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Quenching the Thirst for Value

Kian Ghazi, Hawkshaw Capital Management

H A W K S H A W

Quenching the Thirst for Value

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Hawkshaw Capital Management

Recent Decision to Wind Down the Fund

- In 2011, suffered our worst year, down 12% vs. up 2% for the S&P 500.
  - Only other loss in 2008 when the Fund was down just 3%, preserving capital well.
- Prior to 2011, our trailing 7-yr aggregate net return was 58% vs. 30% for the S&P 500.
- Nonetheless, capital redemptions through 1H12 took our scale to a suboptimal level.
- The portfolio has been liquidated and capital has been returned.

Note: 'Net Returns' are net of all fees and expenses.

Hawkshaw Capital Management

Hawkshaw at its Best Investing in…

- Underfollowed, unloved, misunderstood small/mid cap companies.
- With strong franchises and rock solid balance sheets.
- Where our unique brand of deep, investigative primary research distinguishes itself.
  - The name Hawkshaw is an 1800s term for detective.
  - Underscores our emphasis on cold-calling and establishing our own proprietary, high-quality industry contacts (<u>without the use of paid-networks</u>).
  - Helps us confirm or refute our variant view, stacking the odds of investment success in our favor.

Layne Christensen

Layne Christensen (LAYN)

Layne is a 130 year old business, originating as a water-well driller (#1 in U.S.), eventually broadening through acquisitions into mineral exploration drilling in 1995 (#3 globally) and water infrastructure construction in 2005.

As of September 20, 2012:

Price	$20.16
Market Capitalization	$399mm
Cash	$36mm
Debt	$120mm
Enterprise Value	$483mm
LTM Sales	$1.1b
Net Debt / LTM EBITDA	1.1x
Price / Tangible Book Value	1.0x
Price / 2012E EPS (consensus)	18x

Layne Christensen (LAYN)

<u>Water Infrastructure:</u>

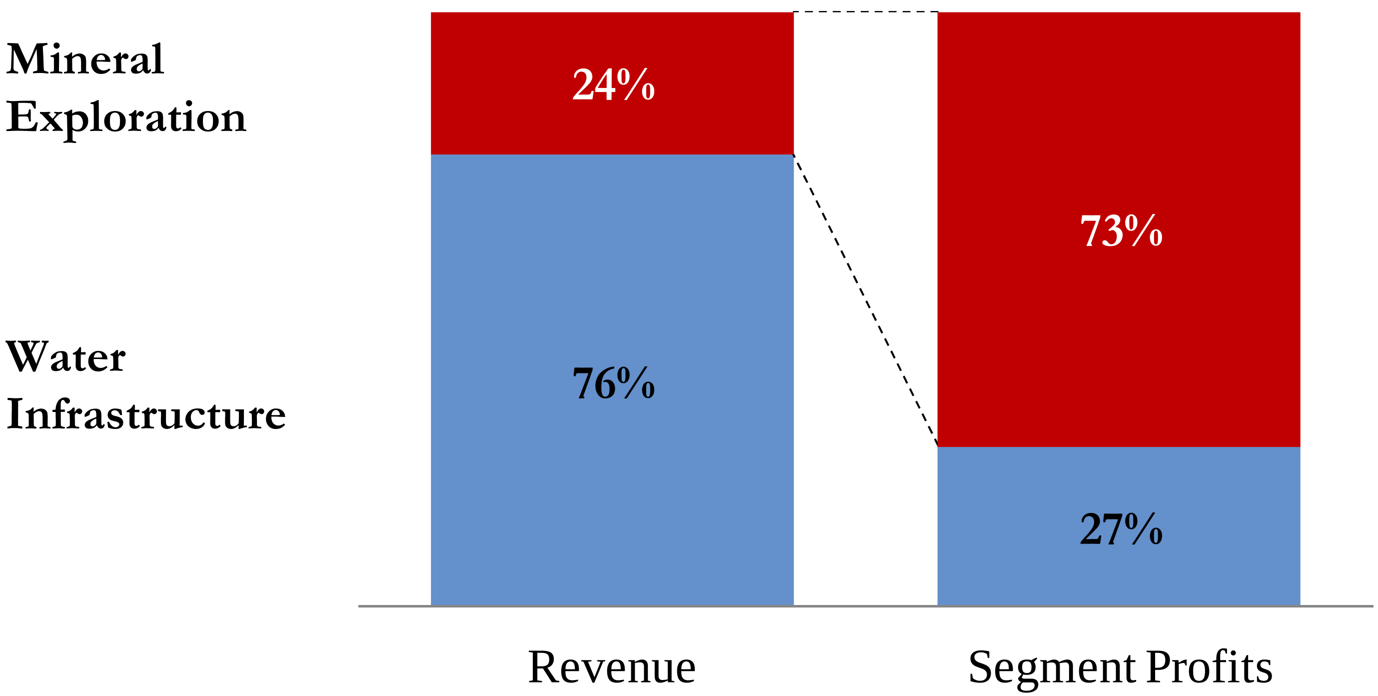
- In the U.S., Layne is a leading provider of water infrastructure services.
  - #1 in water-well drilling.
  - #2 in sewer repair and construction.
  - #2 in "trenchless" pipeline rehabilitation.
  - Also builds water treatment facilities.
  - And offers soil stabilization and support for building damns/tunnels/waterlines.

<u>Mineral Exploration:</u>

- LAYN is the #3 global provider of drilling services for mineral exploration.
  - *Exploratory* drilling to determine if mineral deposits exist.
  - *Definitional* drilling to asses if it's economical to mine for those deposits.

Layne Christensen (LAYN)

CY 2011 Revenue and Segment Profits Breakdown



- Water Infrastructure produces approximately ¾ of revenues.
- But MinEx produces ¾ of profits, as Water margins have been under pressure of late.

Bears Would Say…

- **Mineral Exploration Division is Generating Unsustainably High Margins.**
  - Miners are already cutting back on spending.
  - This unit will no longer mask the weakness in Water.
- **Results are Getting Progressively Worse Under the New CEO (August 2011):**
  - Margins in the Water segment have fallen to 1% from 4-6% range.
  - Due to mounting losses in the construction unit.
- **No Relief in Sight for the Margin Pressure that the Water Division is Facing.**
  - Has heavy exposure to government entities, mainly municipalities.
  - Muni budget deficits are worsening and fiscal cliffs are approaching.

Variant View

- **MinEx Division Can be Hedged:** Pure play comp allows one to lock in a value for MinEx that nearly supports the entire market cap.

- **Problem in the Water Segment Is Isolated to Just 1 of 4 Units:** Good results through the rest of the segment are being masked by losses in the Heavy Civil construction unit.

- **Two Powerful Margin Recovery Drivers in Water:** A new CEO with a strong track record was hired a year ago. The fix is in place. We believe a major turnaround is ahead.

- **Concerns about Muni Exposure are Misguided:** Spending on drinking and waste water systems are structurally protected from municipal deficits and bankruptcies, providing a stable (to growing) demand backdrop for the Water division.

Downside Support With Attractive Upside

- **Trading at Tangible Book, Downside Appears Limited:** Historically, tangible book has provided strong support for the stock.

- **MinEx Alone Worth $19/LAYN Share:** Major Drilling (MDI) provides an ideal comparable with which to value the MinEx business.

- **Heavy Civil Will Revert to 4% Margin from Current Losses:** As money-losing fixed priced contracts are completed and a new disciplined pricing strategy shines through.

- **Water Infrastructure Adds Another $10-15/LAYN Share:** Assumes a 13x multiple on normalized earnings once Heavy Civil is no longer a drag.

Our Conservative Appraisal Suggests 60-90% Upside

Why Does This Opportunity Exist?

- **Gov't Exposure is out of Favor:** LAYN derives ~80% of its Water revs from muni/gov't entities. This heavy exposure appears a credible risk on the surface.

- **Good Results Masked by Losses in a Single Unit:** one has to disaggregate 5+ operating segments to uncover the source of the problem.

- **Numerous Guide Downs:** as several successive quarters of increasing losses in Heavy Civil construction unit have led to disappointing results.

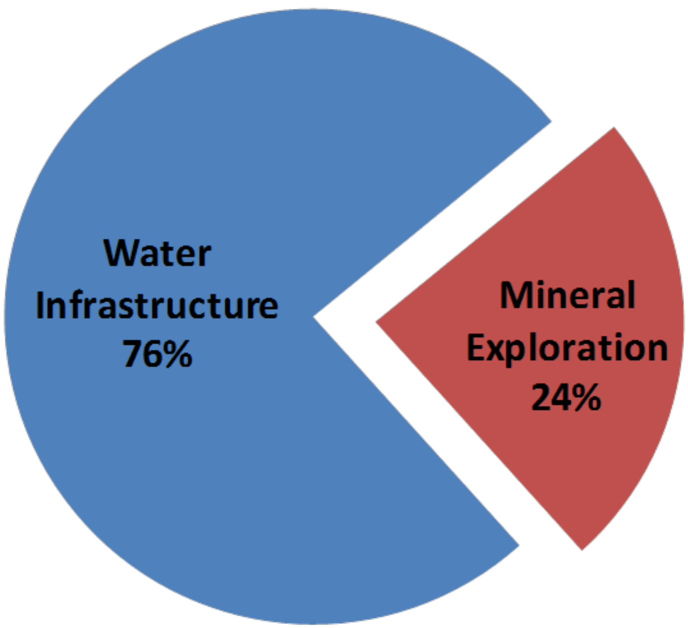
- **Limited Earnings Support:** LAYN appears expensive at 18x CY 2012 EPS, particularly considering the perception that the mining cycle is rolling and muni pressure worsening.

- **Underfollowed:** Covered by 5, mainly small, regional brokerage firms. With two disparate divisions that aren't easily categorized, LAYN isn't covered particularly well.

Mineral Exploration Can Be Hedged

Mineral Exploration Can Be Hedged

CY 2011 Revenue Breakdown



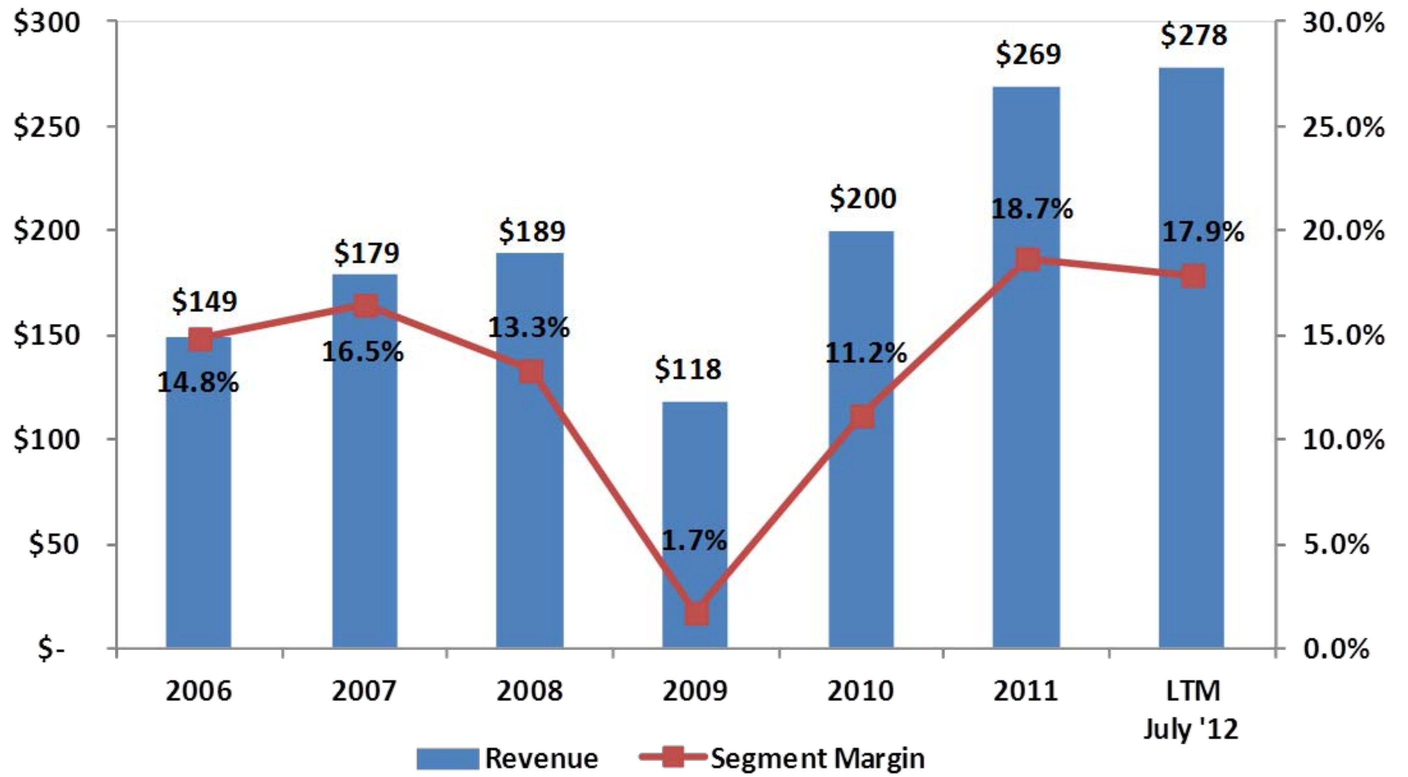
Mineral Exploration

- MinEx represents 24% of revenues.
- Primarily in U.S., Africa, Mexico, Brazil.
- Has 189 owned drill rigs.
- 25-50% ownership of 16 affiliates in Central/South America.
  - 202 additional drill rigs.
- #3 market share globally.

Mineral Exploration Can Be Hedged

- After experiencing a brief but significant downturn during the Great Recession, the MinEx division is producing record sales and margins once again.

Mineral Exploration Revenues & Margins



Mineral Exploration Can Be Hedged

Signs of Weakness in the Mineral Exploration Industry.

- **Major Mining Companies are Pulling Back on CapEx Budgets.**
  - BHP Billiton, Xstrata, Newmont and other Major miners reduced or deferred 2012 capex estimates.
- **Junior Miners are Experiencing Difficulty Raising Capital.**
  - Average monthly capital issuance from Junior Minors has drop from $2.5bn in early 2012 to less than $1.5bn since April 2012.
- **Closest Peers to MinEx Have Reduced 2H12 Guidance.**
  - Boart Longyear, the #1 player, recently reduced guidance and noted softening demand in back half of the year.
  - Major Drilling (MDI), the #2 player, also tempered expectations and revised down full year capex.

Mineral Exploration Can Be Hedged

We are Neutral on the Mining Cycle.

- Clear that the Mineral Exploration business is very cyclical when times are tough.
- One approach is to neutralize this risk by hedging it out.
- The two larger competitors, Boart Longyear and Major Drilling, are both publicly traded.
- Boart Longyear also manufactures drill rigs and has a levered balance sheet.
- Major Drilling is solely a driller, making it a more direct comparable.

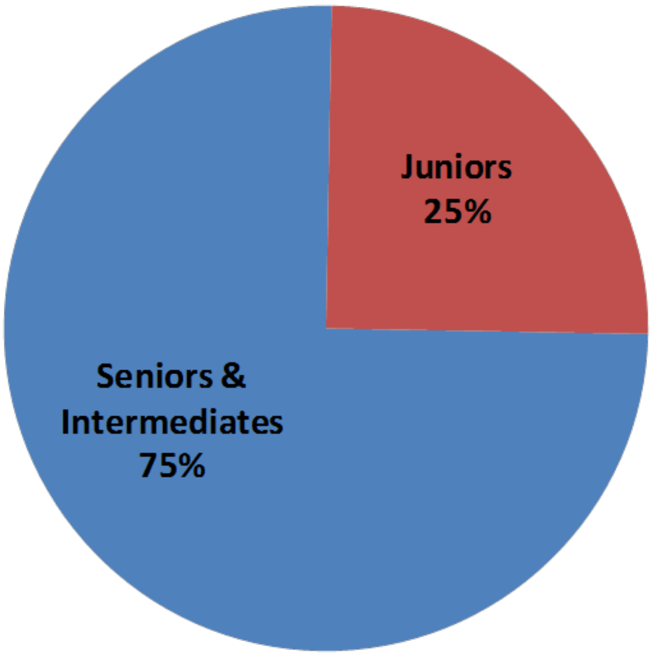
Major Drilling offers a nearly ideal hedge.

Mineral Exploration Can Be Hedged

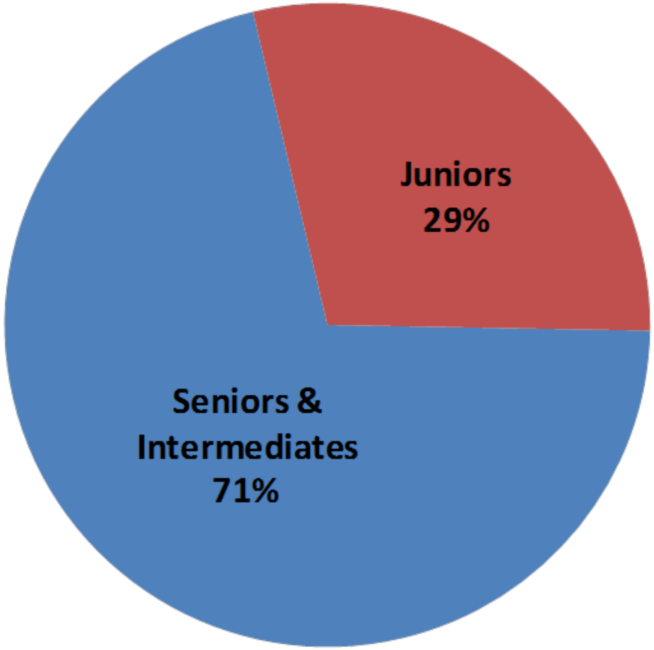
Similar exposures to Senior/Junior mining customers.

- Juniors = 25% for MinEx; 29% for Major Drilling.

Mineral Exploration (LAYN) Customer Breakdown



Major Drilling (MDI) Customer Breakdown

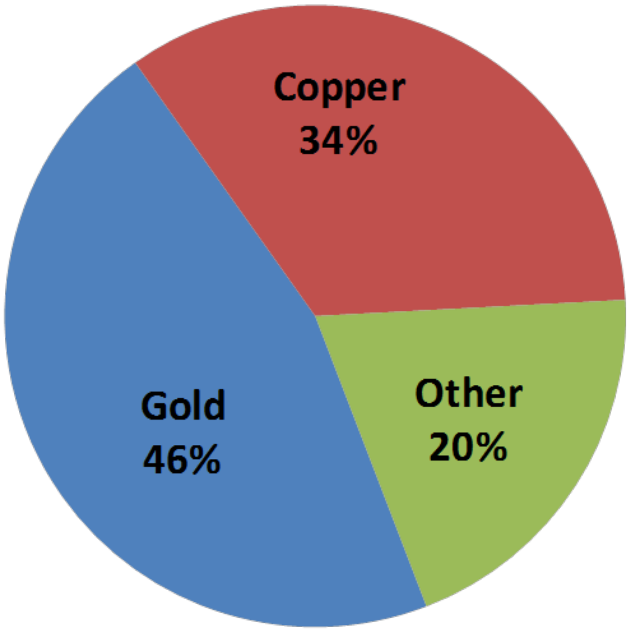


Mineral Exploration Can Be Hedged

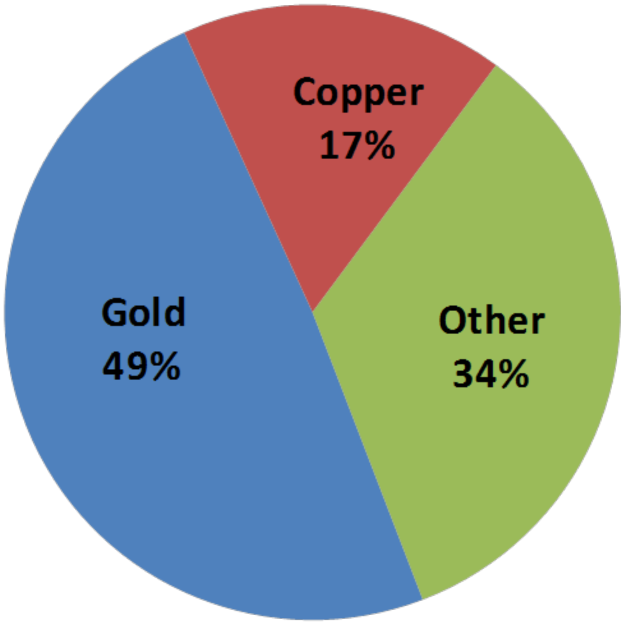
Similar exposures to end-market commodity demand.

- Gold and Copper = 80% for MinEx; 66% for Major.
- No other commodity greater than 6% exposure.

Mineral Exploration (LAYN)
End Demand Breakdown



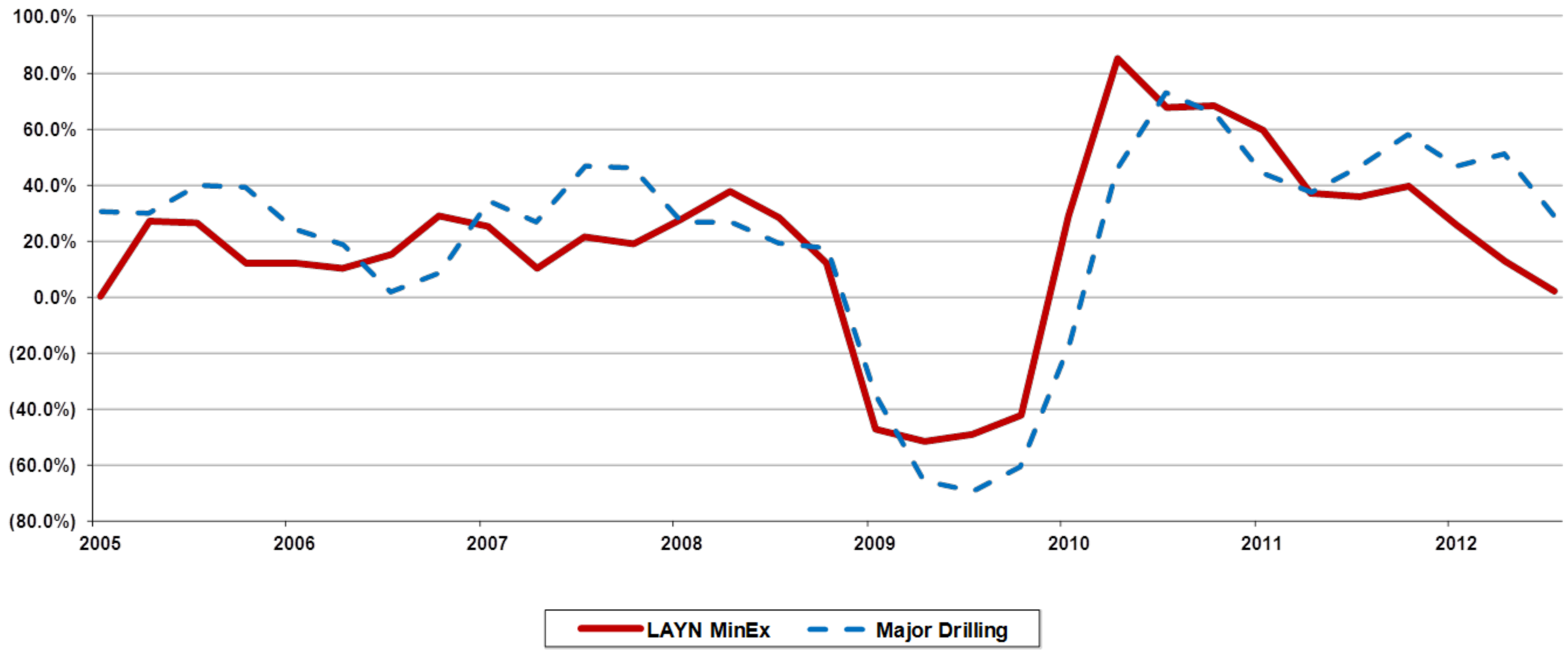
Major Drilling (MDI)
End Demand Breakdown



Mineral Exploration Can Be Hedged

Organic revenue trends are nearly identical.

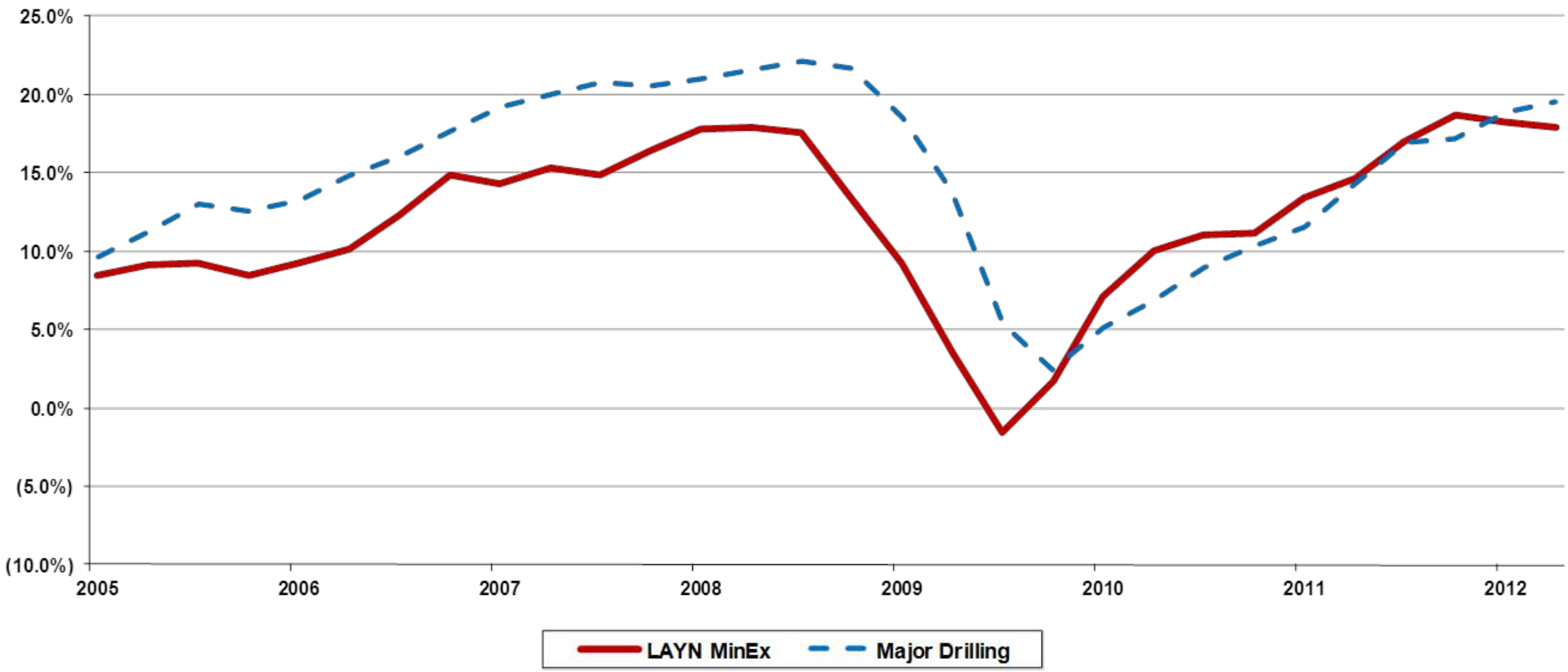
Organic Revenue Growth Comparison



Mineral Exploration Can Be Hedged

Operating margins mirror closely as well.

Operating Margin Comparison



Mineral Exploration Can Be Hedged

Major Drilling (MDI) Offers a Nearly Ideal Hedge

- Multiples of Sales, EBIT and Rigs suggest one can lock in MinEx at ~$19/ LAYN shr.

Period End July '12	MDI Mulltiple	LAYN MinEx EV ($ mil.)	Per LAYN Share
EV / S *	1.0x	$449	$23
EV / EBIT	5.1x	$358	$18
EV / Rig (US $ Mil.) *	$1.208	$337	$17
Average Mineral Exploration EV		**$381**	**$19**

** MinEx Rev. and Rig Count applies average 44.4% affiliate ownership to total affiliate Revenue and Rigs*

Mineral Exploration Can Be Hedged

Remaining Unhedged is also an Option.

- LAYN arguably has reasonably good downside protection at the current valuation.
- Only 6 months ago when there were fewer concerns about the mining cycle, the market valued MDI ~50% higher, implying a $29 MinEx value for LAYN.

Period End July '12	MDI Mulltiple	LAYN MinEx EV ($ mil.)	Per LAYN Share
EV / S *	1.5x	$681	$34
EV / EBIT	7.7x	$543	$27
EV / Rig (US $ Mil.) *	$1.831	$510	$26
Average Mineral Exploration EV		**$578**	**$29**

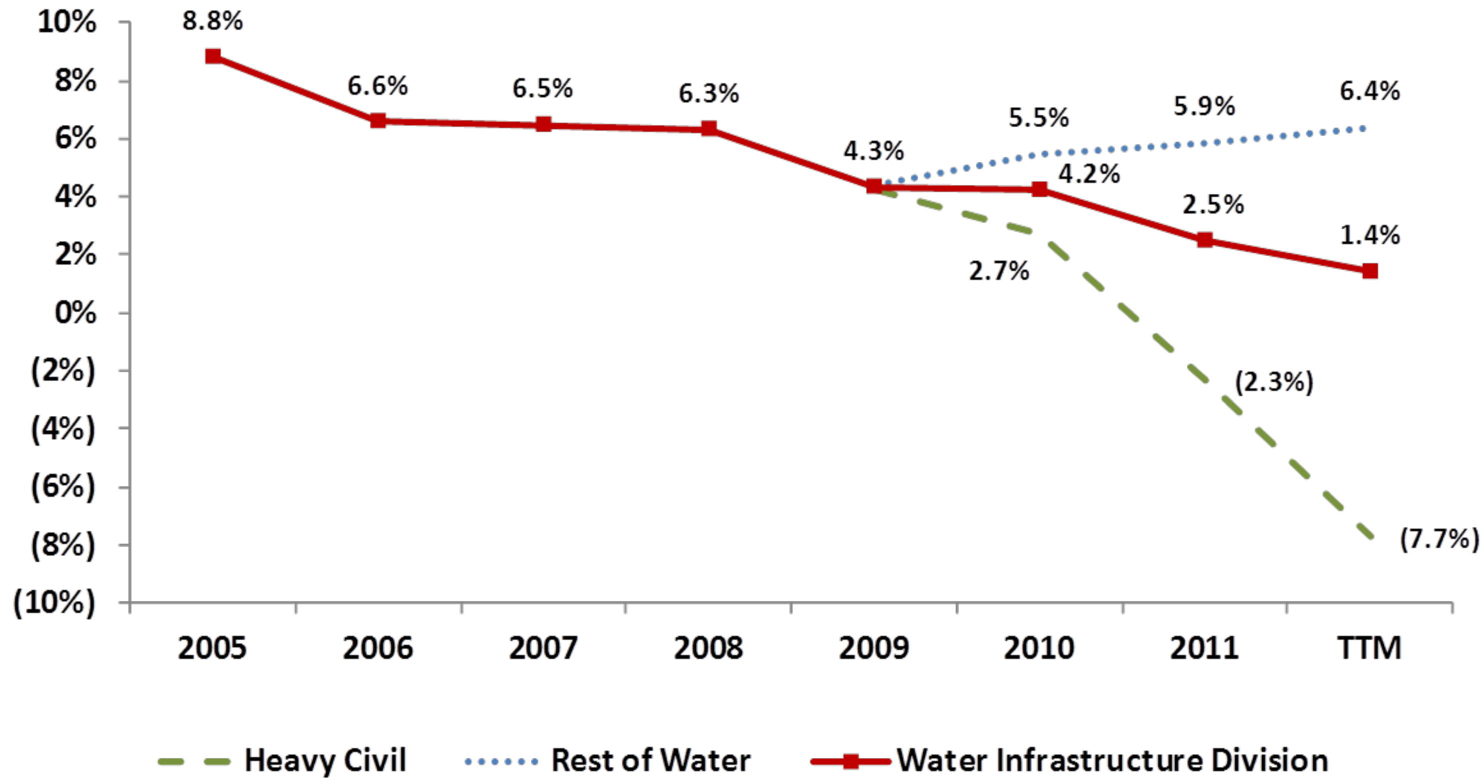
** MinEx Rev. and Rig Count applies average 44.4%affiliate ownership to total affiliate Revenue and Rigs*

Water Infrastructure: 3 of 4 Units Performing Well

Water Infr.: 3 of 4 Units Performing Well

- Excl. the losses in Heavy Civil, it's clear the rest of the Water division is performing well.

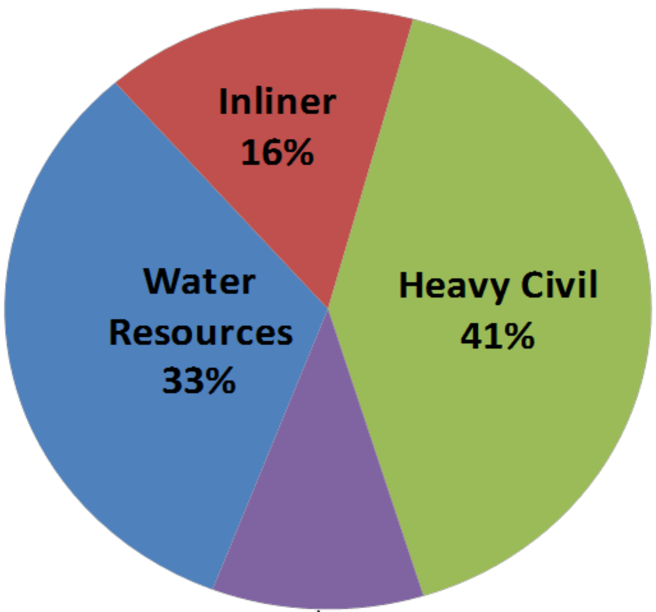
<u>Water Infrastructure Margins</u>



Note: TTM period is Pro Forma Costa Fortuna acquisition. Excludes 4Q11 Water Treatment restructuring charges and unusually profitable Afghanistan project from '09-'11.

Water Infr.: 3 of 4 Units Performing Well

CY11 Total Water Revenues

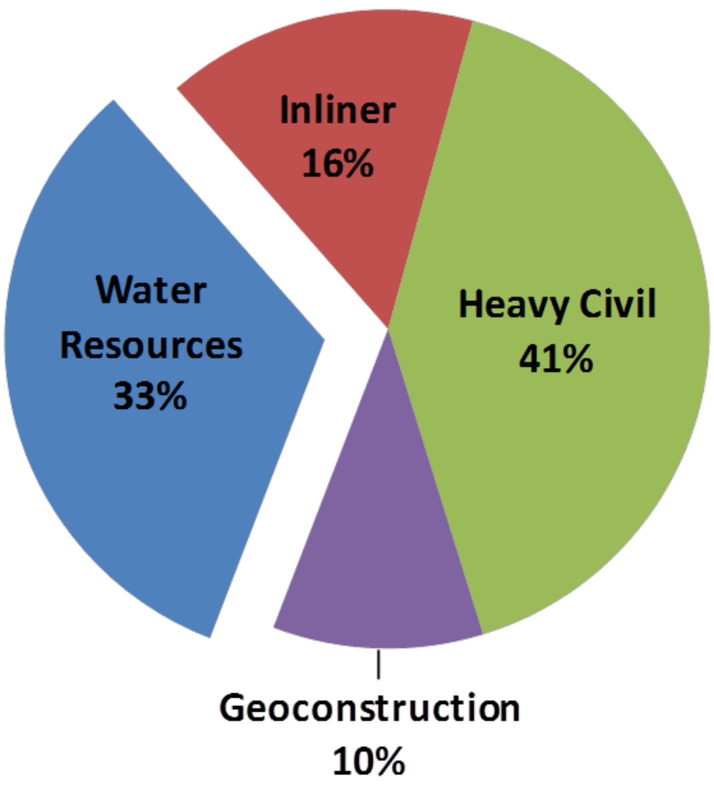


Water Infrastructure Division

- The division is comprised of 4 primary units.
  - Water Resources
  - Inliner
  - Geoconstruction
  - Heavy Civil

Water Infr.: 3 of 4 Units Performing Well

CY11 Total Water Revenues



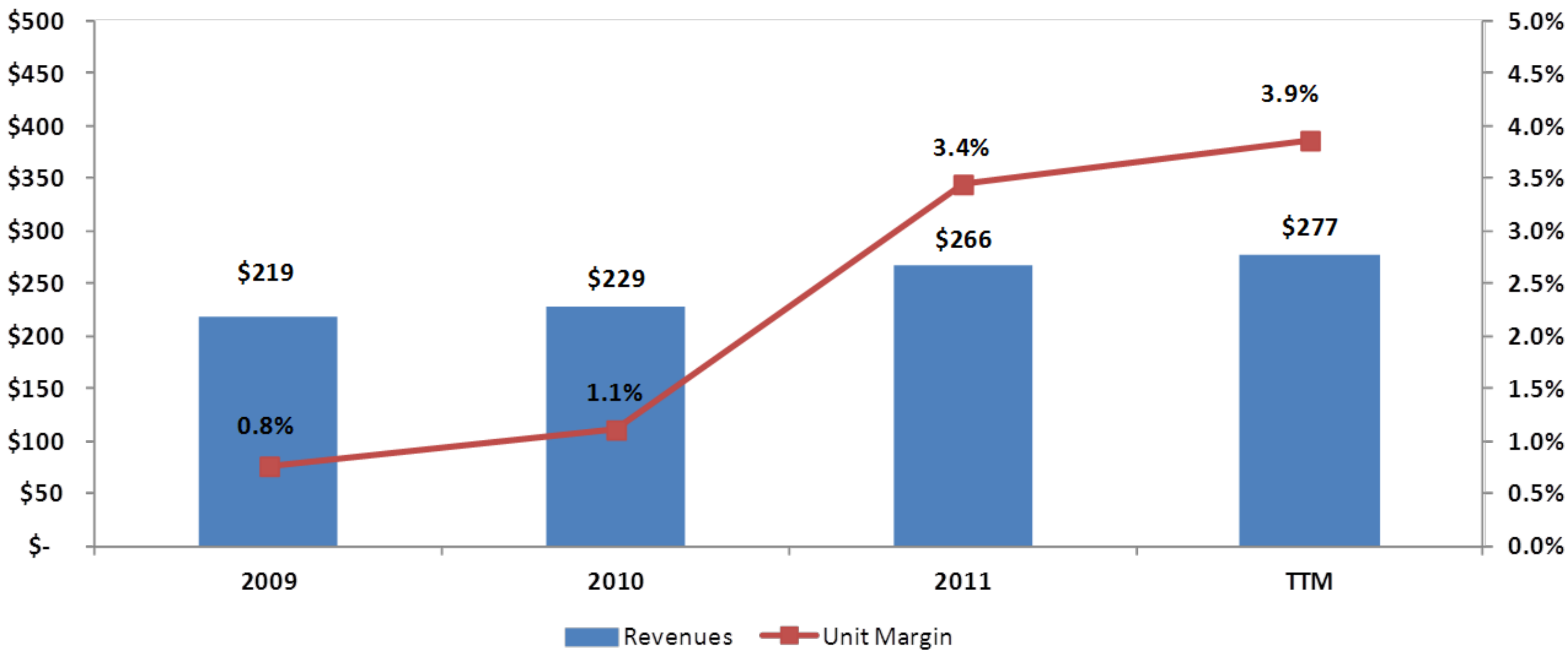
Water Resources Unit

- Represents 33% of Water revenues.
- Provides water-well design, drilling, monitoring and rehabilitation.
- #1 market share in the U.S.
- Government agencies = 62% of revs.
- It has unparalleled library of hydrological maps.
- Majority of revs come from follow-on monitoring and repair work.

Water Infr.: 3 of 4 Units Performing Well

- Core Water Resources revs are growing nicely (10% CAGR).
- And margins are expanding, with room for further improvement.

Water Resources Revenues and Unit Margins



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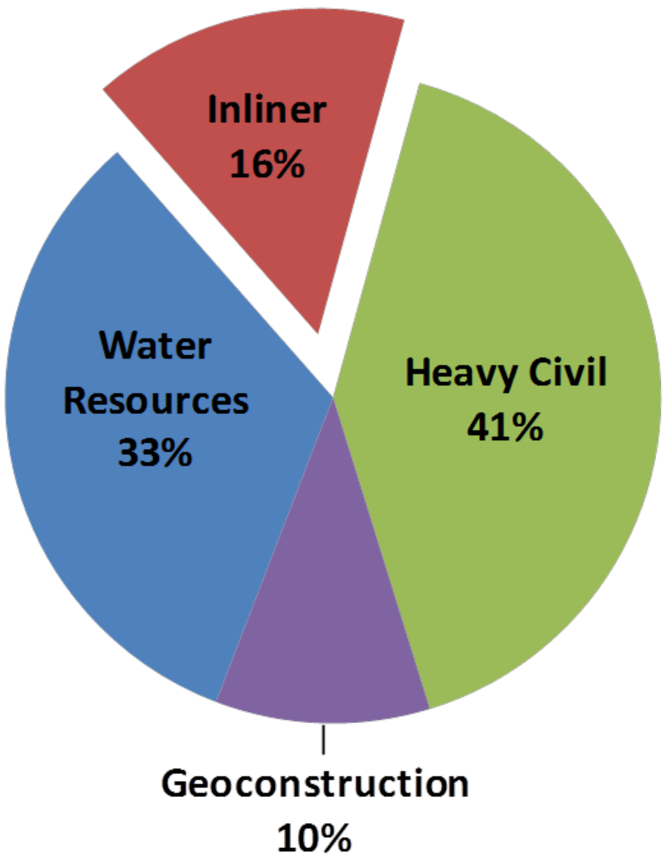
Water Infr.: 3 of 4 Units Performing Well

CY 11 Total Water Revenues



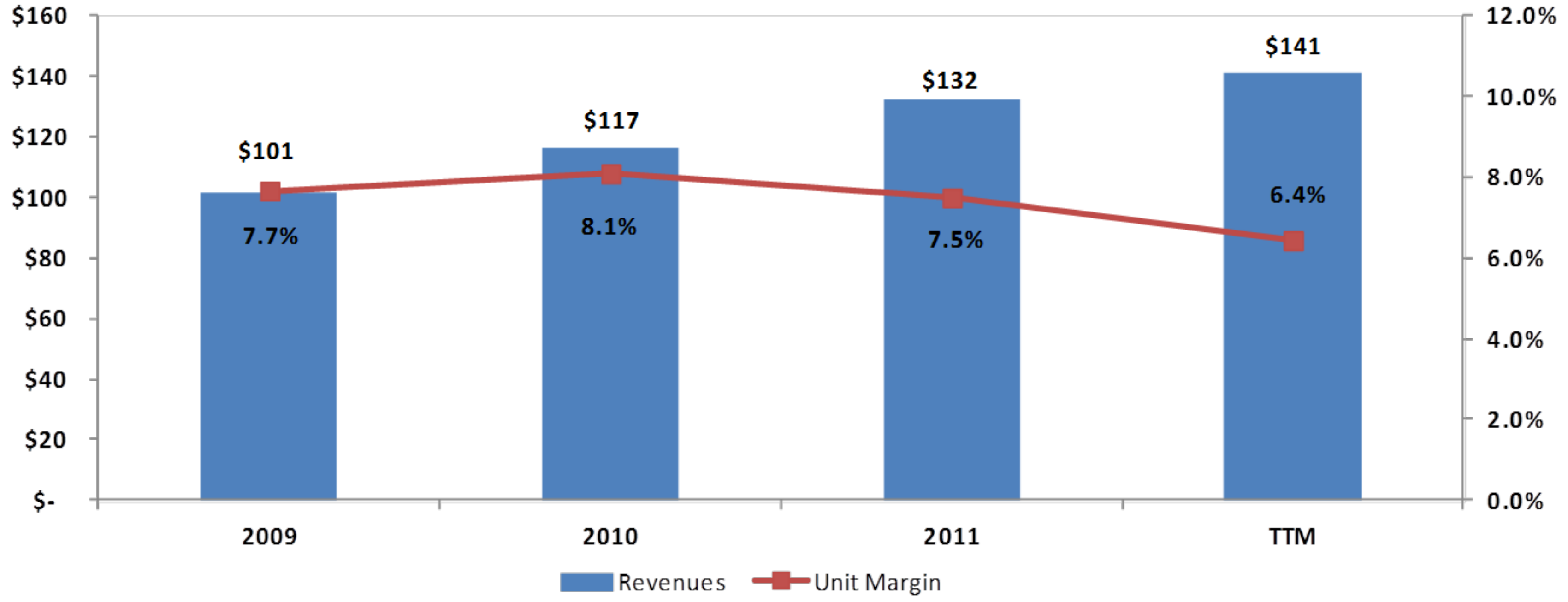
Inliner Unit

- Represents 16% of Water revenues.
- Rehabilitates aging sewer and water lines using its proprietary trenchless technology.
- LAYN is the second largest trenchless pipeline rehabilitator.
- Municipal customers = 98% of revs.
- Vertically integrated - manufactures and installs its proprietary cured-in-place pipe (CIPP).

Water Infr.: 3 of 4 Units Performing Well

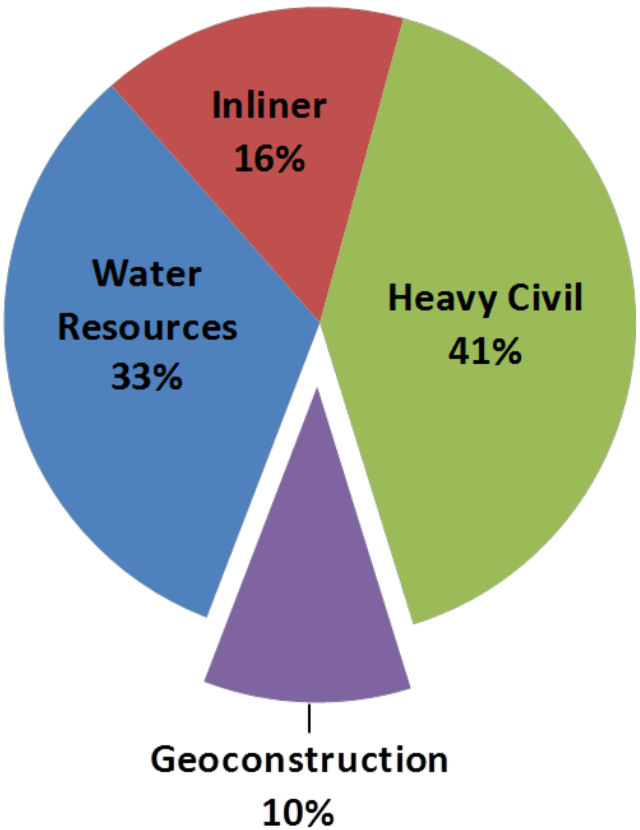
- Unit is performing well, with a 14% revenue CAGR.
- Growth driven by municipalities emphasizing repair work instead of new build.
- Margins are fairly stable.

Inliner Revenues and Unit Margins



Water Infr.: 3 of 4 Units Performing Well

CY11 Total Water Revenues

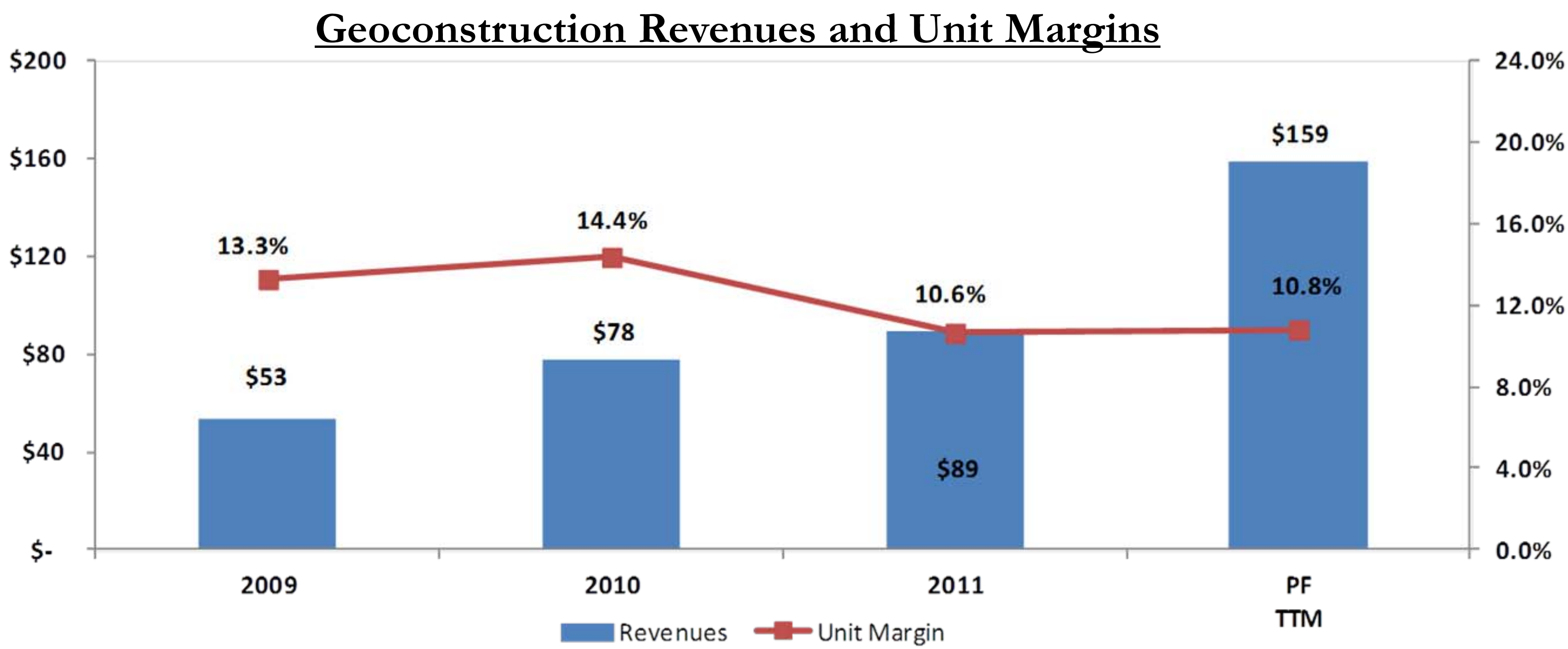


Geoconstruction Unit

- Represents 10% of Water revenues, or 16% pro forma a recent acquisition.
- Offers soil stabilization and subterranean support for building dams/ tunnels/ waterlines.
- Government agencies = 70% of revs.
- Recruited by Carnival Cruise and the Italian government to keep the sunken Costa Concordia cruise ship from falling off an underwater shelf and deeper into the ocean.

Water Infr.: 3 of 4 Units Performing Well

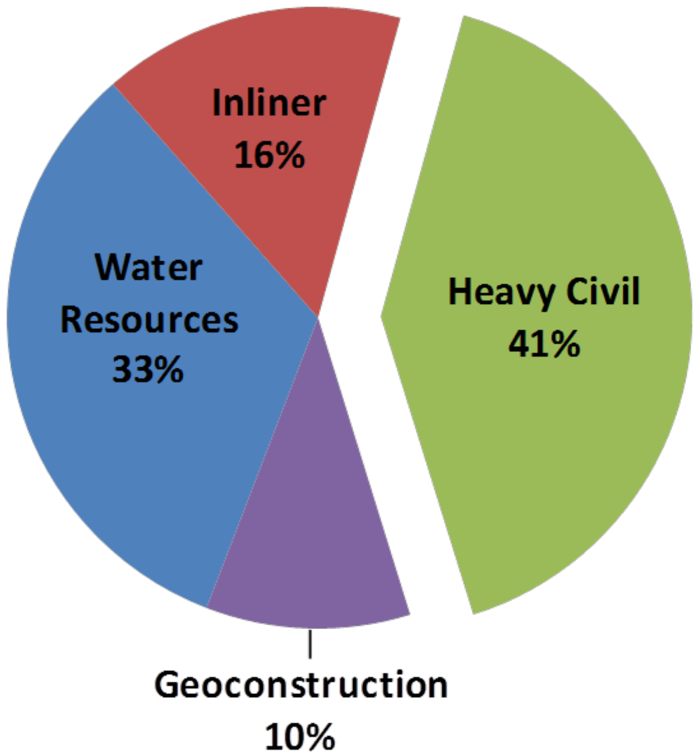
- Generating record results.
- Growth driven by project wins and acquisitions in 4Q10 and 2Q12.
- Margins are fairly stable.



Note: TTM period is Pro Forma the Costa Fortuna acquisition.

Water Infr.: 3 of 4 Units Performing Well

CY11 Total Water Revenues

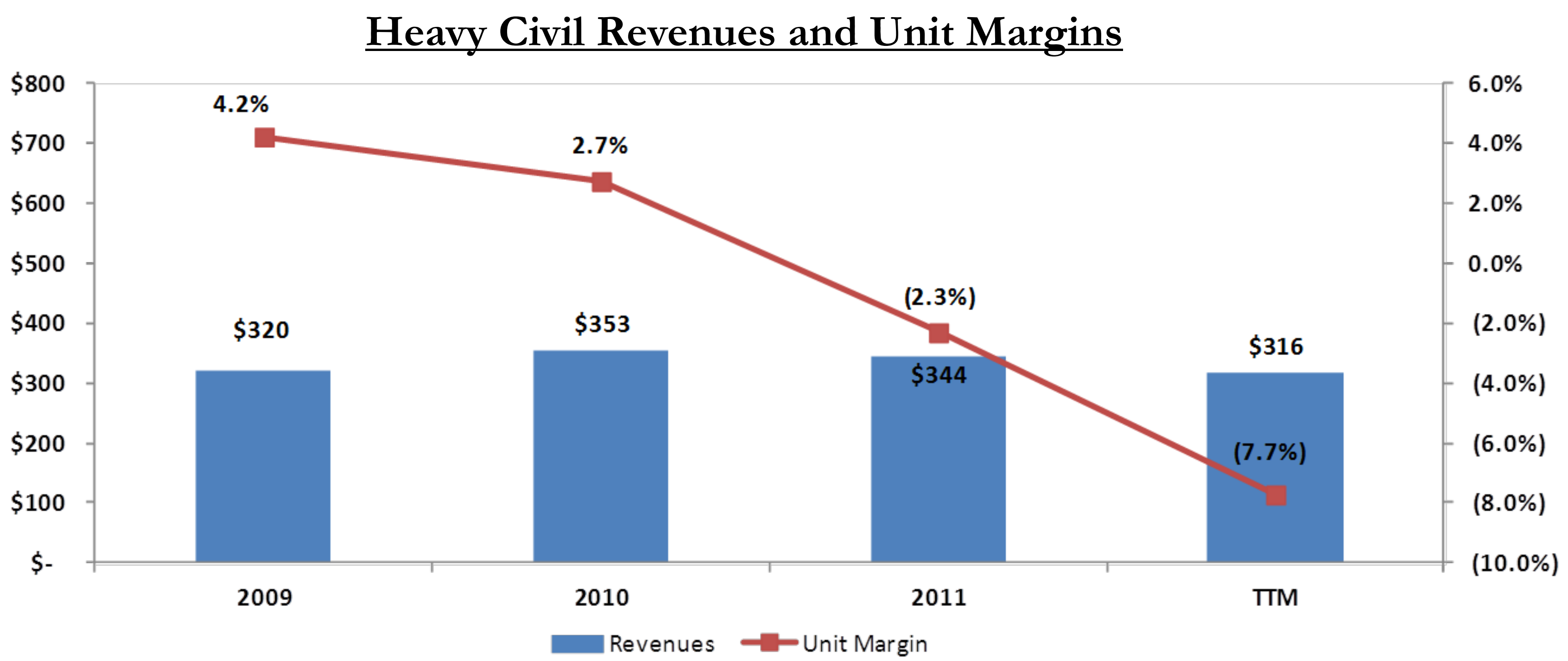


Heavy Civil Unit

- Represents 41% of Water revenues.
- Provides water treatment facility construction and pipeline installation.
- LAYN is #2 in sewer repair and construction.
- Municipal customers = 90% of revs.
- Just won $91mm project to build a wastewater system in Florida Keys.

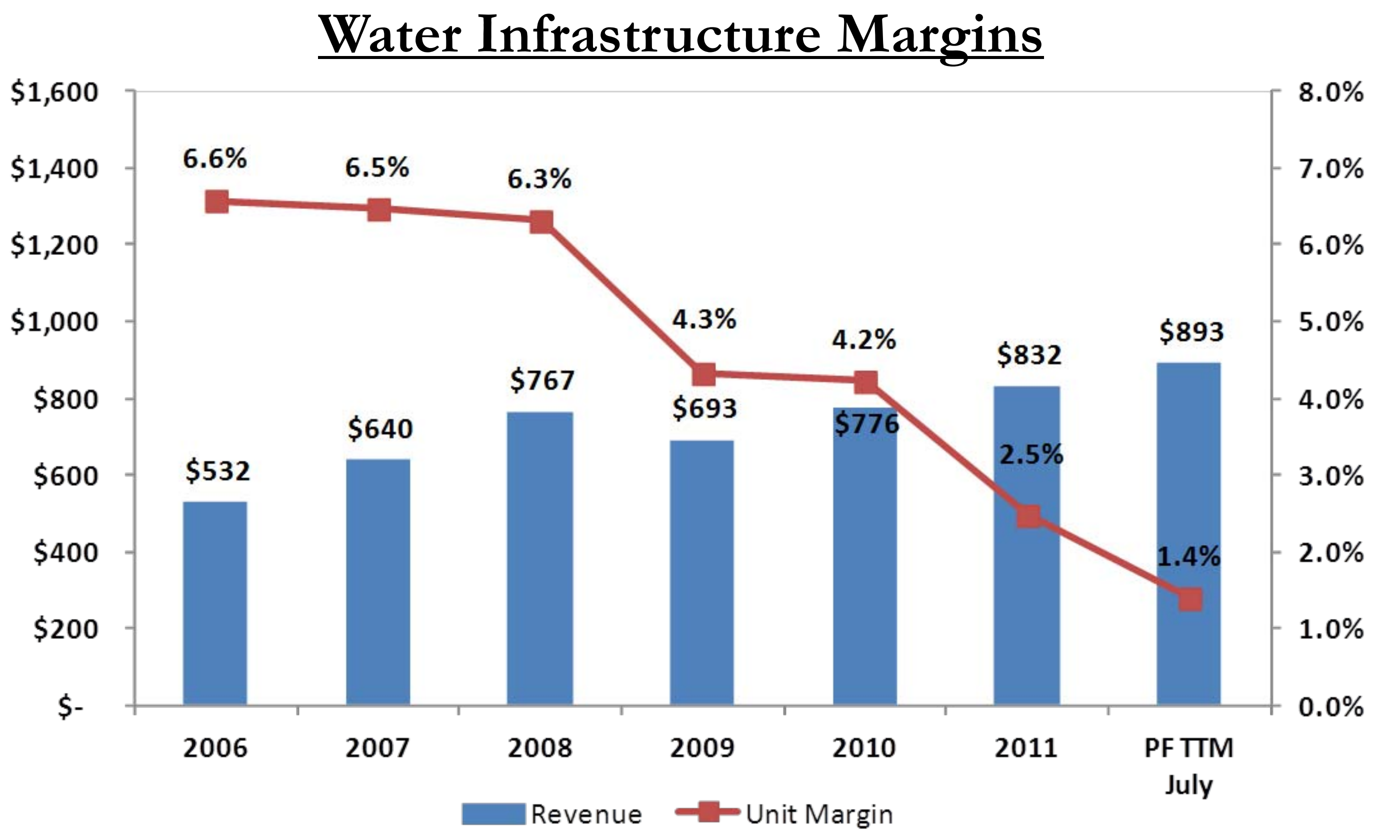
Water Infr.: 3 of 4 Units Performing Well

- Heavy Civil's profitability has deteriorated the last 3 years.
- Margins have dropped from positive 4% to negative 8%.



Water Infr.: 3 of 4 Units Performing Well

- Problems in Heavy Civil alone are weighing down the entire Water division.

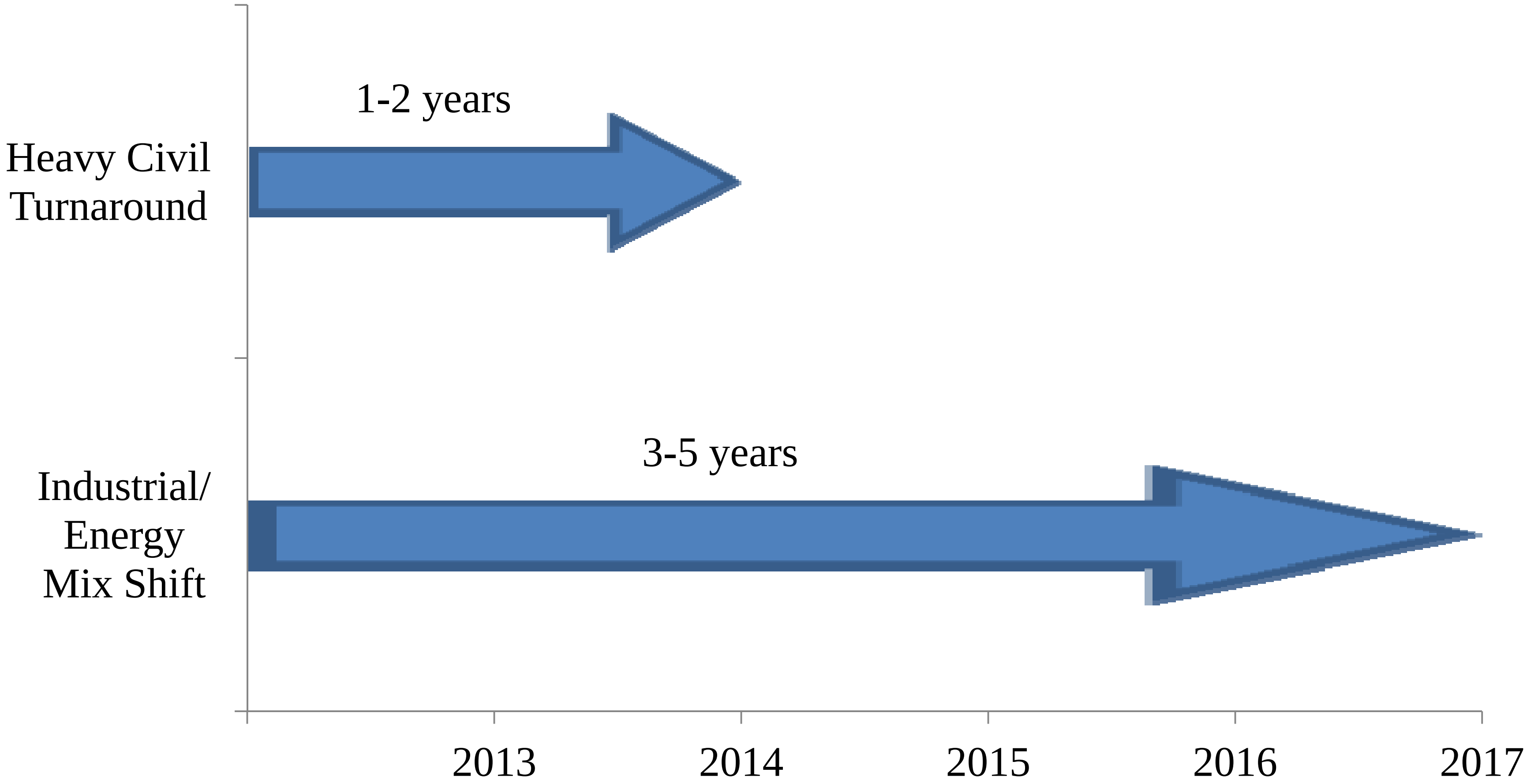


Note: TTM period is Pro Forma Costa Fortuna acquisition. Excludes 4Q11 Water Treatment restructuring charges and unusually profitable Afghanistan project from '09-'11.

Water Segment: Two Powerful Margin Recovery Drivers

Two Powerful Margin Recovery Drivers

Expected Timeline



ST Driver: Heavy Civil Turnaround

Why are Heavy Civil Margins Down?

- Prior management bid projects too aggressively.
  - Goal was to keep backlog up and crews employed.
  - Left little cushion for unexpected costs.
- Today, there are a small number of mis-priced projects incurring meaningful losses.
  - Six "troubled projects" as defined by management.
  - Four of the six projects were based out of one office.
  - The management team at that office has been replaced.
  - **"We are focusing on completing these legacy projects quickly; however, we'll only do that up to our high quality standards and <u>we expect to have this all accomplished by the end of the year</u>."**

    – LAYN CEO

ST Driver: Heavy Civil Turnaround

Why Should Heavy Civil Margins Improve?

- Company is currently filling the backlog with quality projects.
  - "We agreed late last year that enough's enough and we'd be more conservative on costing, raising our minimum pricing and making sure that our portfolio of 50 projects would improve." – LAYN CEO
  - "Our portfolio today is superior vs. twelve months ago and that will be the case 12 months from now too." – LAYN CEO
  - "The guys are back bidding historic margins in Heavy Civil or better…I think we can get 6% [pre-tax margin] in Heavy Civil." – LAYN CFO
- Large insider buys reveal management's conviction.
  - New CEO bought $1m of stock at $24/sh.
  - COO bought $700k of stock at $21/sh.

What Did Our Contacts Say?

- **Industry contacts believe high-single digit margins are achievable.**
  - "My design/build segment gets 8% margins."
    – *Project Manager, Key Heavy Civil Competitor A*
  - "If you couldn't get at least 6% or even 8% pre-tax, I'd be embarrassed."
    – *Regional Manager, Key Heavy Civil Competitor B*

What Did Our Contacts Say?

- **New CEO, Rene Robichaud, is a strong operator.**
  - In 1999, Rene became CEO of NS Group, a troubled maker of tubular steel products used by oil and gas drillers.
  - There he executed a major turnaround. Results improved from losses to 20%+ operating margins and ~40% after-tax ROIC.
  - During his 7 year tenure, the stock appreciated from $5 to ~$50/share.

"[Rene had] an incredible ability to focus on and see all the things that were wrong and get the right people in the right seats [and] lay in professional practices…we had a turnaround situation that needed help from A to Z, from the Board to the guy on the floor, from culture to everything. What we were able to do over that time frame was nothing short of incredible."

– *former Senior Executive at NS Group.*

LT Driver: Mix Shift to Industrial/Energy

LT Driver: Mix Shift to Industrial/Energy

- Heavy Civil and Water Resources have 3 primary customer opportunities.
  - Municipal, Industrial, and Energy.
  - All three segments need help with sourcing, treating, and disposing of water.
- LAYN is underrepresented in Industrial & Energy.
  - Only ~10% of its revenues are from Industrial & Energy customers.
  - Management thinks a 50/50 split is reasonable over time.
- Peers produce 30%-40% of revenues from Industrial & Energy customers.
  - "Our industrial mix is 30%-50% depending on the year."
    – *VP, Key Competitor B*
  - "30%-40% industrial mix is probably the right target."
    – *Project Manager, Key Competitor A*
- Industrial/Energy customers offer meaningfully better margins than municipalities.

What Did Our Contacts Say?

- **Industry contacts suggest Industrial margins (8-20%) are better than Muni margins (4-13%).**
  - "Muni side…. May be in 8-13% GM range…. Industrial GMs [are] 12-20%.
    – *Managing Director, Key Competitor C*
  - "Typical Muni [gross] margins are 4-8%...industrial margins are 8-20%.
    – *Former mid-level manager at LAYN*
- **And Energy margins (15-35%) are even better than industrial margins.**
  - "Energy [GMs] would probably be in 17-25% range."
    – *Managing Director, Key Competitor C*
  - "Energy [gross] margins range from 15-30%.
    – *Former mid-level manager at LAYN*
  - "Typical service business like water transfer or laying pipe [for EP co.] is 30-35%."
    – *CEO of largest water services player in oil and gas*

What Did Our Contacts Say?

Why are Industrial/Energy Margins Better When the Projects…

- Involve the same work.
- Require the same equipment.
- Employ mostly the same people?

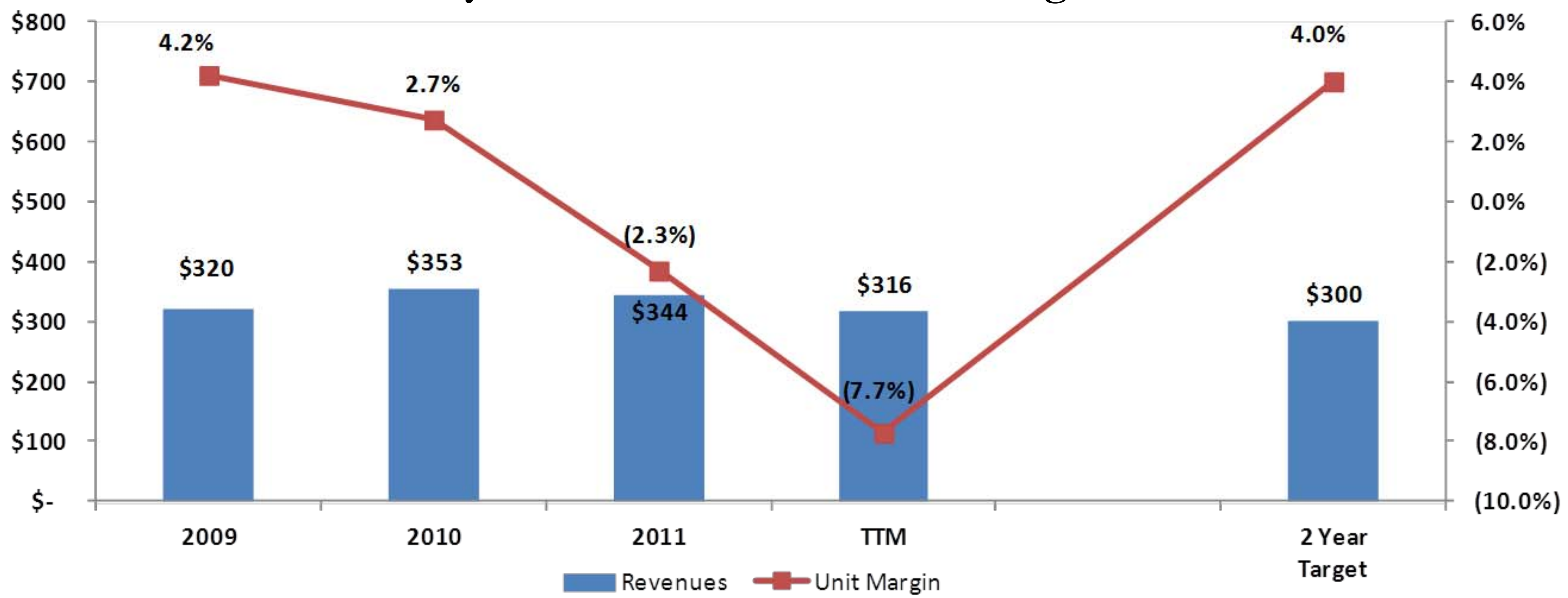
Our Contacts Highlighted Key Differences:

- Muni bids are published publicly and open to "anyone with a backhoe."
- Industrial/Energy firms request bids selectively, typically requiring scale and a track record of execution.
- Industrial/Energy customers require speed and higher standards for quality and safety. Muni customers typically settle for less for a better price.

Margin Recovery Opportunity in Heavy Civil

- Heavy Civil margins used to be north of 4%.
- Peers produce 6-8%+ margins.
- Management believes it can produce a 6% margin.
- We think the new disciplined bidding process should restore margins to 4%.
- And the mix shift towards Energy/Industrial could take it to 6%+ over time.

Heavy Civil Revenues and Unit Margins



Valuation

Downside Protection; 60%+ Upside

Limited Downside: Rarely Trades Below Book

- Over the past 10 years, 1.0x Tangible Book has proven to be a floor for LAYN.
- LAYN currently trades at 1.0x Tangible Book.

LAYN Historical Price / Tangible Book

Limited Downside: Rarely Trades Below Book

- Over the past 10 years, 1.0x Tangible Book has also provided good support for MDI.

MDI Historical Price / Tangible Book

Current

P / TB = 1.8x

Limited Downside: MinEx Offers Firm Floor

MinEx alone provides good downside protection.

- At MDI's multiples of sales, EBIT, and Rigs, MinEx is worth $19/ LAYN share.

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EV / S *	1.0x	$449	$23
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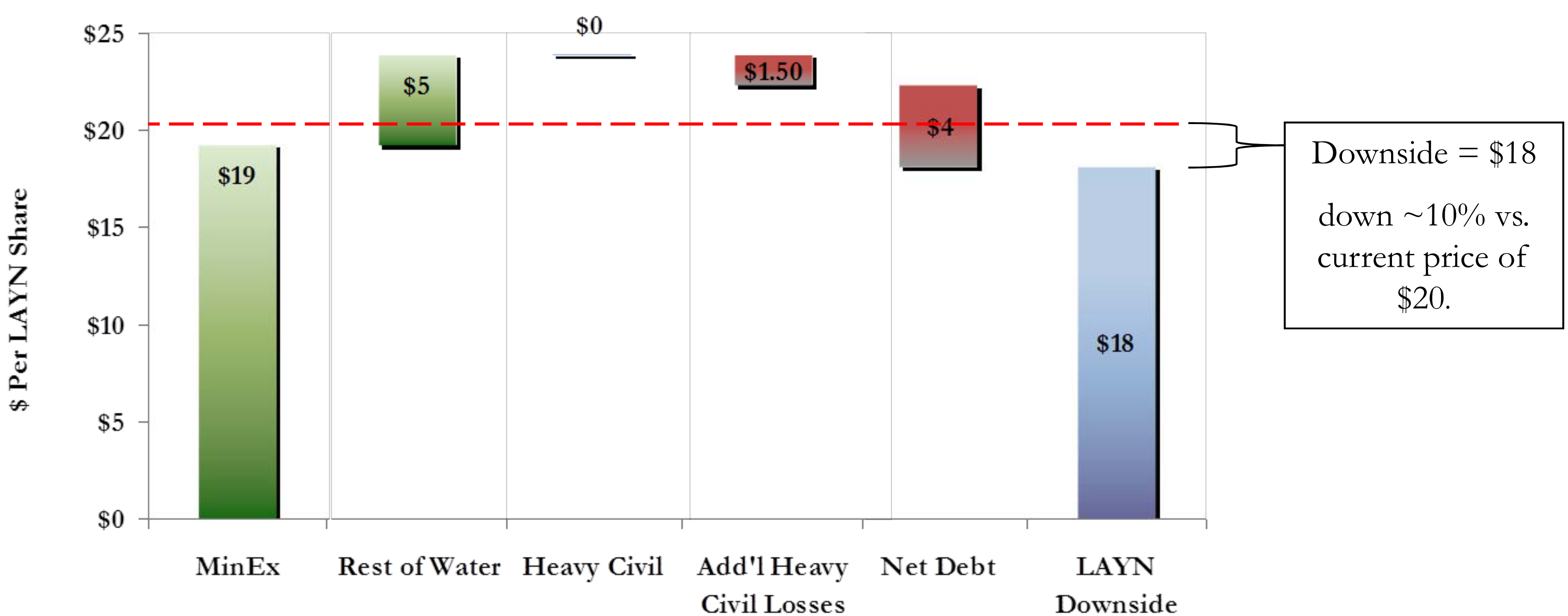
Average Mineral Exploration EV		**$381**	**$19**

** MinEx Rev. and Rig Count applies average 44.4% affiliate ownership to total affiliate Revenue and Rigs*

One can short Major Drilling and firmly establish a value for LAYN's MinEx division.

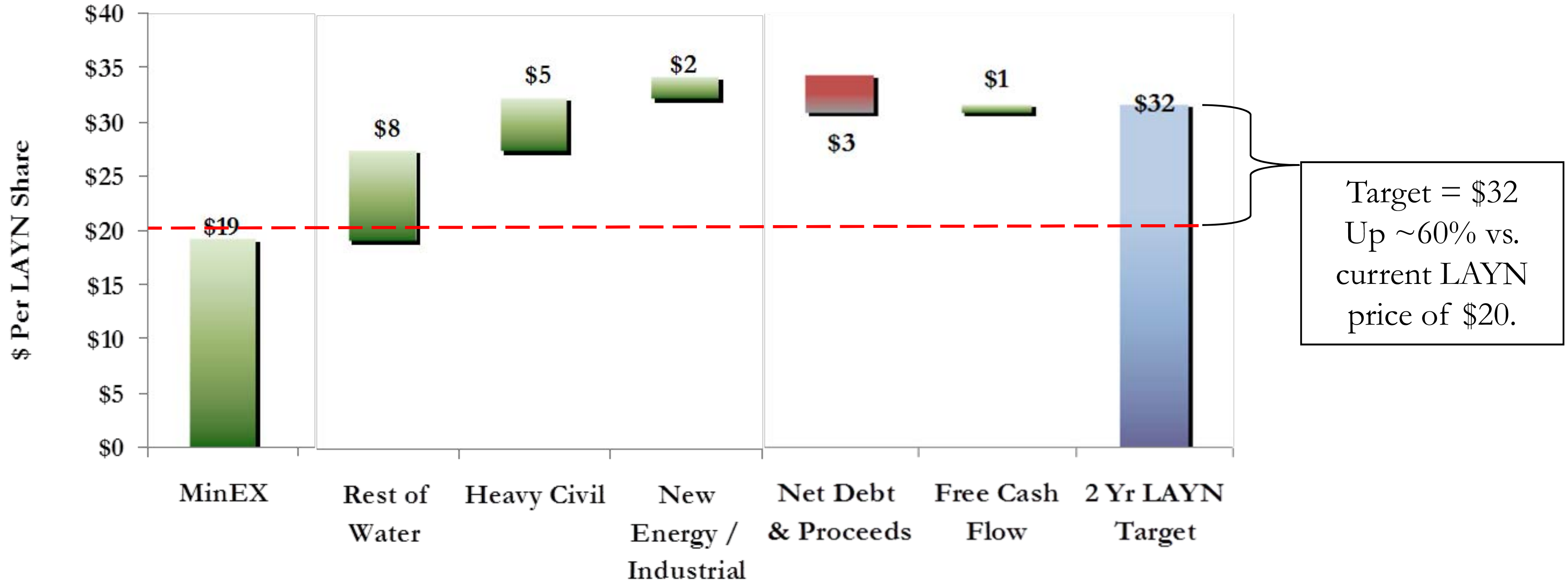
Limited Downside: Bear Scenario ~$18/Shr.

- Lock in $19/share for MinEx.
- Rest of Water (less Corporate Exp.) can be valued at 10x TTM NOPAT.
- No value ascribed to Heavy Civil (a division with $316mm of LTM revenue).
- $50mm of future losses in Heavy Civil, reducing value by $1.50/share.



Attractive Upside: Bull Scenario ~$32

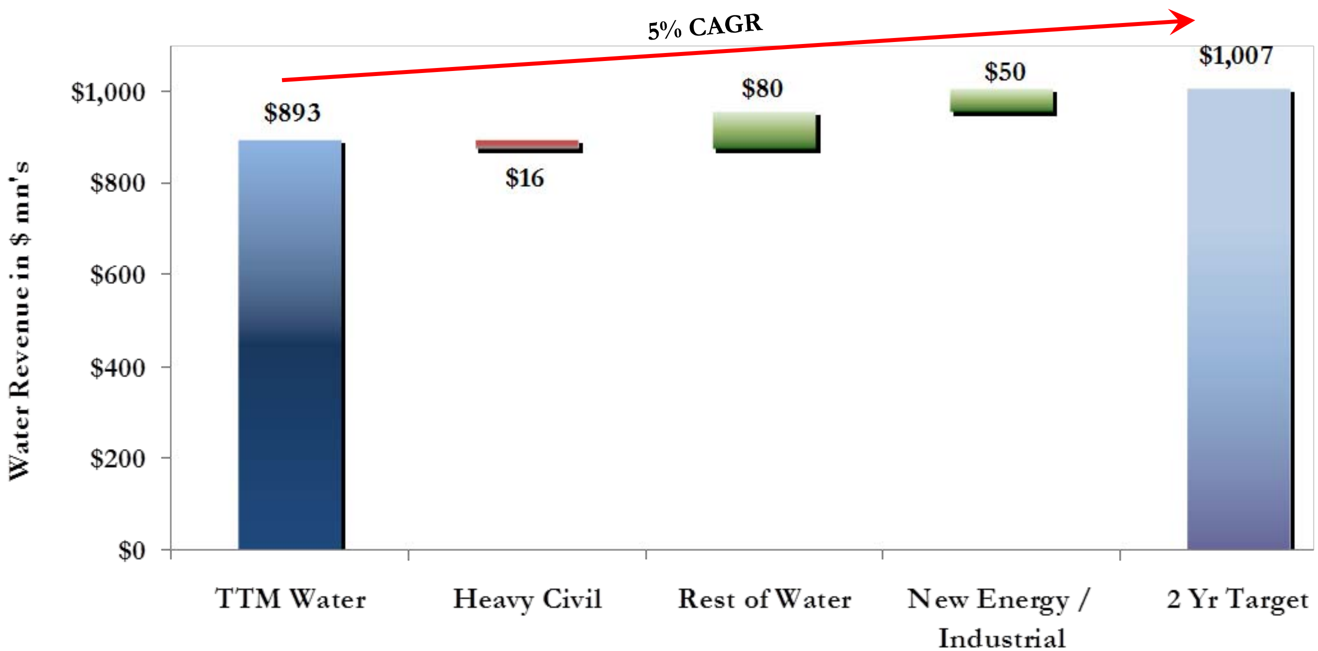
- MinEx still worth $19/share.
- Water worth $15/share, applying 13x normalized earnings.
- Less Net Debt, LAYN is worth $32/share.



Note: Net Debt includes $14m of cash proceeds for the Energy Business held for sale

Bull Scenario: What do you have to believe?

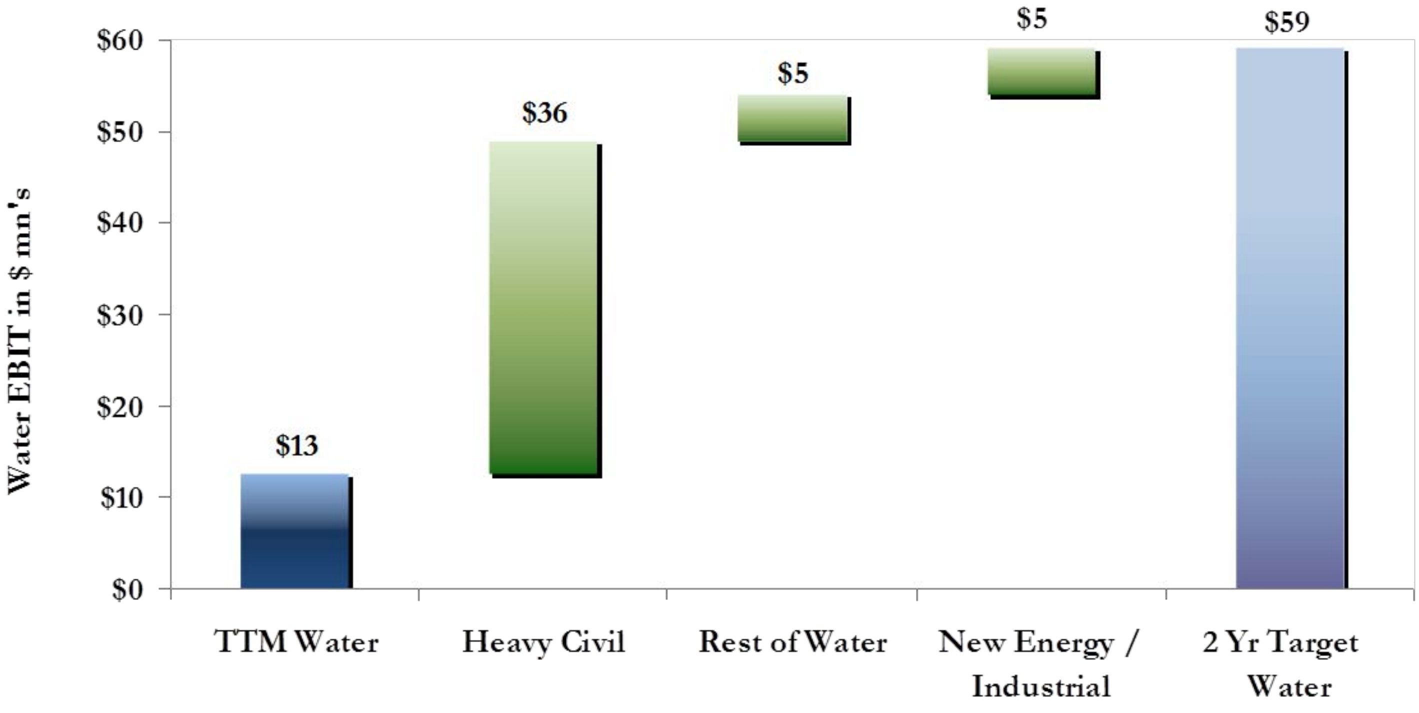
- Over 2.5 years, revenues grow from $893m to $1.0b (in 2014).
  - -2% CAGR in Heavy Civil to $300m of revenue.
  - 5% CAGR in the Rest of Water to $657m of revenue.
  - $50m additional Energy/Industrial Water rev. (CEO targets $200m in 3-5 yrs.).



Note: TTM Water Pro Forma for Acquisition of 50% interest in Costa Fortuna, excludes Afghanistan project and Water Treatment restructuring charge in CY4Q11.

Bull Scenario: What do you have to believe?

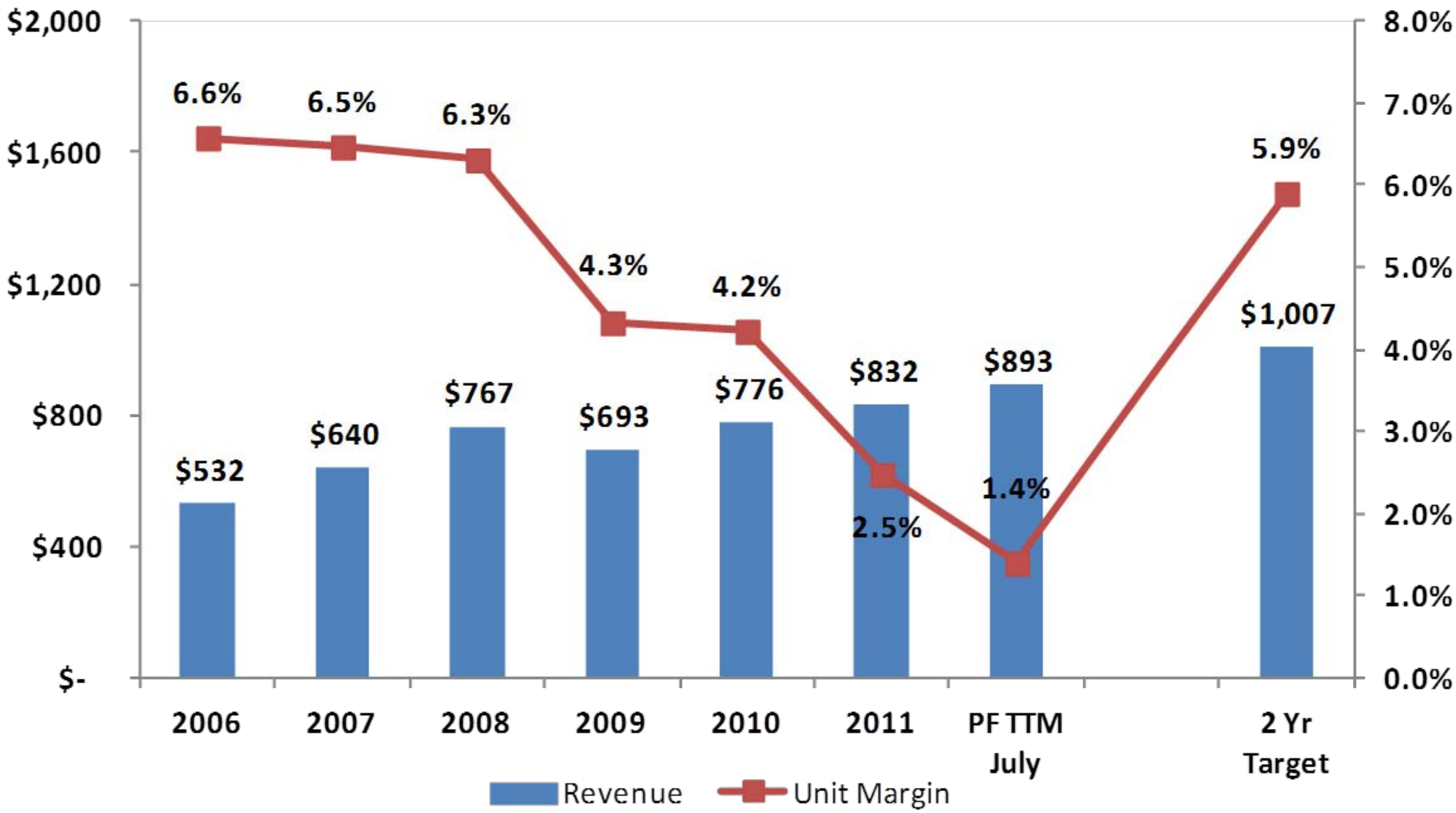
- Heavy Civil returns to historical 4% margins from negative 8% in TTM.
- 'Rest of the Water' margins remain flat with 6.4% on TTM basis.
- New Energy / Industrial Water produces 10% incremental margin (vs. targeted 25%).



Note: TTM Water Pro Forma for Acquisition of 50% interest in Costa Fortuna, excludes Afghanistan project and Water Treatment restructuring charge in CY4Q11.

Bull Scenario: What do you have to believe?

- Water Infrastructure can approach a 6% margin once again.



Note: TTM period is Pro Forma Costa Fortuna acquisition. Excludes 4Q11 Water Treatment restructuring charges and unusually profitable Afghanistan project from '09-'11.

Attractive Upside: Bull Scenario #1 ~$32

- Bull Scenario #1: 4% Heavy Civil margin & $50m Energy/Industrial rev.

Target Price Per LAYN Share

Heavy Civil at a 4% Margin

New Energy	New Energy / Industrial Revenue ($ mil.)				
Margin	**$0**	**$50**	**$100**	**$150**	**$200**
5%	$30	$31	$32	$33	$34
10%	$30	**$32**	$34	$36	$38
15%	$30	$33	$36	$39	$42
20%	$30	$34	$38	$42	$46
25%	$30	$35	$40	$45	$50

Attractive Upside: Bull Scenario #2 ~$38

- Management targets $200m in Energy revenue alone at a 25% margin in 3-5 years.
- And CEO believes that a 6% margin in Heavy Civil is achievable.
- Bull Scenario #2: 6% Heavy Civil margin and $100m of Energy/Ind. rev. @ 15% margin.
- Suggests ~90% upside potential.

Target Price Per LAYN Share

Heavy Civil at a 6% Margin

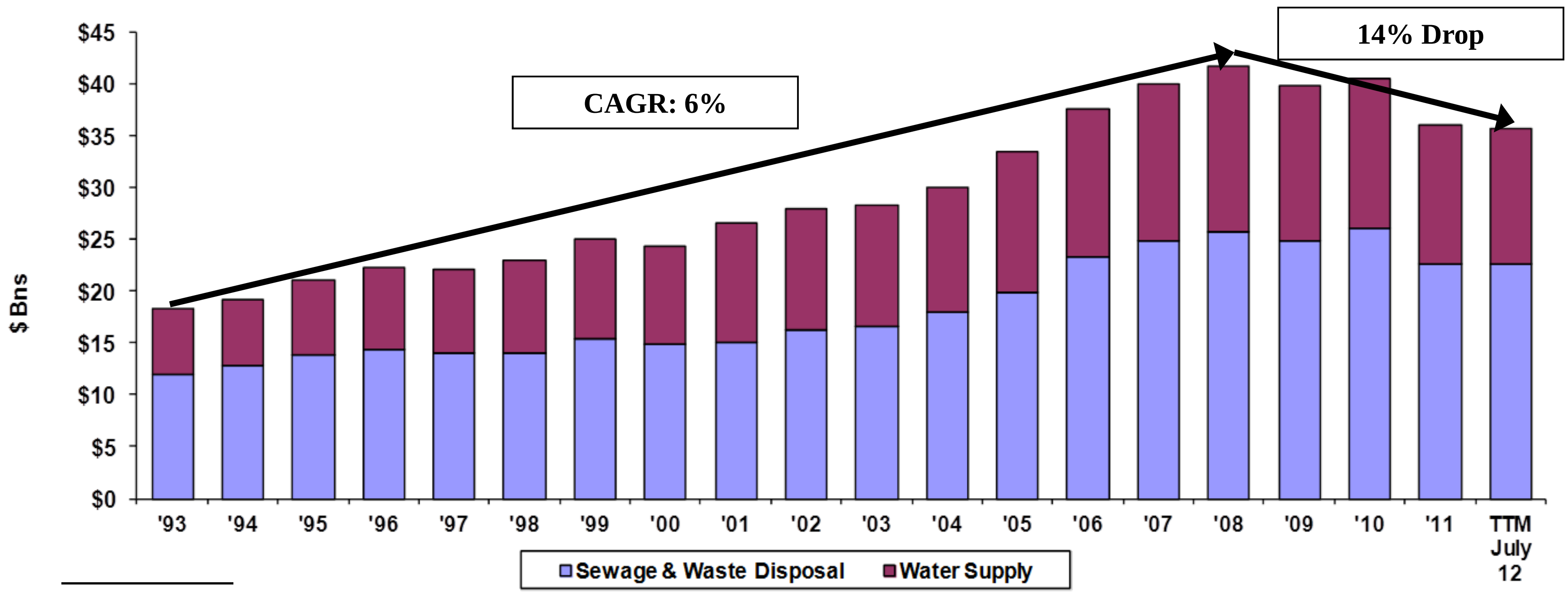
New Energy	New Energy / Industrial Revenue ($ mil.)				
Margin	**$0**	**$50**	**$100**	**$150**	**$200**
5%	$32	$33	$34	$35	$36
10%	$32	$34	$36	$38	$40
15%	$32	$35	**$38**	$41	$44
20%	$32	$36	$40	$44	$48
25%	$32	$37	$42	$47	$52

Risks

Concerns about Muni Exposure are Misguided

What Prevents Further Drop in Water Spend?

Total Public Water and Sewage Construction Spending



Source: U.S. Census Bureau.

- For the 15 years through 2008 total gov't water spending increased at a 6% CAGR.
- Since the peak in 2008, spending has dropped 14%.

What Prevents Further Drop in Water Spend?

Two Primary Causes of the 14% Drop Since 2008 in Water Spending

- Developers pay municipalities "connection fees" to extend the water system for new construction/communities. This source of revenue to the water system and these projects for E&C companies dried up when the construction boom ended.

- Stimulus spending and the Build America Bonds program (which ended in 2010) stimulated projects in 2009 and 2010. This delayed the ultimate drop in water spending until 2011.

  - These factors have already played out and should not cause a further drop in water spending from current levels.

Question: What prevents a further drop in water spending if municipal finances deteriorate from current levels?

What Prevents Further Drop in Water Spend?

#1. The "Enterprise Fund" structure insulates municipal water spending.

- Basically, the Enterprise Fund structure directs revenues from residents' water bills solely for the purpose of sustaining the water system.
- Under this structure water revenues, by law, can not be used for other local spending.
- Water bills usually cover 90-95% of spending with nominal amounts from other sources.
- An est. 90+% of U.S. population is served by systems structured as Enterprise Funds.
- Only declines in water usage or the local population would reduce water bill revenue.
- Under this structure, muni water spending is largely immune to local budgetary issues.
  - The same is true even if a municipality goes bankruptcy.

What Did Our Contacts Say?

- **The Enterprise Fund structure protects water revenues…**
  - "We operate largely outside of the Municipality so as long as people pay their water bills I wouldn't expect any impact [from Municipal struggles]…If the city goes bankrupt tomorrow there is no impact on our business."

    – *Director of Financial Planning for a municipal water system*
- **Even in a Bankrupt Municipality, No Impact on Water Spending…**
  - "Our funding source is separate from the general funds…[it] comes from consumer water bills…[and we use that for] for water maintenance and capital improvements…There is a gov't mandate (Fed/state laws) that says these funds cant be used for any other purpose."

    – *Head of Capital Improvement Projects for a water system in a bankrupt city*
- **Water system revenues declined post 2008 but have stabilized…**
  - "Revenues declined post 2008 due to lost 'new connection' fees, but this has stabilized…Maintenance and rehab have been funded fine with monthly water bill revenues."

    – *Senior Civil Engineer in charge of capital improvements for a municipal water system*

What Prevents Further Drop in Water Spend?

#2. Much of the U.S. water infrastructure is nearing the end of its useful life.

- Because pipe assets can last 100+ years, buried water system infrastructure built in the late 1800s and throughout the 1900s have never required large-scale replacement.
- The American Water Works Association (AWWA) estimates at least $1 trillion must be spent in the U.S. to replace buried drinking water infrastructure over the next 25 years.
- This <u>excludes</u> the cost of new treatment plants and waste and storm water investments – a growing area of focus from the EPA.
- <u>In constant dollars</u>, the AWWA estimates that spending must expand from ~$30 bn a year in 2010 to almost $50 bn annually by the 2040s.

Water system spending, already at a bare bones level, needs to increase.

What Did Our Contacts Say?

- **Spending has nowhere to go but up…**
  - "What we have now is the worst case scenario…spending has no where to go but up on the distribution systems and for repair and replacement. This is because the rate of investment is so far below what it needs to be."

    – *Senior EPA official, Office of Ground Water and Drinking Water*
- **Massive increase in catch-up spending is required for decades…**
  - "[Water utilities'] investment rate in pipes is just 0.5% per year. This imputes a 200 year useful life vs. a realistic life of 100 years…we need to have a period of a couple decades where spending is 2% or more to catch up. "

    – *Senior EPA official, Office of Ground Water and Drinking Water*
- **Water is a growth industry…**
  - "I think over the next 5-10 years [investing in water] would be an excellent investment. Everything from desalination to waste water is a growth industry."

    – *Senior EPA official, State Revolving Fund Branch*

What Prevents Further Drop in Water Spend?

#3. Federal safeguards ensure adequate water spending.

- The Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) ensure that water systems can't be neglected forever.
- EPA actively maintains a monthly watch-list comprised of 400+ cities and wastewater treatment facilities in danger of violating the CWA.
- Failure to comply with federal regulations can result in a "Consent Decree" from the EPA – a legally binding document outlining an accelerated repair program to correct the infraction.
- CWA Consent Decree settlements have saddled defendants (predominantly municipalities) with ~$30 billion in penalties and injunctive relief projects since 1999.
- Notable Consent Decree settlements in just the last 2 years include: $3 billion in Chicago, $4.7 billion in St. Louis, and $5 billion in Honolulu.

Municipalities are being forced to maintain proper water investments.

What Prevents Further Drop in Water Spend?

Municipal Water Spending Should be Stable to Growing.

- **#1. Enterprise Fund structure insulates municipal water system spending.**
- **#2. Much of the U.S. water infrastructure is nearing the end of its useful life.**
- **#3. Federal safeguards ensure adequate water system spending will occur.**

What are the "Real" Risks?

- If one hedges MinEx, there is a risk that the business fundamentals diverge between Major Drilling and MinEx, causing the hedge to fail.
- If one doesn't hedge, could face the situation where the mining cycle rolls and MinEx profits dry up. Without any earnings support how firm of a support will TBV provide?
- Fixed-price contracts in Heavy Civil have the potential for substantive losses if not managed properly.
- New CEO's changes prove too much of a culture shock, causing discontent and turnover that negatively impacts results throughout the Water Infrastructure division.
- A tumultuous capital market environment like 2008/09 could make it difficult for municipal water systems to fund large infrastructure projects that require access to capital markets.

Investment Summary

- The MinEx value alone, at $19/share, nearly supports the entire market cap.
- Problems in the Water segment are isolated to one unit generating heavy losses.
- Key steps taken by new CEO for a significant margin recovery in Water division.
- Concerns about Municipal exposure are misguided.

Trading at tangible book, downside is limited with 60-90% upside.