The zinc-rich mineralization at the Lone Mountain Property has similar characteristics to the other carbonate-hosted replacement deposit of the Eureka District.

1.3 EXPLORATION STATUS

In June, 2014 a geochemical soil sampling program was carried out to better resolve data over part of the area where the previous geochemical survey work was completed in 2007. A follow up soil sampling program was carried out in September-October 2014 to extend the coverage on the Property as well as to continue to define potential anomalous zones (Pb, Zn, Fe etc.).

The results of the 2014 soil sampling program indicated the following:

- There is a well-defined, strong zinc in the soil anomaly accompanying the up-dip projection of the mineralization discovered for a minimum 1,400 metre length parallel to stratigraphy.
- There is a second well defined soil geochemical anomaly that is primarily lead enriched with lesser anomalous zinc which appears to roughly correlate with the location of the more northerly part of the drill holes completed to date including the areas of the collars of holes LM-15-27 and LM-15-36. This anomaly also extends for a minimum 1,400 metre length parallel to stratigraphy.
- Additional geochemical data has been collected to the southeast of the Mountain View Mine claim which show the anomaly extends in that direction.

More soil samples were collected in May 2016 to provide data on the patented claim.

A study of historical information combined with the results of initial field work led to several drill programs. Between October 2014 and November 2017 the Company has completed six phases of drilling consisting of 85 reverse circulation holes and 13 drill core holes. In total there were 12,234.69 metres of reverse circulation drilling, and 2,082.54 metres of core drilling.

1.4 MINERAL RESOURCES ESTIMATE

Drilling programs to-date identified significant high-grade zinc and associated lead mineralization over widths of 10's of metres to in excess of 100 metres. Select RC intervals located on a section 180 m northwest of the Mountain View Mine shaft include: hole LM-14-06 with 64.01 m at 5.87% Zn and 1.11% Pb; hole LM-15- 27 with 118.87 m at 9.58% Zn and 0.74% Pb; and hole LM-15-36 with 91.44 m at 9.49% Zn and 1.34% Pb. Select diamond drill core holes include NLM-17-08 that intersected 24.7 m grading 23.06% Zn from a depth of 143.05 m.

The sampling methodology as implemented by Nevada Zinc meets industry standards for an advanced exploration project and that sample preparation, security and analytical procedures for the Lone Mountain drill program were adequate for the purposes of this Mineral Resource Estimate.

Mr. Fred Brown, P.Geo., a Qualified Person under the regulations of NI 43-101 completed an on-site review of Nevada Zinc's Lone Mountain Property for the current Technical Report on June 11, 2018 and had previously visited the property on November 28, 2016. During the site visits, drilling and sampling operations and storage facilities were observed. During the 2018 site visit ten core samples were collected by Mr. Brown from high-, medium- and low-grade mineralization in five drill holes. Samples were analyzed for zinc and lead at AGAT Labs in Mississauga, ON, using Sodium Peroxide fusion with ICP-OES finish and density determination was carried out on all samples by pycnometry. P&E's due diligence sampling show good correlation with the original Nevada Zinc assays and it is P&E's opinion that Nevada Zinc's results are suitable for use in the current Mineral Resource Estimate.

The Mineral Resource Estimate presented has been prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral Resources have been classified in accordance with the "CIM Standards on Mineral Resources and Reserves: Definition and Guidelines" as adopted by CIM Council on May 10, 2014. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

Mineral Resource modelling and estimation were carried out using the Gemcom GEMS software program. Open-pit optimization was carried out using the Whittle Four-X Single Element software program.

For reporting purposes, an optimized pit shell was constructed using the following parameters: mining costs of US\$2.50/t and US\$3.50/t for waste and mineralized rock respectively; a zinc price of US\$1.25/lb; process recovery of 85%; smelter payable of 85%; concentrate mass pull of

8%; concentrate freight and handling of US\$50/t; smelter treatment charges of US\$150/t; process cost of \$20/t; and G&A costs of US\$3/t.

The pit-constrained Inferred Mineral Resource Estimate at a 2% Zn cut-off is listed in Table 1-1 below.

Table 1-1 INFERRED MINERAL RESOURCES(1-5)				
Cut-Off Zn%	Tonnage (1,000 t)	Pb %	Zn %	Zn (M lb)
2 %	3,257	0.7	7.57	543

- 1) Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues
- 2) Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.
- 3) The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
- 4) Contained metal may differ due to rounding.
- 5) Inferred Mineral Resources are reported within an optimized pit shell.

The sensitivity of the Mineral Resource model to changes in cut-off grade was examined and results suggest that the Mineral Resource model is relatively insensitive to changes in cut-off grade. The block model was validated visually by the inspection of successive cross-sections in order to confirm that the block models correctly reflect the distribution of high-grade and low-grade values. An additional validation check was completed by comparing the average grade of the constrained, uncapped composites to the model block grade estimates at zero cut-off. Uncapped composite grades and block grades were also compared to the average Nearest Neighbour block estimate. As a further check of the Mineral Resource model, the total volume reported at 0.01% Zn cut-off was compared with the calculated volume of the defining mineralization wireframe.

P&E considers that the Lone Mountain Property hosts significant high-grade Zn mineralization and warrants further exploration. P&E recommends that the next exploration phase focus on RC and core drilling to test exploration targets and improve Mineral Resource Estimate confidence. The program should also include metallurgical, marketing studies plus environmental and permitting work and is budgeted at CAD\$1,345,000.

1.5 METALLURGICAL TEST WORK

Preliminary mineralogical and metallurgical testwork have been conducted on Lone Mountain deposit since late 2015, including;

- mineralogical tests;
- heavy liquid separation (HLS) tests;
- flotation tests;
- leach tests and flotation concentrate leach test; and
- solid-liquid separation tests.

The key findings from the mineralogical tests are briefed below.

- 1) The major zinc-containing minerals were smithsonite and willemite. The major gangue minerals included dolomite, calcite, and quartz. There were trace amounts of zinc contained within sphalerite, calcite and dolomite. The mineral distributions within each fraction were all similar to the overall combined mineral distribution.
- 2) Zn is almost evenly distributed between the Zn silicates and Zn carbonates,
 - Willemite/Hemimorphite 47.2%
 - Smithsonite 33.0%
 - Smithsonite(+/- Fe,Ca,Mg) 18.6%
- 3) Both smithsonite (combines both the pure and impure as one mineral group) and willemite/hemimorphite are moderately liberated at grind size P80 of 600 μm , 57% and 72%, respectively.

In general, pre-concentration of feed material using heavy liquid separation method responded favorably. The results showed that production of a high grade (>30%Zn) zinc product and rejection of the majority (>80%) of the calcium and magnesium is attainable. Either dense media separation or gravity separation can be used in the flow sheet to upgrade the feed material.

The flotation test was performed by SGS Minerals Services Lakefield, Canada. The program included bench scale rougher and cleaner flotation tests, and bulk flotation test. Zinc recovery of higher than 80% was possible to produce a concentrate grading 40% Zn. If higher concentrate grade of 45% Zn is required, zinc recovery of approximately 70% is achievable. More test work will be required, especially locked-cycle tests, to better understand grade-recovery relationship.

Leach tests were performed on whole mineralized material and on flotation concentrate.

- 1) Outotec Research Center (ORC) in Pori, Finland performed acid leach test work on whole mineralized material samples. Zinc extraction can be achieved as high as 97% at pH 3, and ~99% at pH 2 to pH 1.5. Sulphuric acid consumption in whole mineralized material leach was very high, ~6.5 kg H_2SO_4 acid/kg leached zinc at pH 3, as the carbonates leached simultaneously with zinc and the magnesium dissolution.

- 2) SGS performed a total of nine acid leach tests on flotation concentrate generated in the bench scale and the bulk flotation tests. The investigated parameters involved leach pH level, temperature, pulp density, and residence time. Overall, most of the tests resulted in high zinc extraction (>94%). Flotation concentrate leach has substantially lower acid consumption, < 2 kg H₂SO₄ acid/kg leached zinc. This indicates that an upgrading of the feed material prior to acid leaching reduces the amount of carbonates, which reduce the acid consumption.
- 3) In addition to conventional acid leach approach, Metsol process which was a unique process developed by Metallic Waste Solutions (Metsol), Australia was tested to see the compatibility between the Metsol Process and Lone Mountain zinc mineralized material. Six samples received from Nevada Zinc were processed using the Metsol technology and reported excellent zinc extraction (80-94%). No impurities of concern were detected in the feed material, pregnant liquor, or final ZnO.

During acid leach test in Outotec laboratory, preliminary investigation of settling and filtration characteristics of the solids after acid leach was performed. Filtration test was conducted on one sample after its settling test. The details and results of these tests can be seen in Section 13.6.3 of this Report.

1.6 RECOVERY METHODS

Based on the metallurgical test work completed to date, a preliminary mineral processing flow sheet for the Lone Mountain Project has been developed, which includes crushing, grinding, and zinc flotation to produce zinc concentrate for sale. In addition, the flow sheet includes reagent preparation, fuel supply, compressed air supply, water management, and tailings disposal.

Plant throughput is 800 dry tonnes, or approximately 277,000 dry tonnes of mineralized material annually at an operating availability of 95%. Brief process description and preliminary design criteria of each area in the plant are provided below.

Portable crushing and screening equipment will be utilized at mine site to process approximately 1,000 tonnes (dry) daily at an operating availability of 75%. Crushing operations are planned as a two-stage circuit with a screen to separate the final product size material for grinding.

A grinding circuit is included to reduce material particle size to P80 of 75 microns required for downstream flotation process. The grinding circuit employs a wet-overflow type ball mill and a cyclone to form a closed-circuit with 150% circulation load.

The flotation process to recover zinc minerals includes zinc rougher and scavenger, rougher concentrate re-grinding, and 3-stage zinc cleaners. The concentrate from the 3rd cleaner is the

final product with high than 40% zinc content. The flotation tailing is dewatered in a thickener for process water recovery prior to being disposed to designated tailings management facility (TMF).

1.7 ENVIRONMENTAL STUDIES AND PERMITTING

The Lone Mountain Project is located approximately 7.5 km (5 miles) north of US Highway 50 that leads to the town of Eureka, Nevada. The location and property ownership will mean that the mine will be held to permitting requirements to be determined by Eureka County, the State of Nevada, and the US Department of the Interior, Bureau of Land Management, Battle Mountain District Office, Mount Lewis Field Office (BLM).

The Lone Mountain Project will need to implement an Environmental Monitoring Plan in the future and includes specific requirements and procedures for monitoring the following areas:

- Air quality
- Groundwater quality
- Water supply
- Waste rock management (PAG)
- ROM pad effluent
- Fresh water make-up supply
- Wildlife
- Noxious weeds
- Reclamation

During the life of mine (LOM) the environmental management plans will need to be updated for the project. The next phase of work for the Lone Mountain Project will be to initiate a baseline environmental study with a third party contractor. The study will provide direct understanding of the site and the systems to be managed as they apply to areas in the list above.

1.8 CAPITAL AND OPERATING COSTS

Capital and operating cost estimates were prepared for the PEA assuming a greenfield installation of mining and processing facilities. Costs are considered to be accurate within a range of $\pm 30\%$ for the capital and operating costs described in this section. Key assumptions utilized during the estimating process were as follows:

- All costs reflect an 800 tonnes per day mining and milling operation;
- 95% mill availability for a total annual capacity of 277,400 tonnes of mill feed;
- Overall zinc recovery of 80% resulting in annual production rate of 35,500 tonnes of zinc oxide concentrate;
- Life-of-mine (LOM) average estimated grade of the resource is used for all production years (prior to dilution);

- Overall mineable recovery of 95% of the current resource (inferred) during LOM operations (12 year mine life);
- Milling facilities to be constructed at a suitable site within close proximity of the mine site (<1km).
- Power will be supplied by diesel gen-set equipment initially, and power costs will be reflected in fuel demand. Back-up generator will provide emergency power to maintain operations.

1.8.1 Capital Costs

The capital cost estimate was developed to go directly into production. Early capital includes all mine and process costs up to the initiation of commercial mining operations (75% of steady state production). Total pre-production costs at Lone Mountain are estimated at \$25.7M. Sustaining capital costs over the life of mine are estimated at \$2.7 M for a total project capital cost of \$28.4M.

A breakdown of the project capital costs is summarized in TABLE 1-2 below. Details of these costs are discussed later in Section 21.3.

TABLE 1-2 LONE MOUNTAIN PROJECT CAPITAL COSTS (GREENFIELD PLANT) - \$MILLION

Area	Pre-Production Capital Costs	Sustaining Capital Costs	Total Capital Costs
Mine			
Mine site pre-strip	2 ^{*1}		2
Process Plant/ Infrastructure			
Processing Plant	14		14
Infrastructure	2		2
Tailings	1		1
Contingency 30%	5.7 ^{*2}		5.7
Mine Closure		0.5	0.5
Owner's cost	1		1
Sustaining Capital (LOM)		2.2	2.2
Total Capital	25.7	2.7	28.4

Notes:

1. Mine pre-strip cost allows for waste removal and road construction. Cost includes predevelopment mine costs plus installation of mine site power and MTC shop.
2. Applied to total cost of mining, mill, tailings, and infrastructure

The production capital cost estimate of \$24.7 million includes the construction of a new stand-alone process facility, mine development up to 1 million tonnes of waste rock and tailings

(tailings storage facilities) and all necessary infrastructures to bring the mine into production. A 30% contingency has been included in the mine and process facilities to account for requirements that are not detailed in the current study.

The sustaining capital estimate of \$2.2 million is for mine improvements and upgrades during the LOM period. Items to be included in this figure are the expansion of the tailings impoundment facilities and ongoing annual sustaining capital requirements. To reduce capital requirements, the company will utilize contractors for both mining and mine-site crushing activities. Subsequent to the initial mine pre-development activities, all additional mine development is treated as operational development and included in the contractor mining rates.

1.8.2 Operating Costs

The total unit operating costs for the project are estimated at \$51.70/tonne of plant feed resulting in a net cash production cost of \$ 0.41/lb of zinc, including G&A and concentrate shipping. It should be noted that the decision to utilize contractors for mining and crushing has added somewhat to this cost. The life-of-mine operating costs are summarized in TABLE 1-3. Details of these costs are discussed later in Section 21.4.

TABLE 1-3 OPERATING COST SUMMARY

Description	\$/tonne feed
Mining	\$19.5
Crushing and haulage	\$3.0
Processing plant	\$22.2
Transportation	\$5.0
G&A	\$2.0
Total Cost	\$51.7

1.9 ECONOMIC ANALYSIS

Caution to readers: *The PEA is preliminary in nature and there is no certainty the results of the PEA will be realized. The PEA is based on inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. A Mineral Resource is not a Mineral Reserve and does not have demonstrated economic viability. Additional drilling and studies are required to upgrade the Inferred Mineral Resource to a Mineral Reserve.*

Economic analysis for the project provides a cash flow forecast and estimates of net present value (NPV), internal rate of return (IRR), payback period of capital, and sensitivity analyses. A single high-grade concentrate production scenario is evaluated and sensitivity analyses are

carried out for varied initial capital costs, operating costs, concentrate grades, and selling prices. Concentrate product price is based on recent 5-year zinc metal average price, concentrate zinc grade, and assumed payable rate. The cash flow model is based on a 12-year life. At full production the study projects that 277,600 tonne (dry) mineralized material will be mined and processed, and 35,500 tonne (dry) concentrate containing 45% Zn will be produced and sold annually.

The economic model used in this PEA study is simplified as follows:

- Average diluted LOM mined material zinc grade is used for all production years,
- All pre-production capital costs are assumed to take place in Year 0,
- Mining unit costs, milling unit costs and zinc recovery are assumed to be equal to their LOM average for all production years,
- Zinc price is assumed constant at US\$2,500 /t zinc metal,
- No inflation is incorporated into the model parameters,

TABLE 1-4 presents the summary of the cash flow forecasts along with resulting revenue and post-tax cash flow.

TABLE 1-4 SUMMARY OF COST, FINANCIAL OUTPUT FOR A FULL PRODUCTION YEAR

Parameter	Value
Annual concentrate production, mt (dry)	35,500
Total operating costs, U\$millions, (*1)	15.0
Total capital cost, \$millions,	25.7
Operating revenue (EBITDA), U\$millions (*2)	10.9
Pre-tax cash flow, U\$millions (*2)	10.7
Post-tax cash flow, U\$millions (*2)	8.9

Notes:

1. Including concentrate shipping, royalty. Contingency not applied. Sensitivities are reported in Item 22.3.
2. Average of 12-year life.

TABLE 1-5 summarizes the net present value (NPV), internal rate of return (IRR), and payback period of capital on a before-tax and after-tax basis. The payback period starts from the first production year.

TABLE 1-5 SUMMARY OF PEA NPV, IRR AND PAYBACK

Description	Value
NPV @ 8% discount rate (before-tax), US\$millions	56.4
IRR (before-tax)	40%
NPV (after-tax), US\$millions	43.2
IRR (after-tax)	35%
Payback	2.7 years

Sensitivity analysis predicts impact of variations in commodity price, capital and operating costs, and other significant parameters on profitability of the project. Factors analyzed include:

- Initial capital costs (mining, process plant, tailings and infrastructure),
- Operating costs (mining, milling, and G&A),
- Zn metal price, and
- Average resource zinc grade.

The resulting NPV and IRR are presented in TABLE 1-6.

TABLE 1-6 PRE-TAX NPV SENSITIVITIES

Item	Variiances	Value	Project NPV: (US\$ millions)			IRR
			0%	5%	10%	
Initial capital cost (US\$ millions)	+15%	\$22	\$104	\$68	\$45	35%
	Base Case	\$19	\$107	\$71	\$48	40%
	-15%	\$16	\$110	\$75	\$52	47%
Total operating cost (US\$ millions)	+15%	\$15	\$83	\$54	\$35	32%
	Base Case	\$13	\$107	\$71	\$48	40%
	-15%	\$11	\$131	\$89	\$62	48%
Zinc metal price US\$/t Zn metal	+15%	\$2,875	\$168	\$116	\$83	60%
	Base Case	\$2,500	\$107	\$71	\$48	40%
	-15%	\$2,125	\$45	\$26	\$14	19%
Zinc grade	+15%	8.7%	\$151	\$104	\$73	54%
	Base Case	7.57%	\$107	\$71	\$48	40%
	-15%	6.4%	\$62	\$39	\$24	26%

The sensitivity modelling demonstrates that the project economics are most sensitive to changes in zinc metal price and zinc grade of mined mineralized material, and least impacted by initial capital cost and operating cost. Metal price is uncertain and not foreseeable. As shown in the table, IRR would reduce to 19% when metal price falls 15%, however the IRR would increase to 60% when the price rises the same percentage. Zinc price would substantially affect the project economics.

1.10 CONCLUSIONS AND RECOMENDATIONS

P&E considers that the information available for the Nevada Zinc Deposit demonstrates reasonable geological and grade continuity, and satisfies the requirements for an Inferred Mineral Resource Estimate and that the Lone Mountain Property hosts significant high-grade Zn mineralization and warrants further exploration.

Preliminary flotation tests generated suitable conditions to achieve higher than 40% Zn grade concentrate. For the reporting purpose, the process considered in the Study is only a flotation plant to produce a single high grade zinc concentrate product for sale. In the future when project studies proceed further, extracting zinc via leach process and producing high market value chemical zinc product can be investigated, which may improve the economic potential of the project.

Currently there are no known specific environmental issues that could materially impact Nevada Zinc to extract zinc from its Lone Mountain deposit. However, there are a range of environmental issues that will be considered and assessed through the baseline information gathering process and environmental impact assessment process (EIA). The Lone Mountain Project will need to implement an Environmental Monitoring Plan in the future.

It is concluded that the Preliminary Economic Assessment (PEA) demonstrates that the development of the Nevada Zinc Lone Mount Project is technically feasible and has the potential for robust economics with the design criteria and zinc prices assumptions used in this Report.

Recommendations for the future work

- 1) The Lone Mountain Property hosts significant high-grade Zn mineralization and warrants further exploration. Exploration should include both RC and core drilling to evaluate additional targets and improve confidence in the Mineral Resource Estimate.
- 2) Next phase metallurgical tests should include locked-cycle flotation test, zinc concentrate acid leach test, and other tests in order to develop a potential flow sheet for processing the carbonate-oxide mineralization and produce high market value zinc product at Lone Mountain.
- 3) A baseline environmental study is recommended to quantify potential physical and environmental hazards from past mineral production. The study should evaluate potential remediation and safety measures for these physical hazards,
- 4) Undertake a marketing study to evaluate the potential of primary zinc sulphate sales.

An estimated budget of CAD \$1.35 million is required to complete recommended work listed above.

2 INTRODUCTION AND TERMS OF REFERENCE

2.1 TERMS OF REFERENCE

This technical report (“Report”) was prepared by Peimeng Ling and Associates Limited (“PL&A”) at the request of Mr. Bruce Durham, President and CEO of Nevada Zinc Corporation. This report is specific to the standards dictated by National Instrument 43-101, companion policy NI43-101 CP and Form 43-101 F1 (Standards of Disclosure for Mineral Projects) in respect to the Lone Mountain Project (“Project” or “Property”) and focuses on PL&A’s independent NI 43-101 compliant preliminary economic assessment (PEA) for the Lone Mountain Deposit.

Nevada Zinc Corporation (“Nevada Zinc” or “Company”) is a company incorporated in Ontario and trading on the TSX Venture Exchange (TSXV: NZN) with its corporate office at

141 Adelaide St. W
Suite 1660
Toronto, Ontario, M5H 3L5

The PEA was completed using resource information for the deposit which is referenced directly from the current NI 43-101 compliant initial mineral resource estimate completed previously by P&E Mining Consultants Inc. (“P&E”) and filed on SEDAR on September 7, 2018. The scope of the current report is to utilize the available resource data to complete a preliminary economic analysis for the Lone Mountain Project, a zinc project in east central Nevada. Included as part of these efforts are the followings:

- Description of conceptual mine planning activities to extract mineral from the Project;
- Metallurgical testwork updates;
- Description of metallurgical process stages for recovery of zinc;
- Capital and operating costs estimates for development of the Project; and
- Economic analysis and sensitivity studies

This Technical Report is considered current as of the effective date June 27, 2019.

2.2 SCOPE AND DISCLAIMER

This technical report was prepared on behalf of Nevada Zinc and reports on the Lone Mountain Project and PL&A’s compliant preliminary economic assessment for the Company’s Lone Mountain Project with recommendations to allow Company and current or potential partners to reach informed decisions. This Report was prepared by PL&A personnel. Ms. Peimeng Ling, M.Sc., P.Eng. and Qualified Person (QP), is responsible for the preparation of this report and supervised the preparation of the economic assessment. Ms. Ling has a Master of Science degree in Chemical Engineering and is a registered Professional Engineer (P.Eng.) in good standing registered in the Provinces of Ontario (Registration Number 90444985). Ms. Ling has

over 35 years of experience in the chemical and metallurgical industries with a background in international precious and base metals mineral processing including project evaluation and management.

The effective date of this report is June 27, 2019 and is based on data known to PL&A at the cut-off date. Only the Lone Mountain Deposit area visited by Mr. Fred Brown in November 2016 and June 2018 is discussed in any detail in this report. PL&A reserves the right, but will not be obligated to revise this Report and conclusions contained therein if additional information becomes known to PL&A subsequent to the effective date of this Report.

Nevada Zinc reviewed draft copies of this Report for factual errors. Any changes made as a result of these reviews did not include alterations to the conclusions made. Therefore, the statement and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false or misleading at the date of this Report.

Nevada Zinc has accepted that the qualifications, expertise, experience, competence and professional reputation of PL&A are appropriate and relevant for the preparation of this Report. Nevada Zinc has also accepted that PL&A's Principals and Associates are members of professional bodies that are appropriate and relevant for the preparation of this Report.

2.3 SOURCES OF INFORMATION

In preparing this report, PL&A reviewed geological and metallurgical reports, maps, miscellaneous technical papers, company letters and memoranda as made available by Nevada Zinc, and other public and private information as listed in Section 27 of this Report, "References", including exploration data, geological interpretation, metallurgical lab testwork reports, digital data including lab results, sample analyses and other miscellaneous information relating to the Property as supplied by the Company. This Technical Report is supplemented by published and available reports provided by the United States Geological Survey (USGS), the Nevada Bureau of Mines and Geology, United States Bureau of Land Management and the United States Public Land Survey.

Sections 4 to 12 and Section 14 in this report, which are related to the property, exploration and resource estimation activities at the Lone Mountain project have been taken directly from "Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA" completed by P&E Mining Consultants Inc. (filed September 7, 2018). PL&A has included these sections in their entirety in the current report and the responsibility for their preparation remains with the Principals of P&E Mining Consultants Inc. as outlined in the original report.

PL&A is not aware of and has not investigated in detail any environmental or social issues that could conceivably affect the Lone Mountain Property. Historical mineral resources figures contained in the report, including any underlying assumptions, parameters and classifications,

are quoted “as is” from the source. These estimates being historical in nature are non-compliant with National Instrument 43-101 standards and as such, should not be relied upon. In addition, during the preparation of the Report PL&A carried out extensive discussions with Mr. Bruce Durham, consultants and technical advisors of Nevada Zinc.

The author believes that the information and data presented to PL&A by Nevada Zinc are a reasonable and accurate representation of the Lone Mountain Project and are of sufficient quality to provide the basis for the conclusions and recommendations reached in the report.

2.4 UNITS AND CURRENCY

Unless otherwise stated all unites used in the Technical Report are metric. Length is generally expressed in kilometres, metres, and centimetres; volume in cubic metres and litres, mass in metric tonnes, kilograms, and grams; area in hectares and square meters. Base metal grades such as zinc (“Zn”) and lead (“Pb”) are reported in weight percent (%), grams per tonne (“g/t”), and the precious metal assays such as gold (“Au”) and silver (“Ag”) are reported in grams of metal per tonne (“g/t Au or g/t Ag”), parts per billion (“ppb”), or parts per million (“ppm”) unless ounces per ton (“oz/ton”) are specifically stated. The US Dollar is used throughout this report unless other currencies are specifically noted. Location coordinates are expressed in the Universal Transvers Mercator (UTM) grid coordinates using 1983 North American Datum (NAD83) Zone 11 unless otherwise noted.

Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Conversions from the SI or Metric System to the Imperial System are provided below and quoted where practical.

1 ton	0.9072 tonne
1 troy ounce	31.104 grams
1 ppm	1 g/t
1 ppb	0.001 g/t
1 pound	0.454 kilograms
1 foot	0.3048 metres
1 mile	1.609 kilometres
1 acre	0.4047 hectares
1 square mile	2.590 square kilometres
1 square kilometre	100 hectares

The following list, TABLE 2-1, shows the meaning of the abbreviations for the technical terms used throughout the text of this Report.

TABLE 2-1 ABBREVIATION TABLE

Abbreviation	Meaning
Ag	silver
Au	gold
BLM	Bureau of Land Management
BMRR	Bureau of Mining Regulation and Reclamation
cm	centimetre(s)
CSAMT	Controlled source audio magneto-telluric
DDH	Diamond drill hole
EA	Environmental Assessment
EIS	Environmental Impact Statement
ft	Foot
g/t	grams per tonne
Ha	hectare(s)
IP/RES	induced polarization / resistivity survey
km	kilometre(s)
lb	pound(s)
m	metre(s)
m ³	cubic metres
µm or mu	micron(s)
M	million(s)
Ma	millions of years
Mg	magnesium
ML	mining lease
NAD	North American Datum
NDEP	Nevada Department of Environmental Protection
NEPA	National Environmental Policy Act
NI	National Instrument
NoI	Notice of Intent
NSR	Net Smelter Return
oz/ton	Ounce(s) per ton
PEA	Preliminary Economic Assessment
PL&A	Peimeng Ling and Associates Limited
PoO	Plan of Operations
ppb	Parts per billion
ppm	parts per million
QA/QC	Quality Assurance / Quality Control
RC	Reverse Circulation
ton	short ton(s)
t	metric tonne(s)
UTM	Universal Transverse Mercator

3 RELIANCE ON OTHER EXPERTS

PL&A has relied on information provided by Nevada Zinc which may or may not be in the public domain. This includes but is not necessarily limited to the following:

- Preparation methodologies and analyses for metallurgical testwork composites,
- Detailed metallurgical testwork results from programs completed at SGS Lakefield, Outotec, and others,
- Local site conditions and infrastructure.

PL&A has made every attempt to accurately convey the content of those files, but cannot guarantee either the accuracy or validity of the work contained within those files. However, PL&A believes that the preparation of these reports and data were completed with the objective of presenting the results of the work performed without any promotional or misleading intent. In this sense, the information presented should be considered reliable, unless otherwise stated, and may be used without any prejudice by Nevada Zinc.

4 PROPERTY DESCRIPTION AND LOCATION

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

4.1 PROPERTY LOCATION

The Lone Mountain Property is located within in the Eureka Mining District of Eureka County, Nevada, in southwestern USA, see FIGURE 4-1. The centre of the Property is located at approximately 563,100 m E, 4,385,250 m N (UTM NAD83 Zone 11S) or Latitude 39° 36'53" N and Longitude 116° 15'54" W.

The property is located approximately 300 km east of Reno, Nevada, 28 km northwest of the town of Eureka and 7.5 km north of US Highway 50.

FIGURE 4-1 PROPERTY LOCATION MAP



Source: GoogleEarth 2017

4.2 PROPERTY DESCRIPTION AND TENURE

The Lone Mountain Project is comprised of 230 contiguous unpatented lode mining claims and one patented mining claim, FIGURE 4-2. The claims are within the Lone Mountain portion of the Eureka Mining District, Eureka County within T 20 N, R51 E, MDBM. The unpatented lode claims are each 600 by 1,500 feet in size (20.5 acres) and cover an area totalling approximately 4,715 acres. The claims require an annual Intent to Hold filing and cash payment to the BLM and Eureka County totalling US\$154.50 per claim for a total of US\$ 35,535 annually. The lode mining claims for the Lone Mountain Project are listed in TABLE 4-1.

The Project property holdings are held by Lone Mountain Zinc Ltd. (“Lone Mountain”), a Nevada corporation that is a wholly owned subsidiary of Nevada Zinc. Prior to February 2015, Lone Mountain was a wholly owned subsidiary of Goldspike Exploration Inc. (“Goldspike”). In February 2015, Nevada Zinc completed a vertical amalgamation with Goldspike, and all of the business including the Lone Mountain subsidiary continued under the ownership of Nevada Zinc Corporation.

FIGURE 4-2 LODE CLAIMS MAP FOR NEVADA ZINC CORPORATION'S LONE MOUNTAIN PROJECT

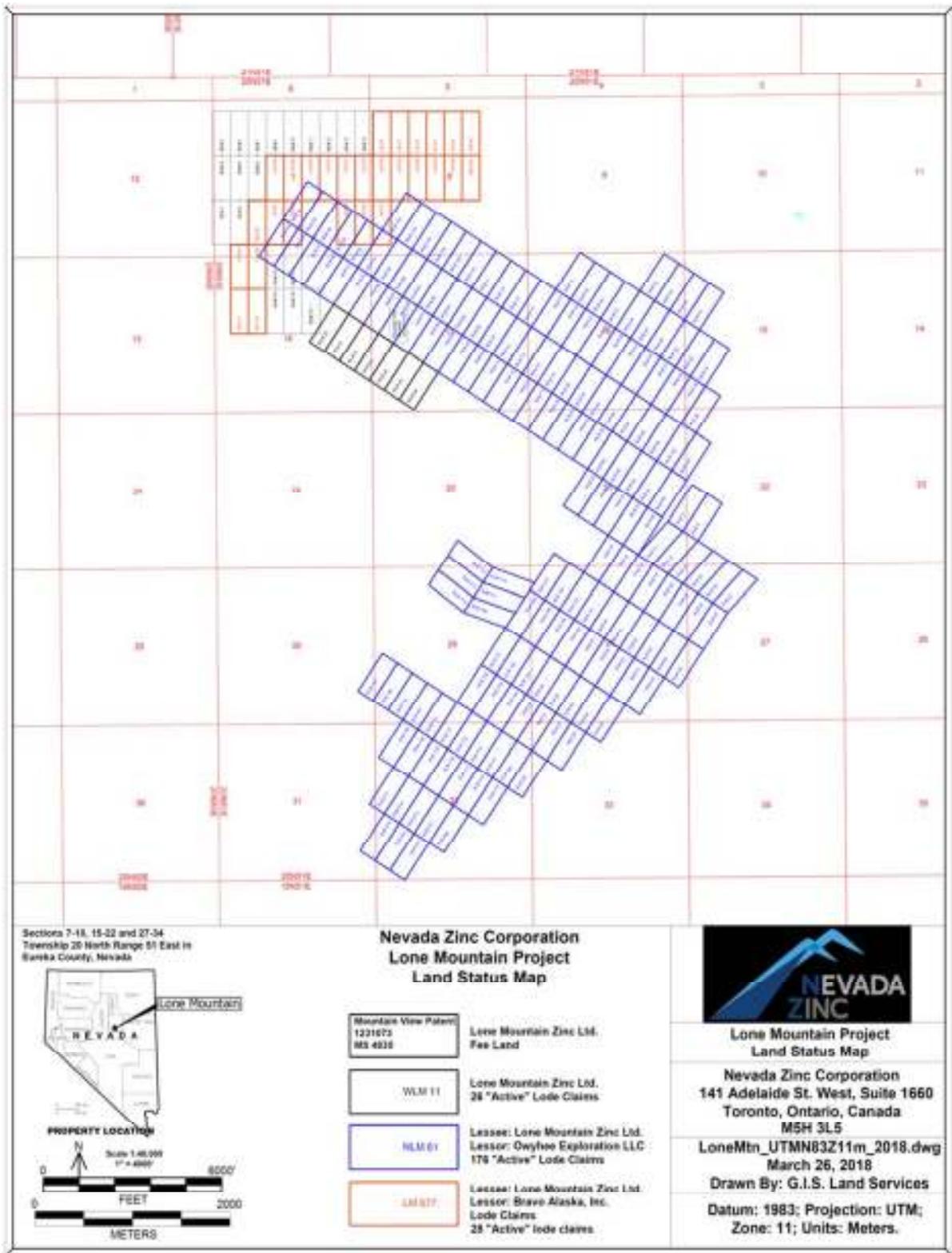


TABLE 4-1 LIST OF LODE MINING CLAIMS FOR THE LONE MOUNTAIN PROPERTY			
Claim No.	Nevada NMC/BLM Serial No.	Claim No.	Nevada NMC/BLM Serial No.
Owyhee Lease Claims			
NLM No. 11	903196	NLM 51	1014486
NLM No. 12	903197	NLM 52	1014487
NLM No. 13	903198	NLM 53	1014488
NLM No. 14	903199	NLM 54	1014489
NLM No. 16	903200	NLM 55	1014490
NLM No. 17	903201	NLM 56	1014491
NLM No. 18	903202	NLM 57	1014492
NLM No. 19	903203	NLM 58	1014493
NLM No. 20	903204	NLM 59	1014494
NLM No. 21	903205	NLM 60	1014495
NLM No. 22	903206	NLM 61	1014496
NLM No. 23	903207	NLM 62	1014497
NLM No. 24	903208	NLM 63	1014498
NLM No. 25	903209	NLM 64	1014499
NLM No. 26	903210	NLM 65	1014500
NLM No. 27	903211	NLM 66	1014501
NLM No. 28	903212	NLM 67	1014502
NLM No. 29	903213	NLM 68	1014503
NLM No. 30	903214	NLM 69	1014504
NLM No. 31	903215	NLM 70	1014505
NLM No. 32	903216	NLM 71	1014506
NLM No. 33	903217	NLM 72	1014507
NLM No. 34	903218	NLM 73	1014508
NLM No. 35	903219	NLM 74	1014509
NLM No. 36	903220	NLM 75	1014510
NLM No. 38	903221	NLM 76	1014511
NLM No. 39	903222	NLM 77	1014512
NLM No. 40	903223	NLM 78	1014513
NLM No. 41	903224	NLM 79	1014514
NLM 43	1026972	NLM 80	1014515
NLM 44	1026973	NLM 81	1014516
NLM 45	1014480	NLM 82	1014517
NLM 46	1014481	NLM 83	1014518
NLM 47	1014482	NLM 84	1014519
NLM 48	1014483	NLM 85	1014520
NLM 49	1014484	NLM 86	1014521
NLM 50	1014485	NLM 87	1014522
NLM 88	1014523	SLM No. 43	903103
NLM 89	1014524	SLM No. 44	903104

TABLE 4-1 LIST OF LODE MINING CLAIMS FOR THE LONE MOUNTAIN PROPERTY			
Claim No.	Nevada NMC/BLM Serial No.	Claim No.	Nevada NMC/BLM Serial No.
NLM 90	1014525	SLM No. 45	903105
NLM 91	1014526	SLM No. 46	903106
NLM 92	1014527	SLM No. 47	903107
NLM 93	1014528	SLM No. 48	903108
NLM 94	1014529	SLM No. 49	903109
NLM 95	1024078	SLM No. 50	903110
NLM 96	1014530	SLM No. 51	903111
NLM 97	1014531	SLM No. 52	903112
NLM 98	1014532	SLM No. 53	903113
NLM 99	1014533	SLM No. 54	903114
NLM 100	1014534	SLM No. 55	903115
NLM 101	1014535	SLM No. 56	903116
NLM 102	1100849	SLM No. 101	903166
NLM 103	1100850	SLM No. 102	903165
NLM 104	1100851	SLM No. 103	903164
NLM 105	1100852	SLM No. 104	903163
NLM 106	1100853	SLM No. 105	903162
NLM 107	1100854	SLM No. 106	199848
SLM No. 2	903071	SLM No. 107	199847
SLM No. 4	903072	SLM No. 108	199846
SLM No. 14	903074	SLM No. 109	934008
SLM No. 15	903075	SLM No. 110	934009
SLM No. 16	903076	SLM No. 111	934010
SLM No. 17	903077	SLM No. 112	934011
SLM No. 18	903078	SLM No. 113	934012
SLM No. 19	903079	SLM No. 114	934013
SLM No. 20	903080	SLM No. 123	903168
SLM No. 21	903081	SLM No. 124	903169
SLM No. 22	903082	SLM No. 125	903170
SLM No. 23	903083	SLM No. 126	903171
SLM No. 24	903084	SLM No. 127	903172
SLM No. 25	903085	SLM No. 128	903173
SLM No. 26	903086	SLM No. 167	903184
SLM No. 27	903087	SLM No. 169	903186
SLM No. 36	903096	SLM No. 170	903187
SLM No. 38	903098	SLM No. 171	903188
SLM No. 39	903099	SLM No. 172	903189
SLM No. 40	903100	SLM No. 173	903190
SLM No. 41	903101	SLM No. 174	903191
SLM No. 42	903102	SLM No. 175	903192

TABLE 4-1 LIST OF LODE MINING CLAIMS FOR THE LONE MOUNTAIN PROPERTY			
Claim No.	Nevada NMC/BLM Serial No.	Claim No.	Nevada NMC/BLM Serial No.
SLM No. 176	903193	SLM No. 185	906335
SLM No. 177	903194	SLM No. 187	906337
SLM No. 178	903195	SLM No. 209	906359
SLM No. 179	906329	SLM No. 211	906361
SLM No. 180	906330	SLM No. 212	906362
SLM No. 181	906331	SLM No. 213	906363
SLM No. 182	906332	SLM No. 214	906364
SLM No. 183	906333	SLM No. 215	906365
SLM No. 216	906366	SLM No. 217	906367
Nevada Zinc Claims			
WLM 1	1103988	WLM 10	1103997
WLM 2	1103989	WLM 15	1104002
WLM 3	1103990	WLM 16	1104003
WLM 4	1103991	WLM 17	1104004
WLM 5	1103992	WLM 18	1104005
WLM 6	1103993	WLM 19	1104006
WLM 7	1103994	WLM 20	1135779
WLM 8	1103995	WLM 21	1135780
WLM 9	1103996	WLM 22	1135781
WLM 10	1103997	WLM 23	1135782
WLM 11	1103998	WLM 24	1135783
WLM 12	1103999	WLM 25	1135784
WLM 13	1104000	WLM 26	1135785
WLM 14	1104001		
Bravada Option Claims			
LM 234	895633	LM 278	895677
LM 235	895634	LM 667	896066
LM 236	895635	LM 668	896067
LM 264	895663	LM 669	896068
LM 266	895665	LM 670	896069
LM 268	895667	LM 672	896071
LM 270	895669	LM 177	1033221
LM 272	895671	LM 179	1033222
LM 274	895673	LM 275	1033226
LM 276	895675	LM 277	1033227
LM 284	895683	LM 279	895678
LM 401	895684	LM 280	895679
LM 402	895685	LM 281	895680
		LM 282	895681
		LM 283	895682

The majority of Nevada Zinc's unpatented mining claims are held through a lease agreement with Owyhee Exploration II LLC ("Owyhee"), and Idaho limited liability company. The lease agreement covers 176 unpatented claims and was executed on June 2, 2014, between Norvista Capital Corporation ("NCC"), and Ontario corporation, and Owyhee. The lease terms are for twenty years, subject to a right to extend the term of the agreement for two additional terms of ten years each, TABLE 4-2. Subsequently, on July 16, 2014 NCC executed an assignment agreement with Goldspike Exploration Inc. ("Goldspike") and Lone Mountain Zinc Ltd. ("Lone Mountain"), a wholly owned subsidiary of Goldspike, whereby the Owyhee Lease agreement and its obligations were assigned to Lone Mountain.

In consideration for the assignment of the Owyhee Lease, Goldspike issued 2,000,000 common shares to NCC and granted an option to purchase an additional 3,333,333 shares at a price of \$0.15/share until July 11, 2014. NCC exercised the option to purchase the shares.

TABLE 4-2 LEASE PAYMENTS TO BE MADE TO OWYHEE (US\$)	
Effective Date (June 2, 2014) (paid)	25,000
First anniversary of the Effective Date (paid)	25,000
Second anniversary of the Effective Date (paid)	25,000
Third anniversary of the Effective Date (paid)	25,000
Fourth anniversary of the Effective Date (paid)	50,000
Fifth anniversary of the Effective Date	50,000
Sixth and each succeeding anniversary of the Effective Date	100,000

The payments due on the first and each succeeding anniversary of the Effective Date are adjusted for inflation using the CPI-U, West Region, All Items, index with the base index being the month after the Effective Date and the adjustment index being the month before the payment date. The Minimum Payments payable on and after the sixth anniversary of the Effective Date shall be credited against the Royalty payment obligation during the Lease Year for which the Minimum Payment is made.

The Owyhee Lease requires that the Lessor receive an NSR from the production and sale of minerals from the property. The NSR for Precious Metals is 3% and the NSR for all other Minerals is 2%. Nevada Zinc has the option to purchase a portion of the NSR representing 0.5% of the NSR on or before the third anniversary of the Effective Date for the purchase price of US\$2,000,000 and the option to purchase an additional 0.5% of the NSR on or before the fifth anniversary of the Effective Date for the purchase price of US\$3,000,000.

Nevada Zinc as lessee has the right to use the Property for mineral exploration, development, mining and mineral processing activities. Subject to the regulations of the State of Nevada concerning the appropriation and taking of water, Nevada Zinc has the right to appropriate and

use water, to drill wells for the water on the Property and to lay and maintain all necessary water lines as may be required for operations on the Property.

Beginning with the annual assessment work period of September 1, 2014, to September 1, 2015, and for each subsequent following annual assessment work year commencing during the term of the Owyhee Lease agreement, Nevada Zinc is required to perform assessment work of sufficient value to satisfy the annual assessment work requirements, and to file evidence of the work, provided that if Nevada Zinc elects to terminate this Agreement more than three (3) months before the deadline for performance of annual assessment work for the following annual assessment year, Nevada Zinc shall have no obligation to perform annual assessment work.

In October 2014, Goldspike executed a lease with an option to purchase agreement with Bravada Gold Corporation (“Bravada”) for 28 claims that are part of the current Lone Mountain Property. The agreement consists of escalating lease payments totalling US\$329,200 in cash over a period of up to 10 years, during which exploration and development may be conducted. In addition, Bravada received 50,000 common shares and will receive another 100,000 common shares should a NI 43-101 resource estimate for the combined properties include a least 10% of the reported tonnage attributable to the Property. All lease payments can be applied to the final purchase price of US\$329,000, after which advanced minimum royalty payments become due annually in the amount of the cash equivalence of 50 ounces of gold. Upon production, Bravada will receive royalty payments of 1.5% NSR on production of base metals and 3.0% NSR on precious metals. Nevada Zinc has the option to buy-down Bravada’s royalties to 1% NSR for base metals and 1.5% NSR for precious metals for a cash payment of US\$3,000,000. An underlying vendor also holds a royalty on the property, which is 1% NSR for all metals and can be reduced to 0.5% NSR for a cash payment of \$3,000,000.

Twenty size (26) unpatented mining claims were located directly by Nevada Zinc.

Nevada Zinc purchased a 100% interest in the patented Mountain View Mine in September 2015 from Combined Metals Reduction Company, a Utah corporation and its affiliates for US\$50,000. The Mountain View patented claim is identified as Eureka County patent 231073, Mineral Survey 4830, Assessor’s Parcel Number 009-200-01 and has an area of approximately 20 acres. The patented claim is subject to annual real property taxes. Nevada Zinc is required to pay a 1% NSR on the Mountain View patent to Owyhee as a consequence of the patented claim being in the area of influence of the Owyhee Lease.

4.3 PERMITS

The Lone Mountain Property encompasses public lands administered by the United States Bureau of Land Management (BLM). Nevada Zinc reports that the exploration activities to date have disturbed less than five acres. This level of activity requires a Notice of Intent (NoI) with the BLM and courtesy notification to the Nevada Department of Environmental Protection

(NDEP) Bureau of Mining Regulation and Reclamation (BMRR), with an associated surety reclamation bond.

Future exploration drilling on public lands administered by the BLM may require an Exploration Plan of Operations (PoO) for surface disturbance activities greater than five acres. The BLM requires that a PoO be completed pursuant to 43 CFR 3809 regulations describing the existing exploration activities and the details of each component of the proposed action. Mining and exploration activities included in the PoO will require items such as a description of surface disturbance activities, preliminary design reports for the heap leach facility and a description of waste rock, mineralized material, spent heap, and ground water characterization. A Reclamation Plan describing the construction and closure of each facility with the associated bond cost estimate as applicable is also required.

Future exploration activities creating more than five acres of disturbance will also require that the BLM perform an appropriate National Environmental Policy Act (NEPA) analysis, likely an Environmental Assessment (EA). Mining activities will also require the BLM to complete a NEPA analysis, likely an Environmental Impact Statement (EIS). The NEPA analysis assesses the potential for impacts to all resources (biological, air quality, socioeconomic, etc.) from the proposed project. No survey work has been initiated at the Lone Mountain Property.

P&E has reviewed a decision letter dated December 15, 2016 from the US Department of the Interior to Nevada Zinc confirming that the Department of the Interior recognizes Nevada Zinc as the operator of the Property and has accepted a bond in the amount of US\$18,753 for Nevada Zinc's current exploration reclamation obligations.

Several of the BLM claims and the Mountain View Mine patented claim have historical mine workings and/or mine waste rock surface dumps. The historical mining development on the BLM claims predates the current claim fabric and Nevada Zinc reports that they have not made any modifications to any surface pits or shafts so as to not incur liability in regards to the pre-existing hazards. Nevada Zinc owns the Mountain View Mine patented claim that has hazards related to the historic shafts, an open stope and surface waste rock piles. Nevada Zinc has not conducted an assessment of the potential liabilities from past production.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

5.1 ACCESS

The Lone Mountain Property is located within the Eureka Mining District of Eureka County, Nevada. The Lone Mountain claims are physically located along the northern and eastern slopes of Lone Mountain. The Property is located approximately 7.5 km north of US Highway 50 and can be accessed by vehicles from the highway via an unpaved road extending north from Highway 50 approximately 28 km northwest of Eureka, NV (

FIGURE 5-1). Additionally, helicopter access is available via a number of charter companies based in the surrounding area.

FIGURE 5-1 LONE MOUNTAIN PROPERTY LOCATION RELATIVE TO STATE OF NEVADA AND MAJOR HIGHWAYS



5.2 CLIMATE

The Lone Mountain area is dry with an annual precipitation of 12 to 25 cm (5-10 inches). Temperatures typically range from -12° to 5° Celsius (10° to 40° Fahrenheit (F)) in the winter and exceed 32° C (90° F) in the summer. Climate data for Eureka, Nevada is provided in TABLE 5-1. Exploration activities may be conducted year-round.

TABLE 5-1 CLIMATE DATA FOR EUREKA, NEVADA

Climate data for Eureka, Nevada (Elevation 6,500 feet or 2,000 metres); 1971-2000													[hide]
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °F (°C)	61 (16)	65 (18)	75 (24)	81 (27)	91 (33)	95 (35)	98 (37)	97 (36)	90 (32)	86 (30)	72 (22)	63 (17)	98 (37)
Average high °F (°C)	36.9 (2.7)	40.7 (4.8)	46.9 (8.3)	54.9 (12.7)	64.5 (18.1)	75.8 (24.3)	84.5 (29.2)	82.6 (28.1)	73.5 (23.1)	61.3 (16.3)	46.0 (7.8)	38.1 (3.4)	58.8 (14.9)
Average low °F (°C)	16.3 (-8.7)	19.3 (-7.1)	24.0 (-4.4)	28.8 (-1.8)	36.5 (2.5)	44.6 (7)	52.4 (11.3)	51.6 (10.9)	43.7 (6.5)	33.6 (0.9)	23.4 (-4.8)	16.7 (-8.5)	32.6 (0.3)
Record low °F (°C)	-26 (-32)	-23 (-31)	-9 (-23)	5 (-15)	10 (-12)	11 (-12)	29 (-2)	30 (-1)	5 (-15)	3 (-16)	-11 (-24)	-21 (-29)	-26 (-32)
Average precipitation inches (mm)	1.00 (25.4)	0.91 (23.1)	1.45 (36.8)	1.16 (29.5)	1.54 (39.1)	0.74 (18.8)	0.55 (14)	0.83 (21.1)	1.00 (25.4)	1.05 (26.7)	0.95 (24.1)	0.88 (22.4)	12.06 (306.4)
Average snowfall inches (cm)	12.7 (32.3)	6.9 (17.5)	11.4 (29)	6.6 (16.8)	4.0 (10.2)	0.1 (0.3)	0.0 (0)	0.0 (0)	0.7 (1.8)	2.0 (5.1)	7.3 (18.5)	9.4 (23.9)	61.1 (155.4)
Average precipitation days (≥ 0.01 inch)	5.9	5.3	7.6	5.9	6.2	4.2	3.3	3.9	3.8	4.5	4.7	5.6	60.9
Average snowy days (≥ 0.1 inch)	5.2	3.8	4.7	2.6	1.2	0.1	0.0	0.0	0.2	1.0	2.7	4.4	25.9
Source #1: National Oceanic and Atmospheric Administration ^[1]													
Source #2: National Weather Service, Elko, Nevada ^[2]													

5.3 LOCAL RESOURCES

The Lone Mountain Property is located 28 km northwest of the town of Eureka, Nevada. Eureka, situated on US Highway 50, is a historical mining centre and the largest community within Eureka County. Eureka is part of the Elko Micropolitan Statistical Area and has a district population in excess of 46,000 and a local population of greater than 600 (2012 census). Most services and supplies are available in this resource-based community or nearby Elko, Nevada (184 km).

Business activities in Eureka County are mainly based on agriculture and mining. Mining built Eureka in the late 1800s and mining remains a major economic activity in the county. Several major mines in the Carlin Trend including Barrick Gold's Goldstrike Mine are located in the northern part of Eureka County and are approximately 150 km north of the Lone Mountain Property.

As a consequence of the mining activity, the region supports an active mining workforce with significant resources for mineral exploration, mine development and mine operations.

According to the Eureka County water resources master plan dated July 2016, there is a relatively small amount of unappropriated surface or ground water in Eureka County. Any future mining development will need to take this into consideration.

5.4 INFRASTRUCTURE

The Lone Mountain Property currently has limited infrastructure, however, the Property is road accessible with the paved US Highway 50 being located 7.5 km south.

Interstate 80 crosses through the northern part of Eureka County and U.S. 50 connects the town of Eureka with Ely and continues west to Carson City and Sacramento, California.

Eureka County has an airport with a 2.2 km asphalt airstrip located 11 km northwest of the town at the south end of the Diamond Valley.

5.5 PHYSIOGRAPHY

The Lone Mountain Property is located within the Basin and Range Province; a major physiographic region of the western United States (FIGURE 5-2). This region contains north-northeast trending mountain ranges separated by broad, flat, alluvium-filled valleys (Lumos, 2007). Some exposure of bedrock is evident in the southern hillier parts of the Property (Gow, 2007). Elevations within the Project area range from approximately 1,800 metres in the valley to over 2,400 metres at the Lone Mountain summit.

Lower elevation vegetation is typified by sagebrush, grasses and greasewood. Mountain ranges typically contain pinion, juniper and mountain mahogany.

FIGURE 5-2 PHOTOGRAPH OF LONE MOUNTAIN SHOWING PHYSIOGRAPHY AND VEGETATION



FIGURE 5-2 is looking northwesterly.

6 HISTORY

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

Southern Eureka County is a historic mining area that was first settled in 1864 by silver prospectors from nearby Austin, who discovered silver-lead mineralization at Prospect Peak. Lead mining became the area’s main activity. By 1878 the population reached 10,000 inhabitants with the Richmond Mining Company and the Eureka Mining Company being the major operators. After 1878, the population declined with decreasing mine production and eventual mine closings.

6.1 HISTORIC PROPERTY EXPLORATION

The exploration history for the Lone Mountain Property is summarized in Table 6.1. This region has been explored for lead and zinc but few written records are available for the ground covered by the Lone Mountain claims. In 1875, the Eureka County Mountain View Mine was recorded to have produced 11 tons of mineralization valued at US\$1,507.25 (Raymond, 1877). Staking in the region began in the 1920’s for zinc. In the 1940’s, the U.S. Smelting Co. completed a diamond drilling program in the Mountain View claims area. Significant drilling results are reported in Table 6.2. A number of trenches and pits are also located west of the Mountain View claims which may date from this period. There are no public records of the work conducted in the 1940’s (Gow, 2007).

Aurogin Resources Ltd. (“Aurogin”) staked the main part of the current Lone Mountain Property in mid-2004 to pursue the Battle Mountain-Cortez gold trend located in north-central Nevada. The staked property covered the mineralized fault zone that truncates Lone Mountain and is buried by the alluvial plain. Lone Mountain is considered to be a window into the Roberts Mountain Thrust Plate and favourable for blind Carlin-type gold deposits on the valley side of the fault bounded region. In 2005, Aurogin identified a 3.5 km long geochemical anomaly. During this time, Castle Gold also entered into an earn-in agreement with Aurogin (Paterson, 2005 & 2006).

In 2006, Aurogin completed a Controlled Source Audio-Magnetotelluric (CSAMT) geophysical survey, geological mapping, surface geochemical sampling and acquired gravity plus airborne magnetic data for the Property. In 2007, as a result of the 2006 geophysical survey, Aurogin drilled five reverse circulation holes totalling a depth of 795.5 m. The primary target of the holes was potential gold mineralization. The gold assay results were not encouraging, but high-grade lead and zinc were intersected in drill hole 07-1 with 41.3% zinc over 4.56 m interval and 40.1% lead within another 4.56 m interval (Paterson, 2007b). Lead and zinc mineralization appeared to be mainly in non-sulphide minerals and was thought to occur as irregular pods. Property-wide geological mapping was also conducted in 2007 (Paterson, 2007a). As of August

28, 2007, following the amalgamation of Aurogin Resources Ltd. and Morgain Minerals Inc., Aurogin changed its name to Castle Gold Corporation.

In 2005, anomalous gold was collected from chip samples extracted from an oil well on Bravada's South Lone Mountain claims. The samples contained 2.36 g/t gold in samples described as basal gravel with jasperoid fragments and jarosite-stained, decalcified siltstone and fine sandstone. One chip split contained a vug lined with quartz crystals and euhedral barite. The basal gravel unit sits upon the Roberts Mountain Formation. The Formation has been dolomitized on this property and contains minor quartz fragments. Over 300 ppb Au has been found in bedrock samples immediately beneath the bedrock interface with the gravel and volcanic covers (Bravada, 2014).

TABLE 6-1 HISTORICAL EXPLORATION ON THE LONE MOUNTAIN PROPERTY *	
Year	Exploration Activities
1875	Eureka County Mountain View Mine produced 11 tons of mineralized material valued at 1,507.25 USD.
1920	Staking for zinc begins in Lone Mountain area.
1940	U.S. Smelting Co. completes Mountain View claims diamond drilling. A number of trenches and pits are also thought to have been explored west of this area.
1942	Mountain View Mine, high grade zinc deposit, is established after diamond hole drilling and trench/pit exploration results.
1964	Mountain View Mine reports total production of almost 5 million pounds of zinc and 650,000 pounds of lead, 4,000 pounds of silver and 600 pounds of copper.
2004	Aurogin stakes Lone Mountain Claims.
2005	Aurogin identifies a 3.5 km long geochemical anomaly. Aurogin enters into two option agreements with neighbouring claim owners: Owyee Exploration LLC.
2006	Aurogin completes a Controlled Source Audio-Magnetotelluric (CSAMT) geophysical survey, geological mapping, and surface geochemical sample and acquires gravity plus airborne magnetic data.
2007	Aurogin drills five reverse circulation holes totalling a depth of 795.5 m for gold. Finds high grade lead and zinc intersections. Property geology is mapped. Aurogin changes name to Castle Gold.
2014	Owyhee Exploration II LLC signs lease agreement with the Norvista Capital Corporation

* Partially summarized from Paterson (2005 & 2007) and Gow (2007)

TABLE 6-2 LONE MOUNTAIN HISTORICAL DRILL CORE ASSAY RESULTS FROM 1944 AND 1945 EXPLORATION*					
DDH ID	Depth (ft)	From (ft)	To (ft)	Width (ft)	Zn %
1	237	No data			
2	309	150.0	151.0	1.0	8.30
3	193	142.0	142.5	0.5	34.60
4	161	109.0	113.0	4.0	4.20
5	161	No data			
6	155	56.0	59.0	3.0	2.40
		112.5	116.0	3.5	5.50
7	247	64.5	74.5	10.0	3.70
		90.0	105.0	15.0	5.80
		117.0	137.0	20.0	15.30
8	67	16.5	17.5	1.0	22.80
8a	200	16.5	18.0	1.5	33.10
		137.5	142.0	4.5	3.50
9	298	11.0	36.5	25.5	14.15
		90.5	109.0	18.5	11.06
		238.5	248.0	9.5	2.93
		260.0	270.0	10.0	1.90
10	190	28.0	30.0	2.0	7.20
11	165	Depth interval not known		5.0	4.00
12	55	30.0	45.0	15.0	13.66
13	220	17.5	46.0	28.5	6.50
14	212	28.0	30.0	2.0	18.50
15	165	125.0	131.0	6.0	25.80
16	155	79.0	90.0	11.0	4.28
17	97.5	26.0	28.0	2.0	6.40
18	100	46.5	51.0	4.5	2.60
		90.0	94.0	4.0	5.00
19	223	No significant mineralization			
20	297	79.0	125.0	46.0	4.63
		178.0	195.0	17.0	8.80
21	110	29.0	47.0	18.0	9.52
		70.0	85.0	15.0	13.70
22	107	35.0	54.0	19.0	22.53
		75.0	87.0	12.0	4.76
23	210	24.0	40.0	16.0	8.36
		54.0	76.0	22.0	21.90
24	110	65.0	92.0	27.0	7.27
25	200	96.0	141.0	45.0	11.83
		157.0	200.0	43.0	6.89
26	332	175.0	183.0	8.0	5.93

TABLE 6-2 LONE MOUNTAIN HISTORICAL DRILL CORE ASSAY RESULTS FROM 1944 AND 1945 EXPLORATION*					
DDH ID	Depth (ft)	From (ft)	To (ft)	Width (ft)	Zn %
27	166	28.0	136.0	108.0	18.35
28	260	79.0	81.0	2.0	21.70
		105.0	170.0	65.0	8.84
29	145	No significant mineralization			
30	395	130.0	160.0	30.0	7.02
31	300	88.5	92.5	4.0	19.00
		203.0	205.0	2.0	15.40
32	294	No data			
33	729	No significant mineralization			
34	503	204.0	241.0	37.0	4.15
35	750	159.0	229.0	70.0	7.81
36	321	129.0	160.0	31.0	7.42
		200.0	226.0	26.0	4.46
37	695	No data			
38	359	111.0	117.0	6.0	3.00
		207.0	215.0	8.0	9.50
39	650	No data			
40	431	136.5	140.0	3.5	9.10
		153.0	161.0	8.0	5.40
41	Not reported	256.0	263.5	7.5	18.40

* Results are modified by Adair (2007) and are historical results that have not been verified by a Qualified Person.

The drill core assay results in TABLE 6-2 predate NI-43-101 standards for disclosure for mineral projects. The data is considered historic, incomplete, and the assay methods are not known. No QA/QC is known to have been completed and therefore the information contained in this table must be considered to be historic in nature under NI 43-101 and therefore should not be relied upon. True widths have not and cannot be calculated for the intervals in the table above. All data is in feet.

6.2 PAST PRODUCING MOUNTAIN VIEW MINE

The past-producing Mountain View Mine is located on the patented mining claim that forms part of the Lone Mountain Project. This carbonate hosted high-grade zinc mine is an underground past-producer that was discovered in 1942 and first mined in 1942. Roberts et al. (1967) report that production in 1942-1943 totalled 2,284 short tons grading 28.8% zinc, and 4% lead. Production to 1964 when the mine closed amounted to 4,952,627 lb of zinc, 649,579 lb of lead, 4,040 oz of silver and 600 lb of copper with a total value of US\$781,102.

The mineralogy is reported by Roberts et al. (1967) as smithsonite (zinc carbonate), zincite (zinc oxide), hydrozincite (zinc carbonate-hydroxide), cerussite (lead carbonate), malachite (copper carbonate-hydroxide) and azurite (copper carbonate-hydroxide). Small amounts of sulphide are also reported locally as sphalerite (zinc sulphide), galena (lead sulphide), chalcopyrite (copper sulphide) and pyrite (iron sulphide). Mineralization at the Mountain View Mine is found within thickly bedded, grey dolomite of the Devils Gate Formation that strikes northwest and dips to the northeast. The mineralized zones occur in breccia zones located at the intersection of two sets of faults (Roberts et al. 1967).

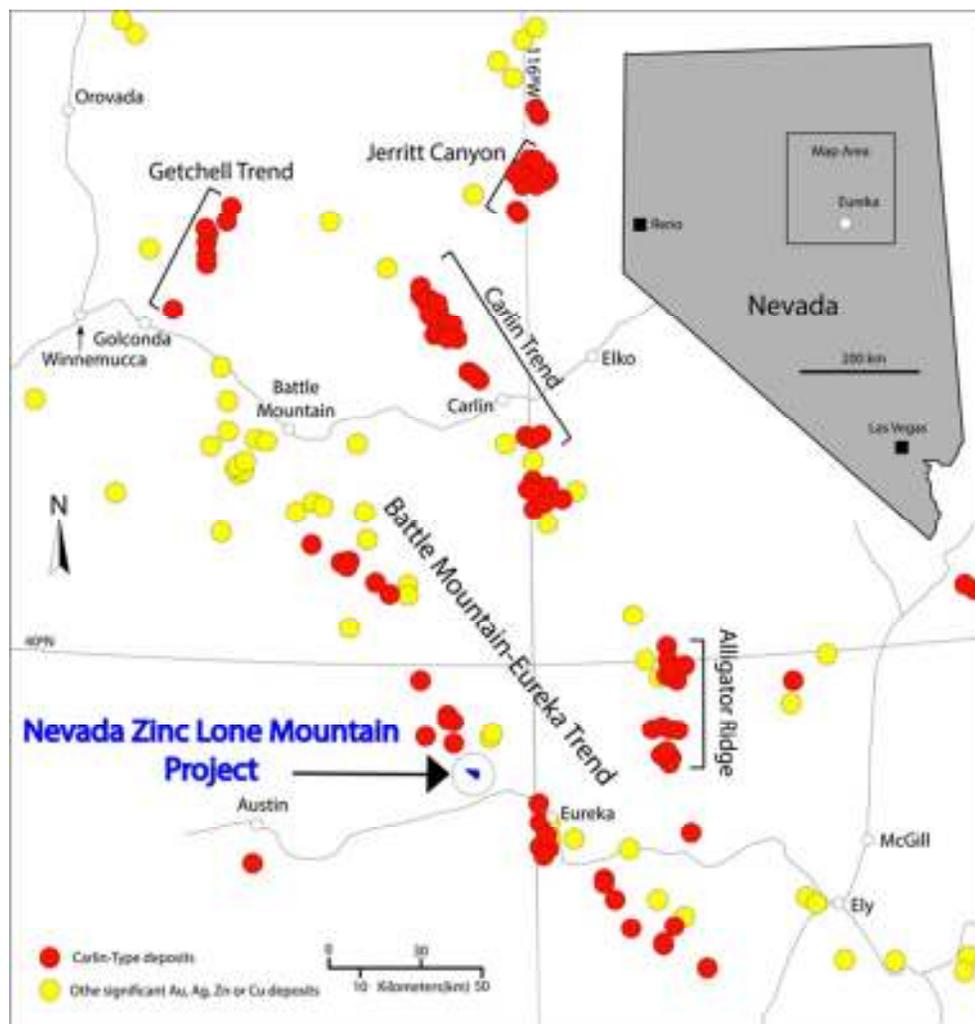
7 GEOLOGICAL SETTING AND MINERALIZATION

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

7.1 REGIONAL GEOLOGY

The Lone Mountain Property is located within the Battle Mountain-Eureka Trend of Northern Nevada. This is a 56 km long mineralized trend containing both multi-million ounce, sedimentary-hosted (Carlin-type) gold deposits such as the Battle Mountain, Cortez and Ruby Hill Mines in addition to several significant Pb-Zn-Cu-Au-Ag deposits (FIGURE 7-1).

FIGURE 7-1 REGIONAL MINERAL DEPOSITS OF THE EUREAK AREA



Source: Nevada Zinc 2017, after Cline et al. 2003

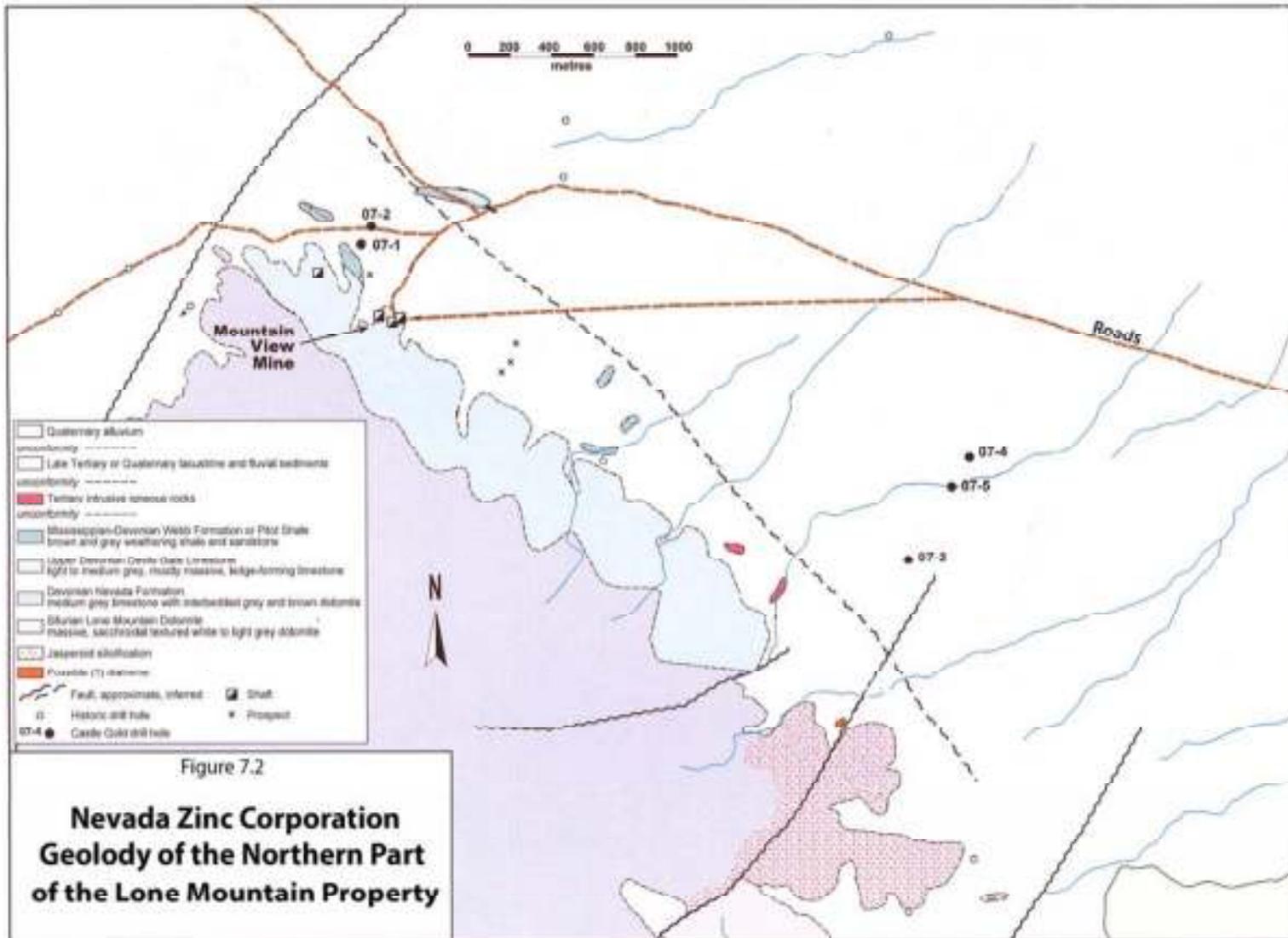
Sedimentary rocks underlying the Eureka District and Lone Mountain Project area formed in a Lower Paleozoic passive margin that developed on older Paleoproterozoic and Archean basement. These pre-orogenic Cambrian to Early Mississippian sedimentary rocks belong to an eastern carbonate assemblage. During the Late Devonian and Early Mississippian Antler Orogeny, a western assemblage of siliceous clastic and volcanoclastic rocks was thrust over the eastern assemblage. These Cambrian to Early Mississippian sediments are overlapped by a Mississippian to Permian post-orogenic coarse clastic assemblage. During the Late Paleozoic and Early Mesozoic, intermittent shortening and extension continued, resulting in the majority of northern Nevada being comprised of both western and eastern blocks separated by thrust faults (Gow, 2007). Mesozoic volcanic rocks occur within the central part of Eureka County. The southern area of the county contains exposed Cretaceous clastic unit members. Intrusive stocks are dispersed throughout the county. Tertiary rocks are comprised of lavas, pyroclastics and intercalated sedimentary rocks, whereas Quaternary alluvium partially fills valleys and covers the flanks of the ranges (Roberts et al., 1967).

Late Paleozoic and Mesozoic orogenic events resulted in folding and thrust faulting of the overlapping assemblage and underlying units within the Eureka County area. During Mesozoic and Tertiary Ages, granitic stocks were emplaced within these highly fractured areas. Mineralization is associated with the granitic stocks and consists mainly of silver-gold-lead-zinc replacement deposits within eastern carbonate assemblage (pre-orogenic Cambrian to Early Mississippian sedimentary facies). Gold, copper and barite deposits have been found within the western chert and shale assemblage (pre-orogenic Cambrian to Early Mississippian sedimentary facies). Volcanic rock deposits have also yielded significant iron and small amounts of silver (Roberts et al., 1967).

7.1.1 Property Geology

There are no comprehensive geological reports on the Lone Mountain Property and the information reported in this section is based on internal reports and memoranda including Adair (2007) and Gow (2007). Adair (2007) produced a geological map of the northern part of the Lone Mountain Property (FIGURE 7-2).

FIGURE 7-2 GEOLOGY OF THE NORTHERN PART OF THE LONE MOUNTAIN PROPERTY



Source: (Nevada Zinc 2017)

Adair (2007) reported that the Property is mainly underlain by overburden consisting of rocky alluvium. Ridges of grey limestone and dolomite of the Devonian Devils Gate Formation are exposed on the north side of Lone Mountain. The Devils Gate Formation overlies the Nevada Formation that forms the core of the Lone Mountain Inlier and is mainly exposed south of the Property (Gow 2007).

The Devils Gate Formation strikes northwest and dips northeast at 40 to 50 degrees. The Devils Gate Formation is approximately 630 metres thick and is comprised of thick-bedded, grey to blue-grey limestone that is the host of the lead-zinc mineralization at the Mountain View Mine. North of, and overlying the Devils Gate Formation, Adair (2007) reported a poorly exposed unit of interbedded limestone and brown silty sandstone that Adair interpreted to be the Mississippian Chainman or Pilot Formation.

Sub-crop material of grey to black shale and interbedded limestone has been mapped in the northwestern extent of the Property and has been interpreted by Adair (2007) as part of the Ordovician Vinini Formation, although Nevada Zinc geologists interpret this as more likely to be the Pilot shale or Chainman Formation.

FIGURE 7-3 STRATIGRAPHY OF THE LONE MOUNTAIN PROPERTY

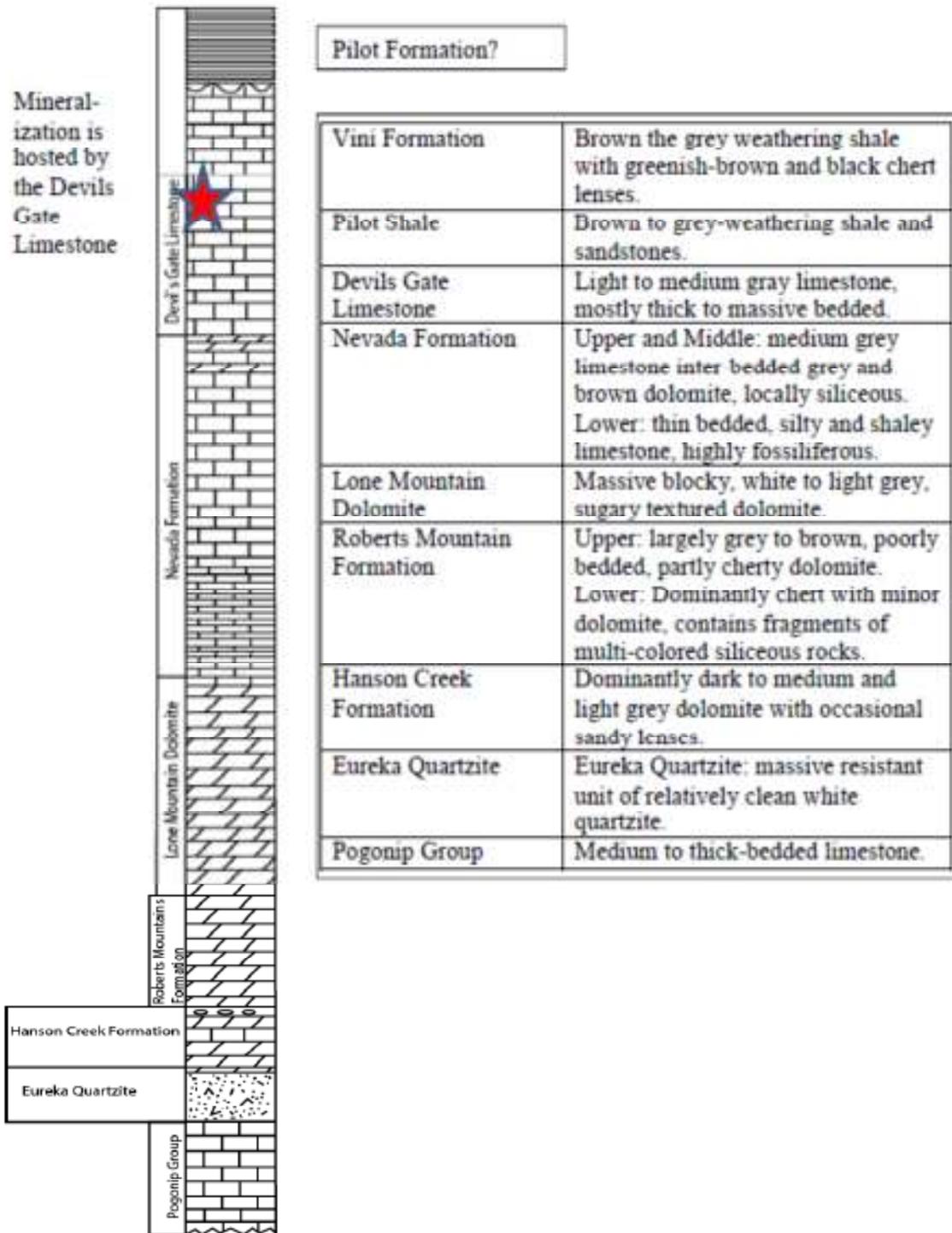


FIGURE 7-3 shows idealized stratigraphy and is not to scale.

7.2 STRUCTURE

Adair (2007) mapped one significant fault in the area that strikes northeast through the Mountain View Mine where it is well exposed in a trench and an open stope near the Extension Shaft.

An additional northeast striking fault is mapped east of the geophysical grid Line 4000E. This fault is interpreted to be associated with alteration, within the Nevada Formation, found to the south of the Lone Mountain Property. Drilling southwest of the Lone Mountain Property along this fault has shown weak gold intersections (Gow, 2007).

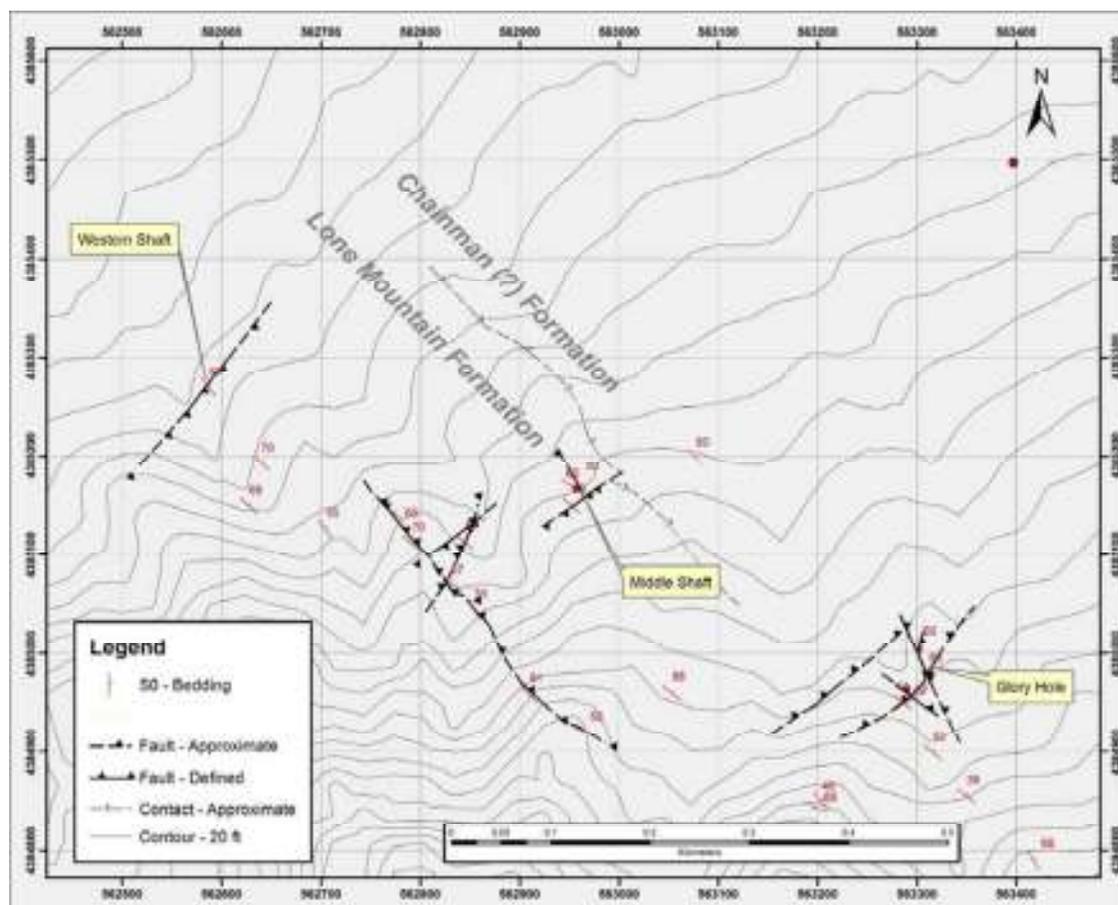
A structural investigation was completed by Terrane Geoscience Inc. in May of 2015 to characterize the geometry, structural evolution and controls on Zn and Pb, carbonate-hosted mineralization. Primary structures observed in the Devils Gate limestone include breccia beds, stylonitic bedding, slump folds, cross bedding, graded bedding, and fossiliferous horizons.

Structures related to two distinct generations of deformation were observed on the Lone Mountain Property. Early structures and fabrics related to Cordilleran shortening are designated as D1. The later extensional overprint characterized by two sets of brittle normal faults is designated D2. The D2 deformational event is interpreted as the product of Cenozoic, Basin-and-Range style extension (Kruse and Gilman, 2015).

The Pb and Zn mineralization at the Lone Mountain Property is strongly localized by D2 faults and appears to also be favourably located in a brecciated, bedding-parallel structural setting. Historic mine files indicate that bedding parallel mineralization was also located underground. D2 fault intersections with favourable stratigraphy seem to be particularly prospective zones. Several new prospect-scale faults were mapped and characterized (Kruse and Gilman, 2015).

FIGURE 7-4 shows the bedding (S0) orientations and approximate location of the Chainman/Lone Mountain Formation contacts.

FIGURE 7-4 CHAINMAN/LONE MOUNTAIN FORMATION CONTACTS



Source: From Kruse (2015)

7.3 MINERALIZATION AND ALTERATION

The zinc-lead mineralization of the Lone Mountain Property is constrained to the Devils Gate limestone/dolostone. There are two distinct types of mineralization found on the Property. The first type of mineralization is easily distinguishable from the grey host dolostone by its pink, red, yellow, orange to brown colour as described by Adair (2007) and produces both high and low grade assay results. This mineralization occurs in the brecciated dolostone of the Devils Gate Formation and is composed mainly of smithsonite and hemimorphite as fine grained aggregates or crystalline components filling voids. The breccia is often clast supported but the mineralization can be found within the colourful fine-grained matrix of the breccia or in dolostone clasts. Lesser amounts of lead occur with this type of mineralization however no significant lead minerals were detected in recent mineralogical work. The second type of mineralization is more difficult to define as there appears to be no significant colour or textural differences to distinguish the mineralization from the fine to medium grained host dolostone. The mineralization is grey to grey-white and produces both high grade and low-grade assay results. White crystalline and fine-grained barite and carbonate (mostly calcite) veins are ubiquitous across the Property.

The mineralization is predominately hemimorphite (Zn silicate-hydroxide), smithsonite (Zn carbonate) and Zn-bearing dolomite (Process Mineralogical Consulting, 2016; Savikangas et al., 2016). Within the Extension Shaft area of the Lone Mountain Mine, the mineralization appears to be restricted entirely to the rocks within the footwall of a D2 structure.

White crystalline barite is associated with the base metal mineralization as veins up to 3 m, and in other locations as infilling around limestone or dolomite breccias. Near the Lone Mountain Mine, the barite is closely associated with the lead-zinc occurrences. In Aurogin's drill hole 07- 1, near the Mine, zinc mineralization contains barite and the cuttings contain barite chips between zones of high-grade lead and zinc mineralization.

7.3.1 Mineralogical Analysis

A total of 13 samples, including 9 samples of crushed rock, and 4 previously prepared polished thin sections were submitted to Process Mineralogical Consulting Ltd. for mineralogical analysis. The purpose of the investigation was to determine the nature and availability of Zn- bearing minerals for potential metallurgical concentration.

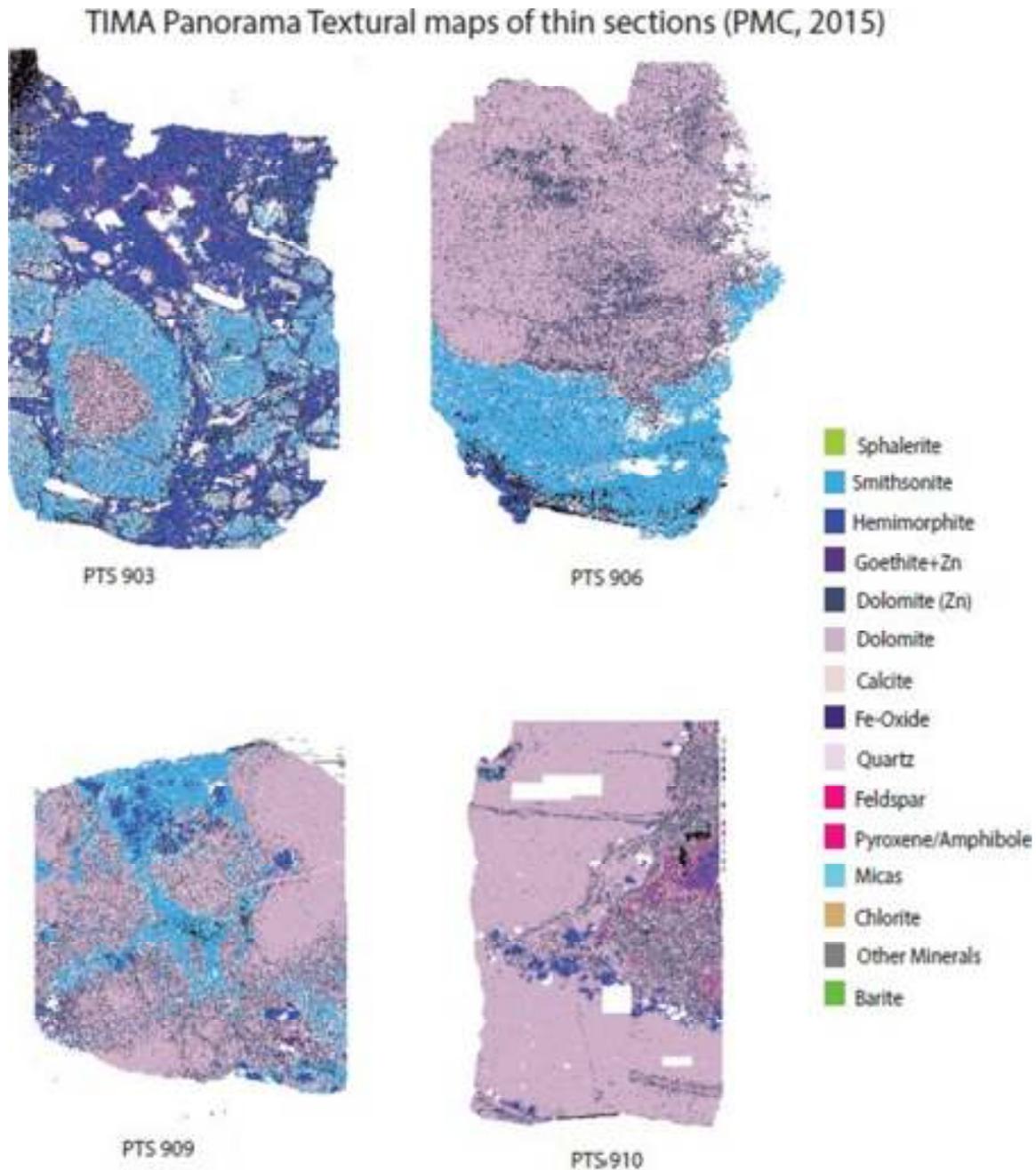
The samples were stage crushed to ~90% passing 20 mesh (850µm) to provide a statistically representative sample for analysis. A portion of each sample was submitted for ICP-OES analysis to determine the major elemental components and a subsequent pulverized portion was submitted for X-ray diffraction to determine the mineral compositions based on crystallographic positions. A riffled portion of the crushed material was also prepared into a single polished block section for examination by the Tescan Integrated Mineral Analyser (TIMA). The TIMA analysis determined the mineral content based on elemental compositions of individual grains as well as providing data on liberation and association constraints of the Zn-bearing minerals.

The TIMA analysis of the crushed samples determined that Zn is mainly present as hemimorphite with the exception of one sample that contains a significant amount of Zn-bearing dolomite and one sample that contains a significant contribution of Zn in the form of smithsonite.

The thin section samples are mainly composed of dolomite, and hemimorphite with lesser amounts of calcite and smithsonite, Figure 7.5. Minor amounts of iron oxides and pyroxene/amphiboles are also present in some samples. In most of the polished thin sections, Zn is mainly present as smithsonite with the exception of PTS 911, which has significant amounts of hemimorphite.

Outotec Research Centre in Pori, Finland, has conducted preliminary acid leaching tests for the Lone Mountain zinc mineralization. Although high recovery of zinc can be achieved, acid consumption is very high as the carbonate in the mineralized rock reacts with the acid. Furthermore, careful pH management is required to control the formation of silica gel.

FIGURE 7-5 TIMA IMAGES OF MINERALIZATION IN THIN SECTION



7.4 DEPOSIT GEOLOGY

The mineralization on the Lone Mountain Property is primarily associated with the northwest striking and northeast dipping Devils Gate Limestone. Based on Nevada Zinc's trench sampling and drilling, the mineralization comes to surface over an approximately 1.4 km long northwest striking zone and dips 30 to 40 degrees toward the northeast. Drilling indicates that the

mineralized zone has significant widths with intersections ranging from 10s of metres to over 100 m in width.

Structural studies for Nevada Zinc indicate that Pb and Zn mineralization at the Lone Mountain Property is strongly localized by D2 faults and appears to also be favourably located in a brecciated, bedding-parallel structural setting. At the past producing Mountain View Mine, the mineralization is reported to occur in breccia zones located at the intersection of two sets of faults (Roberts et al. 1967).

8 DEPOSIT TYPES

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

The mineralization in the Eureka District was among the first of the large replacement deposits in limestone or dolomite to be mined extensively in the Western United States. Nolan (1962) described the Eureka District mineralization as being categorized in five general types: irregular replacement deposits; bedded replacement deposits; fault zone deposits; disseminated deposits; and contact metasomatic bodies. Most of these types are found within limestone and dolomite, with dolomite being the most common host.

Nolan (1962) describes the mineralization of the district to be made up of oxidized lead, arsenic, and silver minerals, and gold, with oxidized zinc minerals being present in some localities. Nolan (1962) notes that the proportions of these minerals are variable from mine to mine, and often within an individual mine. The common gangue minerals include iron-rich minerals, silica-rich minerals, and carbonate wallrock.

Mineralization is considered to have been originally deposited as sulphides and then subsequently oxidized by circulating ground water. Nolan (1962) summarizes the alteration of an original hypogene ore body that consisted of pyrite, arsenopyrite, galena, sphalerite, molybdenite, gold, and an undetermined silver mineral to the carbonate, sulfate, and oxide minerals that constitute the present mineralization. Alteration has produced karst solution cavities over larger mineralized bodies and can be found to depths of approximately 300 m.

The zinc-rich mineralization at the Lone Mountain Property has similar characteristics to the other carbonate-hosted replacement deposit of the Eureka District. This mineralization style is consistent with the supergene-type non-sulphide zinc deposits reviewed by Hitzman et al. (2003). In their summary review paper Hitzman et al. (2003) describe these deposits as forming as a result of weathering of Mississippi Valley-type and high-temperature carbonate replacement-type zinc deposits.

9 EXPLORATION

Note: The information contained in this section is copied in its entirety from "Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA" completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

This section includes exploration conducted by Nevada Zinc and Goldspike, Nevada Zinc's parent company.

9.1 SOIL GEOCHEMISTRY

In June, 2014 a geochemical soil sampling program was carried out to better resolve data over part of the area where the previous geochemical survey work was completed in 2007. 141 samples were taken at stations every 50 metres over nine lines spaced 100-200 metres apart. Results were used to identify areas of anomalous lead and zinc.

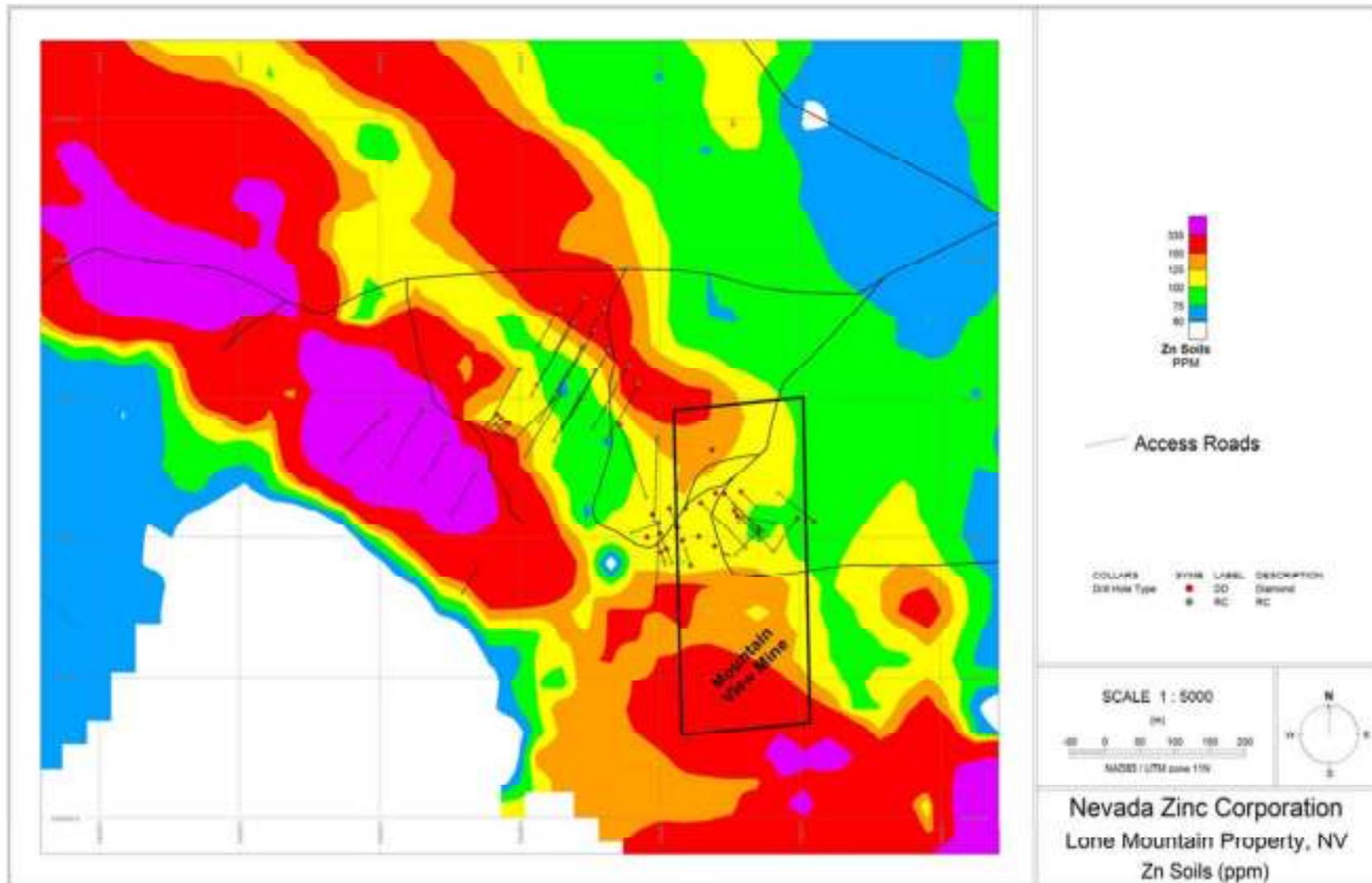
A follow up soil sampling program was carried out in September-October 2014 to extend the coverage on the Property as well as to continue to define potential anomalous zones (Pb, Zn, Fe etc.). 829 samples were taken at stations every 50 m on lines spaced 100 m apart. This work filled gaps over a 2.0 km strike length and revealed anomalous zones for several elements (FIGURE 9-1).

The results of the 2014 soil sampling program indicated the following:

- There is a well-defined, strong zinc in the soil anomaly accompanying the up-dip projection of the mineralization discovered for a minimum 1,400 metre length parallel to stratigraphy.
- There is a second well defined soil geochemical anomaly that is primarily lead enriched with lesser anomalous zinc which appears to roughly correlate with the location of the more northerly part of the drill holes completed to date including the areas of the collars of holes LM-15-27 and LM-15-36. This anomaly also extends for a minimum 1,400 metre length parallel to stratigraphy.
- Additional geochemical data has been collected to the southeast of the Mountain View Mine claim which show the anomaly extends in that direction.

An additional 31 soil samples were collected in May 2016 to provide data on the patented claim.

FIGURE 9-1 SOIL GEOCHEMISTRY, LONE MOUNTAIN ZINC PROPERTY

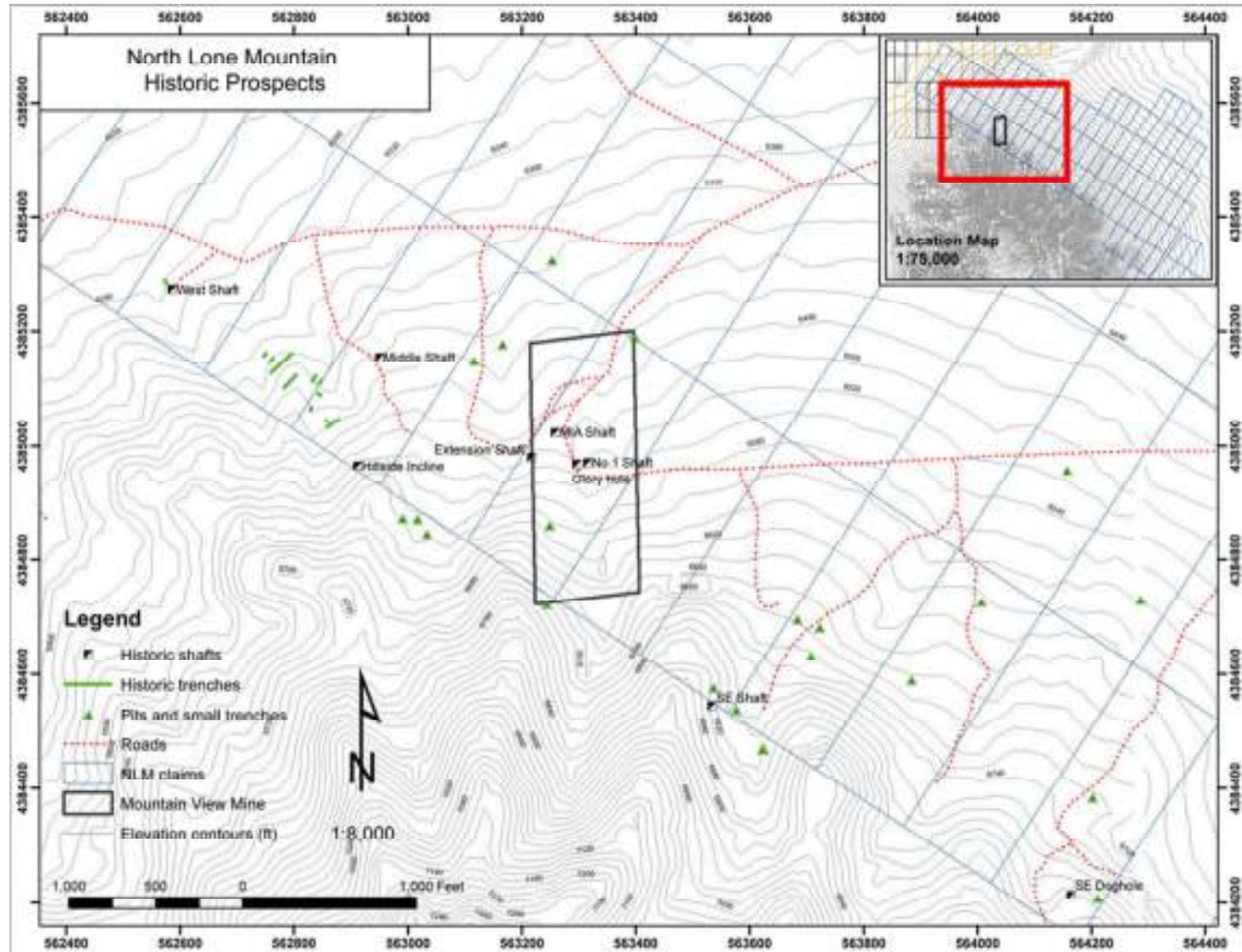


Source: Nevada Zinc, 2017

9.2 TRENCHES AND PITS

Trenches and pits were sampled where available (FIGURE 9-2). In an attempt to understand iron and zinc anomalies to the southeast of the patent claim, trenches and pits were inspected but were generally slumped in or did not reach bedrock. Some of the pits were likely related to older placer gold exploration. Grab samples were acquired from outcrops and shallow shafts and analyzed by handheld portable XRF. The field results indicate localized high-grade base metal mineralization with values up to 34.7% Zn and lesser Pb values to 1.2% Pb.

FIGURE 9-2 HISTORIC SHAFTS, PITS, AND TRENCHES INVESTIGATED WITH PORTABLE XRF



Source: Nevada Zinc, 2017

10 DRILLING

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

10.1 PROPERTY BEDROCK MAPPING

It should be noted that this section includes work conducted by Nevada Zinc’s parent company, Goldspike. An amalgamation between the two companies took place in March of 2015, further details of that transaction are provided in Section 4.

A study of historical information combined with the results of initial field work led to several drill programs. Between October 2014 and November 2017 the Company has completed six phases of drilling consisting of 85 reverse circulation holes and 13 drill core holes. In total there were 12,234.69 metres of reverse circulation drilling, and 2,082.54 metres of core drilling (TABLE 10-1). Borehole locations are presented on FIGURE 10-1. A northwest facing cross section, of the line highlighted in blue, is presented on FIGURE 10-2. FIGURE 10-3 features idealized longitudinal section pierce points.

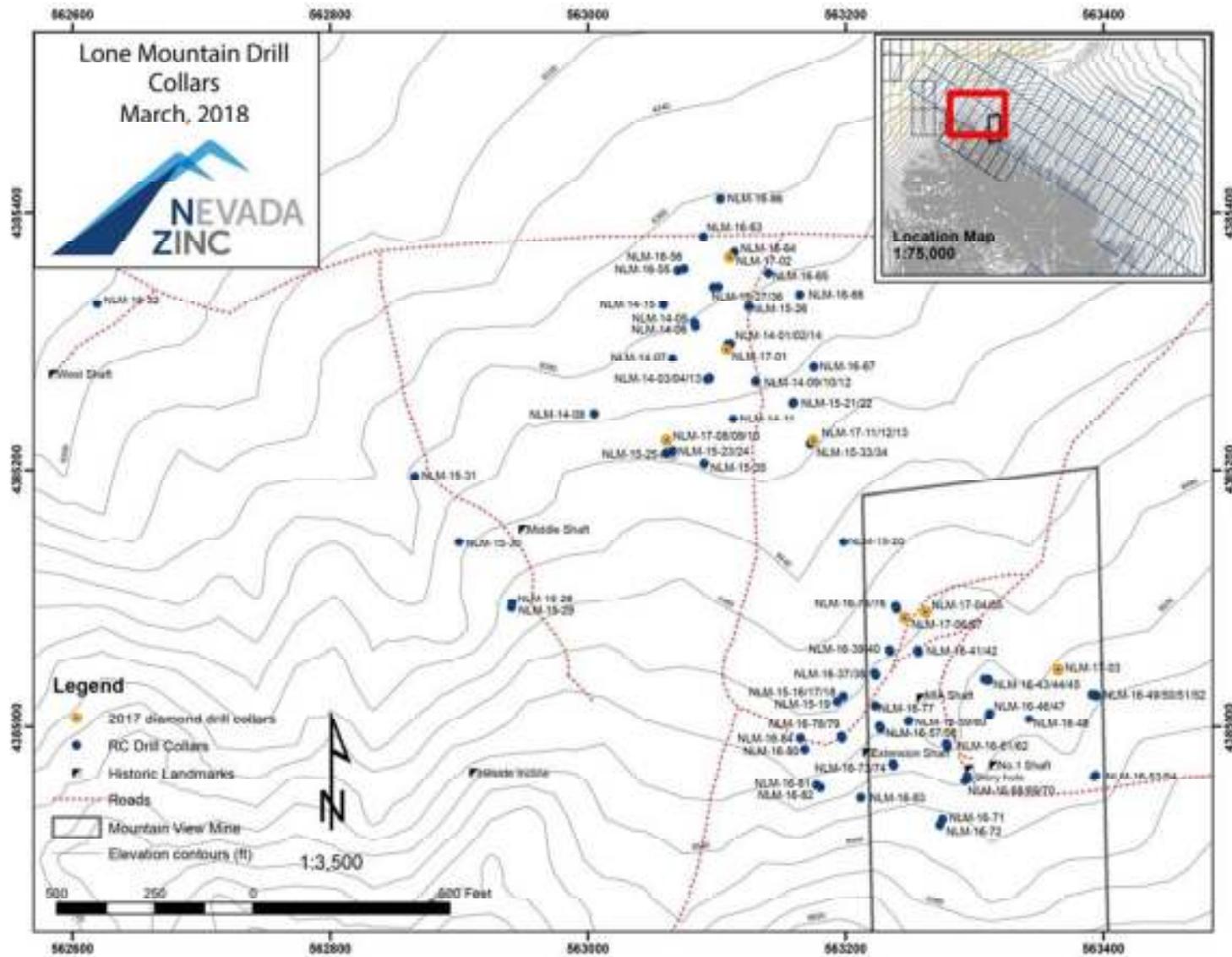
Hole ID	UTM NAD83 Zone 11S		Elevation (m)	Azimuth (°)	Dip (°)	Depth (ft)	Depth (m)
	Easting	Northing					
NLM-14-01	563,109	4,385,298	1,947.8	210	-70	725	220.98
NLM-14-02	563,109	4,385,298	1,947.8	210	-60	670	204.22
NLM-14-03	563,095	4,385,271	1,949.0	210	-45	420	128.02
NLM-14-04	563,095	4,385,271	1,949.0	210	-60	548	167.03
NLM-14-05	563,083	4,385,314	1,945.2	210	-70	750	228.60
NLM-14-06	563,084	4,385,312	1,945.5	210	-60	680	207.26
NLM-14-07	563,066	4,385,287	1,946.7	210	-60	610	185.93
NLM-14-08	563,005	4,385,244	1,946.7	210	-45	460	140.21
NLM-14-09	563,131	4,385,269	1,950.5	210	-75	1000	304.80
NLM-14-10	563,131	4,385,269	1,950.5	210	-60	700	213.36
NLM-14-11	563,113	4,385,239	1,952.6	210	-60	632	192.63
NLM-14-12	563,131	4,385,269	1,950.5	210	-86	1000	304.80
NLM-14-13	563,093	4,385,270	1,949.1	210	-49	610	185.93
NLM-14-14	563,111	4,385,298	1,947.7	210	-80	920	280.42
NLM-14-15	563,059	4,385,328	1,943.0	210	-75	810	246.89
NLM-15-16	563,198	4,385,024	1,974.0	182	-45	460	140.21
NLM-15-17	563,198	4,385,024	1,974.0	182	-90	240	73.15
NLM-15-18	563,198	4,385,024	1,974.0	182	-66	280	85.35
NLM-15-19	563,194	4,385,020	1,974.0	250	-66	320	97.54
NLM-15-20	563,199	4,385,144	1,963.7	182	-45	550	167.64
NLM-15-21	563,160	4,385,252	1,952.3	210	-75	870	265.18

TABLE 10-1 DRILL HOLE LOCATIONS, PHASE 1-6, LONE MOUNTAIN PROPERTY							
Hole ID	UTM NAD83 Zone 11S		Elevation (m)	Azimuth (°)	Dip (°)	Depth (ft)	Depth (m)
	Easting	Northing					
NLM-15-22	563,159	4,385,252	1,952.3	210	-65	820	249.94
NLM-15-23	563,066	4,385,214	1,955.7	210	-45	500	152.40
NLM-15-24	563,066	4,385,214	1,955.7	210	-60	540	164.59
NLM-15-25	563,061	4,385,213	1,956.1	225	-50	520	158.50
NLM-15-26	563,125	4,385,326	1,945.5	210	-80	810	246.89
NLM-15-27	563,098	4,385,342	1,943.5	210	-70	860	262.13
NLM-15-28	562,941	4,385,093	1,963.8	210	-45	330	100.58
NLM-15-29	562,941	4,385,096	1,963.8	210	-90	435	132.59
NLM-15-30	562,900	4,385,144	1,954.0	210	-45	330	100.58
NLM-15-31	562,866	4,385,195	1,945.4	210	-45	470	143.26
NLM-15-32	562,619	4,385,329	1,915.8	210	-45	270	82.30
NLM-15-33	563,173	4,385,220	1,955.3	210	-75	800	243.84
NLM-15-34	563,173	4,385,220	1,955.3	210	-65	730	222.50
NLM-15-35	563,091	4,385,205	1,956.2	210	-60	500	152.40
NLM-15-36	563,101	4,385,343	1,943.6	210	-81	875	266.70
NLM-16-37	563,223	4,385,041	1,973.0	160	-90	280	85.34
NLM-16-38	563,224	4,385,040	1,973.0	160	-60	280	85.34
NLM-16-39	563,234	4,385,061	1,973.0	160	-90	320	97.54
NLM-16-40	563,235	4,385,059	1,973.0	160	-60	300	91.44
NLM-16-41	563,256	4,385,060	1,974.6	160	-90	300	91.44
NLM-16-42	563,257	4,385,059	1,974.7	160	-45	270	82.30
NLM-16-43	563,311	4,385,037	1,981.9	160	-90	260	79.25
NLM-16-44	563,311	4,385,036	1,981.9	160	-45	230	70.10
NLM-16-45	563,308	4,385,037	1,981.8	210	-50	370	112.78
NLM-16-46	563,312	4,385,011	1,984.2	175	-90	140	42.67
NLM-16-47	563,312	4,385,009	1,984.3	180	-45	200	60.96
NLM-16-48	563,343	4,385,006	1,983.7	215	-50	410	124.97
NLM-16-49	563,392	4,385,025	1,985.1	215	-50	620	188.98
NLM-16-50	563,392	4,385,026	1,985.0	215	-80	230	70.10
NLM-16-51	563,395	4,385,024	1,985.1	160	-45	300	91.44
NLM-16-52	563,394	4,385,025	1,985.1	160	-65	250	76.20
NLM-16-53	563,394	4,384,963	1,990.4	215	-90	465	141.73
NLM-16-54	563,393	4,384,961	1,990.3	215	-45	395	120.40
NLM-16-55	563,070	4,385,355	1,941.3	210	-90	800	243.84
NLM-16-56	563,075	4,385,356	1,941.4	160	-80	900	274.32
NLM-16-57	563,227	4,385,000	1,978.3	160	-90	235	71.628
NLM-16-58	563,227	4,384,998	1,978.4	160	-45	170	51.816
NLM-16-59	563,249	4,385,005	1,980.2	160	-90	300	91.44
NLM-16-60	563,249	4,385,004	1,980.2	160	-60	300	91.44
NLM-16-61	563,279	4,384,987	1,981.8	160	-90	350	106.68
NLM-16-62	563,279	4,384,985	1,981.8	160	-45	300	91.44
NLM-16-63	563,089	4,385,381	1,941.0	120	-90	830	252.98

TABLE 10-1 DRILL HOLE LOCATIONS, PHASE 1-6, LONE MOUNTAIN PROPERTY

Hole ID	UTM NAD83 Zone 11S		Elevation (m)	Azimuth (°)	Dip (°)	Depth (ft)	Depth (m)
	Easting	Northing					
NLM-16-64	563,114	4,385,368	1,942.8	120	-90	890	271.27
NLM-16-65	563,140	4,385,352	1,944.4	210	-80	780	237.74
NLM-16-66	563,164	4,385,336	1,945.9	210	-70	700	213.36
NLM-16-67	563,175	4,385,279	1,951.6	210	-75	720	219.46
NLM-16-68	563,294	4,384,961	1,984.6	030	-50	200	60.96
NLM-16-69	563,295	4,384,959	1,984.6	160	-90	360	109.73
NLM-16-70	563,293	4,384,957	1,984.9	160	-45	292	88.39
NLM-16-71	563,275	4,384,928	1,994.9	340	-45	470	143.26
NLM-16-72	563,273	4,384,924	1,995.3	340	-65	350	106.68
NLM-16-73	563,236	4,384,971	1,983.3	160	-90	180	54.86
NLM-16-74	563,237	4,384,970	1,983.5	160	-45	180	54.86
NLM-16-75	563,238	4,385,093	1,971.4	160	-90	290	88.39
NLM-16-76	563,239	4,385,091	1,971.5	160	-45	290	88.39
NLM-16-77	563,223	4,385,016	1,976.0	160	-90	230	70.10
NLM-16-78	563,196	4,384,992	1,976.5	160	-90	250	76.20
NLM-16-79	563,197	4,384,990	1,976.5	160	-45	200	60.96
NLM-16-80	563,168	4,384,982	1,976.9	160	-90	250	76.20
NLM-16-81	563,177	4,384,954	1,980.5	160	-90	250	76.20
NLM-16-82	563,180	4,384,952	1,980.6	160	-45	150	45.72
NLM-16-83	563,212	4,384,944	1,984.6	340	-90	200	60.96
NLM-16-84	563,165	4,384,991	1,976.7	340	-45	200	60.96
NLM-16-86	563,103	4,385,410	1,938.9	120	-80	860	262.13
NLM-17-01	563,108	4,385,294	1,948.0	210	-69	957	291.89
NLM-17-02	563,110	4,385,365	1,943.2	120	-88	847	258.34
NLM-17-03	563,365	4,385,044	1,980.5	215	-48	515	157.08
NLM-17-04	563,262	4,385,089	1,974.4	160	-45	250	76.25
NLM-17-05	563,262	4,385,089	1,974.4	160	-75	292	89.06
NLM-17-06	563,246	4,385,085	1,972.8	160	-89	337	102.79
NLM-17-07	563,246	4,385,085	1,972.8	160	-46	230	70.15
NLM-17-08	563,061	4,385,223	1,953.3	210	-90	550	167.75
NLM-17-09	563,061	4,385,223	1,953.3	210	-61	517	157.69
NLM-17-10	563,061	4,385,223	1,953.3	210	-48	459	140.00
NLM-17-11	563,175	4,385,222	1,955.2	210	-45	649	197.95
NLM-17-12	563,175	4,385,222	1,955.2	210	-64	485	147.93
NLM-17-13	563,175	4,385,222	1,955.2	210	-89	740	225.70

FIGURE 10-1 DRILL HOLE LOCATIONS, LONE MOUNTAIN PROPERTY

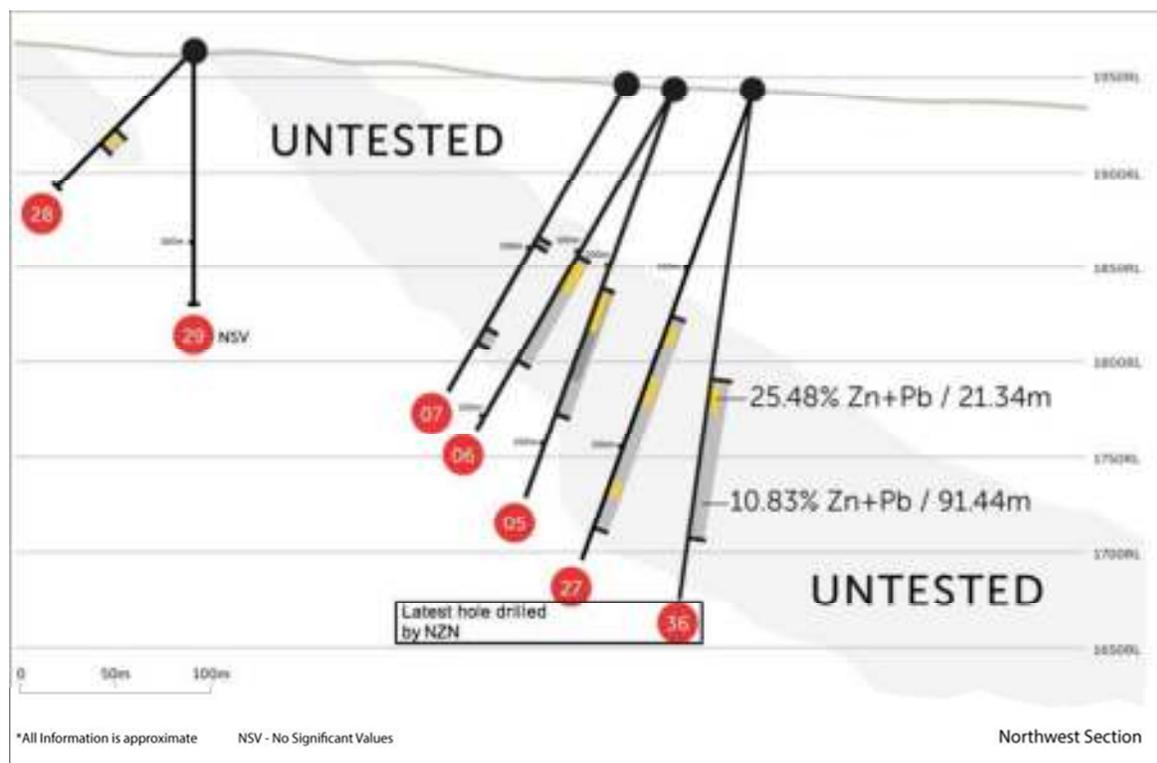


Source: www.nevadazinc.com

10.2 PHASE I DRILL PROGRAM

Between October and December, 2014, 15 reverse circulation drill holes were executed on the Lone Mountain Property as part of its Phase I exploration program. NLM-14-01 to NLM-14-15 were drilled at an azimuth of 210o with dips ranging from -45 to -86 o. Drilling was designed to follow up on the historic, high-grade lead-zinc mineralization intersected at depth in LM07-01. Several ~30 m step out holes were drilled along strike and up dip from the initial discovery setup in order to test the continuity of the mineralization. Drilling from this phase totaled 3,211.07 m. Select mineralized intervals are highlighted in TABLE 10-2.

FIGURE 10-2 PLAN VIEW OF SELECT DRILL HOLE LOCATIONS, LONE MOUNTAIN PROPERTY



Source: Nevadazinc.com, Investor Presentation, Q3, 2016

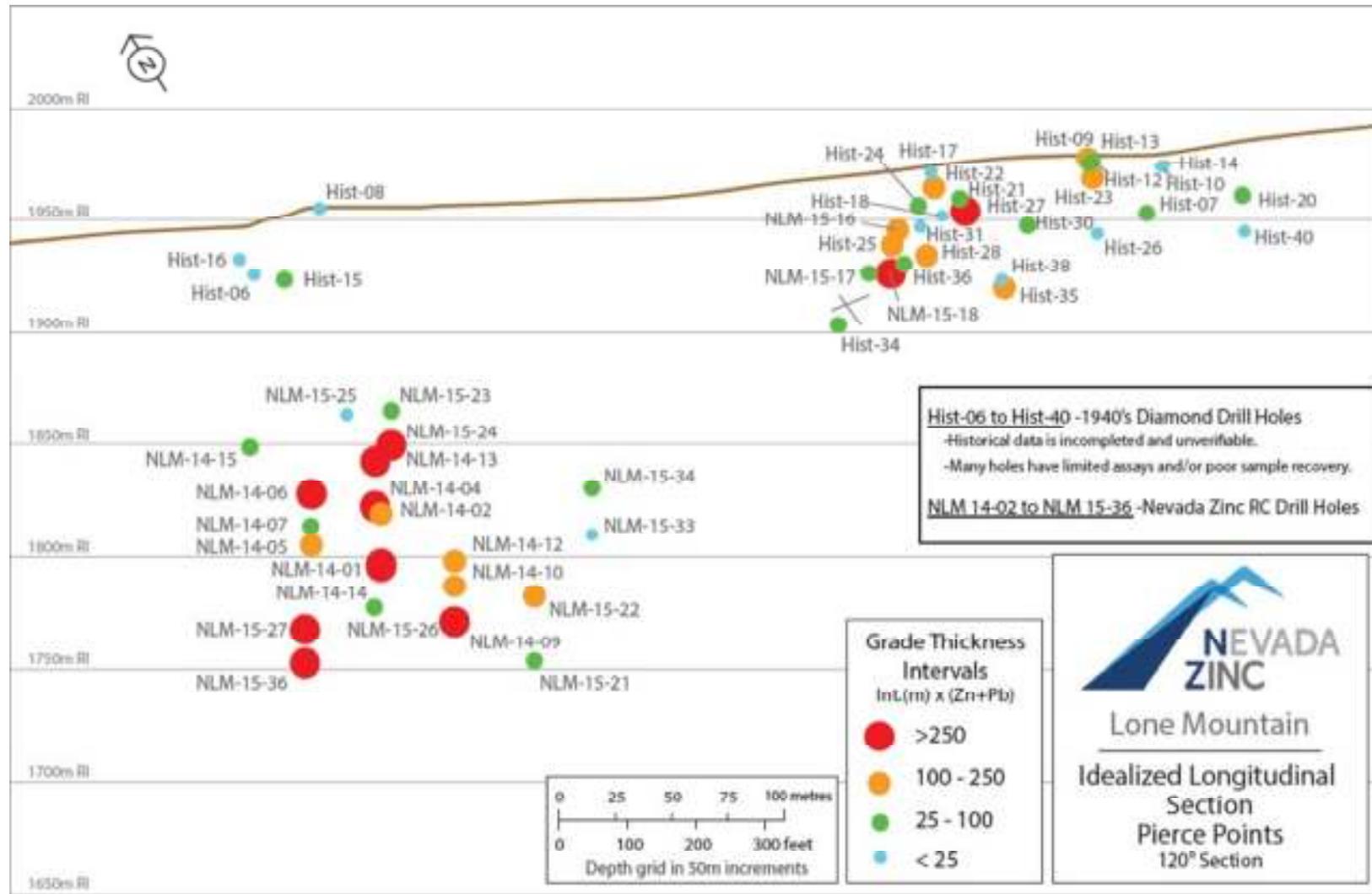
TABLE 10-2 SIGNIFICANT PHASE I DRILL INTERCEPTS

Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
LM-14-01	114.30	204.22	89.92	6.22	1.34	7.56
Including	114.30	118.87	4.57	2.39	22.82	25.21
and	144.78	158.50	13.72	10.56	0.64	11.20
and	193.55	204.22	10.67	27.22	0.10	27.32
LM-14-02	108.20	185.93	77.73	2.76	0.29	0.29
Including	108.20	112.78	4.58	4.35	2.17	6.52
and	166.12	185.93	19.81	9.08	0.04	9.12
LM-14-04	121.92	167.03	45.11	11.62	0.25	11.87
Including	146.30	166.12	19.82	26.44	0.49	26.93
Including	147.83	163.07	15.24	33.06	0.61	33.67
LM-14-05	112.78	182.88	70.10	1.05	1.82	2.87
Including	112.78	163.07	50.29	0.94	2.50	3.44
Including	112.78	135.64	22.86	0.83	5.34	6.17
LM-14-06	102.11	166.12	64.01	5.87	1.11	6.98
Including	105.16	121.92	16.76	19.82	3.76	23.58
LM-14-07	94.49	96.01	1.52	3.68	0.02	3.70
LM-14-07	147.83	156.97	9.14	2.99	0.11	3.10
LM-14-09	114.30	254.51	140.21	4.04	1.13	5.17
Including	114.30	233.17	118.87	4.71	1.33	6.04
and	115.82	158.50	42.68	4.75	3.30	8.05
and	167.64	170.69	3.05	5.64	1.32	6.96
and	208.79	233.17	24.38	12.81	0.06	12.87
LM-14-10	178.31	196.60	18.29	6.41	0.41	6.82
Including	178.31	187.45	9.14	12.10	0.72	12.82
LM-14-12	138.68	164.59	25.91	5.21	0.22	5.43
Including	140.21	156.97	16.76	7.12	0.26	7.38
Including	149.35	155.45	6.10	11.38	0.25	11.63
LM-14-13	109.73	169.16	59.43	7.32	0.64	7.96
Including	143.26	161.54	18.28	22.01	0.93	22.94
Including	143.26	150.88	7.62	30.47	2.12	32.59
Including	156.97	161.54	4.57	32.76	0.11	32.87
LM-14-14	120.40	185.93	65.53	4.49	1.88	6.37
Including	120.40	166.12	45.72	6.05	2.62	8.67
Including	120.40	128.02	7.62	8.07	14.83	22.90
Including	138.68	166.12	27.44	7.30	0.14	7.44
LM-14-14	208.79	213.36	4.57	5.04	0.04	5.08
LM-14-15	92.96	99.06	6.10	1.32	2.92	4.24
Including	92.96	96.01	3.05	1.22	5.34	6.56

10.3 PHASE II DRILLING

Between January and February, 2015, Nevada Zinc drilled 10 reverse circulation drill holes to follow up the Phase I campaign in 2014. Five holes (NLM-15-16 to NLM-15-20) were drilled proximal to the mine patent (Mountain View Extension area) and were generally oriented at an azimuth of 182° with one off angle hole oriented at an azimuth of 250°. The dips ranged from -45° to -90°. These holes were designed to test the continuity of mineralization along strike from the historical mine site. The remaining five holes (NLM-15-21 to NLM-15-25) were drilled along strike and up dip from the discovery section. Total drilling for Phase II reached 1,554.50 m. Select mineralized intervals are highlighted in TABLE 10-3.

FIGURE 10-3 IDEALIZED LONGITUDINAL PROJECTION PIERCE POINTS, LONE MOUNTAIN PROPERTY



Source: Nevadazinc.com, Investor Presentation, Q3, 2016

TABLE 10-3 SIGNIFICANT PHASE II DRILL INTERCEPTS						
Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
LM-15-16	33.53	44.20	10.67	11.05	0.01	11.06
Including	33.53	38.10	4.57	23.53	0.01	23.54
LM-15-17	35.05	57.91	22.86	3.04	0.04	3.08
Including	45.72	57.91	12.19	5.21	0.02	5.23
LM-15-18	27.43	74.68	47.25	6.14	0.06	6.20
Including	35.05	60.96	25.91	10.36	0.18	10.54
Including	35.05	41.15	6.10	18.32	0.04	18.36
LM-15-21	138.68	147.83	9.15	1.44	1.63	3.07
LM-15-21	153.92	158.50	4.58	3.31	0.13	3.44
LM-15-21	198.12	210.31	12.19	3.14	0.01	3.15
LM-15-22	134.11	149.35	15.24	2.59	0.69	3.28
LM-15-22	167.64	204.22	36.58	3.90	0.03	3.93
LM-15-22	214.88	216.41	1.52	5.71	0.00	5.71
LM-15-22	230.12	233.17	3.05	2.91	0.08	2.99
LM-15-23	117.35	135.64	18.29	3.76	0.01	3.77
Including	117.35	118.87	1.52	11.45	0.03	11.48
Including	123.44	135.64	12.19	4.21	0.01	4.22
LM-15-24	96.01	146.30	50.29	5.05	0.21	5.26
Including	97.54	103.63	6.10	11.22	0.39	11.61
LM-15-24	140.21	140.21	6.10	21.81	0.92	22.73
LM-15-25	117.35	120.40	3.05	3.86	0.00	3.86

10.4 PHASE III DRILLING

In April and May of 2015, Nevada Zinc drilled 11 reverse circulation drill holes following the results of the Phase I and Phase II campaigns. Six holes (NLM-15-26, NLM-15-27, as well as NLM-15-33 to NLM-15-36) were drilled along strike as well as up/down dip from the discovery section. Holes were drilled at an azimuth of 210° with dips varying from -45° to -90°. These holes were designed to test and possibly extend mineralization. A total of five holes (NLM-15-28 to NLM-15-32) were drilled into the zinc in the soil geochemical anomaly trend. The Phase III drill program totaled 1,953.77 m of RC drilling. Selected mineralized intervals are highlighted in TABLE 10-4.

TABLE 10-4 SIGNIFICANT PHASE III DRILL INTERCEPTS						
Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
LM-15-26	155.45	182.89	27.44	3.23	0.18	3.41
LM-15-27	126.49	245.36	118.87	9.58	0.74	10.32
Including	131.06	141.73	10.67	1.97	4.44	6.41
and	160.02	175.26	15.24	27.82	1.25	29.07
and	217.93	227.08	9.14	26.62	0.63	27.25
LM-15-28	59.44	67.06	7.62	2.70	0.00	2.70
Including	59.44	65.53	6.09	2.98	0.00	2.98
LM-15-33	146.30	152.40	6.10	2.71	0.41	3.12
LM-15-34	128.02	144.78	16.76	4.20	1.76	5.96
Including	138.68	141.73	3.05	12.70	6.91	19.61
LM-15-34	192.02	195.07	3.05	10.06	0.00	10.06
LM-15-36	146.30	237.74	91.44	9.49	1.34	10.83
Including	149.35	170.69	21.34	22.84	2.64	2.64

10.5 PHASE IV DRILLING

From May to July, 2016, 25 reverse circulation holes were drilled with the purpose of delineating the near surface zinc mineralization that could potentially be mined using open pit methods as well as continued evaluation of the discovery hole. The first two holes were drilled from the same drill pad with a separation of approximately 50 m on the zinc mineralized zone. The holes were located near the west boundary of the Mountain View Mine Property. Hole LM-16-37 (- 90o) intersected zinc mineralization at a vertical depth of 68.6 m. A 4.57 m interval from 68.58 to 73.15 m averaged 4.45% zinc. The zinc target tested in these short drill holes is one of two or more zinc zones in the area near some historic small-scale mining on the Mountain View Mine Property that occurred nearly 50 years ago. That mining was apparently focused on narrow high- grade zinc rich fractures with the material hand sorted and direct shipped to a smelter for processing. The drill hole assay data reported shows zinc-lead mineralization essentially extending from the west boundary of the Mountain View Mine to beyond the mid-point of the Mountain View Mine Property a distance of more than 175 m. Two drill holes, LM-16-43 and 44 collared in zinc-lead mineralization under shallow overburden. Three drill holes, LM-16-40, LM- 16-44 and LM-16-46 appear to have intersected shallow historic mine openings and therefore are missing the high-grade portion of the zinc-lead mineralization that would have been mined at those locations. Drill Hole LM-16-52 intersected high-grade zinc-lead mineralization at a vertical depth of only 28.96 m. A 12.19 m interval from 28.96 to 41.15 m averaged 11.56% zinc and 0.82% lead (12.38% zinc + lead). In drill hole LM-16-49, 12 samples intervals, each of 5 feet in length, were not recovered for technical reasons in areas that are likely to have been mineralized. Drill hole LM16-56, at the Discovery Zone area, intersected a broad zone of mineralization commencing at a depth of 164.59 m and continuing for a hole length of 100.58 m that averaged 7.0% zinc+lead. This is the deepest test of the

Discovery Zone to-date and the zone remains open at depth. Six of the eight holes were drilled to test for the presence of shallow, non-sulfide, zinc- lead mineralization in areas proximal to historic small-scale mine operations on the west side of the Mountain View Mine Property, situated within the boundaries of the Project. Most of the drill holes intersected significant zinc-lead mineralization at shallow depths associated with brecciated and fractured sedimentary rocks of the Devils Gate Formation. At a depth of only 6.1 m from surface, drill hole LM-16-57 intersected 6.4% zinc+lead mineralization over a hole length of 47.24 m. Drill holes LM-57, 58 and 59 appear to have intersected historic workings or other near surface poorly consolidated material and therefore did not have complete sample recovery included in the zones of mineralization.

Drill hole LM-16-55 and 56 were drilled to test the northwesterly and down dip part on the Discovery Zone and the extremely broad zone of mineralization in drill hole LM-16-56 is the deepest test on the Discovery Zone to-date.

Select mineralized intervals are highlighted in TABLE 10-5.

TABLE 10-5 SIGNIFICANT PHASE IV DRILL INTERCEPTS						
Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
LM-16-37	63.58	73.15	4.57	4.45	0.01	4.46
LM-16-38	41.15	65.53	24.38	7.70	0.01	7.71
Including	54.86	62.48	7.62	15.53	0.04	15.57
LM-16-39	50.29	56.39	6.10	6.83	3.04	9.87
Including	50.29	51.82	1.52	15.25	7.02	22.27
LM-16-40	30.48	35.05	4.57	7.00	0.80	7.80
LM-16-40	56.39	80.77	24.38	3.39	0.02	3.41
LM-16-41	33.53	47.24	13.71	1.86	0.31	6.98
Including	33.53	44.20	10.67	2.09	0.33	2.42
LM-16-42	22.86	44.20	21.34	6.61	2.51	9.12
Including	25.91	33.53	7.62	11.18	4.37	15.55
LM-16-43	4.57	9.14	4.57	3.20	0.73	3.93
LM-16-43	208.79	233.17	24.38	12.81	0.06	12.87
LM-16-44	4.57	7.62	3.05	3.63	0.07	3.70
LM-16-44	24.38	35.05	10.67	11.38	1.12	12.50
LM-16-45	92.96	100.58	7.62	5.17	2.39	7.56
LM-16-46	12.19	32.00	19.81	4.42	0.80	5.22
LM-16-47	9.14	0.22	13.72	4.57	12.14	12.36
LM-16-48	10.67	114.30	103.63	2.78	0.66	3.44
Including	19.81	35.05	15.24	11.89	3.74	15.63
LM-16-49	21.34	59.44	38.10	3.48	0.87	4.35
LM-16-49	80.77	85.34	4.57	23.53	0.01	23.54
LM-16-50	33.53	44.20	10.67	7.20	1.58	8.78
Including	39.62	42.67	3.05	18.20	0.74	18.94

TABLE 10-5 SIGNIFICANT PHASE IV DRILL INTERCEPTS						
Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
LM-16-51	57.91	60.96	3.05	2.37	0.03	2.40
LM-16-52	28.96	41.15	12.19	11.56	0.82	12.38
LM-16-53	126.49	128.02	1.52	1.96	0.99	2.95
LM-16-55	144.78	147.83	3.05	1.61	0.36	1.97
LM-16-56	164.59	265.18	100.58	6.58	0.41	6.99
Including	164.59	179.83	15.24	17.98	2.26	20.24
and	246.89	251.46	4.57	22.20	0.05	22.25
LM-16-57	6.10	53.34	47.24	6.01	0.43	6.44
Including	16.76	24.38	7.62	21.23	1.82	23.05
and	39.62	45.72	6.10	13.25	0.62	13.87
LM-16-58	3.05	44.20	41.15	5.76	0.38	6.14
LM-16-59	60.96	58.58	7.62	2.58	0.03	2.61
LM-16-61	74.68	89.92	15.24	6.47	0.99	7.46
Including	74.68	80.77	6.10	11.02	2.32	13.34
LM-16-62	65.53	68.58	3.05	8.18	1.37	9.55

10.6 PHASE V DRILLING

Subsequent to the date of the 2017 Technical Report, the Corporation completed its Phase 5 drill program which included 23 reverse circulation drill holes, surface geological mapping and prospecting, limited geophysical test work and specific gravity testing of mineralized material. Drill hole NLM-160-77 intersected significant near surface Zn mineralization over a 36.58 metre interval from 21.34 metres grading 4.39% Zn and 0.04% Pb (4.43% Zn + Pb) southwest of the historic mine workings on the Mountain View Mine Property.

Drill hole NLM-16-78 intersected a 10.67 metre interval of Zn mineralization grading 6.42% Zn starting at a down hole depth of only 21.34 metres.

The Discovery Zone Zn mineralization remains untested at depth to the northeast beyond holes NLM-16-63, 64 and 65 that were reported in a press released filed on SEDAR on January 11, 2017. Drill hole NLM-16-64 in that press release intersected a broad zone of Zn mineralization from 184.4 metres down hole that averaged 3.99% Zn and 0.21% Pb over 53.34 metres, including a 30.48 metre interval that averaged 5.99% Zn.

Select significant intercepts are presented on TABLE 10-6.

TABLE 10-6 SIGNIFICANT PHASE V DRILL INTERCEPTS

Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
NLM-16-73	30.48	39.62	9.14	3.04	0.03	3.07
Including	35.05	39.62	4.57	4.75	0.01	4.76
NLM-16-77	21.34	57.91	36.58	4.39	0.04	4.43
Including	32.00	48.77	16.76	7.35	0.07	7.42
Including	35.05	41.15	6.10	10.55	0.13	10.68
NLM-16-78	21.34	44.20	22.86	3.46	0.02	3.48
Including	21.34	32.00	10.67	6.42	0.03	6.45
Including	21.34	25.91	4.57	9.11	0.06	9.17
NLM-16-80	53.34	57.91	4.57	3.13	0.01	3.14

Note: Hole LM-16-67, 72-76, 79, 81-83 contained no significant results (mostly less than 2% Zn). True widths were not determinable at the time.

10.7 PHASE VI CORE DRILLING

Subsequent to the Phase 5 RC drill program the Company completed a 13-hole core drilling program in the areas near where the RC drilling had been undertaken between 2014 and 2017. The results confirmed the extent and overall grade and interpretation as to structure and distribution of the mineralization from the Phase 1-5 RC programs. Table 10.7 below is a summary of the significant assay results from the core drilling program.

Core drill holes that accurately twinned previous RC drill holes were largely similar to the extent and the grade of the mineralization intersected; some areas showing significantly higher grade partly because the core drilling equipment, with improved mudding techniques, allowed for better recovery of the mineralized zone than with the RC drilling equipment.

Drilling to-date, between surface and 250 metres in depth, has identified mineralization for more than 450 m along the main trend from the west side of the Discovery Zone area to the east side of the Mountain View Mine Property.

The current drilling program is part of a work program designed to evaluate the potential of the Project to host near surface zinc-lead Mineral Resources that could potentially be mined using low cost open pit mining techniques. The majority of the drill holes reported to-date from the Mountain View Mine Property and the Discovery Zone area of the Project have intersected near surface zinc-lead mineralization that is now known to extend from surface to a depth of approximately 250 meters beyond which it remains open to further expansion.

Core hole NLM-17-01 which was a twin of RC hole NLM-14-01 intersected a similar interval to RC hole NLM-14-01 although the overall assay interval was some 26% higher at 9.58% zinc+lead over 91.5 metres.

Core hole NLM-17-02 extended the mineralization to depth by approximately 25 metres.

Core holes NLM-17-03 through NLM-17-07 were drilled in the historic Mountain View Mine area with the best hole, NLM-17-04 intersecting 4.32% zinc+lead over a length of 13.72 metres starting at a downhole depth of 38.13 metres (27 metres vertical). The holes at the Mountain View Mine area were designed to extend the limits of the shallow mineralized zones.

Core hole NLM-17-09 was drilled in close proximity to RC drill hole NLM-15-24 with the former intersecting mineralization grading 8.53% zinc+lead over an interval of 27.45 metres while the latter intersected 50.29 metres of mineralization grading 5.26%lead+zinc. While the interval shows significant variation in total length, the contained length-weighted amount of zinc+lead is quite similar.

Core hole NLM-17-10 twinned RC drill hole NLM-15-23 with the new hole intersecting 25.62 metres of mineralization grading 4.42% zinc+lead while the RC hole intersected 18.29 metres grading 3.77% zinc+lead.

Core hole NLM-17-11 extended the mineralization first drilled in RC drill hole NLM-15-34 up-dip by approximately 20 metres.

Select significant intersections area presented on TABLE 10-7.

TABLE 10-7 SIGNIFICANT PHASE VI CORE DRILL INTERCEPTS						
Hole ID	From (m)	To (m)	Length (m)	Zn (%)	Pb (%)	Zn+Pb (%)
NLM-17-01	118.04	209.54	91.5	7.67	1.91	9.58
NLM-17-02	226.62	244.92	18.3	4.6	0.01	4.6
NLM-17-03	18.00	21.05	3.05	1.79	0.01	1.80
NLM-17-04	38.13	51.85	13.72	3.54	0.77	4.32
NLM-17-05	52.77	53.99	1.22	1.65	0.22	1.87
NLM-17-06	58.26	64.05	5.80	3.27	0.42	3.69
and	77.78	82.35	4.58	2.70	0.75	3.45
NLM-17-07	56.73	60.39	3.66	1.80	0.39	2.18
NLM-17-08	143.05	167.75	24.70	23.06	0.29	23.35
Including	152.81	167.75	14.94	29.38	0.13	29.51
NLM-17-09	108.28	135.73	27.45	7.60	0.93	8.53
Including	108.28	117.43	9.15	15.18	0.04	15.22
NLM-17-10	102.48	128.10	25.62	4.35	0.07	4.42
Including	102.48	112.85	10.37	7.74	0.10	7.84
NLM-17-11	137.56	158.91	21.35	2.02	0.22	2.24
Including	154.33	158.91	4.58	6.63	0.08	6.71

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

11.1 SAMPLE PREPARATION

Nevada Zinc Corp. personnel undertook supervision and organization of reverse circulation drilling chip samples. Nevada Zinc collected samples at five-foot intervals from a rotating wet splitter assembly attached to the drill rig. Chip tray samples were collected from the reject side of the wet splitter. The splitter was adjusted to produce 10 to 20 lb. of sample material. Samples were collected from the drill in cloth bags by employees of New Frontier Drilling under the supervision of Nevada Zinc personnel. Samples were dried on site and catalogued by a Nevada Zinc geologist.

11.2 ANALYSIS

11.2.1 Assaying Procedure

Preparation of the samples is done at the ALS Chemex Elko, NV facility. The sample is logged in the tracking system, weighed, dried and finely crushed to better than 70 % passing a 2 mm (Tyler 9 mesh, US Std. No.10) screen. A split of up to 250 g is taken and pulverized to better than 85 % passing a 75 micron (Tyler 200 mesh, US Std. No. 200) screen. A split of the pulp is then sent to ALS’s North Vancouver, BC facility, or in the case of gold analysis, their Reno, NV facility.

A 48 element package using a 4 acid digestion with ICP-AES and ICP-MS was done on all samples. A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and analyzed by inductively coupled plasma- atomic emission spectrometry. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples meeting this criterion are then analyzed by inductively coupled plasma-mass spectrometry. Results are corrected for spectral inter-element interferences.

For lead and zinc values exceeding the limits of the 48 element package (1%), the procedure was to use a 4 acid digestion with ICP-AES or AAS finish (grade analysis). This method has a limit of 20% lead and 30% zinc. A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water is added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by inductively coupled plasma - atomic emission spectroscopy or by atomic

absorption spectrometry. ICP-AES is the default finish technique for this technique (ME- OG62). However, under some conditions and at the discretion of the laboratory an AA finish may be substituted.

In the case of values exceeding the limits of the mineralized material grade analysis, the procedure was to use specialized titration. For zinc, a prepared sample (0.4 - 1.0 g) is digested with nitric, hydrochloric, sulphuric and hydrofluoric acids to dryness. The sample is re-dissolved in hydrochloric acid and the solution is titrated with EDTA solution with xylenol orange as an indicator. For lead, a suitable size of sample (0.5 to 1.0 grams) is weighed along with control standards, duplicates and proofs. The sample is digested with nitric, hydrochloric, sulphuric and hydrofluoric acids forming a lead sulphate precipitate. The sample is subsequently boiled with water then cooled and lead sulphate residue is collected by filtration. This residue is boiled with ammonium acetate solution then titrated with EDTA (xylenol orange indicator).

ALS Minerals has developed and implemented strategically designed processes and a global quality management system at each of its locations that meets all requirements of International Standards ISO/IEC 17025:2017 and ISO 9001:2015. All ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

The ALS quality program includes quality control steps through sample preparation and analysis, inter-laboratory test programs, and regular internal audits. It is an integral part of day-to-day activities, involves all levels of ALS staff and is monitored at top management levels.

11.2.2 Quality Assurance and Quality Control (2014–2017)

Certified standard reference samples were acquired by Nevada Zinc from CDN Resource Laboratories Ltd., Langley, BC and Analytical Solutions Ltd. of Toronto, ON. Standards used include OREAS-131b, OREAS-133b, OREAS-134b, ME-17, ME-1201 and ME-1402. Nevada Zinc inserted two or more standards for each drill hole at random intervals. Blank material was sourced from marble garden stone as well as Analytical Solutions Ltd., Toronto. Blank material was also inserted at random intervals.

A total of 4,164 assay samples were available for review. Of these assays, 89 are identified as field blanks. A total of 149 assays are from the reference standards. A total of 137 assays are pulp duplicates. This corresponds to an insertion rate of 2.1% for blanks and 3.6% for reference standards, which should ideally be approximately 5% for both the blanks and reference standards.

The author reviewed all available blank data and there is no suggestion that contamination is an issue in the data set. A single blank zinc result (sample number 2015951707B) returned a value of 8,410 ppm, with all other results well below the cut-off value for zinc.

Review of the certified reference standards revealed that the standards performed well for the RC drilling and core drilling programs, with few failures reported (TABLE 11-1).

No field duplicates have been collected by Nevada Zinc during the drilling program. P&E recommends that duplicate samples should be sent to an independent, certified assay laboratory on a routine basis for quality assurance quality control purposes.

TABLE 11-1 PERFORMANCE OF CERTIFIED REFERENCE STANDARDS

Standard Used	RC Drilling			Core Drilling		
	Number Used	Zn Failures	Pb Failures	Number Used	Zn Failures	Pb Failures
OREAS 131b	51	4	6	11	2	3
OREAS 133b	27	0	0	6	1	0
OREAS 134b	25	0	0	2	0	0
ME-1201	10	0	0	--	--	--
ME-1402	13	0	0	--	--	--
ME-17	4	0	0	--	--	--
Total	130	4	6	19	3	3
Total %		3%	5%		16%	16%

A total of 137 pulp duplicate assay analyses were carried out at the primary laboratory. The author reviewed all available pulp duplicate results for both zinc and lead and considers the results to be acceptable for the purposes of the current Mineral Resource Estimate.

11.2.3 Check Assaying

Nevada Zinc undertook a check assaying program of the RC drill samples from the 2014 to 2016 drill programs in December of 2016. Both pulp and split core duplicate samples were obtained for the check analyses. A total of 122 samples, collected from 12 holes, were sent for analyses by American Assay Laboratories (AAL), an ISO/IEC 17025:2005 accredited lab, located in Sparks, Nevada.

Results of both the original ALS samples and the check assays analysed at AAL were compared and correspond very well.

FIGURE 11-1 and FIGURE 11-2 chart the check assaying results for zinc and lead.

FIGURE 11-1 LONE MOUNTAIN CHECK ASSAY RESULTS FOR ZINC: ALS VERSUS AAL (2014-2016)

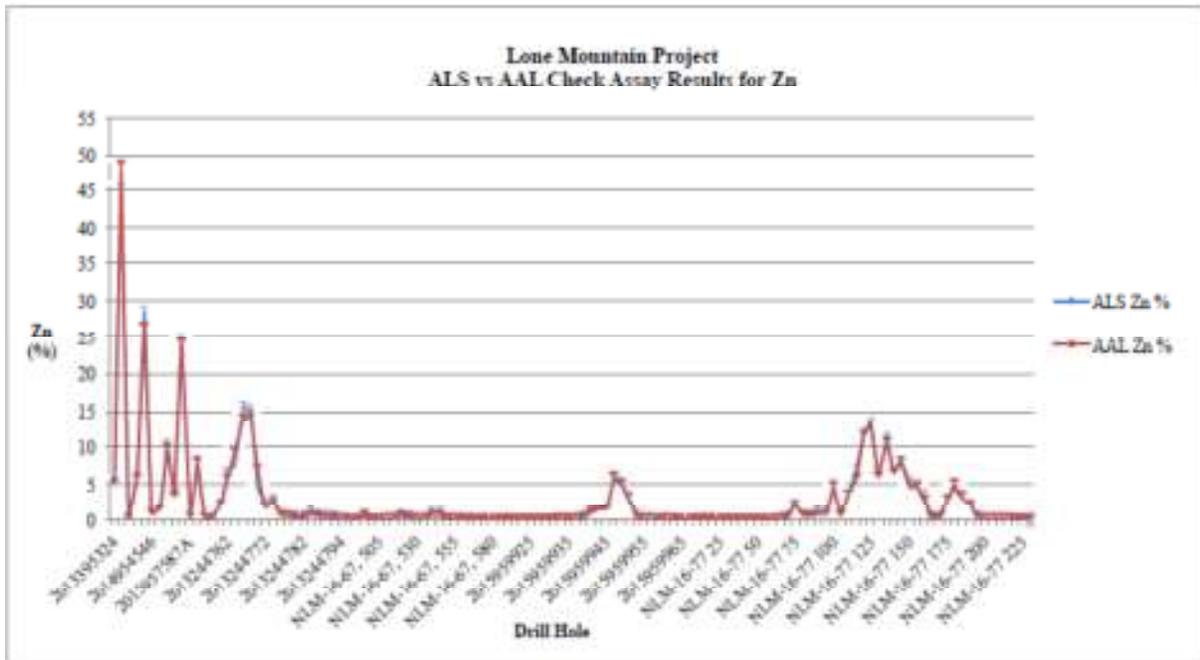
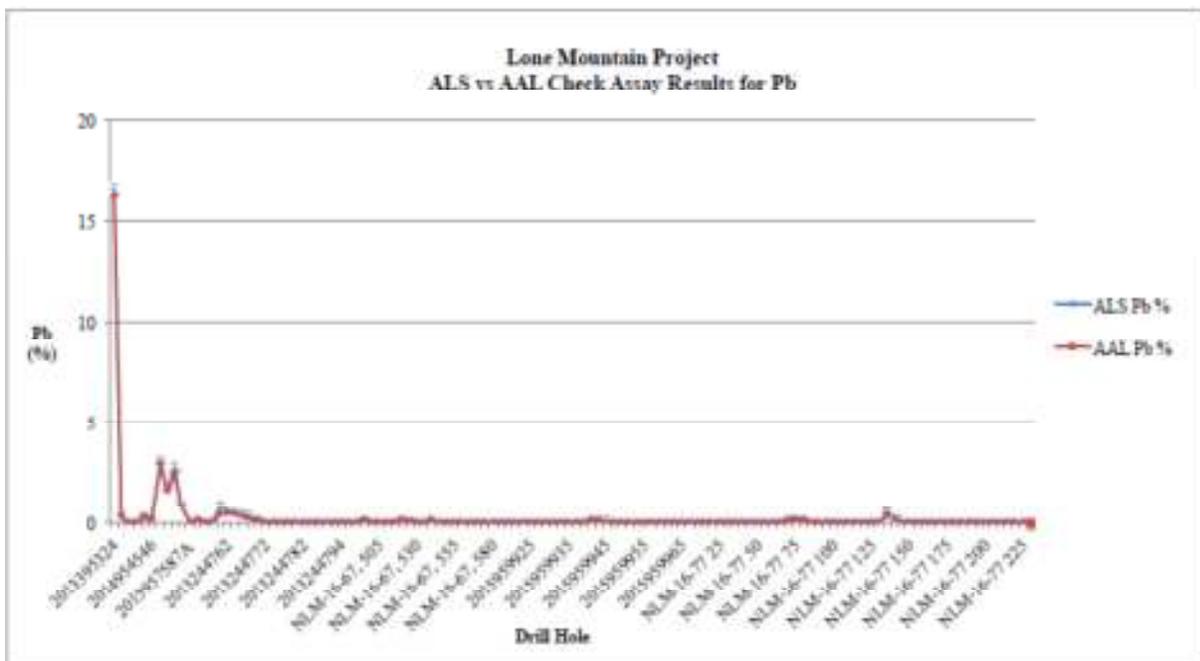


FIGURE 11-2 LONE MOUNTAIN CHECK ASSAY RESULTS FOR LEAD: ALS VERSUS AAL (2014-2016)



11.3 SECURITY

Reverse circulation drill samples are bagged on-site for shipment and secured for collection. The samples are then collected at the drill site by ALS Chemex preparatory laboratory employees or delivered to the laboratory by Nevada Zinc personnel. Samples are kept secure until delivery by Nevada Zinc personnel to ALS Chemex in Elko, NV. Returned reject pulps are stored at a temporary storage facility in Eureka NV. P&E recommends that a more secure facility be obtained for long term storage of all samples.

It is P&E's opinion that sample preparation, security and analytical procedures for the Lone Mountain drill program were adequate for the purposes of this Mineral Resource Estimate.

12 DATA VERIFICATION

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

12.1 DATABASE REVIEW

P&E conducted verification of the Lone Mountain Project drill hole assay database for zinc and lead by comparison of the database entries with assay certificates independently downloaded directly from the ALS Webtrieve website in digital format.

Assay data ranging from 2014 through 2017 were verified for the Lone Mountain Project. 91% (986 out of 1,079) of the constrained drilling assay data were checked for zinc and lead.

A few minor errors were encountered during verification of the Lone Mountain database, which were subsequently corrected.

12.2 SITE VISIT AND DUE DILIGENCE SAMPLING

The Nevada Zinc Lone Mountain Project was visited on two occasions by Mr. Fred Brown, P.Geol., November 28, 2016 and from June 11 to June 12, 2018 for the purpose of completing an on-site review of the Property. During the site visits, drilling and sampling operations and storage facilities were observed.

Mr. Brown selected ten pulp duplicate samples during the November 28, 2016 site visit. Samples were collected by Mr. Brown directly from the storage facility, and submitted to the ALS Chemex facility in Reno, NV.

During the June 2018 site visit, Mr. Brown collected ten samples from five diamond drill holes. A range of high, medium and low-grade samples were selected from the stored drill core. Samples were collected by taking the half core remaining in the core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered to AGAT Labs in Mississauga, ON for analysis. Zinc and lead were determined using Sodium Peroxide fusion with ICP-OES finish and density determination was carried out on all samples by pycnometry.

AGAT is an independent lab that has developed and implemented at each of its locations a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards.

AGAT maintains ISO registrations and accreditations. ISO registration and accreditation provide independent verification that a QMS is in operation at the location in question. AGAT Laboratories in Mississauga, ON is ISO/IEC 17025:2005 accredited laboratory. Results of the two site visits due diligence samples are presented in TABLE 12-1 and FIGURE 12-1 and FIGURE 12-2.

Sample	SG	P&E Zn %	NZ Zn %	P&E Pb %	NZ Pb %	% Difference	
						Zn	Pb
2013409298	2.90	22.300	22.100	0.065	0.065	1	0
2013253965	3.05	11.250	11.650	1.530	1.565	-3	-1
2014954556	3.05	9.810	10.150	3.180	3.320	-3	-1
2014968144	2.91	7.670	7.995	1.635	1.670	-4	-1
2013244762	2.91	6.340	6.460	0.634	0.619	-2	1
2013299060A	2.95	3.780	3.910	0.010	0.009	-3	3
2013250650	2.77	3.630	3.620	0.159	0.183	0	-3
2014968149	2.82	3.470	3.550	2.010	2.060	-2	-1
2013386797	2.66	2.010	2.050	0.030	0.031	-2	0
2013281984	2.69	1.975	2.030	0.146	0.166	-3	-3

Note: NZ = Nevada Zinc Corp.

FIGURE 12-1 LONE MOUNTAIN SITE VISIT SAMPLE RESULTS FOR ZINC, JUNE 2018

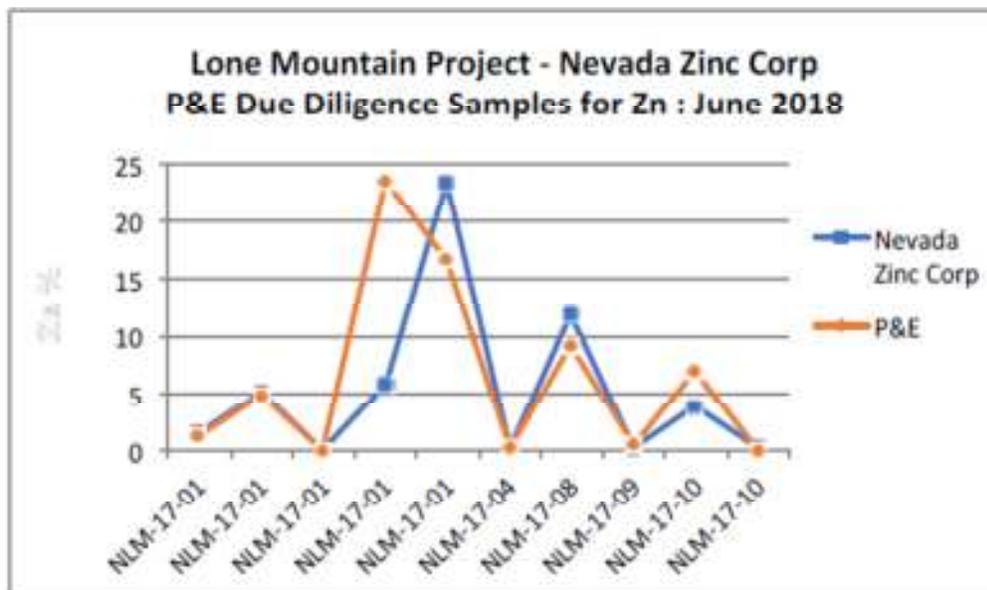
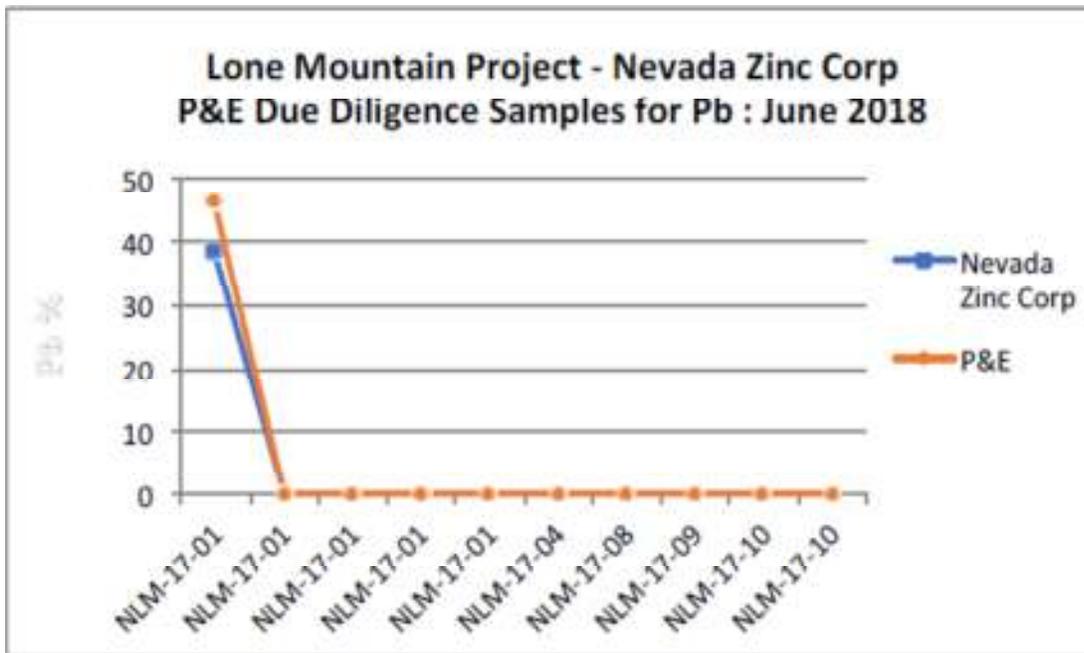


FIGURE 12-2 LONE MOUNTAIN SITE VISIT SAMPLE RESULTS FOR LEAD, JUNE 2018



12.3 SUMMARY

Based upon the evaluation of the QA/QC program and check assaying undertaken by Nevada Zinc, as well as P&E's due diligence sampling, it is P&E's opinion that the results are suitable for use in the current Mineral Resource Estimate.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 INTRODUCTION

Preliminary mineralogical and metallurgical testwork have been conducted on mineralized material of Lone Mountain deposit since late 2015, including

- mineralogical tests;
- heavy liquid separation (HLS) tests;
- flotation tests;
- leach tests and flotation concentrate leach test; and
- solid-liquid separation tests.

13.2 MINERALOGICAL TEST WORK

13.2.1 Rock Sample Mineralogical Test

In October 2015, rock samples were submitted to Process Mineralogical Consulting Ltd. (PMC) in Maple Ridge, British Columbia, Canada for mineralogical analysis. The purpose of the investigation was to determine the nature and availability of Zn-bearing mineral for metallurgical concentration.

Samples included crushed rocks and previously prepared polished thin sections (PTS). The crushed rock samples were further stage-crushed to 90% passing 20 mesh (850 μ m) in order to provide a statistically representative sample for analysis. ICP-OES analysis was used to determine the major elemental components and X-ray diffraction was used to determine the mineral compositions based upon crystallographic positions. The mineral content based on elemental compositions of individual grains as well as the liberation and association constraints of the Zn-bearing minerals were determined by Tescan Integrated Mineral Analyser (TIMA).

The key findings of the investigations by PMC are:

- 1) Zn is mainly present as hemimorphite in each of the crushed samples with the exception of two samples, one has a significant amount of Zn-bearing dolomite and another has significant contributions of Zn as smithsonite.
- 2) The polished thin sections have Zn mainly present as smithsonite with the exception of one sample which has significant amounts Zn as hemimorphite. However little can be concluded from this as the representation of these sections is only a small portion of the mineralized material zone.
- 3) The average grain size of hemimorphite among all samples has a P80 of ~250 μ m, while smithsonite having an average grain size P80 of ~35 μ m.

- 4) At the coarse crushing size utilized in this investigation, hemimorphite is mostly (~60%) liberated and free with two exceptional of samples which have substantial amounts (>60%) as locked and middling grains.

Findings of this test work were further confirmed by mineralogical analysis on master composite.

Details of the test program can be referred to the Mineralogical Note provided by PMC (Ref 1).

13.2.2 Master Composite Mineralogical Test

In August 2017, three boxes of samples, weighing a total of approximately 50 kilograms and comprising representative samples from the Lone Mountain deposit, were submitted to SGS Minerals Services Lakefield, Lakefield, Ontario, Canada. All the as-received material was combined and blended into one master composite. The composite was crushed to minus ½ inch to be used for various test work.

A subsample of the master composite was submitted for mineralogy analysis. The sample was stage-crushed to minus 20 mesh and screened into five fractions. The fractions investigated were +600, -600+300, -300+150, -150+75, and -75 µm. The mineralogy analysis was performed by QEMSCAN in the Particle Mineral Analysis (PMA) mode. The key findings from the tests are briefed below.

- 1) The major zinc-containing minerals were smithsonite and willemite. The major gangue minerals included dolomite, calcite, and quartz. There were trace amounts of zinc contained within sphalerite, calcite and dolomite. The mineral distributions within each fraction were all similar to the overall combined mineral distribution.
- 2) Zn is almost evenly distributed between the Zn silicates and Zn carbonates, see FIGURE 13-1 below.
 - Willemite/Hemimorphite 47.2%
 - Smithsonite 33.0%
 - Smithsonite(+/- Fe,Ca,Mg) 18.6%
- 3) Both smithsonite (combines both the pure and impure as one mineral group) and willemite/hemimorphite are moderately liberated at grind size P80 of 600 µm, 57% and 72%, respectively.

TABLE 13-1 and FIGURE 13-2 show the associations of smithsonite with other minerals in the master composite and the liberation characteristics.

TABLE 13-2 and FIGURE 13-3 illustrate associations of willemite with other minerals and the liberation.

FIGURE 13-1 ELEMENTAL DEPARTMENT (MASS % ZN) MASTER COMP

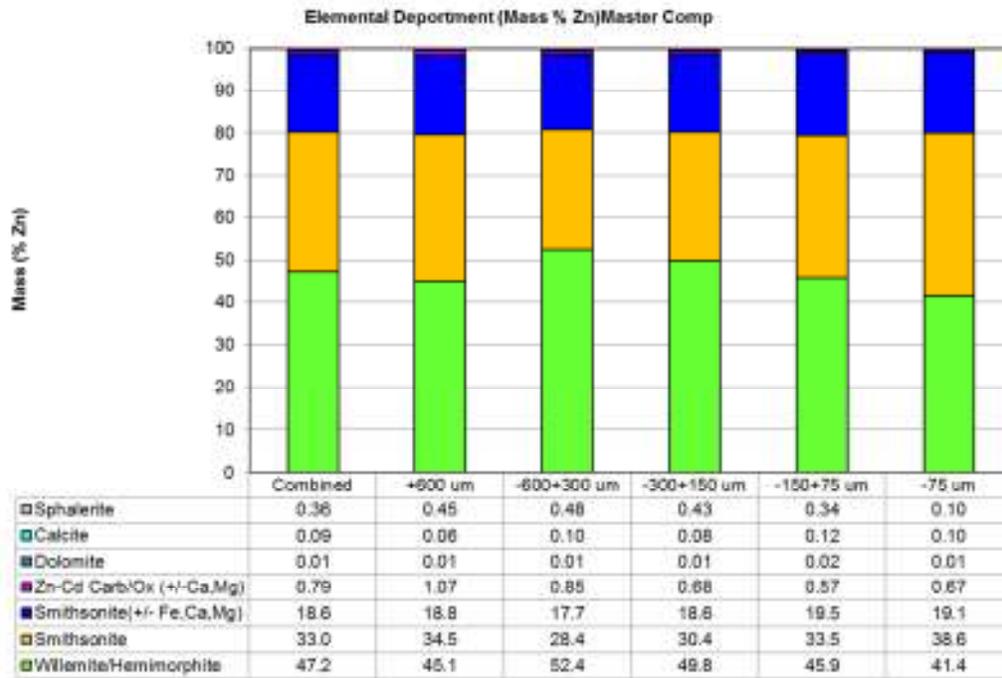


TABLE 13-1 SMITHSONITE ASSOCIATION DETAILS (IN %)

Mineral Name	Combined	+600 um	-600+300 um	-300+150 um	-150+75 um	-75 um
Free Smithsonite	30.8	21.6	14.1	26.4	36.5	57.7
Lib Smithsonite	26.1	32.8	31.5	28.2	20.7	15.0
Smithsonite:Will/Hem	4.77	4.55	6.28	4.63	4.02	3.68
Smithsonite:Carbonates	24.2	23.4	28.2	26.7	28.4	17.0
Smithsonite:Silicates	0.01	0.01	0.00	0.00	0.01	0.03
Smithsonite:Oxides	0.03	0.00	0.00	0.00	0.02	0.10
Smithsonite:Sulphides	0.01	0.00	0.01	0.01	0.02	0.00
Smithsonite:Barite	0.08	0.07	0.12	0.08	0.05	0.07
Smithsonite:Other	0.00	0.00	0.00	0.00	0.00	0.00
Complex	14.0	17.6	19.8	14.0	10.2	6.36
Total	100.0	100.0	100.0	100.0	100.0	100.0

FIGURE 13-2 SMITHSONITE LIBERATION - MASTER COMP

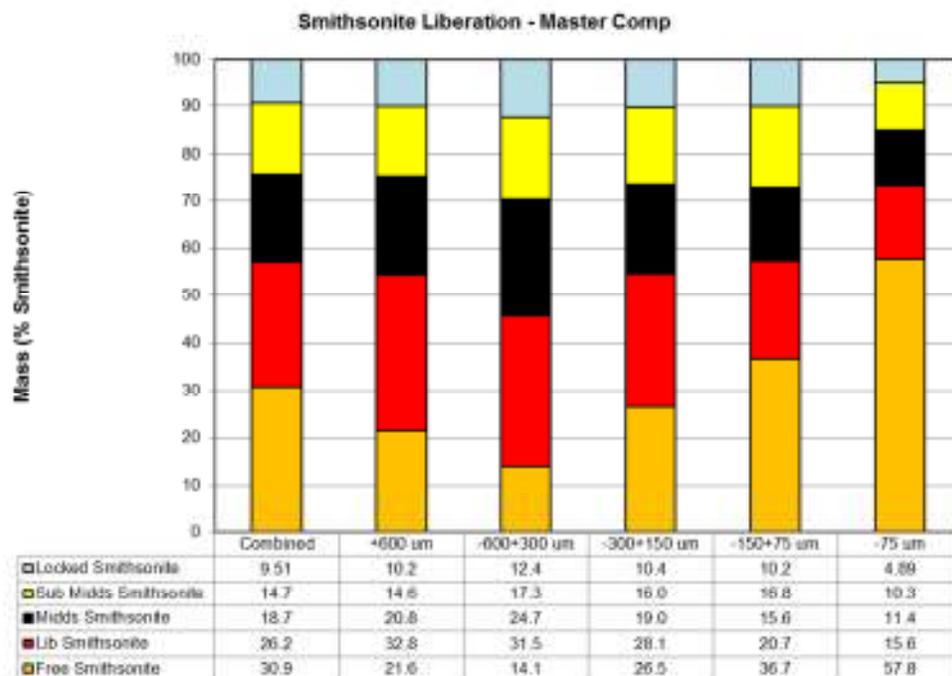
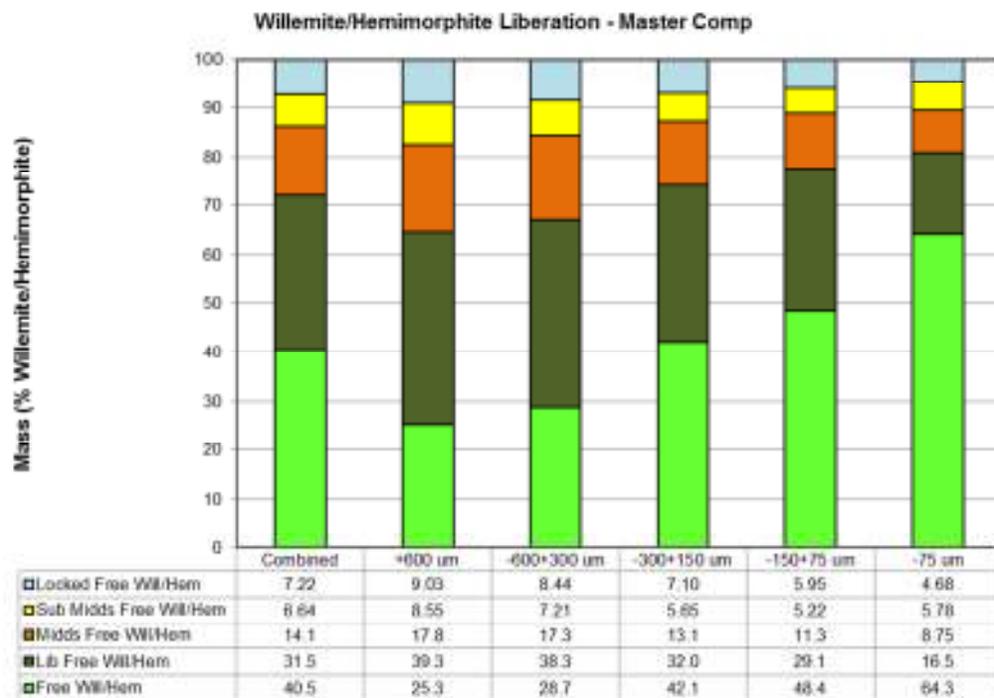


TABLE 13-2 WILLEMITE ASSOCIATION DETAILS (IN %)

Mineral Name	Combined	+600 um	-600+300 um	-300+150 um	-150+75 um	-75 um
Free Will/Hem	40.4	25.3	28.7	42.1	48.0	64.0
Lib Will/Hem	31.5	39.3	38.3	31.9	29.3	16.5
Will/Hem:Smithsomite	7.91	8.85	9.34	7.94	6.78	5.57
Will/Hem:Carbonates	0.99	1.13	0.79	0.58	0.33	1.76
Will/Hem:Silicates	2.31	1.98	2.29	1.85	2.41	2.98
Will/Hem:Other Oxides	0.06	0.00	0.02	0.00	0.08	0.22
Will/Hem:Sulphides	0.01	0.00	0.00	0.03	0.00	0.01
Will/Hem:Barite	0.24	0.42	0.19	0.28	0.08	0.20
Will/Hem:Other	0.00	0.00	0.00	0.00	0.00	0.01
Complex	16.6	23.0	20.4	15.3	13.0	8.74
Total	100.0	100.0	100.0	100.0	100.0	100.0

FIGURE 13-3 WILLEMITE/HEMIMORPHITE LIBERATION - MASTER COMP



Generally, the liberation of both smithsonite and willemite increased as the material reduces in particle size. Liberated and free smithsonite accounted for 45.6% of the total smithsonite in the -600+300 µm fraction up to 73.4% in the -75 µm fraction. Liberated and free willemite accounted for 64.6% of the total willemite in the +600 µm fraction up to 80.8% in the -75 µm fraction.

Conversely, the amount of middling and locked material decreased with finer grain size. For the smithsonite major contaminant contained in the middling and locked material was smithsonite associated with carbonates. Complex mineral structures also made up a minor portion of the middling and locked smithsonite. For the willemite the major contaminant contained in the middling and locked material was willemite associated with silicates and complex mineral structures.

Detailed mineralogical data can be found in a QEMSCAN data report (Ref 2) and test work final report issued by SGS (Ref 3).

13.3 HEAVY LIQUID SEPARATION (HLS) TEST

The purpose of HLS test was to investigate the grade-recovery relationship at various specific gravity cut points and particle sizes. Two HLS tests were conducted on Lone Mountain zinc deposit samples. The first was conducted by Met-Solve Laboratories, Elko, Nevada in November,

2015. The second was performed in September 2017 by SGS on master composite sent to SGS for flotation test. This section presents key test program information and results of these two programs.

Detailed data of these two test programs can be referred to Met-Solve Laboratories' test report (Ref 4), SGS test program final report (Ref 3), and SGS HLS test result data files (Ref 7 and Ref 8), respectively.

13.3.1 Met-Solve HLS Test

The test work investigated the samples' grade-recovery relationship for zinc, calcium, and magnesium at various specific gravity cut points and particle sizes.

1) Sample Head Assay

Rocks received as large as 6" were crushed, prepared and tested according to Met-Solve's procedures. Minus 0.85 mm material in the samples were removed by screening. The fines were assayed for composition, but not subject to heavy liquid separation.

The direct assay results and back calculated head grades of zinc, calcium, and magnesium are presented in TABLE 13-3 and TABLE 13-4 below. The back calculated grades are based on a much larger sample mass and multiple assays to reduce the variability encountered in analyzing small samples.

TABLE 13-3 LONE MOUNTAIN DEPOSIT - DIRECT HEAD ASSAYS

Sample #	Description	Zn %	Ca %	Mg %
105885	Head 1	17.24	15.98	9.01
105886	Head 2	17.35	14.23	8.2
Average		17.3	15.11	8.61

TABLE 13-4 LONE MOUNTAIN DEPOSIT - CALCULATED HEAD GRADE

Description	Zn%	Ca%	Mg%
SAF Calculated Head	16.22	14.18	8.33
HLS Calculated Head	16.13	14.3	8.05
Average Calculated Head	16.17	14.24	8.19

The fines (-0.85 mm), with a grade of 20.1% Zn, contained 35% of the zinc in 28% of the total mass.

2) Heavy Liquid Separation

Heavy liquid separation tests were conducted on three size fraction groups, -12.5+4.75 mm, -4.75+2.36 mm, and -2.36+0.85 mm, at four specific gravity cut points, 3.03, 2.91, 2.85, and 2.82. FIGURE 13-4 illustrates the relationship between upgrade ratio and zinc recovery at various particle sizes, as well as calcium and magnesium rejections. At a SG of 3.03, the coarsest fraction (-12.5 mm / +4.75 mm) had a recovery of 72%; the finest fraction (-2.36 mm / +0.85 mm) had a recovery of 86% at the same SG cut point. The figure also shows the close association of the calcium and magnesium content, this indicates that a large portion of these elements likely occur as dolomite.

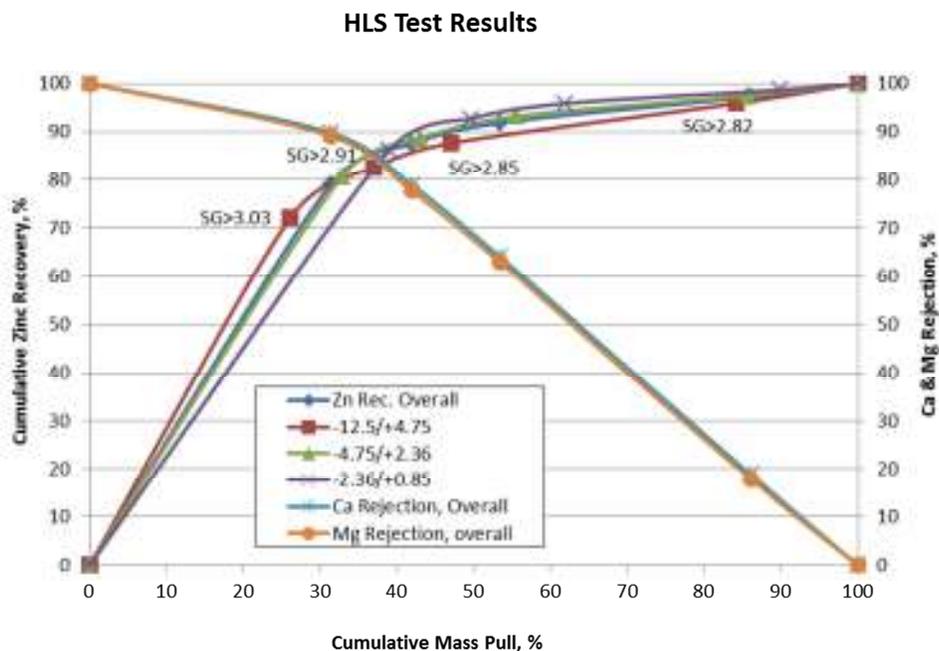


FIGURE 13-4 MASS YIELD -Zn RECOVERY & Ca, Mg REJECTION

TABLE 13-5 below presents the HLS test work results. At a SG cut point of 3.03, 79% of the zinc was recovered into 31% of the mass at a grade of 36.7% Zn with 90% of the calcium and magnesium rejected. At a SG cut point of 2.85, 92% of the zinc was recovered into 53% of the mass at a grade of 25.1% Zn with 64% of the calcium and magnesium rejected.

TABLE 13-5 HLS TEST WORK SUMMARY

Specific Gravity of Fraction	Cumulative Mass Yield %	Zn		Ca & Mg	
		Cumulative Recovery %	Grade %	Rejection %	Grade %
>3.03	31.4	79.0	36.7	89.5	7.9
2.91/3.03	42.0	87.5	30.4	78.3	12.2
2.85/2.91	53.4	91.8	25.1	63.6	16.1
2.82/2.85	86.1	97.2	16.5	18.3	22.4
<2.82	100.0	100.0	14.6	0.0	23.6

Detail data of this test work can be found in Ref 4.

13.3.2 SGS Heavy Liquid Separation Testing

Two sets of HLS test were performed. First test was on a crushed sample of minus 14 mesh, screened at 400 mesh to remove fines, to examine the amenability of the material to gravity separation techniques. Second was on a crushed sample of minus 1/2", screened at 20 mesh to remove fines, to examine the amenability of the material to pre-concentration using dense media separation. Total of 10 kilograms of minus 1/2" composite was used for heavy liquid separation testing.

1) Minus 14 Mesh HLS Testing

The sample, approximately 2 kg of minus 1/2" master composite, was stage-crushed to minus 14 mesh and screened into four fractions, -14+28M, -28+65M, -65+400M, and minus 400M. The minus 400M material was submitted directly for Zn analysis. The coarser fractions were each used in the HLS test.

For each of the three coarser fractions, HLS was initially performed at a specific gravity of 3.3. The floats were successively re-passed at specific gravities of 3.1, 2.9, and 2.7. The four sink fractions and the final float fraction were submitted for Zn analysis.

The results are provided in TABLE 13-6 below. FIGURE 13-5 illustrates the zinc grade/recovery versus mass recovery. The results show that approximately 96% of the zinc between the 2.90 g/cm³ cumulative sinks and the fines can be recovered into 65% of the mass producing a concentrate of 29% Zn.

TABLE 13-6 MINUS 14 MESH MATERIAL HLS TEST RESULTS

Sample ID	Weight %	Assay %Zn	Distribution %Zn
SG 3.30 g/cm ³ Sink, -14+28 M	10.57	43.0	23.2
SG 3.10 g/cm ³ Sink, -14+28 M	2.18	27.0	3.0
SG 2.90 g/cm ³ Sink, -14+28 M	4.87	10.8	2.7
SG 2.70 g/cm ³ Sink, -14+28 M	13.17	2.00	1.3
SG 3.30 g/cm ³ Sink, -28+65 M	11.81	43.0	25.9
SG 3.10 g/cm ³ Sink, -28+65 M	2.08	23.2	2.5
SG 2.90 g/cm ³ Sink, -28+65 M	5.87	8.6	2.6
SG 2.70 g/cm ³ Sink, -28+65 M	12.51	1.62	1.0
SG 3.30 g/cm ³ Sink, -65+400 M	7.26	41.8	15.5
SG 3.10 g/cm ³ Sink, -65+400 M	1.21	30.6	1.9
SG 2.90 g/cm ³ Sink, -65+400 M	4.95	14.9	3.8
SG 2.70 g/cm ³ Sink, -65+400 M	8.83	2.40	1.1
SG 2.70 g/cm ³ Float, --14+28 M	0.19	3.48	0.0
SG 2.70 g/cm ³ Float, -28+65 M	0.26	5.48	0.07

Sample ID	Weight %	Assay %Zn	Distribution %Zn
SG 2.70 g/cm ³ Float, -65+400 M	0.21	5.99	0.07
-400 M	14.0	21.4	15.3
Assay (Calc.)	100	19.6	100.0
Assay (Dir.)		19.6	

(from: 16317-001-HLS Results, Ref 5)

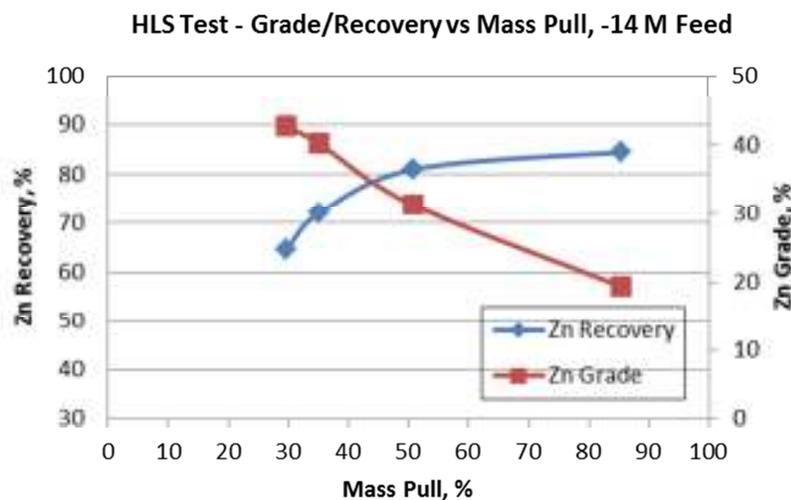


FIGURE 13-5 ZINC GRADE/REC. vs. MASS PULL, -14M FEED

2) Minus ½ Inch HLS Testing

Approximately 5 kg of the master composite was stage-crushed to minus 1/2 inch and divided into four fractions. Those fractions included -1/2”+4M, -4+8M, -8+20M, and minus 20M. The minus 20M material was submitted directly for Zn analysis. The coarser fractions were each sent for HLS testing.

For each of the three coarser fractions, HLS was initially performed at a specific gravity of 3.3. The floats were successively re-passed at specific gravities of 3.1, 2.9, and 2.7. The four sink fractions and the final float fraction were submitted for Zn analysis.

The results are provided in TABLE 13-7. Zinc recovery and Zn grade versus mass recovery are plotted in FIGURE 13-6. The results show that approximately 92% of the zinc between the 2.90 g/cm³ cumulative sinks and the fines can be recovered into approximately 60% of the mass (40% weight rejection). This corresponds to an upgraded concentrate of 29% Zn.

TABLE 13-7 MINUS 1/2 INCH MATERIAL HLS TEST RESULTS

Sample ID	Weight, %	Assay %Zn	Distribution %Zn
SG 3.30 g/cm3 Sink, -0.5"+4 M	12.39	41.4	27.7
SG 3.10 g/cm3 Sink, -0.5"+4 M	9.83	32.3	17.2
SG 2.90 g/cm3 Sink, -0.5"+4 M	13.06	12.7	9.0
SG 2.70 g/cm3 Sink, -0.5"+4 M	31.00	3.57	6.0
SG 3.30 g/cm3 Sink,	3.96	44.4	9.5
SG 3.10 g/cm3 Sink, -4+8 M	1.78	33.9	3.3
SG 2.90 g/cm3 Sink, -4+8 M	2.37	12.9	1.7
SG 2.70 g/cm3 Sink, -4+8 M	6.19	3.08	1.0
SG 3.30 g/cm3 Sink,	3.14	44.7	7.6
SG 3.10 g/cm3 Sink, -8+20 M	1.00	33.0	1.8
SG 2.90 g/cm3 Sink, -8+20 M	1.26	12.7	0.9
SG 2.70 g/cm3 Sink, -8+20 M	3.33	2.85	0.5
SG 2.70 g/cm3 Float, -0.5"+4 M	0.09	1.66	0.0
SG 2.70 g/cm3 Float, -4+8 M	0.06	1.74	0.01
SG 2.70 g/cm3 Float, -8+20 M	0.06	3.21	0.01
-20 M	10.5	24.6	13.9
Assay (Calc.)	100	18.5	100.0
Assay (Dir.)		19.6	

(from: 16317-001-HLS Results-0.5 inch, Ref 6)

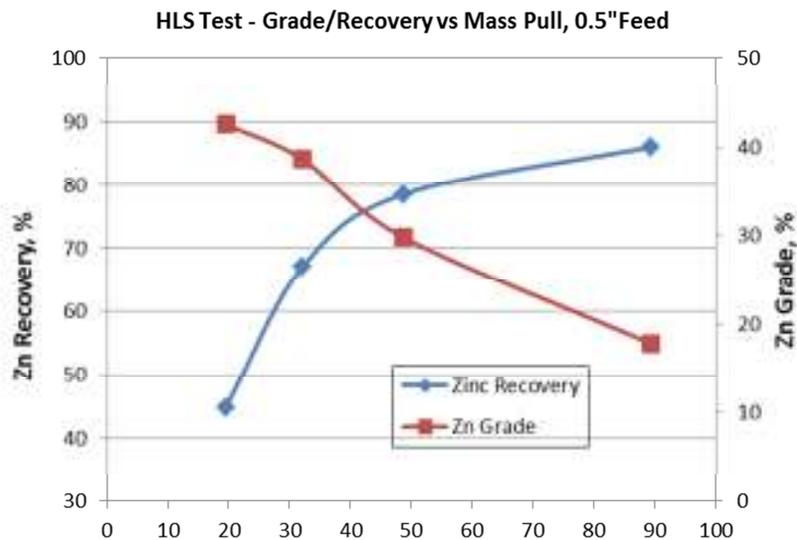


FIGURE 13-6 Zn RECOVERY & Zn GRADE vs. MASS RECOVERY, 1/2 INCH FEED

3) Impact of Crushed Size

FIGURE 13-7 illustrates the impact of two different crushed sizes, 1/2 inch (12.8mm) and 14 mesh (1.4mm) on zinc recovery and zinc grade of HLS products. Over 92% of the zinc can be recovered into a concentrate grading 29% Zn with approximately 40% mass rejection.

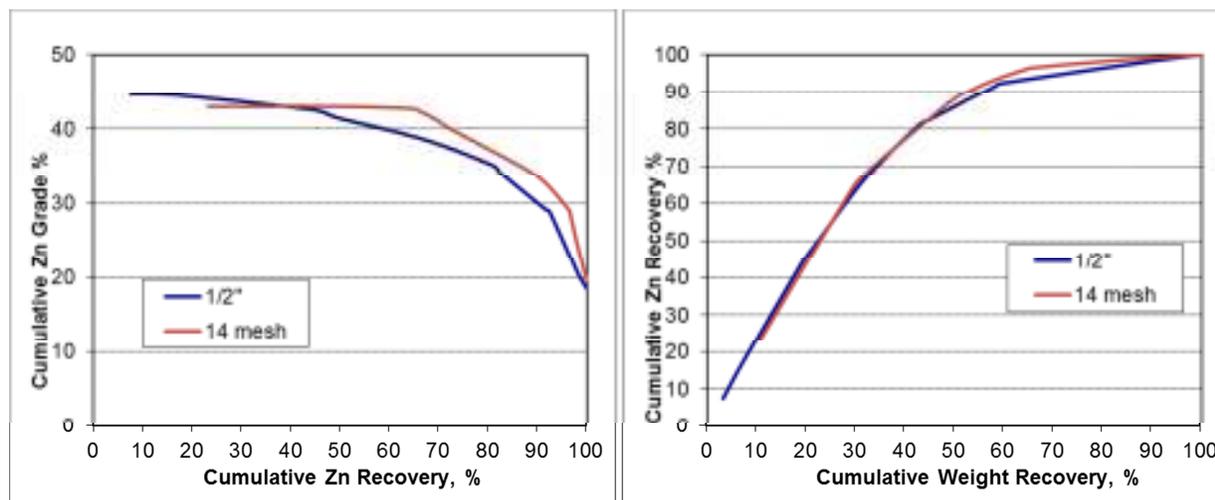


FIGURE 13-7 IMPACT OF CRUSHED SIZE ON RECOVERY AND GRADE

Detailed data of SGS HLS test can be found in Ref. 5 and Ref. 6.

13.4 FLOTATION TEST

The flotation test was performed by SGS Minerals Services Lakefield, Canada. Testing described in the following section was completed in pairs with the first of the tests being completed on a coarser fraction (+38 μm) and the second of the tests being completed on a finer fraction (-38 μm).

13.4.1 Head Assays

The master composite was sub-sampled and submitted for Zn, Pb, Au, Ag, S^t , S^- , C^t , CO_3 , SiO_2 , and an ICP scan. The results are shown in TABLE 13-8.

TABLE 13-8 MASTER COMPOSITE HEAD ASSAY DATA

<u>Element</u>	<u>Unit</u>	<u>Master Composite</u>
Zn	%	19.6
Pb	g/t	0.16
Ag	g/t	11.0
Au	g/t	0.07
S ⁺	%	0.05
S ⁼	%	0.05
C ⁺	%	9.20
CO ₃	%	49.1
SiO ₂	%	4.84

<u>Element</u>	<u>Unit</u>	<u>ICP-Scan</u>	<u>Element</u>	<u>Unit</u>	<u>ICP-Scan</u>
Al	g/t	1,930	Mn	g/t	1,480
As	g/t	281	Mo	g/t	<5.0
Ba	g/t	2,750	Na	g/t	160
Be	g/t	0.08	Ni	g/t	<20
Bi	g/t	<020	P	g/t	<90
Ca	g/t	136,000	Sb	g/t	<30
Cd	g/t	3,240	Se	g/t	<30
Co	g/t	<4.0	Sn	g/t	<20
Cr	g/t	<8.0	Sr	g/t	59
Cu	g/t	20	Ti	g/t	103
Fe	g/t	12,700	Tl	g/t	<30
K	g/t	672	U	g/t	<20
Li	g/t	<30	V	g/t	35
Mg	g/t	76,800	Y	g/t	4.5

13.4.2 Bench Scale Rougher Flotation Test

A 2 kg charge of master composite was stage-ground to minus 212 μm . The material was then screened over a 400 mesh sifter yielding two size groups, +38 μm and – 38 μm fractions. Two groups were flotation tested separately. The conditions used for each test are presented in TABLE 13-9. The results are shown in TABLE 13-10.

TABLE 13-9 INITIAL ROUGHER FLOTATION TEST CONDITIONS

Test ID	K ₈₀ (μm)	pH	Reagents Added, g/t				
			Na Silicate	Calgon	Collector Blend *	PAX	Na ₂ S
F1	173	11.5	1050	250	700	300	9600
F2	29	11.5	1050	300	750	300	11600

* Armac C / Pine Oil / Kerosene - 10:1:1

TABLE 13-10 INITIAL ROUGHER FLOTATION TEST RESULTS

Test ID	Product	Weight %		Assay % Zn	Distribution %Zn	
		Stage	O'all		Stage	Zn O'all
F1 (+38 μm)	Ro Conc	46.6	32.5	36.7	89.5	60.4
	Ro Conc + Scav Conc	65.2	45.4	28.3	96.5	65.0
	Ro Scav Tail	34.8	24.2	1.92	3.5	2.4
	Head (calc.)	100.0	69.6	19.1	100.0	67.4
F2 (-38 μm)	Ro Conc	28.5	8.7	30.3	40.9	13.3
	Ro Conc + Scav Conc	67.0	20.4	30.3	96.0	31.3
	Ro Scav Tail	33.0	10.0	2.56	4.0	1.3
	Head (calc.)	100.0	30.4	21.2	100.0	32.6
F1/F2	O'all Head (calc.)		100.0	19.7		100.0

The initial tests showed that rougher stage of both size fractions achieved recoveries in the range of 96% and produced concentrate with approximately 30% zinc content.

13.4.3 Bench Scale Cleaner Flotation Test

Three cleaner flotation test pairs were conducted on the master composite. Test conditions are shown in TABLE 13-11 and the results are presented in TABLE 13-12.

TABLE 13-11 CLEANER FLOTATION TEST CONDITIONS

Test ID	Stage	K80 (μm)	pH	Reagents Added, g/t				
				Na Silicate	Calgon	Collector Blend*	PAX	Na2S
F3 (+38 μm)	Ro	169	11.5	1050	250	700	300	3700
	Cln			100	100	100	50	1000
F4 (-38 μm)	Ro	29	11.5	1050	300	750	300	9000
	Cln			150	150	100	50	2500
F5 (+38 μm)	Ro	183 29**	11.5	1050	250	700	300	6700
	Cln			175	175	175	85	3000
F6 (-38 μm)	Ro	27	11.5	1050	300	750	300	9000
	Cln			150	150	100	50	2500
F7 (+38 μm)	Ro	128*** 29**	11.5	1050	250	700	300	6700
	Cln			175	175	175	85	4750
F8 (-38 μm)	Ro	29	11.5	1050	300	750	300	9500
	Cln			150	150	100	50	2500

* Armac C/Pine Oil/Kerosene 10:1:1

** Screen the ground sample on 400 mesh screen

***Finer primary stage-grind of minus 150 μm **TABLE 13-12 CLEANER FLOTATION TEST RESULTS**

Test ID	Product	Weight %		Assay, %				Distribution %				
		Stage	O'all	Zn	Fe	Mg	Ca	Zn Stage	Zn O'all	Fe Stage	Mg Stage	Ca Stage
F3 (+38 μm)	1st Cl Conc	43.5	30.3	36.7	1.31	3.34	4.76	86.6	50.7	57.8	18.7	17.7
	Ro Con	44.4	30.9	36.1	1.31	3.48	4.99	86.9	50.9	59.2	19.8	19.0
	Ro + Scav Con	63.3	44.1	27.9	1.18	5.57	8.09	95.8	56.1	76.0	45.3	43.8
	Ro Scav Tail	36.7	25.5	2.12	0.64	11.6	17.9	4.2	2.5	24.0	54.7	56.2
	Head (calc.)	100.0	69.6	18.4	0.98	7.80	11.7	100.0	58.6	100.0	100.0	100.0
F4 (-38 μm)	1st Cl Conc	38.0	11.6	40.0	1.73	2.73	3.11	71.4	29.6	39.1	15.4	11.8
	Ro + Scav Con	75.6	23.0	27.1	1.93	5.42	7.78	96.3	39.9	86.9	60.9	58.6
	Ro Scav Tail	24.4	7.4	3.20	0.90	10.8	17.1	3.7	1.5	13.1	39.1	41.4
	Head (calc.)	100.0	30.4	21.3	1.68	6.73	10.0	100.0	41.4	100.0	100.0	100.0
F3/F4	O'all Head (calc.)		100.0	19.3	1.19	7.47	11.2		100.0			
F5 (+38 μm)	2nd Cl Conc	28.9	19.9	44.3	1.28	2.05	2.68	68.3	44.7	37.2	7.7	6.5
	1st Cl Conc	30.5	20.9	43.1	1.29	2.30	3.13	70.1	45.9	39.5	9.1	8.0
	Ro Con	39.7	27.2	37.2	1.27	3.56	5.26	78.8	51.6	50.6	18.3	17.5
	Ro + Scav Con	53.1	36.5	33.1	1.31	4.51	6.71	93.7	61.3	69.5	31.0	29.9
	Ro Scav Tail	46.9	32.2	2.51	0.65	11.4	17.9	6.3	4.1	30.5	69.0	70.1
	Head (calc.)	100.0	68.6	18.8	1.00	7.74	11.9	100.0	65.4	100.0	100.0	100.0

Test ID	Product	Weight %		Assay, %				Distribution %				
		Stage	O'all	Zn	Fe	Mg	Ca	Zn Stage	Zn O'all	Fe Stage	Mg Stage	Ca Stage
F6 (-38 μm)	2nd Cl Conc	42.2	13.2	43.3	1.43	2.56	2.35	84.4	29.2	37.5	15.5	9.3
	1st Cl Conc	49.1	15.4	39.7	1.67	3.19	3.62	90.0	31.1	51.2	22.4	16.7
	Ro + Scav Con	62.0	19.4	33.3	1.83	4.46	5.98	95.2	32.9	70.8	39.6	34.8
	Ro Scav Tail	38.0	11.9	2.72	1.23	11.1	18.2	4.8	1.7	29.2	60.4	65.2
	Head (calc.)	100.0	31.4	21.7	1.60	6.98	10.6	100.0	34.6	100.0	100.0	100.0
F5/F6			100.0	19.7	1.19	7.50	11.5		100.0			
F7 (+38 μm)	2nd Cl Conc	24.9	15.6	47.3	1.12	1.63	1.87	66.1	39.7	31.1	4.9	3.7
	1st Cl Conc	30.4	18.9	44.2	1.17	2.28	2.97	75.2	45.1	39.6	8.4	7.2
	Ro Con	44.7	27.9	34.7	1.13	4.32	6.10	87.2	52.3	56.4	23.5	21.8
	Ro + Scav Con	56.3	35.1	29.8	1.09	5.46	7.81	94.0	56.4	68.6	37.4	35.1
	Ro Scav Tail	43.7	27.3	2.44	0.64	11.8	18.6	6.0	3.6	31.4	62.6	64.9
	Head (calc.)	100.0	62.4	17.8	0.90	8.21	12.5	100.0	60.0	100.0	100.0	100.0
F8 (-38 μm)	2nd Cl Conc	33.9	12.8	43.6	1.15	2.33	2.09	75.0	30.0	28.0	10.8	6.4
	1st Cl Con	41.0	15.4	40.0	1.37	3.07	3.24	83.3	33.3	40.5	17.1	12.0
	Ro Con	63.2	23.8	29.4	1.56	5.25	7.09	94.3	37.7	71.0	45.1	40.3
	Ro Scav Tail	36.8	13.8	3.03	1.10	11.0	18.1	5.7	2.3	29.0	54.9	59.7
	Head (calc.)	100.0	37.6	19.7	1.39	7.36	11.1	100.0	40.0	100.0	100.0	100.0
F7/F8			100.0	18.5	1.08	7.89	12.0		100.0			

FIGURE 13-8 illustrates the relationship of Zn recovery and Zn grade of each pair of tests, including bench flotation rougher tests F1 and F2.

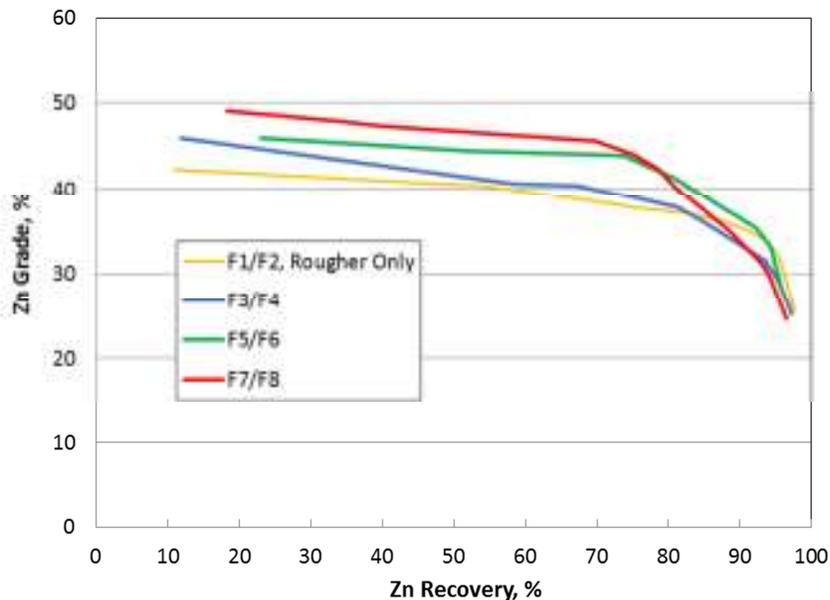


FIGURE 13-8 FLOTATION GRADE-RECOVERY RELATIONSHIP

The observations from the batch tests were:

- 1) Tests F3/F4 which essentially took the rougher concentrates of tests F1/F2 and cleaned these once, generated a slightly better grade-recovery relationship than the rougher flotation grade-recovery relationship of F1/F2.
- 2) The other two sets of cleaner tests involved either finer grinding and / or regrinding of the coarse fraction. Both test sets had similar zinc grade-recovery relationships, improved from F3/F4 which had no particle size reduction. This highlights the importance of finer particle size in order to achieve higher concentrate grade at similar recovery.
- 3) Zinc recovery of higher than 80% was possible to produce a concentrate grading 40% Zn. If higher concentrate grade of 45% Zn is required, zinc recovery of approximately 70% is achievable. More test work will be required, especially closed circuit, i.e. lock-cycle tests, to better understand grade-recovery relationship.
- 4) The impurity levels of each final concentrate recorded in each test also decreased throughout the series of tests. Test F7 recorded a final concentrate containing 1.12% Fe, 1.63% Mg, and 1.87% Ca. Test F8 recorded a final concentrate containing 1.15% Fe, 2.33% Mg, and 2.09% Ca.

13.4.4 Bulk Flotation Testing

A 10 kg charge bulk flotation test was performed using conditions from flotation tests F7 and F8 to produce concentrate to be used for leach testing. The results obtained are shown in TABLE 13-13. The combined concentrate graded 46% Zn at a zinc recovery of 67.4%, which is a similar but slightly inferior result to the 2 kg equivalent test series.

TABLE 13-13 BULK FLOTATION RESULTS

Test ID	Product	Weight %		Assay, %				Distribution %				
		Stage	O'all	Zn	Fe	Mg	Ca	Zn Stage	Zn O'all	Fe Stage	Mg Stage	Ca Stage
F9 (+38 µm)	2nd Cl Conc	31.3	20.7	43.6	1.29	2.09	2.51	80.6	49.9	39.3	8.1	6.2
	1st Cl Conc	33.7	22.3	41.9	1.37	2.45	3.21	83.4	51.7	44.7	10.2	8.5
	Ro + Scav Con	57.4	38.0	28.0	1.33	5.67	8.40	94.9	58.8	74.0	40.2	38.0
	Ro Scav Tail	42.6	28.2	2.04	0.63	11.4	18.5	5.1	3.2	26.0	59.8	62.0
	Head (calc.)	100.0	66.1	17.0	1.03	8.11	12.7	100.0	62.0	100.0	100.0	100.0
F10 (-38 µm)	2nd Cl Conc	19.3	6.5	48.5	1.28	1.10	0.90	46.0	17.5	17.5	2.9	1.5
	1st Cl Con	23.7	8.0	45.6	1.50	1.65	1.84	53.2	20.2	25.4	5.3	3.7
	Ro Con	46.6	15.8	34.9	1.82	3.92	5.94	80.0	30.4	60.2	24.7	23.6
	Ro Scav Tail	53.4	18.1	7.61	1.05	10.4	16.8	20.0	7.6	39.8	75.3	76.4
	Head (calc.)	100.0	33.9	20.3	1.41	7.37	11.7	100.0	38.0	100.0	100.0	100.0
F9/F10			100.0	18.1	1.16	7.86	12.4		100.0			

13.4.5 Concentrate Assays and Mineralogy

A subsample of the final concentrate from test F8 was submitted for element analysis as shown in TABLE 13-14. As expected, Mg, Ca, and Fe were the major contaminants. There were also high levels of Cd, Pb, and Mn in the concentrate.

TABLE 13-14 CONCENTRATE ASSAYS

Element		F8 - 2nd CI Con
Cl	g/t	50
F	%	0.015
Zn	g/t	453,000
ICP-Scan		
Ag	g/t	23
Al	g/t	1,500
As	g/t	443
Ba	g/t	527
Be	g/t	0.20
Bi	g/t	< 20
Ca	g/t	22,600
Cd	g/t	3,860
Co	g/t	< 4.0
Cr	g/t	19
Cu	g/t	75
Fe	g/t	12,000
K	g/t	518
Li	g/t	< 5.0
Mg	g/t	24,200
Mn	g/t	1,080
Mo	g/t	< 5.0
Na	g/t	113
Ni	g/t	< 20
P	g/t	< 200
Pb	g/t	2,060
Sb	g/t	< 40
Se	g/t	< 30
Sn	g/t	< 20
Sr	g/t	18
Ti	g/t	120
Tl	g/t	< 40
U	g/t	< 20
V	g/t	52
Y	g/t	2.2

Subsamples of concentrates from F7 and F8 were submitted for mineralogical analysis. FIGURE 13-9 illustrates the modal mineralogical analysis of each concentrate. FIGURE 13-10 shows the

zinc mineral department of each concentrate. Over 94.4% of the F7 concentrate was accounted for by willemite and smithsonite, with minor amounts of dolomite (1.8%) and quartz (1.07%). Similarly, Over 92.1% of the F8 concentrate was accounted for by willemite and smithsonite, with minor amounts of dolomite (1.94%) and quartz (3.58%). The results appear to show that lower levels of Fe, Ca, and Mg in the concentrate may not be possible due to the appearance of these elements on the smithsonite mineral matrix.

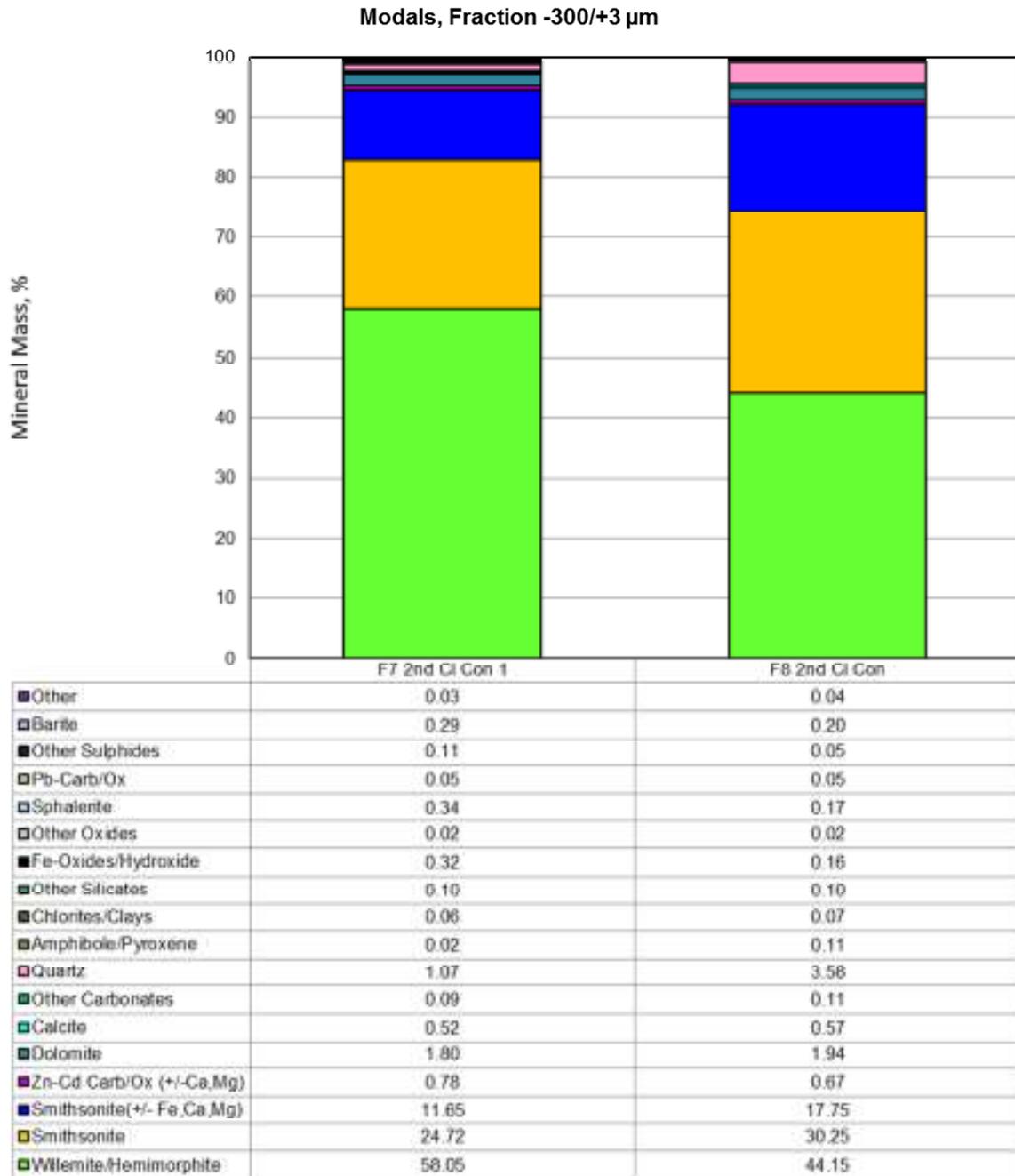


FIGURE 13-9 MODAL MINERALOGY OF CONCENTRATE FROM FLOTATION TESTS F7 AND F8

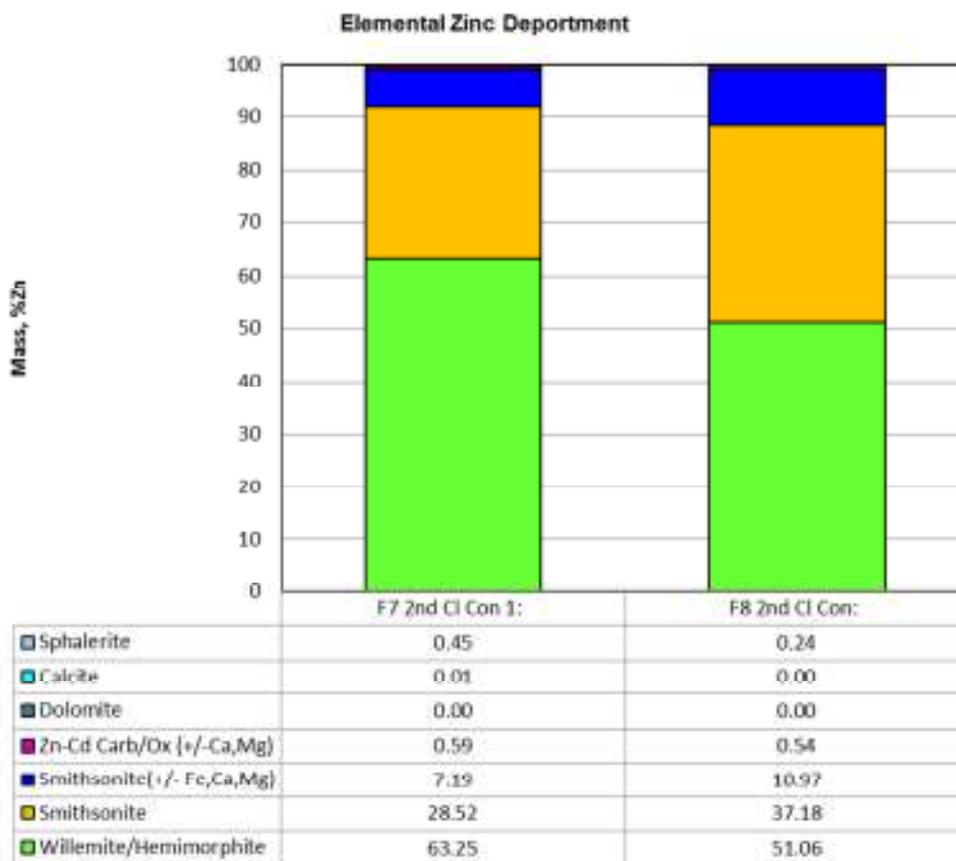


FIGURE 13-10 ELEMENTAL ZINC DEPARTMENT OF CONCENTRATE FROM TEST F7 AND F8

TABLE 13-15 and TABLE 13-16 show that 78.4% of the smithsonite in the F7 concentrate was liberated, with 22.2% smithsonite associated with willemite, carbonates, and complex minerals. 66.2% of the smithsonite in the F8 concentrate was liberated, with 35.7% smithsonite associated with willemite, carbonates, silicates, and complex minerals.

TABLE 13-15 CONCENTRATE SMITHSONITE LIBERATION DETAILS (%)

Mineral Name	F7 2nd Clnr Conc 1 -300/+3 µm	F8 2nd Clnr Conc -300/+3 µm
Free Smithsonite	55.21	36.86
Lib Smithsonite	23.19	29.35
Midds Smithsonite	10.06	19.22
Sub Midds	6.30	12.04
Smithsonite		
Locked Smithsonite	5.23	2.53
Barren	0.00	0.00
Total	100.00	100.00

TABLE 13-16 CONCENTRATE SMITHSONITE ASSOCIATION DETAILS (%)

Mineral Name	F7 2nd Clnr Conc 1 -300/+3 µm	F8 2nd Clnr Conc -300/+3 µm
Free Smithsonite	54.71	36.37
Lib Smithsonite	23.10	27.90
Smithsonite:Will/Hem	10.92	13.39
Smithsonite:Carbonates	2.60	2.11
Smithsonite:Silicates	0.84	2.87
Smithsonite:Oxides	0.00	0.00
Smithsonite:Sulphides	0.09	0.04
Smithsonite:Barite	0.01	0.01
Smithsonite:Other	0.00	0.01
Complex	7.73	17.29
Total	100.00	100.00

TABLE 13-17 and TABLE 13-18 show that approximately 87% of the willemite in the F7 concentrate is liberated, the remaining is willemite associated with smithsonite, carbonates, silicates, and complex minerals. The F8 concentrate is 67% liberated, with 34% willemite associated with smithsonite, carbonates, silicates, and complex minerals.

TABLE 13-17 CONCENTRATE WILLEMITE/HEMIMORPHITE LIBERATION DETAILS (%)

Mineral Name	F7 2nd Clnr Conc 1 -300/+3 µm	F8 2nd Clnr Conc -300/+3 µm
Free Will/Hem	64.31	46.99
Lib Free Will/Hem	22.82	20.22
Midds Free Will/Hem	9.08	21.14
Sub Midds Free Will/Hem	2.52	8.40
Locked Free Will/Hem	1.27	3.24
Total	100.00	100.00

TABLE 13-18 CONCENTRATE WILLEMITE/HEMIMORPHITE ASSOCIATION DETAILS (%)

Mineral Name	F7 2nd Clnr Conc 1 -300/+3 µm	F8 2nd Clnr Conc -300/+3 µm
Free Will/Hem	63.96	46.62
Lib Will/Hem	22.89	19.14
Will/Hem:Smithsonite	6.39	13.18
Will/Hem:Carbonates	0.06	0.25
Will/Hem:Silicates	0.68	2.23
Will/Hem:Other Oxides	0.01	0.01
Will/Hem:Sulphides	0.03	0.03

Mineral Name	F7 2nd Clnr Conc 1 -300/+3 µm	F8 2nd Clnr Conc -300/+3 µm
Will/Hem:Barite	0.10	0.06
Will/Hem:Other	0.00	0.01
Complex	5.86	18.47
Total	100.00	100.00

Detailed data of flotation test work can be found in References 3, 7 and 8.

13.5 FLOTATION CONCENTRATE ACID LEACH TEST

A total of nine leach tests were performed on flotation concentrate generated from tests F6, F7 and F9/F10 aiming to recover zinc using sulphuric acid under atmospheric conditions. The assays of the three samples are given in TABLE 13-19.

TABLE 13-19 ZINC LEACH TEST FEED ASSAYS

Element	Feed Assays (%)		
	F6 2nd Cl Conc	F7 2nd Cl Conc	F9/F10 2nd Cl Conc.
Zn	43.3	48	45.8
Si	4.66	6.53	5.19
Al	<0.3	<0.2	<0.1
Fe	1.43	1.10	1.33
Mg	2.56	1.50	1.95
Ca	2.35	1.69	2.17
K	0.09	<0.03	0.04
Ti	0.016	0.01	0.008
Mn	0.13	0.07	0.10

Leach tests were conducted in glass reactor equipped with overhead stirring and temperature control. The investigated parameters involved leach pH level, temperature, pulp density, and residence time. Main conditions of the nine tests are summarized in TABLE 13-20. The final assays of each test are presented in TABLE 13-21 below.

TABLE 13-20 FLOTATION CONCENTRATE ACID LEACH TEST CONDITIONS

Test ID	L1	L2	L3	L4	L5	L6	L7	L8	L9
Feed	F6 2nd Cl Conc	F7 2nd Cl Conc	F9/F10 2nd Cl Conc.						
Acid/pH Target	10 g/L	10 g/L	pH 1	pH 3-3.5	pH 1	pH 1	pH 3.5-4	pH 3-3.5	110%
Temperature (°C)	90	90	90	90	50	90	90	90	90
Initial Pulp Density (% Solids)	10%	10%	10%	10%	10%	10%	10%	25%	25%
Total Test Time (h)	4	4	4	4	4	2	8	8	~6
Weight Loss (%)	81	71	80	68	90	92	40	37	76
Final PLS Acidity (g/L)	14	12	27	1	10	35	0	1	1
Final Pulp pH	1.5	1.5	1.0	3.4	1.1	1.1	3.5	3.3	2.6
Acid Addition (kg/t)	917	898	1041	692	867	1100	392	368	756
Acid Consumption (kg/t)	805	812	819	682	777	796	390	366	751
Acid Addition (% stoich. Zn)	141	125	152	101	126	160	57	54	110

* acid addition, % stoich. Zn in feed

Weight losses in the leach tests were typically high, > 70%, while tests with lower acid addition, L7 and L8, resulted in less weight loss and lower zinc extraction. The final leach solution had high zinc concentration, > 50 g/L, except for the test L7, due to high zinc content in the concentrates. Silicon tenors were seen to vary somewhat independently of the final solution acidity. Tests L7 and L8 had lower zinc extraction because of insufficient acid addition.

TABLE 13-21 FLOTATION CONCENTRATE ACID LEACH TEST FINAL ASSAYS

Element	Final Filtrate Assays (mg/L)								
	L1	L2	L3	L4	L5	L6	L7	L8	L9
Zn	52,700	62,000	61,300	51,400	57,300	62,200	28,800	99,100	14,3000
Si	220	239	541	253	5760	5810	183	103	155
Al	45.3	25.4	31.7	<0.8	22.1	30.3	<0.9	<0.2	3.8
Fe	537	193	793	60.4	195	858	6.2	18.6	558
Mg	2,920	1,840	2,390	1,430	2,040	2,220	772	2,390	4,970
Ca	680	655	702	746	675	847	689	599	442
Na	17	6	11	21	9	9	7	28	31
K	306	706	211	171	18	184	120	52	959
Ti	0.92	2.1	0.64	<0.04	0.15	0.88	<0.02	<0.03	0.09
P	19	11	14	<8	12	14	<5	<5	34
Mn	148	88.3	112	70.5	100	111	39.4	142	312

Element	Final Residue Assays (%)								
	L1	L2	L3	L4	L5	L6	L7	L8	L9
Zn	3.53	10.2	5.81	17.4	5.46	3.47	35.4	35.7	6.92
Si	20.0	20.4	21.8	15.7	5.10	7.76	8.13	7.99	19.5
Al	0.89	0.29	0.42	0.34	0.80	0.98	0.17	<0.2	0.43
Fe	4.81	3.24	3.29	3.92	10.2	7.34	2.13	1.98	4.41
Mg	0.42	0.35	0.27	1.94	1.39	0.30	2.04	1.92	1.42
Ca	8.08	3.45	6.46	3.38	12.8	14.3	2.06	2.53	5.58
K	0.37	0.25	0.20	0.14	0.34	0.42	0.06	0.09	0.15
Ti	0.08	0.02	0.04	0.03	0.08	0.10	0.01	0.02	0.04
Mn	0.01	0.02	0.018	0.11	0.04	0.02	0.10	0.09	0.05

FIGURE 13-11 below illustrates the kinetic trend of zinc extraction. It indicates that extended leach time would improve leach recovery.

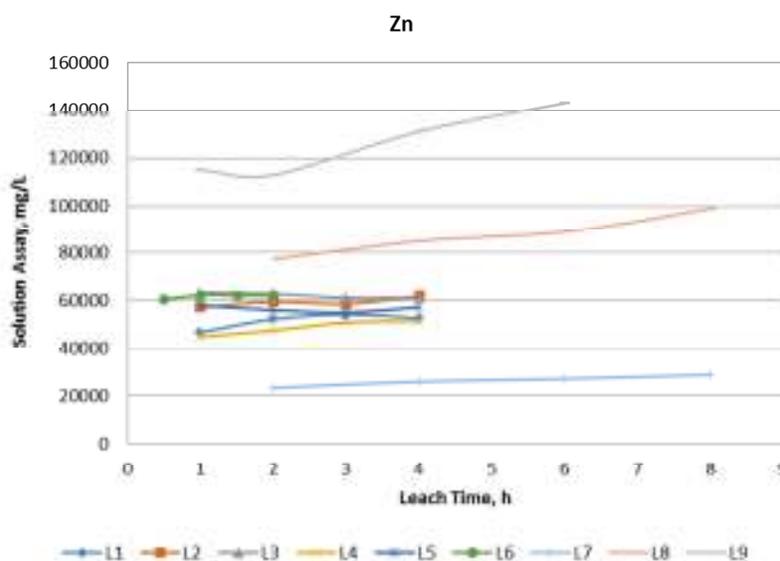


FIGURE 13-11 Zn EXTRACTION KINETIC SAMPLE ASSAYS

TABLE 13-22 summarizes the calculated extractions of Zn, Si and Mg. Overall, most of the tests resulted in high zinc extraction (>94%) with magnesium typically following suit. The method of acid addition seemed to have a significant impact on silicon extraction; tests L5 and L6 that added the acid quickly resulted in the highest extractions (~90%), while the remainder of the tests that added acid slowly (usually limited by foaming during acid addition) resulted in ~5% Si extraction.

TABLE 13-22 LEACH TEST KEY ELEMENT CALCULATED EXTRACTION

Element	Calculated Extractions, %								
	L1	L2	L3	L4	L5	L6	L7	L8	L9
Zn	98	94	98	88	99	99	52	51	96
Si	4	3	9	4	89	88	3	0	1
Mg	97	93	97	64	92	99	34	32	79

FIGURE 13-12 shows the final extraction of Zn, Si and Mg in each test compared to the acid addition, stoichiometric relative to zinc in the feed. Initially acid addition was managed by controlling at a targeted pH level during test. However, it was observed in some of the tests that the extraction rate and the actual solution acidity by titration could vary at the same or similar pH level. The relationship between acid addition and extraction offers more predictability in terms of performance.

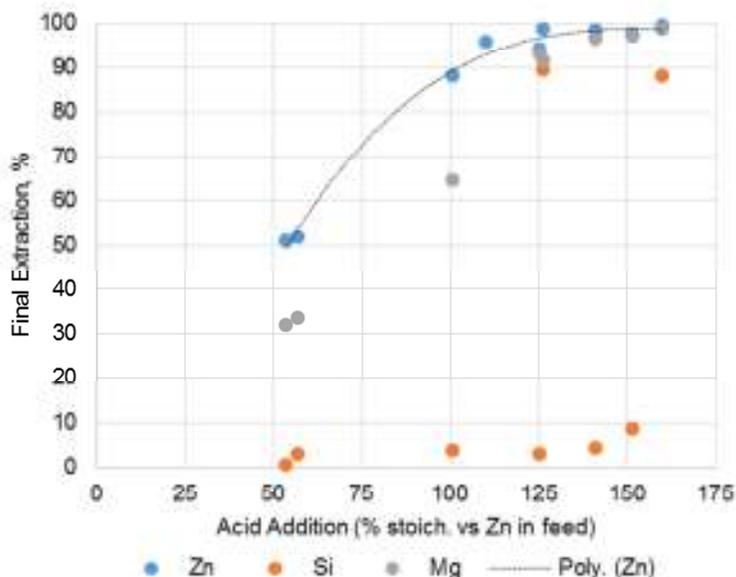


FIGURE 13-12 KEY METAL EXTRACTIONS vs. ACID ADDITION

Detailed data of this leach test work can be referred to Ref 9.

13.6 OTHER TEST WORK

13.6.1 Whole Mineralized Material Acid Leach

January 2016, Nevada Zinc retained Outotec Research Center (ORC) in Pori, Finland to perform leach test work for Lone Mountain mineralized material samples.

Two leaching tests were carried out with sulphuric acid in various concentrations and at two different temperatures. Temperature and pH measurement and control were provided during tests. Concentrated sulfuric acid was fed into the reactor via pH control. Test 2 also investigated neutralization of leach slurry using mineralized material sample.

Zn extraction in both tests reached > 97% at pH 3 after 2 hour leaching time, was > 99.5% at pH 0.5 after total of 10 hour leaching. To achieve > 99% of zinc leach recovery, approximate 1.0 - 1.5 kg of sulphuric acid (H₂SO₄) per kg of sample was required.

In Test 2 sample was used to raise slurry pH from pH 3 to 4.5 during leach test thus to precipitate soluble iron in solution. It was confirmed that sample could be used as neutralizing agent. After neutralization step, iron concentration is reduced by about 75%. Si concentration in solution was also lowered at the end of neutralization step forming polymeric silica gel.

Details of test data and discussion can be referred to Outotec's report, " Leaching Tests for Nevada Zinc Material", dated on May 23 2016 (Ref 10).

13.6.2 Metsol Process

In addition to conventional acid leach approach, Metsol process which was a unique process developed by Metallic Waste Solutions (Metsol), Australia was tested to see the compatibility between the Metsol Process and Lone Mountain zinc mineralized material (Ref 11).

Six mineralized material samples received from Nevada Zinc were processed using the Metsol technology and reported excellent zinc extraction (80-94%). No impurities of concern were detected in the feed material, pregnant liquor, or final ZnO indicating that Nevada Zinc Lone Mountain mineralized material is highly suited to the Metsol Process.

TABLE 13-23 presents Metsol Process final product information.

TABLE 13-23 METSOL PROCESS FINAL PRODUCT KEY PARAMETERS

Description	Value
Product purity (%)	99.3
Surface area (m ² /g)	4.5
Impurity level	
Chloride (%)	0.64
Lead (ppm)	11
Sodium (ppm)	51
Calcium (ppm)	31

13.6.3 Solid-Liquid Separation Test

During whole mineralized material acid leach test in Outotec laboratory, two slurry samples were taken from leaching test 2, one at pH 4.5 after neutralization, and another at pH 1.5 after acid leaching, for preliminary investigation of settling and filtration characteristics of the solids after these steps. Filtration test was conducted on the pH 1.5 sample after its settling test. Types of flocculant were also tested (Ref 10).

The settling test of pH 4.5 slurry was not successful due to the presence of polymeric silica gel which prevented formation of flocs. Dilution of the slurry and more flocculant addition were tried to improve settling properties, but unsuccessful. Slurry sample taken pH 1.5 after acid leach in test 2 was diluted before the settling rate test with wash water from test 1. Settling was good, but the overflow was not very clear.

Underflow from the pH 1.5 slurry settling test was then tested for its indicative filtration rate. Test was performed under vacuum. Filtration capacities were 295 kg/m²h without washing and 79 kg/m²h after two-stage washing. Filtercake moisture after 60 seconds drying time was 48%.

13.7 TEST WORK CONCLUSION AND RECOMMENDATIONS

13.7.1 Conclusion

- 1) Zinc in Lone Mountain deposit is contained almost exclusively in willemite / hemimorphite and smithsonite. A portion of the smithsonite contained impurity elements Fe, Mg and Ca. Almost 95% of the non-value gangue minerals were dolomite and calcite.
- 2) In general, pre-concentration of feed material using heavy liquid separation method responded favorably. Typical relationship between concentrate grade and zinc recovery can be observed in the results. At an SG cut point of 2.9 g/cm³, and a crush size of 12.7 mm, approximately 92% of the zinc was recovered in 60% of the weight at a grade of 29% Zn. At same SG cut point and a finer crush size of 1.4 mm approximately 96% of the zinc was recovered into 65% of the mass at a grade of 29% Zn. In both cases approximately 1.5 times of upgrading were achieved.

The results showed that production of a high grade (>30%Zn) zinc product and rejection of the majority (>80%) of the calcium and magnesium is attainable. Either dense media separation or gravity separation can be used in the flow sheet to upgrade the feed material.

- 3) Flotation tests generated suitable conditions to achieve higher than 40% Zn grade concentrate. Testing was fairly limited and it is possible that further optimization would improve metallurgy. It is believed that 45% Zn grade can be achieved in closed circuit flotation operation.

- 4) Zinc can be efficiently extracted from whole mineralized material or flotation concentrate using sulphuric acid leach. Leach Temperature (50 °C to 90 °C) did not have significant impact on zinc extraction. Leaching is an exothermic reaction and no external energy input is required.
- 5) For whole mineralized material acid leach, effective zinc extraction can be achieved as high as 97% at pH 3, and ~99% at pH 2 to pH 1.5. Further lower acidity did not have significant benefit for zinc recovery.
- 6) Sulphuric acid consumption in whole mineralized material leach was very high, ~6.5 kg H₂SO₄ acid/kg leached zinc at pH 3, as the carbonates leached simultaneously with zinc and the magnesium dissolution. Flotation concentrate leach has substantially lower acid consumption, < 2 kg H₂SO₄ acid/kg leached zinc. This indicates that an upgrading of the feed material prior to acid leaching reduces the amount of carbonates, which reduce the acid consumption.
- 7) Silica gel formation was observed at some acid leach test stages. However, the results showed that gel formation could be minimized by proper process design and careful pH control.
- 8) Preliminary Metsol process leach test showed that process is suitable for Lone Mountain mineralized material with extraction as high as 99%.

13.7.2 Future Test Work Recommendation

Test work to date has provided insightful understanding and potential processing flow sheet information for treating of Lone Mountain deposit mineralization. The next step is to investigate in depth the processing conditions which can be used in project plant design. Recommendations for future test work include:

- 1) More flotation tests are recommended, especially tests to produce high grade zinc concentrate. Lock-cycle testing (LCT) is necessary to obtain dependable concentrate grade and recovery data.
- 2) Further acid leaching tests are required to optimize conditions, especially acid consumption.
- 3) Further Metsol process leach tests are worth conducting to better understand its benefit.
- 4) More solid-liquid separation tests are required, including thickening and filtration.
- 5) No comminution tests have been done to date and will need to be included in the future test work plan.
- 6) Sorting can be an additional option of concentration of feed material. Some test work is recommended.
- 7) Variability tests of samples from different orebodies, especially flotation and leach tests.

14 MINERAL RESOURCE ESTIMATES

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

14.1 INTRODUCTION

The Mineral Resource Estimate presented herein has been prepared following the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted “CIM Estimation of Mineral Resource and Mineral Reserves Best Practices” guidelines. Mineral Resources have been classified in accordance with the “CIM Standards on Mineral Resources and Reserves: Definition and Guidelines” as adopted by CIM Council on May 10, 2014:

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

All Mineral Resource estimation work reported herein was carried out or reviewed by Fred Brown, P.Geo., and Eugene Puritch, P.Eng., FEC, CET, both independent Qualified Persons as defined by National Instrument 43-101 by reason of education, affiliation with a professional association and past relevant work experience. This Mineral Resource Estimate is based on information and data supplied by Nevada Zinc. A draft copy of this report was reviewed by Nevada Zinc for factual errors.

Mineral Resource modelling and estimation were carried out using Gemcom GEMS software program. Open-pit optimization was carried out using the Whittle Four-X Single Element software program.

The effective date of this mineral resource estimate is July 25, 2018.

14.2 PREVIOUS MINERAL RESOURCE ESTIMATES

P&E is not aware of any previous public Mineral Resource Estimate for the Lone Mountain deposit.

14.3 DATA SUPPLIED

Drilling data were provided electronically by Nevada Zinc as ASCII format csv tables and pdf assay certificates. Assay certificates were also received directly from the issuing laboratory. Drill hole distance units are reported in metres and grade units are reported as ppm, ppb or percent. The collar coordinates were provided in the WGS1983 UTM Zone 11N coordinate system.

The Nevada Zinc supplied drill hole database contains 98 unique collar records, of which 83 intersect the area defined for mineralization (TABLE 14-1). The assay database contains 3,942 assay records. A total of nine assay intervals are marked as "Empty Bag". RQD data were supplied by Nevada Zinc.

TABLE 14-1 DRILL HOLE DATABASE		
Drill Hole Type	Count	Length (m)
Diamond drill hole (DH)	13	2,142.6
Reverse circulation (RC)	85	12,265.2
Total	98	14,407.7

Industry standard validation checks were carried out on the supplied databases, and minor corrections made where necessary. P&E typically validates a Mineral Resource Estimate database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields.

P&E identified several trivial drill hole total depth errors, which were corrected. A small number of transcription errors were also corrected. Grades reported below detection limit were assigned a value of half the detection limit. P&E considers that the drill hole database supplied is suitable for Mineral Resource estimation.

For the Nevada Zinc drilling program the collar locations were located by project geologists using hand-held GPS units. A total of 74 drill hole collars were subsequently located by a licensed surveyor. Nevada Zinc completed down hole surveys for 21 drill holes.

14.4 EXPLORATORY DATA ANALYSIS

The average nearest-neighbour collar distance is 13 m, and the average drill hole length is 145 m. Summary assay data for the supplied database and for assay samples constrained to the mineralized structures are provided below (TABLE 14-2). P&E also noted a strong correlation between As and Pb, and weaker correlations between As and S as well as between S and Pb (Table 14-3).

TABLE 14-2 SUMMARY ASSAY STATISTICS								
	Unassigned	N100	N110	S200	S210	S220	S230	Total
Count	2,894	317	418	50	163	64	36	3942
Mean Length	1.51	1.52	1.51	1.27	1.52	1.52	1.52	1.51
Mean As ppm	68.39	401.48	91.30	128.08	110.11	95.87	251.83	102.21
Mean S %	0.12	0.20	0.12	0.13	0.12	0.11	0.07	0.13
Mean Pb %	0.13	1.33	0.20	1.21	0.23	1.31	1.40	0.28
Mean Zn %	0.37	6.38	7.69	4.32	7.04	7.94	5.69	2.13
Min As ppm	0.10	4.30	3.00	6.60	7.60	6.30	11.20	0.10
Min S %	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Min Pb %	0.0001	0.002	0.001	0.02	0.001	0.01	0.01	0.00
Min Zn %	0.002	0.03	0.02	0.18	0.01	0.22	0.70	0.00
Max As ppm	5350	5700	1190	796	2330	439	2020	5700
Max S %	8.80	3.96	4.98	0.29	0.34	0.29	0.19	8.80
Max Pb %	35.67	38.79	3.97	7.02	7.67	6.80	14.85	38.79
Max Zn %	34.53	40.85	45.10	18.10	42.29	29.90	26.00	45.10
StDev As	238.45	692.71	162.43	177.81	247.66	87.22	427.18	309.73
StdDev S	0.37	0.38	0.40	0.08	0.08	0.07	0.06	0.36
StdDev Pb	0.99	3.56	0.52	1.68	0.93	1.59	2.77	1.45
StdDev Zn	1.47	8.68	10.45	4.40	8.64	7.84	5.67	5.70
CoV As	3.49	1.73	1.78	1.39	2.25	0.91	1.70	3.03
CoV S	3.07	1.85	3.26	0.60	0.67	0.65	0.83	2.84
CoV Pb	7.63	2.67	2.60	1.39	4.12	1.21	1.98	5.12
CoV ZN	3.97	1.36	1.36	1.02	1.23	0.99	1.00	2.68

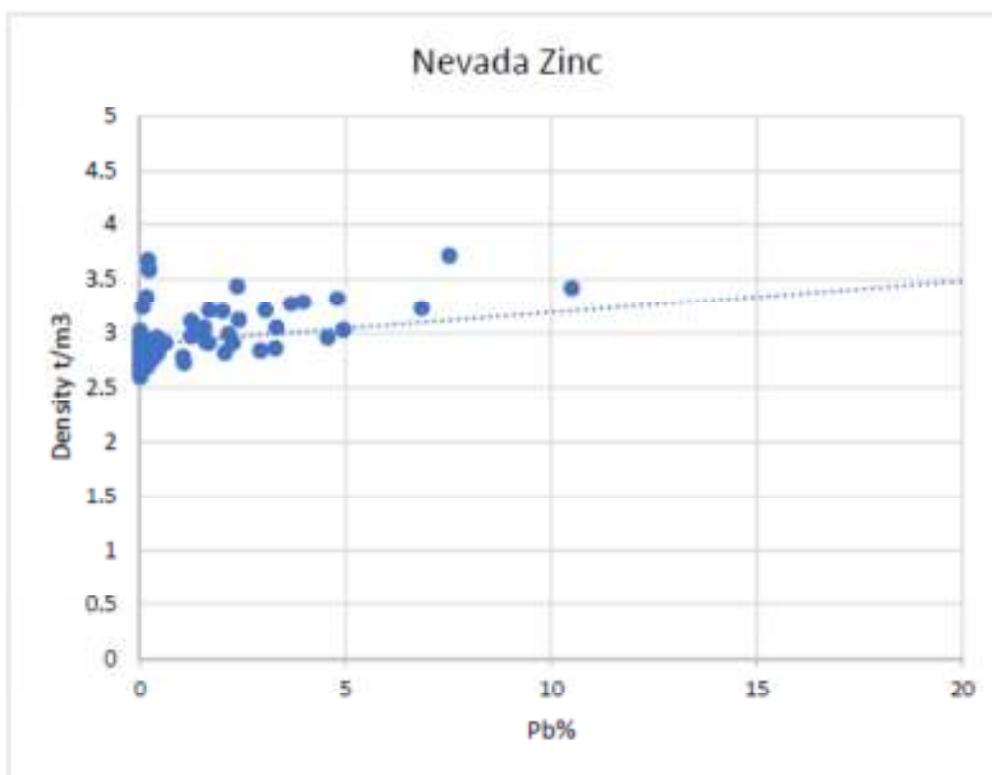
Table 14-3 ASSAY CORRELATION TABLE				
	As	S	Pb	Zn
As	1.00	0.31	0.74	0.01
S	0.31	1.00	0.28	0.00
Pb	0.74	0.28	1.00	0.01
Zn	0.01	0.00	0.01	1.00

A comparison of the distribution of Zn grades between RC and DH drilling suggests that RC drilling is slightly under-estimating the Zn content at lower grades.

14.5 DENSITY

The Nevada Zinc supplied drill hole database contains 87 density measurements taken by pycnometer, with values ranging from 2.55 to 4.07 t/m³. The average density within the defined mineralized domains is 2.98 t/m³, and the average density of the surrounding country rock is 2.79 t/m³. P&E noted a weak correlation between Pb grade and density (FIGURE 14-1).

FIGURE 14-1 CORRELATION BETWEEN DENSITY AND GRADE



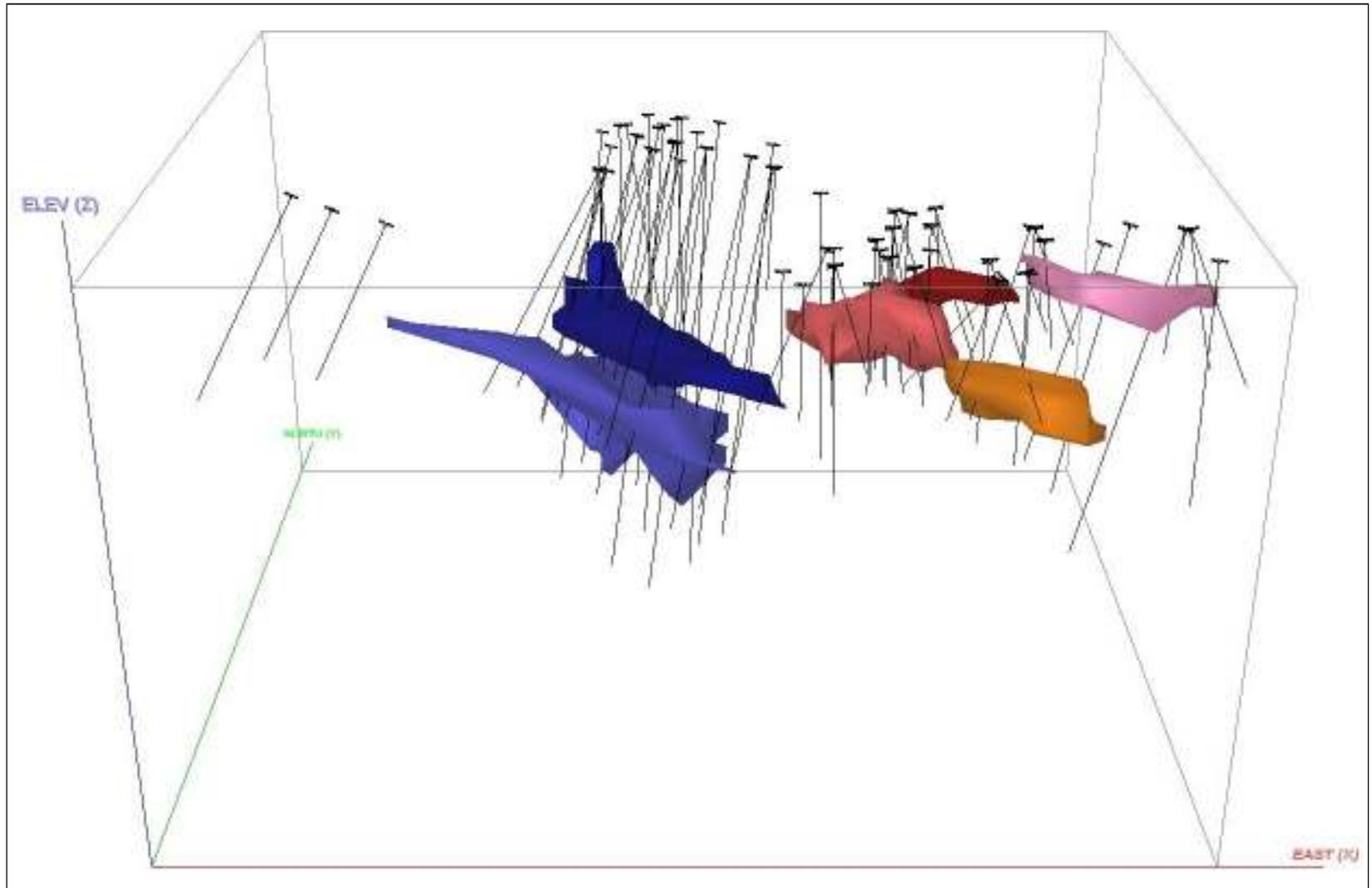
Since the mineralized domains are contained within the Devils Gate limestone, a 10% void factor was applied.

14.6 DOMAIN MODELLING

A topographic surface was constructed using 20 ft. contours as supplied by Nevada Zinc, combined with the surveyed drill hole collar locations. The elevations of the un-surveyed drill hole collars were adjusted to the resulting topographic surface.

All potentially economic mineralization is confined to the Devils Gate limestone. Mineralization grade shells were constructed from connected cross-sectional polygons spaced every ten metres and oriented perpendicular to the trend of the mineralization. The limits of the polygons were determined by a 2% Zn cut-off with demonstrated continuity along strike and down dip, and include lower grade material where necessary to maintain continuity between sections. All polygon vertices were snapped directly to drill hole assay intervals in order to generate a true three-dimensional representation of the extent of the mineralization, which resulted in two discrete mineralized domains to the north-west (N100 and N110), and four discrete mineralized domains to the south-east (S200, S210, S220 and S230), FIGURE 14-2. The topography is not displayed in the figure, in order that the drill holes and mineralized domains can be viewed.

FIGURE 14-2 LONE MOUNTAIN MINERALIZED DOMAINS



14.7 COMPOSITING

Assays sample lengths range from 0.30 m to 2.14 m, with 98% of the assay lengths equal to 1.52 m (5.0 ft). Therefore no compositing was required, and the wireframes that represent the interpreted mineralized domains were used to back-tag a rock code identifier directly into the assay workspace. A total of four small assay samples less than 0.76 m in length were excluded from grade estimation. A total of 1,049 constrained assays were available for grade estimation. The assay data were subsequently visually validated against the wireframes and extracted for analysis and estimation.

14.8 TREATMENT OF EXTREME VALUES

Assay capping thresholds were determined by the decomposition of the global assay log-probability distributions (Appendix I). The selected capping thresholds are as follows:

- As: 2,400 ppm (8 assays)
- Pb: 10 % (9 assays)
- S: 1 % (12 assays)
- Zn: 40 % (11 assays).

14.9 BLOCK MODEL

A rotated block model was established with the block model limits selected so as to cover the extent of the mineralized structures and reflect the generally tabular nature of the mineralized zone (TABLE 14-4). The block model consists of separate models for estimated grades, rock code, percent, density and classification attributes. A volume percent block model was used to accurately represent the volume and tonnage contained within the constraining mineralized domains.

Item	Origin	Block Size (m)	Number of Blocks
Easting (x)	563500	10	80
Northing (y)	4384500	10	130
Elevation (max z)	2100	10	50
Rotation	60° anti-clockwise		

14.10 ESTIMATION AND CLASSIFICATION

Grade estimation was carried out using Inverse Distance Squared anisotropic linear weighting of between three and fifteen capped assay intervals, selected within a search envelope oriented parallel to the defined domains. For each grade element, a Nearest Neighbour model (“NN”) was also generated using the same search parameters.

P&E considers that the information available for the Nevada Zinc Deposit demonstrates reasonable geological and grade continuity, and satisfies the requirements for an Inferred Mineral Resource Estimate.

For reporting purposes, an optimized pit shell was developed using the following economic parameters:

Mining Cost: Waste US\$	\$2.50/t
Mining Cost: Mineralization US\$	\$3.50/t
Zn Price US\$/lb	\$1.25
Process Recovery	85%
Smelter Payable	85%
Concentrate Mass Pull	8.0%
Concentrate Freight & Re-handle US\$/t	\$50
Smelter Treatment Charge US\$/t	\$150
Process Cost US\$/t	\$20
G&A Cost US\$/t	\$3
Zn Cut-Off	2.0%

A small unknown amount of material has been mined from the Lone Mt. property, primarily affecting the south zone. Insufficient information is available to accurately locate the extent of historical mining, and the current Mineral Resource Estimate has not been adjusted to take into account historical mining.

14.11 INFERRED MINERAL RESOURCE ESTIMATE

Mineral Resources have been constrained within an optimized pit shell.

The pit-constrained Inferred Mineral Resource Estimate at a 2% Zn cut-off is listed in TABLE 14-5.

Cut-Off Zn %	Tonnage 1,000 t	Pb %	Zn %	Zn M lb
2.0%	3,257	0.7	7.57	543

- 1) Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues.*
- 2) Mineral Resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

- 3) *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.*
- 4) *Contained metal may differ due to rounding.*
- 5) *Inferred Mineral Resources are reported within an optimized pit shell.*

14.12 CUT-OFF SENSITIVITY

The sensitivity of the Mineral Resource Estimate to changes in cut-off grade was examined by summarizing tonnes, grade and metal content within the Mineral Resource constraining pit shell at varying cut-off grades (TABLE 14-6). The results suggest that the Mineral Resource Estimate is relatively insensitive to changes in cut-off grade.

Cut-Off Zn %	Tonnage 1,000 t	As ppm	S %	Pb %	Zn %	Zn M lb
5%	1,989	251	0.13	0.8	10.05	440
4%	2,473	229	0.13	0.7	8.97	489
3%	2,931	226	0.13	0.7	8.12	525
2%	3,257	220	0.13	0.7	7.57	543
1%	3,534	217	0.13	0.7	7.09	552

14.13 VALIDATION

The block model was validated visually by the inspection of successive section lines in order to confirm that the block models correctly reflect the distribution of high-grade and low-grade values (Appendix II). An additional validation check was completed by comparing the average grade of the constrained, uncapped composites to the model block grade estimates at 0.01% Zn cut-off. Uncapped composite grades and block grades were also compared to the average Nearest Neighbour block estimate (TABLE 14-7).

Domain	Uncapped Assays Zn %	Block Model Zn %	NN Zn %
N100	6.38	6.84	6.66
N110	7.69	6.94	6.35
S200	4.32	5.34	5.80
S210	7.04	6.80	7.57
S220	7.94	8.27	8.23
S230	5.69	5.85	4.83
Total	6.98	6.86	6.54

As a further check of the Mineral Resource Estimate, the total volume reported at 0.01% Zn cut-off was compared with the calculated volume of the defining mineralization wireframe. Total volume estimated is 1.367 M m³, and the total volume of the wireframes is 1.363 M m³. The reported volumes fall within acceptable tolerances.

15 MINERAL RESERVE ESTIMATES

This section is not applicable to this Technical Report.

16 MINING METHODS

This section is not applicable to this Technical Report.

17 RECOVERY METHODS

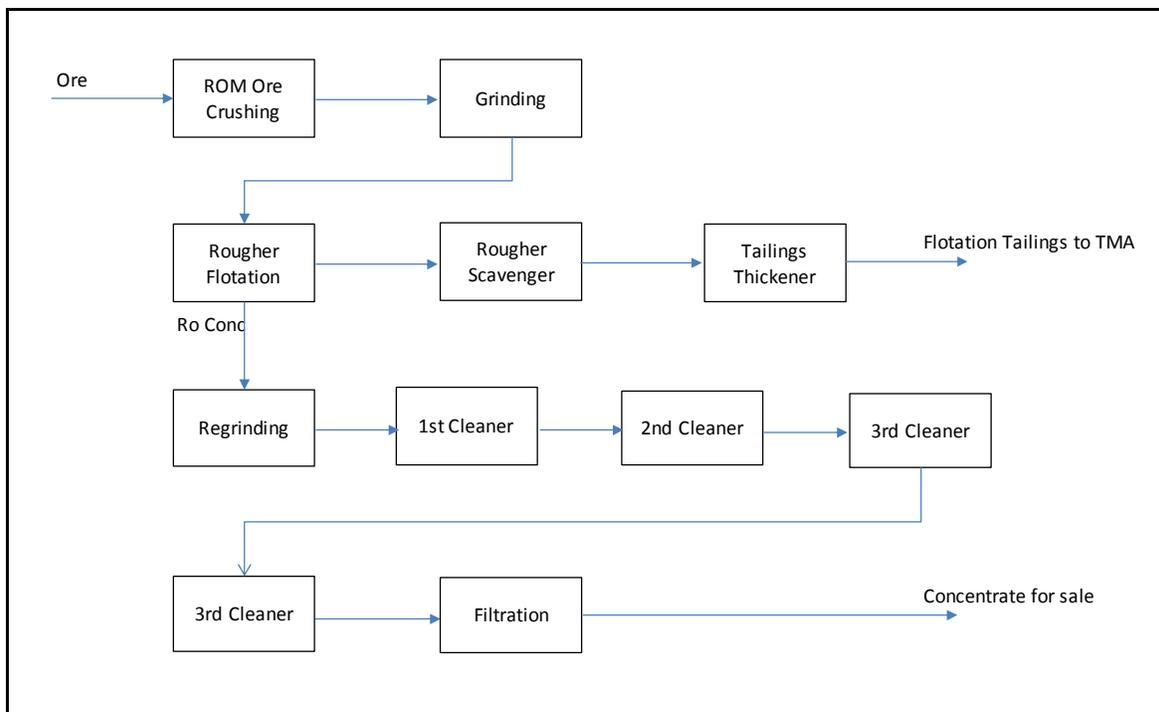
17.1 INTRODUCTION

Based on the metallurgical test work completed to date, a preliminary mineral processing flow sheet for the Lone Mountain Project has been developed, which includes crushing, grinding, and zinc flotation to produce zinc concentrate for sale. In addition, the flow sheet includes reagent preparation, fuel supply, compressed air supply, water management, and tailings disposal.

Plant throughput is 800 dry tonnes, or approximately 277,000 dry tonnes annually at an operating availability of 95%. Brief process description and preliminary design criteria of each area in the plant are provided below.

The overall flow sheet of the process stages is illustrated in FIGURE 17-1 below.

FIGURE 17-1 LONE MOUNTAIN PROJECT ZINC RECOVERY PROCESS BLOCK DIAGRAM



17.2 CRUSHING

Portable crushing and screening equipment will be utilized at mine site to process approximately 1000 tonnes (dry) daily at an operating availability of 75%. Crushing operations are planned as a two-stage circuit with a screen to separate the final product size material for grinding.

Crushing will be performed on a nominal 6 days per week schedule. Coarse and fine (crushed) material stockpiles are utilized to separate the mining and milling operation. ROM material is trucked to the crushing plant and dumped into stockpiles located near the crushing equipment. The two-stage crushing reduces the rock from a maximum feed size of 400 mm down to 80% passing 10 mm. The crushed material is transferred to a fine (crushed) material storage bin feeding to a primary grinding mill.

A contract crushing operation is considered in the current design. An external contractor will supply and operate the crushing equipment as well as transfer the crushed material to the crushed material storage bin. All crushing and transfer equipment will be portable in nature and independently powered by diesel.

17.3 GRINDING

A grinding circuit is included to reduce material particle size to P80 of 75 microns required for downstream flotation process. The grinding circuit employs a wet-overflow type ball mill and a cyclone to form a closed-circuit with 150% circulation load.

The crushed material is transferred from crushing area by a series of conveyors to a storage bin located close to the grinding area. Material discharges onto a mill feed conveyor discharging to a cyclone feed pump box. A belt scale is installed to weigh and record feed rate to the processing plant.

The crushed material is ground in the ball mill. Ball mill discharge flows by gravity to the cyclone feed pump box from where slurry is pumped to a hydrocyclone for size classification. Cyclone overflow stream with particle size P80 of 75 microns flows by gravity to a rougher flotation conditioning tank located in the flotation area.

17.4 FLOTATION

The flotation process to recover zinc minerals includes zinc rougher and scavenger, rougher concentrate re-grinding, and 3-stage zinc cleaners. The concentrate from the 3rd cleaner is the final product with 45% zinc content. The flotation tailing is dewatered in a thickener for process water recovery prior to being disposed to designated tailings management facility (TMF).

17.4.1 Zinc Flotation Rougher and Scavenger

Ground material is fed to a rougher flotation conditioning tank where slurry is conditioned with various reagents at pre-set dosages and diluted with process water to a desired slurry density.

Zinc rougher and scavenger flotation cells are installed in a stepped arrangement allowing slurry to advance by gravity.

Rougher concentrate is collected via a concentrate launder in the rougher concentrate pump

box. Rougher tails advance by gravity to the first cell of rougher scavenging line. Scavenger concentrate is collected in the same pump box of the rougher concentrate. The combined concentrate is then pumped to a regrinding cyclone feed pump box while the scavenger tails is pumped to tailings thickener.

17.4.2 Regrinding

The purpose of the re-grinding is to achieve proper particle size of feed to cleaner stage to improve zinc recovery in downstream flotation process.

The re-grinding circuit employs a wet-overflow type ball mill and a cyclone to form a closed-circuit with a circulation load. Combined rougher/scavenger concentrate is pumped to a regrinding cyclone for size classification. Underflow of cyclone flows by gravity to the regrinding mill, while cyclone overflow with desired particle size is fed by gravity to a conditioning tank prior to being processed in the cleaner stages.

17.4.3 Zinc Flotation Cleaners

Slurry is pumped to a conditioning tank where it is mixed with additional reagents which are required for the zinc cleaning operation. The conditioned slurry flows by gravity to the 1st cell of the 1st cleaning stage.

The 1st cleaning stage generates concentrate which is approximate 25% of the mill feed. The 1st cleaning tails returns to rougher flotation. The 1st cleaner concentrate flows by gravity to the 2nd cleaning stage which produces concentrate at a mass pull of approximate 16% of the mill feed. The 2nd cleaner concentrate is further cleaned in the 3rd cleaner to improve concentrate grade. The final zinc concentrate reaches up to 45% zinc content at approximate 14% mass pull and 80% zinc recovery.

The final concentrate is dewatered in a zinc concentrate thickener followed by a filter press to remove excess water. Filter cake with 10% solids is collected and conveyed to a concentrate storage area. Filtrate is recovered as process water.

Tailings from the 2nd and the 3rd cleaners are collected, respectively, and returned by pumping, to their previous cleaner stages.

17.4.4 Flotation Tails Dewatering

Rougher flotation tailing is pumped to a tailings thickener to recover water. Thickener underflow is pumped to a tailings management area and overflow is pumped to a mill water tank.

17.4.5 Reagents

Reagents and chemicals required for processing zinc mineralized material include collectors, frother, and activators for flotation purposes; flocculant for solid-liquid separation.

A vendor designed flocculant mixing system package is considered, including dry flocculant dosing unit, a wetting device, agitated mixing tank, and storage tank. Dedicated metering pumps are provided to deliver pre-set flocculant dosage to each user.

Flotation reagents are delivered in either solids or liquid format. A mixing tank is provided for the reagent that needs to be dissolved or diluted prior to application. Dedicated metering or delivery pumps are installed to distribute reagents to various users.

The selection of reagent preparation equipment is based on the assumed packaging size and conditions of reagents to the plant.

17.5 UTILITIES AND AUXILIARIES

17.5.1 Plant Water Management

Plant is designed with two water systems, i.e. mill water and fresh water systems which will provide water to different areas in the plant.

1) Mill Water

Mill water is the process water recovered or recycled from thickeners, filters and tailings management area. It is mainly used in grinding, flotation, reagent mixing and dilution, launder water, and filter wash water in flotation circuits. The estimated total mill water demand is 65 m³/h approximately. Makeup water for mill water will be taken from the fresh water tank.

2) Fresh Water

An estimated of 15 m³/h of fresh water is needed as make-up water to the plant. Gland water pumps are provided to deliver water to slurry pumps that need gland water seal. Fire water pump package is considered for the plant, including electric pump, diesel driven pump, jockey pump and all auxiliary equipment. The system is on emergency power supply.

17.5.2 Compressed Air

Air systems are provided to supply compressed air for filter press, plant air, and instrumentation air. Each system consists of compressor and intake filters, and associated auxiliary equipment. A minimum delivery pressure of 800 kPa(g) is designed for the purpose of filter press operation.

Air receivers are installed to provide filter press air, plant air, and instrument air, respectively.

Instrument air is first dried by a heatless lower purge twin tower desiccant air dryer and is then stored in an instrument air receiver.

Blowers are included to supply low pressure air required for flotation.

17.5.3 Electric Power and Fuel

Electric power required for plant operation will be supplied by an onsite 1.5 MW diesel generator. Emergency power will come from a back-up generator. A dedicated diesel tank is equipped for storage and delivery of diesel for power generator.

Diesel storage tank and distribution unit, mainly for mobile equipment and vehicles, is included in the design.

18 PROJECT INFRASTRUCTURE

This section is not applicable to this Technical Report.

19 MARKET STUDIES AND CONTRACTS

No market studies have been completed for the Project at the time of this Report being prepared, however the anticipated non-sulphide concentrates are thought to be saleable to a smelter facility with only modest penalties for magnesium forecast at this time.

No contractual arrangements for processing the concentrates exist at this time. Zinc is the only payable product anticipated at this time.

A metal price of \$2,500 per tonne was used as the base zinc price for the study. The price chosen is below the three year trailing price for zinc on the London Metal Exchange.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 REQUIRED PERMITS AND STATUS

The Lone Mountain Project is located approximately 7.5 km (5 miles) north of US Highway 50 that leads to the town of Eureka, Nevada. The location and property ownership will mean that the mine will be held to permitting requirements to be determined by Eureka County, the State of Nevada, and the US Department of the Interior, Bureau of Land Management, Battle Mountain District Office, Mount Lewis Field Office (BLM). The list for the project permits and licenses with authorizations are presented in TABLE 20-1.

TABLE 20-1 PERMITS REQUIRED FOR LONE MOUNTAIN MINE (FEDERAL, STATE, COUNTY PERMITS, APPROVALS AND REGISTRATIONS)

Permit / Approval	Issuing Authority
<u>Federal Permits Approvals and Registrations</u>	
Mine Plan of Operations/ National Environmental Policy Act (NEPA) Analysis and Record of Decision (RoD)	US Bureau of Land Management
Right of Way (RoW) across public lands	US Bureau of Land Management
Explosives Permit	US Bureau of ATF
EPA Hazardous Waste ID No.	US EPA
Notification of Commencement of Operations	Mine Safety and Health Administration
Biological Opinion and Consultation	US Fish and Wildlife Service
Federal Communications Commission Permit	FCC
<u>State Permits, Authorizations and Registrations</u>	
Nevada Mine Registry	Nevada Division of Minerals
Surface Area Disturbance Permit	Nevada Division of Environmental Protection (NDEP)/ Bureau of Air Pollution Control (BAPC)
Air Quality Operating Permit	NDEP/BAPC
Mercury Operating Permit to Construct	NDEP/BAPC
Mining Reclamation Permit	NDEP/Bureau of Mining Regulation and Reclamation (BMRR)
Mining Exploration Hole Plugging Permit or Waiver	Nevada Division of Water Resources (NDWR)
State Groundwater Permit	NDEP/BMRR
Water Pollution Control Permit (WPCP)	NDEP/BMRR
Approval to Operate a Solid Waste System	NDEP/Bureau of Waste Management (BWM)
Hazardous Waste Management Permit	NDEP/BWM

Permit / Approval	Issuing Authority
National Pollutant Discharge Elimination System (NPDES) Permit	NDEP/Bureau of Water Pollution Control (BWPC)
General Storm Water Discharge Permit	NDEP/BWPC
Permit to Appropriate Water/ Change Point of Diversion	NDWR
Permit to Construct a Dam	NDWR
Potable Water System Permit	Nevada Bureau of state Drinking Water
Septic Treatment Permit (Sewage Disposal System Permit)	NDEP/ Bureau of Water Pollution Control
Hazardous Materials Permit	Nevada Fire Marshall
<u>Local Permits for Eureka County</u>	
Building Permits	Eureka County Building Planning Department
Conditional Special Use Permit	Eureka County Building Planning Department
County Road Use and Maintenance Permit/Agreement	Eureka County Building Planning Department
Business License	Eureka County Building Planning Department

20.2 LOCAL PERMITTING

Currently Nevada Zinc uses a county road to access the Lone Mountain site. A Special Use Permit will be needed (SUP).

20.3 STATE PERMITTING

The State of Nevada requires a number of operational mining permits regardless of the land status of the project (private or public). The following permits will be required from the state before operating the mine:

- Air quality operating,
- Water pollution control,
- Storm water discharge,
- Reclamation plan,
- Water appropriations.

20.4 FEDERAL PERMITTING

A number of federal permits and authorizations are required for mining on public land. The agencies and departments are listed in TABLE 20-1. All submitted applications and permits will be reviewed by the National Environmental Policy Act for evaluation and approvals.

20.5 ENVIRONMENTAL STUDIES AND PERMITTING

The US Bureau of Land Management (BLM) will review all baseline data for the Lone Mountain Project and determine if it is complete. Nevada Zinc has not selected an environmental contractor to initiate baseline studies for the site when this Report was prepared.

The Lone Mountain Project will need to implement an Environmental Monitoring Plan in the future and includes specific requirements and procedures for monitoring the following areas:

- Air quality
- Groundwater quality
- Water supply
- Waste rock management (PAG)
- ROM pad effluent
- Fresh water make-up supply
- Wildlife
- Noxious weeds
- Reclamation

During the LOM the environmental management plans will need to be updated for the project. The next phase of work for the Lone Mountain Project will be to initiate a baseline environmental study with a third party contractor. The study will provide direct understanding of the site and the systems to be managed as they apply to areas in the list above. Part of the baseline will be to understand and analyze the potential impact on the surrounding waterways (basins) and habitat.

The BLM and the State of Nevada mining regulations will require a reclamation and closure plan (Reclamation Permit). The closure plan must be supported in the form of a bond provided by the owner and that value will be determined from the baseline study and must sufficiently cover any disturbance created by the mining operation.

21 CAPITAL AND OPERATING COSTS

21.1 ASSUMPTIONS

Capital and operating cost estimates were prepared for the PEA assuming a greenfield installation of mining and processing facilities. Costs are considered to be accurate within a range of $\pm 30\%$ for the capital and operating costs described in this section. Key assumptions utilized during the estimating process were as follows:

- All costs reflect an 800 tonnes per day mining and milling operation;
- 95% mill availability for a total annual capacity of 277,400 tonnes of mill feed;
- Overall zinc recovery of 80% resulting in annual production rate of 35,500 tonnes of zinc oxide concentrate;
- Life-of-mine (LOM) average estimated grade of the resource is used for all production years (prior to dilution);
- Overall mineable recovery of 95% of the current resource (inferred) during LOM operations (12 year mine life);
- Milling facilities to be constructed at a suitable site within close proximity of the mine site (<1km).

Power will be supplied by diesel gen-set equipment initially, and power costs will be reflected in fuel demand. Back-up generator will provide emergency power to maintain operations.

21.2 COST ESTIMATE METHODOLOGY

The general methodology utilized for the development of the PEA study operating and capital costs estimates was as follows:

- A preliminary process simulation model was completed using Metsim[®] software, preliminary testwork completed primarily at SGS Canada, 2018, as well as experience from similar previous projects.
- Mass and energy balance results were taken directly from the process model and then utilized to identify and size all major process equipment items.
- Process plant capital costs were estimated for equipment and plant construction using information in InfoMine Cost Model for the Flotation Mill. Certain cost adjustments were made considering the differences between current plant design and Cost Model.
- A 30% contingency was applied to capital cost estimates of mining, mill, tailings, and infrastructure to account for items that were not specifically identified at this stage of the study.
- Conceptual capital costs of tailings containment facility were estimated based on cost information of similar facilities constructed recently in nearby area.

- Infrastructure and owner's costs were developed based on a conceptual plant site location within 1 km of the mine site. Infrastructure requirements included road upgrades, off-grid power systems, site preparations and facilities such as a maintenance shop, drying area, laboratory and administration building. Owner's costs included permitting requirements, insurance, first fill of consumables. Other costs included in contingency may need to cover temporary construction requirements, land acquisition and a pre-production drilling program. Excluded from owner's costs are corporate overheads (G&A) and working capital requirements.
- Operating costs were developed based on estimated staffing levels, reagents and consumable consumptions estimated based on testwork results and typical industrial criteria, and expenditures required to support the mine and its associated processing, maintenance and administrative activities. Power cost was estimated based on preliminary equipment motor sizing and assuming powered by diesel generators.
- Additional operating cost allowances were included for outside mining contractors, laboratory consumables, miscellaneous vehicle fuel requirements, etc.
- Included in the mine operating costs were the estimated average contractor rates, based on cost per tonne of mined material. The total mining cost for the Company also included an allowance for salaried workers for ongoing development drilling. Contractor rates were assumed to include ongoing production development.
- A conceptual mine plan was prepared. The mining plan envisions pre-development schedule and cost estimate was created using ramp/road access.

21.3 CAPITAL COSTS

The capital cost estimate was developed to go directly into production. Early capital includes all mine and process costs up to the initiation of commercial mining operations (75% of steady state production). Total pre-production costs at Lone Mountain are estimated at \$25.7M. Sustaining capital costs over the life of mine are estimated at \$2.7 M for a total project capital cost of \$28.4M. A breakdown of the project capital costs is summarized in TABLE 21-1.

TABLE 21-1 LONE MOUNTAIN PROJECT CAPITAL COSTS (GREENFIELD PLANT) - \$MILLION

Area	Pre-Production Capital Costs	Sustaining Capital Costs	Total Capital Costs
Mine			
Mine site pre-strip	2 ^{*1}		2
Process Plant/ Infrastructure			
Processing Plant	14		14
Infrastructure	2		2
Tailings	1		1
Contingency 30%	5.7 ^{*2}		5.7
Mine Closure		0.5	0.5
Owner's cost	1		1
Sustaining Capital (LOM)		2.2	2.2
Total Capital	25.7	2.7	28.4

Notes:

1. Mine pre-strip cost allows for waste removal and road construction. Cost includes predevelopment mine costs plus installation of mine site power and MTC shop.
2. Applied to total cost of mining, mill, tailings, and infrastructure.

The production capital cost estimate of \$24.7 million includes the construction of a new stand-alone process facility, mine development up to 1 million tonnes of waste rock and tailings (tailings storage facilities) and all necessary infrastructures to bring the mine into production. A 30% contingency has been included in the mine and process facilities to account for requirements that are not detailed in the current study.

The sustaining capital estimate of \$2.2 million is for mine improvements and upgrades during the LOM period. Items to be included in this figure are the expansion of the tailings impoundment facilities and ongoing annual sustaining capital requirements. To reduce capital requirements, the company will utilize contractors for both mining and mine-site crushing activities. Subsequent to the initial mine pre-development activities, all additional mine development is treated as operational development and included in the contractor mining rates.

21.3.1 Mine Pre-development

A preliminary mine predevelopment plan was prepared where access to the deposit levels is via ramp. Brief information of this plan is presented in Section 14 of this Report. A breakdown of the \$2M in capital costs associated with this pre-development work is included as TABLE 21-2.

TABLE 21-2 MINE PRE-DEVELOPMENT COSTS

Description	Pre-production	Sustaining Capital Mine Site	Total
Mobilization Major Equipment			
To site	\$200,000		\$200,000
Contractor set-up	\$50,000		\$50,000
Teardown		\$125,000	\$125,000
Demobilization		\$75,000	\$75,000
Site Preparation and Operation			
Staff mobilization	\$200,000		\$200,000
Surface facilities, power, water, misc.	\$300,000		\$300,000
Open Pit Development			
Pit preparation and pre-stripping	\$1,000,000		\$1,000,000
Indirect	\$250,000		\$250,000
Total	\$2,000,000	\$200,000	\$2,200,000

21.3.2 Mine Site

An estimate of \$2M was included to cover pre-production mine site development activities. Included in this cost are the following:

- 1km of power line installation for mine site,
- Site Power,
- Water/sewage utilities,
- Waste rock excavation,
- 2km of resurfacing of existing mine roads,
- ROM material stockpile pad,
- Diesel storage,
- Emergency power backup generators.

An estimate of \$200,000 was included to cover additional mine site costs for contractor teardown and demobilization.

21.3.3 Process Plant

A breakdown of the overall process plant costs is shown in TABLE 21-3. The capital cost estimates were prepared based on the construction of a greenfield facility within reasonable proximity to the Lone Mountain open pit mine site. From general initial reviews of the area, it has been assumed that the nearby property consists of relatively flat terrain with minimal site excavations required prior to the initiation of construction operations.

TABLE 21-3 LONE MOUNTAIN PROCESS PLANT CAPITAL COSTS

Description	Cost, US\$
Grinding and Flotation	\$ 14,000,000
Infrastructure (Greenfield)	\$ 2,000,000
Tailings	\$ 1,000,000
Contingency (30%)	\$5,100,000
Total Process Plant (includes EPCM)	\$ 22,100,000

As was described previously, InfoMine Flotation Mill Model was used for a single flotation product mill to produce a concentrate for market. Additional infrastructure and miscellaneous costs were estimated at another \$2M to account for other capital items that will be required but have not yet been detailed at the current level of review. A contingency of 30% was adopted in the cost estimate, which is considered adequate based on the absence of engineering detail completed to date.

21.3.4 Infrastructure

An estimate of \$2M was included to cover pre-production infrastructure activities. Included in this cost are the following:

- Plant site transformers/substation,
- 2km of new roads to access plant site,
- Construction of administrative and lab buildings,
- Miscellaneous site preparations.

21.3.5 Tailings

Early construction of a tailings management site is only at the conceptual design level and an initial cost for a tailings facility suitable for the Lone Mountain site are estimated at \$1,000,000, and will include a portable water treatment as required. A total capital cost of \$2.5M was estimated for the life-of-mine, with a cost included in the operating cost for disposal of approximately 3M tonnes of tailings material and for maintaining the facility.

The current estimate is not site specific and will need to be re-evaluated once a site has been selected.

Basic parameters utilized for the design include:

- 2.8 million tonnes of solids in tailings,
- Site with level grade,
- Flotation type tailings thin layer,
- Deposition method not known.

Included in the estimate are the following:

- Basic site clearing (assumed minimum overburden, <0.5 m),
- Dam construction,
- Tailings transport (pipe/pump),
- Water reclaim (includes polishing pond),
- Closure (not included in cost),
- Indirect costs and contingency.

21.3.6 Mine Closure

An allowance of \$0.5M has been included for final closure costs related to the mine and processing plant. This cost was estimated based on regional data and capping the tailings with locally available mine waste rock, for a total 250,000 tonnes transported for a 1 m cap, for a 300 m by 500 m pond.

21.3.7 Owner Costs

Owner costs are estimated at \$1.0M. Included in this figure are:

- Environmental activities related to plant site and tailings,
- Initial fill of warehouse supplies and reagents,
- Insurance,
- Temporary building power and mine site costs during construction,
- Construction communications and security,
- Predevelopment definition drilling.

21.3.8 Ongoing Sustaining Capital

An annual allowance of \$200,000 has been made to account for ongoing sustaining capital requirements starting from year 2 of operation, for a total of \$2.2 million for the LOM.

21.3.9 Exclusions

No allowances have been made in the current capital cost estimates for the following:

- Working capital: exploration, permitting and environmental analysis,
- Nevada Zinc corporate costs,
- Additional pre-construction civil works beyond basic requirements assuming relatively level terrain with soils suitable for the proposed construction activities,
- Taxes,
- Bonding,
- Inflation.

21.4 OPERATING COSTS

The total unit operating costs for the project are estimated at \$51.70/tonne of feed resulting in a net cash production cost of \$ 0.41/lb of zinc, including G&A and concentrate shipping. It should be noted that the decision to utilize contractors for mining and crushing has added somewhat to this cost. The life-of-mine operating costs are summarized in TABLE 21-4 . Details of these costs are discussed later in this section.

TABLE 21-4 OPERATING COST SUMMARY

Description	\$/tonne feed
Mining	\$19.5
Crushing and haulage	\$3.0
Processing plant	\$22.2
Transportation	\$5.0
G&A	\$2.0
Total Cost	\$51.7

21.4.1 Mining Operating Costs

Mining operating cost assumed contract mining at site, including mining, crushing, and haulage. Total annual production is 277,400 tonnes feed. A detailed breakdown of the total LOM average mining costs is summarized in TABLE 21-5.

TABLE 21-5 MINE OPERATING COSTS (OPEN PIT)

Description	Value
Mining Cost (mineralized material)	\$3.50/t
Mining Cost (waste)	\$16.00/t
Crushing	\$3.00/t
Total Mining Costs	\$22.50/t

Based on preliminary plans and discussions with local contractors an average LOM contractor rate of \$19.50 per tonne of mined mineralized material has been utilized in the estimate. Included in this average rate are ongoing production development costs beyond the initial mine predevelopment capital costs. A small crushing plant would be operated on a contract basis near the mine site, and crushed material would be trucked to the mill live storage area.

During mining operations, there will be an ongoing development exploration drilling program aimed at better defining resource blocks prior to their extraction. An allowance has been included in the current figures for these ongoing activities.

The mine site manager would be responsible for the preparation of overall mine plans and the monitoring of mine contractor activities, with assistance from the chief geologist.

21.4.2 Surface Material Crushing/Haulage Operating Cost

It has been assumed that mined material will be stockpiled and crushed at the mine site utilizing portable crushing equipment and a crushing contractor. ROM material will be crushed to <3/4" in a two-stage crushing circuit. Discussions with crushing equipment suppliers as well as local contractors have indicated an overall cost of \$3.0/tonne of material is a reasonable estimate for these activities. Included in this rate are:

- Supply and maintenance of all crushing equipment,
- Loading of crushed material from ROM stockpile into crushing circuit,
- Loading and haulage of crushed material to processing facility located within 1.0km of mine site.

The advantages of using portable equipment and a contractor for crushing/hauling operations include a reduction in upfront capital requirements and greater flexibility with respect to the crushing circuit design and integration between the mine and processing facilities. Should the project resources continue to grow a re-evaluation of the contractor option may be warranted by the Company.

The tailings facility offers the opportunity to recycle most of the process water used in the flotation process. This part of the project has not been clearly defined, however a tailings management facility (TMF) will be constructed. Permit and construction cost was based on an assumed per tonne of mineralized material mined.

21.4.3 Processing Plant Operating Cost

A breakdown of the processing plant operating costs is shown in TABLE 21-6.

TABLE 21-6 PROCESSING OPERATING COSTS

Description	Cost/t feed
Labour (mine site and plant)	\$9.50
Reagents & Consumables	\$5.00
Power	\$4.50
Maintenance supplies	\$2.00
Water	\$0.70
Tailings disposal	\$0.50
Total Cost	\$22.20

Labour costs were developed by preparing a complete manpower schedule for the mine site and the processing operations and then applying typical base rates and burdens for current operations in the Nevada area. This is summarized in TABLE 21-7 below.

TABLE 21-7 MINE SITE AND PLANT LABOUR COSTS

	Qty.	Rate	w/Benefits	Total Cost
Hourly Personnel				
Mine				
Surveyors/Geo technician	2	\$30	\$78,000	\$156,000
Labourers- (Fieldwork)	1	\$20	\$54,080	\$54,080
Mill				
Shift Boss (Metallurgist)	3	\$42	\$113,570	\$340,710
Mill Op 1 (Grinding)	3	\$36	\$97,340	\$292,020
Mill Op 2 (Flotation)	3	\$36	\$81,120	\$243,360
Labourers – (Concentrate Handling)	6	\$17	\$45,360	\$272,160
Labourers - Security	6	\$13	\$34,000	\$204,000
Salaried Personnel				
Mine Site Manager (GM)	1	\$190,000	\$50,000	\$240,000
Mill Superintendent	1	\$150,000	\$44,400	\$194,400
Foreman/ MTC Foreman	1	\$150,000	\$44,400	\$194,400
Geologist	1	\$120,000	\$30,000	\$150,000
Mechanic	1	\$95,000	\$25,000	\$120,000
Mechanic Apprentice	1	\$45,000	\$10,000	\$55,000
Electrician	1	\$95,000	\$25,000	\$120,000
Total Work Force	31			\$2,636,130.00
Cost per Mined Tonne				\$9.50

Reagents, consumables, and electric power were estimated based on preliminary testwork results and equipment sizes generated for the project. Projected reagent and consumable prices were applied based on current market prices. Other operating cost components were estimated as follows:

- Annual operating maintenance supply cost is assumed at \$2.00/t feed processed.
- Consumable and reagent costs are assumed at \$5.50/t, which include laboratory, safety equipment, vehicle fuel, and tailings handling.
- An allowance of \$195,000 a year is included for fresh water cost, or \$0.70/t feed.
- Electric power cost is calculated based on diesel consumption of one 1.5MW generator set operating at 75% load for 24 hours every day, \$4.50/t feed or \$0.16/kWh.

21.4.4 G&A Costs

The LOM general and administrative (G&A) costs have been estimated at \$550,000 per year or \$2.00 per tonne, see TABLE 21-8.

TABLE 21-8 G&A COSTS

Position	Annual Cost
Controller	\$110,000
Accountant	\$95,000
Purchasing Agent/ Payable/Receivable Clerk/Sec	\$75,000
Sub-total	\$265,000
Burden (@ 25%)	\$66,250
Materials & Services (@60%) includes Audit Services, Consultants, Office	\$200,000
Total G&A Cost	\$555,000
G&A Cost per Mined Tonne	\$2.00

22 ECONOMIC ANALYSIS

Caution to readers: *The PEA is preliminary in nature. It includes indicated and inferred mineral resources, which are considered too speculative geologically to have the economic consideration applied to them that would enable them to be categorized as mineral reserves and there is no certainty that the preliminary economic assessment will be realized.*

This item provides an economic analysis for the project including a cash flow forecast and estimates of net present value (NPV), internal rate of return (IRR), payback period of capital and sensitivity analyses. A free cash flow (FCF) approach is used, which projects annual cash revenues and cash outflows including operating costs, capital costs, royalties, and taxes. The resulting net annual cash flows are totalled to determine net present values (NPVs) at the selected discounted rates. The internal rate of return (IRR) is calculated as the discount rate that yields a zero NPV. The payback period is calculated as the years required recovering the pre-production capital.

22.1 PRINCIPAL ASSUMPTIONS

This section is a statement of, and justification for, the principal assumptions of the economic analysis presented in the PEA. All monetary figures are presented in constant 2019 US dollars, and the figures presented do not include any escalation for cost inflation that is likely to occur over the study period.

A single high-grade concentrate production scenario is evaluated and sensitivity analyses are carried out for varied initial capital costs, operating costs, concentrate grades, and selling prices.

Concentrate product price is based on recent 5-year zinc metal average price, concentrate zinc grade, and assumed payable rate. The cash flow model is based on a 12-year life. At full production the study projects that 277,600 tonne (dry) mineralized material will be mined and processed, and 35,500 tonne (dry) concentrate containing 45% Zn will be produced and sold annually. TABLE 22-1 shows the key parameters used in the economic analysis model.

TABLE 22-1 ECONOMIC MODEL PARAMETERS

Item	Unit	Value
Mining/milling throughput	tpd	800
Resource Zn grade ¹	%	7.57
Mill feed Zn grade ²	%	7.19
Mine life	years	12
Mill recovery, Zn	%	80
Concentrate grade, Zn	%	45

Item	Unit	Value
Mining (mineralized material & waste rock)	US\$/t	19.5
Crushing cost	US\$/t	3.0
Milling cost	US\$/t	22.2
G&A	\$/t	2.0
<u>Initial capital costs</u>		
Mining (contract)	US\$ million	2
Process Plant / Tailings /infrastructure	US\$ million	17
Contingency	%	30
Owner's cost	US\$ million	1
<u>Sustaining capital costs</u>		
Mine closure	US\$ million	0.5
Sustaining capital (LOM)	US\$ million	2.2
Zinc LME price	US\$/t Zn	2,500
Zinc payment	%	85
Smelter charge	US\$/mt conc	200
Penalties	US\$/mt conc	30
Federal income tax	%	21

Notes:

1. inferred mineral resource at cutoff of 2%Zn
2. at 5% open pit dilution at zero grade

All cost estimates used for the cash flow forecasts are as described in Item 21 of this report. There are slight differences between some current cost estimates and the estimates presented in the Section 14.10 of this Report; the latter was prepared for “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” in 2018. It is believed that current estimates are somewhat more detailed and up to date. However, the cost estimates are at a conceptual level of detail and consistent with the preliminary nature of a PEA estimate. The estimates are based on the information, plans and projections currently available, and are certain to change over time. This economic analysis provides only an initial measurement of the potential economics of the Project.

22.2 CASH FLOW FORECASTS

The economic model used in the current PEA study is simplified as follows:

- Average diluted LOM mined material zinc grade is used for all production years,
- All pre-production capital costs are assumed to take place in Year 0,
- Mining unit costs, milling unit costs and zinc recovery are assumed to be equal to their LOM average for all production years,

- Zinc price is assumed constant at US\$2,500 /t zinc metal,
- No inflation is incorporated into the model parameters,
- No allowances are made for depreciation.

TABLE 22-2 presents the summary of the cash flow forecasts along with resulting revenue and post-tax cash flow.

TABLE 22-2 SUMMARY OF COST, FINANCIAL OUTPUT FOR A FULL PRODUCTION YEAR

Parameter	Value
Annual concentrate production, mt (dry)	35,500
Total operating costs, U\$millions, (*1)	15.0
Total capital cost, \$millions,	25.7
Operating revenue (EBITDA), U\$millions (*2)	10.9
Pre-tax cash flow, U\$millions (*2)	10.7
Post-tax cash flow, U\$millions (*2)	8.9

Notes:

1. Including concentrate shipping, royalty. Contingency not applied. Sensitivities are reported in Item 22.3.
2. Average of 12-year life.

TABLE 22-3 summarizes the net present value (NPV), internal rate of return (IRR), and payback period of capital on a before-tax and after-tax basis. The payback period starts from the first production year.

TABLE 22-3 SUMMARY OF PEA NPV, IRR AND PAYBACK

Description	Value
NPV @ 8% discount rate (before-tax), US\$millions	56.4
IRR (before-tax)	40%
NPV (after-tax), US\$millions	43.2
IRR (after-tax)	35%
Payback	2.7 years

An annual LOM cash flow forecast is presented in .

Table 22-4 Lone Mountain Project Zinc Concentrate Cash Flow Model

Item	Units	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
Resource															
Pit constrained 43-101 resource	tonnes	3,257,000	3,257,000	2,993,280	2,729,560	2,465,840	2,202,120	1,938,400	1,674,680	1,410,960	1,147,240	883,520	619,800	356,080	92,360
Zinc	%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%	7.57%
Lead	%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%
Inferred resource Zn contained	lbs	543,559,864	543,559,864	499,547,703	455,535,542	411,523,382	367,511,221	323,499,060	279,486,900	235,474,739	191,462,578	147,450,418	103,438,257	59,426,096	15,413,936
Mining & Milling															
Mine rate	tpd	-	800	800	800	800	800	800	800	800	800	800	800	800	800
Days of operation	days	-	347	347	347	347	347	347	347	347	347	347	347	347	347
Mine production	mtpy	-	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600	277,600
Open pit dilution	%	-	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Mine production effective	tpy	-	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720	263,720
Mine production Zn eq.	tpy	-	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964	19,964
Mill recovery	%	-	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Concentrate production (contained zinc)	tpy	-	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971	15,971
Concentrate production ((contained zinc)	lbs	-	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729	35,209,729
Zinc value in conc	\$/yr	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concentrate Revenue															
Zinc LME price	\$/mt	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Concentrate grade	%	-	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Concentrate production (Total)	mtpy	-	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491	35,491
Zinc payment	%	-	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Payable zinc concentrate value	\$/mt	-	956	956	956	956	956	956	956	956	956	956	956	956	956
Smelter treatment charge	\$/mt	-	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Penalties (Magnesium)	\$/mt	-	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Total smelter charges	\$/mt	-	230	230	230	230	230	230	230	230	230	230	230	230	230
Concentrate revenue (smelter invoiced)	\$/yr	-	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	25,775,231	9,027,000
Mining & Milling Costs															
Strip ratio	ratio	-	8.0x	8.0x											
Waste mining cost	\$/mt	-	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Waste mining	\$/yr	-	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	4,441,600	1,477,760
Mining ore	\$/mt	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Mining ore	\$/yr	-	971,600	971,600	971,600	971,600	971,600	971,600	971,600	971,600	971,600	971,600	971,600	971,600	323,260
Crushing	\$/mt	-	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Crushing	\$/yr	-	832,800	832,800	832,800	832,800	832,800	832,800	832,800	832,800	832,800	832,800	832,800	832,800	277,080
Total mining costs	\$/yr	-	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	6,246,000	2,078,100
Milling cost	\$/mt	-	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20
Milling cost	\$/yr	-	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	6,162,720	2,050,392
G&A cost	\$/mt	-	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
G&A cost	\$/yr	-	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	555,200	184,720
Total concentrate opex costs	\$/yr	-	12,963,920	4,313,212											
Opex cost per tonne of ore	\$/mt	-	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70
Concentrate transportation costs	\$/mt	-	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Transportation costs	\$/yr	-	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	1,419,634	497,184
Royalty	%	-	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Royalty Owyhee	\$/yr	-	515,505	515,505	515,505	515,505	515,505	515,505	515,505	515,505	515,505	515,505	515,505	515,505	180,540
Total Operating cost	\$/yr	-	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	14,899,059	4,990,936
Operating profit before tax, D&A (EBITDA)	\$/yr	-	10,876,172	4,036,063											
Depreciation & Amortization															
CCA rate	%	-	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%
Capital cost base	\$	-	25,700,000	18,504,000	13,322,880	9,592,474	6,906,581	4,972,728	2,486,369	-	-	-	-	-	-
Deductions	\$/yr	-	7,196,000	5,181,120	3,730,406.40	2,685,892.61	1,933,842.68	1,419,634	1,064,726	803,303	617,172	471,772	353,772	267,772	203,772
Operating profit before tax (EBIT)	\$/yr	-	3,680,172	5,695,052	7,145,766	8,190,280	8,942,330	8,389,803	8,389,803	10,876,172	10,876,172	10,876,172	10,876,172	10,876,172	4,036,063
Income tax	%	-	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Income tax	\$/yr	-	772,836	1,195,961	1,500,611	1,719,959	1,877,889	1,761,859	1,761,859	2,283,996	2,283,996	2,283,996	2,283,996	2,283,996	847,573
Net income	\$/yr	-	2,907,336	4,499,091	5,645,155	6,470,321	7,064,441	6,627,944	6,627,944	8,592,176	8,592,176	8,592,176	8,592,176	8,592,176	3,188,490
Capex															
Contract mining Set up and startup	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mill	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tailings	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal capex	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Owner's cost	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total capex	\$	-	(25,700,000)	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining Capex	\$/yr	-	-	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Mine closure	\$	-	(500,000)	-	-	-	-	-	-	-	-	-	-	-	-
Salvage value	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Cash Adjustments															
Depreciation & amortization	\$	-	7,196,000	5,181,120	3,730,406	2,685,899	1,933,843	1,419,634	1,064,726	803,303	617,172	471,772	353,772	267,772	203,772
FCF (before-tax)	\$	-	(26,200,000)	10,876,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	10,676,172	4,036,063
FCF (after-tax)	\$	-	(26,200,000)	10,103,336	9,480,211	9,175,561	8,956,214	8,798,283	8,914,314	8,914,314	8,392,176	8,392,176	8,392,176	8,392,176	3,188,490

22.3 TAXES AND ROYALTIES

The following assumptions were made for the PEA cash flow estimate:

- Royalty fee - 2% of concentrate sales revenue;
- Federal corporate income tax rate - 21% of operating revenue (EBIT).

TABLE 22-5 AVERAGE ANNUAL TAXES & ROYALTIES COST SUMMARY

Description	Annual Cost (US\$)
Royalties	515,000
Taxes	2,284,400
Total	2,799,600

22.4 SENSITIVITY ANALYSIS

Sensitivity analysis predicts impact of variations in commodity price, capital and operating costs, and other significant parameters on profitability of the project. Each parameter was varied by -15% to +15% and the resulting NPV and IRR are presented in TABLE 22-6. Factors analyzed include:

- Initial capital costs (mining, process plant, tailings and infrastructure),
- Operating costs (mining, milling, and G&A),
- Zn metal price, and
- Average resource zinc grade.

TABLE 22-6 PRE-TAX NPV SENSITIVITIES

Item	Variances	Value	Project NPV: (US\$ millions)			IRR
			0%	5%	10%	
Initial capital cost (US\$ millions)	+15%	\$22	\$104	\$68	\$45	35%
	Base Case	\$19	\$107	\$71	\$48	40%
	-15%	\$16	\$110	\$75	\$52	47%
Total operating cost (US\$ millions)	+15%	\$15	\$83	\$54	\$35	32%
	Base Case	\$13	\$107	\$71	\$48	40%
	-15%	\$11	\$131	\$89	\$62	48%
Zinc metal price US\$/t Zn metal	+15%	\$2,875	\$168	\$116	\$83	60%
	Base Case	\$2,500	\$107	\$71	\$48	40%
	-15%	\$2,125	\$45	\$26	\$14	19%
Zinc grade	+15%	8.7%	\$151	\$104	\$73	54%
	Base Case	7.57%	\$107	\$71	\$48	40%
	-15%	6.4%	\$62	\$39	\$24	26%

The sensitivity modelling demonstrates that the project economics are most sensitive to changes in zinc metal price and zinc grade of mined mineralized material, and least impacted by initial capital cost and operating cost. Metal price is uncertain and not foreseeable. As shown in the table, IRR would reduce to 19% when metal price falls 15%, however the IRR would increase to 60% when the price rises the same percentage. Zinc price would substantially affect the project economics.

23 ADJACENT PROPERTIES

Note: The information contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance except for being formatted to be consistent with current Report.

The Lone Mountain Property is located within the Battle Mountain-Eureka Trend and is surrounded by federal lands under the BLM administration. There are a number of semi-active mineral projects in the area although none are within 20 kilometres of the Project and all but the Cyprus Development Gunman project are targeted at precious metals or molybdenum, in the case of the Mount Hope Project. Timberline Resources’ Lookout Mountain Project is located near the town of Eureka, more than 30 kilometres to the south-southwest of the Lone Mountain Project and Cypress Development Corp.’s Gunman Project is located approximately 40 kilometres east of the Lone Mountain Project. This project has similar characteristics to the Lone Mountain Project in that it is primarily a project targeting zinc oxide as the primary mineralization of interest. Closer to the Lone Mountain Project (22 kilometres to the north), General Moly, Inc. has completed a full Feasibility Study on the Mount Hope open-pit molybdenum mine and McEwen Mining Inc. has completed a Feasibility Study on its Gold Bar gold project located approximately 22 kilometres to the northwest of the Project. The reader is cautioned that results reported in this section have not been independently verified by P&E.

23.1 LOOKOUT MOUNTAIN PROJECT

Timberline Resources Corp.’s Lookout Mountain Gold Project is located approximately 13 km south of the town of Eureka within the southern part of the Eureka Mining District in Central Nevada. Lookout Mountain is an advanced project and hosts significant oxide gold mineralization in the form of disseminated sediment-hosted Carlin-type deposits. Gold occurs at or near the contact of the Dunderberg shale and Hamburg dolomite and is associated with strong silicification, argillization and within a series of steep to moderately dipping normal faults that are westerly tilted and downward pinching into a mineralized wedge. Gold is often associated with pyrite, realgar, quartz and clay. Surface mineralization of jasperoid is associated with arsenic, mercury and antimony anomalies. Mine Development Associates (Gustin 2013) have completed an NI 43-101 Mineral Resource Estimate for the Lookout Mountain project and report Measured and Indicated Mineral Resources of 26.3 M tonnes at a gold grade of 0.62 g/t Au (0.018 oz Au/ton) (508,000 oz Au) plus Inferred Mineral Resources of 10.6 M tonnes at a grade of 0.41 g/t Au (0.012 oz Au/ton) (141,000 oz Au).

23.2 GUNMAN PROJECT

The Gunman Zinc-Silver Project is located 50 km northeast of the town of Eureka, Nevada in White Pine County. Reverse circulation drilling programs, totalling 11,600 m, have returned significant zinc (5% to 33%) and silver 17 to 514 g/t (0.5 to 15.0 oz/ton) grades over considerable widths. Infill and confirmation drilling have intersected long intervals of strong

dolomitic alteration with numerous gossanous iron oxide zones. Samples taken from within the oxide zones, and the adjacent dolomitized limestone, returned up to 30% zinc and 209.2 g/t (6.1 oz/ton) silver mineralization. The mineralization is suggested to be structurally controlled and contained within an envelope of hydrothermally altered, fractured and brecciated dolomite. Subsequent oxidation, of the poly-metallic veins, has returned significant down-hole intervals of silver, zinc and iron oxide gossans with local sulphide-cast boxworks. A series of well-developed north-northeast-trending fracture zones appears to control the mineralization at the Gunman Project. This setting is also present at other locations along the Carlin and Battle Mountain gold trends: north-south to north-northeast alignments of mineralized zones within cross-cutting structural zones and within or adjacent to the main north by northwest striking trends (Cypress, 2014 and Marvin, 2014).

24 OTHER RELEVANT DATA AND INFORMATION

To the best of the authors' knowledge there is no other relevant data, additional information or explanation necessary to make the Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

Note: The information in Item 25.1 contained in this section is copied in its entirety from “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA” completed for Nevada Zinc Corporation by P&E Mining Consultants Inc. (filed September 7, 2018). There have been no subsequent changes in substance to this part of the information except for being formatted to be consistent with current Report.

Caution to readers: The Study is based on Inferred Mineral Resources and is preliminary in nature, and Inferred Mineral Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that this potential will be realized. The factors, or assumptions, that were applied in drawing the conclusions and projections set forth in this Item are summarized in the other Items of this Technical Report. For this reason, readers should read this Item 25 solely in the context of the full report, and after reading all other Items of this report.

25.1 MINERAL RESOURCES

Nevada Zinc’s Lone Mountain Project is located in Eureka County, Nevada, approximately 300 km east of Reno, Nevada and within Nevada’s prolific Battle Mountain-Eureka mineralization trend.

The Lone Mountain Property comprises 230 contiguous unpatented lode mining claims and one patented claim covering a total area of approximately 4,540 acres. The Lone Mountain claims are located along the northern edge of Lone Mountain. The property is approximately 7.5 km north of US Highway 50 and can be accessed by vehicles via an unpaved road extending north from Highway 50. Exploration activities may be conducted year-round. The Lone Mountain Property benefits from its location within the Battle Mountain-Eureka Trend of Northern Nevada. The region supports an active mining workforce with significant resources for mineral exploration, mine development and mine operations.

High-grade zinc-lead carbonate/oxide mineralization at Lone Mountain is primarily associated with fault intersections and breccia zones in the Devonian Devils Gate Formation. The zinc mineralization is predominately hemimorphite (Zn silicate-hydroxide), smithsonite (Zn carbonate) and minor Zn-bearing dolomite. The mineralization style is consistent with the supergene-type non-sulphide zinc deposits described as forming as a result of weathering of Mississippi Valley-type and high-temperature carbonate replacement-type zinc deposits.

The past-producing Mountain View Mine is located on the patented claim that is part of the Lone Mountain Project. This high-grade zinc carbonate/oxide deposit was mined from underground between 1942 and 1964. The Mountain View Mine is reported to have contained smithsonite (zinc carbonate), zincite (zinc oxide), hydrozincite (zinc carbonate-hydroxide), cerussite (lead carbonate), malachite (copper carbonate-hydroxide) and azurite (copper

carbonate-hydroxide). Small amounts of sulphide were present as sphalerite (zinc sulphide), galena (lead sulphide), chalcopyrite (copper sulphide) and pyrite (iron sulphide). The mineralization at the Mountain View Mine is hosted in thickly bedded, grey dolomite of the Devils Gate Formation that strikes northwest and dips to the northeast. The mineralized zones occur in breccia zones located at the intersection of two or more sets of faults.

Exploration by Nevada Zinc has identified strong zinc in the soil anomaly with a minimum strike length of 1,400 m associated with the up-dip projection of zinc mineralization intersected in drill holes. Nevada Zinc has completed 85 reverse circulation (RC) drill holes for a total of 12,265.2 m and 13 diamond drill holes for a total of 2,142.6 m. This drilling has identified significant high-grade zinc and associated lead mineralization over widths of 10's of meters to in excess of 100 metres. Select diamond drill core holes include NLM-17-08 that intersected 24.7 m grading 23.06% Zn from a depth of 143.05 m.

P&E considers that the sampling methodology as implemented by Nevada Zinc meets industry standards for an advanced exploration project and that sample preparation, security and analytical procedures for the Lone Mountain drill program were adequate for the purposes of this resource estimate. Mr. Fred Brown, P.Geo., a Qualified Person under the regulations of NI 43-101 completed an on-site review of Nevada Zinc's Lone Mountain Property for the current Technical Report on June 11, 2018 and had previously visited the property on November 28, 2016. P&E's due diligence sampling show good correlation with the original Nevada Zinc assays and it is P&E's opinion that Nevada Zinc's results are suitable for use in the current Mineral Resource Estimate.

The drill hole database contains 85 reverse circulation and 13 diamond drill holes with a total of 1,049 assays available for grade estimation. Mineralization domains (wireframes) were constructed from connected cross-sectional polylines using a 2% Zn cut-off. The mineralization is confined to the Devils Gate limestone and contained in two discrete northern mineralized domains and four discrete southern mineralized domains. The average density within the defined mineralized domains is 2.98 t/m³ and since the mineralized domains are contained within the Devils Gate limestone, a 10% void discount factor was applied.

Grade estimation was carried out using Inverse Distance Squared anisotropic linear weighting within a search envelope oriented parallel to the defined structures. P&E Mining Consultants Inc. considers that the information available for the Nevada Zinc Corporation Lone Mountain Deposit demonstrates reasonable geological and grade continuity and satisfies the requirements for an NI 43-101 Inferred Mineral Resource Estimate.

For reporting purposes, an optimized pit shell was constructed to constrain the modelled mineralization. At a cut-off grade of 2% zinc, the pit constrained Inferred Mineral Resource Estimate was determined to be 3,257,000 tonnes grading 7.57% zinc and 0.70% lead.

The Mineral Resource Estimate presented in the current Technical Report has been prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral

Resource and Mineral Reserves Best Practices” guidelines. Mineral Resources have been classified in accordance with the “CIM Standards on Mineral Resources and Reserves: Definition and Guidelines” as adopted by CIM Council on May 10, 2014. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

25.2 PROCESSING

Nevada Zinc is developing a flotation process to recover zinc minerals from Lone Mountain deposit mineralized material. The process being developed is based on test work conducted to date by various test laboratories as described in Item 13 in the Report.

Preliminary flotation tests generated suitable conditions to achieve higher than 40% Zn grade concentrate. Testing was fairly limited and it is probable that further optimization would improve metallurgy. It is considered probable that with closed flotation circuit 45% zinc grade can be reached.

In addition, leach tests to extract zinc from whole mineralized material or flotation concentrate using different technical approaches were conducted and results were positive. Effective zinc extraction can be achieved as high as from 97% to 99% depending on technology.

For the reporting purpose, the process considered only flotation plant to produce a single high grade zinc concentrate product for sale. In the future when project studies proceed further, extracting zinc via leach process and producing high market value chemical zinc product can be investigated, which may improve the economic potential of the project. Additionally, while all zinc projects are highly subject to fluctuations in the zinc metal price, projects that produce value added chemicals tend to be significantly more insulated from large fluctuations in the zinc metal price and are also isolated in wildly fluctuating smelter treatment charges. Zinc sulphate and zinc oxide chemical products command a premium to the zinc metal price and do not require the involvement of a zinc smelter.

25.3 ENVIRONMENTAL

Currently there are no known specific environmental issues that could materially impact Nevada Zinc to extract zinc from its Lone Mountain deposit. However, there are a range of environmental issues that will be considered and assessed through the baseline information gathering process and environmental impact assessment process (EIA). The Lone Mountain Project will need to implement an Environmental Monitoring Plan in the future.

25.4 CONCLUSION

It is concluded that the Preliminary Economic Assessment (PEA) demonstrates that the development of the Nevada Zinc Lone Mount Project is technically feasible and has the potential for robust economics with the design criteria and zinc prices assumptions used in this Report.

A number of key factors have been identified that will be benefit to the robust nature of the project development economics:

- The Lone Mountain Property is located within in the Eureka Mining District of Eureka County, Nevada, in southwestern USA. It can be accessed by vehicles from highway and helicopter via a number of charter companies based in the surrounding area;
- The Property is located in the area mainly based on agriculture and mining business. As a consequence of the mining activity, the region supports an active mining workforce with significant resources for mineral exploration, mine development and mine operation;
- Deposit mineralogy allows for the production of high grade salable zinc flotation concentrates. The concentrate can then be processed via acid leach or other technology to recover zinc and produce high value zinc products.

26 RECOMMENDATIONS AND PROPOSED BUDGET

Overall, the project shows reasonable prospects for economic viability and should be advanced to the next phase of study to improve confidence and decrease Project risks. It is recommended that the Company moves forward with the recommendations listed in the P&E Mining report filed on SEDAR September 7, 2018, as well as the recommendations based on this Study.

Previous P&E recommendations included:

- 1) P&E considers that the Lone Mountain Property hosts significant high-grade Zn mineralization and warrants further exploration. Exploration should include both RC and core drilling to evaluate additional targets and improve confidence in the Mineral Resource Estimate.
- 2) Metallurgical studies including dense media separation are recommended in order to develop a potential flow sheet for processing the carbonate-oxide mineralization at Lone Mountain.
- 3) A baseline environmental study is recommended to quantify potential physical and environmental hazards from past-production. The study should evaluate potential remediation and safety measures for these physical hazards,
- 4) Recommend a marketing study to evaluate the potential of primary zinc sulphate sales.

The dense media separation test recommend by P&E has been completed. For the next phase metallurgical tests including locked-cycle flotation test, zinc concentrate leach using acid and other technology are recommended in order to develop a feasible and economical flow sheet for processing the carbonate-oxide mineralization at Lone Mountain.

In P&E Mining's report, a budget of CAD \$1,345,000 was estimated to complete recommended programs as presented in TABLE 26-1. This Report considers that the original budget is still valid, including the budget for next phase metallurgical test work.

TABLE 26-1 RECOMMENDED PROGRAM AND BUDGET (CAD)			
Program	Units (m)	Unit Cost (\$/M)	Budget (\$)
Geochemical sampling			25,000
RC drilling – exploration targets	1,000	150	150,000
RC drilling – resource	2,000	150	300,000
Core drilling	800	\$400	320,000
Metallurgical testwork			200,000
Zinc sulphate market evaluation			200,000
Permitting and environmental			100,000
Site accommodation costs			50,000
Total			\$1,345,000

27 REFERENCES

- Ref 1 Mineralogical Note, Process Mineralogical Consulting Ltd., Jan 5, 2016 (PMC)*
- Ref 2 QEMSCAN Data, SGS, Project CALR-16317-001 MI5014-Sep 17*
- Ref 3 An Investigation into Initial Metallurgical Testing on a Sample from the Lone Mountain Deposit, SGS Project 16317-001-DRAFT-Final Report, Feb 18, 2019*
- Ref 4 Heavy Liquid Separation, MS1658 Nevada Zinc Final Report, Met-Solve, January 4th, 2016*
- Ref 5 SGS file: 16317-001-HLS Results*
- Ref 6 SGS file: 16317-001-HLS Results-0.5 inch*
- Ref 7 SGS file: 16317-001-Flotation*
- Ref 8 SGS file: 16317-001 Nevada Zinc Corp. MI5038-FEB18 - QS Data*
- Ref 9 16317-001 – Leaching Test*
- Ref 10 Leaching Tests for Nevada Zinc Material", Outotec, May 23, 2016.*
- Ref 11 Metsol leach results, March 17, 2017*
- Ref 12 "Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Project – Eureka County, Nevada, USA" by P&E Mining Consultants Inc. September 7, 2018*

28 CERTIFICATES

CERTIFICATE OF QUALIFIED PERSON

FRED H. BROWN, P.GEO.

I, Fred H. Brown, of PO Box 332, Lynden, WA, USA, do hereby certify that:

1. I am an independent geological consultant and have worked as a geologist continuously since my graduation from university in 1987.
2. This certificate applies to the Technical Report titled "Preliminary Economic Assessment on The Lone Mountain Project, Eureka County, Nevada, USA" for Nevada Zinc Corporation", (The "Technical Report") with an effective date of June 27, 2019.
3. I graduated with a Bachelor of Science degree in Geology from New Mexico State University in 1987. I obtained a Graduate Diploma in Engineering (Mining) in 1997 from the University of the Witwatersrand and a Master of Science in Engineering (Civil) from the University of the Witwatersrand in 2005. I am registered with the South African Council for Natural Scientific Professions as a Professional Geological Scientist (registration number 400008/04), the Association of Professional Engineers and Geoscientists of British Columbia as a Professional Geoscientist (171602) and the Society for Mining, Metallurgy and Exploration as a Registered Member (#4152172).
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.

My relevant experience for the purpose of the Technical Report is:

- Resident Geologist, Venetia Mine, De Beers 1997-2000
- Chief Geologist, De Beers Consolidated Mines 2000-2004
- Consulting Geologist 2004-2008
- P&E Mining Consultants Inc. – Sr. Associate Geologist 2008-Present

4. I have visited the Property that is the subject of this Technical Report on November 28, 2016 and from June 11 to June 12, 2018.
5. I am responsible for having visited the property from June 11 to June 12 2018 at which time I reviewed the work on the Lone Mountain Project.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the Property that is the subject of this Technical Report with a previous Technical Report titled "Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA" with an effective date of January 25, 2017 and

“Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Property Eureka County, Nevada, USA” with an effective date of July 22, 2019.

8. I am responsible for co-authoring Sections 1, 14, 25, and 26 of the Technical Report.
9. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
10. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: Sept. 26, 2019

{SIGNED AND SEALED}

[Fred H. Brown]

Fred H. Brown, P.Geol.

PEIMENG LING, M.Sc. P.Eng.

I, Peimeng Ling, do hereby certify that:

1. I am Principal of Peimeng Ling & Associates Limited (CofA #100183418) with an office located at 39 Clovercrest Road, Toronto, Ontario, Canada, M2J 1Z5
2. This certificate applies to the Technical Report titled “Preliminary Economic Assessment on The Lone Mountain Project, Eureka County, Nevada, USA” for Nevada Zinc Corporation, (The “Technical Report”) with an effective date of June 27, 2019.
3. I am a graduate of Zhejiang University, PRC (B.Eng. ,Chem. Eng., 1982), University of Toronto, Canada (MSc Chem. Eng.1994). I am a registered Professional Engineer in good standing of Professional Engineers Ontario (Registration Number 90444985) and a member of The Canadian Institute of Mining, Metallurgy and Petroleum (CIM). I have over 25 years of direct experience with precious and base metals mineral and hydrometallurgical processing in Canada, USA, Brazil, and Russia including test work, project feasibility study, process design, plant design, environmental compliance, and financial evaluation with a variety of deposit types including gold, silver, copper, zinc, nickel, cobalt, vanadium, platinum-group metals and industrial minerals. As a result of my education, professional qualifications, and experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
4. I have not visited the Project Site.
5. I am author of the technical report titled: “Preliminary Economic Assessment on The Lone Mountain Project, Eureka County, Nevada, USA” for Nevada Zinc Corporation, dated June 27, 2019 (the “Technical Report”). I am responsible for authoring Sections 2, 3, 4, 13 17, 19, 22 and 24, and co-authoring Sections 1, 21, 25 and 26 of the Technical Report and responsible for the overall preparation of the Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. I have read the Instrument and Form 43-101F1 and this technical report has been prepared in compliance with therewith.

9. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: Sept. 26, 2019

{SIGNED AND SEALED}

[Peimeng Ling]

Peimeng Ling, P. Eng.

GARTH WILCOX

I, Garth Wilcox, of 2 Clarinet Lane, Stouffville, ON, L4A 4N7, do hereby certify that:

1. I am an independent engineering consultant and have worked as an engineer continuously since my graduation from university in 1996.
2. This certificate applies to the Technical Report titled “Preliminary Economic Assessment on The Lone Mountain Project, Eureka County, Nevada, USA” for Nevada Zinc Corporation”, (The “Technical Report”) with an effective date of June 27, 2019.
3. I graduated with a Bachelor of Engineering Degree in Metallurgical from the Technical University of Nova Scotia, 1996. I am registered with the Professional Engineers of Ontario, and have been continuously since 2000. 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.

My relevant experience for the purpose of the Technical Report is:

- Process Engineer Davy/Kvaerner Engineering 1995-2003
- Senior Process Engineer AMEC, Ontario 2006-2007
- Engineering Management, Castle Gold Corp. 2007-2010
- Project Management, Gowest Gold Ltd. 2010-Present

4. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
5. I have not visited the Property that is the subject of this Technical Report.
6. I am responsible of authoring Sections 20 and 21, and co-authoring Sections 1, 25 and 26 of the Technical Report.
7. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.
8. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: September 26, 2019

{SIGNED AND SEALED}

[G.R. Wilcox]

Garth Wilcox, P.Eng.

DAVID BURGA, P.GEO.

I, David Burga, P. Geo., residing at 3884 Freeman Terrace, Mississauga, Ontario, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “NI 43-101 Preliminary Economic Assessment and Technical Report on The Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of June 27, 2019.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geological Sciences (1997). I have worked as a geologist for a total of 20 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 1836).

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.

My relevant experience for the purpose of the Technical Report is:

- Exploration Geologist, Cameco Gold 1997-1998
- Field Geophysicist, Quantec Geoscience 1998-1999
- Geological Consultant, Andeburg Consulting Ltd. 1999-2003
- Geologist, Aeon Egmond Ltd. 2003-2005
- Project Manager, Jacques Whitford 2005-2008
- Exploration Manager – Chile, Red Metal Resources 2008-2009
- Consulting Geologist 2009-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 9 and 10 and co-authoring Sections 1, 25 and 26 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the Property that is the subject of this Technical Report with two previous Technical Reports titled “Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of January 25, 2017 and “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA for Nevada Zinc Corporation”, with an effective date of July 22, 2018.
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.

9. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: September 26, 2018

{SIGNED AND SEALED}

[David Burga]

David Burga, P.Geol.

Jarita Barry, P.Geol.

I, Jarita Barry, P.Geol., residing at 4 Creek View Close, Mount Clear, Victoria, Australia, 3350, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “NI 43-101 Preliminary Economic Assessment and Technical Report on The Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of June 27, 2019.
3. I am a graduate of RMIT University of Melbourne, Victoria, Australia, with a B.Sc. in Applied Geology. I have worked as a geologist for a total of 12 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Engineers and Geoscientists of British Columbia (License No. 40875) and Professional Engineers and Geoscientists Newfoundland & Labrador (License No. 08399). I am also a member of the Australasian Institute of Mining and Metallurgy of Australia (Member No. 305397);

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.

My relevant experience for the purpose of the Technical Report is:

- Geologist, Foran Mining Corp. 2004
- Geologist, Aurelian Resources Inc. 2004
- Geologist, Linear Gold Corp. 2005-2006
- Geologist, Búscore Consulting 2006-2007
- Consulting Geologist (AusIMM) 2008-2014
- Consulting Geologist, P.Geol. (APEGBC/AusIMM) 2014-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 11 and co-authoring Sections 1, 12, 25 and 26 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101. I am independent of the Vendor and the Property.
7. I have had prior involvement with the Property that is the subject of this Technical Report with a previous Technical Report titled “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA for Nevada Zinc Corporation”, with an effective date of July 22, 2018.
8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.

9. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: September 26, 2019

{SIGNED AND SEALED}

[Jarita Barry]

Jarita Barry, P.Geol.

Eugene Puritch, P. Eng., FEC, CET

I, Eugene J. Puritch, P. Eng., FEC, CET, residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

1. I am an independent mining consultant and President of P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “NI 43-101 Preliminary Economic Assessment and Technical Report on The Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of June 27, 2019.
3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen’s University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee’s Examination requirement for Bachelor’s Degree in Engineering Equivalency. I am a mining consultant currently licensed by Professional Engineers and Geoscientists New Brunswick (License No. 4778), Professional Engineers, Geoscientists Newfoundland & Labrador (License No. 5998), Association of Professional Engineers and Geoscientists Saskatchewan (License No. 16216), Ontario Association of Certified Engineering Technicians and Technologists (License No. 45252) the Professional Engineers of Ontario (License No. 100014010) and Association of Professional Engineers and Geoscientists of British Columbia (License No. 42912). I am also a member of the National Canadian Institute of Mining and Metallurgy.

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.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

- Mining Technologist - H.B.M.& S. and Inco Ltd., 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
- Self-Employed Mining Consultant – Timmins Area, 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
- President – P&E Mining Consultants Inc, 2004-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for co-authoring Sections 1, 14, 25, and 26 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the Property that is the subject of this Technical Report with a previous Technical Report titled “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA for Nevada Zinc Corporation”, with an effective date of July 22, 2018.

8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
9. As of the effective date of this 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.

Effective Date: June 27, 2019

Signing Date: September 26, 2019

{SIGNED AND SEALED}

[Eugene Puritch]

Eugene Puritch, P.Eng., FEC, CET

RICHARD SUTCLIFFE, Ph.D., P. GEO.

I, Richard Sutcliffe, Ph.D., P. Geo., residing at 130 Foxridge Drive, Ancaster, Ontario, do hereby certify that:

1. I am an independent geological consultant and Sr. Geological Advisor, P&E Mining Consultants Inc.
2. This certificate applies to the Technical Report titled “NI 43-101 Preliminary Economic Assessment and Technical Report on The Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of June 27, 2019.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geology (1977). In addition, I have a Master of Science in Geology (1980) from University of Toronto and a Ph.D. in Geology (1986) from the University of Western Ontario. I have worked as a geologist for a total of 32 years since obtaining my M.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 852).

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.

My relevant experience for the purpose of the Technical Report is:

- Precambrian Geologist, Ontario Geological Survey 1980-1989
- Senior Research Geologist, Ontario Geological Survey 1989-1991
- Associate Professor of Geology, University of Western Ontario. 1990-1992
- President and CEO, URSA Major Minerals Inc. 1992-2012
- President and CEO, Patricia Mining Corp. 1998-2008
- President and CEO, Auriga Gold Corp. 2010-2012
- Founder and President, Pavey Ark Minerals Inc. 2012-present
- Consulting Geologist 1992-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Sections 5 to 8, 23 and co-authoring Sections 1, 25 and 26 of the Technical Report.
6. I am independent of the issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the Property that is the subject of this Technical Report with two previous Technical Reports titled “Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA” with an effective date of January 25, 2017 and “Initial Mineral Resource Estimate and Technical Report on the Lone Mountain Property, Eureka County, Nevada, USA for Nevada Zinc Corporation”, with an effective date of July 22, 2018. .
8. I have read NI 43-101 and Form 43-101F1 and this Technical Report has been prepared in compliance therewith.

9. As of the effective date of this 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.

Effective Date: June 27, 2019

Signed Date: September 26, 2019

{SIGNED AND SEALED}

[Richard Sutcliffe]

Richard H. Sutcliffe, PhD.,P.Geo.