

Timberline's Talapoosa PEA Indicates \$136M After-Tax NPV and 39% IRR at \$1,150/oz Gold with \$51M Pre-Production Capital Costs

- Estimated average annual production of 55,000 oz of gold and 679,000 oz of silver for 11 years
- LOM all-in sustaining costs of \$599/oz gold (net of silver byproduct at \$16/oz silver price)
- After-tax NPV_{5%} of \$136 million and 39% IRR at \$1,150/oz gold price and \$16/oz silver price
- Low initial capital requirement of \$51 million required to achieve production

Coeur d'Alene, Idaho – April 27, 2015 – **Timberline Resources Corporation (NYSE MKT: TLR; TSX-V: TBR)** (“Timberline” or the “Company”) is pleased to report the results of a positive Preliminary Economic Assessment (“PEA”) carried out on the Company’s recently optioned Talapoosa project (“Talapoosa”) located in western Nevada. Timberline holds a 30-month option to purchase 100% of Talapoosa.

The PEA confirms Talapoosa’s robust economic potential as an open pit, heap leach gold operation using contract mining at a processing rate of 3.8 million tons per annum (Mtpa). Specifically, using the base case price assumption of \$1,150/oz gold and \$16/oz silver, Talapoosa has an estimated \$209 million after-tax net cash flow, \$136 million after-tax net present value (NPV) at a 5% discount rate, an attractive 39% after-tax internal rate of return (IRR), and a low initial capital cost of \$51 million. All currency figures are in US Dollars (US\$ or \$) unless otherwise stated.

The PEA was prepared by WSP Canada Inc. (“WSP”), with technical contributions from Mineral Property Development, Inc. (“MPDI”), McClelland Laboratories, Inc. (“McClelland Labs”), Enviroscientists Inc. (“Enviroscientists”) and DOWL, using the current mineral resource estimate for Talapoosa, which was also prepared by WSP with an effective date of March 24, 2015. The completed PEA technical report will be filed on the Company’s website, EDGAR and SEDAR within 45 days.

Kiran Patankar, Timberline’s President and Chief Executive Officer, commented, “We are extremely pleased to have achieved this important milestone just a short month after having acquired the Talapoosa option. Our technical team capitalized on a well-defined mineral resource that had undergone extensive historic engineering and permitting work to deliver a high quality PEA ahead of schedule. This illustrates the clear advantages of working with a technical group that is actively involved with comparable Nevada gold development projects and had prior experience with Talapoosa.

The PEA presents a development scenario that demonstrates strong economics using conservative metals price assumptions and, importantly, fits within the scope of the previously permitted operation. As a partially permitted project in a low-risk, pro-mining jurisdiction with estimated average annual gold production of 55,000 oz, all-in sustaining cash costs of \$599/oz of gold (net of silver), initial capital costs of \$51 million, and potentially significant opportunities for future optimization and resource expansion, we believe Talapoosa is in the top quartile of North American gold development projects. Based on these encouraging results, we plan to further optimize Talapoosa through the completion of a Pre-Feasibility Study, which we expect to complete in Q1 2016.”

The PEA is preliminary in nature and the economic analysis it presents is based, in part, on Inferred Resources that are considered too speculative geologically to have mining and economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Estimates of Inferred Resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. There is no certainty that the economic forecasts contained within the PEA will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Project Design and Economics

The proposed project is a 10,460 ton/day (3.8 Mtpa) heap leach facility fed by a single open pit mine, resulting in a projected 11-year mine life with total metal production of 593,000 oz of gold and 7,365,000 oz of silver. Initial capital costs are estimated at \$51 million including a \$2 million reclamation bond, \$8 million in owner's costs, and a \$6 million contingency cost. This includes mine development, heap leach pad and Merrill Crowe processing plant construction, waste rock management, and all site infrastructure required for the start of mining operations. Projected life-of-mine (LOM) average cash operating costs are \$543/oz of gold (net of silver byproduct at the base case \$16/oz silver price). All-in sustaining costs are \$599/oz of gold (net of silver). Total all-in costs, including all capital expenditures, are \$682/oz of gold (net of silver), which is among the lowest per-ounce costs when compared with other gold development projects. A summary of the operating assumptions and highlights are as follows:

Operating Assumptions/Highlights	(US\$ unless otherwise indicated)
Mine Life	10.8 years
Total Material Mined	102.4 million tons
Strip Ratio	1.47 : 1
Processing Rate	3.8 Mtpa
Average Gold Head Grade	0.74 g/t
LOM Average Gold Recovery	66%
Total Recovered Gold Ounces	593,000 oz
Average Gold Production	55,000 oz/yr
Average Silver Head Grade	11.6 g/t
LOM Average Silver Recovery	52%
Total Recovered Silver Ounces	7,365,000 oz
Average Silver Production	679,000 oz/yr
Initial Capital Cost ⁽¹⁾	\$51.2 million
Cash Operating Cost (net of silver) ⁽²⁾	\$543/oz Au
All-In Sustaining Cost (net of silver) ⁽³⁾	\$599/oz Au
Total All-in Cost (net of silver) ⁽⁴⁾	\$682/oz Au

⁽¹⁾Includes \$2 million reclamation bond and \$6 million in contingency costs

⁽²⁾Mining, processing, G&A, and reclamation costs; \$16.00/oz silver price

⁽³⁾Cash operating cost plus royalties, refining costs, NV net proceeds tax, and sustaining capex; \$16.00/oz silver price

⁽⁴⁾All-in sustaining cost plus initial capital; \$16.00/oz silver price

At a gold price of \$1,150/oz and a silver price of \$16/oz (base case price assumptions), Talapoosa has an estimated \$209 million after-tax net cash flow, \$136 million after-tax NPV at a 5% discount rate, an attractive 39% after-tax IRR, and a payback period of 3.1 years from first production. The base case economic evaluation used metal prices that are close to current spot prices and lower than historical three-year trailing averages for gold and silver prices. Talapoosa's economics were also evaluated using a \$1,000/oz gold price and a \$14.50/oz silver price (the "Downside Case"), as well as using a \$1,300/oz gold price and a \$17.50/oz silver price (the "Upside Case"). After-tax versions for each case were prepared using the following: a 1% Net Smelter Return (NSR) royalty; a 5% State of Nevada net proceeds tax; depreciation and depletion; and a 35% US Federal income tax. The pre-tax and after-tax results for the base case and other commodity price cases are as follows:

Project Performance <i>(US\$ unless otherwise indicated)</i>	Commodity Price Assumption		
	Downside Case	Base Case	Upside Case
Gold Price	\$1,000/oz	\$1,150/oz	\$1,300/oz
Silver Price	\$14.50/oz	\$16.00/oz	\$17.50/oz
Pre-Tax:			
Net Cash Flow	\$183 million	\$278 million	\$372 million
NPV @ 5%	\$114 million	\$184 million	\$254 million
NPV @ 8%	<i>\$85 million</i>	<i>\$145 million</i>	<i>\$205 million</i>
IRR	30.4%	48.4%	68.4%
Payback Period	5.4 years	0.9 years	0.8 years
After-Tax:			
Net Cash Flow	\$138 million	\$209 million	\$278 million
NPV @ 5%	\$84 million	\$136 million	\$188 million
NPV @ 8%	<i>\$61 million</i>	<i>\$106 million</i>	<i>\$150 million</i>
IRR	25.4%	38.8%	52.6%
Payback Period	5.5 years	3.1 years	1.0 years

Mineral Resources

The PEA is based on the current mineral resource estimate for Talapoosa. The technical report, titled *Technical Report and Resource Estimate on the Talapoosa Project, Nevada*, was published on SEDAR on April 1, 2015. The resource estimate was prepared by WSP, with contributions from McClelland Labs, and has an effective date of March 24, 2015. The Talapoosa resource includes 1.01 million oz of gold and 13.65 million oz of silver in the Measured & Indicated Resources (“M&I”) categories, with an additional 0.23 million oz of gold and 2.17 million oz of silver in the Inferred Resource category, and is summarized in the table below:

	Tons	Au (oz/ton)	Ag (oz/ton)	Tonnes	Au (g/t)	Ag (g/t)	Au (oz)	Ag (oz)
Oxide Measured	3,126,050	0.038	0.553	2,835,890	1.29	18.96	117,253	1,728,323
Sulphide Measured	14,044,820	0.036	0.481	12,741,180	1.22	16.50	501,215	6,760,763
Total Measured	17,170,870	0.036	0.494	15,577,070	1.23	16.95	618,468	8,489,086
Oxide Indicated	1,412,000	0.032	0.416	1,280,900	1.10	14.25	45,328	586,999
Sulphide Indicated	12,681,600	0.028	0.361	11,504,500	0.94	12.36	349,005	4,573,274
Total Indicated	14,093,600	0.028	0.366	12,785,400	0.96	12.55	394,334	5,160,273
Total M&I	31,264,470	0.032	0.437	28,362,470	1.11	14.97	1,012,802	13,649,358
Oxide Inferred	1,762,000	0.027	0.065	1,598,000	0.93	2.24	47,745	115,115
Sulphide Inferred	9,436,000	0.02	0.218	8,560,000	0.68	7.48	185,787	2,057,651
Total Inferred	11,198,000	0.021	0.194	10,158,000	0.72	6.65	233,532	2,172,766

Note: resources estimated using a gold cut-off = 0.013 oz/ton (0.45 g/t)

Capital Costs

Capital costs were developed based on comparable open pit, heap leach gold operations and facilities. The costs are presented in three separate categories: (1) Initial direct capital costs, which cover construction costs to initiate mining and heap leach processing and include a \$2 million estimated reclamation bond; (2) Initial indirect capital costs, which include EPCM, start-up owner's costs, working capital, and initial contingency costs; and (3) Sustaining capital costs, which include vehicle replacement, dewatering infrastructure, contractor demobilization, and associated contingency costs. The estimated capital costs are as follows:

Capital Costs	US\$ million	% of Total
Initial Capital Costs		
Direct Costs ⁽¹⁾	\$37.7	73%
Indirect Costs (including contingencies)	\$13.5	26%
Total Initial Capital Costs	\$51.2	99%
Sustaining Capital Costs ⁽²⁾	\$0.7	1%
Total LOM Capital Costs	\$51.9	100%

⁽¹⁾Includes \$2 million reclamation bond

⁽²⁾Includes return of \$2 million reclamation bond

Operating Costs

Operating costs are based on comparable open pit, heap leach gold operations and facilities and include quotations from third-party vendors for contract mining and crushing. The project will be mined by conventional open pit methods. Mineralized material will be crushed in primary and secondary stages with a high pressure grinding roll (HPGR) tertiary stage to produce a nominal -10 mesh product, which will be agglomerated prior to being placed by stacker on the heap leach pad. Pregnant solution from the heap leach pad will be recovered using a Merrill Crowe recovery circuit that will produce a gold-silver doré. Operating cost estimates are as follows:

Operating Costs (LOM Average)	US\$/ton feed
Mining Cost (@ \$2.32/ton mined)	\$ 5.74
Processing Cost (\$/ton processed)	\$ 3.75
General and Administrative (\$/ton processed)	\$ 0.85
Reclamation Cost (\$/ton processed)	\$ 0.27
Total Operating Costs (\$/ton processed)	\$ 10.61

Metallurgy

Analysis of historic data, in addition to test work performed by McClelland Labs, has provided a reliable basis for deriving gold and silver recoveries for the types of mineralized material to be mined at Talapoosa. WSP used gold and silver recoveries specific to each mineralization type as estimated by McClelland Labs. Assumed recovery rates are as follows:

Average Heap Leach Recovery %	Gold	Silver
Oxides	77%	47%
Unoxidized Material	65%	60%
Sulfides	59%	45%
LOM Average	66%	52%

Permitting

Future mining development at Talapoosa will be subject to federal, state and local permitting regulations. Final permits allowing for the construction of a similar open pit, heap leach mine at Talapoosa were originally obtained by Miramar Mining Corporation in 1996/1997, including an approved Plan of Operations (PoO) by the US Bureau of Land Management (“BLM”) and permits required by the State of Nevada. The PEA contemplates an operation that is consistent with the historic PoO and Enviroscientists considers the PoO to remain in valid standing; however, several permits will require updates including calculation of bond and reclamation fees. Reapplication for State of Nevada permits will also be necessary; however, Timberline expects timely updates to meet current regulatory standards based on historic data.

Major regulatory approvals to be acquired include:

- Bonding decision for the approved PoO and Nevada Reclamation Permit from the BLM and the Bureau of Mining Regulation and Reclamation (“BMRR”), respectively;
- Right of Way with the BLM for portions of the power line and water supply line;
- Water Pollution Control Permit with the BMRR;
- Air Quality Operating Permit and Mercury Operating Permit with the Nevada Bureau of Air Pollution Control;
- Water rights from the Nevada Division of Water Resources; and
- Special Use Permit from Lyon County.

No unusual circumstances are recognized at Talapoosa relative to comparable mine sites in Nevada. This suggests that the necessary regulatory approvals are obtainable with appropriate application support.

Opportunities to Improve Results

Opportunities to improve upon the results presented above that may be evaluated as Talapoosa is advanced include:

- Drilling to bring current Inferred Resources into the Indicated Resource category;
- Further drilling may also extend the Talapoosa deposit where it remains open to resource expansion, particularly on-strike to the southeast;
- Implementation of a comprehensive metallurgical column testing program, including discrete testing by zone based on the current, updated geologic model, to confirm that heap leach processing of the mineralized material is the preferred approach; and
- Evaluation of a milling scenario, wherein ground material would be processed via agitation leaching, flotation, or some combination thereof. Flotation concentrates may be direct shipped or require additional treatment.

Risks

Risks associated with the project include:

- Mineral Resources: This PEA is based on M&I and Inferred Resources; there are no assurances that this material will all be converted to reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. However, it should be noted that 81% of the known gold resources at Talapoosa are in the higher confidence M&I Resource categories.
- Metallurgical performance: Although extensive historic and recent metallurgical test work has been completed on gold and silver recoveries at Talapoosa, potential remains that additional metallurgical testing will not support the conclusion of acceptable heap leach recovery levels as estimated in the PEA. To mitigate this risk, forthcoming testing will evaluate further optimization of heap leach processing as well as evaluation of alternate recovery methods that historical data suggests may be an acceptable or, possibly, even a preferred alternative for unoxidized

material. The sensitivity analysis completed in the PEA accounts for potential changes in recovery levels for heap leach processing.

- Sustained and significant reduction in gold price: The PEA contains an economic analysis that is sensitive to the gold price. To an extent, downside risk is mitigated by a mine plan that provides operators with considerable flexibility in responding to short-term price fluctuations. Talapoosa demonstrates economic resilience at a \$1,000/oz gold price and a \$14.50/oz silver price, generating \$138 million in after-tax net cash flow, an \$84 million NPV at a 5% discount rate, and a 25.4% IRR.
- Capital Cost Overruns: As with all mining projects, financial returns are capital sensitive. The current plan for the mining of Talapoosa includes contract mining at operational and cost terms based on comparable Nevada operations. Should qualified contractors not be available, capital expenditures for the project would likely be greater than estimated in this study as alternative approaches, including owned or leased equipment, would be employed. The sensitivity analysis completed in the PEA accounts for these potential changes.
- Operating Cost Overruns: The PEA operating costs have been developed from contractor, vendor, and expert consultant input. Should industry conditions change and influence market rates for products and services, the project economics would vary. The sensitivity analysis completed in the PEA accounts for these potential changes.
- Water and Power: The PEA contemplates access to water and power sources similar to those anticipated in the previously permitted operation. In follow-up studies to the PEA, advanced review of these sources will be completed; however, if anticipated sources are not practical, alternatives may increase costs to the project.
- Permitting: Although Talapoosa was previously permitted, some risk remains in obtaining necessary approvals to commence mining under current regulatory standards. The Company anticipates that additional waste rock characterization and pit lake modeling may be required to update the Talapoosa permits. Neither is anticipated to be unusual as per industry standards in Nevada. Timberline has engaged Enviroscientists, which has specific permitting expertise in Nevada, for guidance in navigating through the federal, state, and local permitting process.
- Social Acceptance: As with many new mine developments, some risk exists that local or regional opposition to Talapoosa could delay its advancement toward development. However, the risk is considered acceptable as Talapoosa was previously permitted, and potential net benefits to the host community are anticipated to be welcomed. Lyon County, Nevada is currently engaged with mining companies in support of development projects, including a very large proposed open pit copper project. In addition, no environmental habitat, cultural status, or special land status is known to exist at or near the site which might lead to rejection of Talapoosa by the public.

Further risk factors related to the Company are set out in the Company's continuous disclosure documents filed on SEDAR and with the United States Securities and Exchange Commission.

Next Steps

Based on the results of this PEA, Timberline expects to advance the project through the completion of a Pre-Feasibility Study (PFS) in Q1 2016. The Company anticipates that the PFS will build upon extensive historic engineering work and will incorporate several technical advances. Further study will include:

- Complete step-out and infill drilling to upgrade the current Inferred Resource to Measured and/or Indicated Resources and provide material for additional metallurgical testing.
- Additional metallurgical test work of heap leach and mill recovery alternatives.
- Completion of a trade-off study to evaluate potential higher metal recoveries vs. higher initial capital costs utilizing a milling scenario.
- Update the waste rock geochemistry characterization and pit lake hydro-geochemical model to meet current BLM and State of Nevada permitting standards.
- Initiate long-lead-time permit applications in parallel with PFS technical studies.
- Initiate negotiations on water and power supplies.

Independent Qualified Persons (“QPs”)

QPs who have prepared or supervised the preparation of the technical information relating to the PEA include:

- Todd McCracken, P.Geo (WSP Canada Inc.)
- Joanne Robinson, P.Eng (WSP Canada Inc.)
- Richard Jolk, P.E., (MPDI, Inc.)
- Richard DeLong, P.G., (Enviroscientists, Inc.)
- Jack McPartland, (McClelland Laboratories, Inc.)
- Michael Henderson, P.E., (DOWL)

Mr. Steven Osterberg, Ph.D., P.G., Timberline’s Vice-President of Exploration, is a Qualified Person as defined by National Instrument 43-101 and has reviewed and approved disclosure of the technical contents of this news release.

Conference Call

A conference call to discuss Timberline and the PEA will be held at 11:00 am PDT (Pacific Daylight Time) on April 27, 2015. Interested parties are invited to participate by connecting to the call using one of the following dial-in numbers:

Dial in Number: North American Toll-Free: (866) 901-2585 or
Local / International: (404) 835-7099 (use outside of North America)
Access Code: 5869350

A digital recording of the conference call will be available for replay two hours after the call’s completion, and for 30 days thereafter. The recording can be accessed via the Company’s [website](#).

About Timberline Resources

Timberline Resources Corporation is focused on advancing district-scale gold exploration and development projects in Nevada, including its recently optioned Talapoosa project in Lyon County. Current mineral resources⁽¹⁾ at the Talapoosa project include 1.01 million gold ounces and 13.65 million silver ounces (M&I), plus an additional 0.23 million gold ounces and 2.17 million silver ounces (Inferred). Timberline also controls the 23 square-mile Eureka project lying on the Battle Mountain-Eureka gold trend. At Eureka, the Company continues to advance its reported resource⁽²⁾ of 508,000 ounces (M&I) and 141,000 ounces (Inferred) of gold at the Lookout Mountain project area, and has recently completed a drill program at the Windfall project area. Exploration potential occurs within three separate structural trends defined by distinct geochemical gold anomalies. Timberline also owns the Seven Troughs property in northern Nevada, known to be one of the state’s highest grade, former producers, as well as a 50% carried-to-production interest in the Butte Highlands high-grade underground gold project in Montana.

Timberline is listed on the NYSE MKT where it trades under the symbol "TLR" and on the TSX Venture Exchange where it trades under the symbol "TBR".

⁽¹⁾ Refer to Technical Report and Resource Estimate on the Talapoosa Project, Nevada, WSP Canada Inc., Effective March 24, 2015, Filed on SEDAR April 1, 2015

⁽²⁾ Refer to Updated Technical Report on the Lookout Mountain Project, MDA, Effective March 1, 2013, Filed on SEDAR April 12, 2013

Cautionary Statements

The Company’s JV partner at Butte Highlands has decided that it may advance the project into production without first establishing NI 43-101 mineral resources supported by an independent technical report or completing a feasibility study. A production decision without the benefit of a technical report

independently establishing mineral resources or reserves and any feasibility study demonstrating economic and technical viability creates increased uncertainty and heightens economic and technical risks of failure.

Cautionary note to United States Investors Regarding Estimates of Resources: This press release uses the terms "Measured Resources", "Indicated Resources", "Measured & Indicated Resources" and "Inferred Resources". We advise U.S. investors that while these terms are defined in and required by Canadian regulations under NI 43-101, these terms are not defined terms under United States Securities and Exchange Commission ("SEC") Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Under SEC Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and all necessary permits and governmental authorizations must be filed with the appropriate governmental authority. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves. "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures. **The PEA is not a definitive feasibility study and our projects currently do not contain any known proven or probable ore reserves under SEC Industry Guide 7 reporting standards.** The results of the PEA disclosed in this press release are preliminary in nature and include Inferred Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves and there is no certainty that the results of the PEA will be realized.

Forward-looking Statements

Statements contained herein that are not based upon current or historical fact are forward-looking in nature and constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such forward-looking statements reflect the Company's expectations about its future operating results, performance and opportunities that involve substantial risks and uncertainties. These statements include but are not limited to: statements regarding the potential economics of the Talapoosa project as contained in the PEA, including but not limited to statements regarding After-Tax NPV, IRR, Initial Capital Costs, After-Tax Net Cash Flow, gold production, sustaining costs, and all-in costs, the low-risk, pro-mining jurisdiction of Nevada, future optimization and resource expansion, timing and contents of a completed pre-feasibility study, future permitting requirements and the ability to update past permits, mineral resource estimates and other similar statements regarding the future potential of the Talapoosa project. When used herein, the words "anticipate," "believe," "estimate," "upcoming," "plan," "target", "intend" and "expect" and similar expressions, as they relate to Timberline Resources Corporation, its subsidiaries, or its management, are intended to identify such forward-looking statements. These forward-looking statements are based on information currently available to the Company and are subject to a number of risks, uncertainties, and other factors that could cause the Company's actual results, performance, prospects, and opportunities to differ materially from those expressed in, or implied by, these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those risks set forth in this press release under the heading "Risks", risks related to exploration projects, risks related to mining activities, risks related to potential future transactions, risks related to the Company continuing as a going concern, risks related to the ability to finance any payment due at the exercise of the Talapoosa option, risks related to project development decisions, risks related to mineral resource estimates and other such factors, including risk factors discussed in the Company's Annual Report on Form 10-K for the year ended September 30, 2014. Except as required by Federal Securities law, the Company does not undertake any obligation to release publicly any revisions to any forward-looking statements.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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