

Connacher Performance Presentation - 2017



Great Divide SAGD Facilities - 10587

Forward Looking Information and Advisories



This Presentation contains forward looking information including, expectations for future production and total bitumen recovery, estimates of reserves, future development of the **SAGD+**[®] process commercial project at Algar and mini-steam expansion at Pod One and the anticipated impact thereof, growth potential associated with certain additional capital investment options and development projects to be undertaken at Algar, sustainability of production, well and plant performance, the steam to oil ratio (“SOR”), and plant reliability.

Forward looking information is based on management’s expectations regarding the Company's future growth and financial position; results of operations and production, future commodity prices and foreign exchange rates; future capital and other expenditures (including the amount, nature, and sources of funding thereof), plans for and results of drilling activity; environmental matters; business prospects and opportunities; and future economic conditions. Forward looking information involves significant known and unknown risks and uncertainties, which could cause actual results to differ materially from those anticipated. These risks include, but are not limited to: the risks associated with the oil and gas industry (e.g., operational risks in development, exploration and production; delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve and resource estimates; the uncertainty of geological interpretations; the uncertainty of estimates and projections relating to production, costs and expenses; and health, safety and environmental risks), risk of commodity price and foreign exchange rate fluctuations, risks associated with the impact of general economic conditions, risks and uncertainties associated with maintaining the necessary regulatory approvals and securing the financing to proceed with the operation and continued expansion of the Great Divide oil sands project.

This presentation includes information pertaining to the reserves as at December 31, 2016, as evaluated by GLJ Petroleum Consultants Ltd., in their report for the year ended December 31, 2016 (the “GLJ Report”). Statements relating to reserves are deemed to be forward looking statements, as they involve the implied assessment, based on certain estimates and assumptions, that the reserves described exist in the quantities predicted or estimated, and can be profitably produced in the future. Certain information and assumptions relating to the reserves reported herein are set out in the Corporation's Statement of Reserves Data and Other Oil and Gas Information for the year ended December 31, 2016, which is available on the System for Electronic Document Analysis and Retrieval (SEDAR) at www.sedar.com. There is no assurance that the forecast price and cost assumptions contained in the GLJ Report will be attained and variances could be material. The reserves estimates of Connacher's properties described herein are estimates only. The actual reserves on Connacher's properties may be greater or less than those calculated.

Design capacity is not necessarily indicative of the stabilized production levels or steam generation capacity that may ultimately be achieved at Connacher’s SAGD project sites. Reported average production levels may not be reflective of sustainable production rates and future production rates may differ materially from the production rates reflected in this presentation due to, among other factors, difficulties or interruptions encountered during the production of bitumen.

Although Connacher believes that the expectations in such forward looking information are reasonable, there can be no assurance that such expectations shall prove to be correct. The forward looking information included in this presentation is expressly qualified in its entirety by this cautionary statement. The forward looking information included herein is made as of the date of this presentation and Connacher assumes no obligation to update or revise any forward looking information to reflect new events or circumstances, except as required by law.

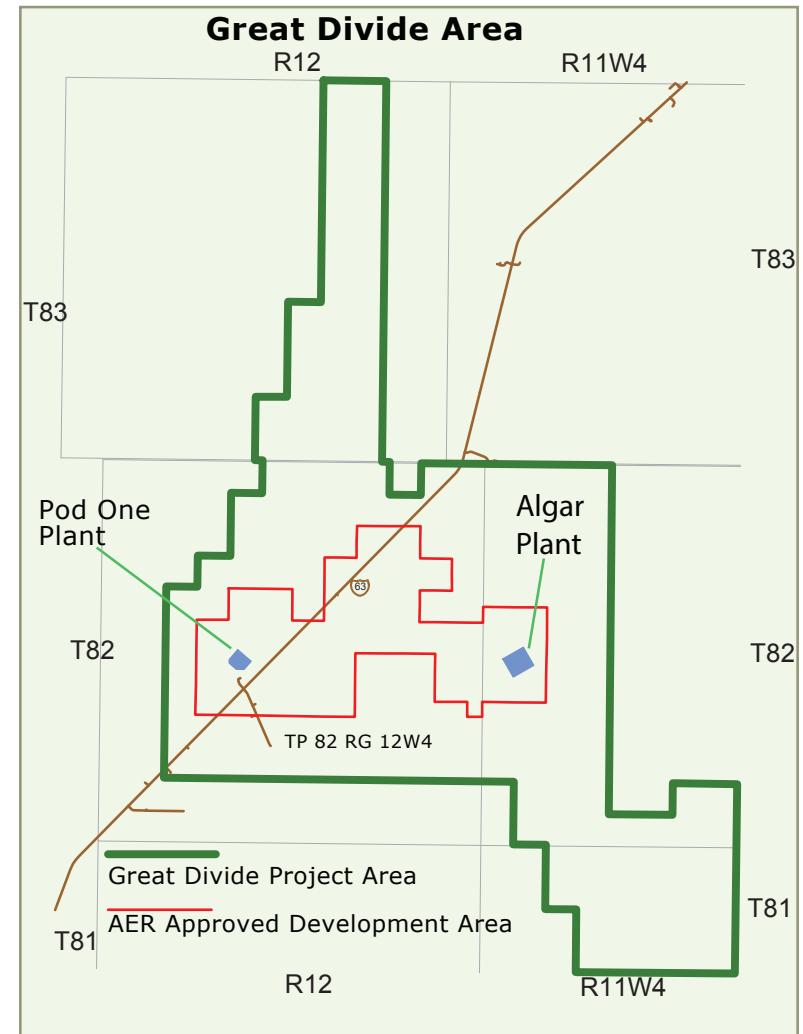
| Subsurface Presentations | |
|---|--------------------|
| Background | Gord Trainor |
| Geology | Gord Trainor |
| Recovery Process | Michael Hardcastle |
| Completions & Artificial Lift, Monitoring | Michael Hardcastle |
| Scheme Performance | Michael Hardcastle |
| Future Plans (Existing Developments) | Gord Trainor |

| Surface Presentations | |
|-------------------------|------------------|
| Facilities | Hollis Sylvester |
| Measurement & Reporting | Hollis Sylvester |
| Water Recycle | Hollis Sylvester |
| Future Plans | Hollis Sylvester |



Subsurface - Background

- Connacher is a focused developer, producer, and bitumen marketer from its in-situ oil sands projects in Alberta's Athabasca oil sands.
- Primary driver of value is the continued development of its bitumen production at its Great Divide oil sands operations using in-situ recovery methods
- Oil sands reserves and resources include 447,237 Mbbl of 2P reserves (as of 31 December 2016 per GLJ Petroleum Consultants) ⁽¹⁾



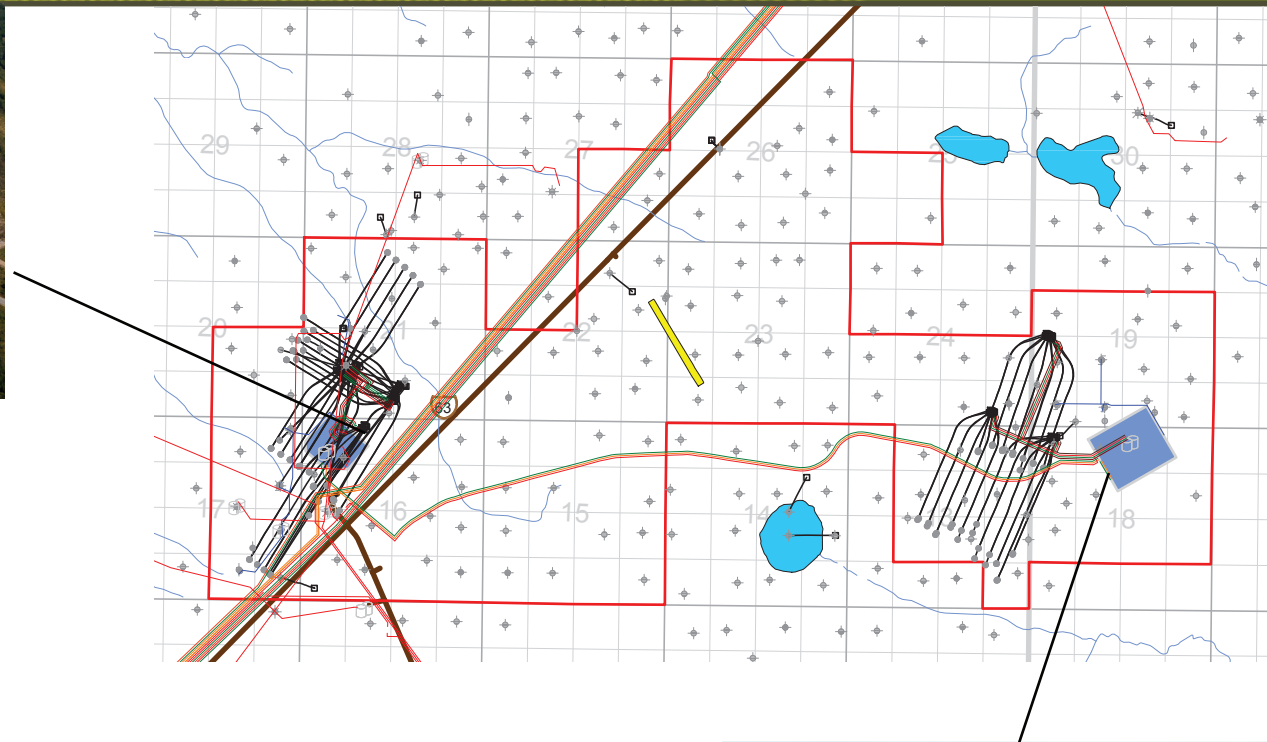
⁽¹⁾ See Slide [Appendix B](#) for Reserve Definitions

Great Divide Assets



Pod One

- First Steam September 2007
- First Bitumen October 2007



Algar

- First Steam May 2010
- First Bitumen July 2010



Highlights - 2017 Connacher Presentation

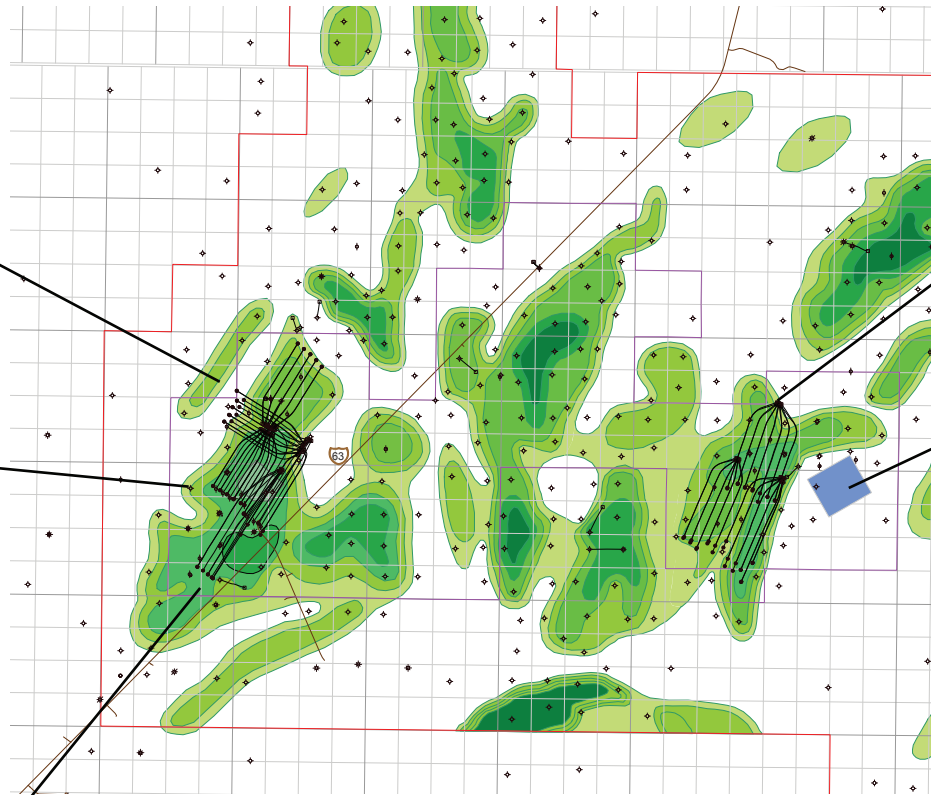
No Changes to Net Pay
and other Geology Maps

November 2016
Pod One Production
Ramp Up

Mini Expansion
at Pod One
Approved

Pad 104

- 10 Well Pairs Approved
- 4 Wells Drilled and Producing

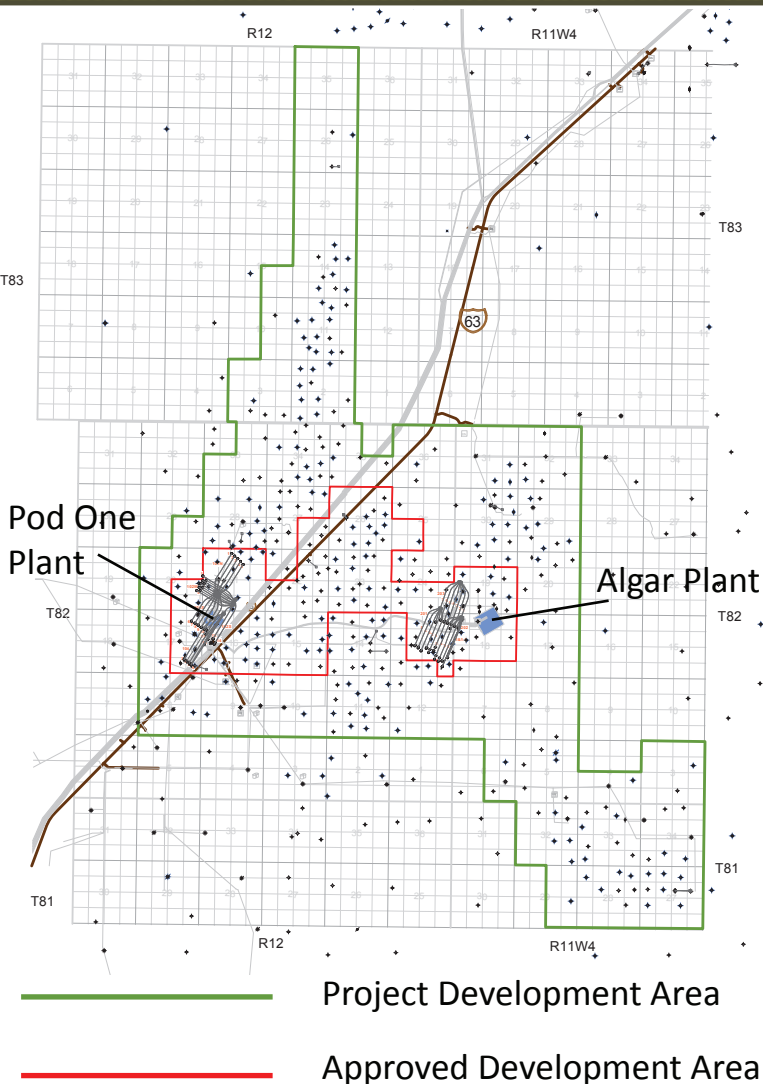


Algar Production
steady following
ramp up

SAGD+® Process
Commercial
Project Approved
at Algar

Other

- Pump Performance Update
- Water Recycle Update
- Facilities and MARP updates
- HSE Updates

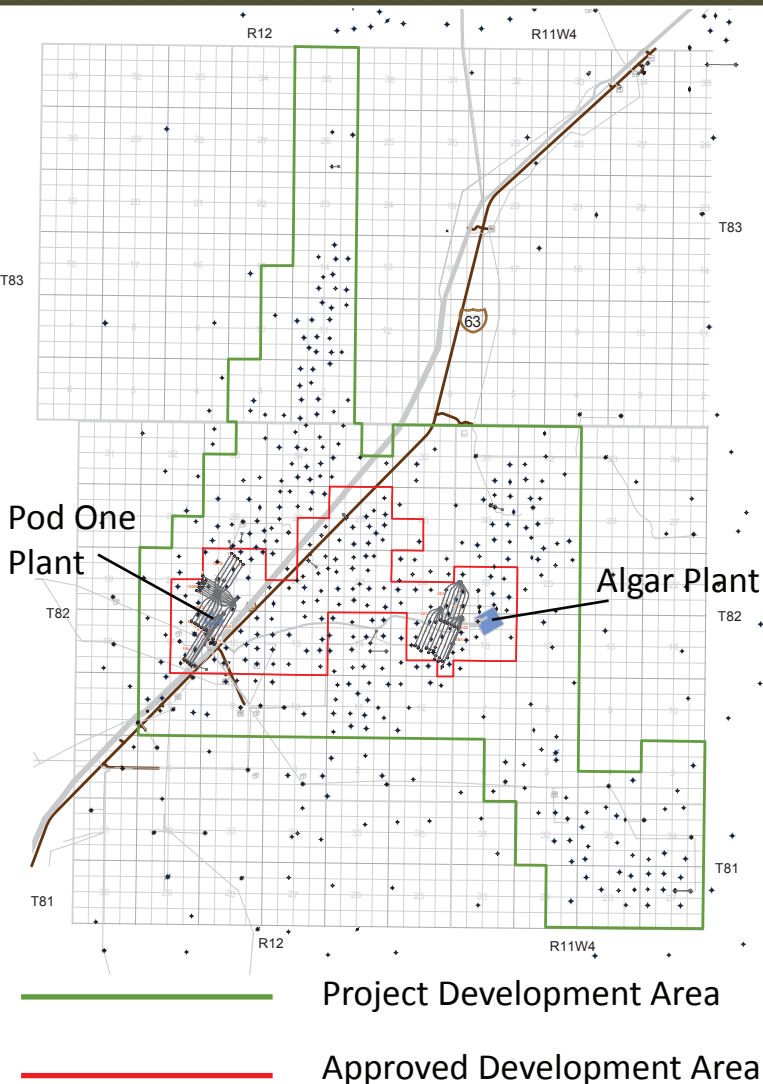


Pod One Current Development

- 23 Well Pairs and 13 Infills
 - Pad 101N - 5 Well Pairs
 - Pad 101S - 6 Well Pairs, 6 Infills
 - Pad 102W - 5 Well Pairs, 5 Infills
 - Pad 102S - 3 Well Pairs, 2 Infills
 - Pad 104 - 4 Well Pairs 80m interwell spacing

Pod One Development History

- Original 15 Well Pairs Drilled in 2007
- all well pair interwell spacing 100m except Pad 104
- 2 Well Pairs Drilled in 2009 (101S and 102S)
- 2 Well Pairs Drilled in 2010 (102S)
- 4 Infills Drilled in 2013 (102W)
- 4 Well Pairs Drilled in 2013 (104)
- 9 Infills Drilled in 2014 (102W(1), 102S(2), 101S(6))



Algar Current Development

- 18 Well Pairs Producing
 - Pad 201S - 5 Well Pairs 100m interwell spacing
 - Pad 202S - 6 Well Pairs (1 re-drill) 100m interwell spacing
 - Pad 203S - 7 Well Pairs 100m interwell spacing

Algar Development History

- Original 17 Well Pairs Drilled in 2009
- Replacement Well Pair (202-01) drilled in 2013
- Approved for 5 Infills on Pad 203 in 2014

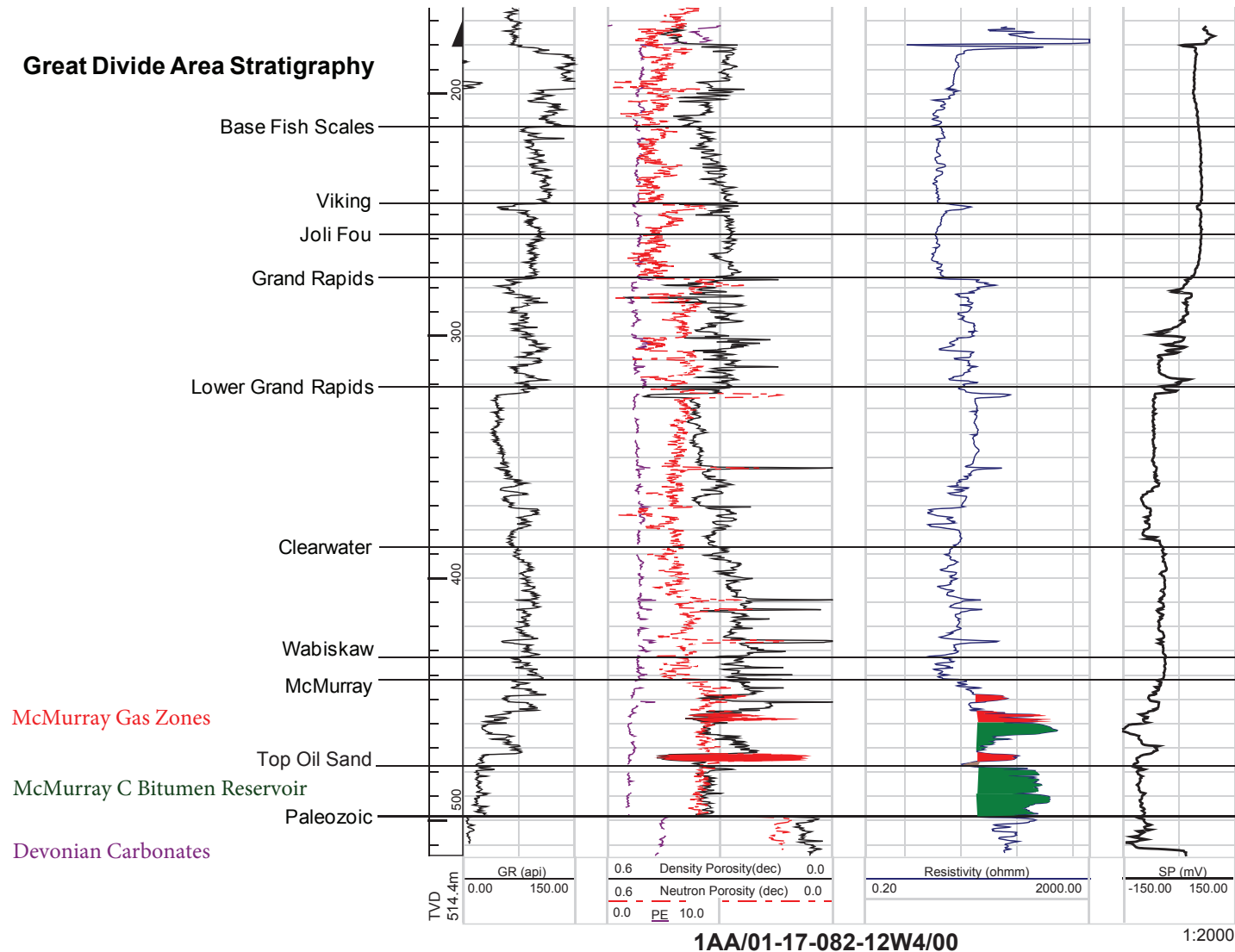
Great Divide Summary

| | Pod One @ Sept 30, 2017 | Algar @ Sept 30, 2017 |
|---|--|--|
| First Steam | September 2007 | May 2010 |
| First Sales Oil | October 2007 | June 2010 |
| Cumulative Bitumen Produced e ³ m ³ | 3,580 | 2,125 |
| Cumulative Steam Injected e ³ m ³ | 13,364 | 9,850 |
| Cumulative SOR | 3.73 | 4.64 |
| Number of Producing Well Pairs | 22 | 18 |
| Number of Circulating Well Pairs | 0 | 0 |
| Infill Wells Producing | 9 | 0 |
| Wells Using Gas Lift | 0 | 15 |
| Wells Using Downhole Pumps | 31 | 3 |
| Operating Pressure Gas Lift | NA | 3850 - 4000 kPa |
| Operating Pressure Pump | 1300 - 3000 kPa | 3000 - 3800 kPa |
| Directive 51 Operating MOP | 6205 kPa Maximum Operating Pressure | 6205 kPa Maximum Operating Pressure |



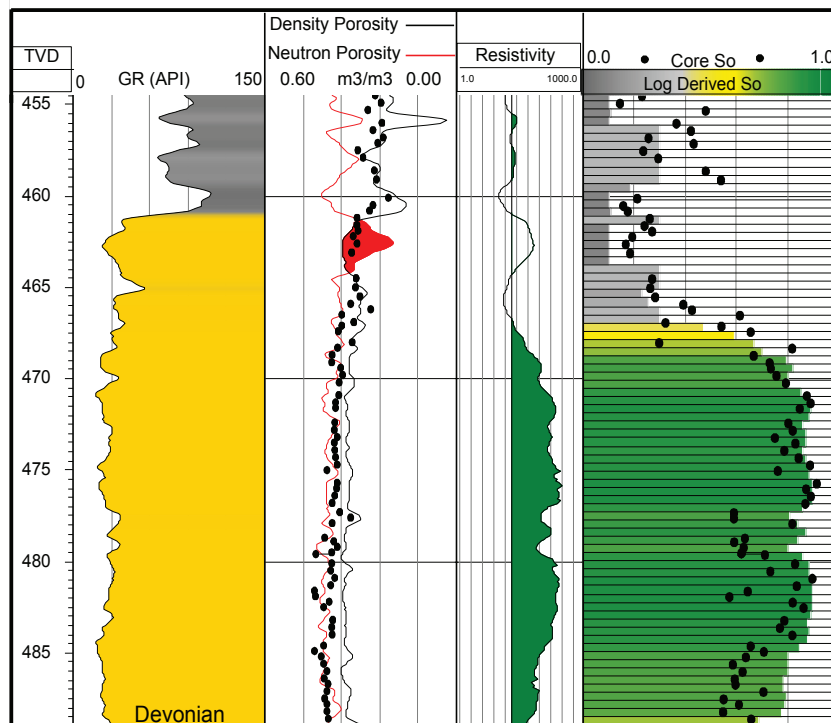
Subsurface - Geology

Great Divide Area Type Well



Great Divide Area Core & Log Data

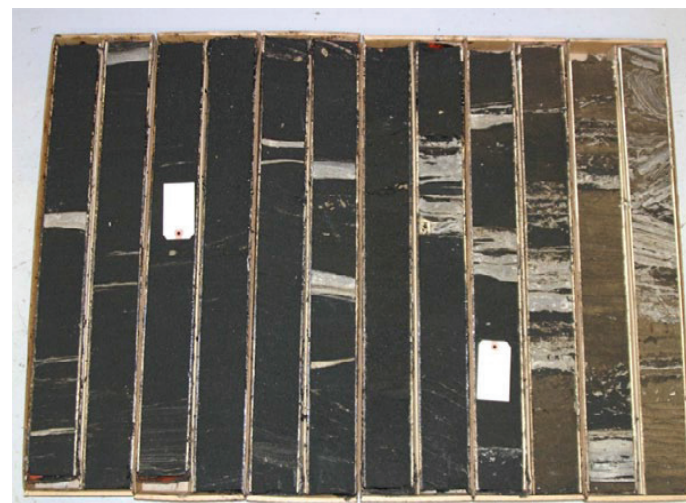
Typical Composite Log with Interpretation and core data comparison.



1AA/13-16-082-12W4/00

- Log vs Core Comparison
- Analytical interpretation of geophysical logs to determine bitumen saturations (wt%) gives good correlation with core derived bitumen saturations (wt%). Examples shown below.

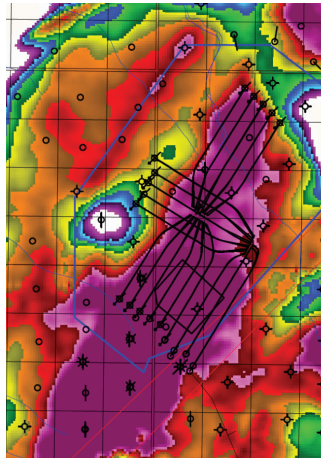
| Well | Log NetPay | Core Net Pay | Log Bitumen Wt % | Core Bitumen Wt % |
|----------------------|------------|--------------|------------------|-------------------|
| 100/08-17-082-12W400 | 21.3 | 23.3 | 13.6% | 14.0% |
| 1AA/03-17-082-12W400 | 13.2 | 12.0 | 11.6% | 12.7% |
| 1AA/03-21-082-12W400 | 14.9 | 13.3 | 10.2% | 10.4% |
| 1AA/07-16-082-12W400 | 25.9 | 27.7 | 11.5% | 12.7% |
| 1AA/10-21-082-12W400 | 20.8 | 17.2 | 13.2% | 14.8% |



Great Divide Reservoir Parameters

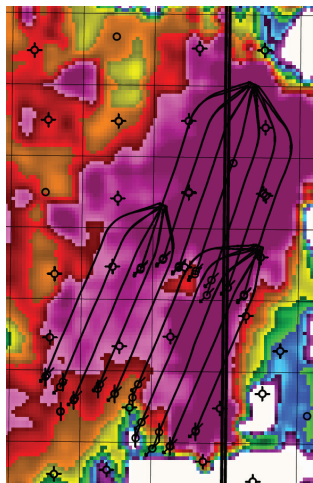
| | Pod One | | Algar | |
|-------------------------------------|-------------|-------------|-------------|-------------|
| | Range | Average | Range | Average |
| Reservoir Thickness (m) | 10 - 30 | 22 | 10 - 30 | 25 |
| Depth to Top of Reservoir (m) | 450 - 490 | 475 | 465 - 500 | 485 |
| Reservoir Net Pay (m) | 10 - 25 | 21 | 10 - 30 | 22 |
| Oil Saturation (%) | 75 - 85 | 80 | 72-80 | 76 |
| Bitumen Density (kg/m3) | | 1018 | | 1018 |
| Bitumen Viscosity (cPs) | | > 1 million | | > 1 million |
| Porosity (%) | 32 - 34 | 33 | 32 - 34 | 33 |
| Vertical Permeability (mD) | 1500 - 4000 | - | 1500 - 4000 | - |
| Horizontal Permeability (mD) | 2000 - 5000 | - | 2000 - 5000 | - |
| Initial Reservoir Temperature (°C) | | 13 | | 13 |
| Initial Reservoir Pressure (kPa) | | 3500 | | 4500 |
| Initial Bottom Water Pressure (kPa) | | | | 2500 |

Great Divide Area - 3D Seismic

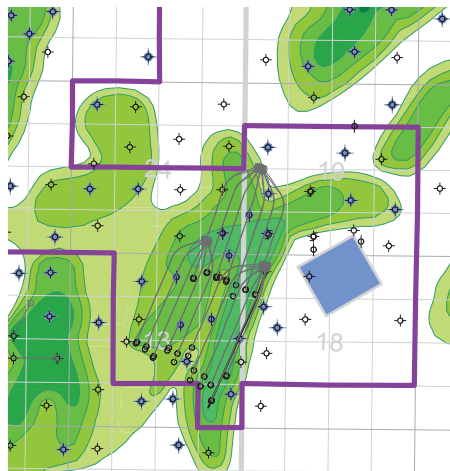
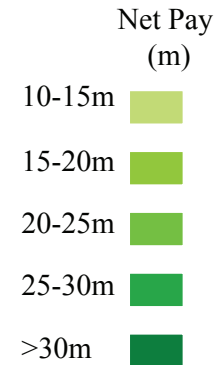
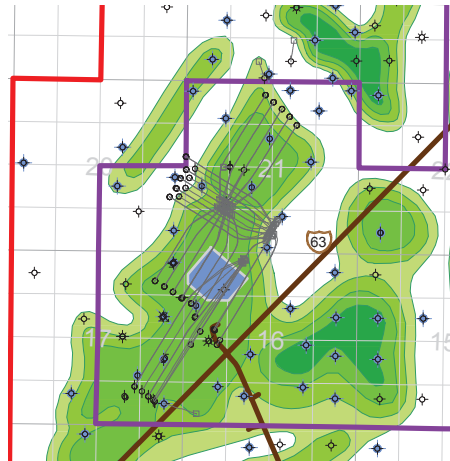


Pod One

3D Seismic - Interpreted
McMurray Sand Isochron



Algal



3D Seismic has been successfully used by Connacher to define edges, sand thickness and paleo structure, and ultimately reduces the drilling costs.

No new Seismic was shot during the 2015-16 exploratory season.

Great Divide Area Oil Sands Facies and Pay

Zones

Defined by Vshale

Connacher Cut-Offs

Z1 (Sand): 0-10% fines

Z2 (Sandy IHS): 10-20% fines

Z3 (IHS): 20-50% fines

Z4 (Muddy IHS): 50-80% fines

Z5 (Mud): 80-100% fines

Z6 (Breccia): >10% clasts

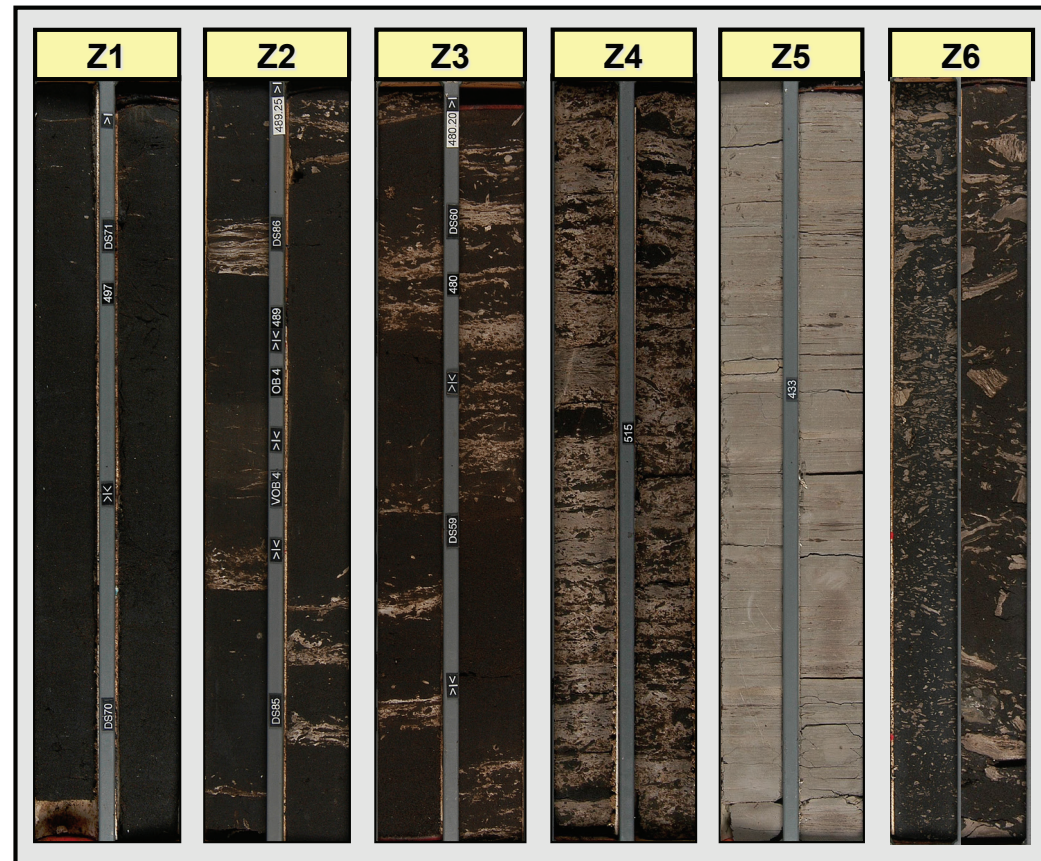
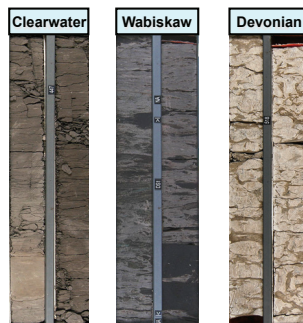
Pay Base Criteria

Minimum bitumen grade: 7wt%

Minimum Net/Gross ratio: 80 %

Maximum included shale interval: 2m

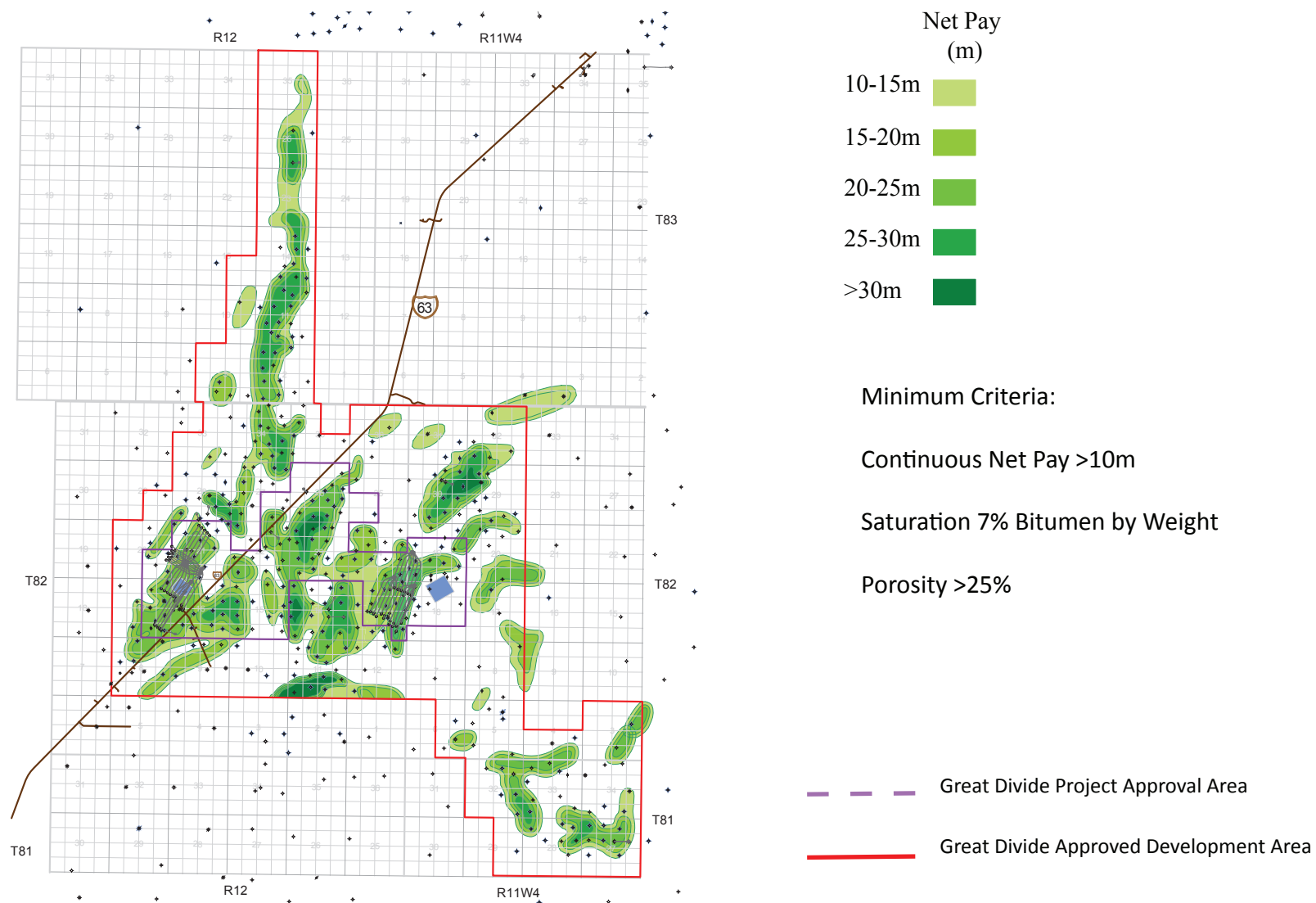
Minimum zone thickness: 10 m



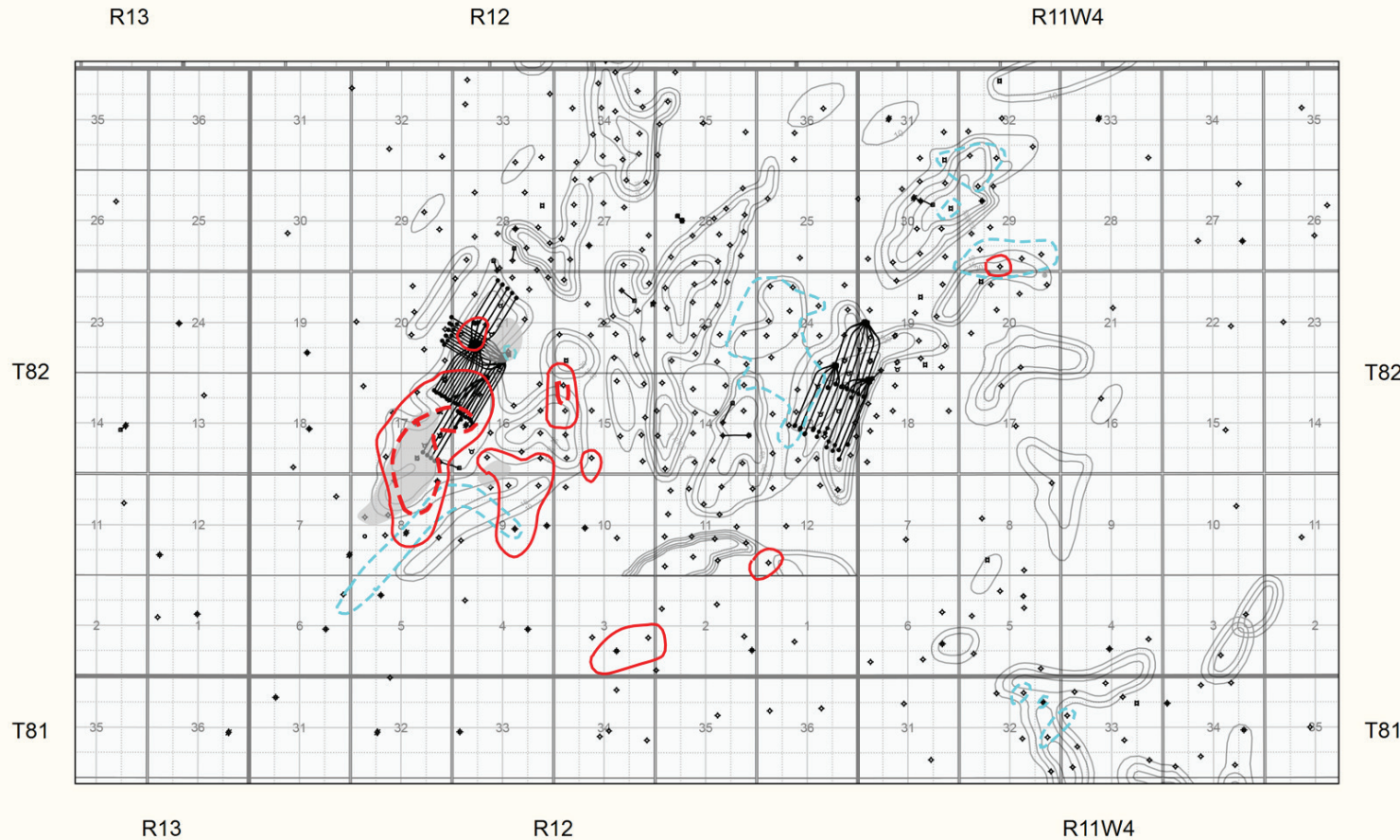
Core displayed is from a number of separate wells

Facies Z1, Z2, and Z3 are included in net pay

Net Pay Map Great Divide Area



Combined Gas Cap & Lean Zone & Bottom Water Map



Original pressure of the gas cap was 2027 kPa in 1988. Subsequent to depletion, the lowest pressure recorded was 746 kPa in 2003.

Estimated original BW pressure of 2500 kPa based on lowest (520 mKB) gauge in Algar observation well 100/15-13-082-12W4 prior to steam injection May 2010.

Bottom Water

5 to 10m
~ 3150 kPa

Lean Zone Thickness (m)

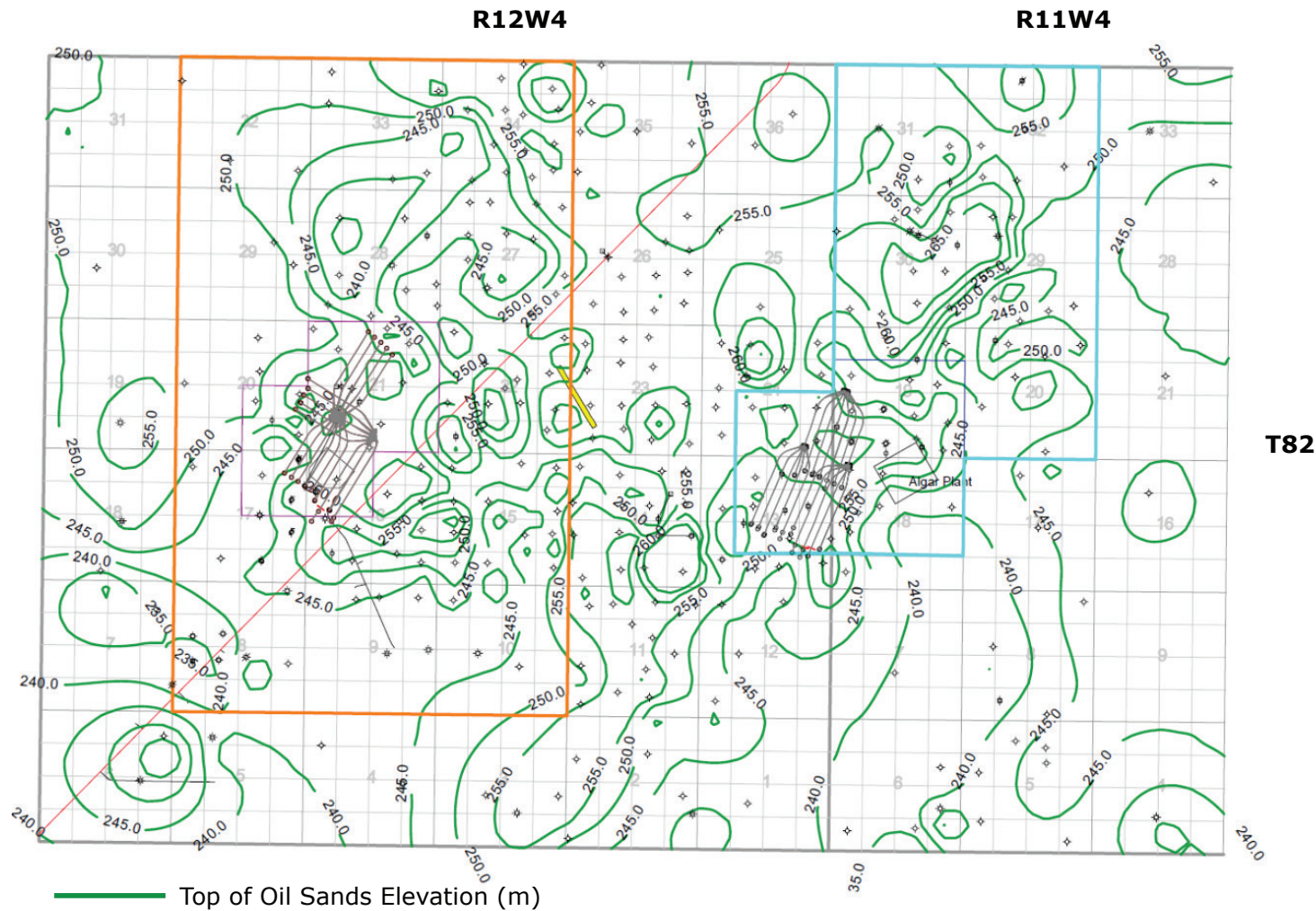
0 to 5m
5 to 10m

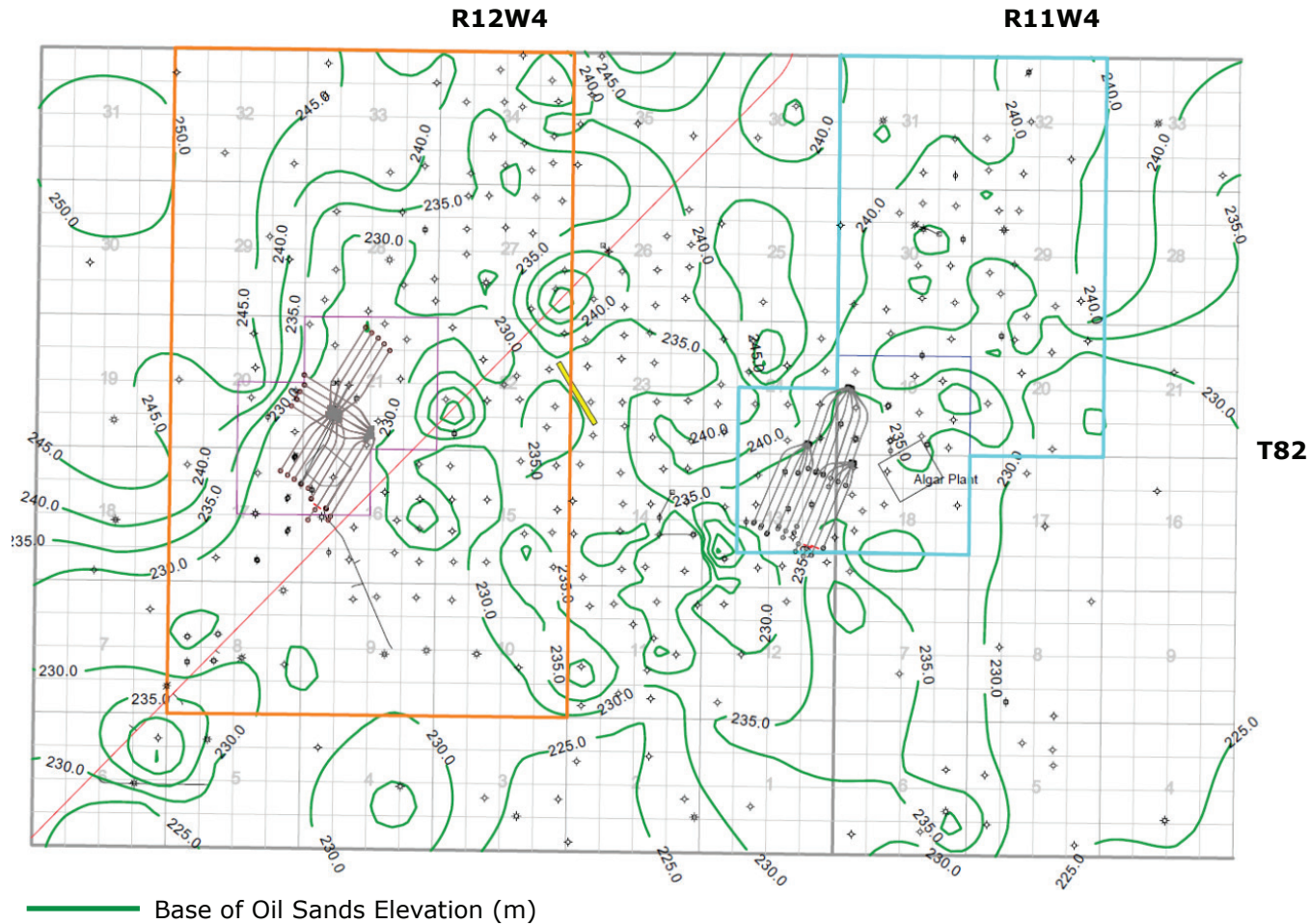
Gas Cap Thickness (m)

0 m
5 m

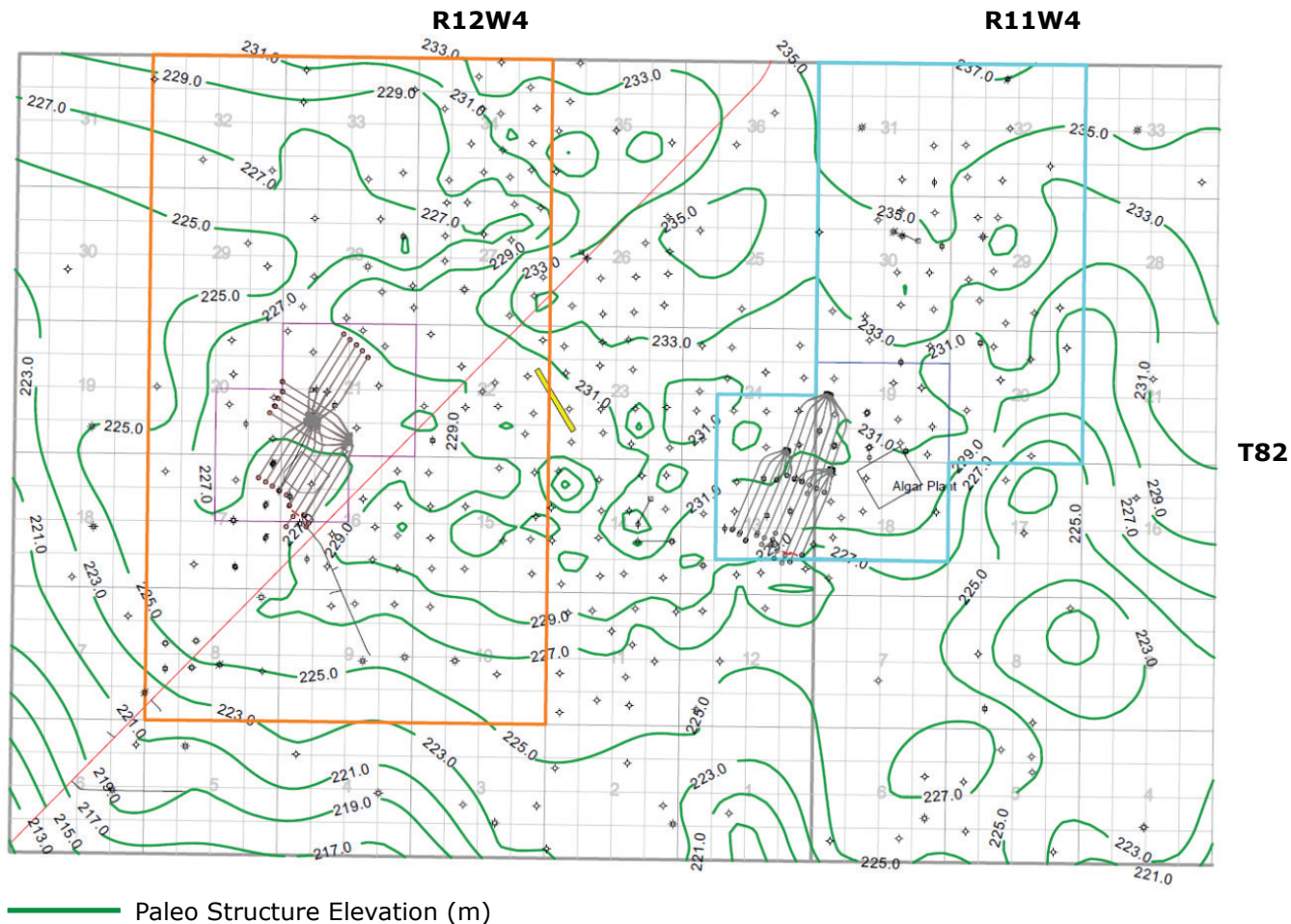
Bitumen Net Pay
Starting at 10m and
then in 5m increments

Top of Oil Sands Elevation



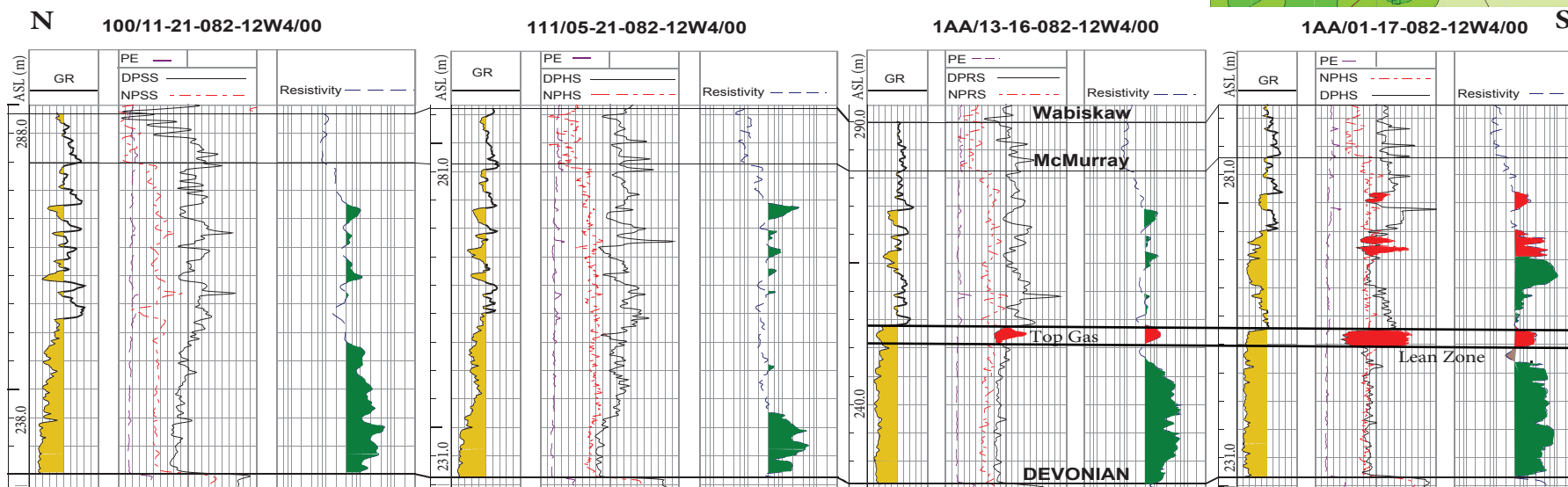
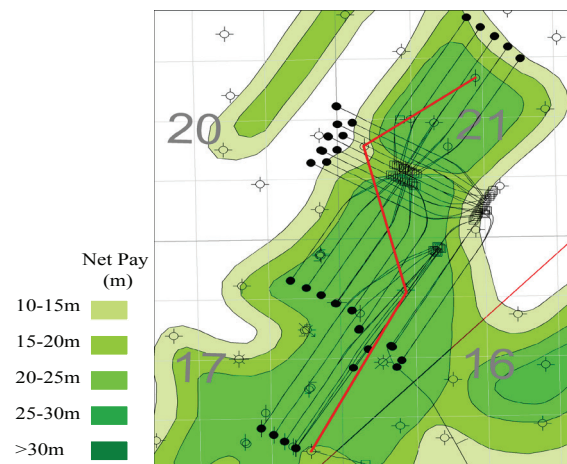


Paleo Structure Elevation



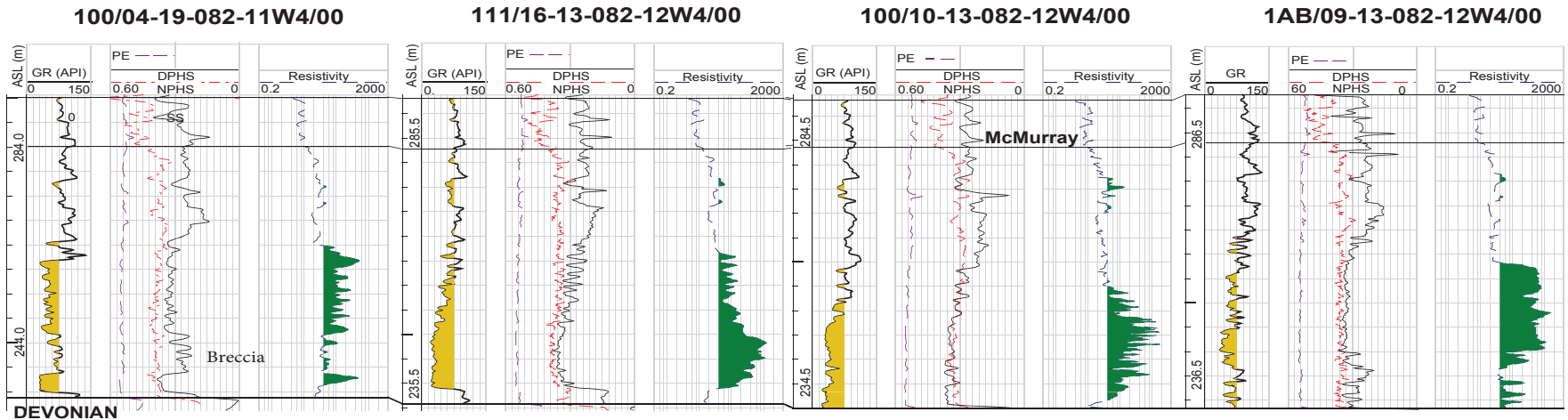
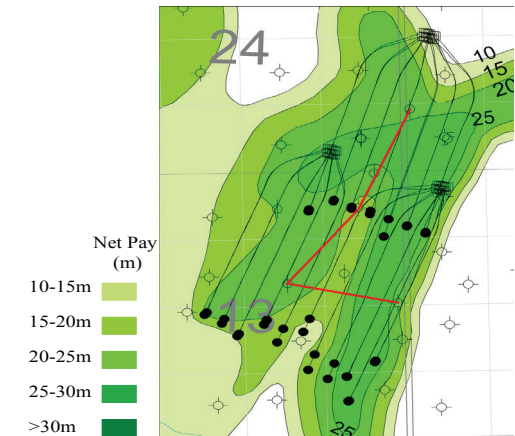
Typical Section - Pod One

Pad 101N is characterized by a higher abundance of IHS in the upper part of the reservoir. As seen in well 05 - 21, the sand body gradually thins to the west. In contrast, the reservoir to the south is dominated by clean Z1 sand facies but develops a gas cap with a lean zone above the bitumen pay column.

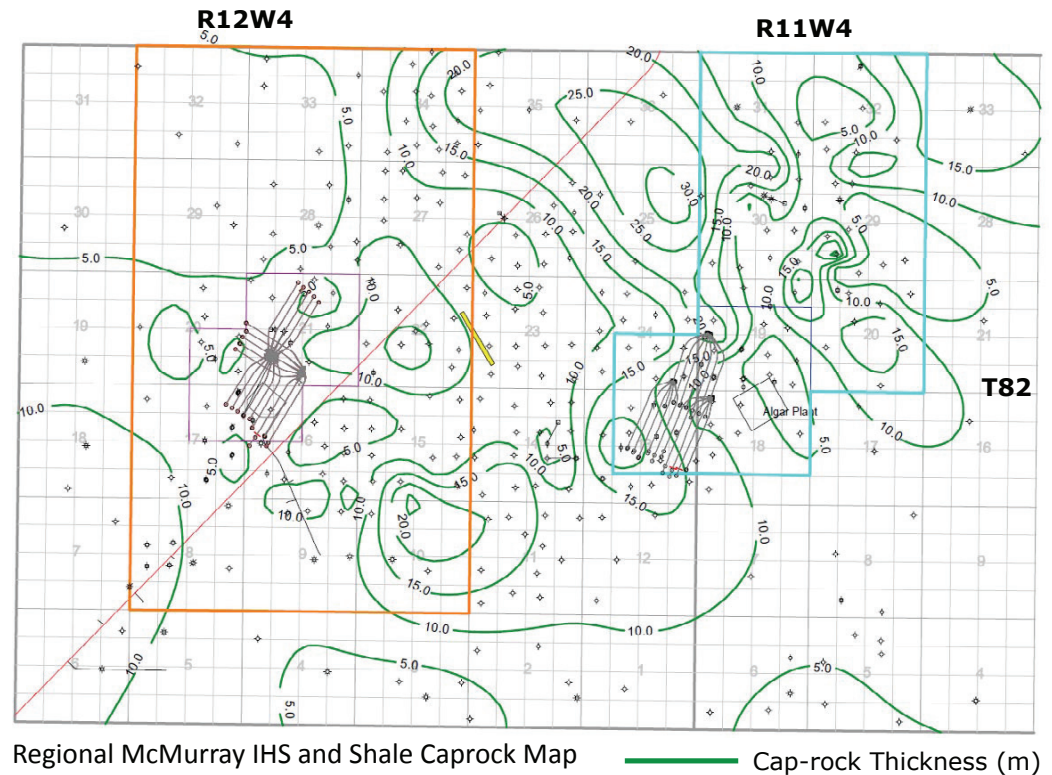


Typical Section - Algar

The Algar reservoir has a some IHS along with a breccia deposit to the north seen in well 100/04-19. Despite poor gamma ray, well 1AB/09-13 confirms high quality reservoir to the east which can be seen on the resistivity curve and verified by core. The poor gamma ray is caused by inaccurate log calibration.



Cap Rock Integrity



The cap-rock in the Great Divide Area consists of a mixture of muddy inclined heterolithic strata (IHS) and a mudstone that average over 10 meters in thickness. The muddy IHS consists of 80% volume of shale that is bio-turbated with mud-lined and sand-filled burrows. Muddy IHS is interpreted to be deposited in a muddy point bar. The light grey mudstone is thinly bedded with the top containing siderite nodules and rootlets. It is interpreted to be deposited in a mud flat to swamp environment. Above are core photos of the cap rock from well 1AA/06-21-82-12W4.

This regionally extensive McMurray caprock is considered the caprock for the project. The McMurray caprock is overlain by the Wabiskaw and Clearwater shales described on the following slide.

Cap Rock Integrity - Mini Frac Tests

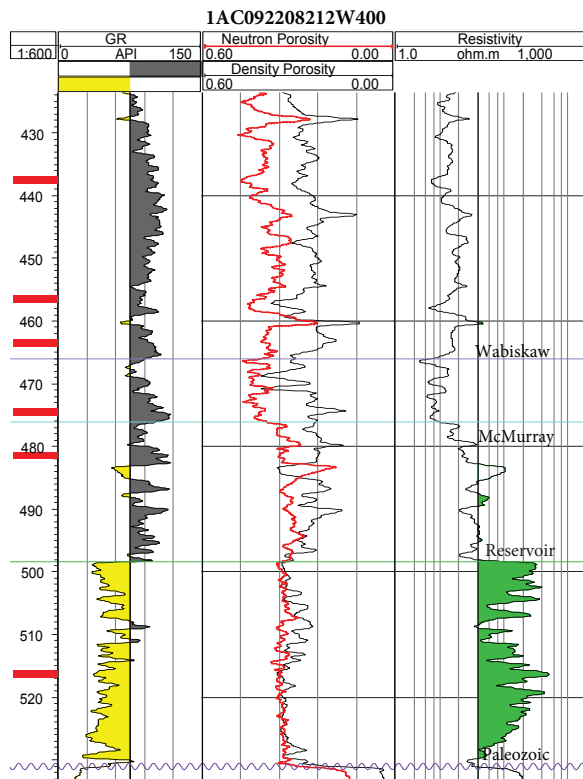
Results of the 1st Mini Frac at 1AB/14-27-082-12W4

| Zone Tested | Test Interval (mKb) | BH Fracture Pressure (kPa) | Gradient (kPa/m) | Closure Pressure (kPa) |
|------------------|---------------------|----------------------------|------------------|------------------------|
| Clearwater Shale | 390 - 395 | 8,463 | 21.7 | 5,805 |
| Wabiskaw Shale | 417 - 425 | 10,991 | 26.3 | 9,500 |
| McMurray Shale | 449 - 452 | 8,583 | 19.1 | 6,106 |
| McMurray Oilsand | 461 - 466 | 8,463 | 17.7 | 5,805 |

A Mini Frac test was conducted in well 1AB/14-27-082-12W4 in February 2010. Certain concerns were raised about one test being representative for the whole project area and also the closure pressure determined for the Wabiskaw which could have been influenced by local changes in rock mechanical properties.

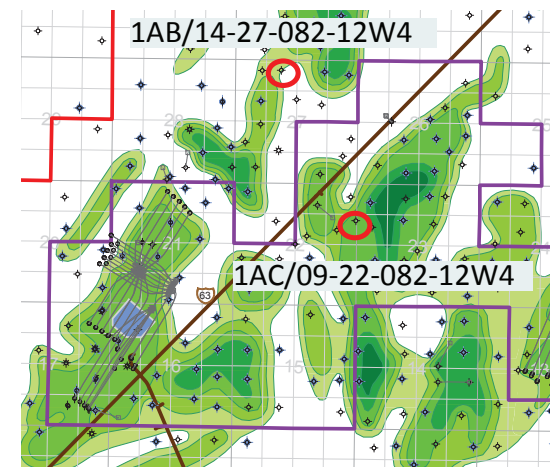
Consequently a second test was conducted at 1AC/09-22-082-12W4 in April 2013, and this is reported in the table below.

Results for the second test are similar to the first. Although the Wabiskaw measured the highest stress gradient it was reduced from the first test.

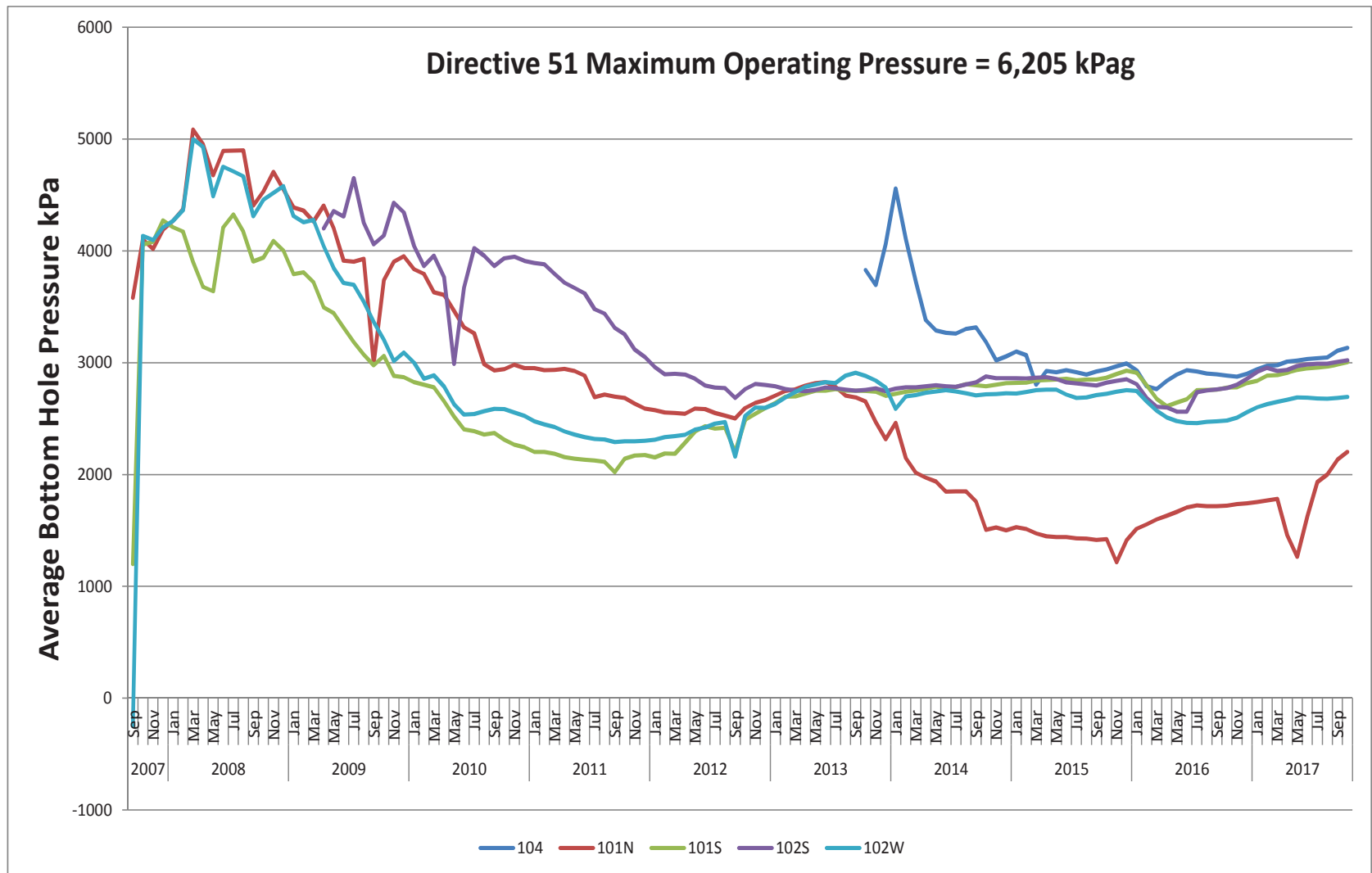


Results of the 2nd Mini Frac at 1AC/09-22-082-12W4

| Zone Tested | Test Interval (mKb) | BH Fracture Pressure (kPa) | Gradient (kPa/m) | Closure Pressure (kPa) |
|------------------|---------------------|----------------------------|------------------|------------------------|
| Clearwater Shale | 463 - 464 | 8,635 | 18.6 | 6,421 |
| Wabiskaw Shale | 474 - 475 | 10,534 | 22.2 | 7,917 |
| McMurray Shale | 481 - 482 | 8,057 | 16.7 | 6,155 |
| McMurray Oilsand | 517 - 518 | 6,503 | 12.6 | 5,397 |

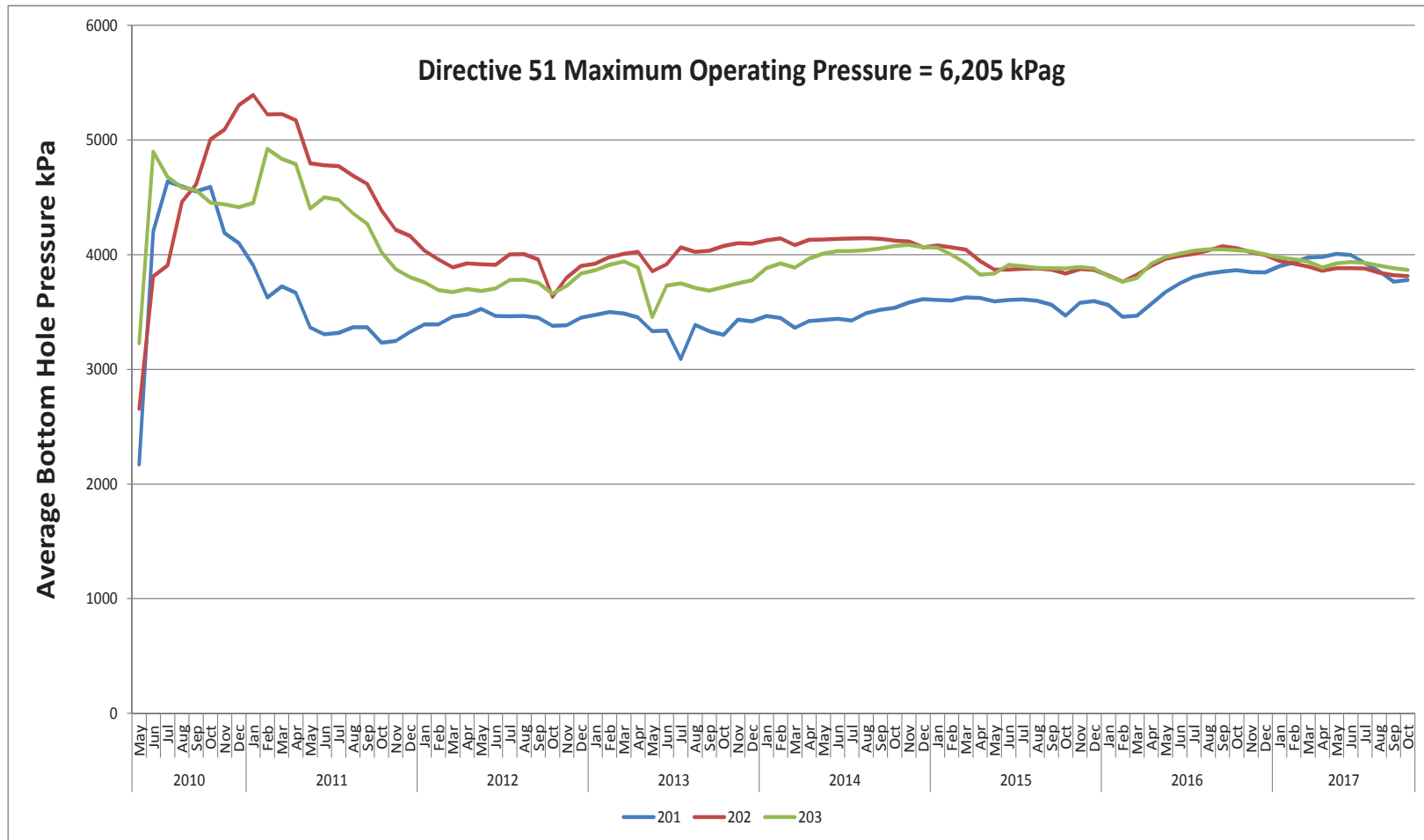


Cap Rock Integrity - Pod One Monthly Average BH Injection Pressure



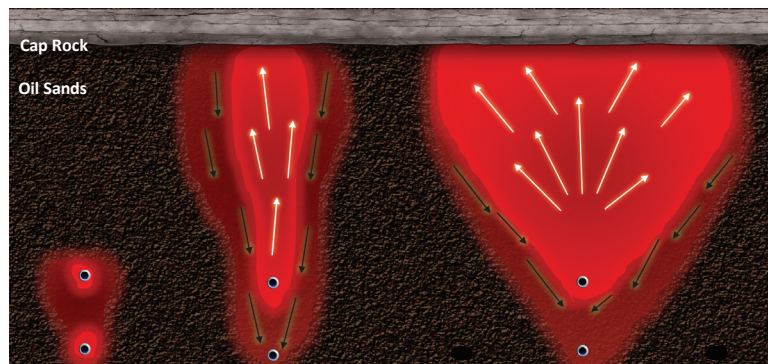
Cap Rock Integrity - Algar Monthly Average BH Injection Pressure

Directive 51 Maximum Operating Pressure = 6,205 kPag



Subsurface - Recovery Process

Basic Process



| Circulation | Peak SAGD Production | Low Pressure SAGD Production |
|---|---|--|
| High Pressure ~90 days Steam Lift | High Pressure ~12 to 18 months Gas Lift | Low Pressure ~4 to 6 years Pumps |

Additional Process

Pod One

- Pressure Balancing under a gas cap and lean zone
- Infill Wells
- Gas Cap Repressurization
- Natural Gas Co-injection (intermittent pressure maintenance)

Algar

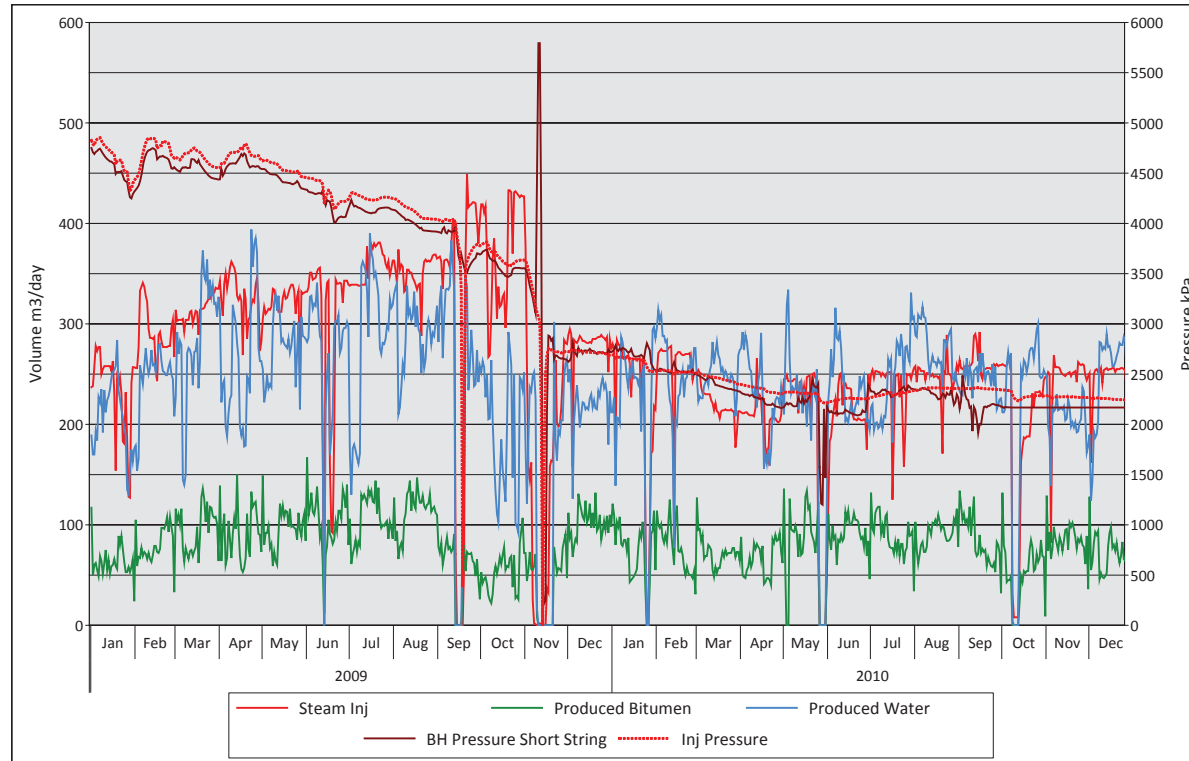
- Pressure Balancing over a water zone
- Infill Wells
- SAGD+® Commercial Project
- Natural Gas Co-injection (intermittent pressure maintenance)

Technologies Developed/Developing

| Description | Stage | Reason | Approvals |
|---|-----------------|---|---|
| Pressure Balancing Under a Top Gas & Lean Zone & Bottom Water | Developed | <ul style="list-style-type: none"> Eliminate steam losses into a gas and lean zone, lower SORs and improve productivity. Required the parallel development of reliability on high temperature downhole pumps. | Operating within existing approvals |
| Gas Co-injection | Implemented | <ul style="list-style-type: none"> Natural gas can replace steam to maintain pressure | Approved for full field at Pod One Approved for full field at Algar |
| Gas Cap Repressurization | Implemented | <ul style="list-style-type: none"> Reduces steam losses into gas cap and lean zone | Approved |
| SAGD+ [®] Process Trial / Commercial | Trial Completed | <ul style="list-style-type: none"> Reduces bitumen viscosity lower than steam alone to improve production rates, SOR, and recovery. | Commercial SAGD+ [®] Commercial Project approved at Algar |
| Infill Wells | Implemented | <ul style="list-style-type: none"> Additional production and reserves at low capital and SORs | Approved for 5 Infill Wells at Algar Pad 203 |

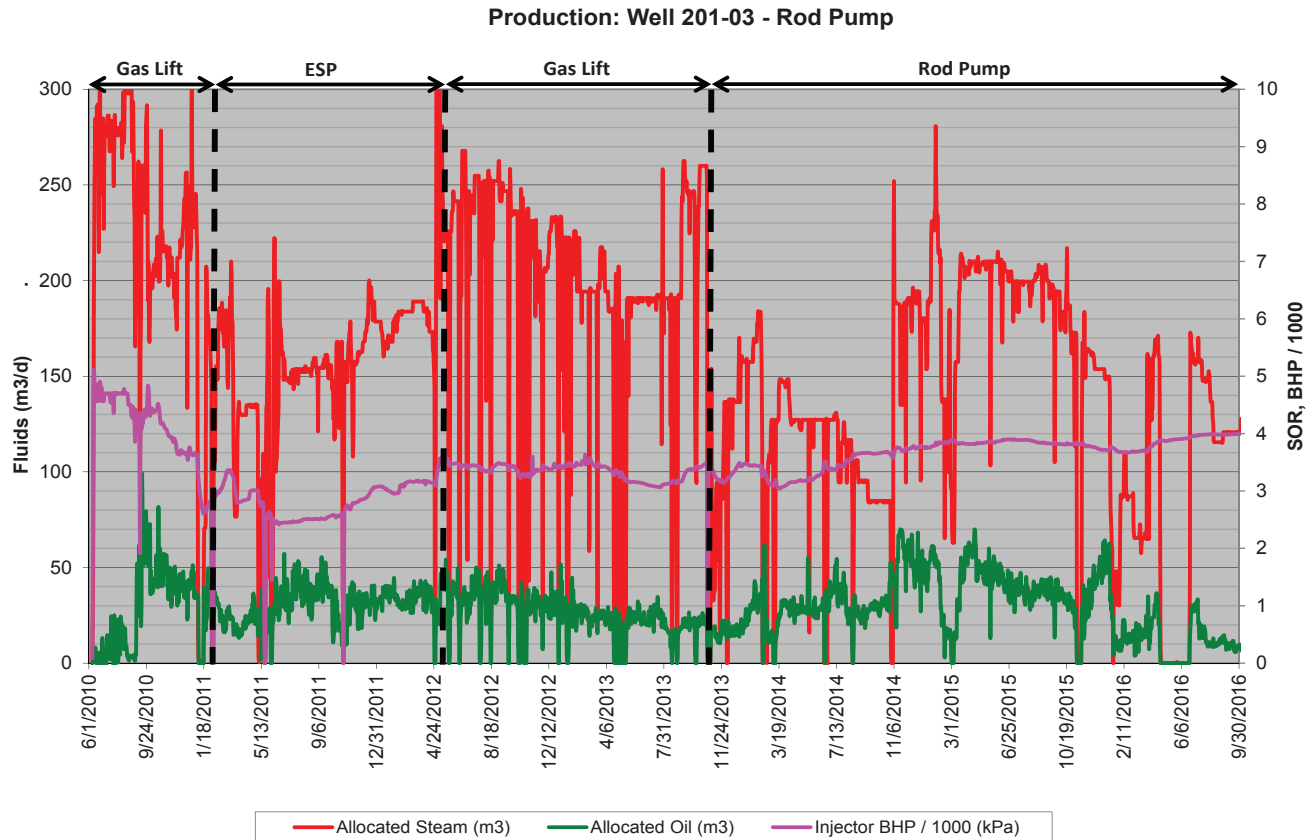
Pressure Balancing (Top Gas & Lean Zone)

Well Pair 101S-09



- Temporary production impact during pressure balance
- Improved SOR with low pressure operation
- Pad 104 is being operated in a similar manner except that the re-pressurization is expected to reduce the quantity of steam losses when the steam reaches the lean zone and pumps are being installed earlier

Pressure Balancing (Bottom Water)

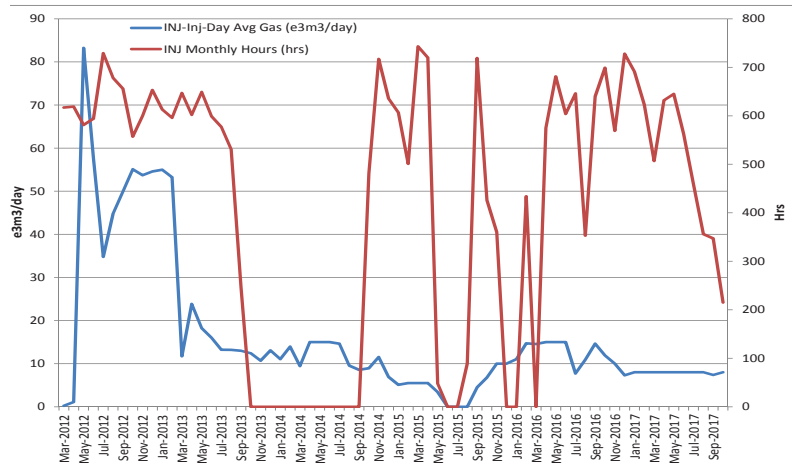


- No update in strategy for pairs operating above bottom water
- Monitoring injection pressure, SOR, and produced water chlorides for signs of steam loss and bottom water production
- Continued operation with mechanical lift (pump) and injection via steam diverter in 201-I03

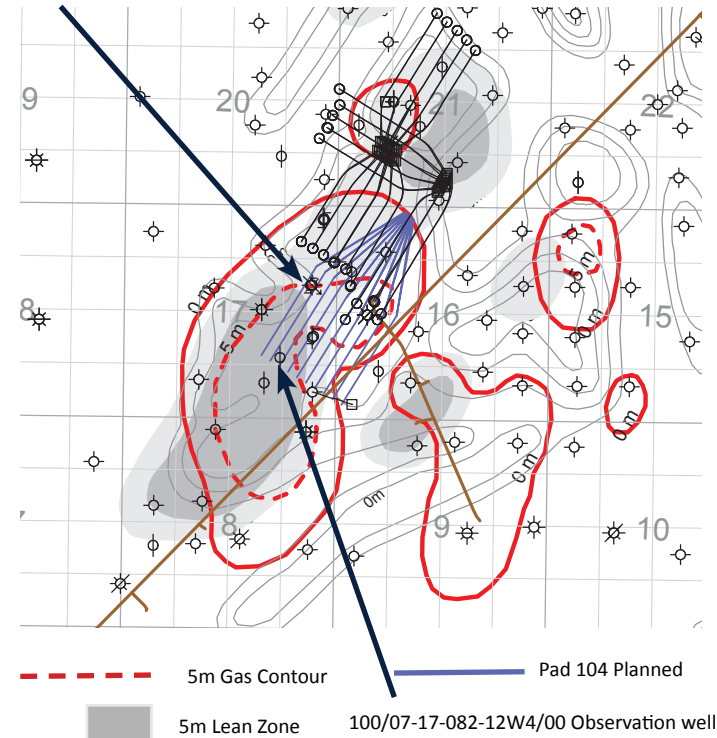
Re-Pressure Pod One Gas Cap

The purpose of gas cap repressurization is to increase the pressure in the gas cap and bitumen lean zone immediately above Pad 104 and institute a more effective pressure balancing process. Simulations have shown long term benefits to production and SOR by repressurizing to just below the SAGD operating pressures, 2000 - 3000 kPa with mechanical lift. Details are discussed in Connacher's Pressure Balancing paper, available upon request.

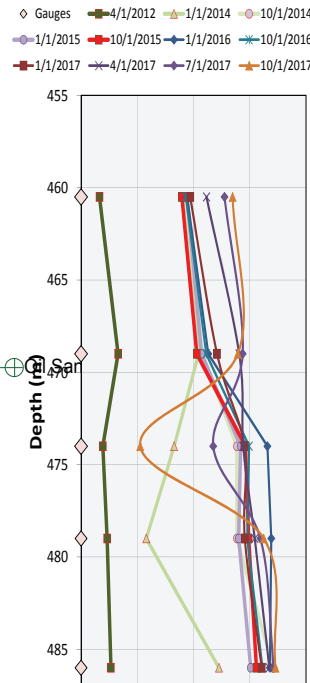
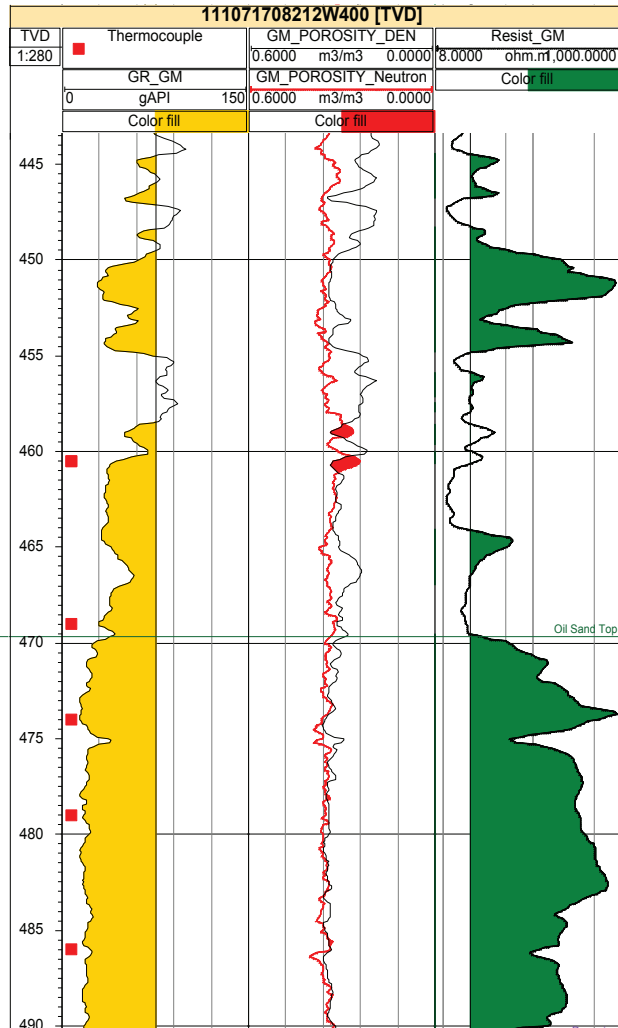
- The repressurizing process was underway prior to the start up of Pad 104 in 2013. Methane was injected into the 9-17 well at the injection rates shown in the graph below.
- The gas cap pressure at the 7-17 observation well was approximately 1600 kPa prior to gas injection, and the average pressure for September 2017 was 2833 kPa in the gas cap and 2901 kPa in the lean zone.
- Currently the well is injecting methane to maintain the pressure.
- The response to gas injection at the 7-17 observation well is shown in the following slide.



100/09-17-082-12W4/00 Injection well



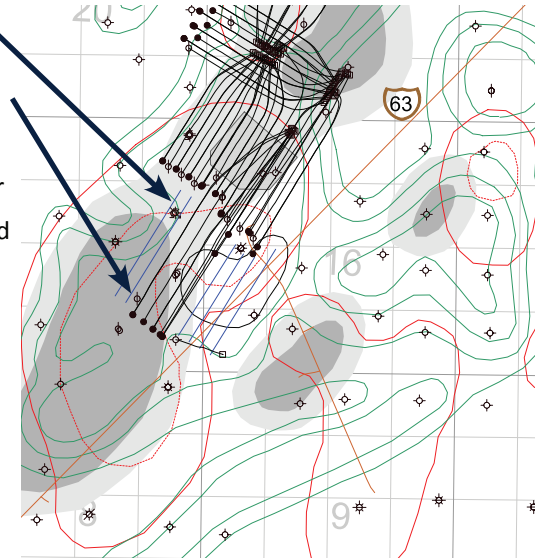
Re-Pressure Pod One Gas Cap



09-17 Injection well

07-17 Observation well

- 5m Gas Contour
- Pad 104 Planned
- 5m Lean Zone

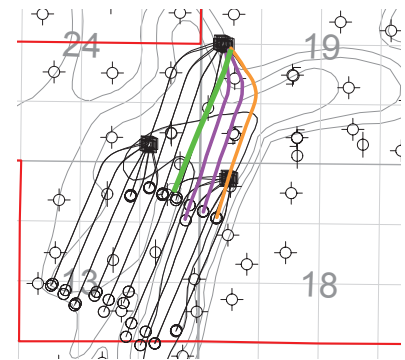


The chart shows the response at various pressure transducers in observation well 7-17 (approximately 600m south of the gas injection at 9-17). The transducers are set at the KB elevations shown on the adjacent log. Connacher is able to pressure the lean zone and gas cap to the target pressure from the 9-17 gas injector.

SAGD+® Commercial Project

Phase 1

- In January 2011, ERCB granted approval for a trial of light hydrocarbon - steam co-injection in the seven well pairs of Pad 203.
- Connacher selected two well pairs 203-2 and 203-3 for an initial test (Phase 1) of the process.
- In Phase 1, a commercially available solvent was co-injected with the steam starting in July 2011 at initial rates of approximately 10% by volume and increased to 15% by volume in October 2011. Compared to an April 2011 baseline, daily average per well bitumen production volumes during the months of August 2011 through October 2011 increased approximately 28% percent with a SOR decrease of 16%. The SOR decrease was limited by the necessity to increase steam injection rates to maintain normal operating pressure.
- Phase 1 injection ended November 2011. Solvent was recovered from the Phase 1 wells until April 2012 just prior to the start of Phase 1.5, 89% of the solvent had been recovered to surface.

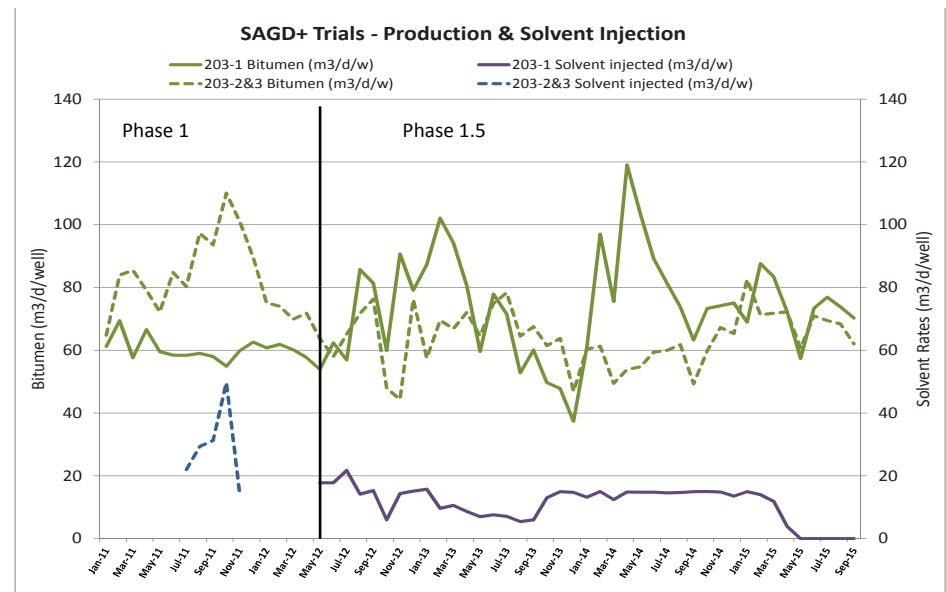


Wells 203-02 & 03 Phase 1

Well 203-01 and 203-04 Phase 1.5

Phase 1.5

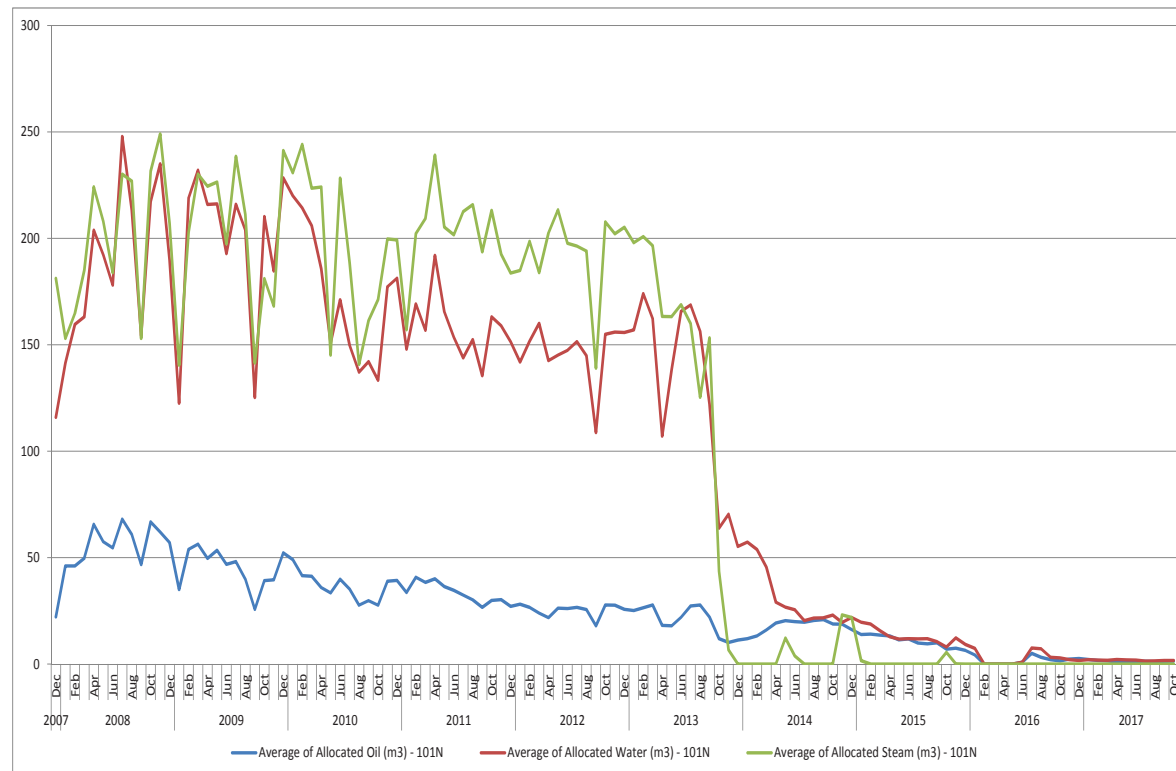
- Phase 1.5 commenced in May 2012 with solvent injection of approximately 10% until August when injection rates were reduced to approximately 6%, and further reduced in March 2013 to approximately 4%. In 2014 solvent injection rates averaged 5.9%.
- In the 12 months May 2012 through April 2013 *bitumen rates increased by approximately 30%* compared to the four months prior to the test. The *SOR decreased 32%* over the same period.
- In July 2013 an ESP was installed in 203-01. Following operational issues the pump was removed in December 2013. The bank of solvent built up during the ESP issues resulted in improved results following the return to gas-lift.
- The SOR for Well 203-01 during the life of the test is 3.0 significantly lower than other wells in the project.
- Solvent injection was stopped in Well 203-1 on April 21, 2015.



Note: details of the measurement of solvent injection and recovery are discussed in the attached [Steam Solvent SAGD Paper](#) and the Algar MARP

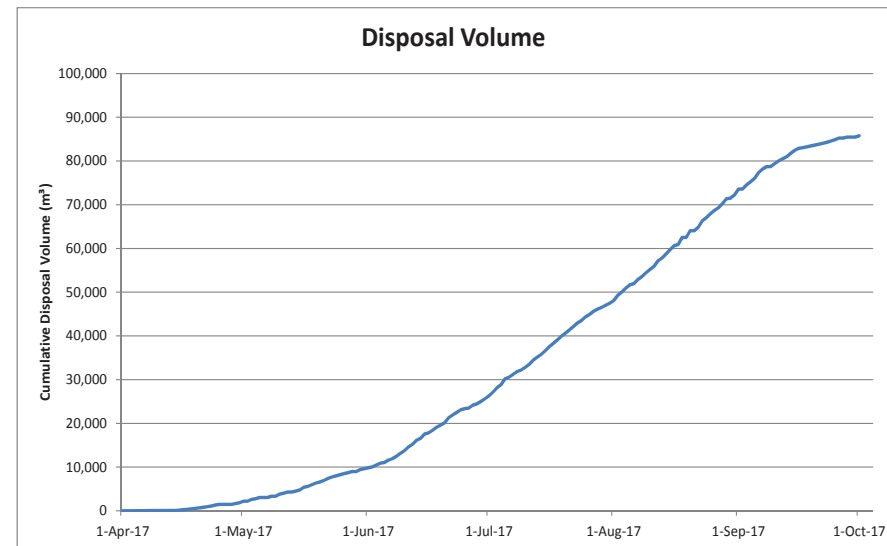
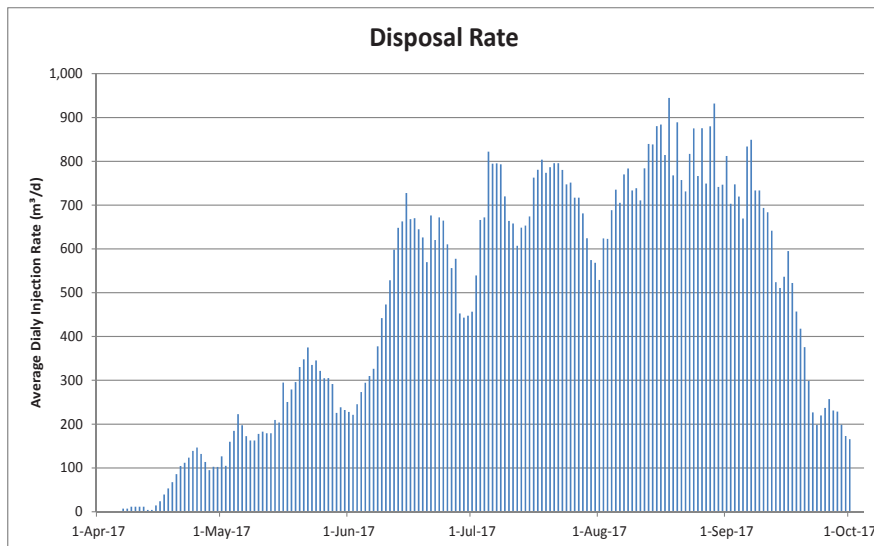
Pad 101N

- Strategy for Pad 101N has not changed, going forward the plan is to continue to produce 101-P04 using rod pump
- No further steam injection is planned
- Pad 101N was approved for produced water disposal on February 8th, 2016. Approval No. 10587S
- Produced water disposal into 101-I01 and -I02 began on April 15, 2017 and is ongoing
- Charts show the production history from 101N



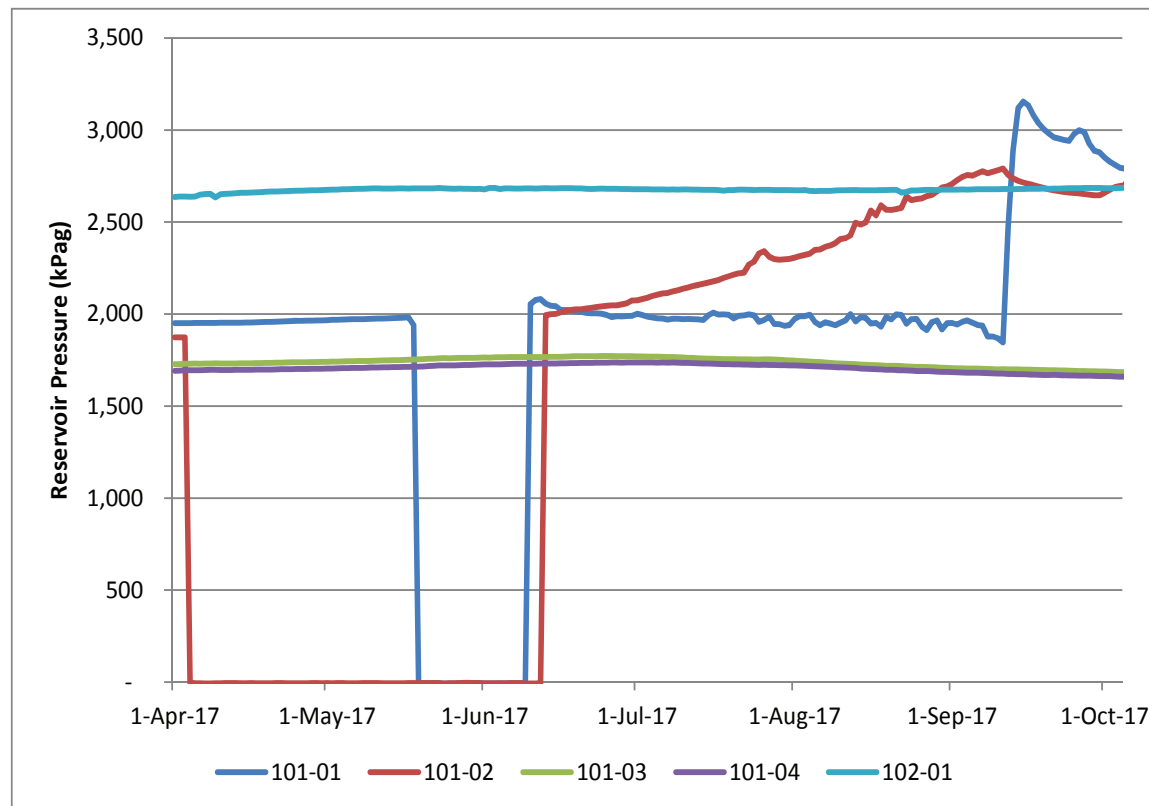
Pad 101N Produced Water Disposal

- Produced water disposal into 101-I01 and -I02 is ongoing
- Following the 2016 production curtailment and subsequent ramp up, water production from the SAGD producers was higher than pre-curtailment rates; water production was projected to exceed maximum steam generation capacity
- Connacher required a disposal strategy for produced water that was in excess of steam generation capacity
- Disposing of up to 750 m³/d of produced water into 101N has allowed Connacher to maximize production and accelerate time required for BS&W of SAGD pairs to “recover” following the production curtailment period
- Charts show the disposal history as well as the cumulative produced water disposal into 101N since April 2017



Pad 101N Produced Water Disposal

- Ongoing produced water disposal is conditional on not interfering with SAGD production operations
- Current disposal into 101-I01 and 101-I02 only, 101-I03 not operational, production from 101-I04 and 102-I01
- Active monitoring of reservoir pressure in 102-I01 and 101-I04 for signs of communication with 101-I01 and -I02
- Bubble tubes on 101-I01 and I02 were shut in until mid-June 2017
- Bubble tube on 101-I01 (blue) was plugged and not reading accurate bottomhole pressure until mid-September
- There has been no sign of communication between 101-I01 and -I02, and 101-I03 nor 102-I01
- Large dP, ~1200 kPa, exists between 101-I01 and -I02, and 101-I03 and -I04 likely due to liner plugging in disposal wells

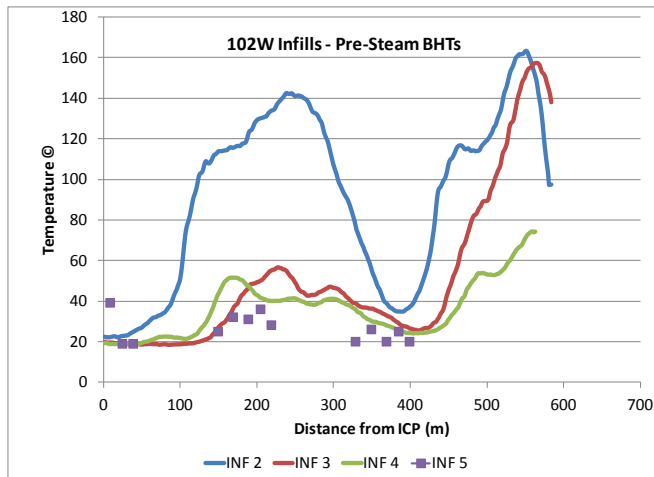
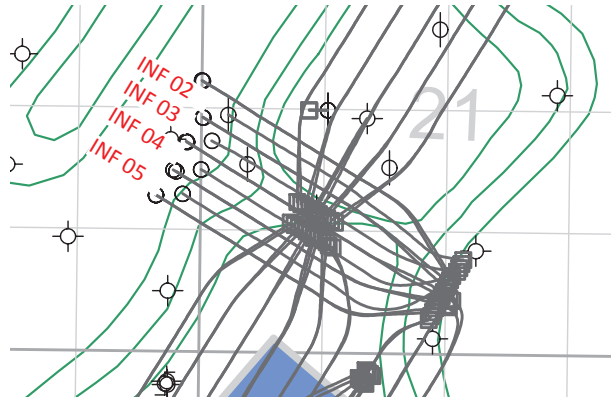


Non-condensable gas (NCG) co-injection is intended for use in pressure maintenance and ability to replace steam with NCG during times of steam shortage.

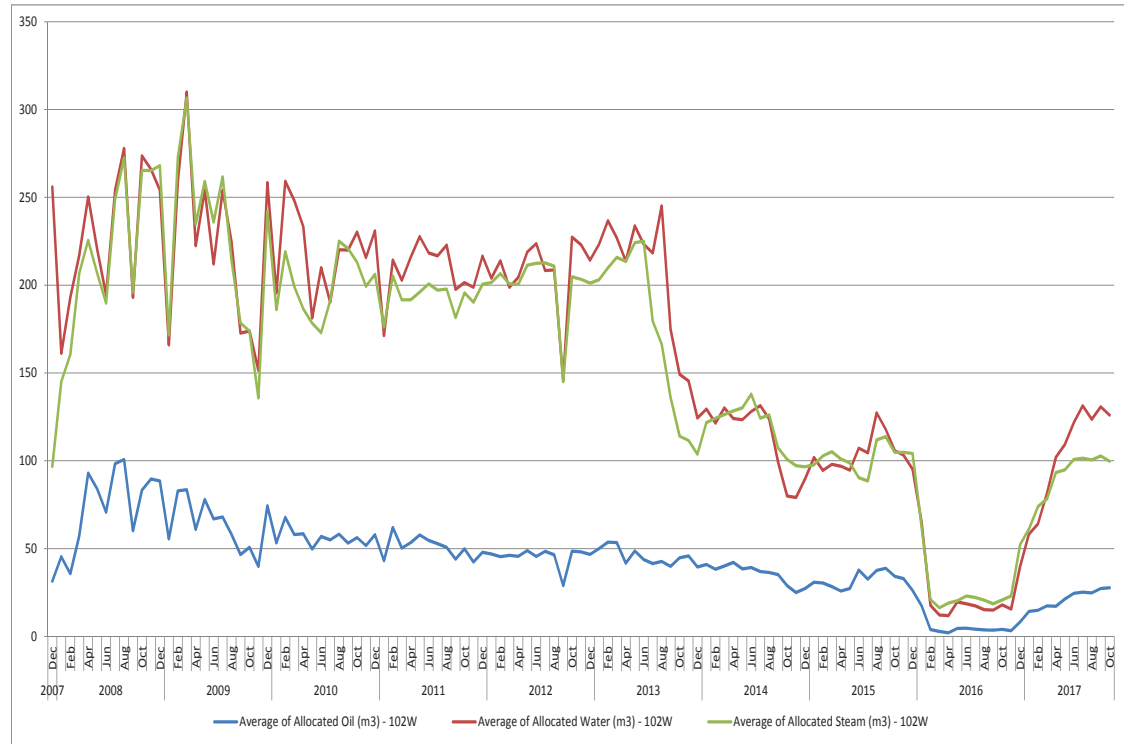
Commercial Scheme Approval issued for Full Field NCG Co-injection at all wells at Pod One and Algar:

- maximum of 10 e³ m³ per day
- limited to a maximum of 4 mole per cent with steam (monthly basis)
- limited to a maximum 20 per cent NCG replacement with steam (6 month average basis)

Infill Wells at Pod One - Pad 102W



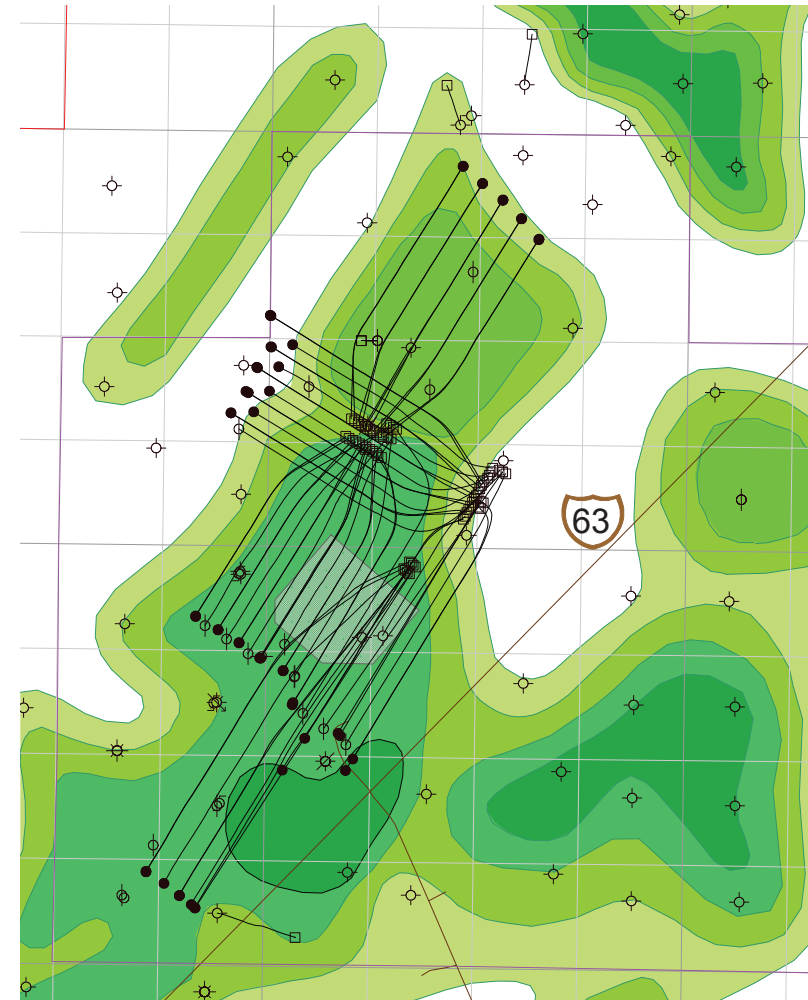
Bottom Hole temperature surveys were carried out prior to steaming the infill wells.



- Infills were drilled shorter than the adjacent well pairs to avoid penetrating the thin channel edge
- Temperature logs prior to the steam injection indicated wide variations in temperatures along horizontal sections of the infill wells
- In order to increase temperature in the wells steam cycles were initiated as shown in the graph to the right
- Infill well 02 received the smallest volume of steam and responded the fastest and also had the highest temperature measured in the pre-steam survey.

New Infill Wells at Pod One - Pad 101 & 102

| Well Pad | Infill Well | UWI | Production Start Date | Cum Oil (m ³) |
|----------|-------------|-----------------------|-----------------------|---------------------------|
| 101S | 101-INF7 | 109/16-17-082-12W4/00 | 18-Sep-15 | 13,883 |
| 101S | 101-INF8 | 108/16-17-082-12W4/00 | 13-Sep-14 | 51,275 |
| 101S | 101-INF9 | 105/09-17-082-12W4/00 | 17-Jul-14 | 44,160 |
| 101S | 101-INF10 | 112/12-16-082-12W4/00 | 24-Jul-14 | 35,239 |
| 101S | 101-INF11 | 114/12-16-082-12W4/00 | 18-Aug-14 | 41,508 |
| 101S | 101-INF12 | 113/12-16-082-12W4/00 | 4-Oct-14 | 60,363 |
| 102W | 102-INF06 | 112/08-20-082-12W4/00 | 3-May-15 | 35,406 |
| 102W | 102-INF13 | 115/12-16-082-12W4/00 | 19-Oct-15 | 17,513 |
| 102W | 102-INF14 | 116/12-16-082-12W4/00 | 17-Jan-17 | 18,810 |



Subsurface - Completions

Injector well BHP measurement:

- Blanket gas on annular side of the wellhead which is isolated from steam injection points for short and long strings

Producer well BHP measurement:

- Algar (gas lift), read by the short string lift gas pressure at surface. This is landed at the heel of the well. The annulus of the well, function as a bubble tube.
- Pod One, read by instrumentation coils which function as a bubble tube. This is landed at the toe of the well. The coil has a check valve at the end to prevent fluid from backing up inside.

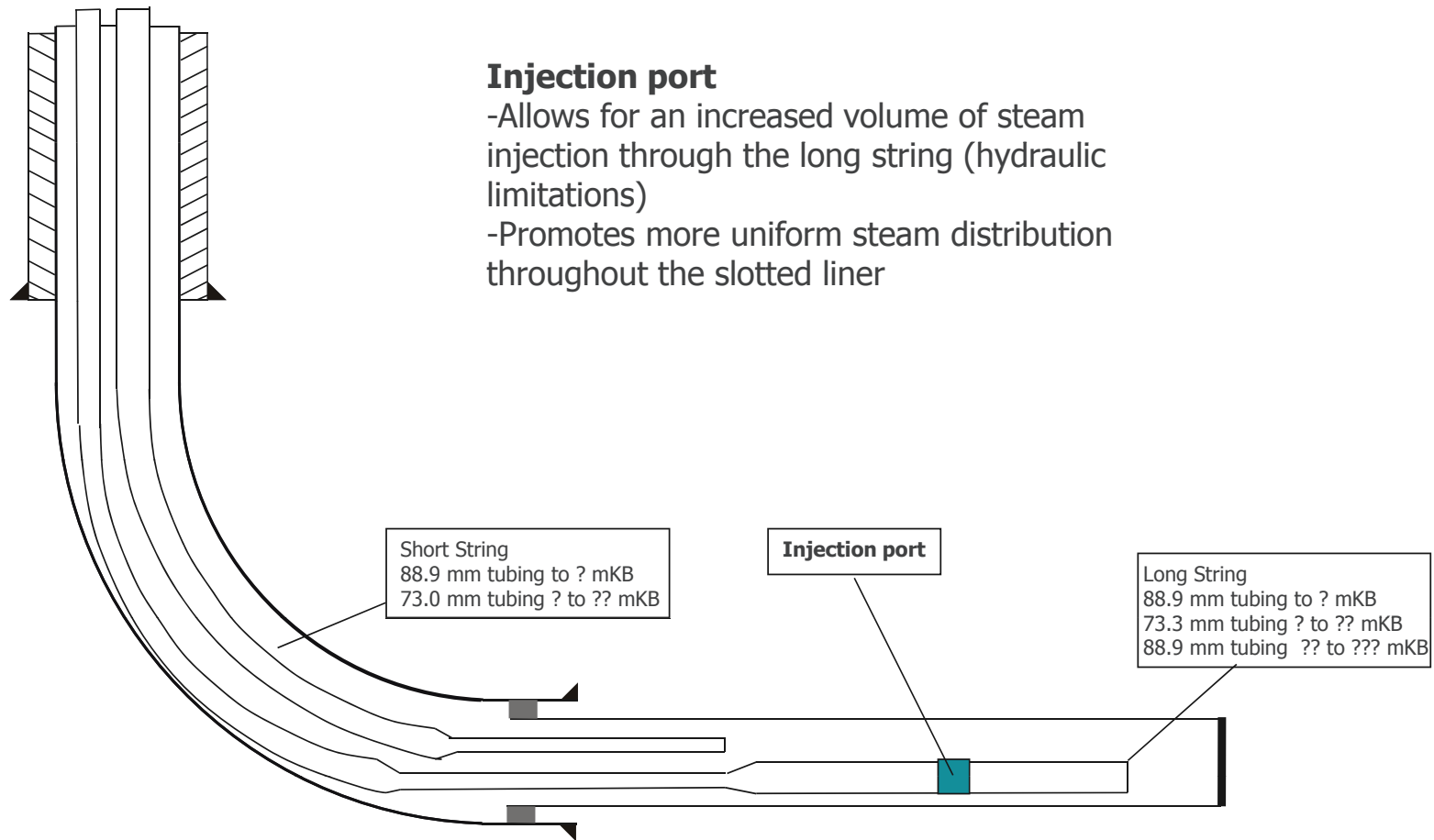
Injector well BHT measurement

- Connacher does not measure injector well BHT. This is interpreted from injector reservoir pressure using saturated steam temperature tables.

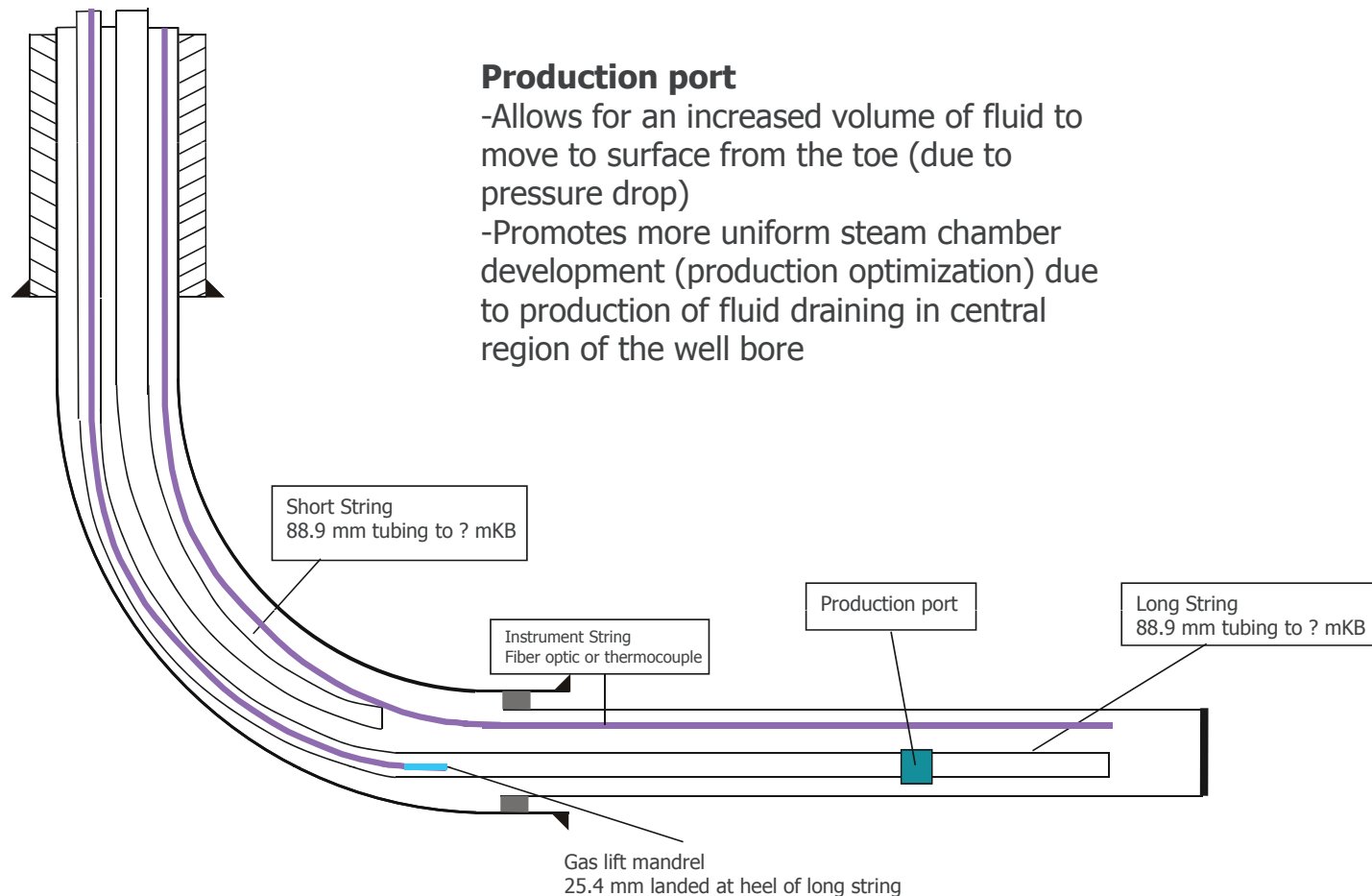
Producer well BHT Measurement

- Connacher uses instrumentation coil strings with fiber or thermocouples to measure producer well BHT at both Algar and Pod One.

Typical Injector Completion



Typical Producer Gas Lift Completion



Typical Producer Mechanical Lift

Electronic Submersible Pump

Metal on metal Progressive cavity pump
Tubing pump (hydraulic pump jack)

ESP development

-Connacher was the first company to run the high temperature limit ESP

-Previous temperature limit
218°C

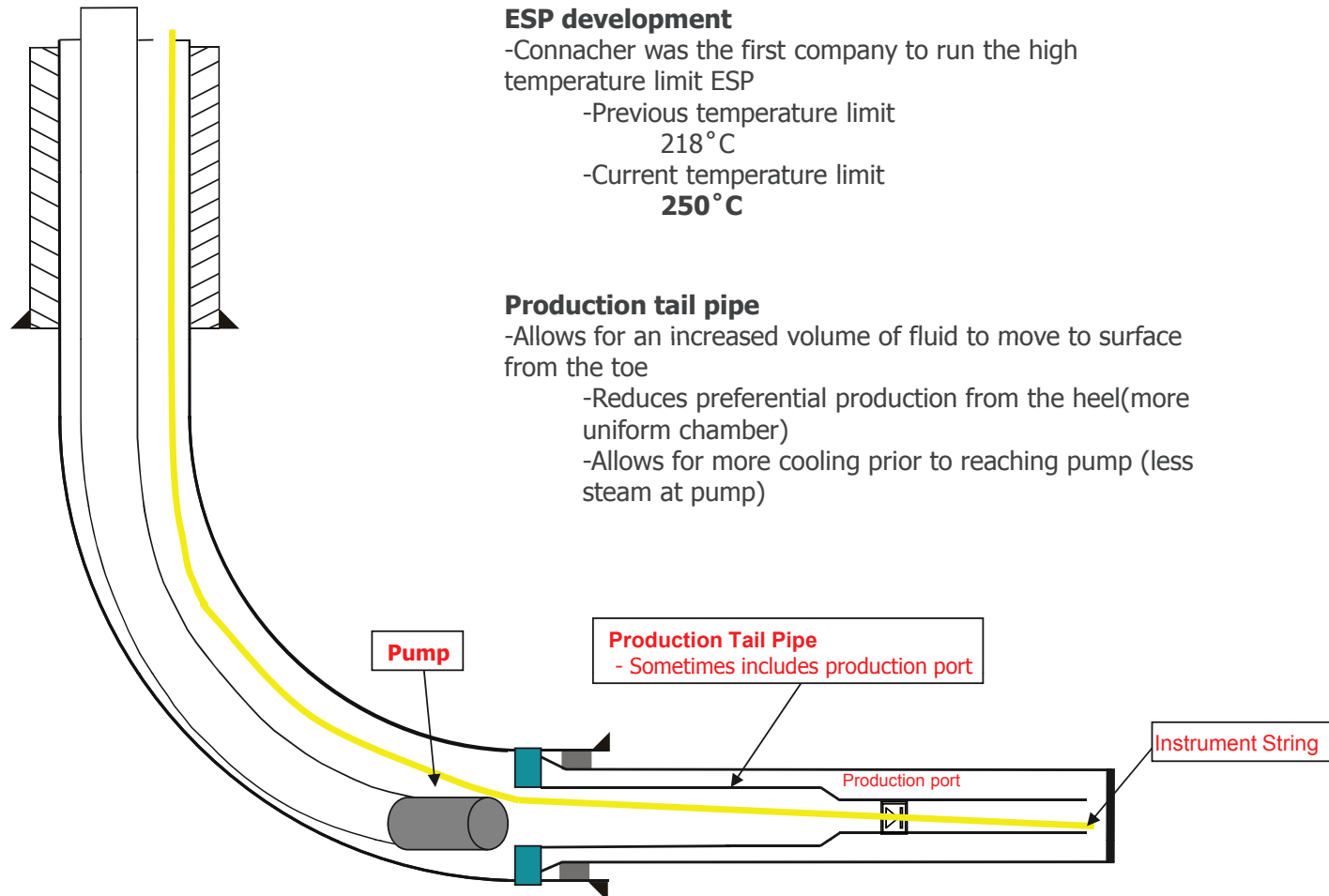
-Current temperature limit
250°C

Production tail pipe

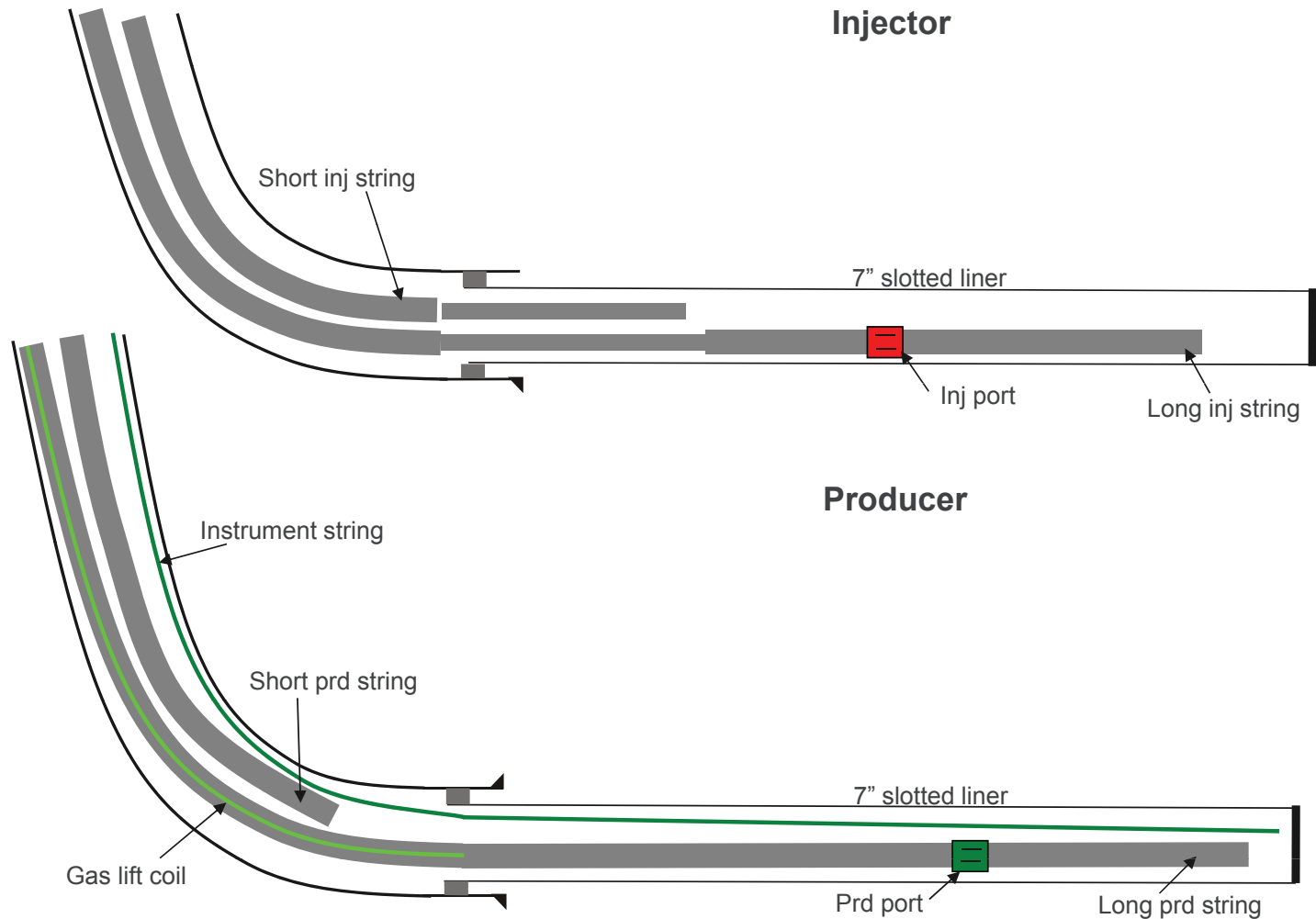
-Allows for an increased volume of fluid to move to surface from the toe

-Reduces preferential production from the heel (more uniform chamber)

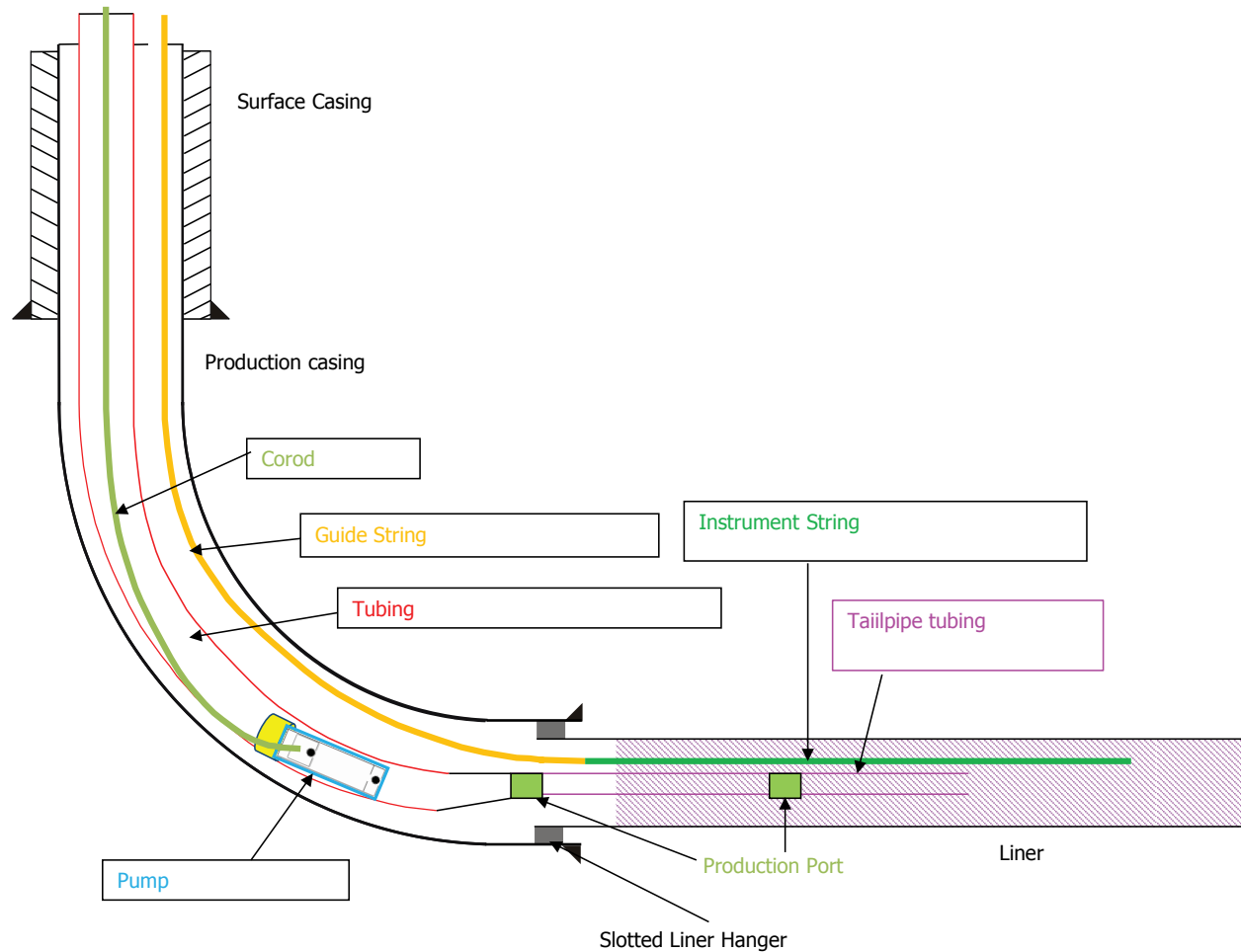
-Allows for more cooling prior to reaching pump (less steam at pump)



Improved Well Bore Design (Algar)



Typical Infill Well Completion



Subsurface - Artificial Lift

Artificial Lift Performance - Pod One

| Pad | Well | Pump Type | Pump | Install date | failure date | Run Time (days) | Current |
|------|--------|-----------|------|--------------|--------------|-----------------|---------------------|
| 101N | 101-01 | PCP | 1 | 5/5/2010 | 12/25/2010 | 234 | |
| 101N | 101-01 | Rod Pump | 2 | 4/24/2013 | 5/29/2013 | 35 | |
| 101N | 101-01 | Rod Pump | 3 | 10/26/2013 | 1/22/2016 | 818 | Shut In |
| 101N | 101-02 | PCP | 1 | 05/05/10 | 05/07/10 | 2 | |
| 101N | 101-02 | PCP | 2 | 5/10/2010 | 11/5/2010 | 179 | |
| 101N | 101-02 | Rod Pump | 3 | 4/14/2013 | 9/9/2013 | 148 | |
| 101N | 101-02 | Rod Pump | 4 | 9/11/2013 | 2/12/2014 | 154 | |
| 101N | 101-02 | Rod Pump | 5 | 2/17/2014 | 1/22/2016 | 704 | Shut In |
| 101N | 101-03 | PCP | 1 | 08/19/10 | 09/13/10 | 25 | |
| 101N | 101-03 | PCP | 2 | 9/18/2010 | 10/16/2010 | 28 | |
| 101N | 101-03 | Rod Pump | 3 | 9/26/2011 | 6/2/2012 | 250 | |
| 101N | 101-03 | Rod Pump | 4 | 6/7/2012 | 1/9/2013 | 216 | |
| 101N | 101-03 | Rod Pump | 5 | 1/15/2013 | 7/19/2013 | 185 | |
| 101N | 101-03 | Rod Pump | 6 | 7/25/2013 | 1/22/2016 | 911 | Shut In |
| 101N | 101-04 | PCP | 1 | 08/11/10 | 11/05/10 | 86 | |
| 101N | 101-04 | Rod Pump | 2 | 4/16/2013 | 5/31/2013 | 45 | |
| 101N | 101-04 | Rod Pump | 3 | 10/27/2013 | 2/17/2014 | 113 | |
| 101N | 101-04 | Rod Pump | 4 | 2/20/2014 | 9/30/2017 | 1318 | Running on Rod Pump |
| 101N | 101-05 | PCP | 1 | 08/06/10 | 09/08/12 | 764 | |
| 101N | 101-05 | PCP | 2 | 9/16/2012 | 7/25/2014 | 677 | |
| 101N | 101-05 | PCP | 3 | 7/27/2014 | 8/28/2014 | 32 | |
| 101N | 101-05 | PCP | 4 | 9/9/2014 | 10/14/2015 | 400 | |
| 101N | 101-05 | PCP | 5 | 10/27/2015 | 10/13/2016 | 352 | Shut In |

| Pad | Well | Pump Type | Pump | Install date | Failure Date | Run Time (days) | Current |
|-----|--------|-----------|------|--------------|--------------|-----------------|----------------|
| 104 | 104-03 | ESP | 1 | 11/22/2014 | 4/24/2017 | 884 | |
| 104 | 104-03 | ESP | 2 | 4/30/2017 | 9/30/2017 | 153 | Running on ESP |
| 104 | 104-04 | ESP | 1 | 5/11/2014 | 10/25/2016 | 898 | |
| 104 | 104-04 | ESP | 2 | 11/4/2016 | 9/15/2017 | 153 | |
| 104 | 104-04 | ESP | 3 | 9/23/2017 | 9/30/2017 | 7 | Running on ESP |
| 104 | 104-05 | ESP | 1 | 3/12/2015 | 3/8/2017 | 727 | |
| 104 | 104-05 | ESP | 1 | 3/27/2017 | 9/30/2017 | 187 | Running on ESP |
| 104 | 104-06 | ESP | 1 | 4/8/2014 | 9/22/2014 | 167 | |
| 104 | 104-06 | ESP | 2 | 9/27/2014 | 9/30/2017 | 1099 | Running on ESP |

Pads 101S, 102W, 102S & 104

These Pads produce from good quality oil sands reservoir and are a good application of ESP's. The pump history is shown here as an example.

The higher rate wells can accommodate ESP's whereas lower rate wells and infills operate more efficiently with rod pumps.

Pads 101S, 102W and 102S are similar and a detailed history of all the pumps at Great Divide is provide in the additional files accompanying this presentation.

Artificial Lift Performance - Algar

| Pad | Well | Pump Type | Pump | Install date | Failure date | Run Time (days) |
|-----|--------|-----------|------|--------------|--------------|-----------------|
| 201 | 201-03 | ESP | 1 | 1/19/2011 | 5/19/2011 | 120 |
| 201 | 201-03 | ESP | 2 | 5/23/2011 | 10/22/2011 | 152 |
| 201 | 201-03 | ESP | 3 | 10/28/2011 | 4/26/2012 | 181 |
| 201 | 201-03 | Rod pump | 4 | 11/3/2013 | 6/19/2014 | 228 |
| 201 | 201-03 | Rod pump | 5 | 6/22/2014 | 8/14/2014 | 53 |
| 201 | 201-03 | Rod pump | 6 | 8/17/2014 | 3/1/2015 | 196 |
| 201 | 201-03 | Rod pump | 7 | 3/7/2015 | 11/8/2015 | 246 |
| 201 | 201-03 | Rod pump | 8 | 11/12/2015 | 4/24/2016 | 164 |
| 201 | 201-03 | Rod pump | 9 | 6/23/2016 | 12/30/2016 | 190 |
| 201 | 201-03 | Rod pump | 10 | 1/11/2017 | 2/19/2017 | 39 |
| 201 | 201-03 | Rod pump | 11 | 2/27/2017 | 6/28/2017 | 121 |
| 201 | 201-03 | Rod pump | 12 | 7/12/2017 | 9/30/2017 | 80 |
| 201 | 201-04 | ESP | 1 | 2/14/2011 | 6/14/2012 | 486 |
| 201 | 201-04 | ESP | 2 | 6/21/2012 | 9/25/2013 | 461 |
| 201 | 201-04 | Rod pump | 3 | 10/8/2013 | 10/21/2014 | 378 |
| 201 | 201-04 | Rod pump | 4 | 10/24/2014 | 5/15/2015 | 203 |
| 201 | 201-04 | Rod pump | 5 | 5/16/2015 | 10/15/2015 | 152 |
| 201 | 201-04 | Rod pump | 6 | 10/22/2015 | 11/25/2016 | 400 |
| 201 | 201-04 | Rod pump | 7 | 12/14/2016 | 6/29/2017 | 197 |
| 201 | 201-04 | Rod pump | 8 | 7/13/2017 | 9/23/2017 | 72 |
| 201 | 201-04 | Rod pump | 9 | 9/28/2017 | 9/30/2017 | 2 |
| 201 | 201-05 | ESP | 1 | 1/27/2011 | 5/8/2011 | 101 |
| 201 | 201-05 | ESP | 2 | 5/18/2011 | 5/2/2012 | 350 |
| 201 | 201-05 | ESP | 3 | 5/5/2012 | 6/29/2013 | 420 |
| 201 | 201-05 | Rod pump | 4 | 7/30/2013 | 5/19/2014 | 293 |
| 201 | 201-05 | Rod pump | 5 | 5/22/2014 | 9/27/2014 | 128 |
| 201 | 201-05 | Rod pump | 6 | 9/30/2014 | 2/2/2015 | 125 |
| 201 | 201-05 | Rod pump | 7 | 2/5/2015 | 12/4/2016 | 668 |
| 201 | 201-05 | Rod pump | 8 | 12/18/2017 | 8/27/2017 | 252 |
| 201 | 201-05 | Rod pump | 8 | 9/26/2017 | 9/30/2017 | 4 |
| 203 | 203-01 | ESP | 1 | 5/3/2013 | 12/24/2013 | 235 |
| 203 | 203-02 | ESP | 1 | 5/8/2013 | 9/5/2014 | 485 |
| 203 | 203-04 | ESP | 1 | 5/14/2013 | 9/28/2013 | 137 |

Algar

Artificial lift at Algar was based on gas lift for the early stages of production with a later move to lower pressure operation with pumps being considered.

The selection of pumps is based on well productivity and Connacher's experience.

ESPs have been used in three wells in Pad 201. These three wells are in, or close to, a limited bottom water zone and the pumps are required to balance pressure and avoid high steam losses.

Recently, and as part of the SAGD+[®] test, ESPs were installed in three wells in Pad 203. Results show that SOR was reduced by using ESPs for artificial lift. But, due to reservoir characteristics and economics, these wells were converted back to gas lift.

Gas Migration & Surface Casing Vent Flows

- SCVF tests were conducted on all injectors and producers at Pod One and Algar in September, 2017. Results will be reported to the AER through DDS.
- A summary table of all historical SCVF results is provided as an additional file to this report.
- Connacher is currently compliant with all SCVF requirements at the Great Divide Project.

Subsurface - Monitoring

Pod One Observation Wells



100/11-21-82-12W4, Operational Apr 2011

- Monitor North Pad Performance (47 m from Well Pair 101-04)
- Five temperature and five pressure measurements all operational
- Temperature readings suspect - all at original reservoir temperature ~14 °C
- Pressure gauges operational
- Continue collecting data

100/06-21-082-12W4, Operational Dec 2007

- Purpose was to measure rise of steam and to determine if steam moved into any overlying gas caps (39 m from Well Pair 101-05)
- Operational but readings suspect
- Maximum temperature 20 °C
- Pressure gauges not operational
- Continue collecting data

111/12-16-82-12W4, Operational Mar 2010

- Provided observations on effects of low pressure operations (40 m from Well Pair 101-10)
- Five temperature measurements all operational. 2 of 5 Pressure gauges not operational
- Continue collecting data

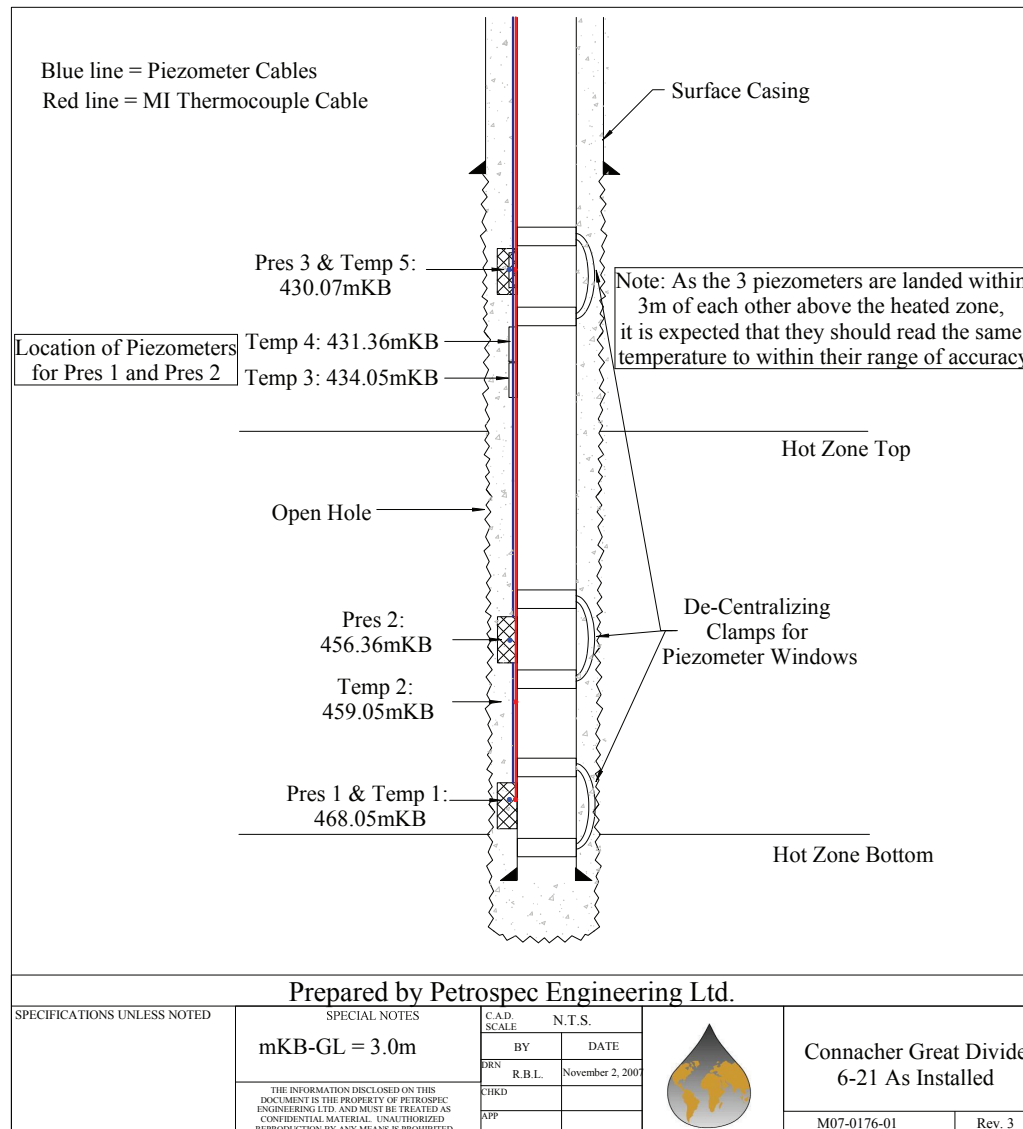
111/05-21-82-12W4, Operational Mar 2012

- Drilled to acquire information on temperature between well pairs for future infill wells (40m from Well Pair 102-03)
- Five temperature measurements operational. Lower pressure gauge not operational
- Continue collecting data

100/07-17-82-12W4, Operational Mar 2012

- Drilled to acquire information on gas cap repressurizing (33m from Well Pair 104-P03)
- Five temperature and five pressure measurements operational
- Continue collecting data

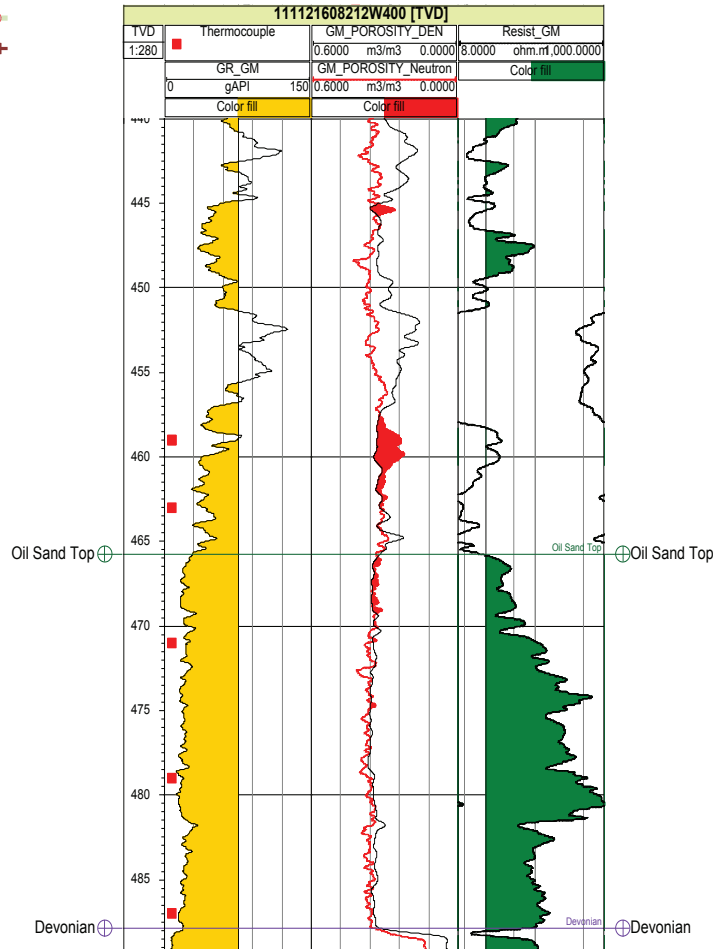
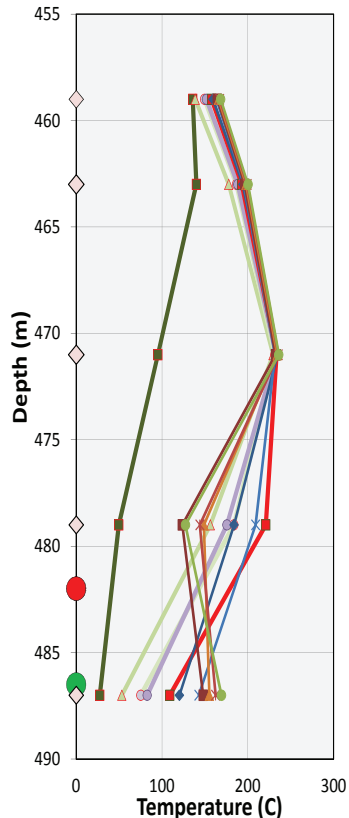
Pod One - Typical Observations Well



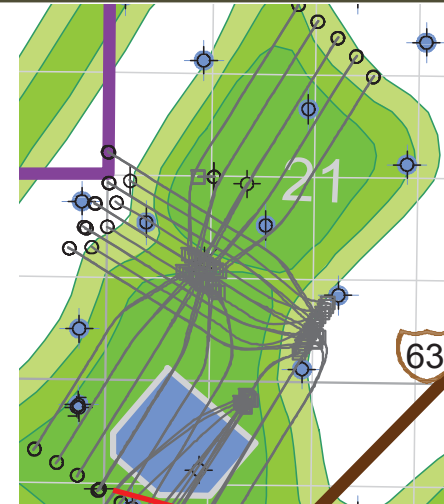
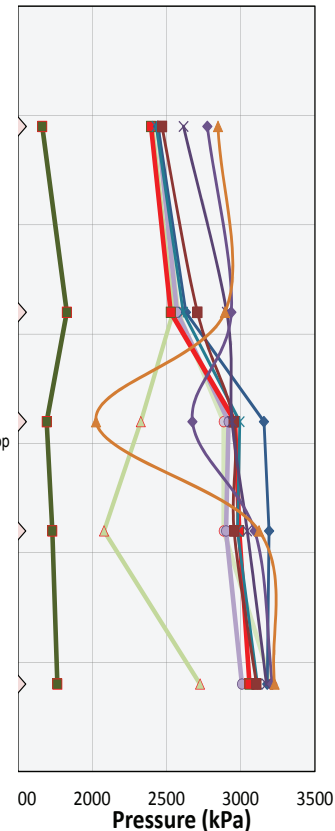
Pod One Obs Well - 111/12-16-82-12 W4

Chamber appears to be fully developed. Steam is suspected to be leaking to gas cap and lean zone. Temperature readings provide support for gas cap repressurization. No valid pressure readings for 2 of 5 gauges after January 1, 2013.

○ SAGD WP ◇ TC
— 4/1/2012 — 1/1/2014 — 10/1/2014
— 1/1/2015 — 10/1/2015 — 1/1/2016 — 10/1/2016
— 4/1/2017 — 1/7/2017 — 10/1/2017



— 4/1/2012 — 1/1/2014 — 10/1/2014
— 10/1/2015 — 1/1/2016 — 10/1/2016
— 4/1/2017 — 7/1/2017 — 10/1/2017

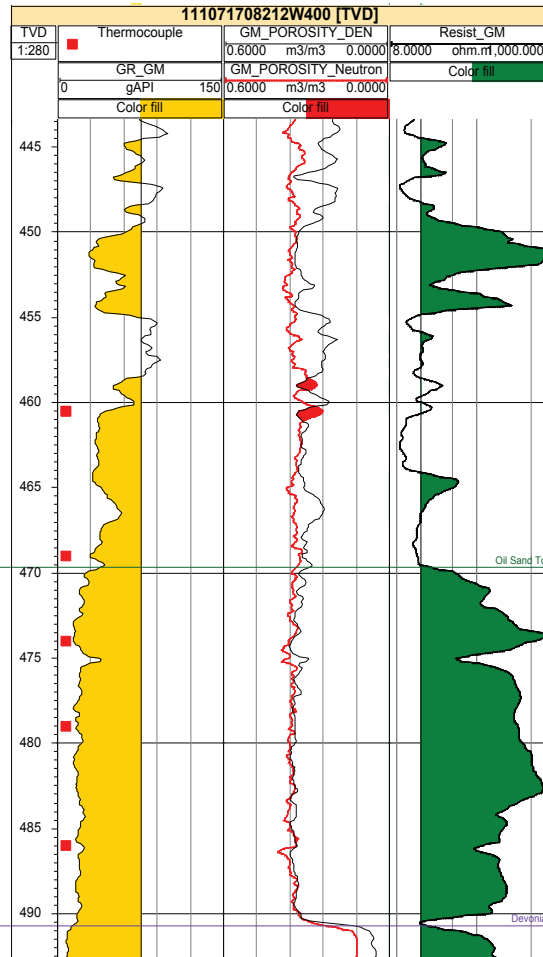
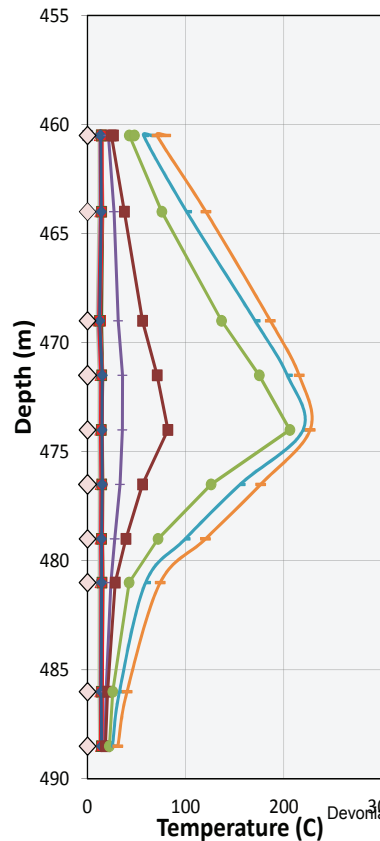


40 meters from
101S-P10

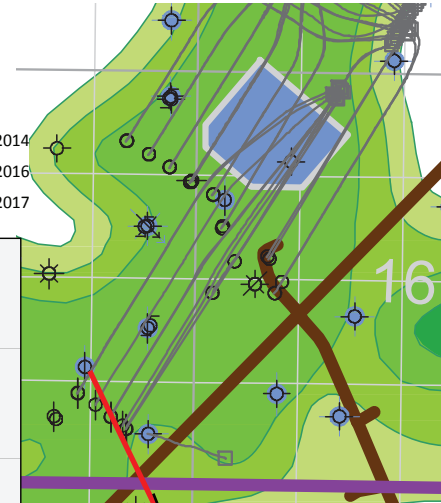
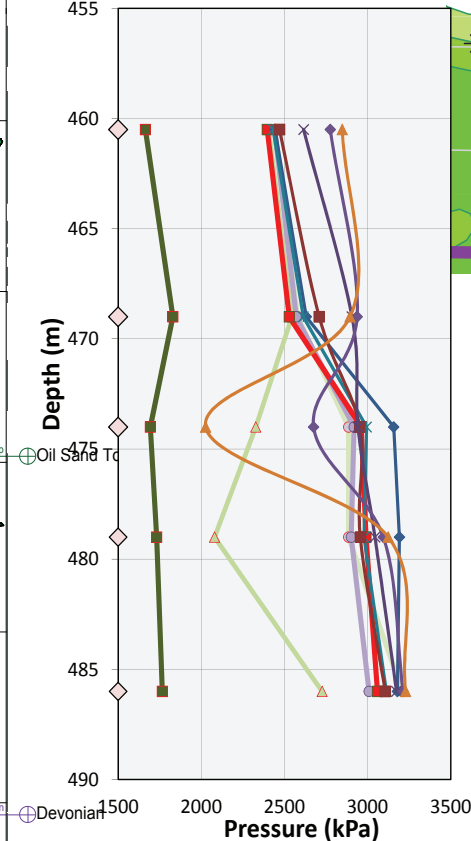
Pod One Obs Well - 111/07-17-82-12 W4

Temperature response observed by April 2016. Pressure response to steam injection observed. Note that steam injection to Pad 104 commenced in September 1, 2013.

◇ TC 4/1/2012 1/1/2014 10/1/2014
1/1/2015 10/1/2015 1/1/2016 10/1/2016
1/1/2017 4/1/2017 7/1/2017 10/1/2017



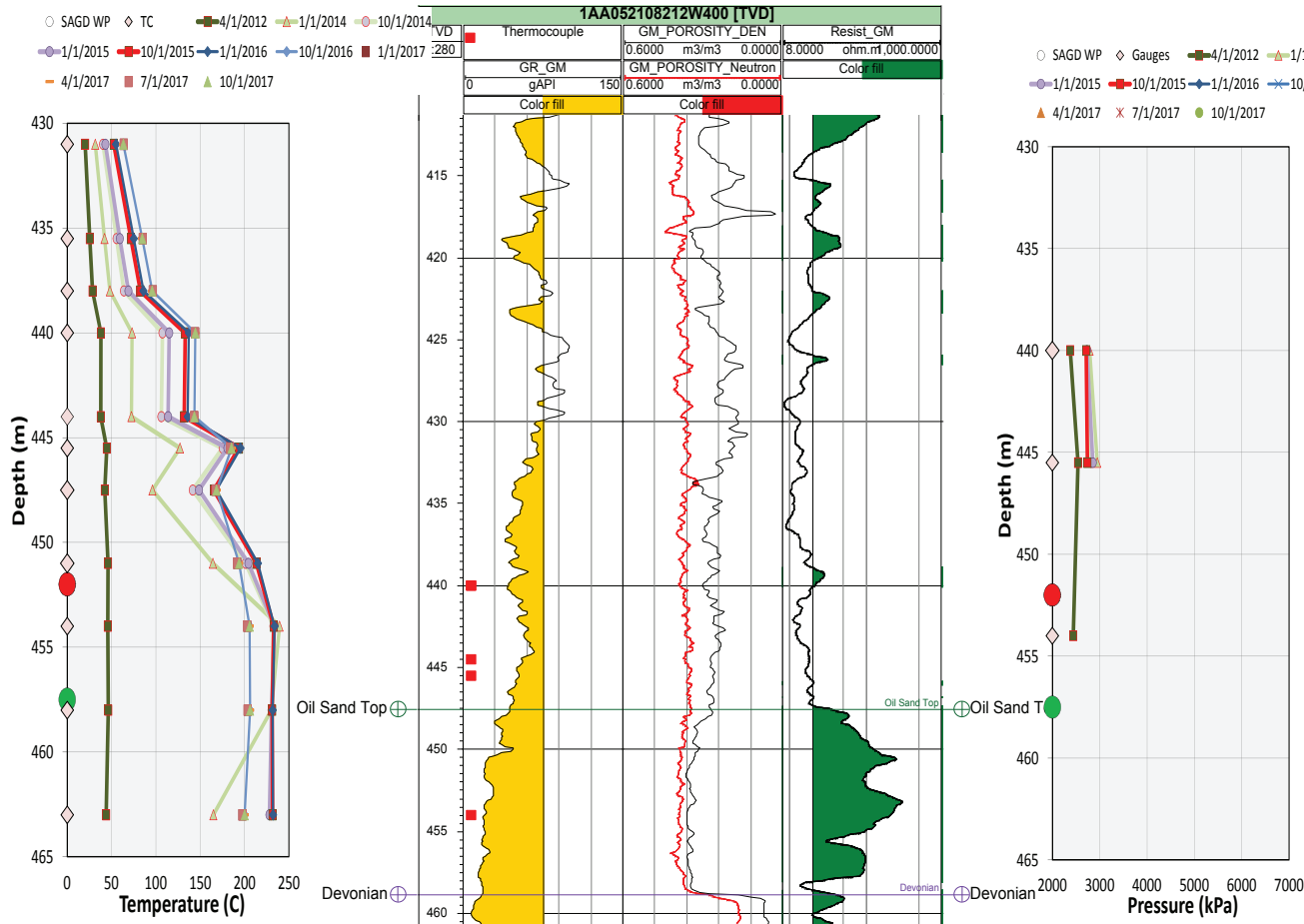
◇ Gauges 4/1/2012 1/1/2014 10/1/2014
1/1/2015 10/1/2015 1/1/2016 10/1/2016
1/1/2017 4/1/2017 7/1/2017 10/1/2017



33 meters from
104-03

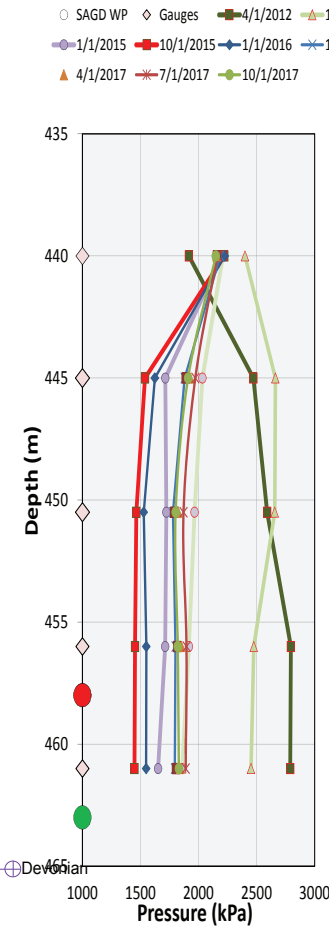
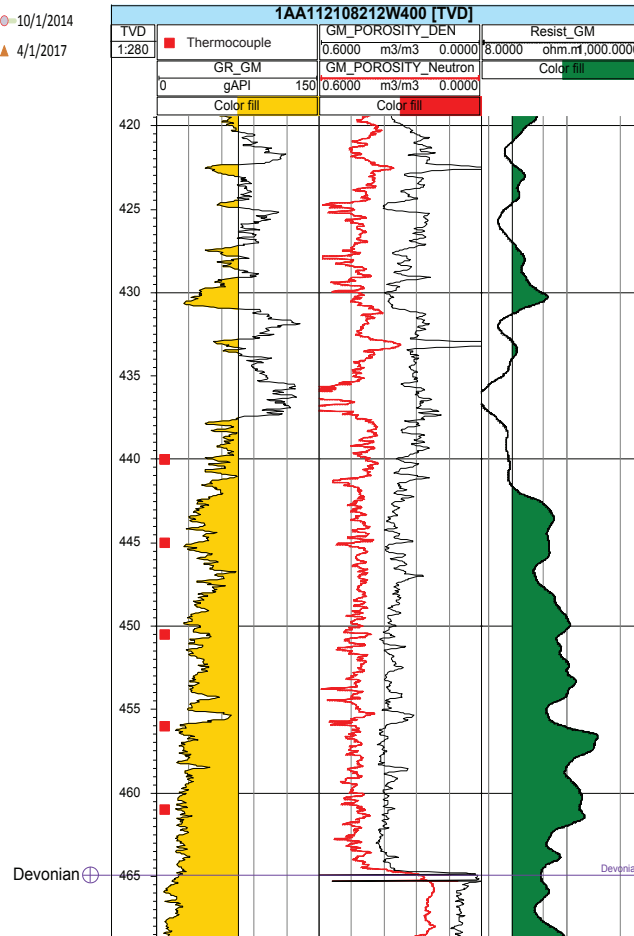
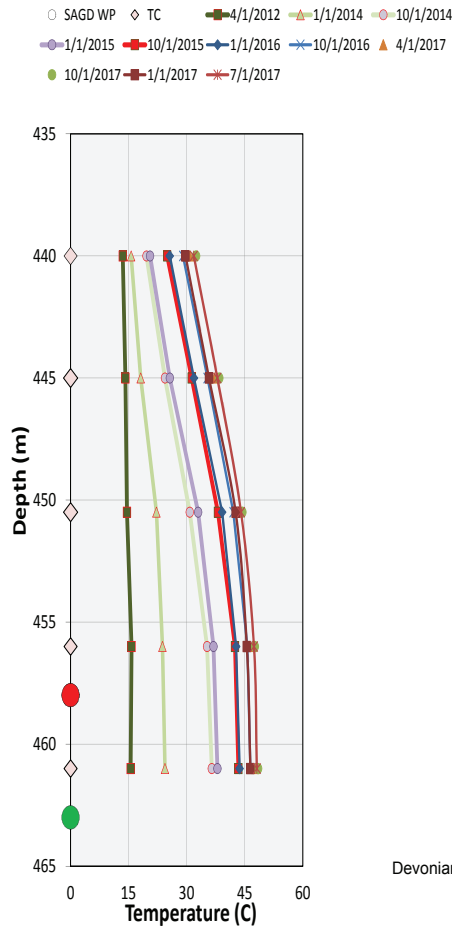
Pod One Obs Well - 111/05-21-82-12 W4

No valid pressure readings at the lowest gauge after January 1, 2013. The piezometer at 445.5 m has failed and is no longer reporting accurate reservoir pressure.



Pod One Obs Well - 100/11-21-82-12 W4

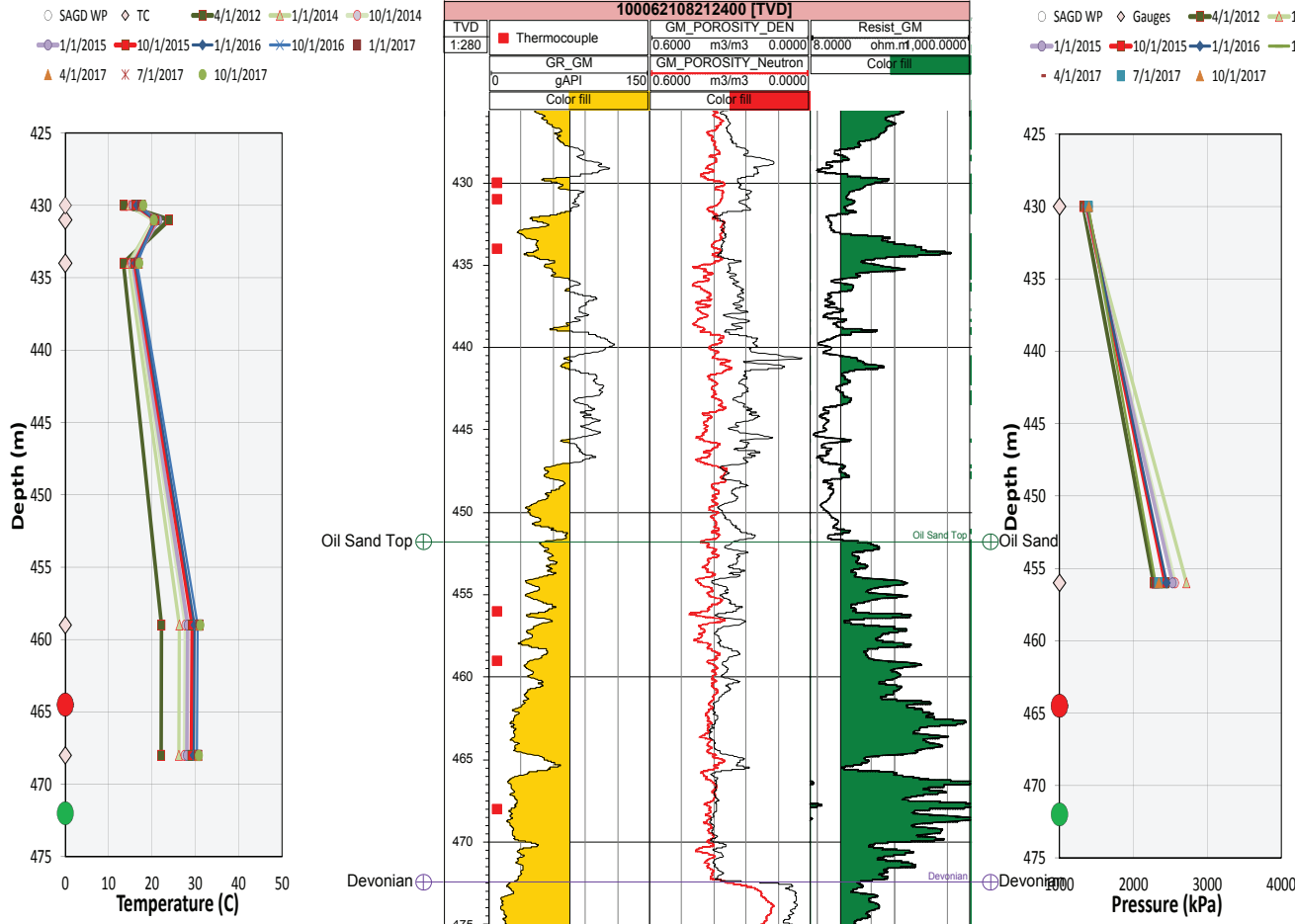
Temperature readings confirm that steam distribution in Pad 101N was a challenge. Note that Pad 101N is on blowdown. Temperature and pressure readings portray a relatively fast response to blowdown.



47m from 101-04

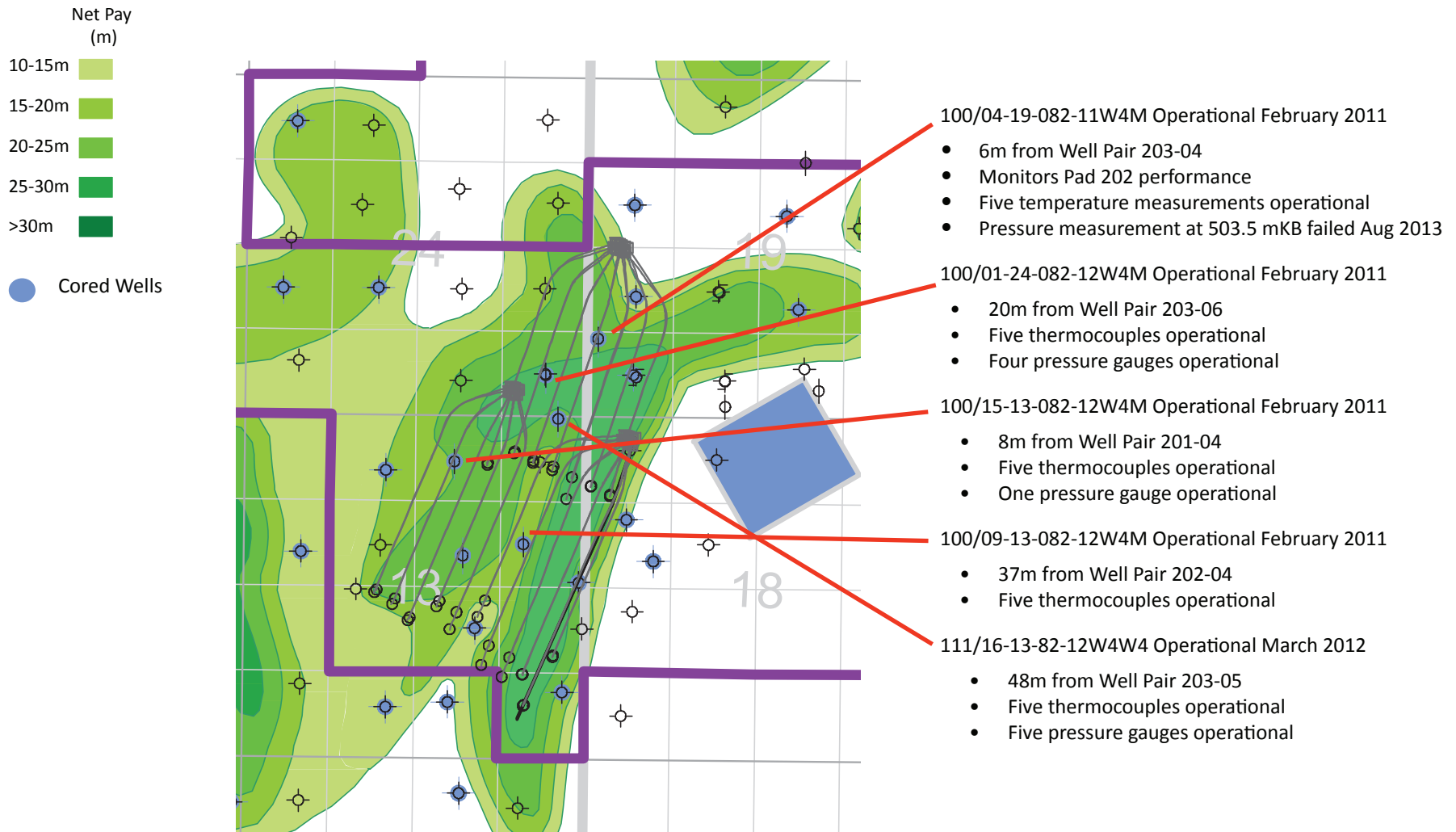
Pod One Obs Well - 100/06-21-82-12 W4

Pressure and Temperature readings are suspect.



39m from 101-05

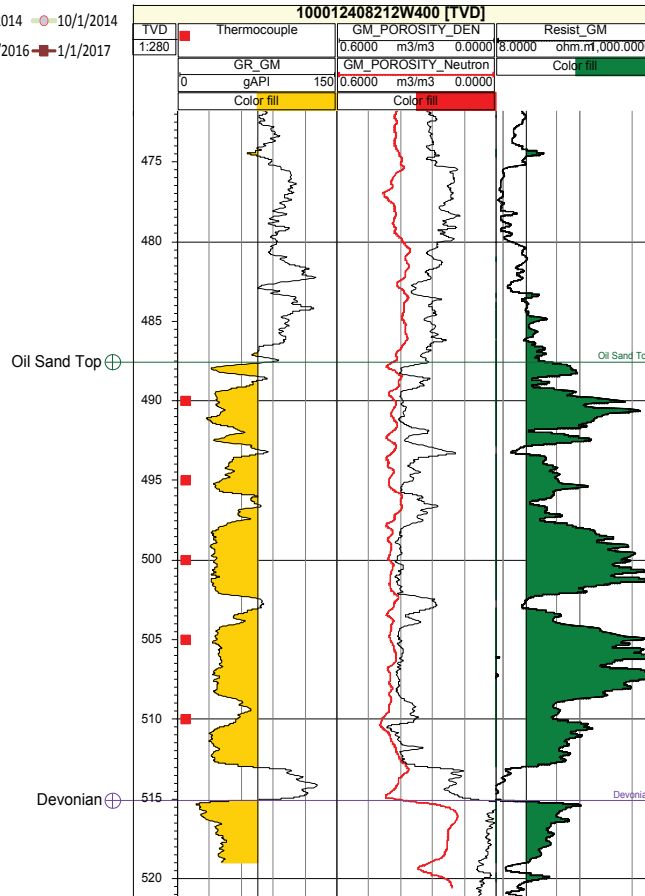
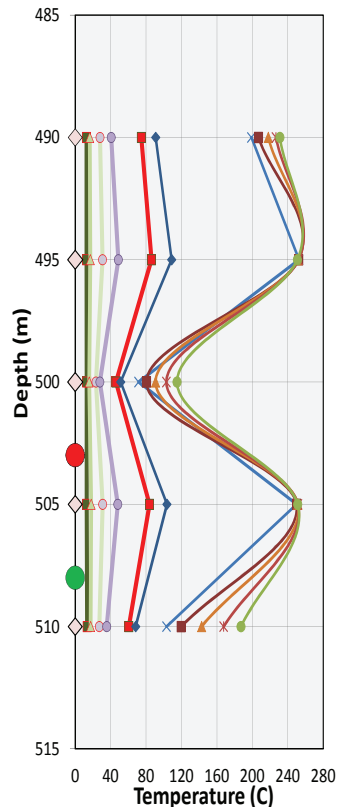
Algar Observations Wells



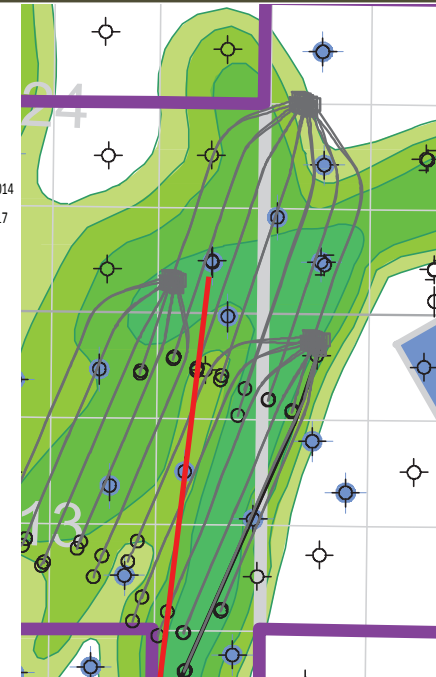
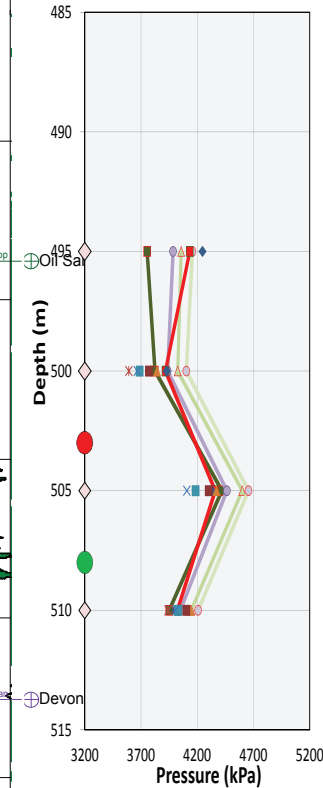
Algar Obs Well - 100/01-24-82-12 W4

Temperature readings at 490 m depth suggest that steam is moving to higher IHS zones. This suggests that the IHS zone are discontinuous at this location.

○ SAGD WP ◇ TC ■ 4/1/2012 ▲ 1/1/2014 ● 10/1/2014
● 1/1/2015 ■ 10/1/2015 ◆ 1/1/2016 ▲ 10/1/2016 ■ 1/1/2017
▲ 4/1/2017 × 7/1/2017 ● 10/1/2017



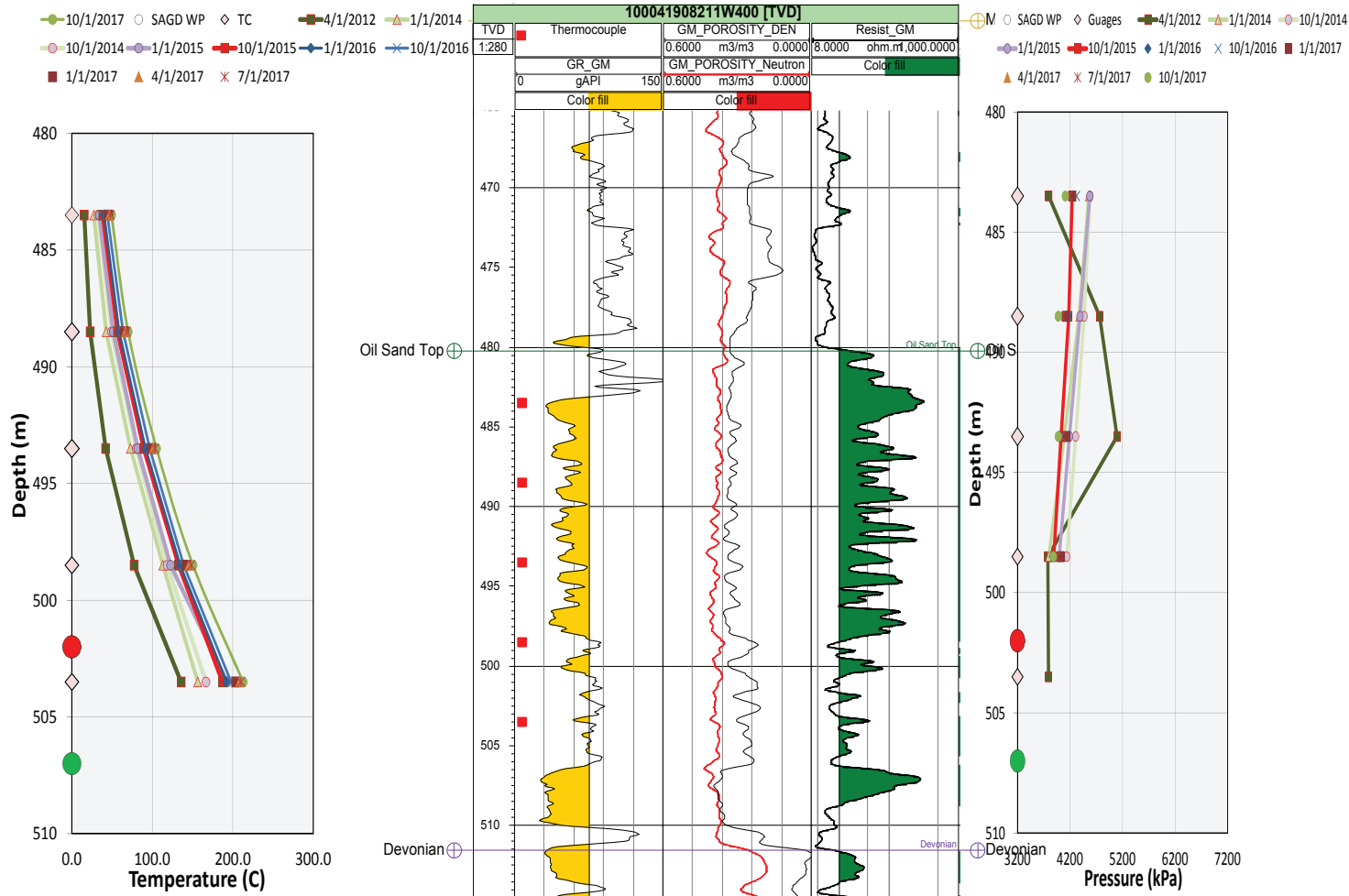
○ SAGD WP ◇ Guages ■ 4/1/2012 ▲ 1/1/2014 ● 10/1/2014
● 1/1/2015 ■ 10/1/2015 ◆ 1/1/2016 ▲ 10/1/2016 ■ 1/1/2017
▲ 4/1/2017 × 7/1/2017 × 10/1/2017



22 m from 203-06

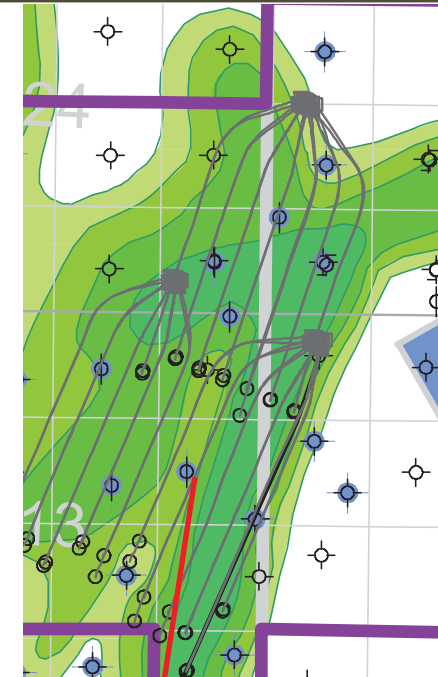
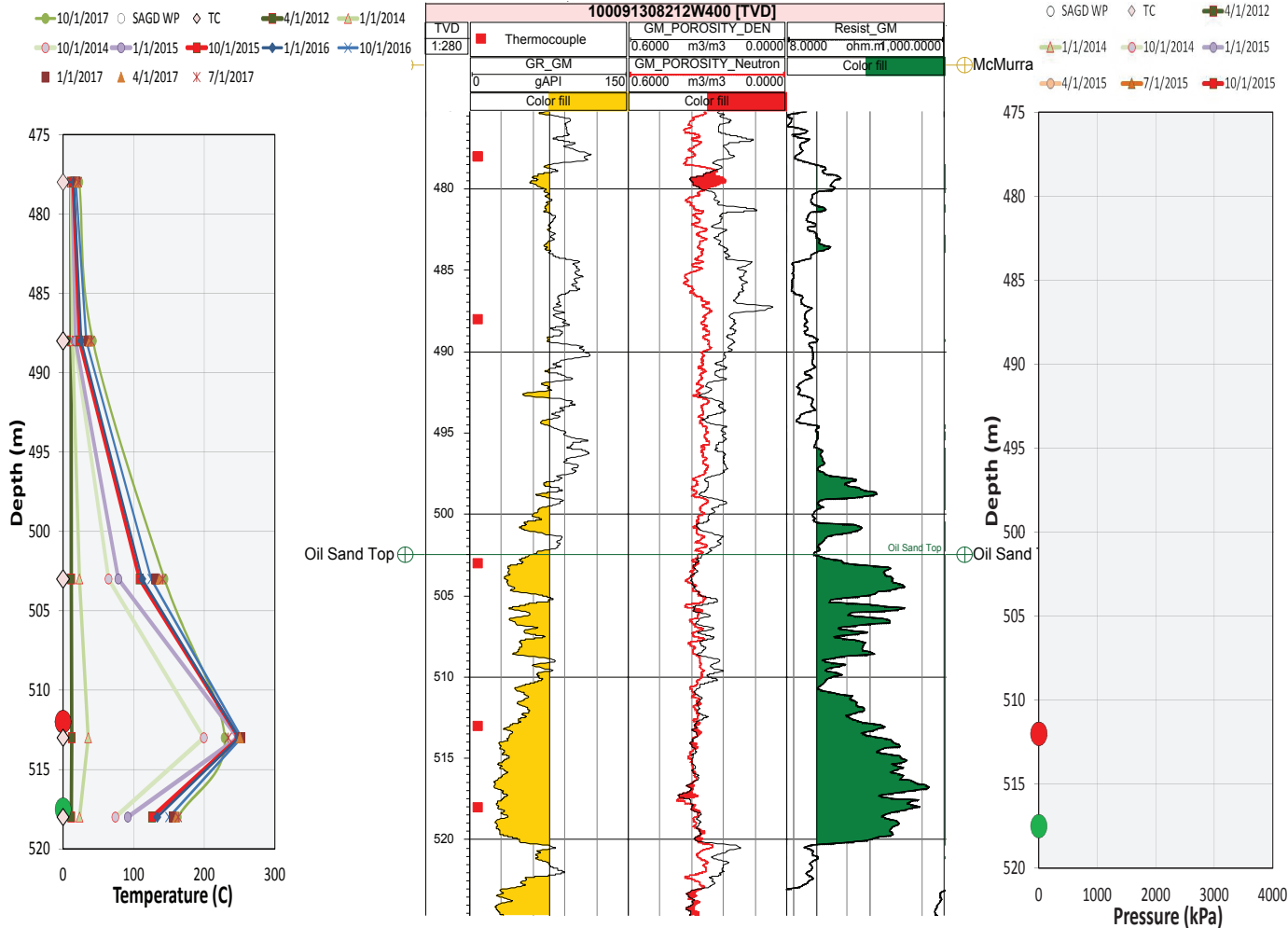
Algar Obs Well - 100/04-19-82-11 W4

Temperature readings show temperature development in intense IHS zones. Pressure readings at this location are suspect.



Algar Obs Well - 100/09-13-82-12 W4

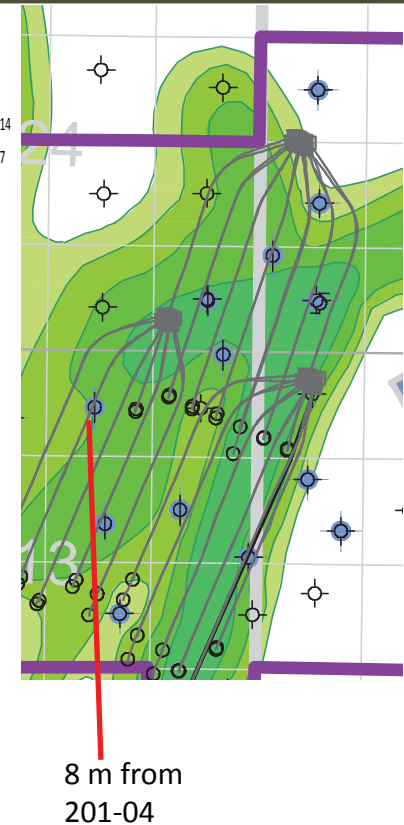
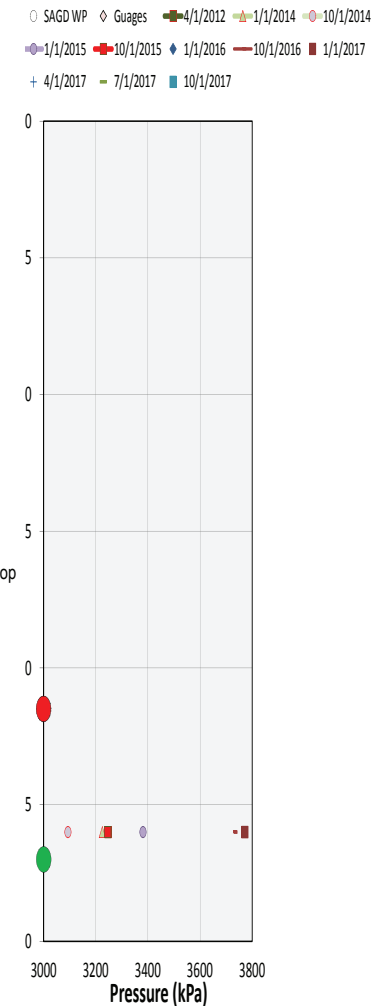
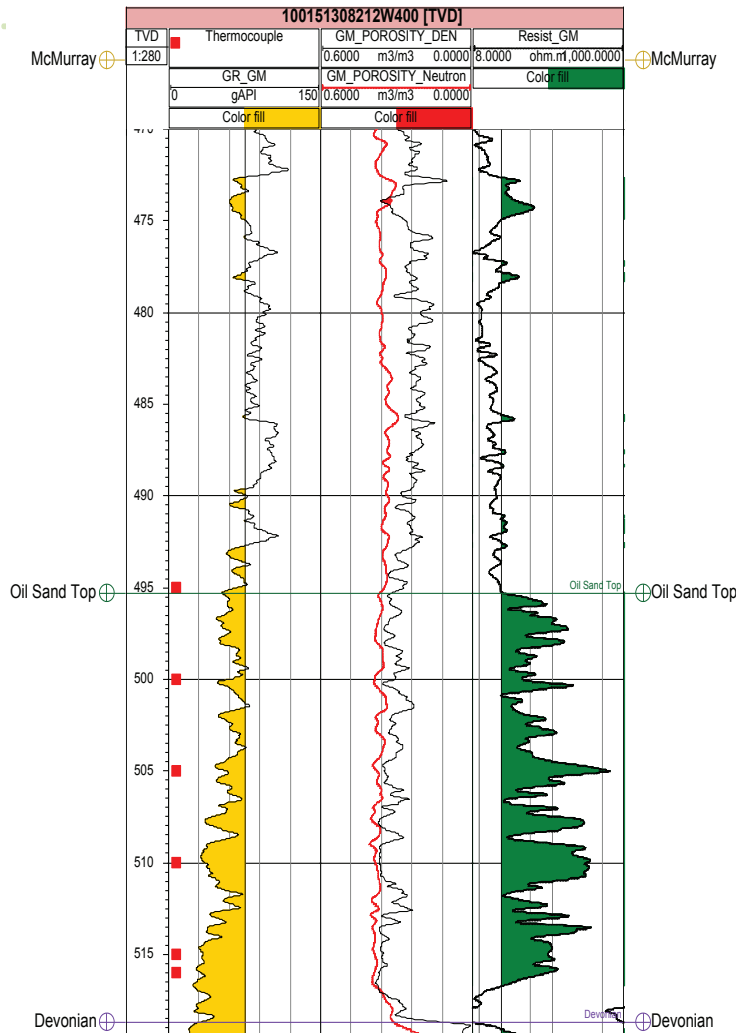
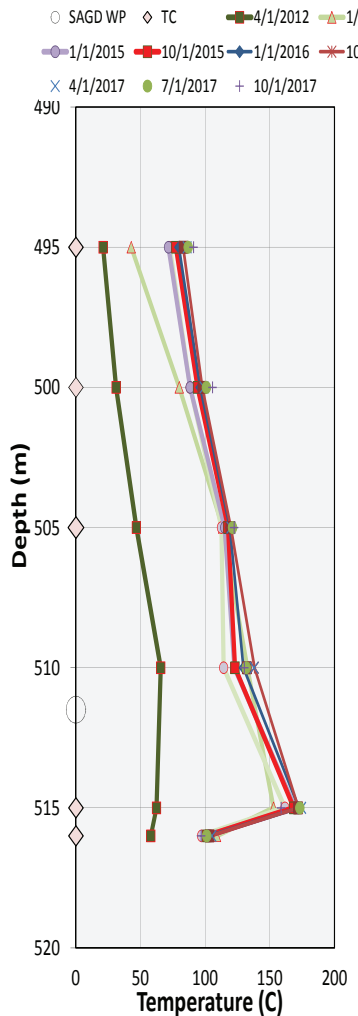
Temperature readings supports the development of infill wells at this location. No pressure readings available.



37 m from
202-04

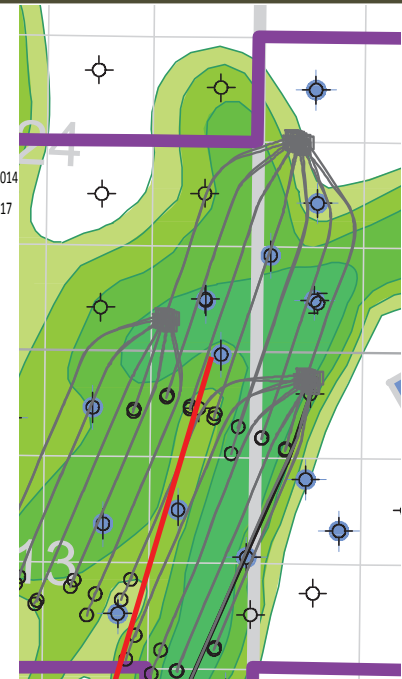
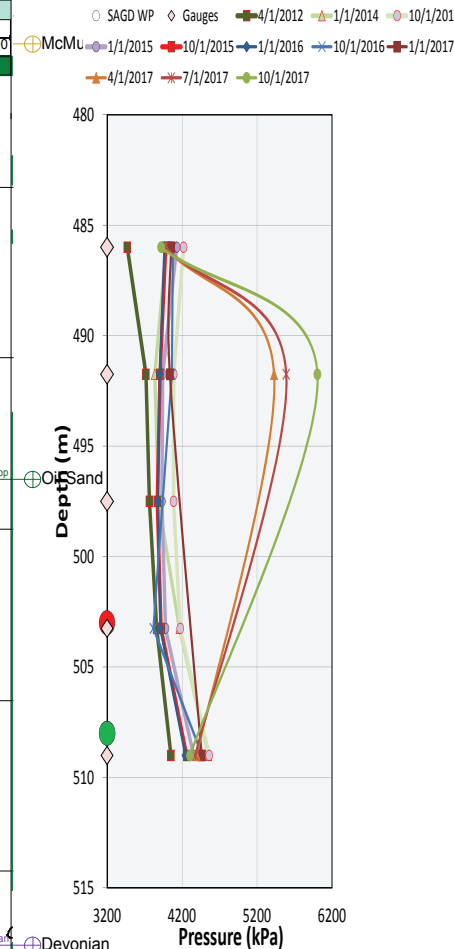
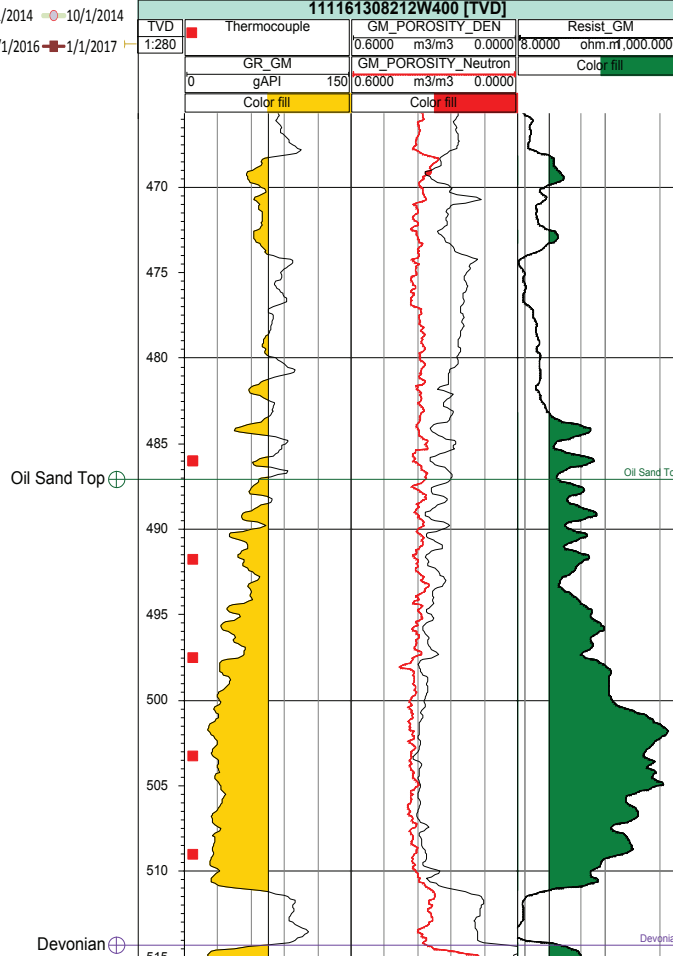
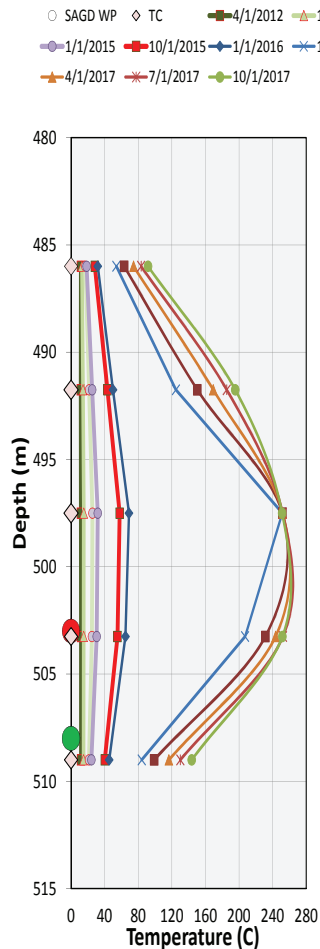
Algar Obs Well - 100/15-13-82-12 W4

Temperature readings show temperature response in IHS zone.



Algar Obs Well - 111/16-13-82-12 W4

Temperature readings shows temperature development in the IHS zone. It is expected that there will be more temperature response at lower depths in the future. Pressure response is observed in the entire column.



48 m from
203-05

Pod One

12-16-082-12W4 - Thermocouples at all measurement depths are operating properly. Piezometers at depths of 471 m and 478 m are not operating due to gauge failure. There are no plans to replace the equipment.

5-21-082-12W4 - Thermocouples at all depths are operating properly. Piezometer located at 445.5 m and 454 m are not operating due to gauge failure. There are no plans to replace the equipment.

6-21-082-12W4 - Thermocouples at all depths are operating properly. All piezometers in this well are not operational. There are no plans to replace the equipment.

Algar

04-19-082-12W4 - Thermocouples at all depths are operating properly. Piezometer at 503.5 mKB is not operational. There are no plans to replace the equipment.

09-13-082-12W4 - Thermocouples at all depths are operating properly. All piezometers in this well are not operational. There are no plans to replace the equipment.

15-13-082-12W4 - Thermocouples at all depths are operating properly. Piezometer at 516 m is the only pressure gauge operating properly. There are no plans to replace the equipment.

16-13-082-12W4 - Thermocouples at all depths are operating properly. Piezometers at 503.3 and 497.5 mKB are not operational. There are no plans to replace the equipment.

Pod One & Algar Ground Movement



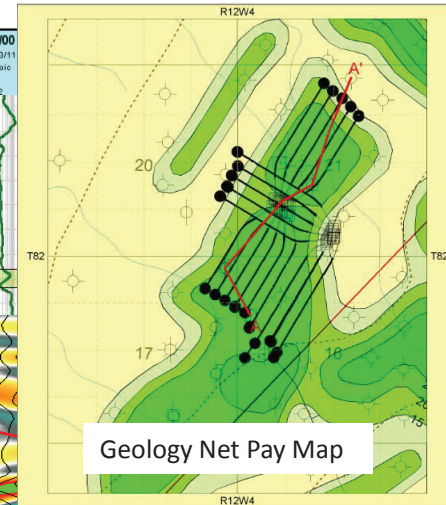
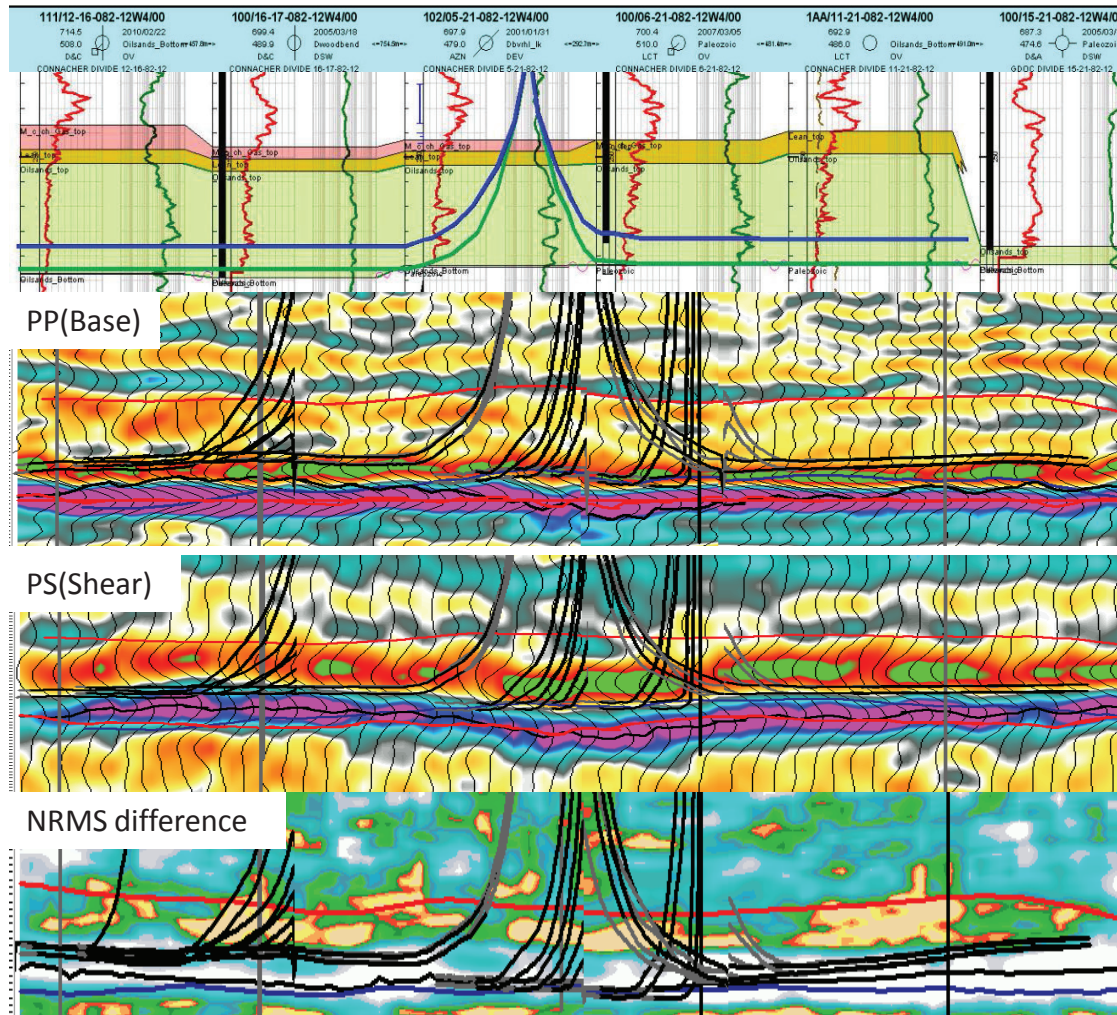
Highway 63 Profile Survey

16 km of Highway 63's road profile adjacent to the Great Divide Project Area was resurveyed in 2017. Southbound lanes (original highway) had good agreement between 2016 & 2017 data, no deviations of concern. Northbound lanes (recently constructed) observed post-construction subsidence and surface elevation changes continue to occur, and any thermal deviation, if present, cannot be differentiated from post-construction subsidence at this time.

Static Monument Survey

38 monuments resurveyed in 2017 (16 at Algar, 17 at Pod One, & 5 controls). One new monument was added in the area southwest of Pod One CPF. At Algar, slight subsidence in the area north of the Algar CPF was observed. At Pod One, slight uplift in the area southwest of the Pod One CPF was observed. Highway 63 road profiles and all static monuments will be resurveyed in summer of 2018.

Pod One 4D Seismic



Geological cross section across seismic data

PP(Primary) conventional seismic is the difference btw the 2005 and 2010 seismic volumes

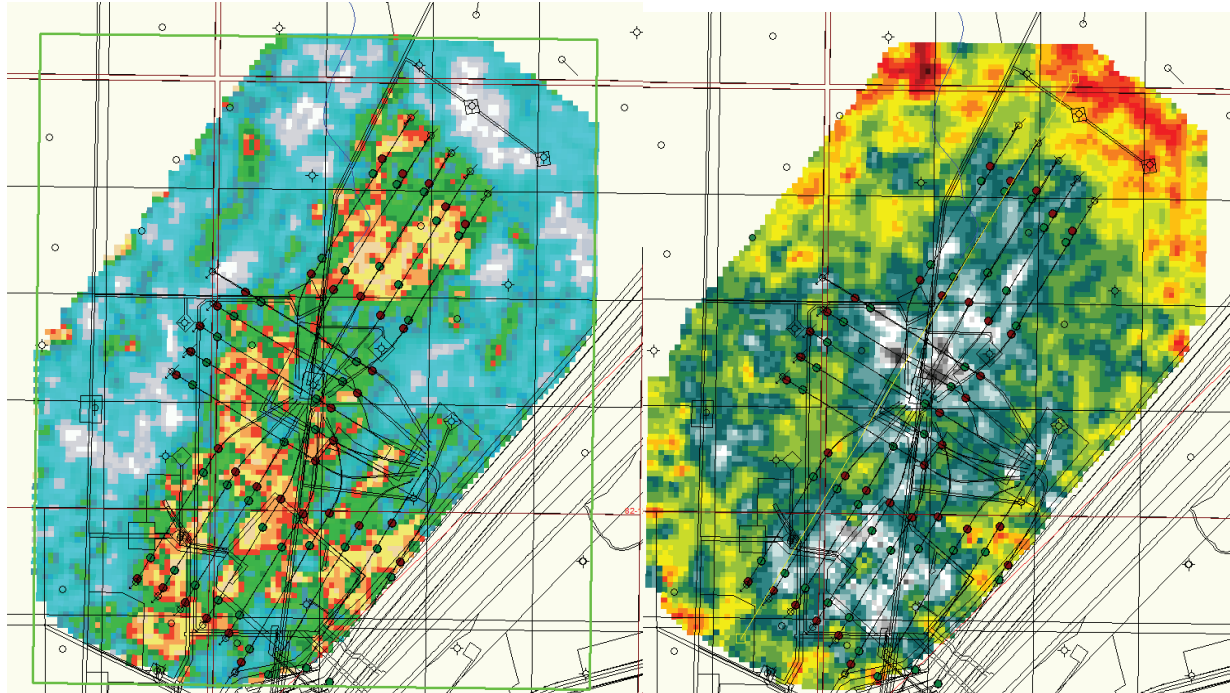
PS data shows changes in the shear component -
Which is an indicator of steam in the rock since 2010

NRMS(Normalized Root Mean Square of the differences btw the 2005 and 2010 surveys) which highlights and confirms change in the reservoir since 2005

Pod One 4D Seismic (2)

NRMS - normalized root mean square
represents the % change in the seismic signal
since steaming operations began

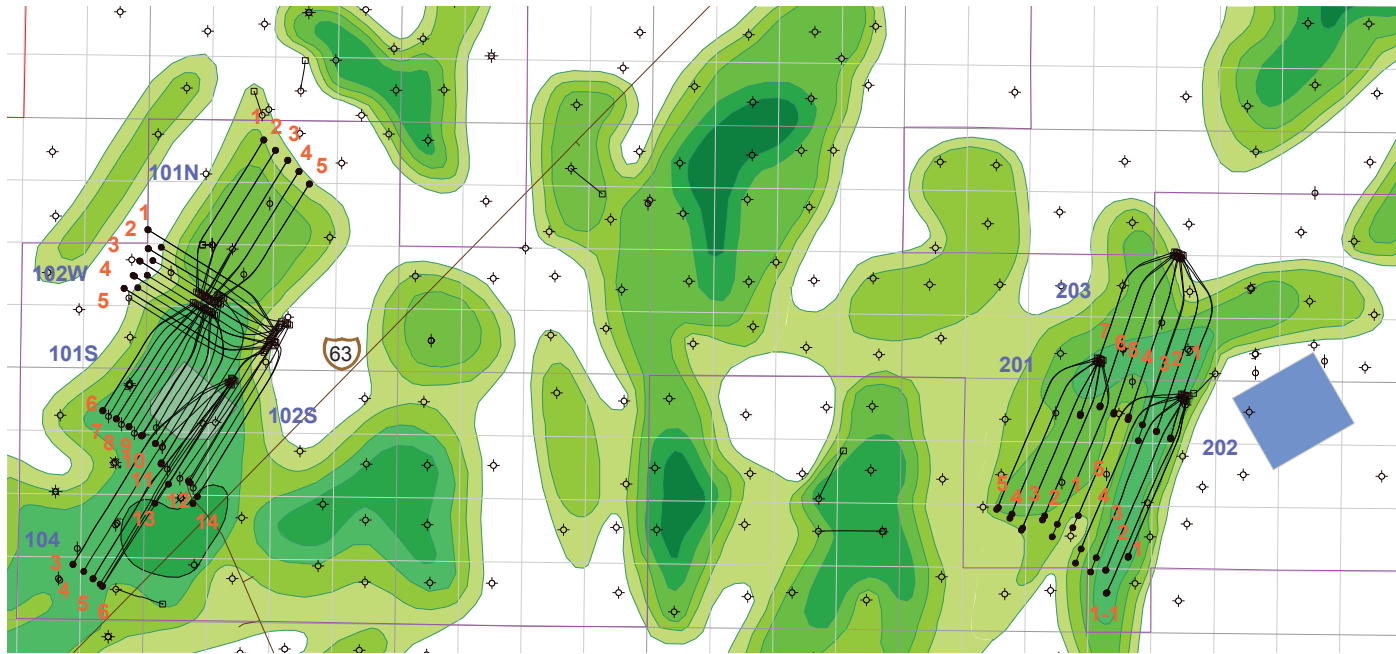
Shear Data - should represent the
extent of the steam chamber



The NRMS represents the percent change in the reservoir since steaming operations commenced in 2007. This roughly corresponds to produced bitumen and should represent the various steam chambers. The shear data is not affected by steam, gas or bitumen heated above 80 C, as this acts like a liquid. The resulting map should show the current extend of the steam chambers. The two maps should be similar and are not, therefore the results of the 4D seismic are inconclusive. Possible reasons for this include plant and highway noise, and errors resulting from using different geophones at different locations in the two surveys.

Subsurface - Scheme Performance

Great Divide Well Layout



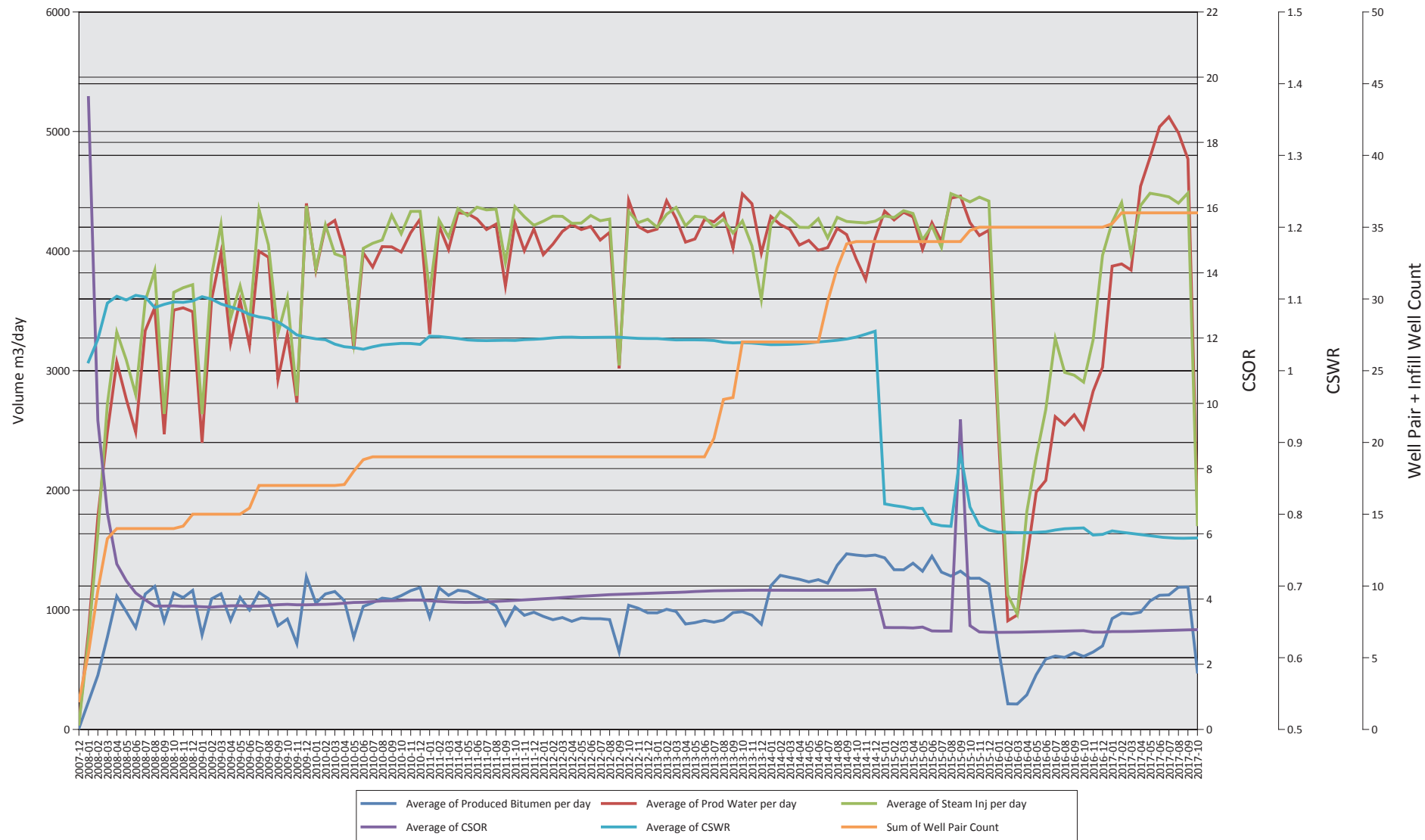
Pod One

- 23 Well Pairs (101N, 101S, 102S, 102W and 104)
- 13 Infills
- SAGD well pairs in 101N, 101S, 102S and 102W were drilled at 100m spacing
- SAGD well pairs in 104 were drilled at 80m spacing
- All infills (except 102 INF06 @35m) were drilled at 50m spacing between the SAGD producers

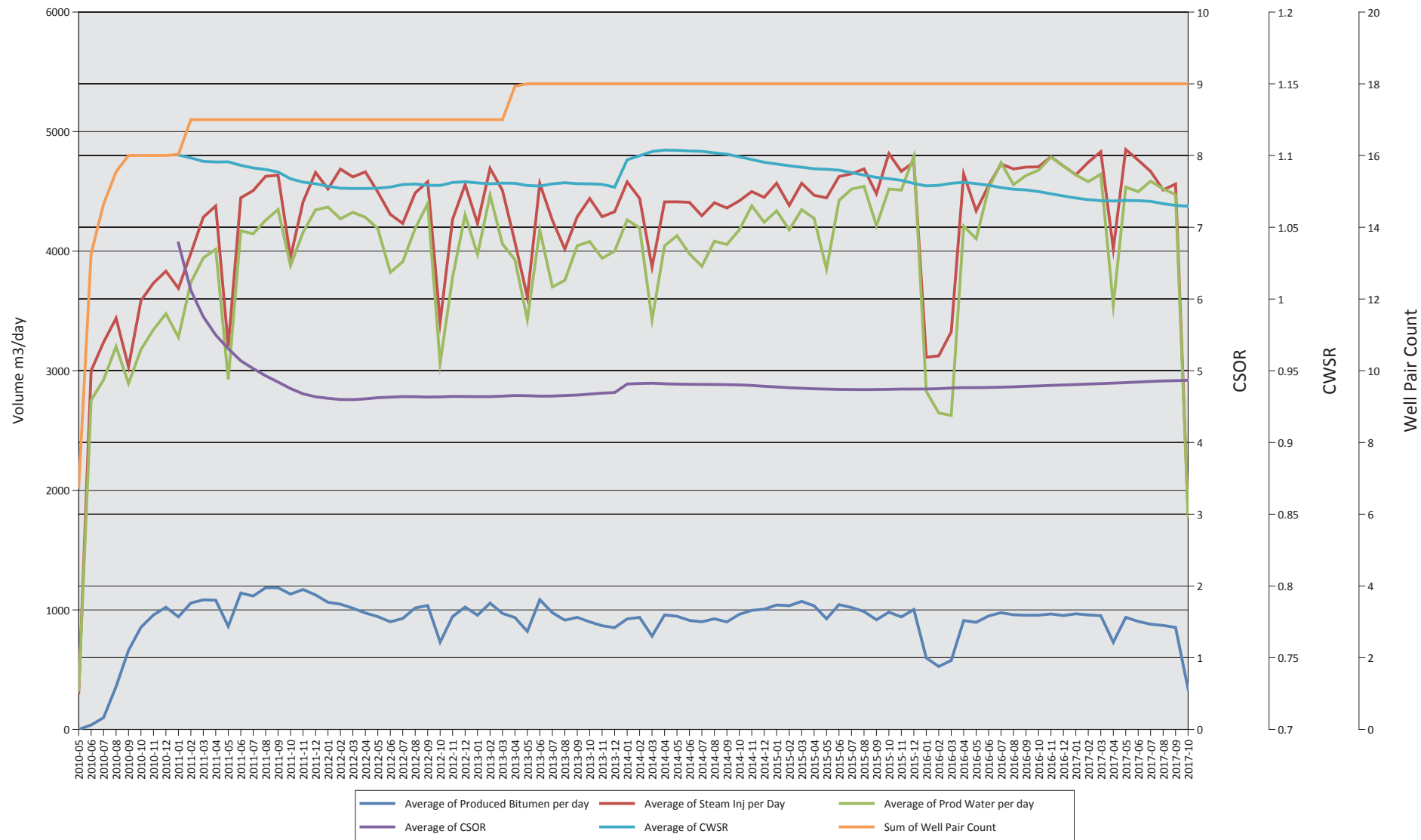
Algar

- 18 Well Pairs (201, 202 and 203)
- All SAGD well pairs except 202 R01 were drilled at 100m spacing
- 202 R01 was drilled 35m from 201-01 and 65m from 202-02 well pair

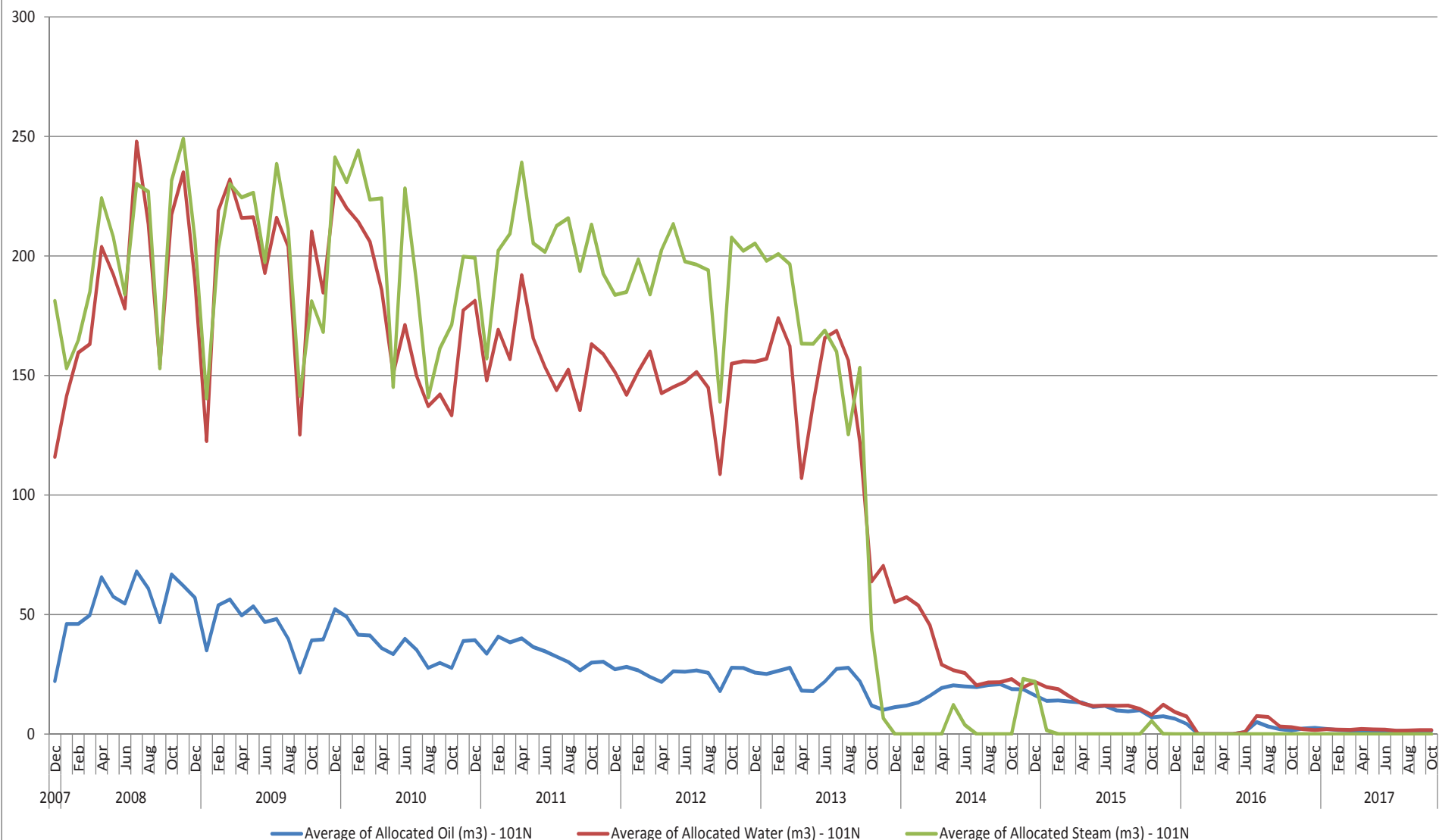
Pod One Performance



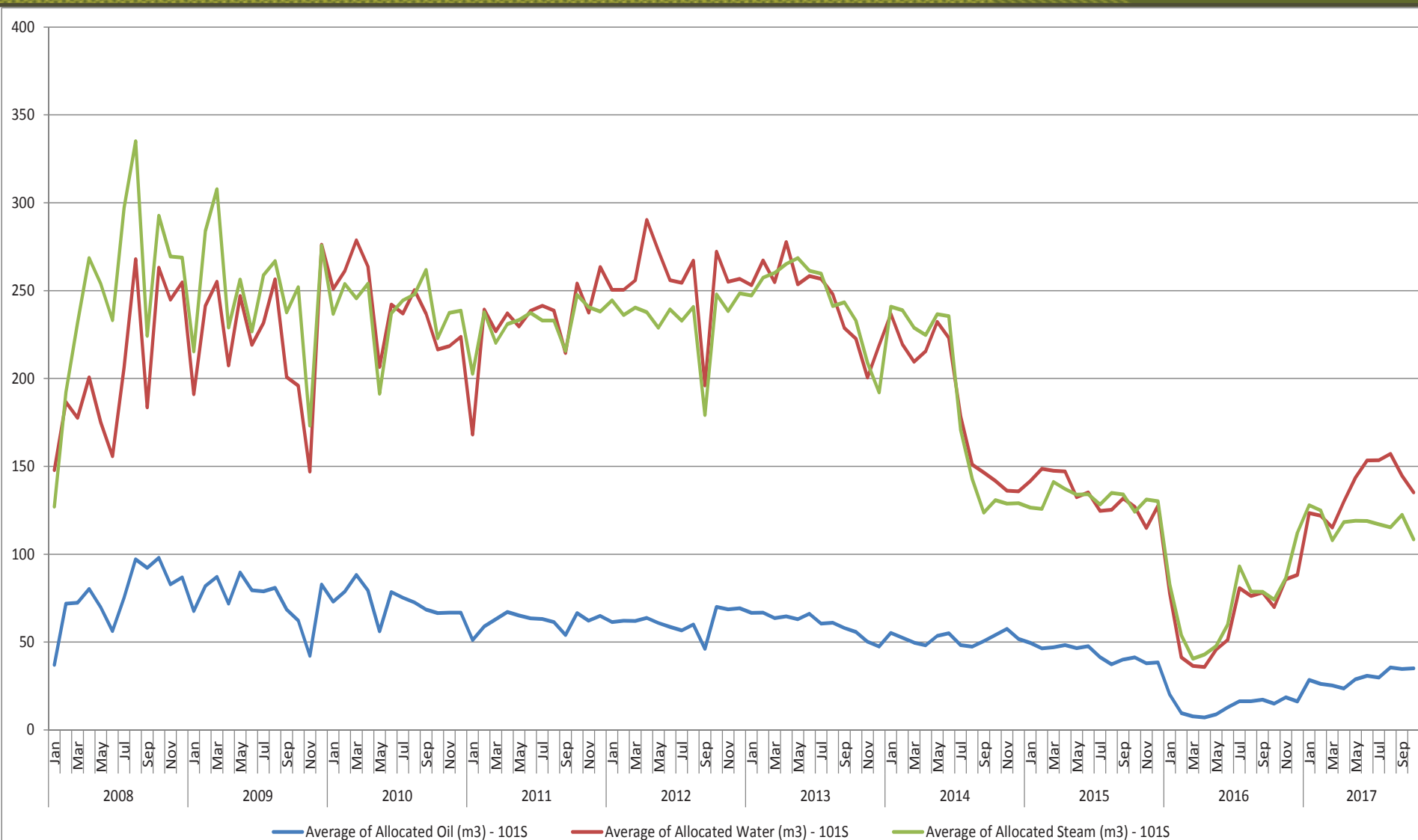
Algar Performance



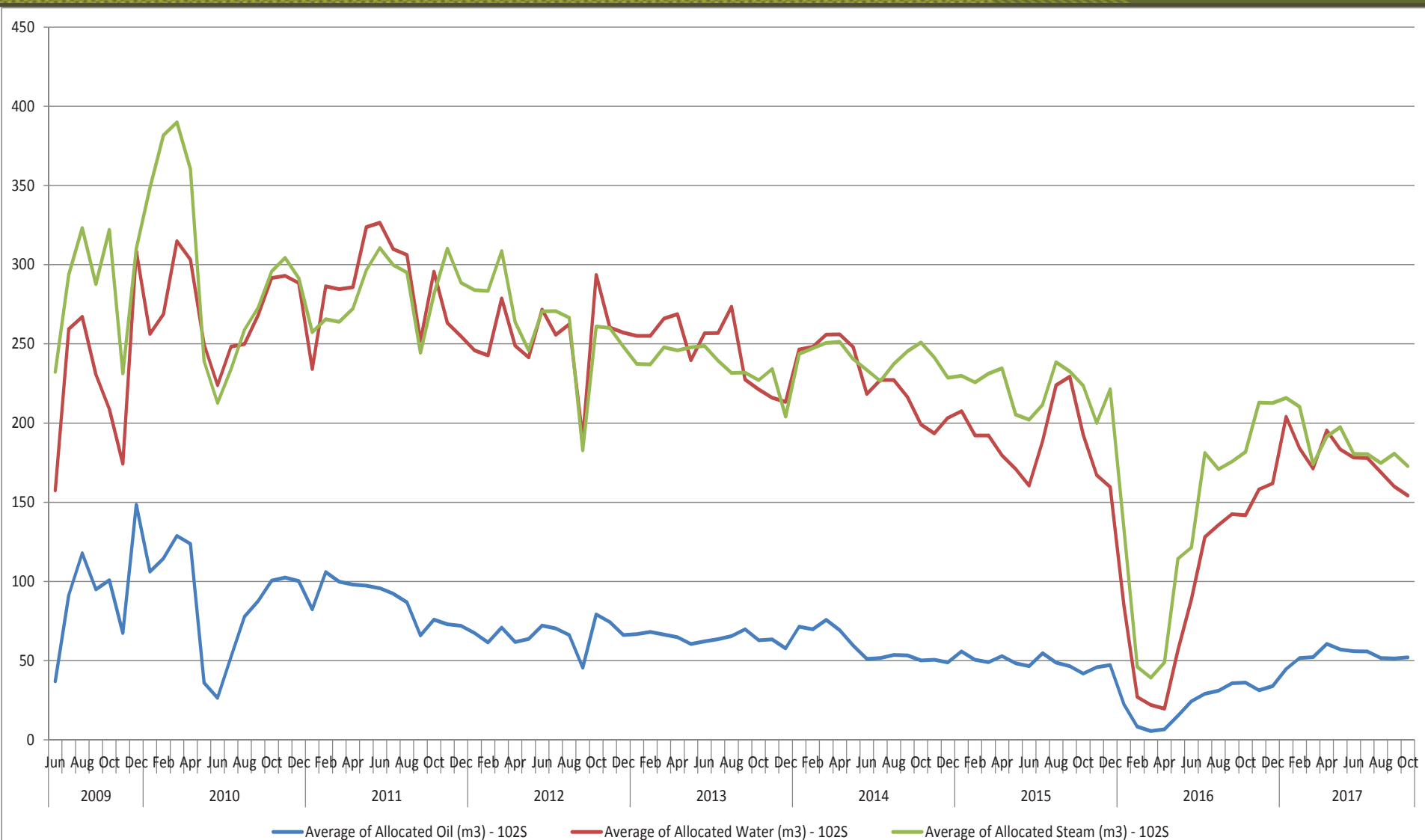
Pod One - Pad 101N Production



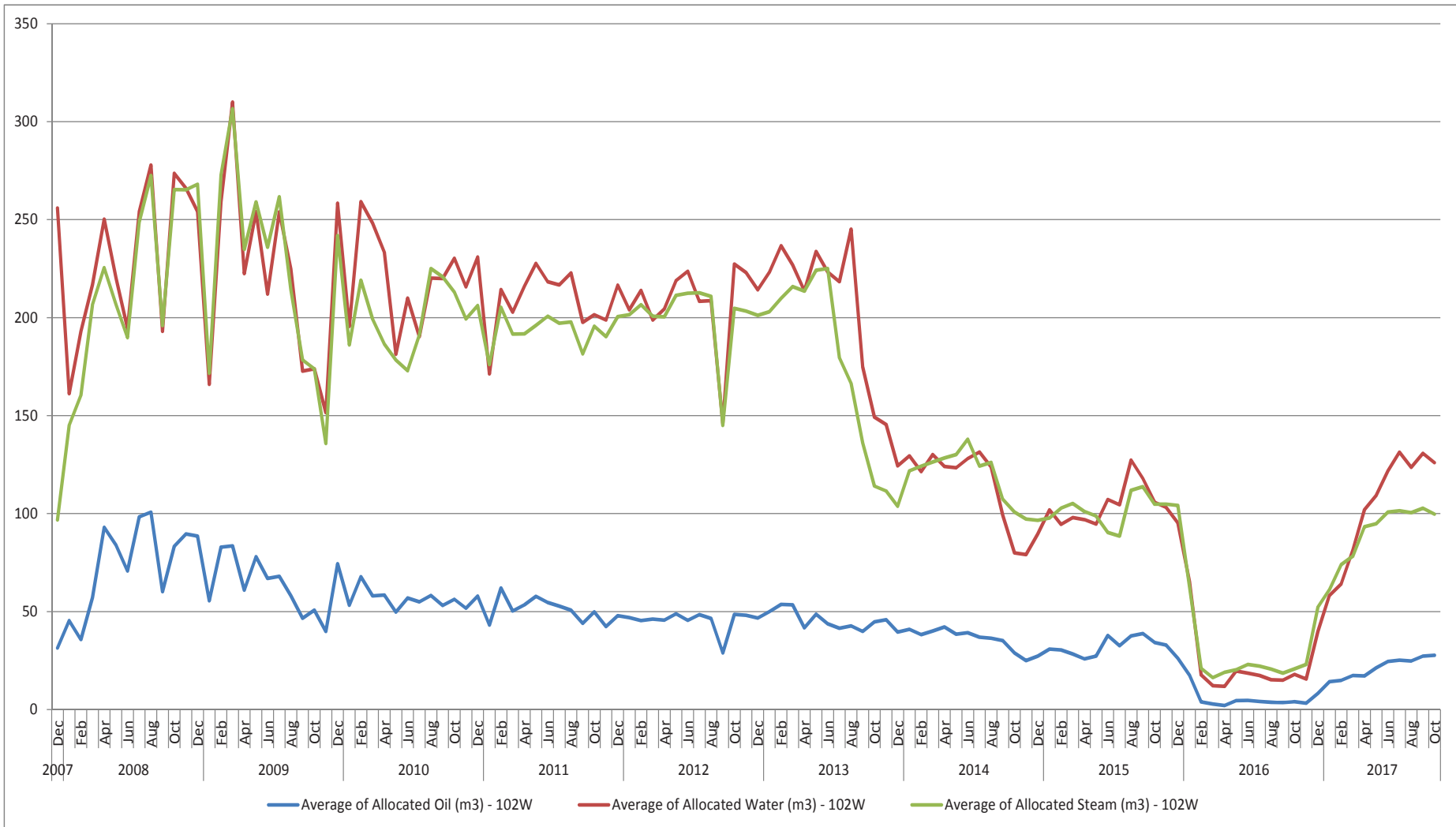
Pod One Pad 101S Production



Pod One Pad 102S Production



Pod One Pad 102W Production



Pod One Pad 104 Production



Algar - Pad 201 Production

201



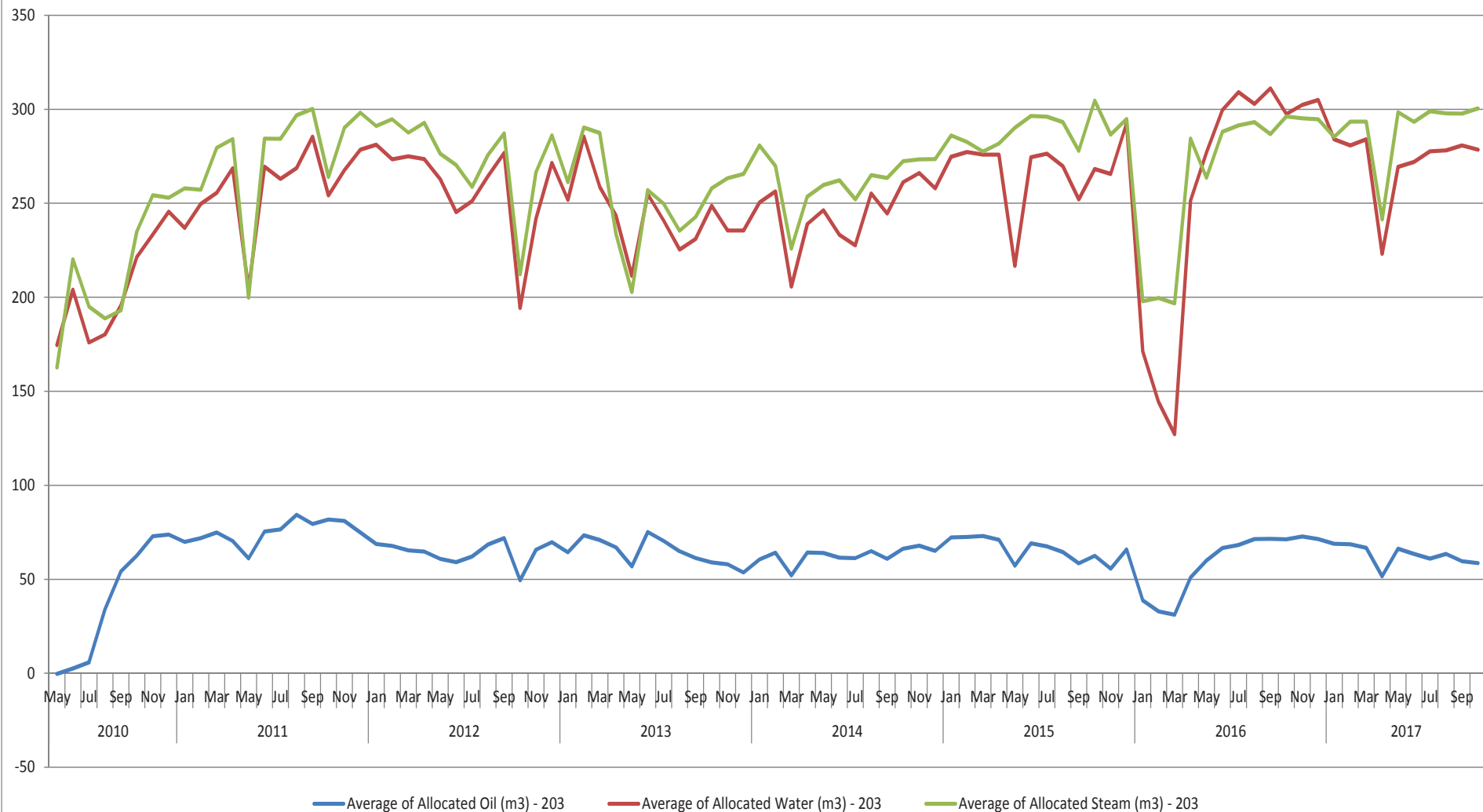
Algar Pad 202 Production

202

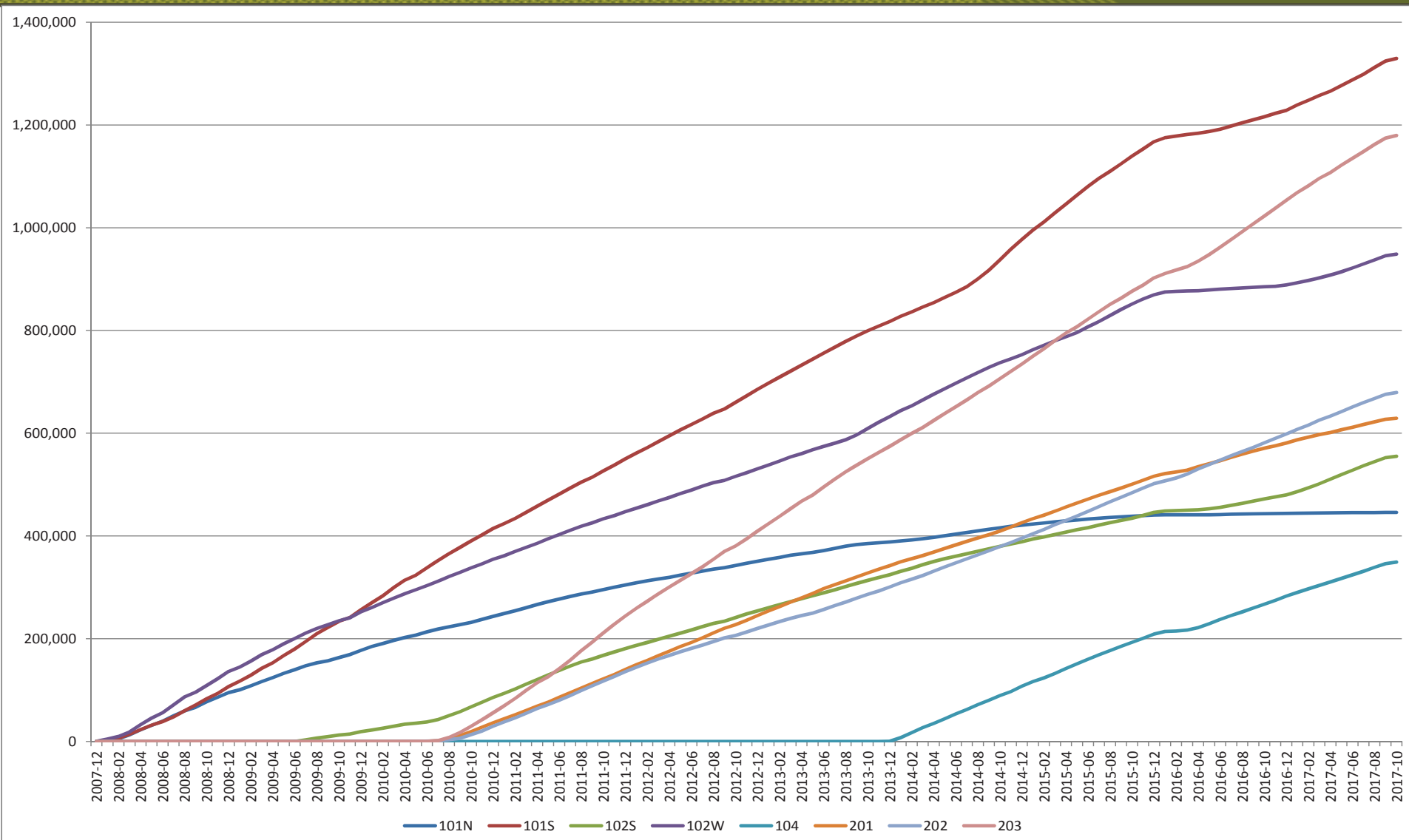


Algar Pad 203 Production

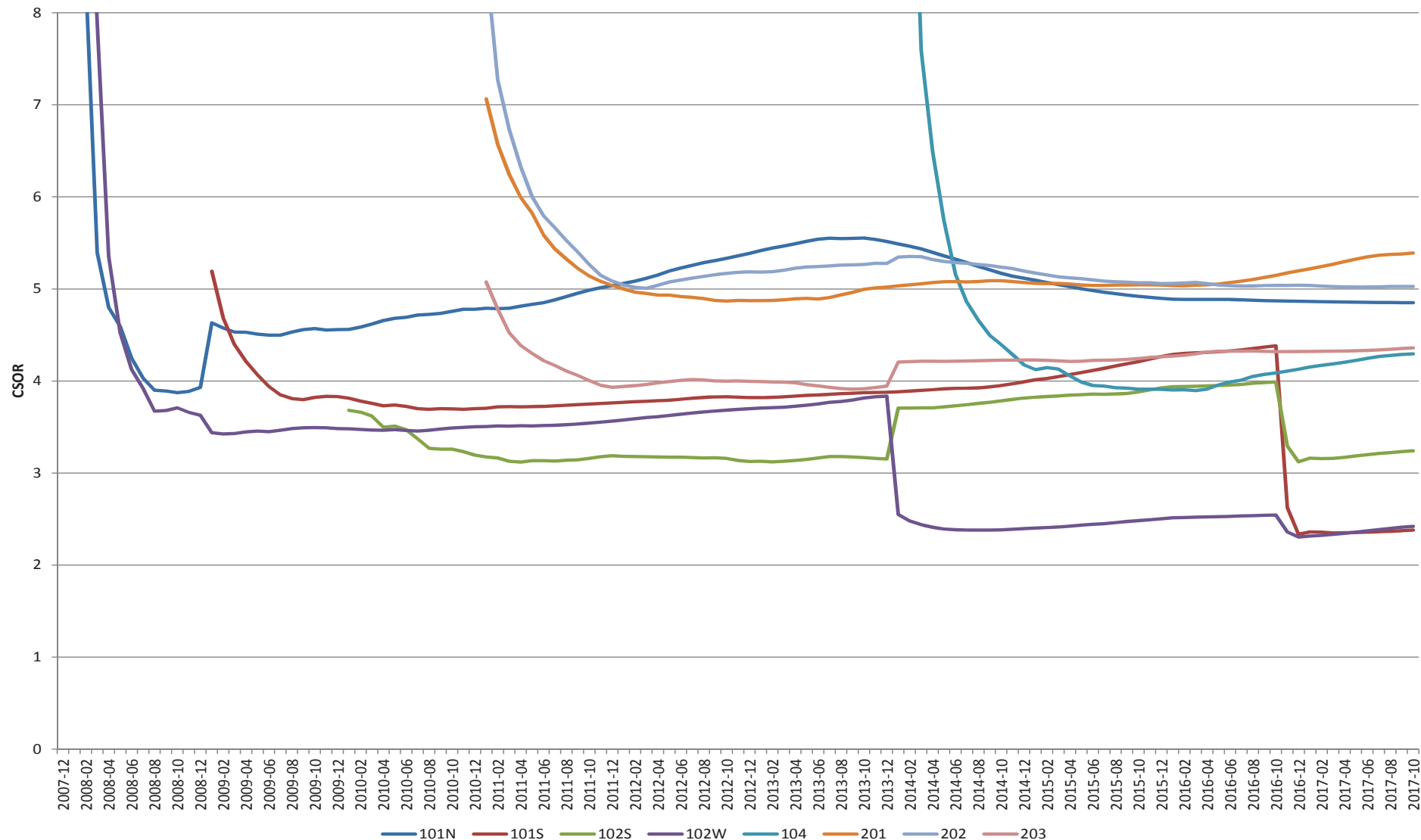
203



Great Divide Performance - Cumulative Production by Pad



Great Divide Performance - Cumulative Steam to Oil Ratio by Pad



Pod One Performance - Well Summary

| Well Pad | Well Pair | Date | Months On | Cum Oil m3 | Cum Steam m3 | Oil Rate (m3/day) | CSOR | Lift | Comments |
|----------|-----------|----------|-----------|------------|--------------|-------------------|------|-----------|---|
| 101N | 101-01 | Sep-2017 | 101 | 90,674 | 436,980 | 0.00 | 4.82 | Rod Pump | North Pad, Channel Edge, Shut-in Jan 2016 |
| 101N | 101-02 | Sep-2017 | 101 | 78,888 | 429,657 | 0.00 | 5.45 | Rod Pump | North Pad, Channel Edge, Shut-in Jan 2016 |
| 101N | 101-03 | Sep-2017 | 100 | 65,631 | 330,690 | 0.00 | 5.04 | Rod Pump | North Pad, Channel Edge, Shut-in Jan 2016 |
| 101N | 101-04 | Sep-2017 | 121 | 111,371 | 465,679 | 5.76 | 4.18 | Rod Pump | North Pad, Channel Edge, Blowdown |
| 101N | 101-05 | Sep-2017 | 110 | 104,138 | 416,764 | 0.00 | 4.00 | Metal PCP | North Pad, Channel Edge, Shut-in Oct 2016 |
| 101S | 101-06 | Sep-2017 | 121 | 128,317 | 602,886 | 11.85 | 4.70 | Rod Pump | Average Well, Channel Edge |
| 101S | 101-07 | Sep-2017 | 121 | 123,357 | 658,131 | 24.46 | 5.34 | Rod Pump | Average Well, Channel Edge |
| 101S | 101-08 | Sep-2017 | 121 | 244,773 | 897,232 | 21.30 | 3.67 | ESP | Good Well in Good Pay |
| 101S | 101-09 | Sep-2017 | 121 | 164,795 | 732,052 | 29.93 | 4.44 | ESP | Good Well in Good Pay |
| 101S | 101-10 | Sep-2017 | 121 | 197,288 | 822,848 | 32.11 | 4.17 | ESP | Good Well in Good Pay |
| 101S | 101-11 | Sep-2017 | 102 | 210,516 | 931,984 | 26.86 | 4.43 | ESP | Good Well in Good Pay |
| 101S | 101-INF7 | Sep-2017 | 25 | 13,883 | 6,268 | 53.59 | 0.45 | Rod Pump | Good Well in Good Pay |
| 101S | 101-INF8 | Sep-2017 | 37 | 51,275 | 917 | 45.22 | 0.02 | Rod Pump | Good Well in Good Pay |
| 101S | 101-INF9 | Sep-2017 | 39 | 44,160 | 3,369 | 39.25 | 0.08 | Rod Pump | Good Well in Good Pay |
| 101S | 101-INF10 | Sep-2017 | 39 | 35,239 | 9,985 | 30.89 | 0.28 | Rod Pump | Good Well in Good Pay |
| 101S | 101-INF11 | Sep-2017 | 38 | 41,508 | 2,433 | 28.29 | 0.06 | Rod Pump | Good Well in Good Pay |
| 101S | 101-INF12 | Sep-2017 | 38 | 60,363 | 1,184 | 82.45 | 0.02 | Rod Pump | Good Well in Good Pay |

Pod One Performance Well Summary (2)

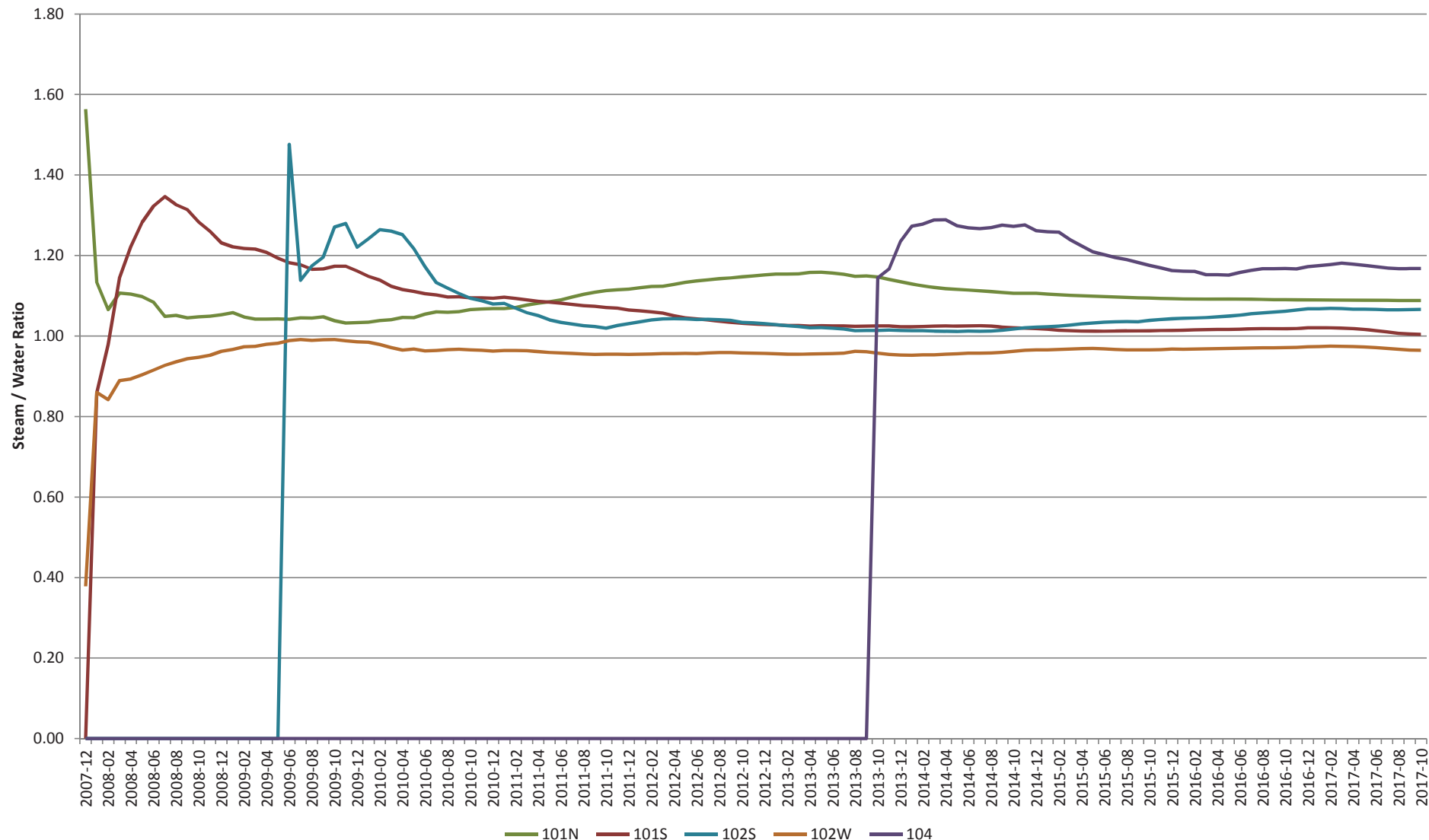
| Well Pad | Well Pair | Date | Months On | Cum Oil m3 | Cum Steam m3 | Oil Rate (m3/day) | CSOR | Lift | Comments |
|----------|-----------|----------|-----------|------------|--------------|-------------------|-------|----------|----------------------------------|
| 102W | 102-01 | Sep-2017 | 121 | 151,193 | 629,357 | 22.03 | 4.16 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-02 | Sep-2017 | 121 | 133,156 | 614,985 | 13.88 | 4.62 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-03 | Sep-2017 | 121 | 134,500 | 641,631 | 12.53 | 4.77 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-04 | Sep-2017 | 121 | 153,727 | 669,120 | 9.31 | 4.35 | ESP | Average Well, Crosses Channel |
| 102W | 102-05 | Sep-2017 | 121 | 159,089 | 776,755 | 6.47 | 4.88 | ESP | Average Well, Crosses Channel |
| 102S | 102-12 | Sep-2017 | 102 | 262,111 | 952,348 | 71.32 | 3.63 | ESP | Good Well in Good Pay |
| 102S | 102-13 | Sep-2017 | 90 | 109,112 | 472,609 | 38.97 | 4.33 | ESP | Average Well, Channel Edge |
| 102S | 102-14 | Sep-2017 | 89 | 136,143 | 588,070 | 42.45 | 4.32 | ESP | Average Well, Channel Edge |
| 102W | 102-INF02 | Sep-2017 | 50 | 30,887 | 352 | 37.73 | 0.01 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-INF03 | Sep-2017 | 51 | 47,510 | 434 | 39.69 | 0.01 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-INF04 | Sep-2017 | 51 | 48,884 | 993 | 34.95 | 0.02 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-INF05 | Sep-2017 | 51 | 42,538 | 2,465 | 25.53 | 0.06 | Rod Pump | Average Well, Crosses Channel |
| 102W | 102-INF06 | Sep-2017 | 29 | 35,406 | 1,718 | 45.09 | 0.05 | Rod Pump | Good Well in Good Pay |
| 102W | 102-INF13 | Sep-2017 | 24 | 17,513 | 308,241 | 40.30 | 17.60 | Rod Pump | Good Well in Good Pay |
| 102W | 102-INF14 | Sep-2017 | 9 | 18,810 | 243,795 | 65.37 | | | Good Well in Average Pay |
| 104S | 104-03 | Sep-2017 | 49 | 116,991 | 368,422 | 97.71 | 3.15 | ESP | Good Well, Thief Zone Impacts |
| 104S | 104-04 | Sep-2017 | 49 | 88,484 | 244,514 | 69.10 | 2.76 | ESP | Good Well, Thief Zone Impacts |
| 104S | 104-05 | Sep-2017 | 49 | 77,944 | 56,719 | 55.76 | 0.73 | ESP | Good Well, Thief Zone Impacts |
| 104S | 104-06 | Sep-2017 | 49 | 50,032 | 42,067 | 30.14 | 0.84 | ESP | Average Well, Thief Zone Impacts |

Algar Performance - Well Summary

| Well Pad | Well Pair | Date | Months On | Cum Oil m3 | Cum Steam m3 | Oil Rate (m3/day) | CSOR | Lift | Comments |
|----------|-----------|----------|-----------|------------|--------------|-------------------|------|----------|-------------------------------|
| 201 | 201-01 | Sep-2017 | 89 | 201,132 | 933,107 | 69.94 | 4.64 | Gas Lift | Good Well, Good Pay, BW |
| 201 | 201-02 | Sep-2017 | 89 | 195,518 | 845,712 | 60.56 | 4.33 | Gas Lift | Good Well, Good Pay, BW |
| 201 | 201-03 | Sep-2017 | 89 | 65,455 | 404,832 | 8.74 | 6.18 | Rod Pump | Intermittent, Sand Issues, BW |
| 201 | 201-04 | Sep-2017 | 89 | 75,625 | 432,353 | 10.28 | 5.72 | Rod Pump | BW / Evaluating Pump Strategy |
| 201 | 201-05 | Sep-2017 | 89 | 71,977 | 445,793 | 9.87 | 6.19 | Rod Pump | BW / Evaluating Pump Strategy |
| 202 | 202-01 | Sep-2017 | 89 | 76,608 | 207,678 | 50.58 | 2.71 | Gas Lift | Edge Well |
| 202 | 202-02 | Sep-2017 | 89 | 157,000 | 718,506 | 48.55 | 4.58 | Gas Lift | Good Well in Good Pay |
| 202 | 202-03 | Sep-2017 | 89 | 98,882 | 561,166 | 33.99 | 5.68 | Gas Lift | Average Well, BW |
| 202 | 202-04 | Sep-2017 | 89 | 99,425 | 575,199 | 43.51 | 5.79 | Gas Lift | Average well, BW |
| 202 | 202-05 | Sep-2017 | 89 | 131,045 | 723,724 | 40.49 | 5.52 | Gas Lift | Good Well in Good Pay |
| 202 | 202-01-1 | Sep-2017 | 54 | 90,323 | 523,662 | 43.94 | 5.80 | Gas Lift | Good Well in Good Pay |
| 203 | 203-01 | Sep-2017 | 89 | 169,153 | 643,365 | 60.77 | 3.80 | Gas Lift | Average Well, Good Pay, Edge |
| 203 | 203-02 | Sep-2017 | 89 | 185,435 | 681,305 | 109.48 | 3.67 | Gas Lift | Good Well in Good Pay |
| 203 | 203-03 | Sep-2017 | 89 | 164,152 | 706,693 | 63.66 | 4.31 | Gas Lift | Good Well in Good Pay |
| 203 | 203-04 | Sep-2017 | 89 | 175,634 | 712,266 | 65.24 | 4.06 | Gas Lift | Good Well in Good Pay |
| 203 | 203-05 | Sep-2017 | 89 | 205,451 | 828,337 | 58.21 | 4.03 | Gas Lift | Good Well in Good Pay |
| 203 | 203-06 | Sep-2017 | 89 | 146,423 | 675,939 | 53.52 | 4.62 | Gas Lift | Average Well, Near Edge |
| 203 | 203-07 | Sep-2017 | 89 | 93,997 | 537,226 | 37.56 | 5.72 | Gas Lift | Edge Well, Delayed Start Up |

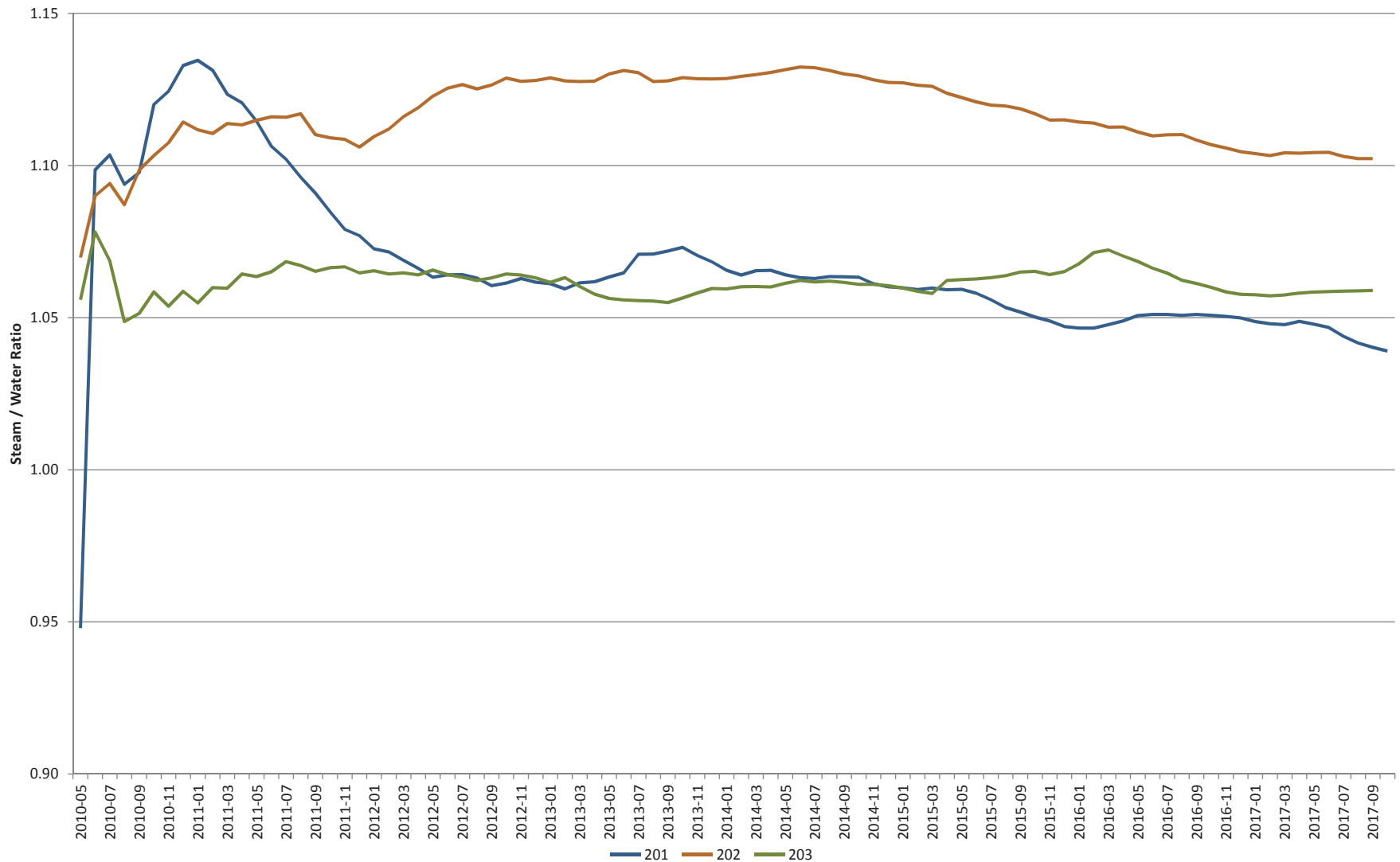
Pod One - Water Balance

Cumulative Steam In / Water Produced



Algar - Water Balance

Cumulative Steam In / Water Produced

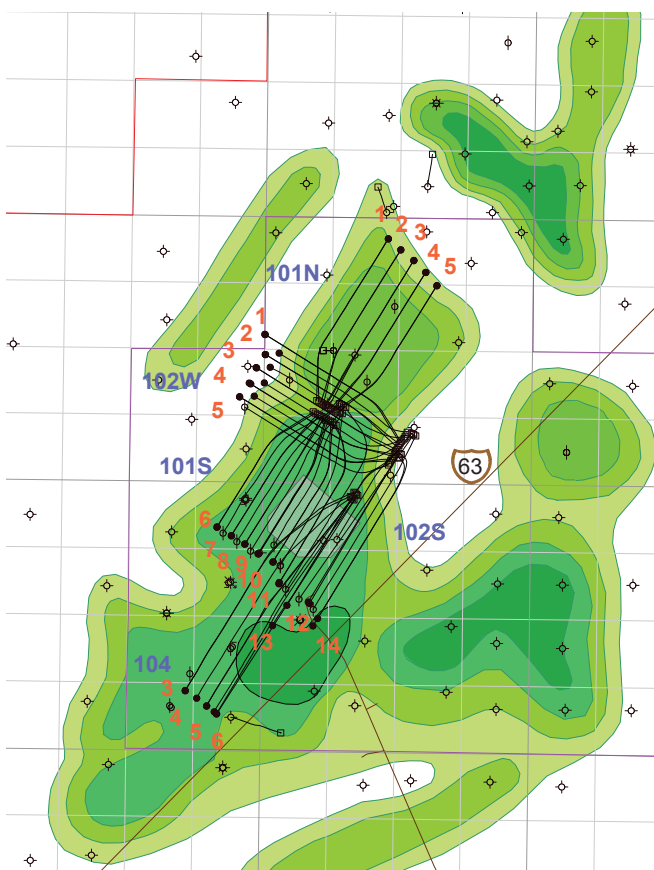


Pod One - Recoverable Bitumen By Pad

| Pad | Area | Average Porosity (%) | Average So (%) | Average Net Pay (m) | Pad OBIP (e³m³) | To Date Recovery (e³m³) | To Date Recovery (%) | Estimated Ultimate Recovery (%) | Estimated Ultimate Recovery (e³m³) |
|------|------|----------------------|----------------|---------------------|-----------------|-------------------------|----------------------|---------------------------------|------------------------------------|
| 101N | 29.6 | 33 | 74 | 18.0 | 1,300 | 451 | 34.7 | 34.8 | 452 |
| 101S | 32.6 | 33 | 80 | 20.0 | 1,720 | 1,315 | 76.5 | 85.0 | 1,462 |
| 102W | 31.6 | 33 | 80 | 17.0 | 1,420 | 937 | 66.0 | 75.0 | 1,065 |
| 102S | 32.7 | 33 | 80 | 19.0 | 1,640 | 544 | 33.2 | 80.0 | 1,312 |
| 104 | 70.3 | 33 | 80 | 21.5 | 4,030 | 333 | 8.3 | 80.0 | 3,224 |

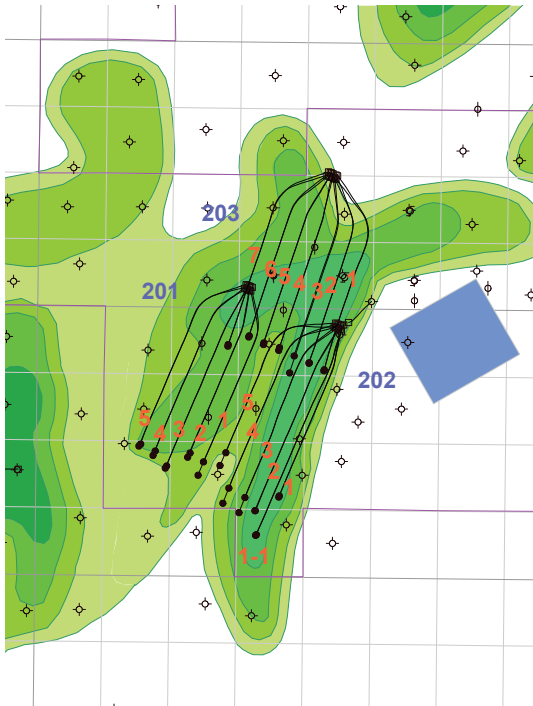
Notes:

1. Pad 101N only 101-04 and 101-05 are producing
2. Additional of estimated infill recoveries of approximately 8% for Pads 101S, 102W, 102S, and 104
3. Estimated Pad Recovery is based on the basic SAGD process
4. Pad 101N injectors were plugged back approximately 1/3 back from well toes
5. Initial Pad recoveries are proving to be on the conservative side



Algar - Recoverable Bitumen by Pad

| Pad | Area | Average Porosity (%) | Average So (%) | Average Net Pay (m) | Pad OBIP (e ³ m ³) | To Date Recovery (e ³ m ³) | To Date Recovery (%) | Estimated Ultimate Recovery (%) | Estimated Ultimate Recovery (e ³ m ³) |
|-----|------|----------------------|----------------|---------------------|---|---|----------------------|---------------------------------|--|
| 201 | 47.1 | 33 | 75 | 19.0 | 1,930 | 610 | 31.6 | 75.0 | 1,448 |
| 202 | 45.6 | 33 | 75 | 18.0 | 1,890 | 653 | 34.6 | 80.0 | 1,512 |
| 203 | 56.7 | 33 | 75 | 22.0 | 3,040 | 1,140 | 37.5 | 80.0 | 2,432 |



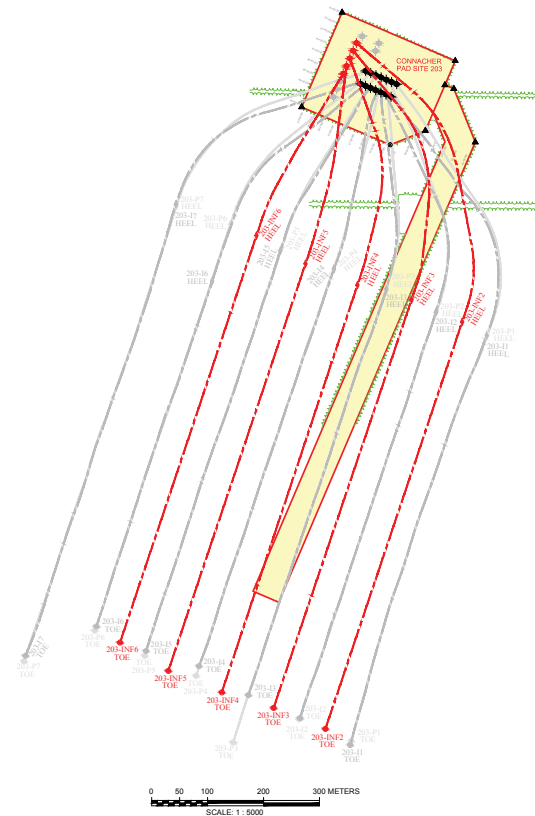
Notes:

1. Pad 203 has completed SAGD+[®] on a trial basis. Reserves will be adjusted when the commercial project begins. An additional recovery between 5 to 8% of the OBIP is estimated.
2. Estimated Pad Recovery is based on the basic SAGD process.

Subsurface - Future Plans

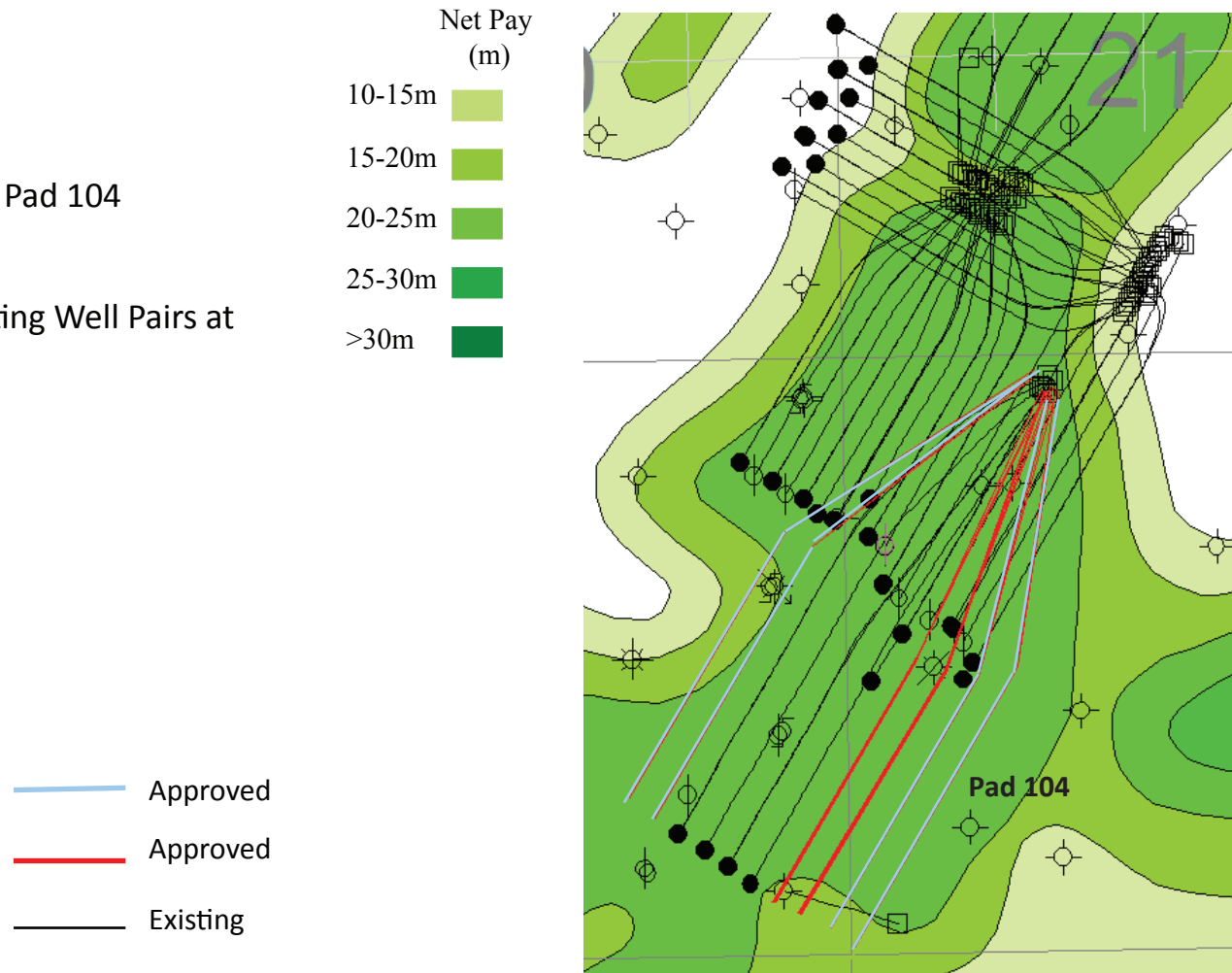
Algar - Pad 203 Infills

- Commercial Scheme Approval 10587Q
- 5 Infills Approved at Pad 203

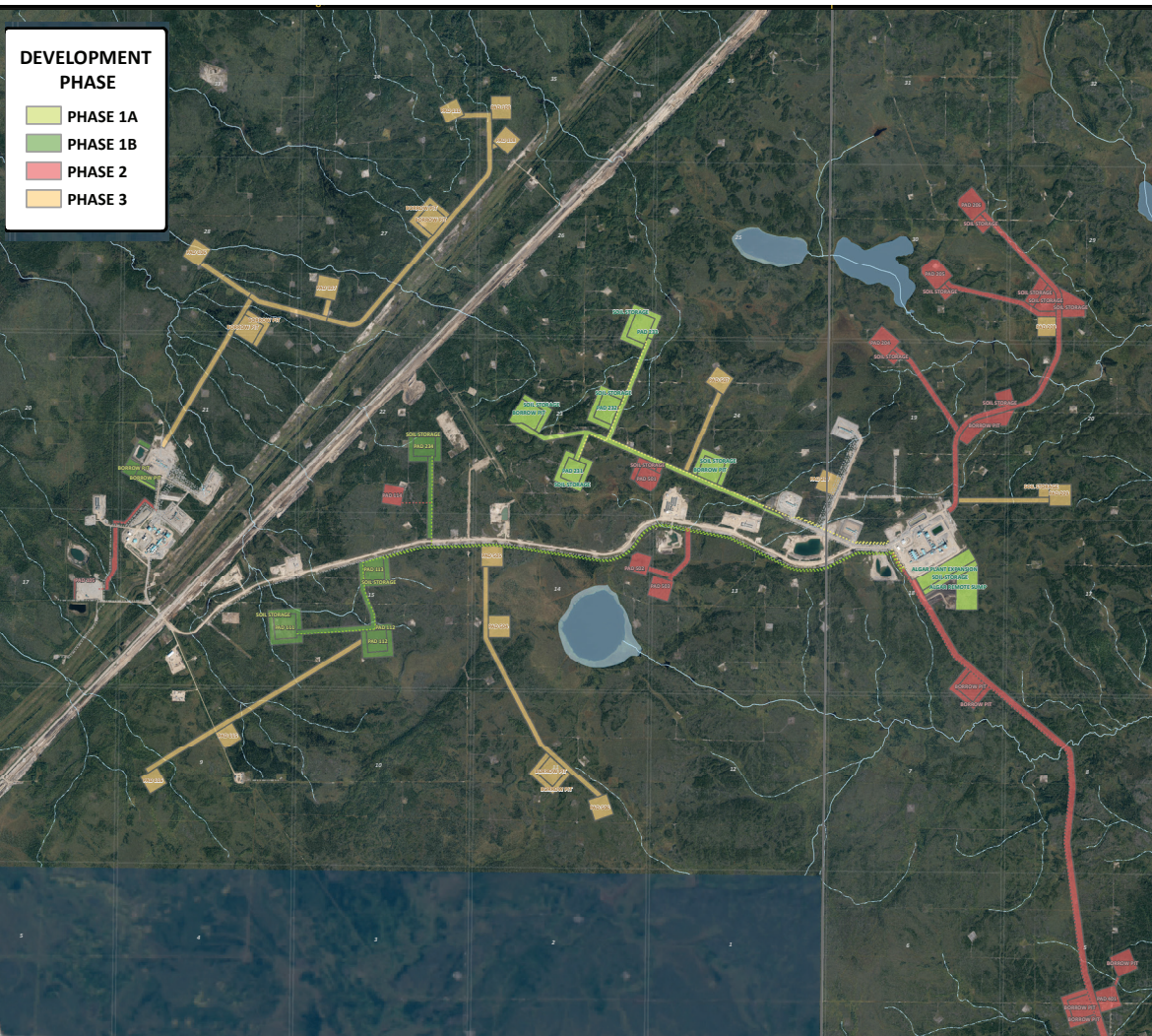


Pod One - Pad 104 Well Pairs

- 10 Well Pair Approved for Pad 104 (Approval 10587H)
- Currently there are 4 existing Well Pairs at Pad 104



Great Divide SAGD Expansion Project



- EIA Deemed Complete
- Commercial Scheme Approval Received September, 2012
- EPEA Approval Amendment Received December, 2013
- Approved for expansion to 44,000 bbl/day

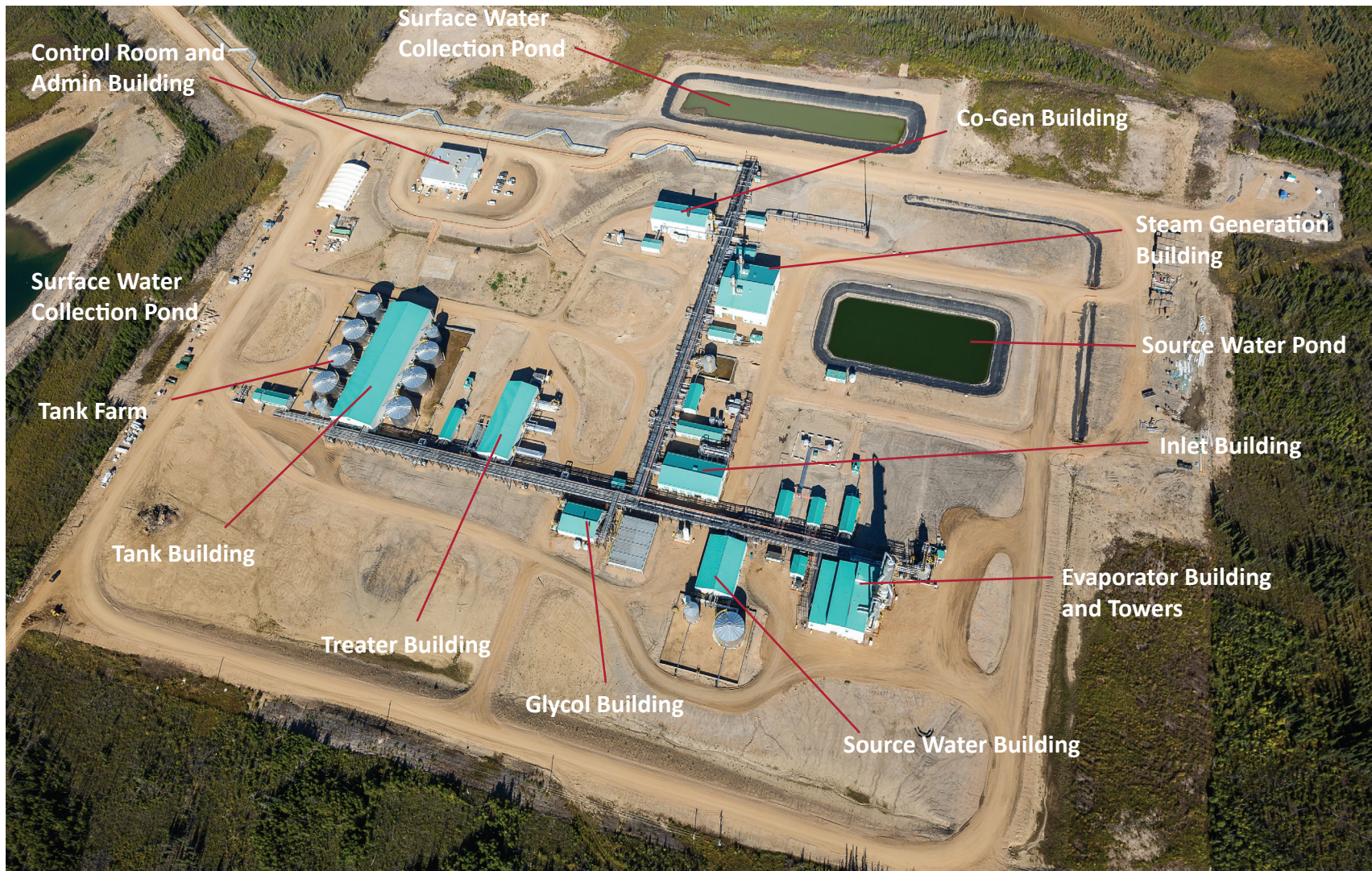
Surface - Facilities



Pod One Plant



Algar Plant



Key Points

Design Capacity ~ 1,600 m³/day bitumen

Steam Generation: Drum boilers

Operating pressure 6,300 kPa

Deliver 4,300 m³/day steam @ 98% + Quality

Treating: Diluent addition

Water Recycle: IGF, WS Filter, Two vertical tube falling film evaporator towers

Waste Water: Waste water shipped to Algar 2nd Stage Evaporators

Source water: 3 operating source water wells in the Lower Grand Rapids formation, 1 other source water well approved

Key Points

Design Capacity ~ 1,600 m³/day bitumen

Steam Generation: Drum boilers

Operating pressure 6,700 kPa

Deliver 4,800 m³/day steam @ 98% + Quality

Treating: Diluent addition

Water Recycle: IGF, WS Filter, Two vertical tube falling film evaporator towers

Waste Water: All water shipped from facility to approved disposal sites

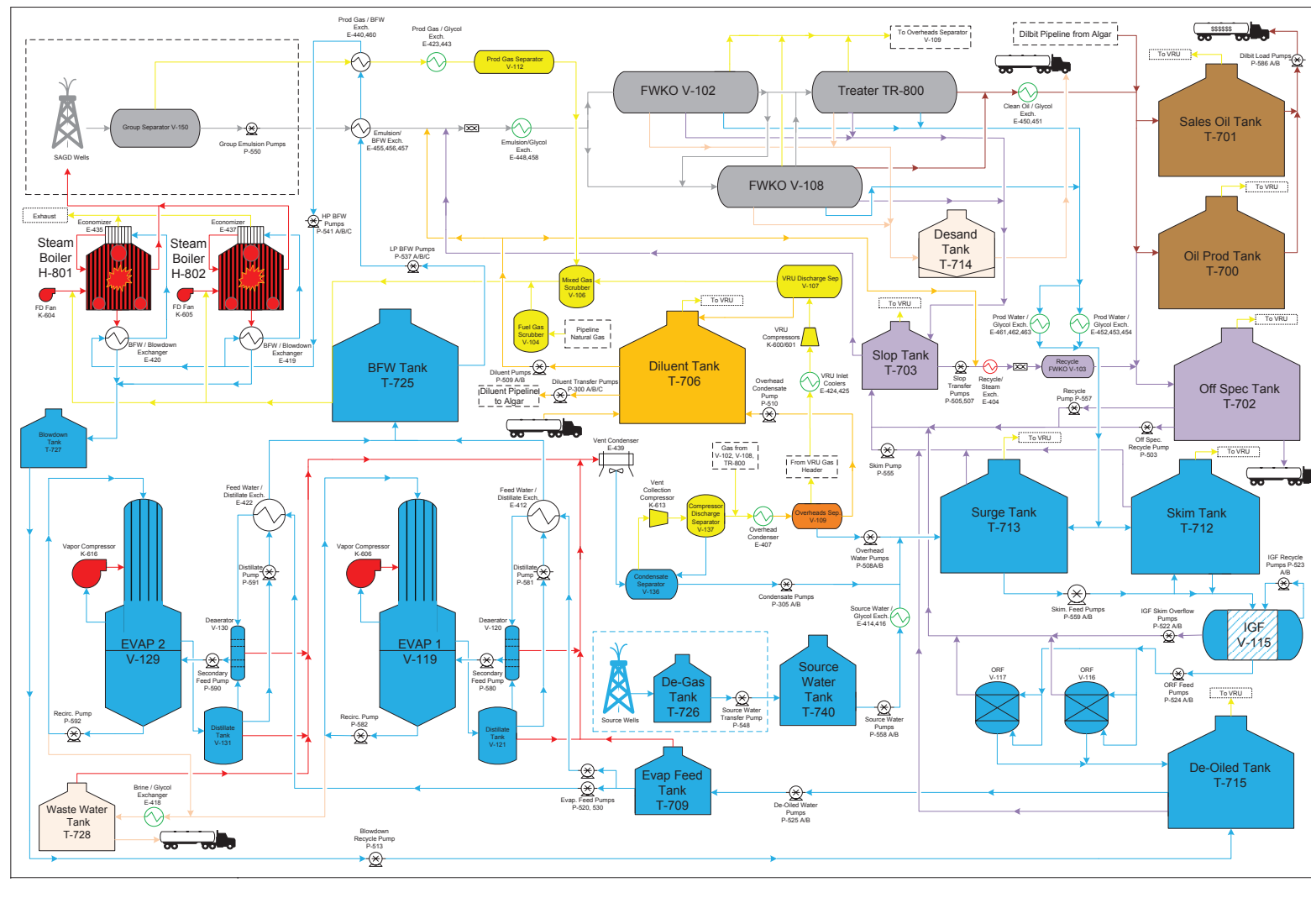
Source water: 3 operating source water wells in the Lower Grand Rapids formation, 1 other source water well approved

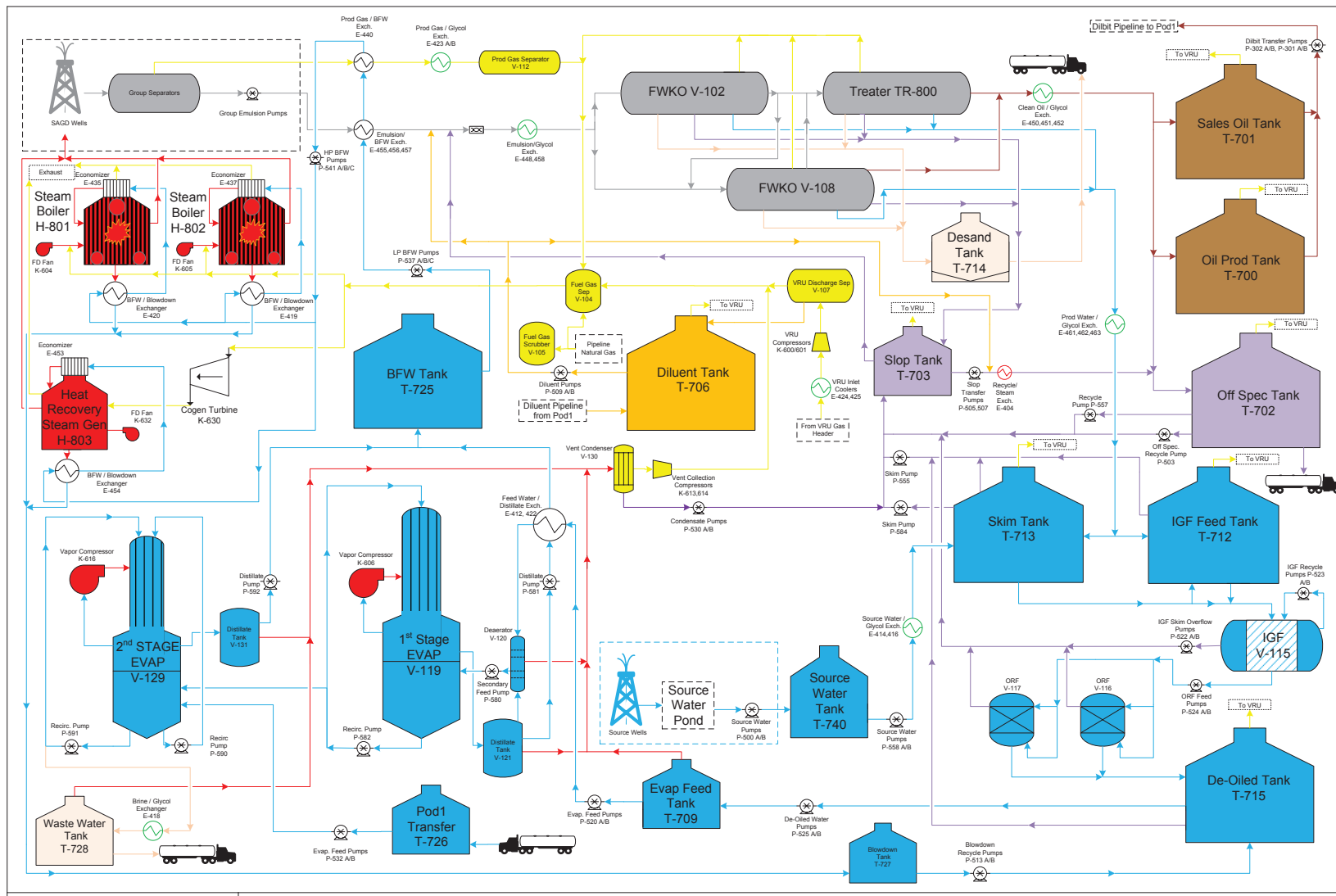
Pod One

- Produced water disposal truck unloading station at Pad 101
- Replaced heat trace on Pad 101 and 102
- Installed new style of clean oil exchanger downstream of FWKO
- VRU discharge header piping changed to Stainless Steel

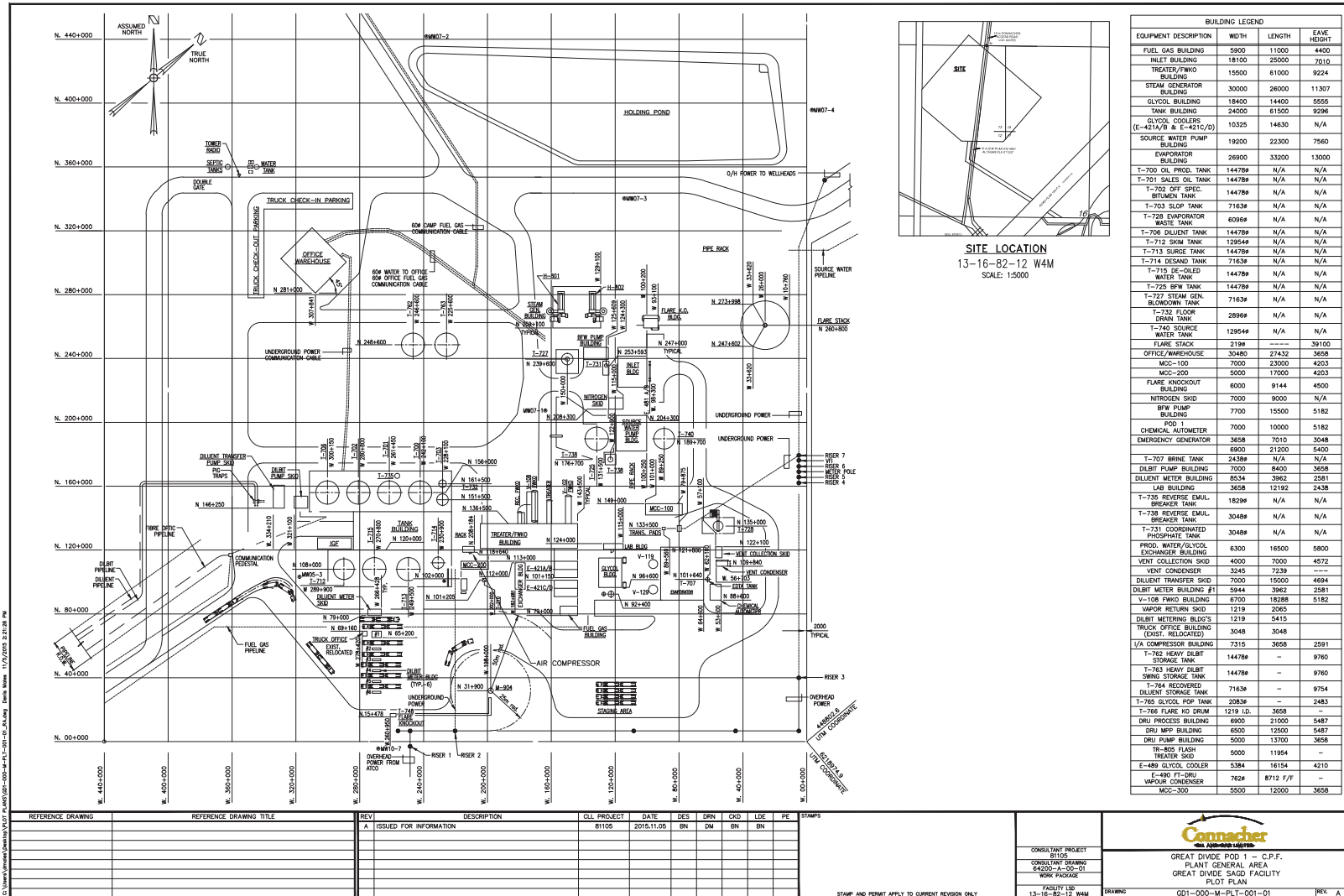
Algar

- Installed nozzle on Off-Spec Tank to allow cleaning while in service
- Moved FE-242 Injection from Evaporator building to tank farm for longer retention period
- Replaced thief hatches with stainless steel thief hatches

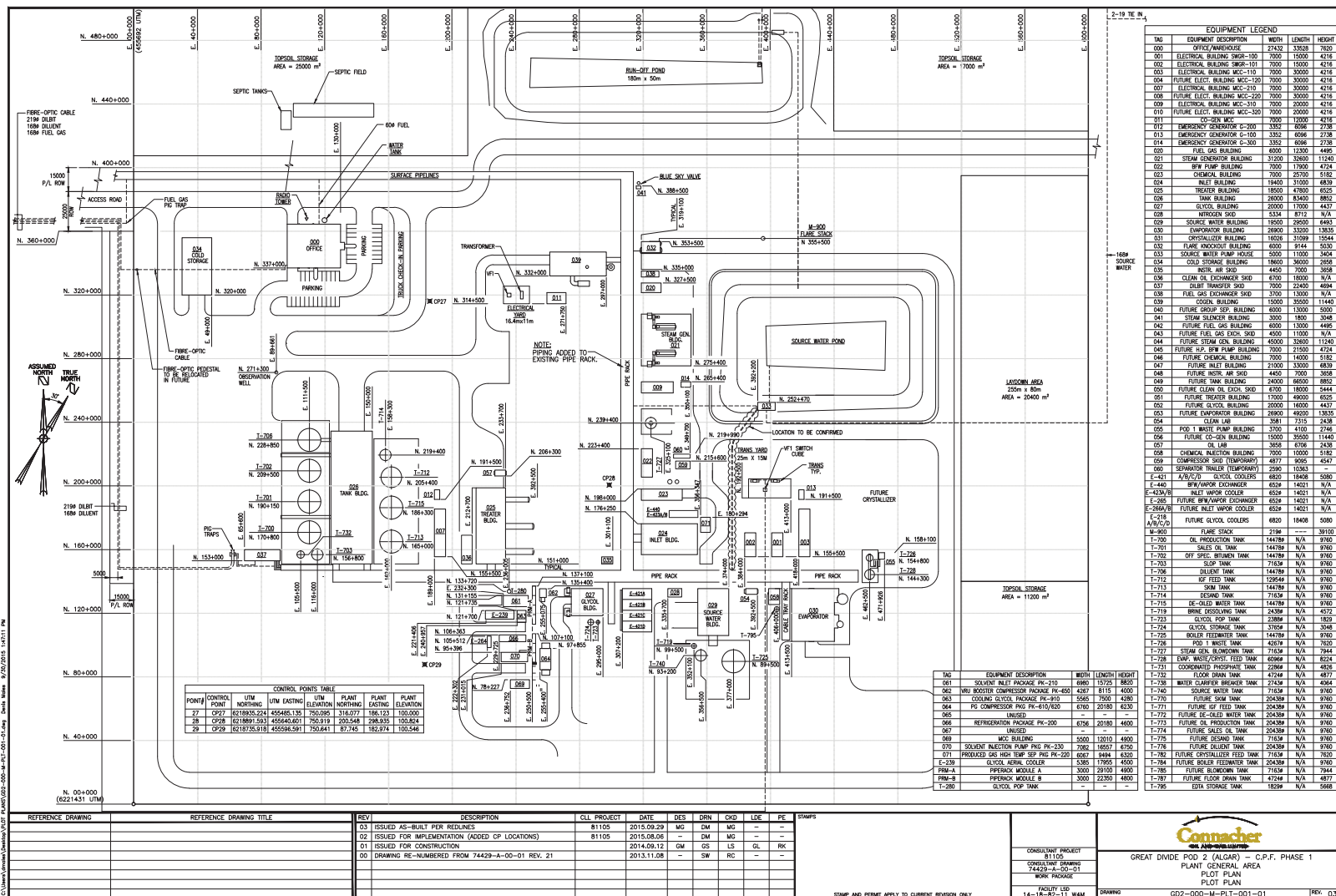




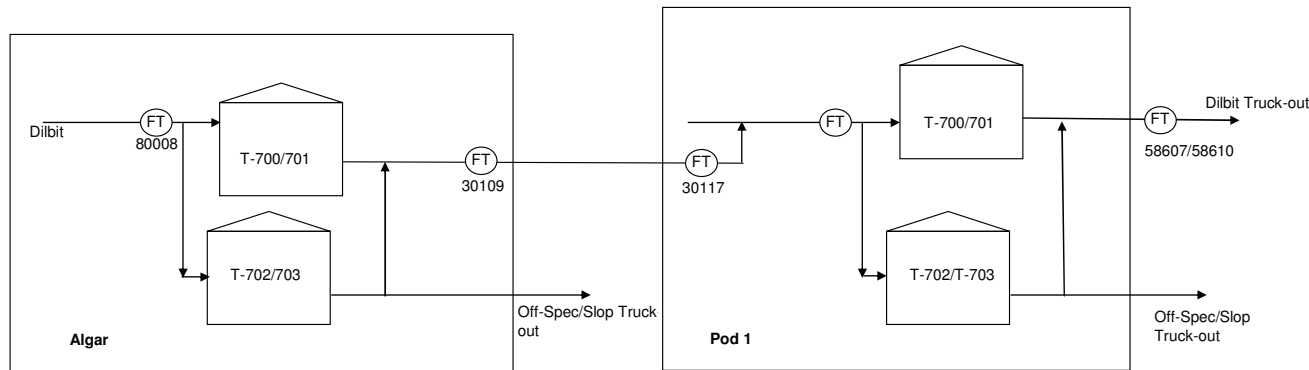
Pod One Plant Layout



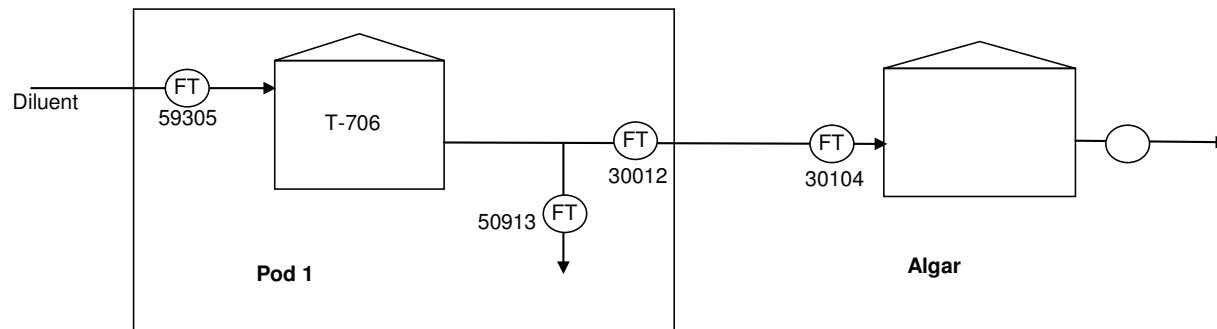
Algar Plant Layout



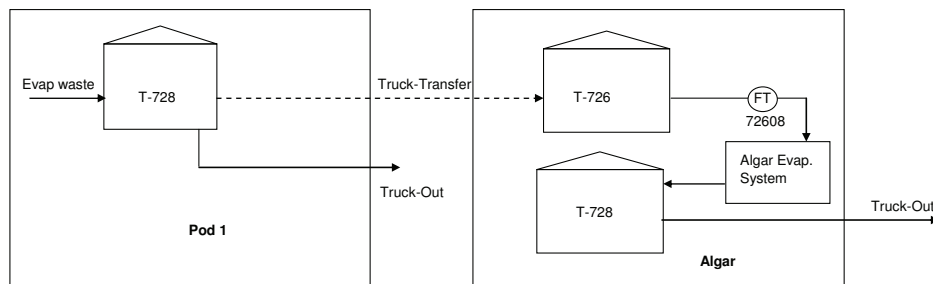
Pod One and Algar Integration



Dilbit



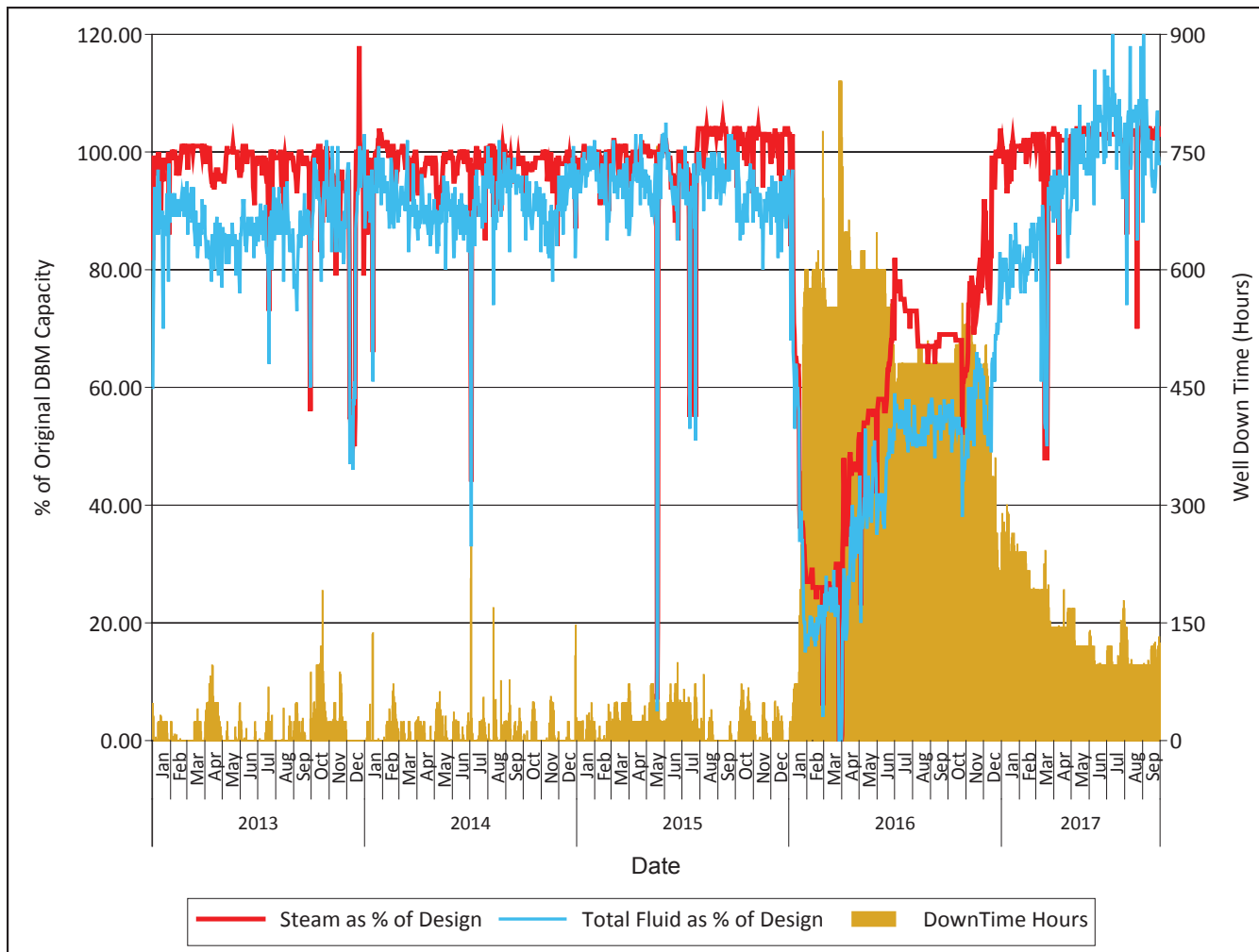
Diluent



Evap Waste

Surface - Facility Performance

Pod One CPF Performance



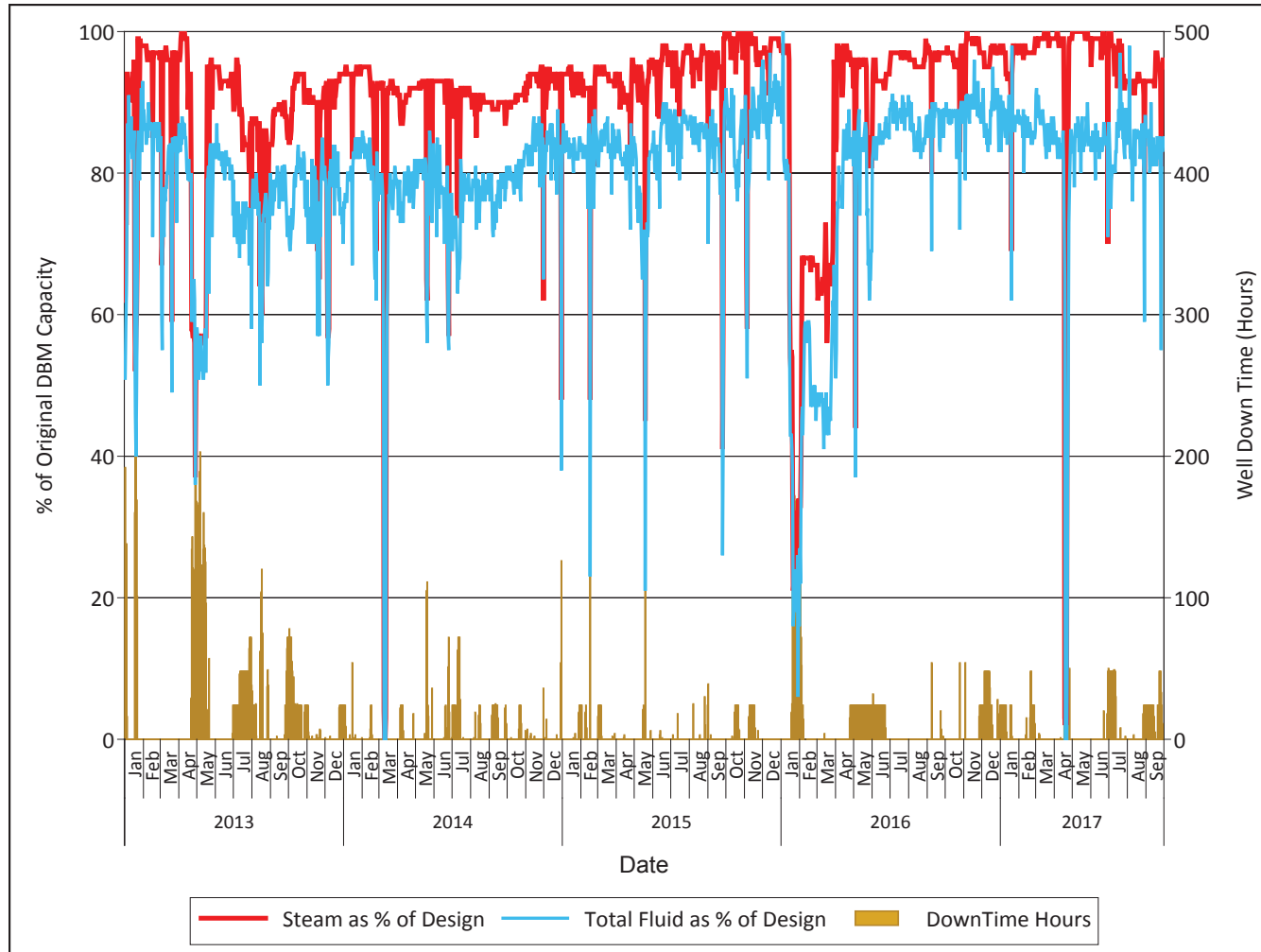
The reliability considers the two steam Boilers at the plant.

For the period October 1, 2016 to September 30, 2017 the steam plant has averaged 95.4% of the original design basis (4,320 m³ /day) and 85.5% of the designed total fluid capacity (5,920 m³/day).

This performance compares to the previous 12 months. Which had a steam generation of 65.7% and a total fluid throughput of 54.0% of plant design capacity.

Downtime Hours is the reported downtime for the Well Pairs.

Algar CPF Performance



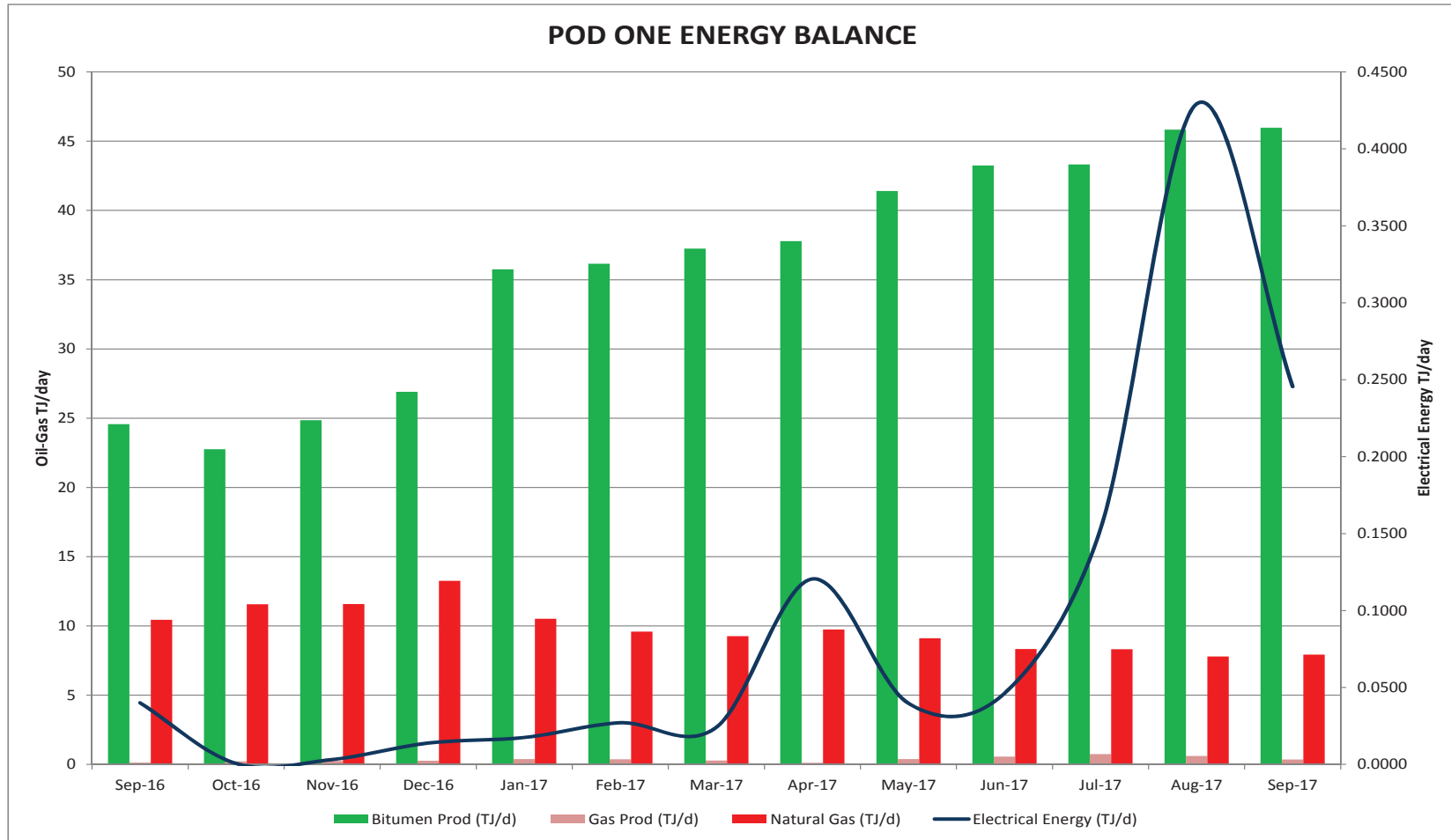
The reliability considers the two steam Boilers at the plant. The Cogen steam is not included.

For the 12 months from October 1 2016, to the of September 30, 2017 the steam plant output has averaged 96.7% of the original design basis (4800 m3 /day) and 85.0% of the designed total fluid handling capacity (6400 m3/day).

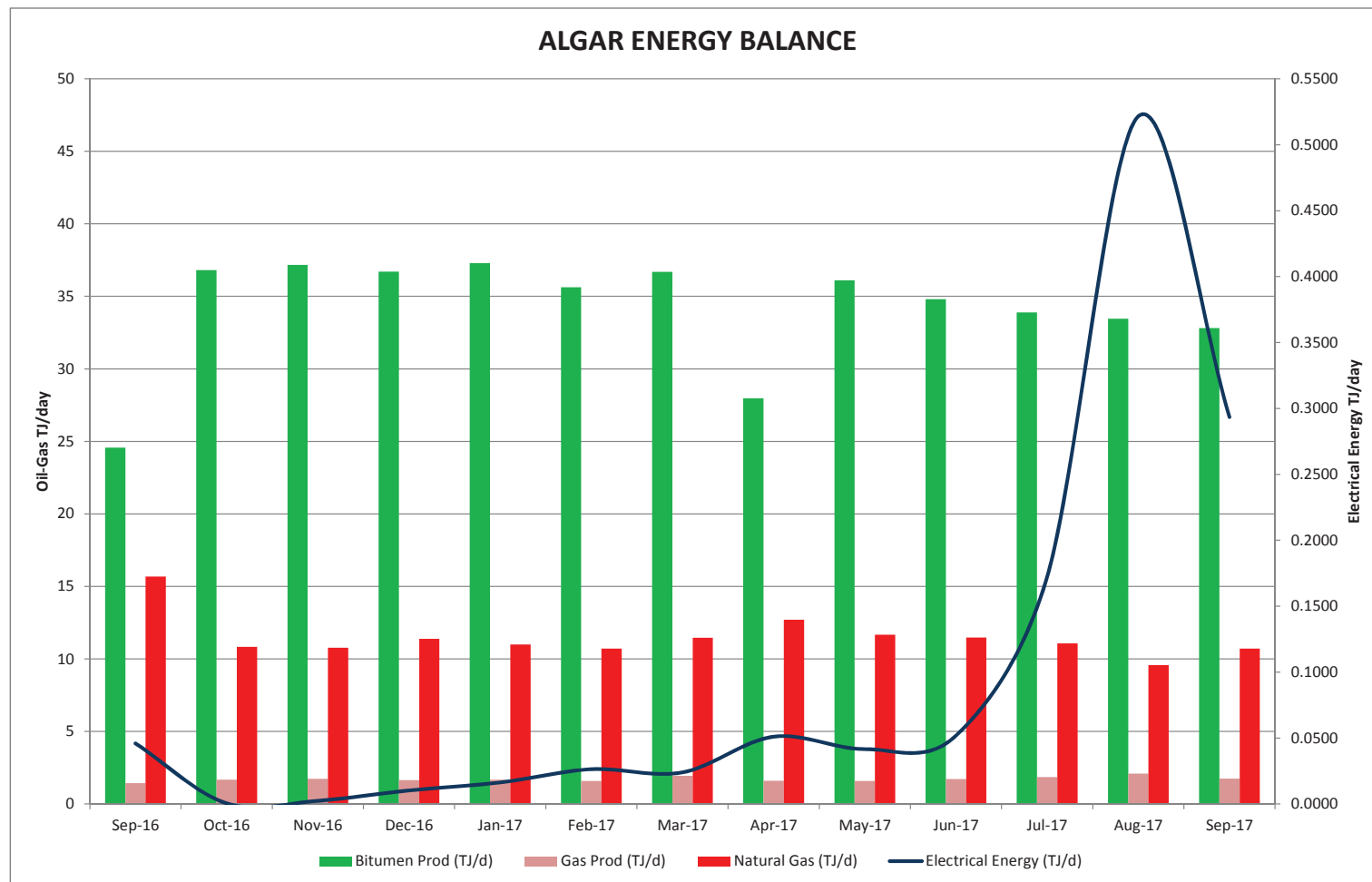
This performance compares to the previous 12 months which had a steam generation of 79.5% and total fluid throughput of 76.9% of plant design capacity.

Downtime Hours is the reported downtime for the Well Pairs.

Pod One Energy Balance



Greenhouse Gas Emissions Reported for December, 2016 = 144,502 t CO₂ equivalent



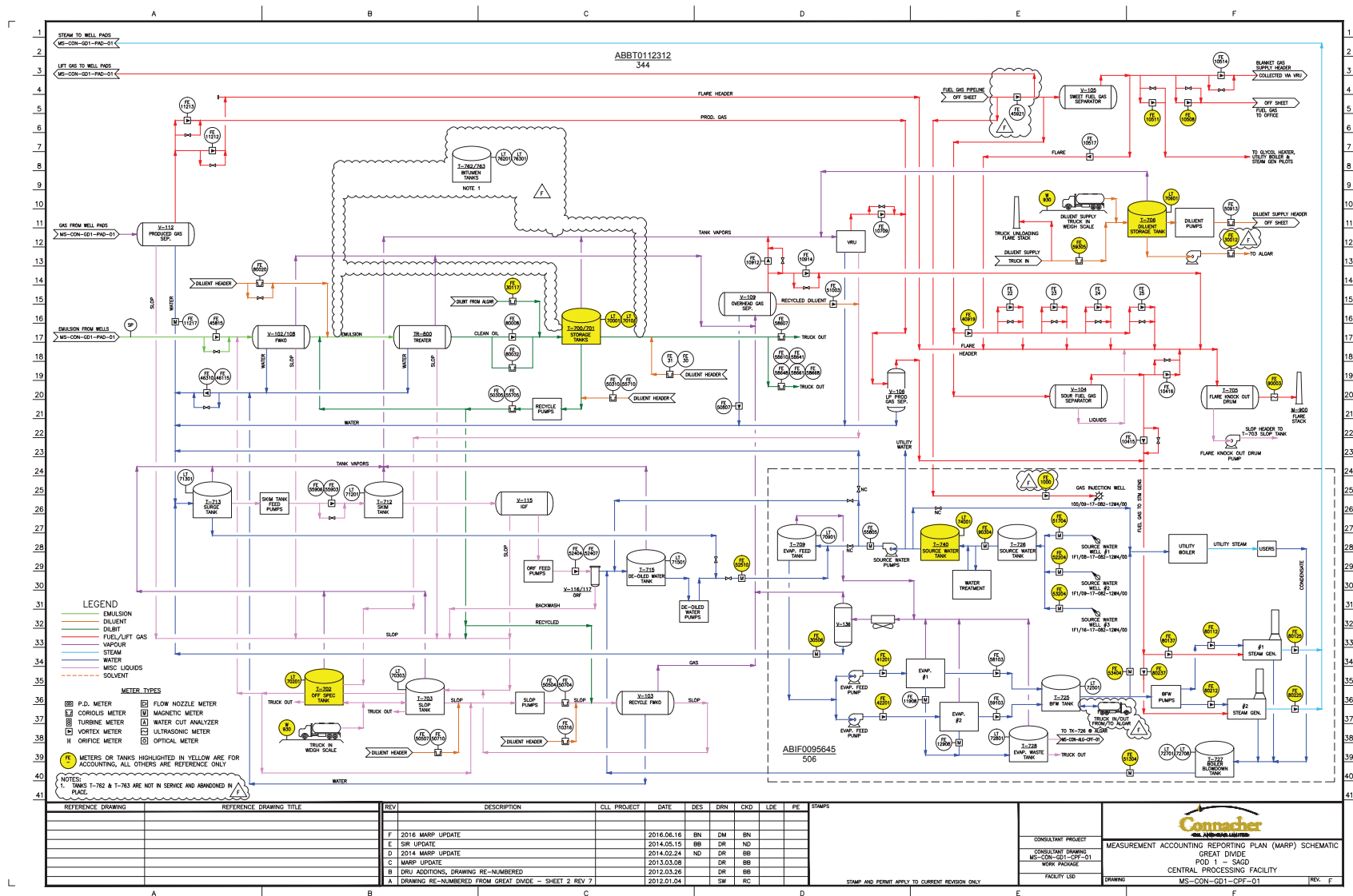
Greenhouse Gas Emissions Reported for December, 2016 = 265,358 t CO₂ equivalent

- Designed to produce 13.1 MW electricity from GT and 588 m³/d of steam from the HRSG
- Horse River sub-station on line June 2011
- Running near capacity with power distributed to both Algar and Pod One
- Steam being used at Algar

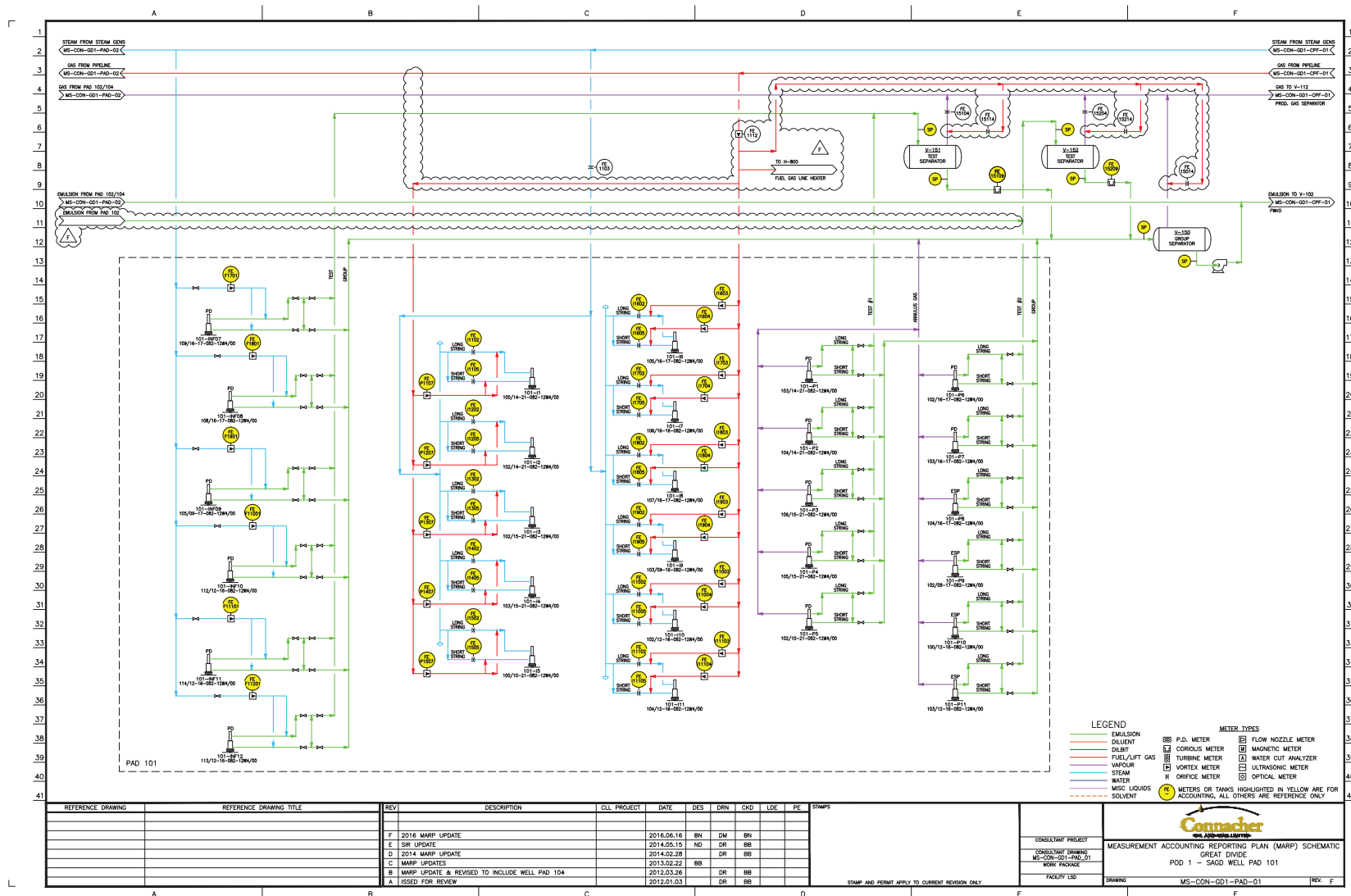
Surface - Measurement and Reporting

1. Minor changes and corrections on the 2017 MARP, manual and schematics to implement comments from AER review

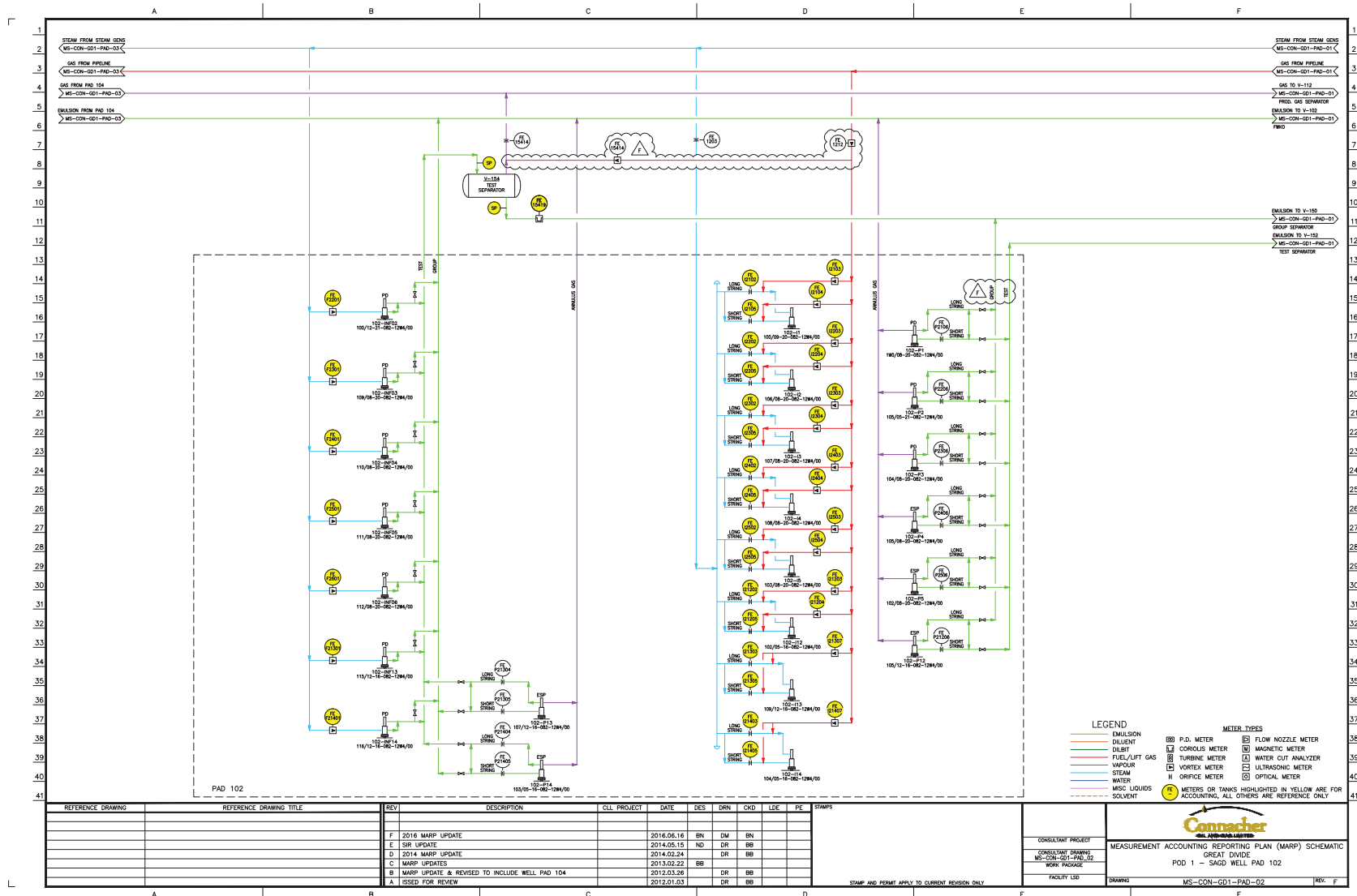
Pod One MARP - CPF



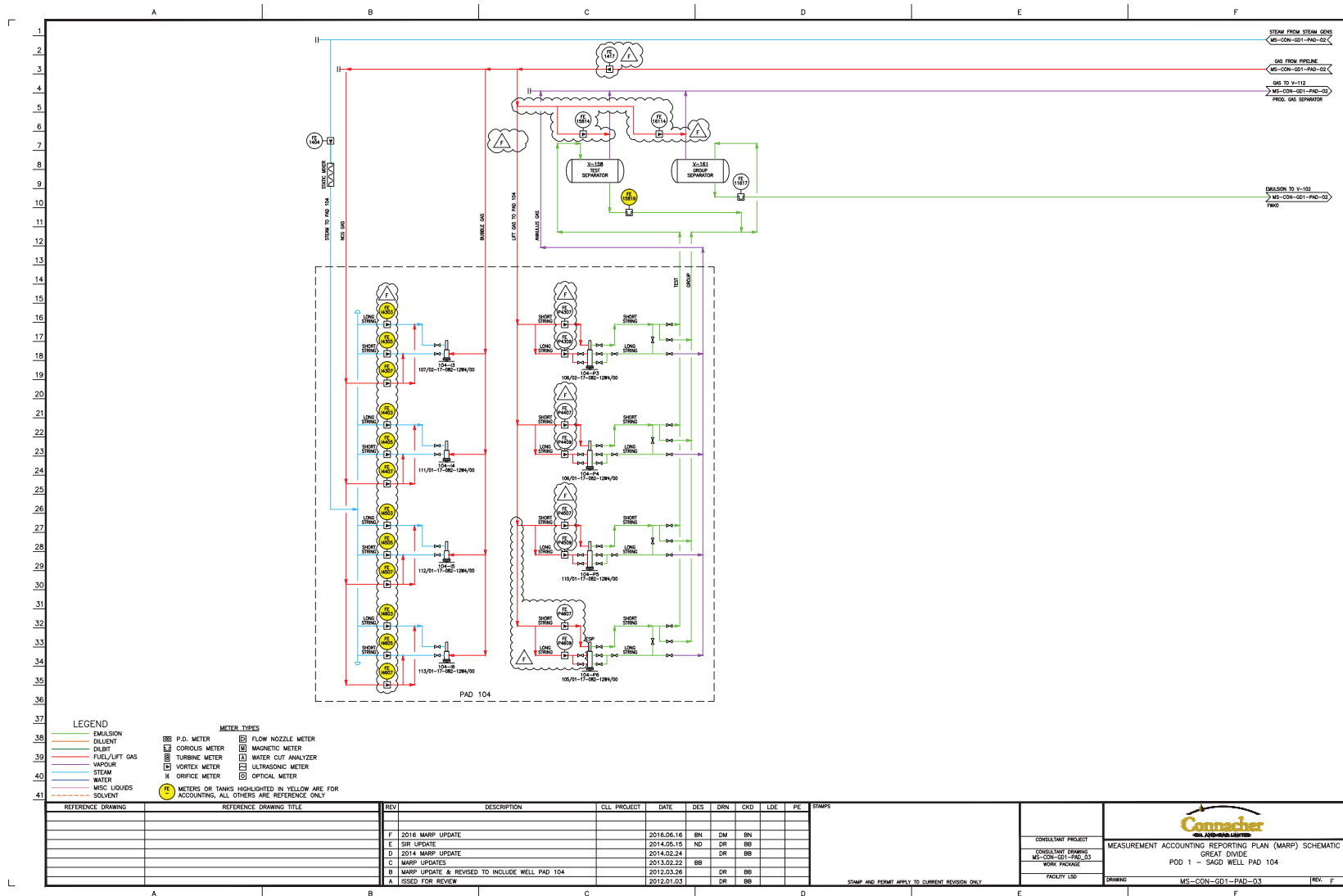
Pod One MARP - Pad 101

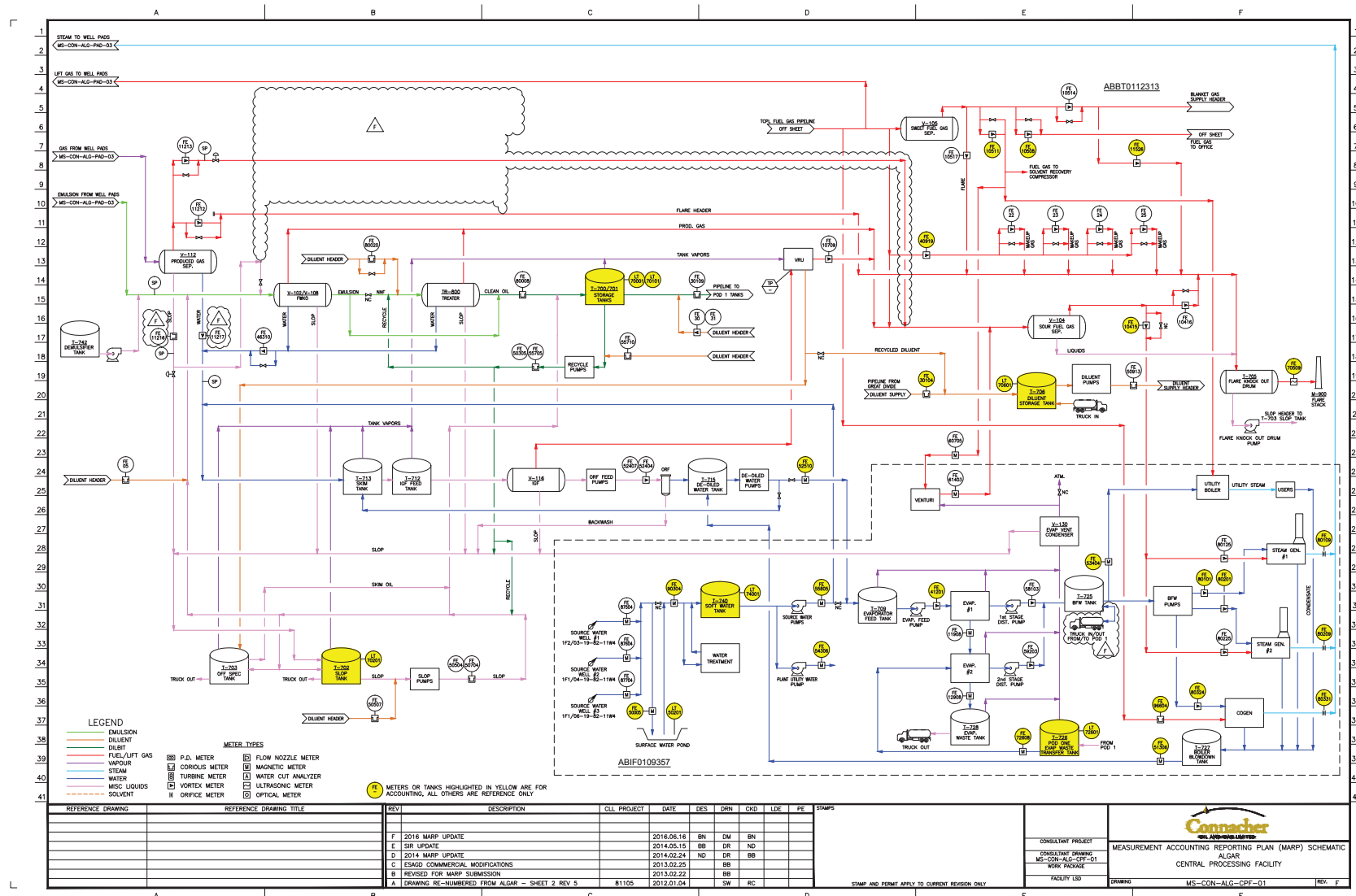


Pod One MARP - Pad 102

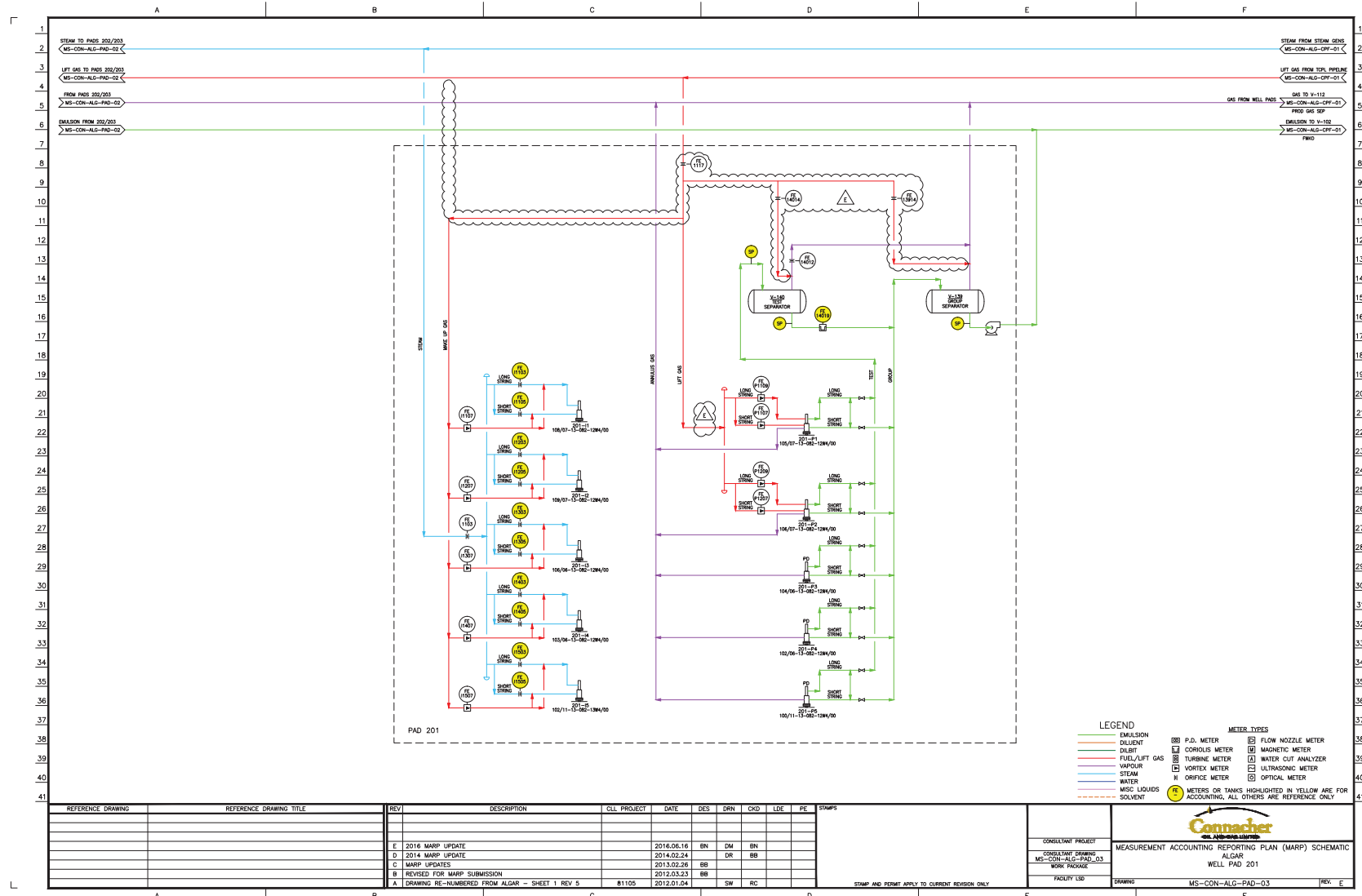


Pod One MARP - Pad 104

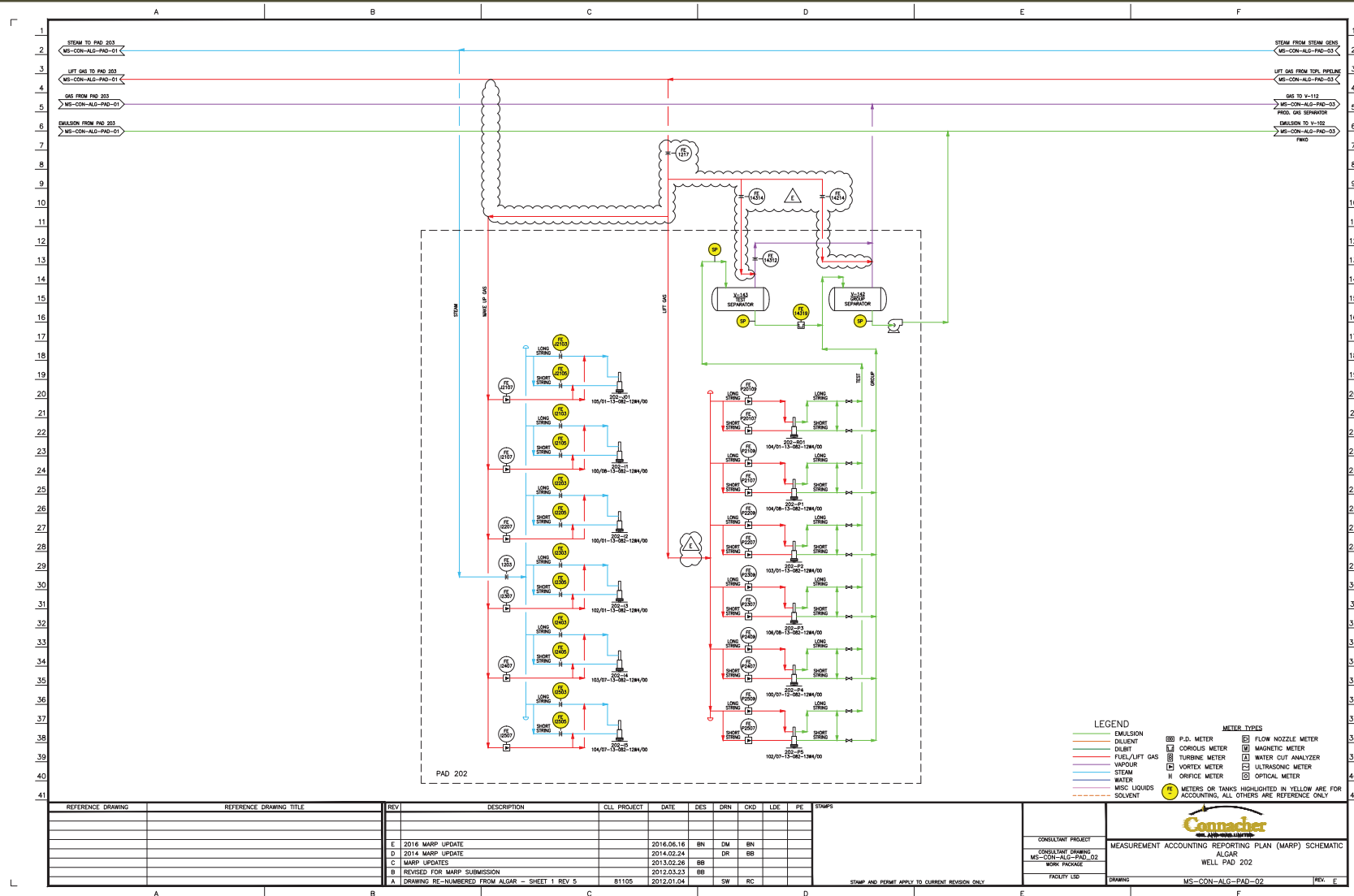




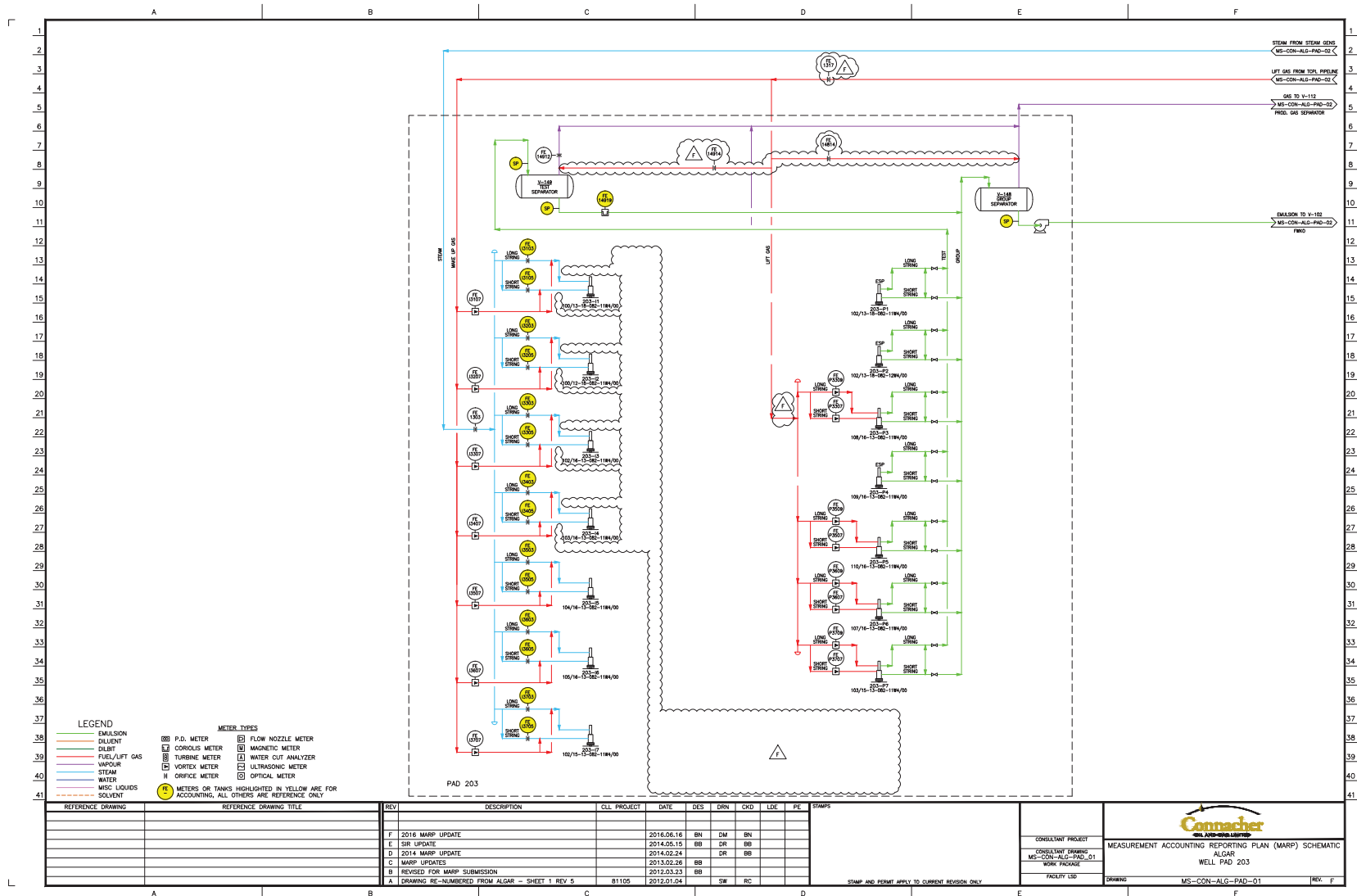
Algar MARP - Pad 201



Algar MARP - Pad 202

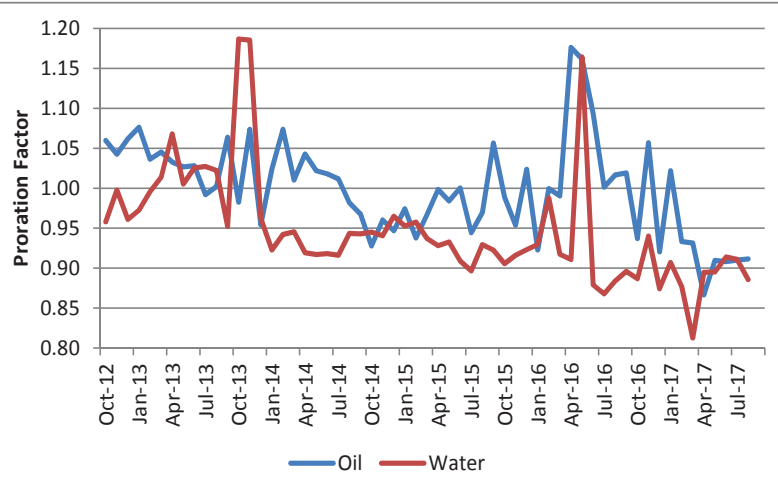


Algar MARP - Pad 203



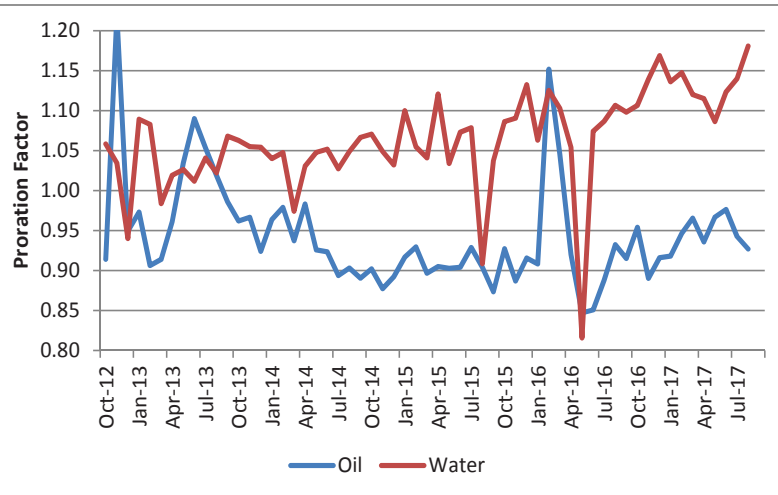
Pod One and Algar Proration Factors

Pod One



Pod One uses manual oil cuts however procedures implemented 2012 are clearly showing improved results.

Algar



The proration factor at Algar is calculated from the interconnect pipeline volumes whereas the Pod One proration factor is calculated from truck receipts less the Algar pipeline volumes and is subject to typical truck measurement differences.

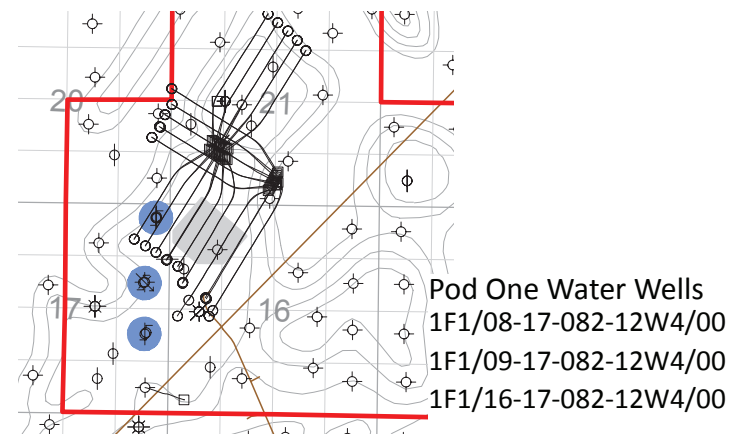
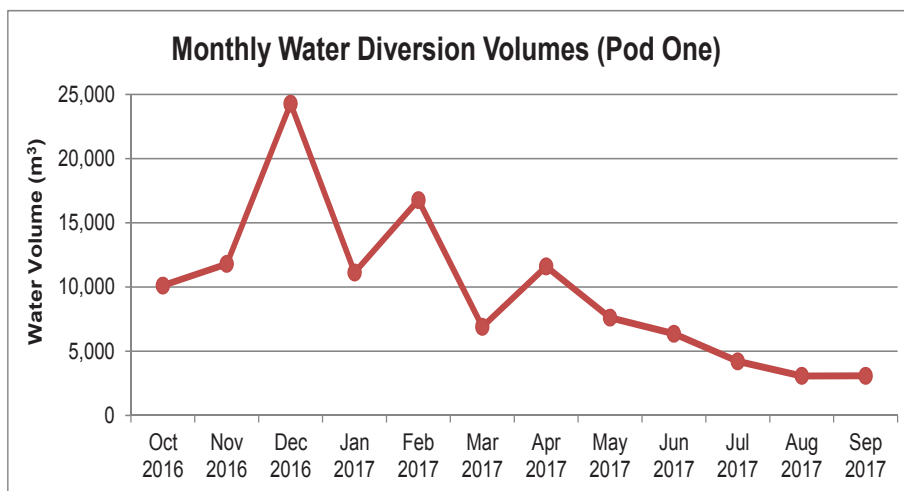
Surface - Water Recycle



Source Water Wells - Pod One

| Year | Pod One Water Withdrawals (m ³ /year) | Licenced Maximum Annual Diversion (m ³ /year) |
|------|--|--|
| 2012 | 132,670 | 292,000 |
| 2013 | 92,462 | 292,000 |
| 2014 | 122,720 | 292,000 |
| 2015 | 114,208 | 292,000 |
| 2016 | 156,313 | 292,000 |
| 2017 | 70,722 | 292,000 |

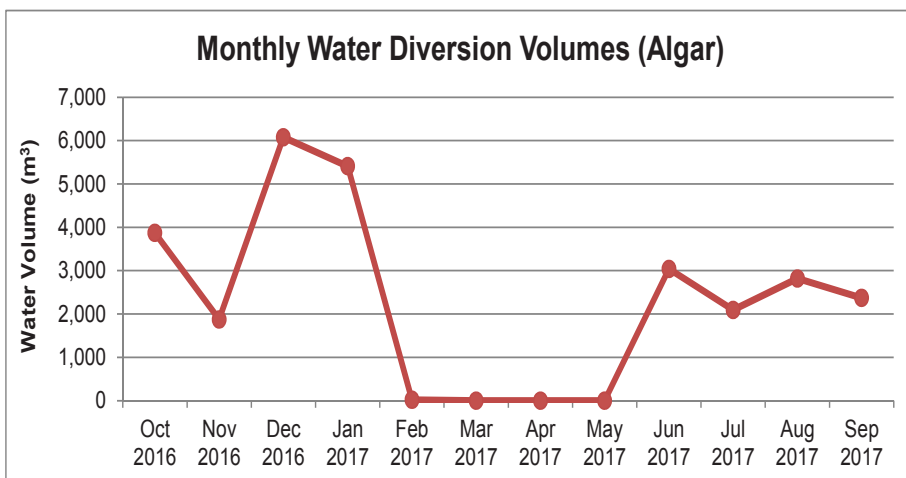
| Water Act Licence 00240458-01-00 | |
|----------------------------------|--|
| Well Location | Production Interval (meters below grade) |
| 16-17-082-12 W4M | 300 - 350 |
| 09-17-082-12 W4M | 300 - 350 |
| 08-17-082-12 W4M | 300 - 350 |
| 02-17-082-12 W4M (standby) | 324 - 330 |



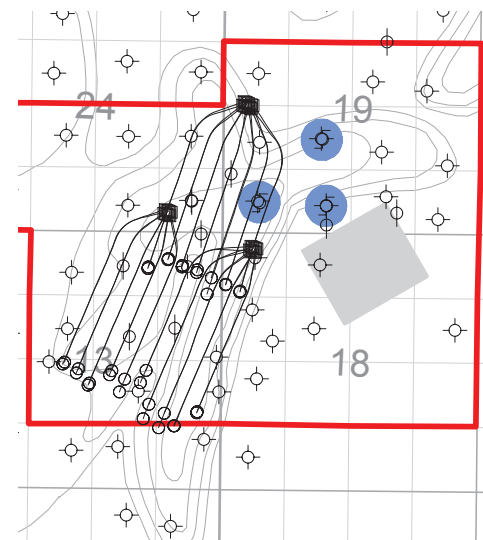
All wells use the Grand Rapids Formation for source water.

Source Water Wells - Algar

| Year | Algar Water Withdrawals (m ³ /year) | Licenced Maximum Annual Diversion (m ³ /year) |
|------|--|--|
| 2012 | 96,164 | 330,000 |
| 2013 | 78,917 | 330,000 |
| 2014 | 45,632 | 330,000 |
| 2015 | 45,142 | 330,000 |
| 2016 | 68,956 | 330,000 |
| 2017 | 15,745 | 330,000 |



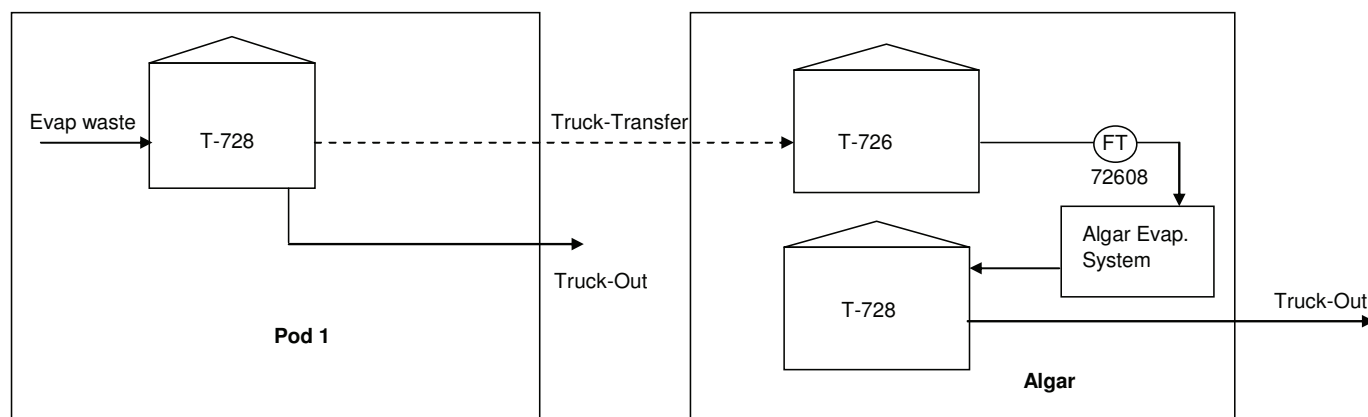
| Water Act Licence 00240527-00-02 | |
|----------------------------------|--|
| Well Location | Production Interval (meters below grade) |
| 02-19-082-11 W4M standby | 356 - 382 |
| 03-19-082-11 W4M | 349 - 382 |
| 04-19-082-11 W4M | 350 - 382 |
| 06-19-082-11 W4M | 347 - 382 |



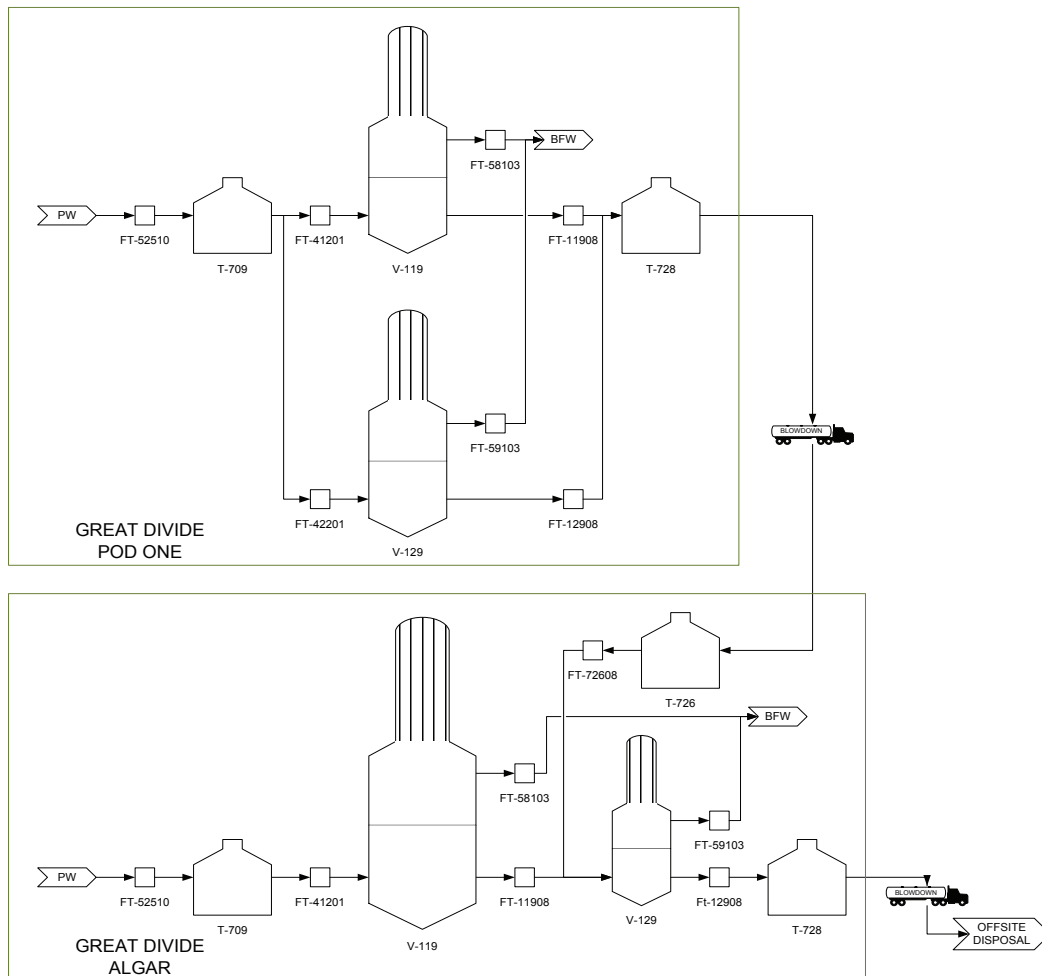
Algar Water Wells
1F2/03-19-082-11W4/00
1F1/04-19-082-11W4/00
1F1/06-19-082-11W4/00

All wells use the Grand Rapids Formation for source water.

Evaporator Waste Integration

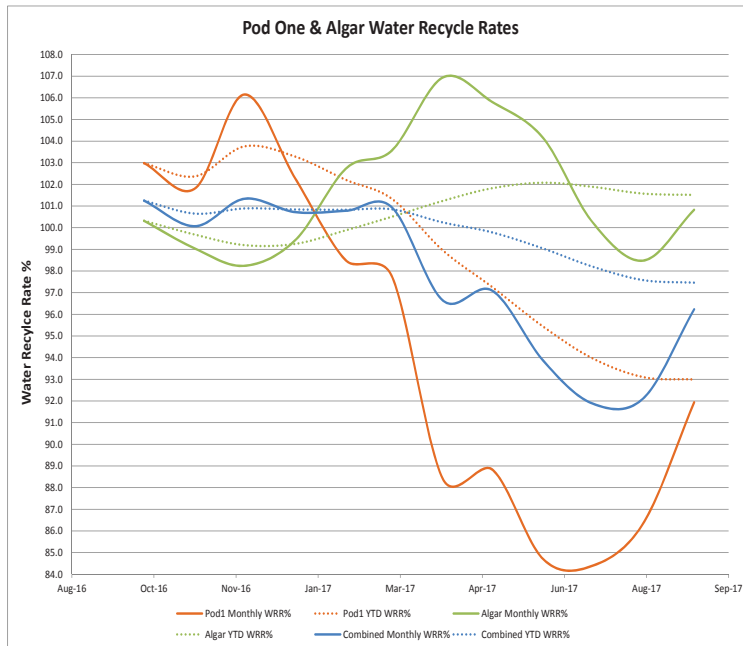


Integrated Water Recycle Scheme



- Evaporators produce high quality boiler feed water efficiently while generating a highly concentrated brine for disposal.
- At Algar a second stage evaporator further concentrates both the Algar brine and a portion of the Pod One brine to improve water reuse and minimize disposal.
- Disposal concentrations are close to crystallizer performance.
- Chemical optimization has significantly improved evaporator reliability.

Water Recycle Ratio



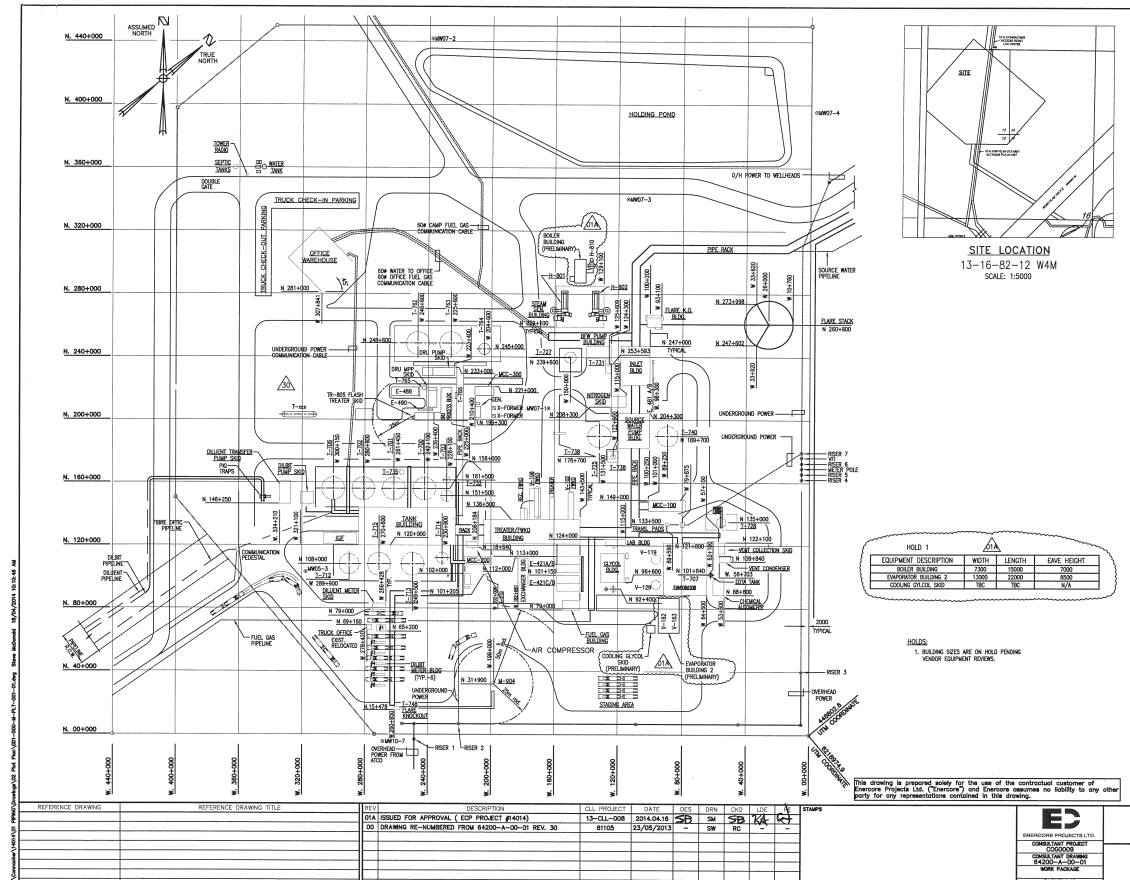
- The series evaporator operation at Algar provides high recycle rates and improved reliability.
- The Algar operation accommodates waste from the parallel evaporators at Pod One and brine is shipped from Pod One to Algar.
- By treating part of the Pod One blow-down at Algar the average yearly water recycle ratio for both plants is approximately 97.5%.

| Month | Pod1 Monthly WRR% | Pod1 YTD WRR% | Algar Monthly WRR% | Algar YTD WRR% | Combined Monthly WRR% | Combined YTD WRR% |
|--------|-------------------|---------------|--------------------|----------------|-----------------------|-------------------|
| Oct-16 | 103.0 | 103.0 | 100.3 | 100.3 | 101.2 | 101.2 |
| Nov-16 | 101.8 | 102.4 | 99.0 | 99.7 | 100.1 | 100.7 |
| Dec-16 | 106.2 | 103.8 | 98.2 | 99.2 | 101.3 | 100.9 |
| Jan-17 | 102.3 | 103.3 | 99.4 | 99.3 | 100.7 | 100.8 |
| Feb-17 | 98.5 | 102.2 | 102.7 | 99.9 | 100.8 | 100.8 |
| Mar-17 | 97.7 | 101.3 | 103.6 | 100.5 | 100.9 | 100.9 |
| Apr-17 | 88.4 | 99.0 | 106.9 | 101.2 | 96.6 | 100.2 |
| May-17 | 88.8 | 97.3 | 105.8 | 101.8 | 97.1 | 99.8 |
| Jun-17 | 84.7 | 95.4 | 104.1 | 102.1 | 93.9 | 99.0 |
| Jul-17 | 84.4 | 94.0 | 100.3 | 101.9 | 91.9 | 98.2 |
| Aug-17 | 86.3 | 93.1 | 98.5 | 101.6 | 92.1 | 97.6 |
| Sep-17 | 91.9 | 93.0 | 100.8 | 101.5 | 96.2 | 97.5 |

Surface - Future Plans

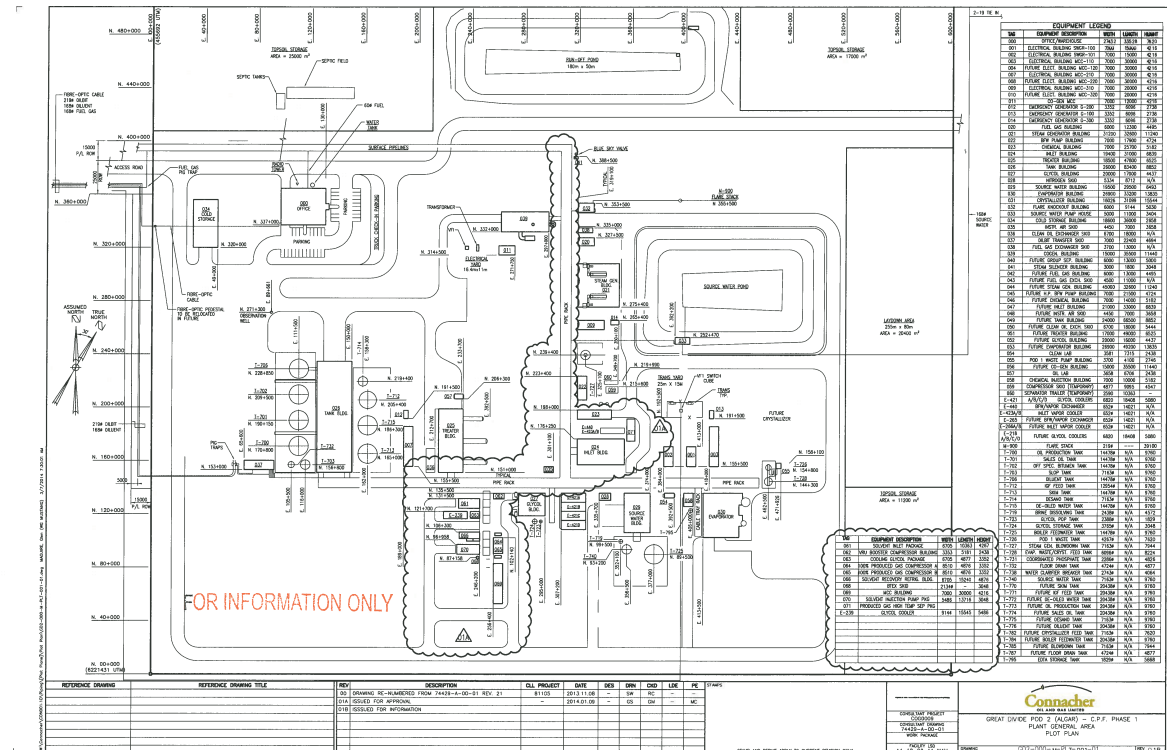
Pod One - Mini Steam Expansion

- Commercial Scheme Approval 10587P.
- 500 t/d of steam.
- Allows for 2 Well Pair at Pad 104.
- Steam Generator (17.26 MW).
- 2 Evaporator Units.
- SIR 1 Submitted for EPEA Amendment.
- No additional water allocation required.



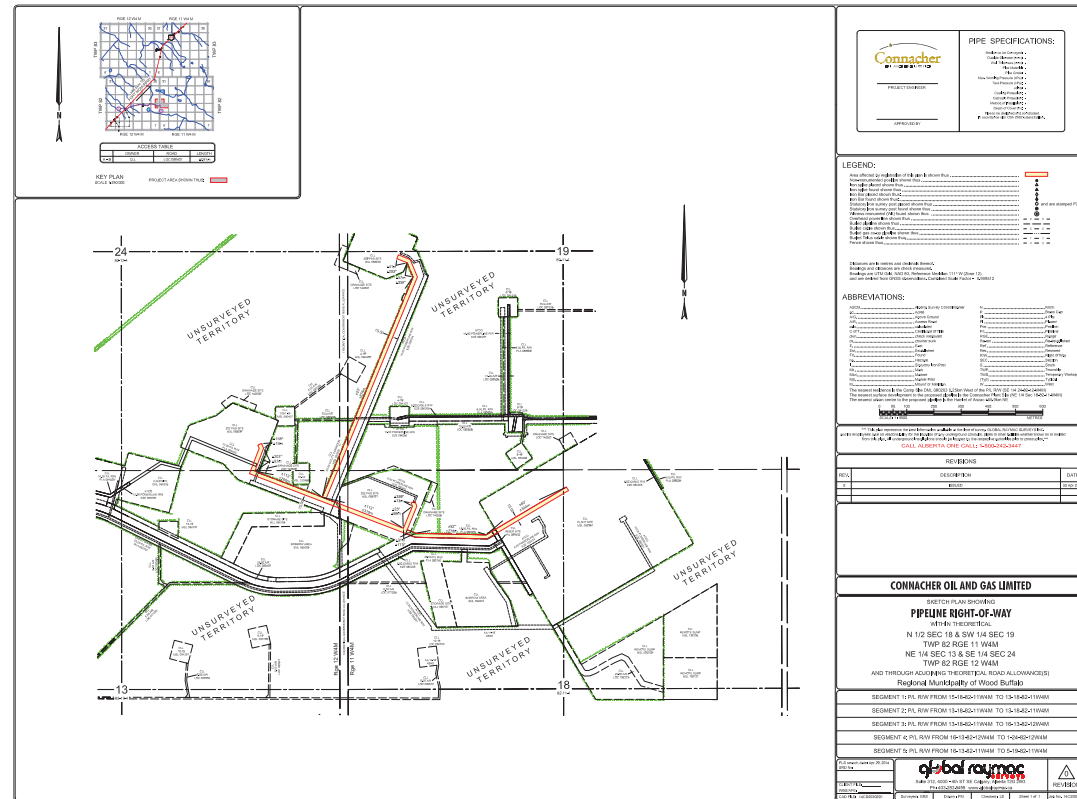
SAGD+® Process Commercial

- Commercial Scheme Approval 10587K.
- Light hydrocarbon (solvent) and steam co-injection at all well pairs at Algar.
- Solvent to be recovered at facility for re-injection.
- EPEA 67(3) No objection received May, 2014.
- Construction began August, 2014 but not yet completed.



SAGD+® Process Commercial (pipelines)

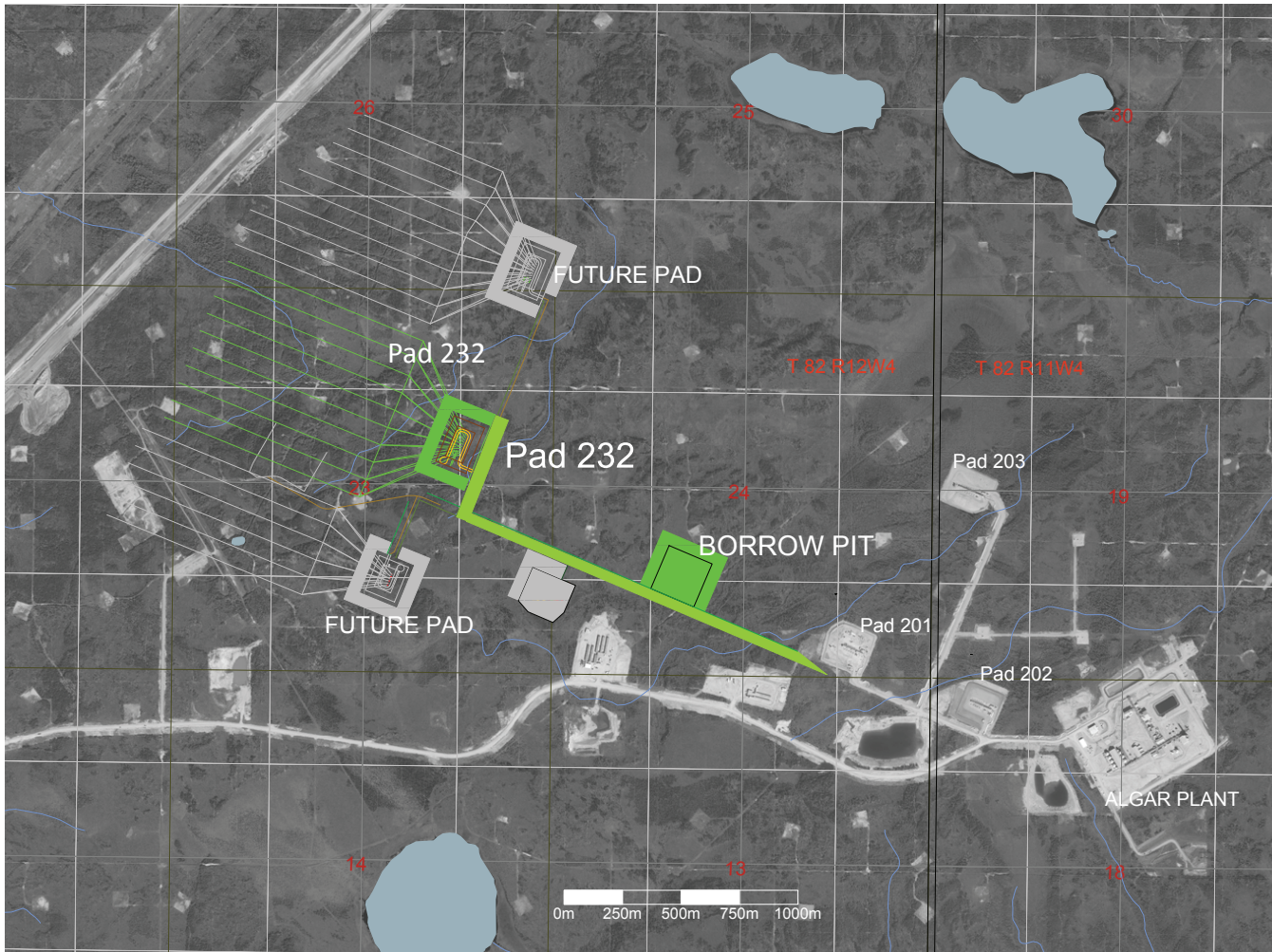
- Commercial Scheme Approval 10587K.
- 3 inch light hydrocarbon pipeline to all well pads.
- Installed on existing pipe rack.
- Construction completed but not yet commissioned.



Algar - New Pad Development

Near Future Development to include:

- Pad 232 (Phase 1A)
- Borrow Pit
- Utility Corridor



Surface - Sulphur Production



Pod One Sulphur Emissions

| Quarter | Average Sulphur Dioxide Emissions (t/day) |
|-----------|---|
| Q4 - 2016 | 0.15 |
| Q1 - 2017 | 0.20 |
| Q2 - 2017 | 0.21 |
| Q3 - 2017 | 0.23 |

- Pod One EPEA SO₂ emission limit is 1.98 t/day
- Peak SO₂ emissions were 0.25 t/day: August 1,2, and 30, and September 1,2, and 22-30.

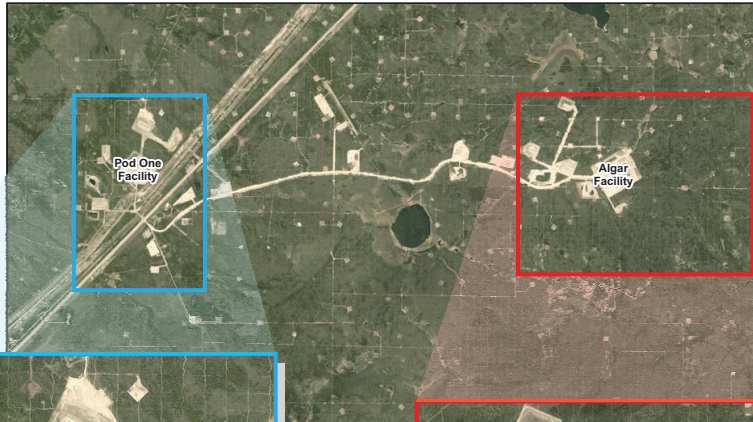
- Plant Total SO₂ = Flared SO₂ + Steam Generators SO₂
- There has been no material change in sulphur production observed over the past year of production at Pod One
- Connacher will continue to monitor produced gas H₂S concentrations, sulphur emissions and evaluate plans for sulphury recovery installations
- SO₂ production is well below emission limits

| Quarter | Average Sulphur Dioxide Emissions (t/day) |
|-----------|---|
| Q4 - 2016 | 0.61 |
| Q1 - 2017 | 0.62 |
| Q2 - 2017 | 0.63 |
| Q3 - 2017 | 0.66 |

- Algar EPEA SO₂ emission limit is 1.98 t/day
- Peak SO₂ emissions were 0.97 t/day: April 24.

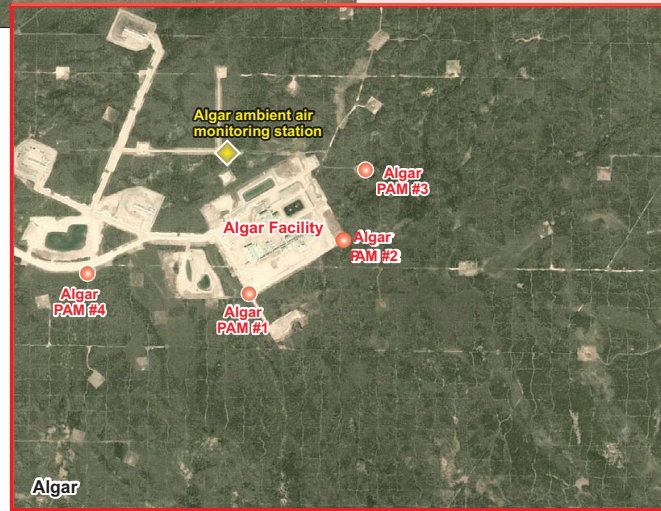
- Plant Total SO₂ = Flared SO₂ + Steam Generators SO₂
- There has been no material change in sulphur production observed over the past year of production at Algar
- Connacher will continue to monitor produced gas H₂S concentrations, sulphur emissions and evaluate plans for sulphury recovery installations
- SO₂ production is well below emission limits

Ambient Air Quality Network



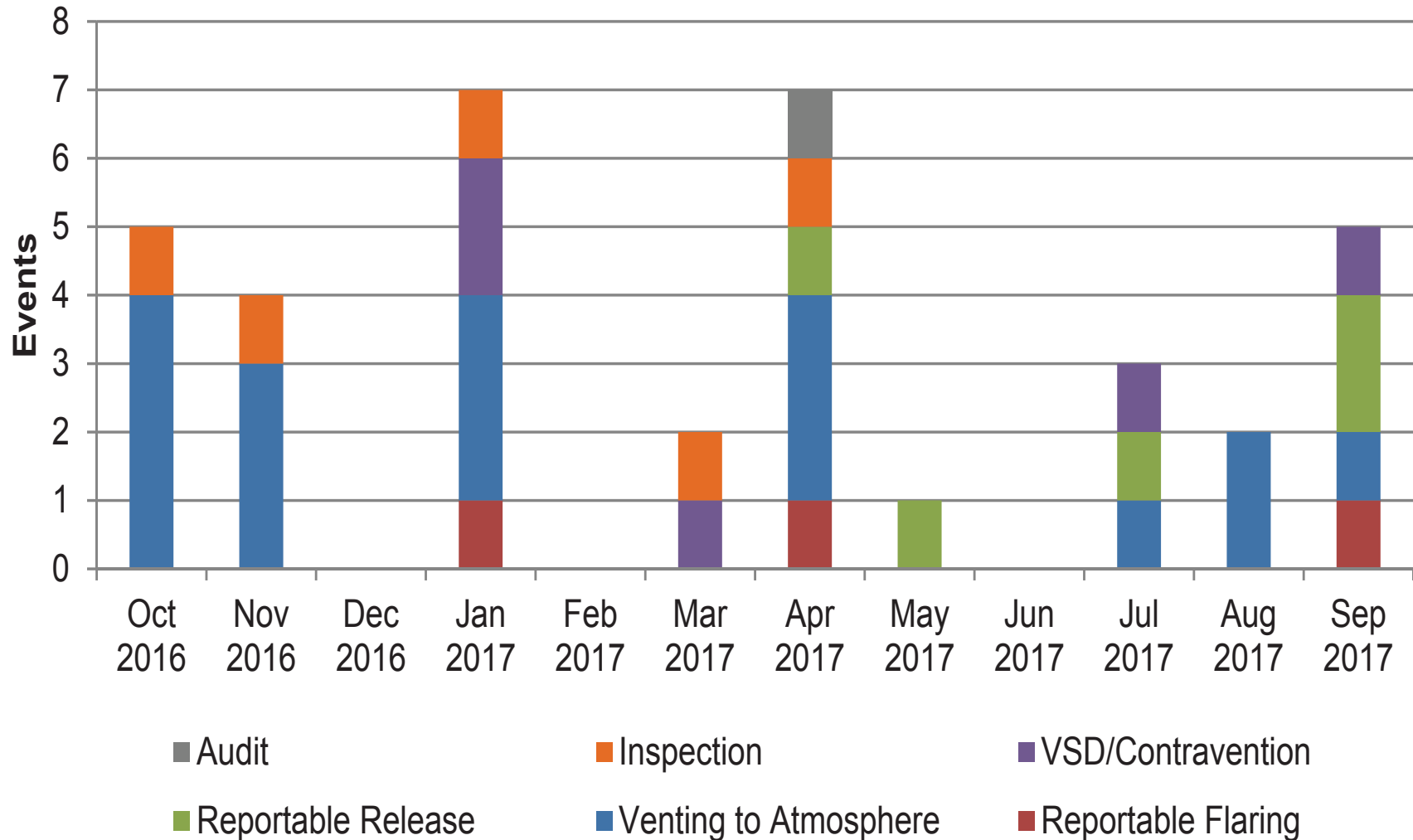
There are a total of 8 passive air monitoring stations at Pod One and Algar. These sites monitor for SO₂ and H₂S. For the reporting period there were no exceedances of the AAAQO

Connacher is required to complete continuous ambient air monitoring station for SO₂, H₂S and NO₂, as well as wind speed and wind direction. This monitoring is required 6 months per year. For the reporting period all measured concentrations were within the AAAQO's.



Surface - Environment

Great Divide Compliance



Great Divide Applications / Authorizations

| Approval Date | Authorization No. | Description |
|--------------------|-------------------|---|
| December 4, 2013 | 10587M | Pod One Full Field NCG Co-injection Scheme Approval |
| December 12, 2013 | 10587N | Pod One - Pad 101 and Pad 102 Infills (9) Scheme Approval |
| January 8, 2014 | 10587O | SAGD+® Trail Pad 104 Scheme Approval |
| March 21, 2014 | 10587P | Mini-Expansion at Pod One Scheme Approval |
| Pending | Pending | EPEA Approval Amendment for Mini-Expansion at Pod One |
| June 10, 2014 | F36853 | Pod One Facility Licence Amendment |
| August 1, 2014 | F40209 | SAGD+® Commercial Project Facility Licence Amendment |
| August 13, 2014 | 56423 | SAGD+® Commercial Project Solvent Pipeline Licence |
| September 10, 2014 | 10587Q | Algar - Pad 203 Infills (5) Scheme Approval |
| October 1, 2014 | 10587R | Algar Full Field NCG Co-injection Scheme Approval |
| Pending | Pending | Algar Water Act Licence 240527-00-00 Renewal |
| Pending | Pending | Pod One Water Act Licence 240458-01-00 Renewal |
| February 8, 2016 | 10587S | Produced Water Disposal Operations at Pad 101N Approval |

Great Divide Inspections, Audits and VSDs

| Inspection Date | Licence Number / Agency | Location | Inspection Result |
|-----------------|-------------------------|------------------------|---|
| October 8, 2014 | 51876 | 01-24-082-12 W4M | Satisfactory |
| October 8, 2014 | 54978 | 01-24-082-12 W4M | Satisfactory |
| October 8, 2014 | 51620 | 14-18-082-11 W4M | Satisfactory |
| October 8, 2014 | 48792 | 13-16-082-12 W4M | Satisfactory |
| October 8, 2014 | 40209 | 15-18-082-11 W4M | Satisfactory |
| January 1, 2015 | 36853 | 13-16-082-12 W4M | Satisfactory |
| July 1, 2015 | 240008-00-04 (EPEA) | 13-16-082-12 W4M | Satisfactory |
| March 1, 2016 | n/a | 15-18-082-11 W4M | Satisfactory |
| July 1, 2016 | n/a | 13-16-082-12 W4M | Satisfactory |
| October, 2016 | OHS | Algar SAGD Facility | Satisfactory |
| November, 2016 | AEP | Great Divide Project | Satisfactory |
| January, 2017 | AEP | Connacher Lodge (Camp) | Satisfactory with minor follow-ups |
| March, 2017 | RMWB | Connacher Lodge (Camp) | Unsatisfactory, corrective actions initiated on all deficiencies with most now sufficiently addressed |
| April, 2017 | OHS | Pod One SAGD Facility | Satisfactory |

| Audit Date | Licence Number / Agency | Location | Issue and Resolution |
|--------------|-------------------------|----------------------|--|
| October 2014 | 10587 | Great Divide SAGD | Injection Pressure audit. Technical data submitted. Closed |
| January 2015 | W0450332 | Pad 202 PO1-1 | Unsatisfactory; failure to submit drilling waste records within 24 months of rig release. Closed |
| March 2015 | W0455341 | AC/09-22-082-12W4M | Unsatisfactory; failure to submit drilling waste records within 24 months of rig release. Closed |
| April 2015 | W0445265 | 07/02-17-082-12W4M | Unsatisfactory; failure to submit drilling waste records within 24 months of rig release. Closed |
| April, 2017 | AER | Great Divide Project | Unsatisfactory, minor administrative reporting errors corrected immediately and monthly reports resubmitted. |

Voluntary Self Disclosures

| Date | Licence Number | Location | Issue and Resolution |
|------------------------|----------------------|---|---|
| September 2014 | W0374122 | Pad 101N-I03 | CLC failed to complete casing inspection log&install casing corrosion coupon in well by July 30th,2015. Closed Nov 21/2015 |
| September 2014 | multiple | various at Great Divide | CLC aquired several inactive pipelines within the Great Divide area that were not properly suspended or abandoned. Ongoing; AER granted an extension to complete pipeline discontinuation activities to March 31,2016 |
| January 2015 | W0450336 | 105/01-13-082-12W4M | Low risk NC, failure to submit drilling waste records within 24 months indentified by an internal audit. Closed |
| January, 2017 | EPEA 249471-00-00 | Connacher Lodge (04-24-082-12 W4M) | Approval Contravention, operating a waste water treatment plant without a licensed operator. Closed. |
| January, 2017 | EPEA 249471-00-00 | Connacher Lodge (04-24-082-12 W4M) | Approval Contravention, failing to report an approval contravention immediately. Closed. |
| March, 2017 | EPEA 240008-00-04 | Algar SAGD Facility (14-18-082-11 W4M) | Approval Contravention, exceedance of ambient air quality objectivec for Hydrogen Sulfide. Closed. |
| January and July, 2017 | EPEA 249471-00-00 | Connacher Lodge (04-24-082-12 W4M) | Approval Contravention, unauthorized release of wastewater from collection system. |
| September, 2017 | EPEA 249471-00-00 | Connacher Lodge (04-24-082-12 W4M) | Approval Contravention, unauthorized release of wastewater from collection system. |

Great Divide Monitoring Programs

Connacher currently implements the following monitoring programs at the Great Divide Project:

- Groundwater monitoring program;
- Wildlife monitoring program;
- Ambient air monitoring program;
- Industrial wastewater and Industrial runoff monitoring program; and,
- Soil monitoring program.

No changes or developments to EPEA compliance monitoring programs



Appendix A - List of Additional Material Submitted

Additional Material Attached to Submission:

Energy Usage & Balance for Algar & Great Divide

Electrical Use at Pod One & Algar

SCVF GM Testing Results

Connacher Heave Monitoring Data

Pump Runlife Histories

Observation Well Pressure and Temperature Data

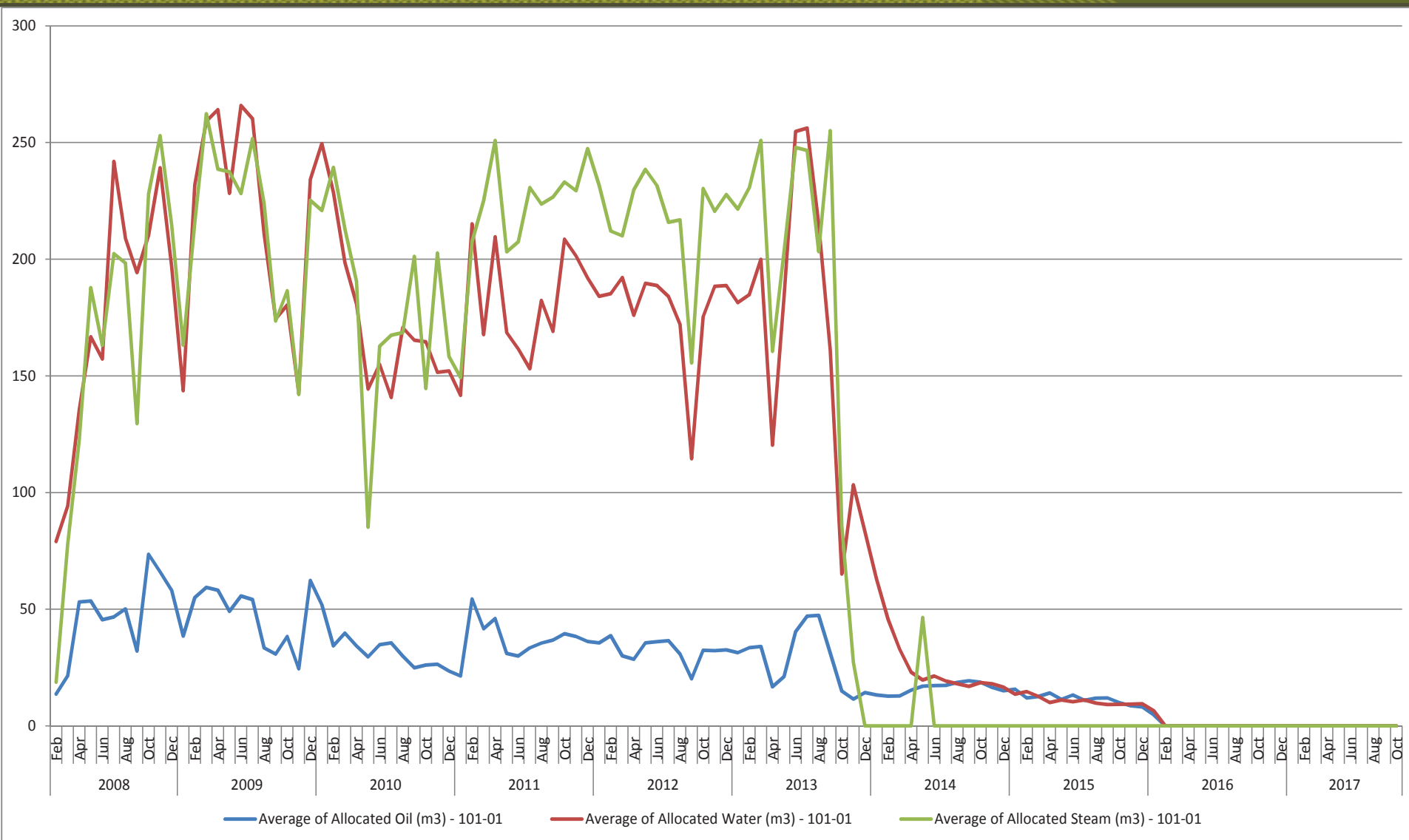
Appendix B - Bitumen Reserves and Resources

1) Proved reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.

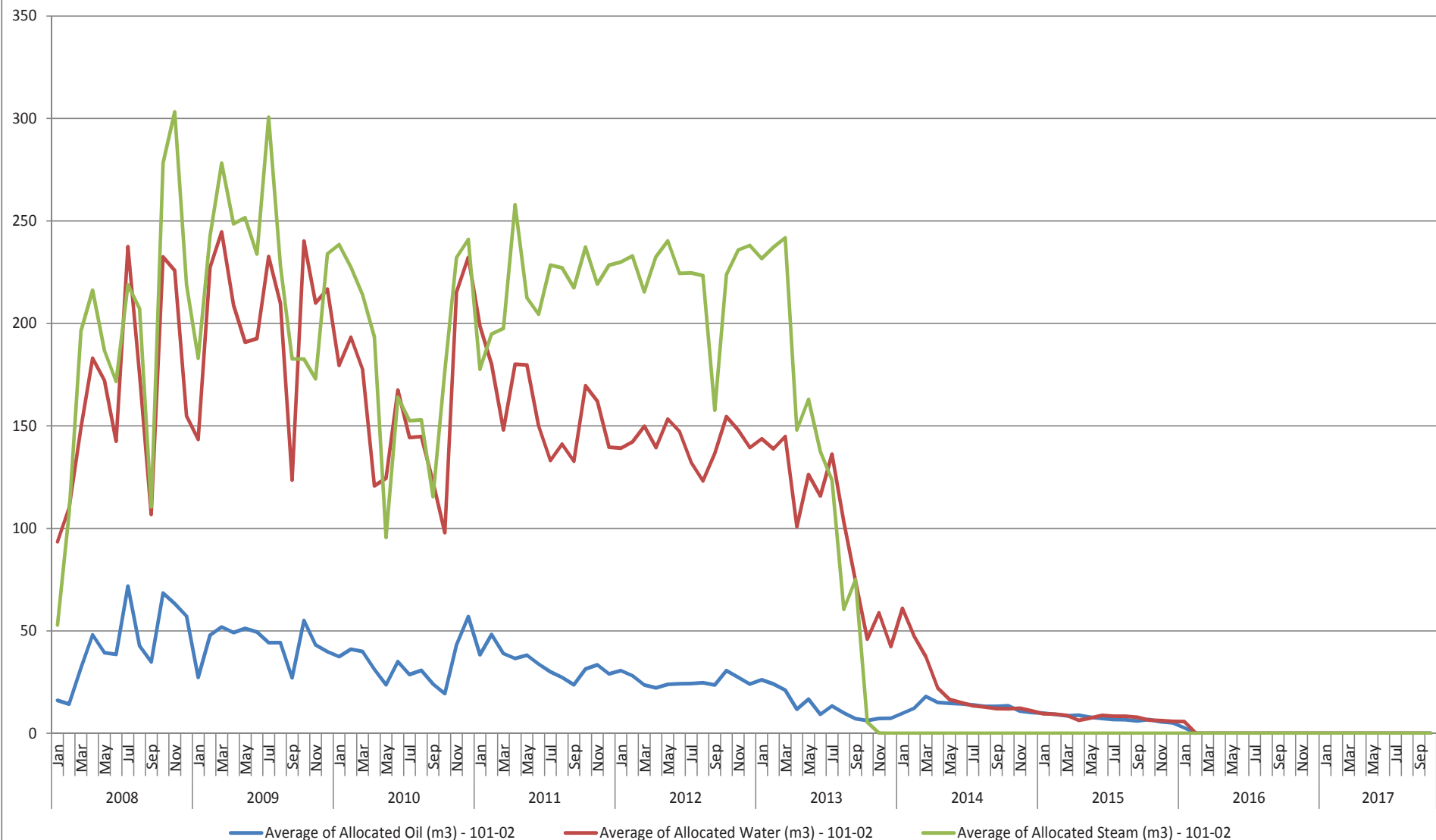
2) Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

Appendix C - Individual Well Performance

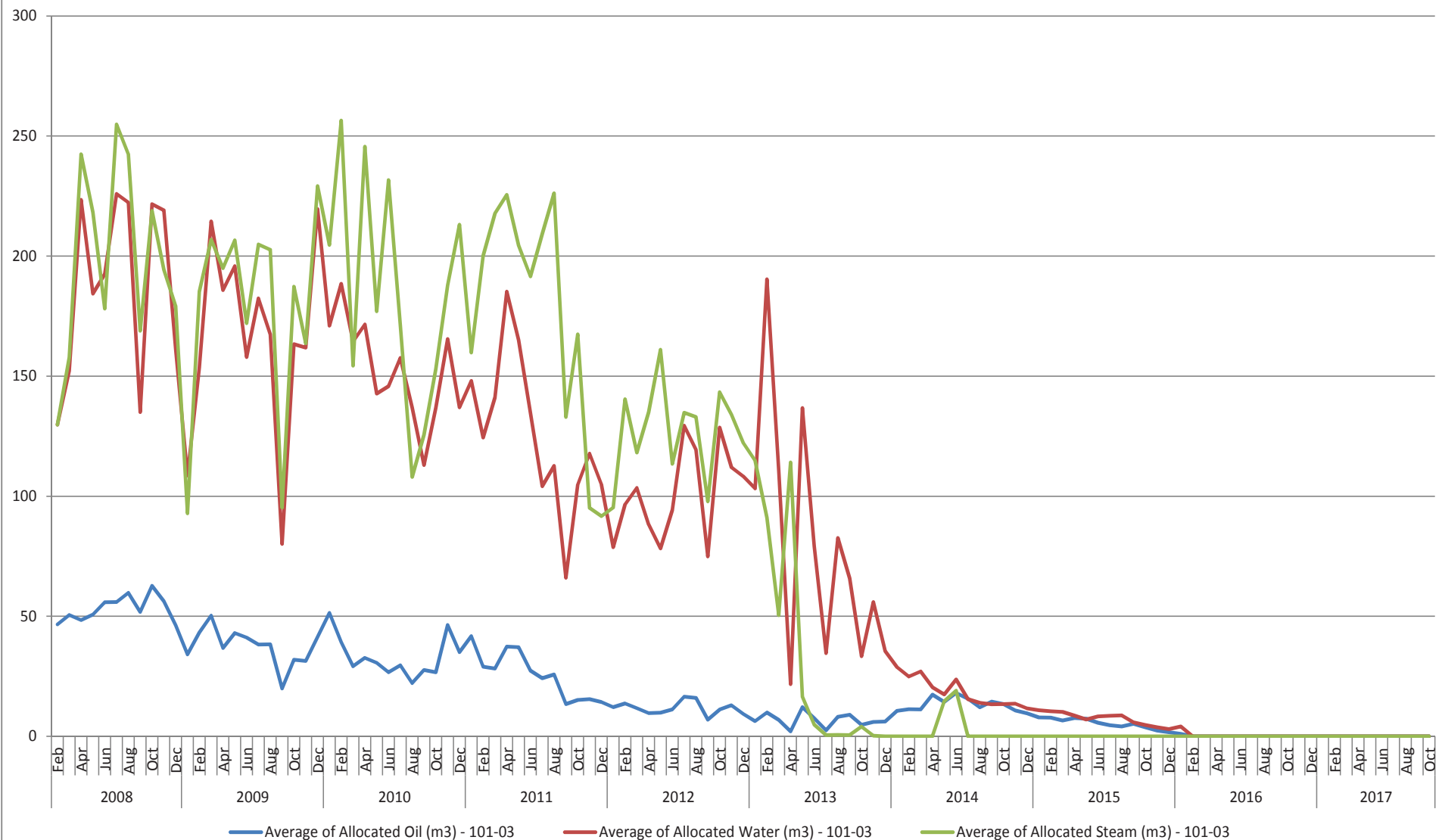
Pod One Pad 101N - 101-01



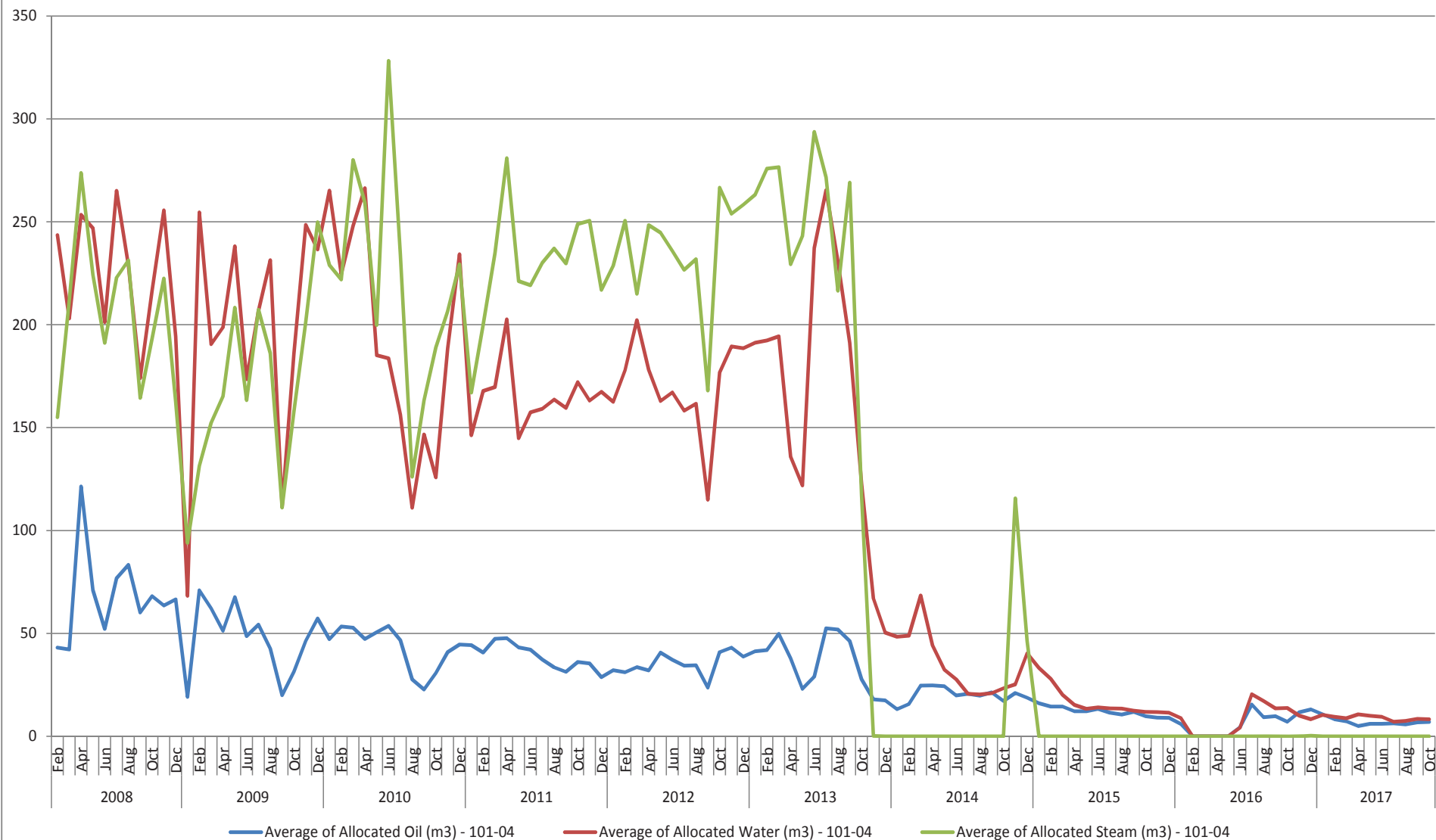
Pod One Pad 101N - 101-02



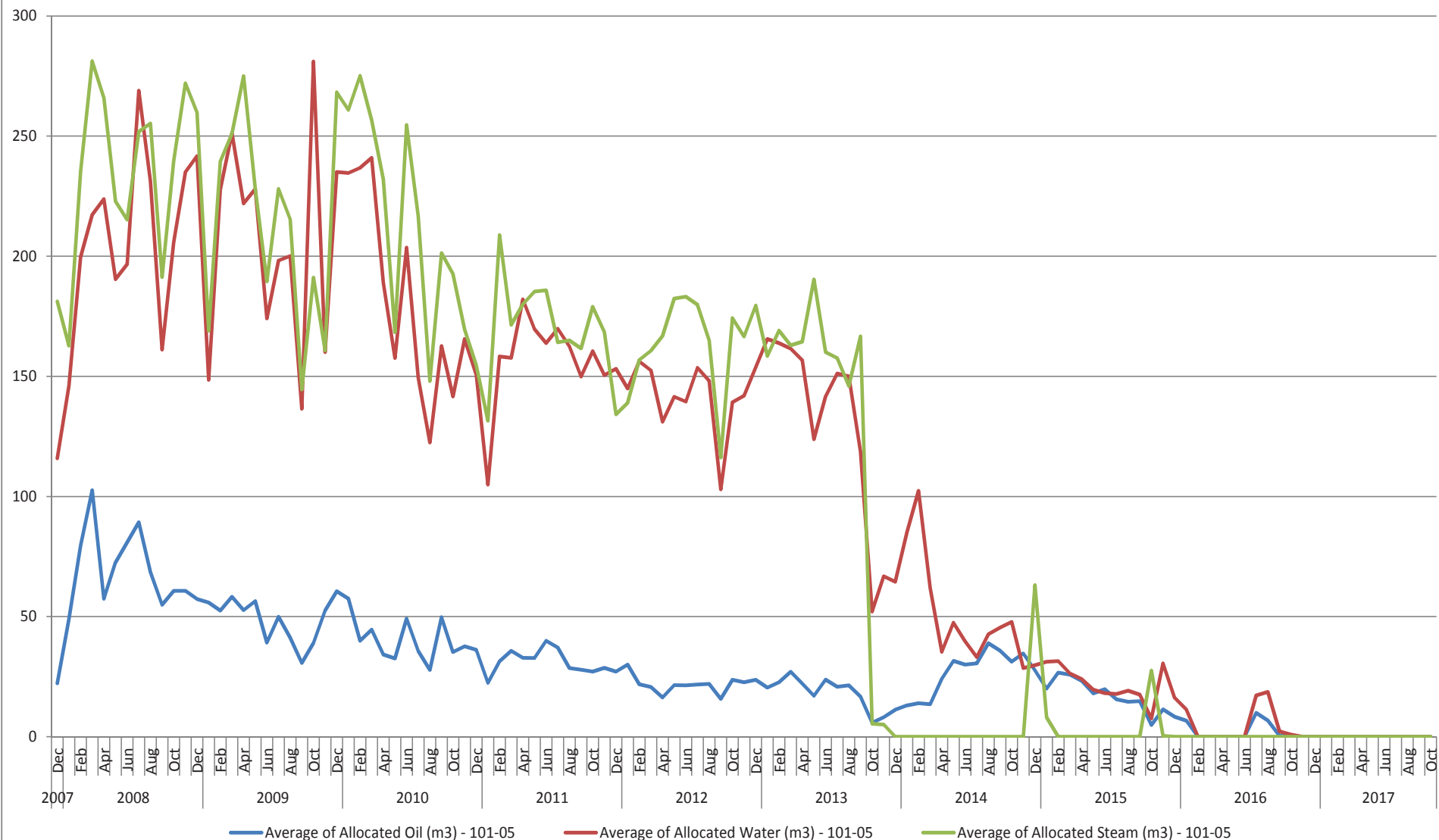
Pod One Pad 101N - 101-03



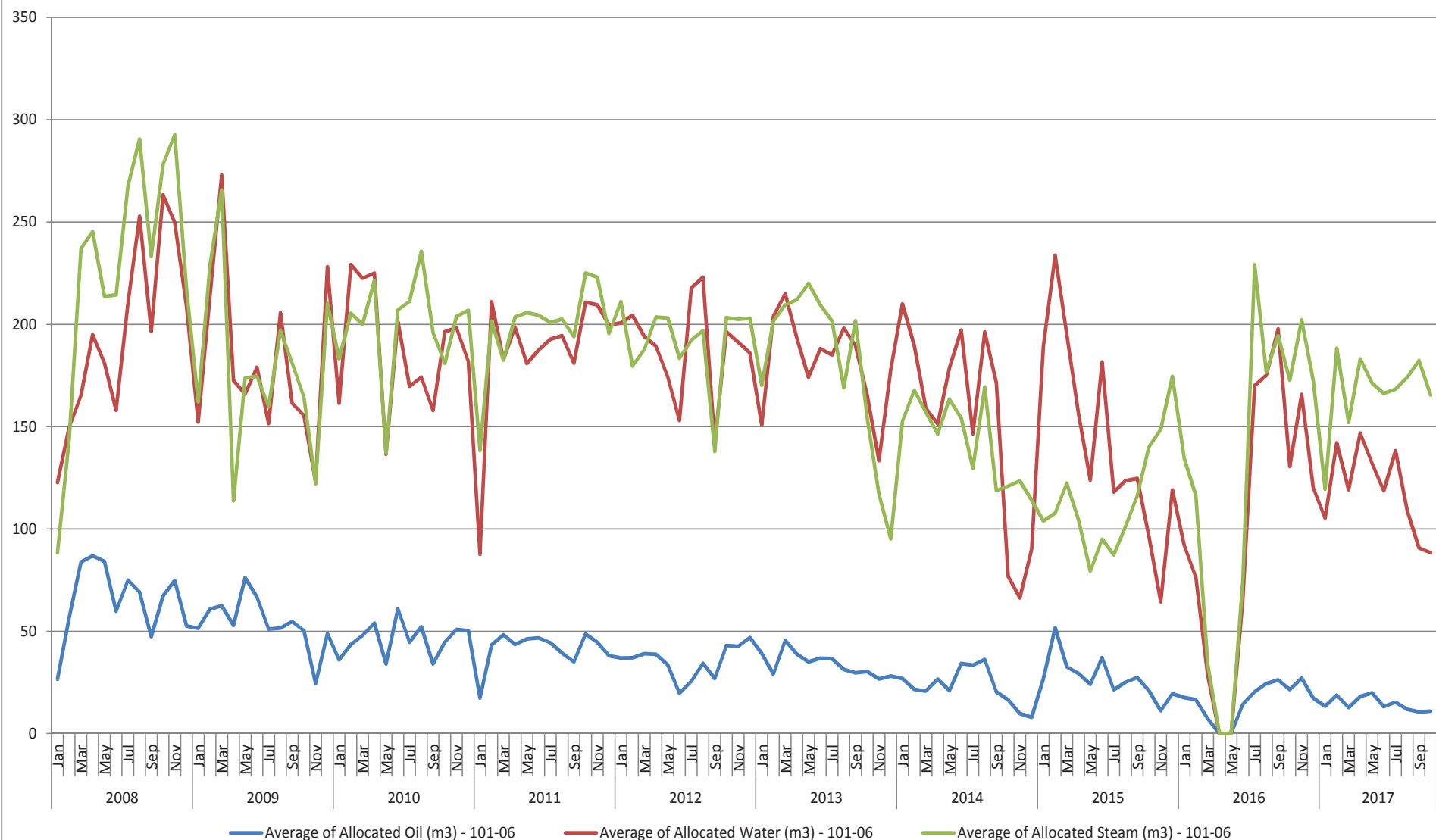
Pod One Pad 101N - 101-04



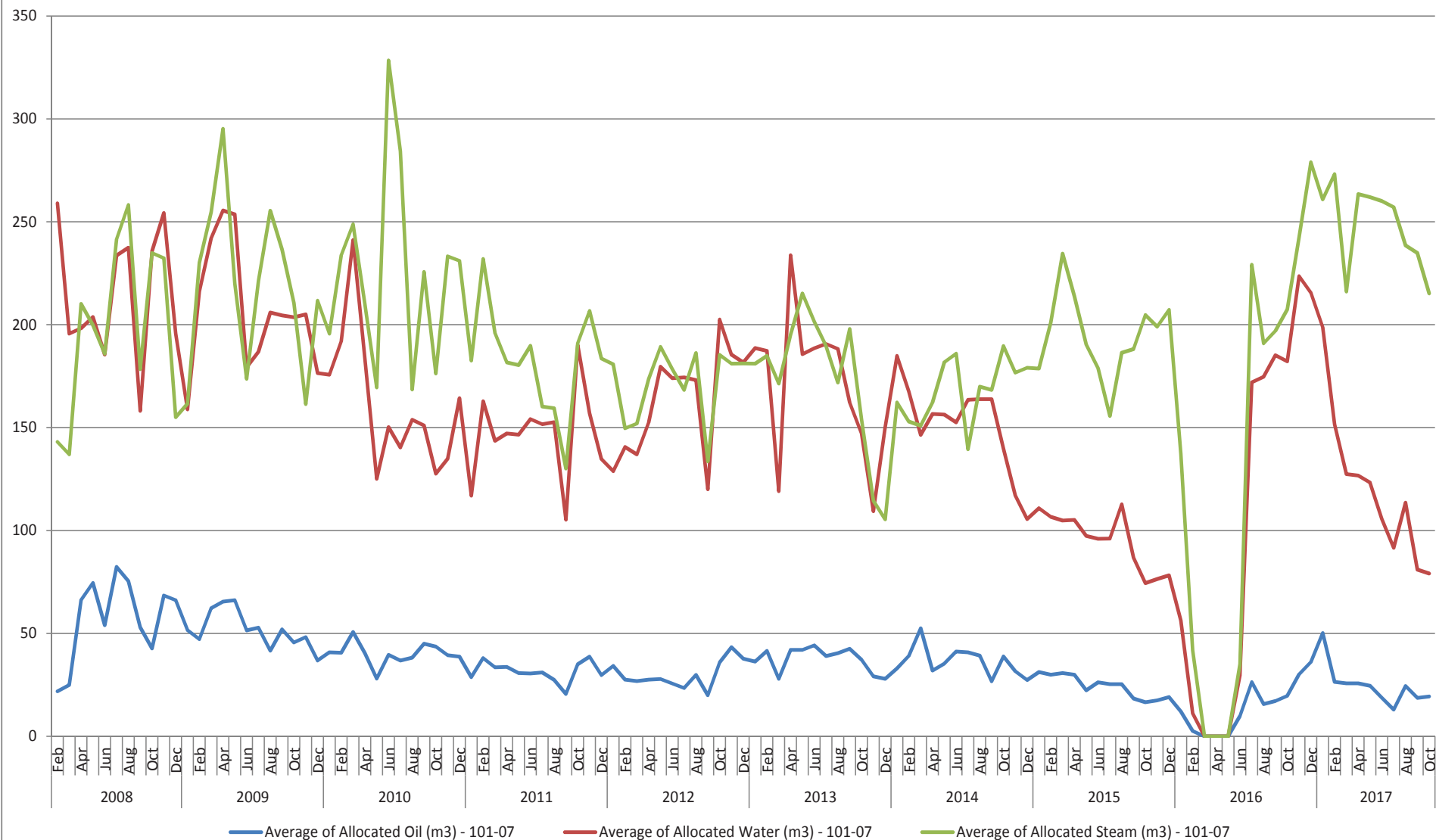
Pod One Pad 101N - 101-05



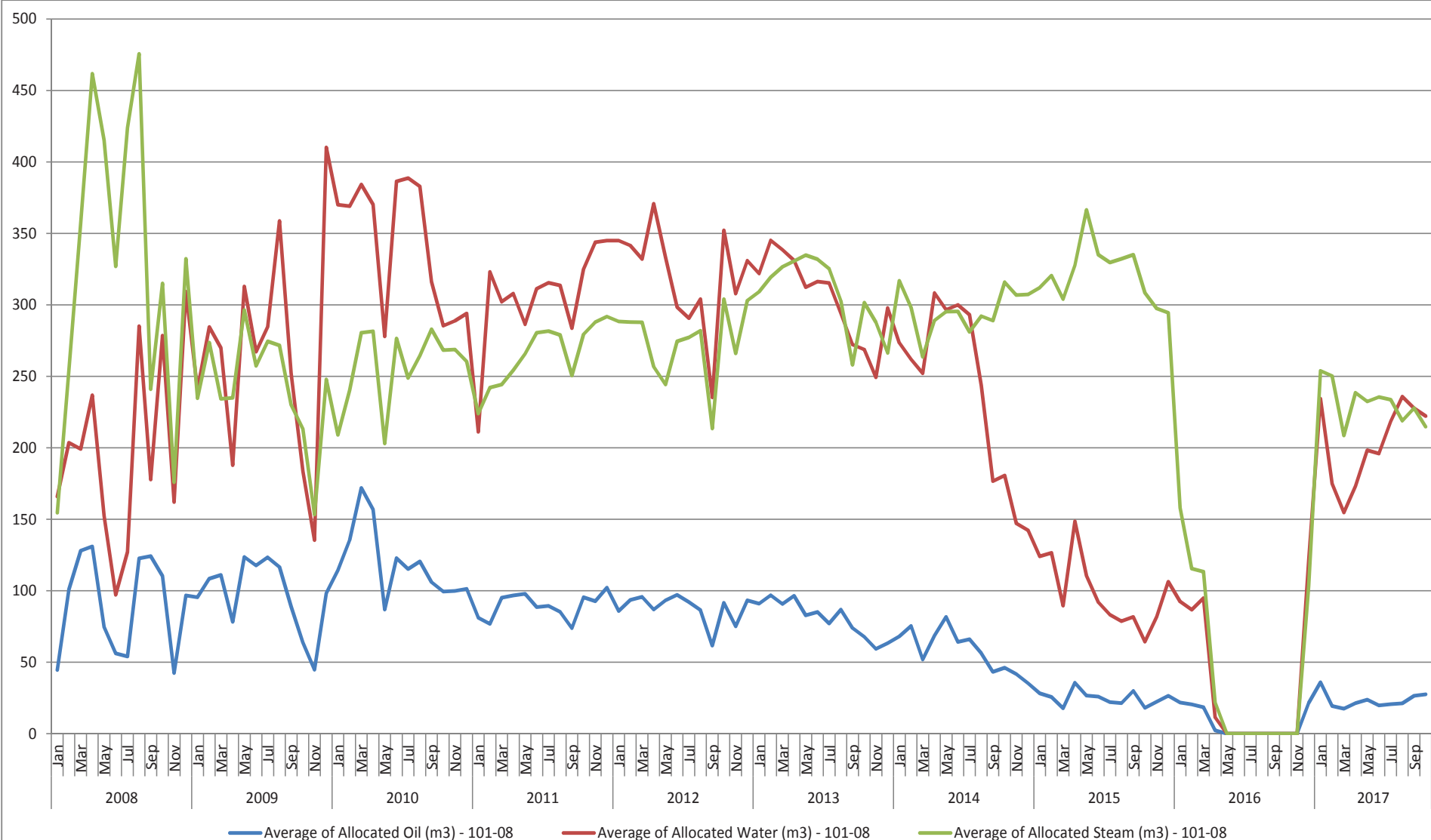
Pod One Pad 101S - 101-06



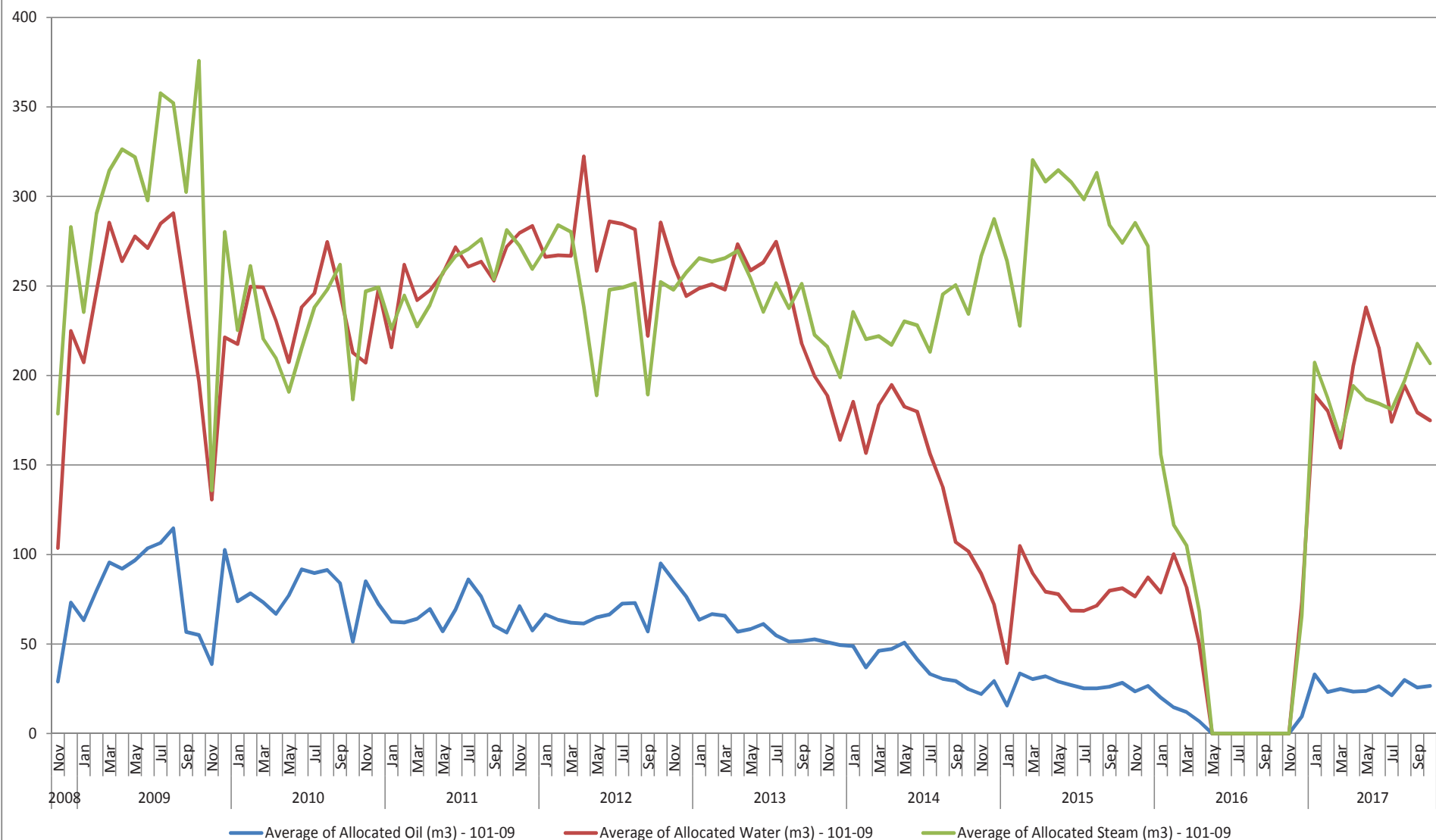
Pod One Pad 101S - 101-07



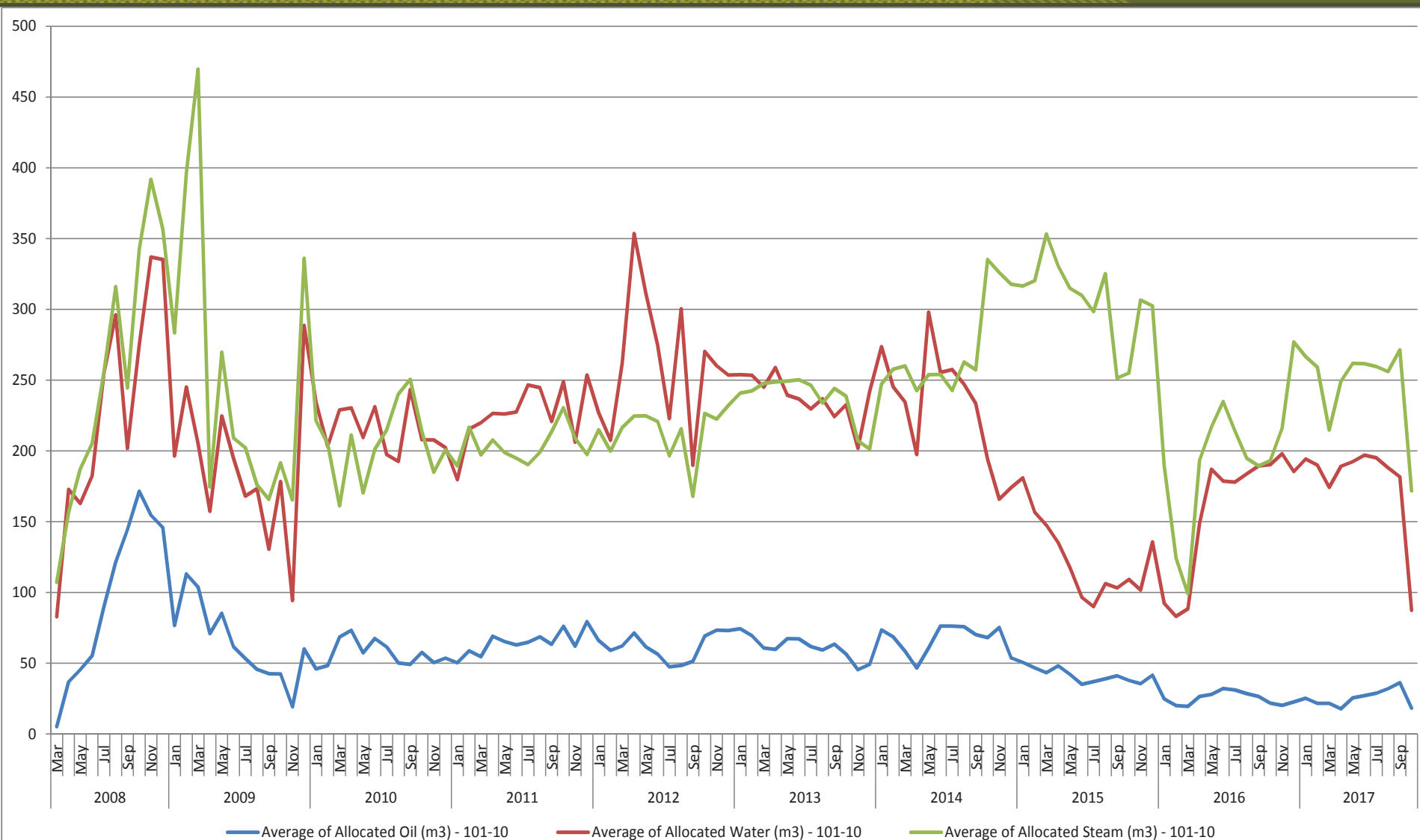
Pod One Pad 101S - 101-08



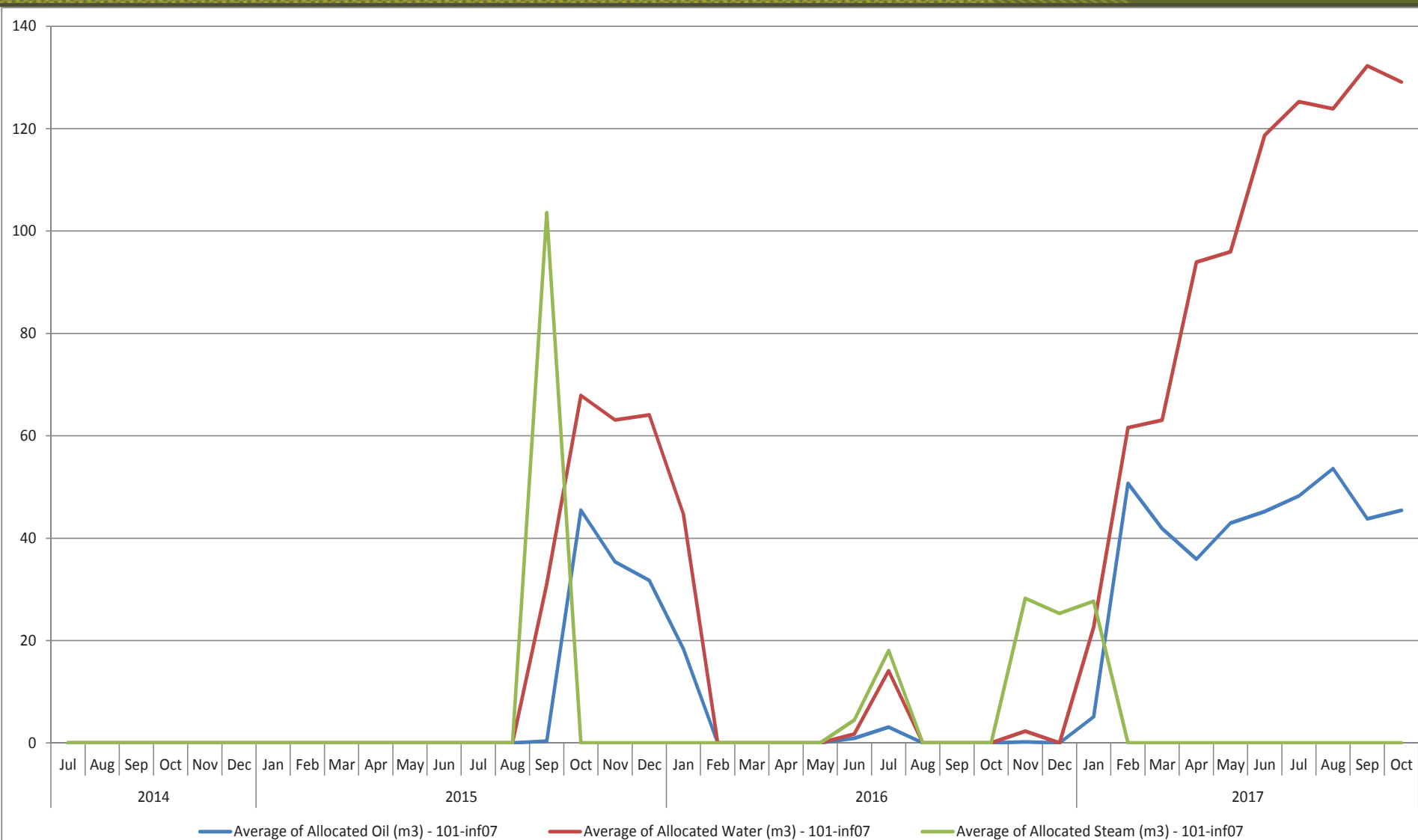
Pod One Pad 101S - 101-09



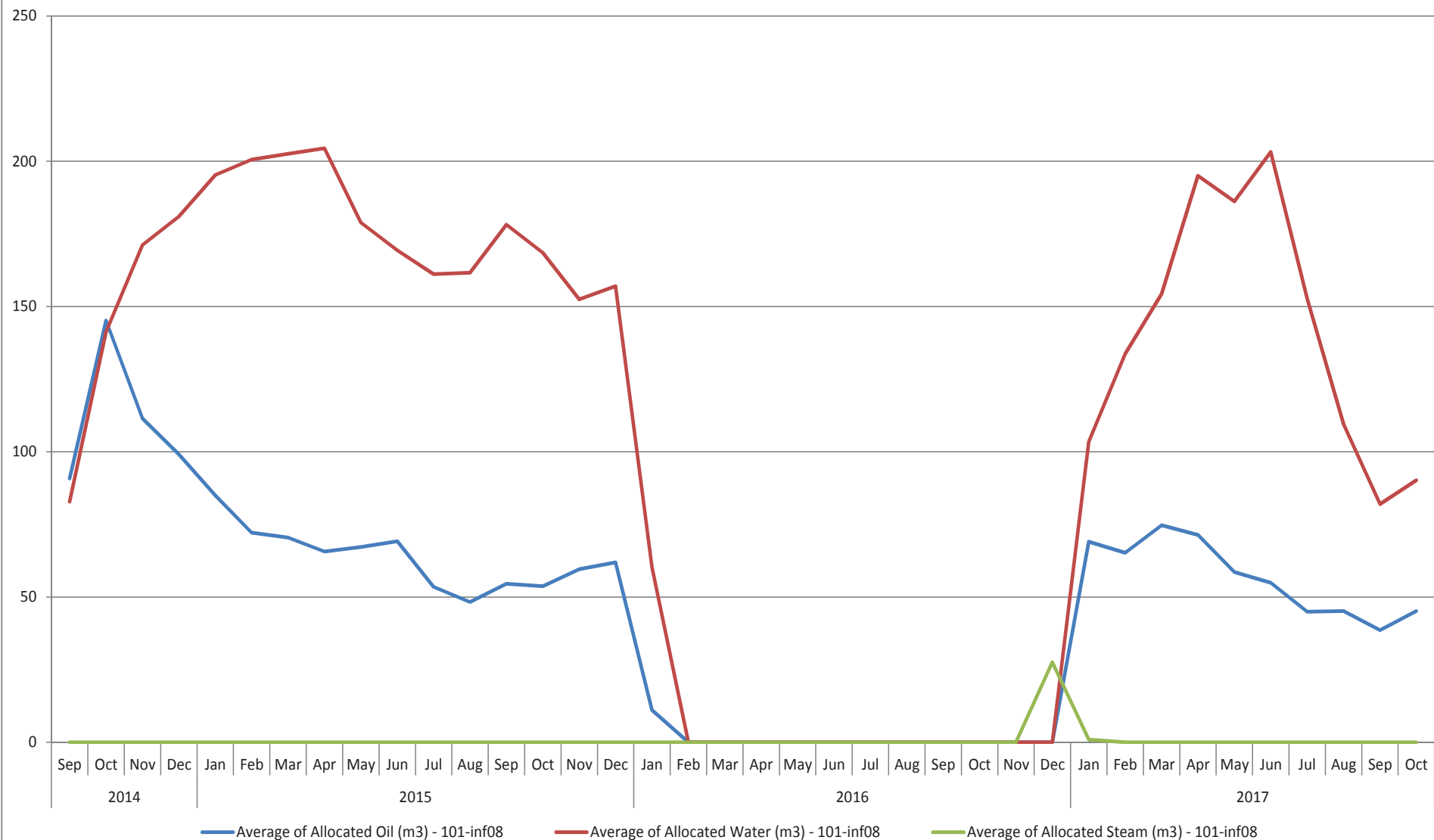
Pod One Pad 101S - 101-10



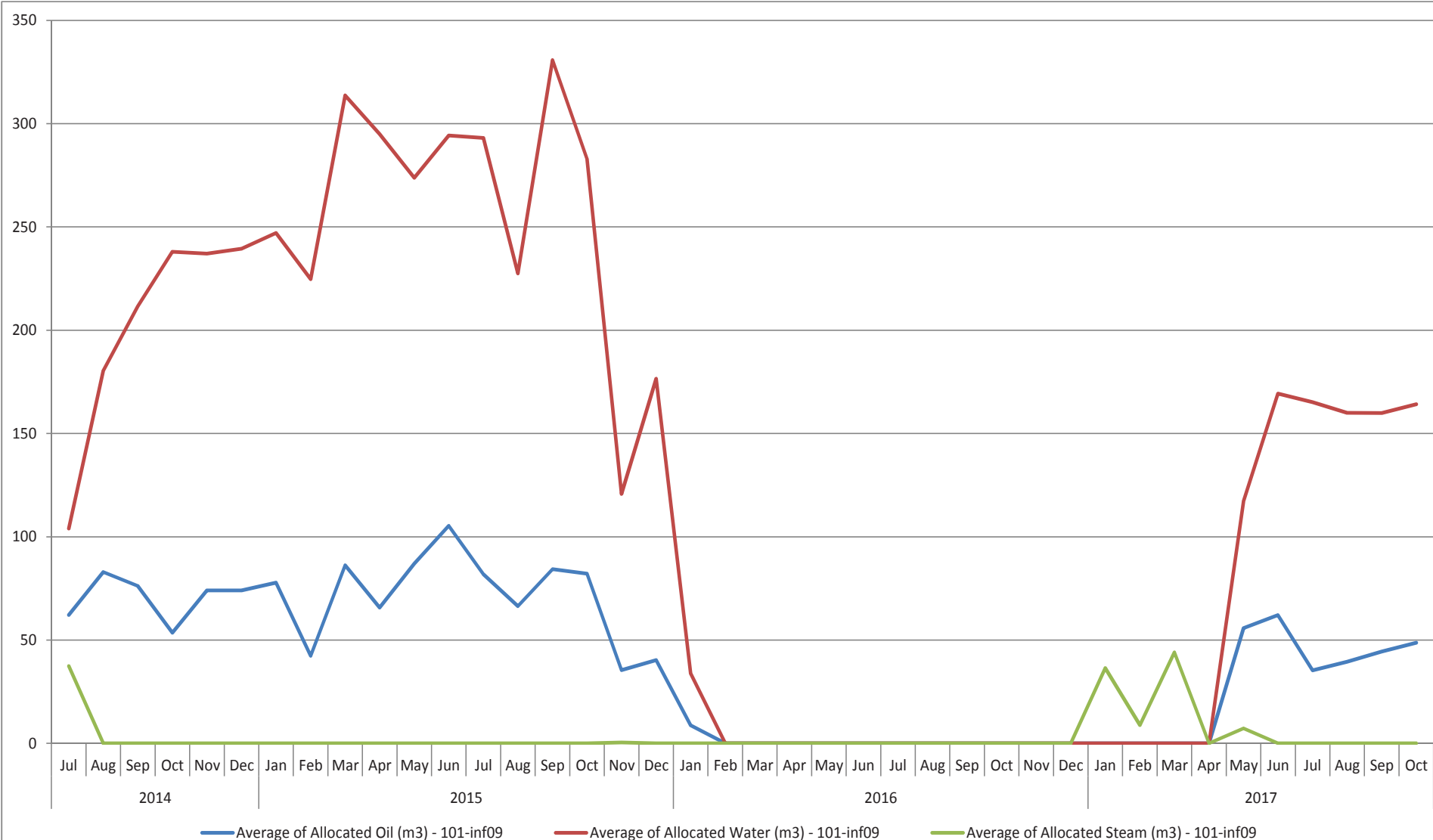
Pod One Pad 101S - 101-F07



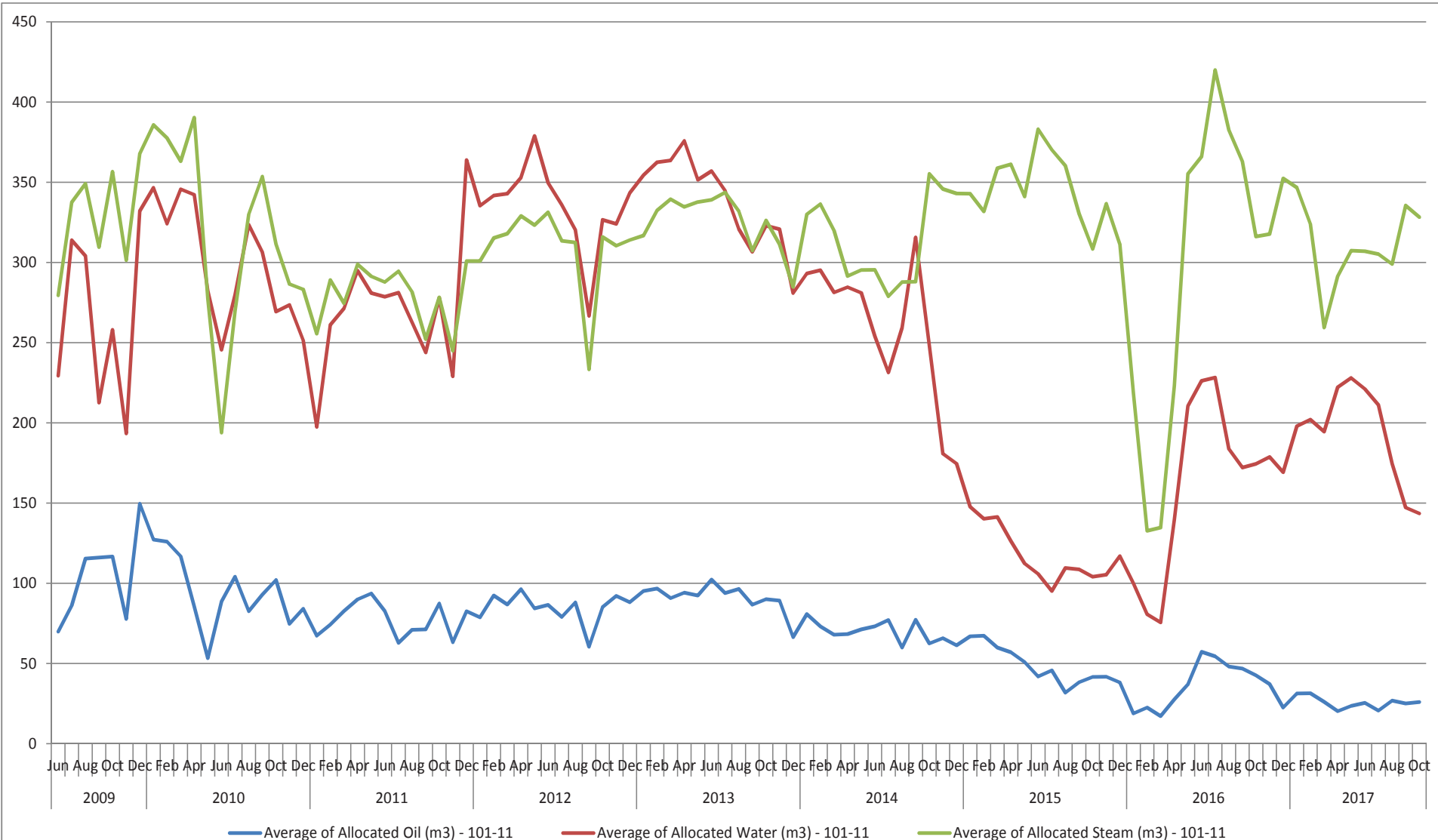
Pod One Pad 101S - 101-F08



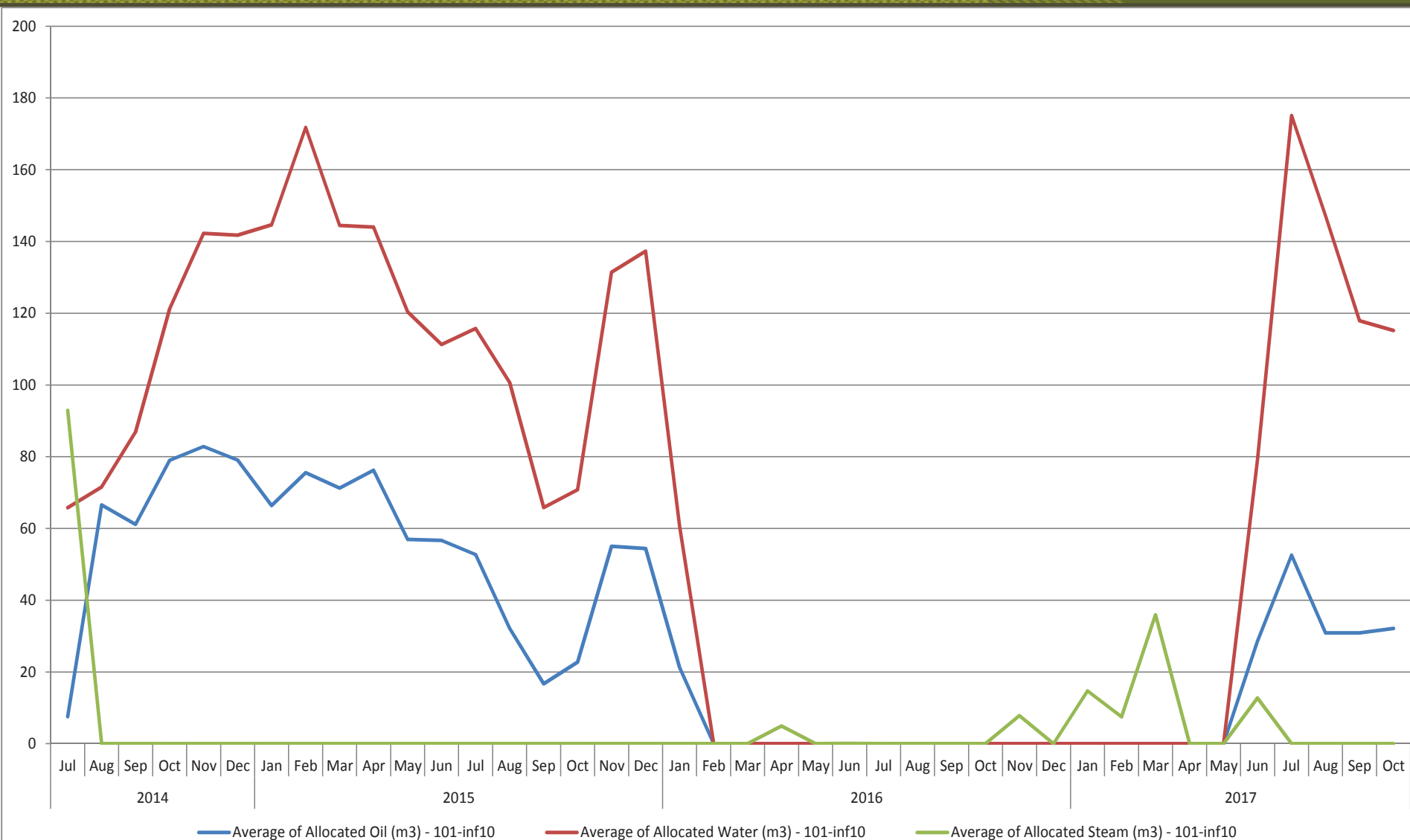
Pod One Pad 101S - 101-F09



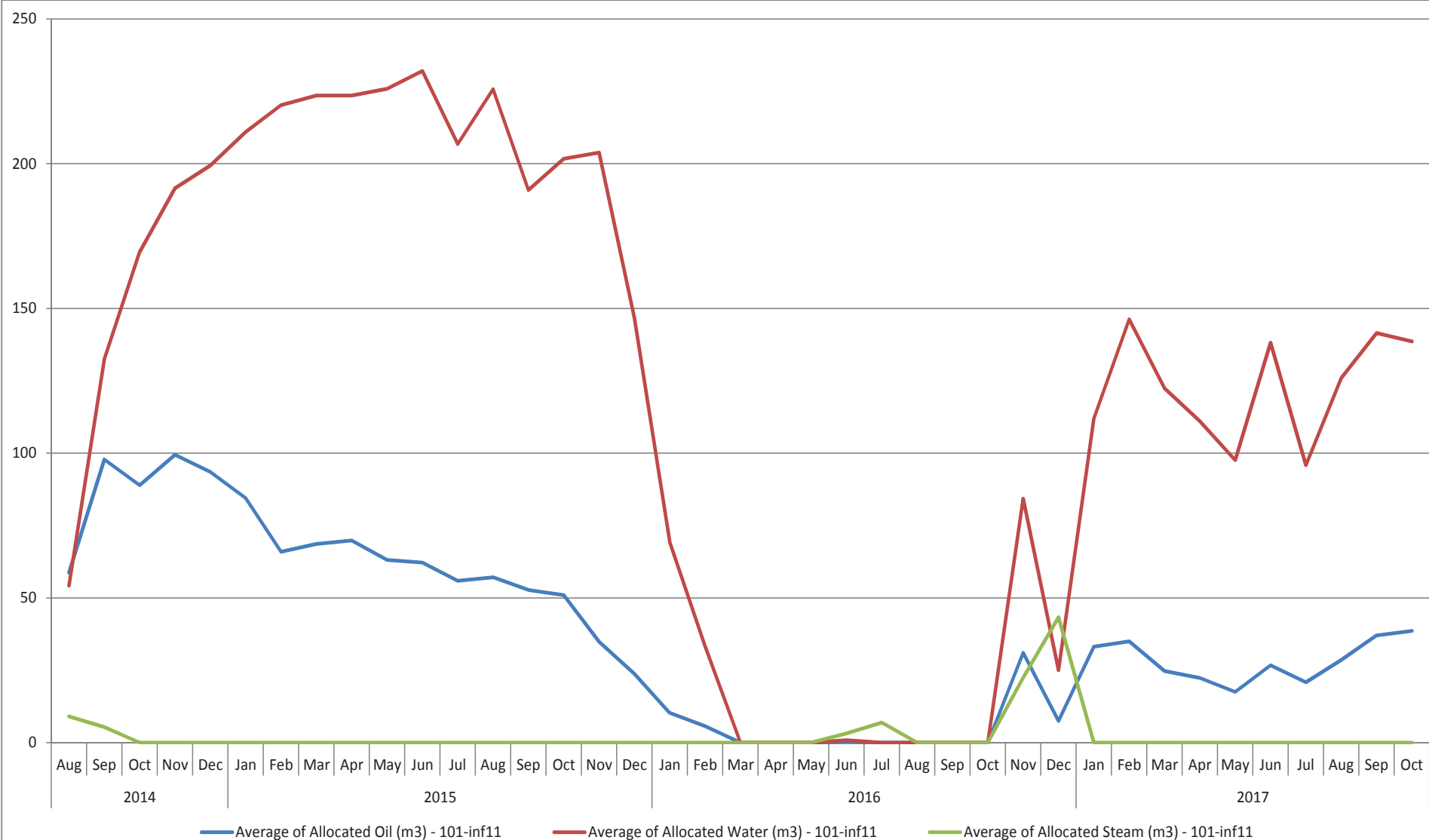
Pod One Pad 102S - 101-11



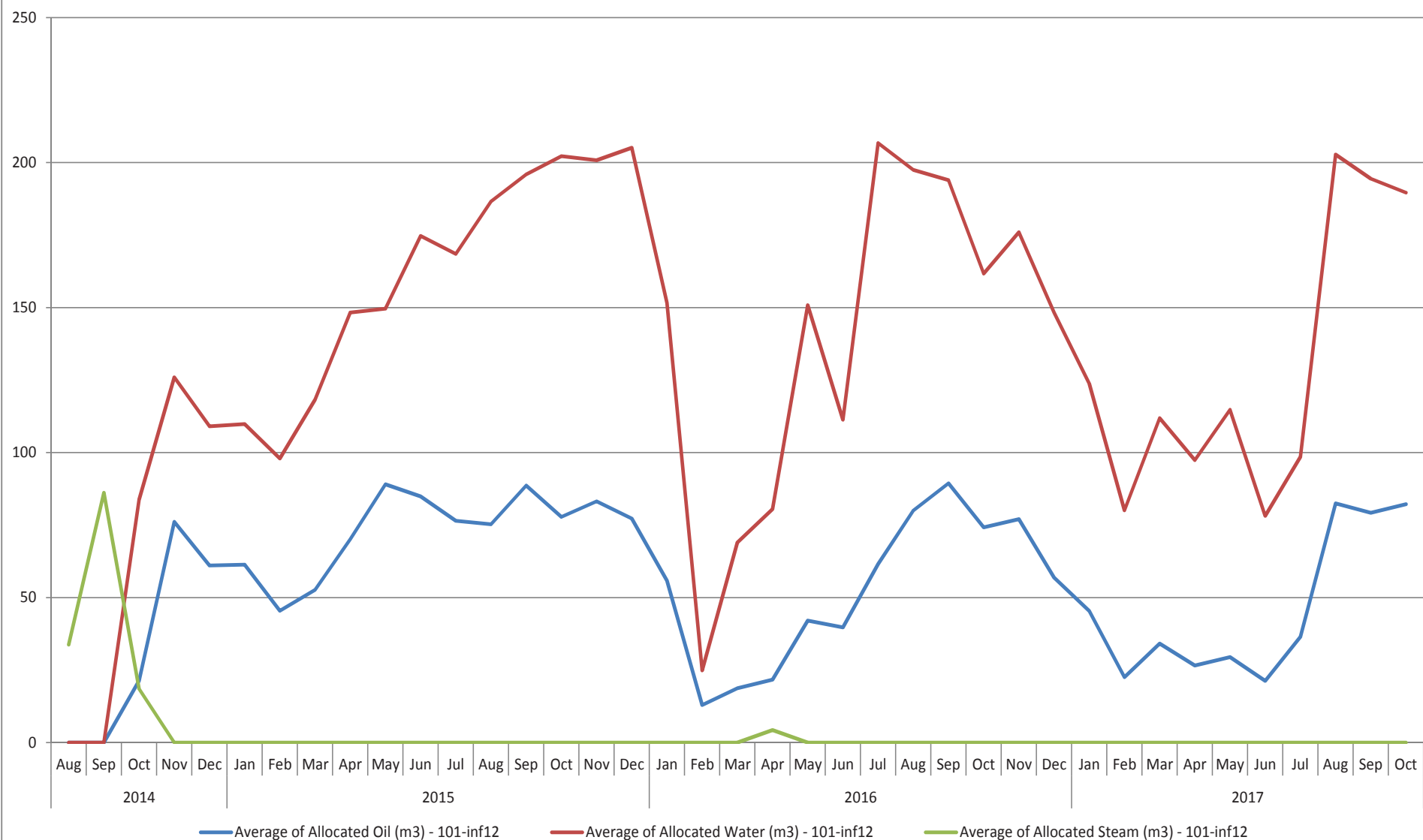
Pod One Pad 102S - 101-F10



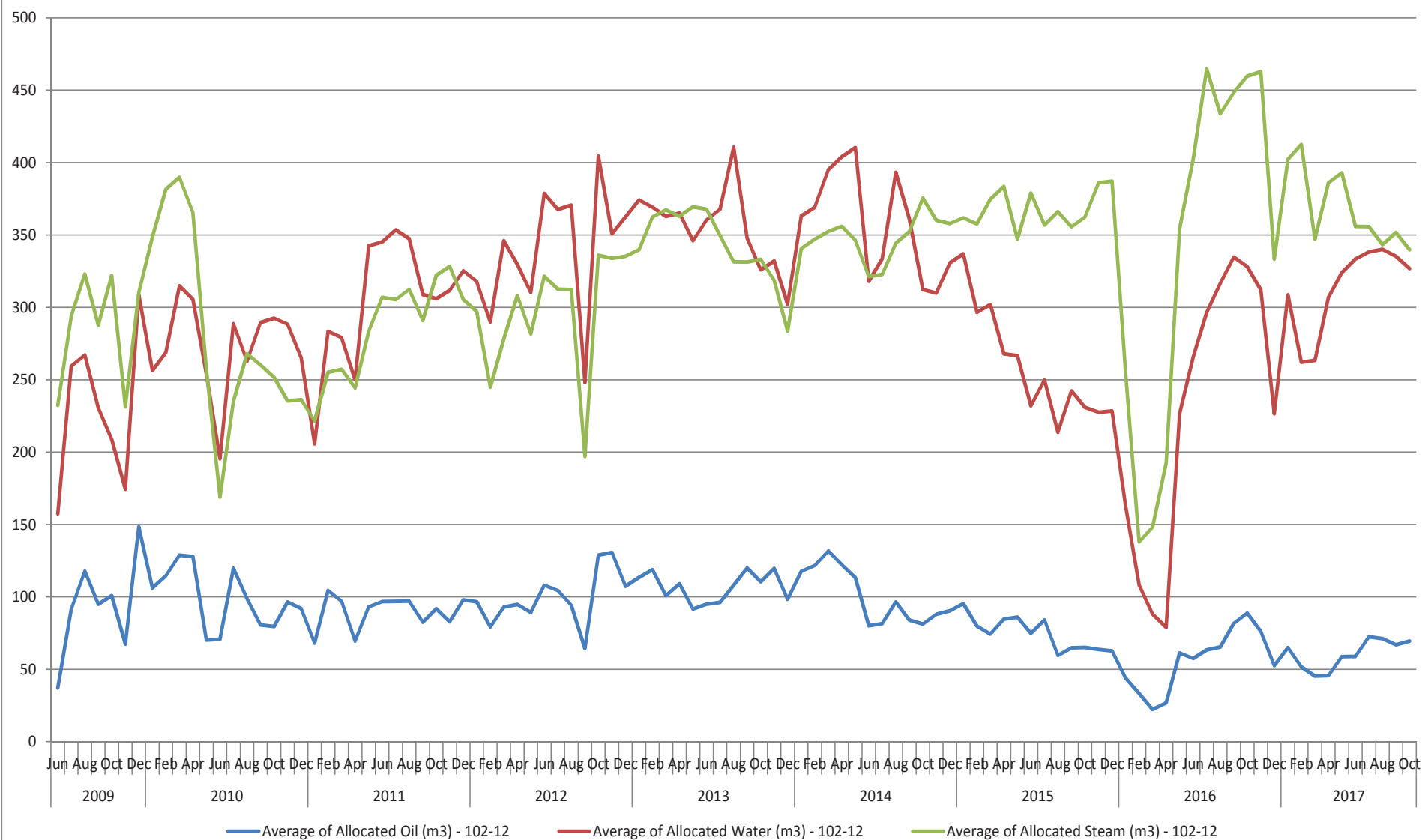
Pod One 102S - 101-F11



Pod One Pad 102S - 101-F12



Pod One Pad 102S - 101-12



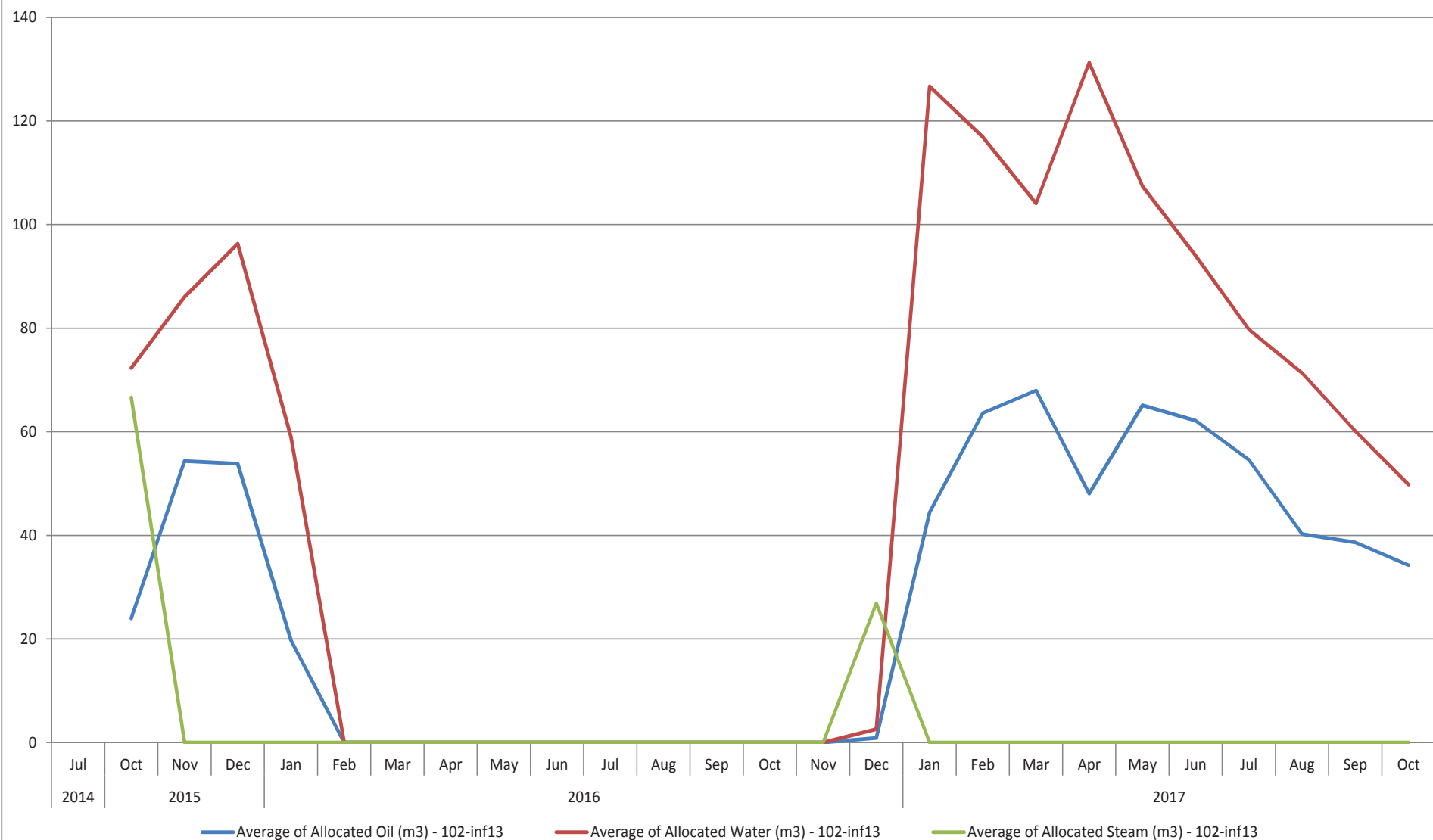
Pod One Pad 102S - 102-13



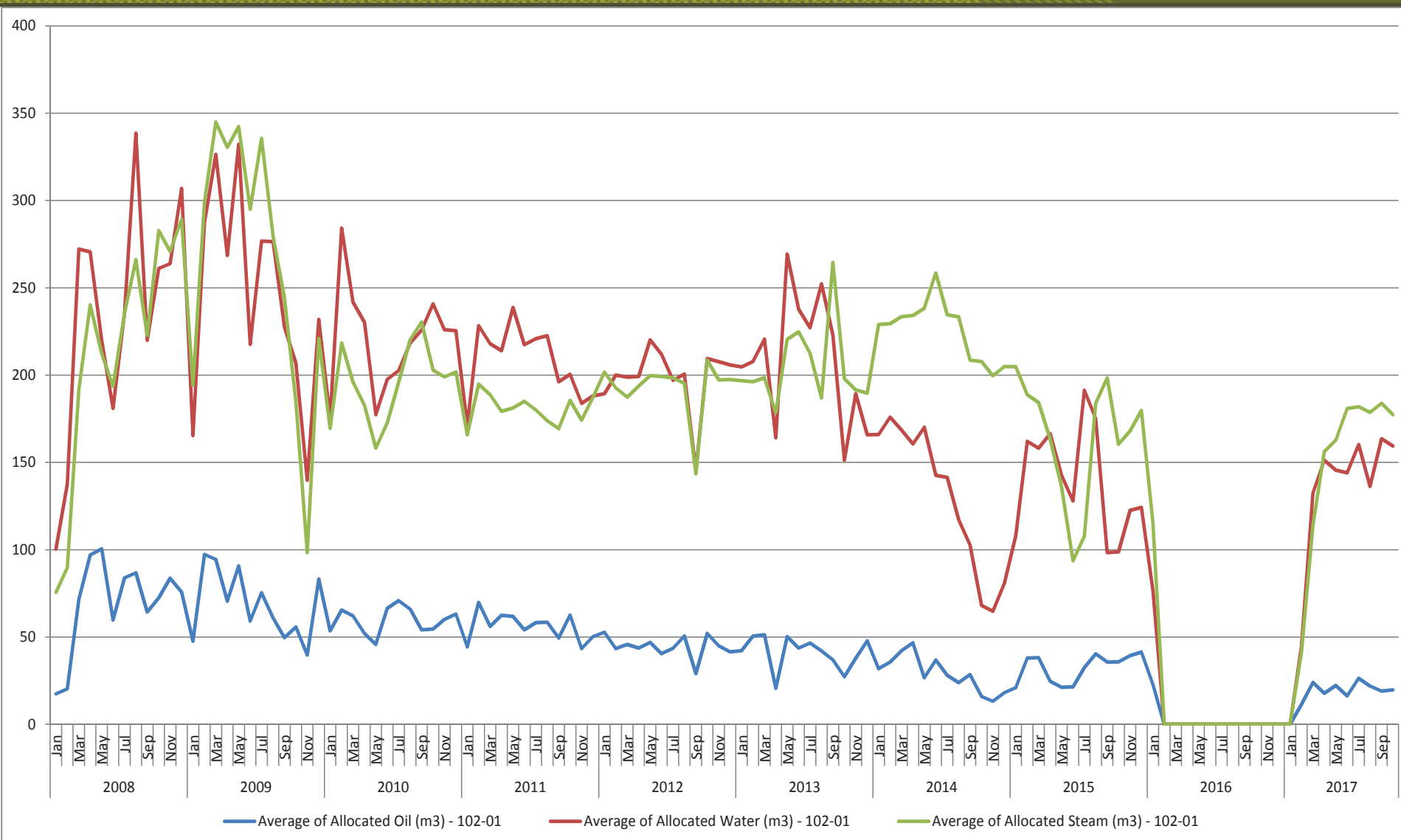
Pod One Pad 102S - 101-14



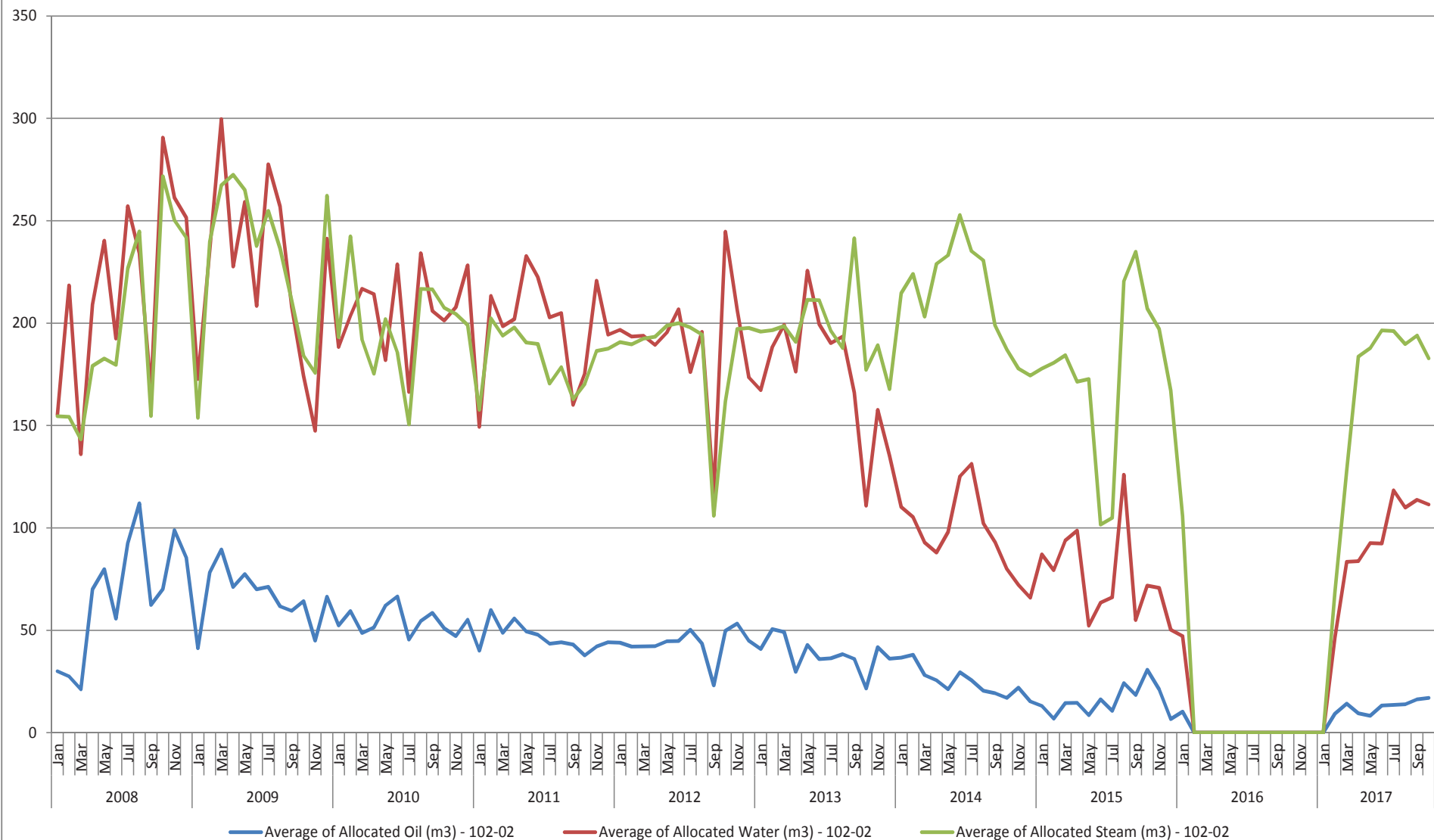
Pod One Pad 102S - 102-F13



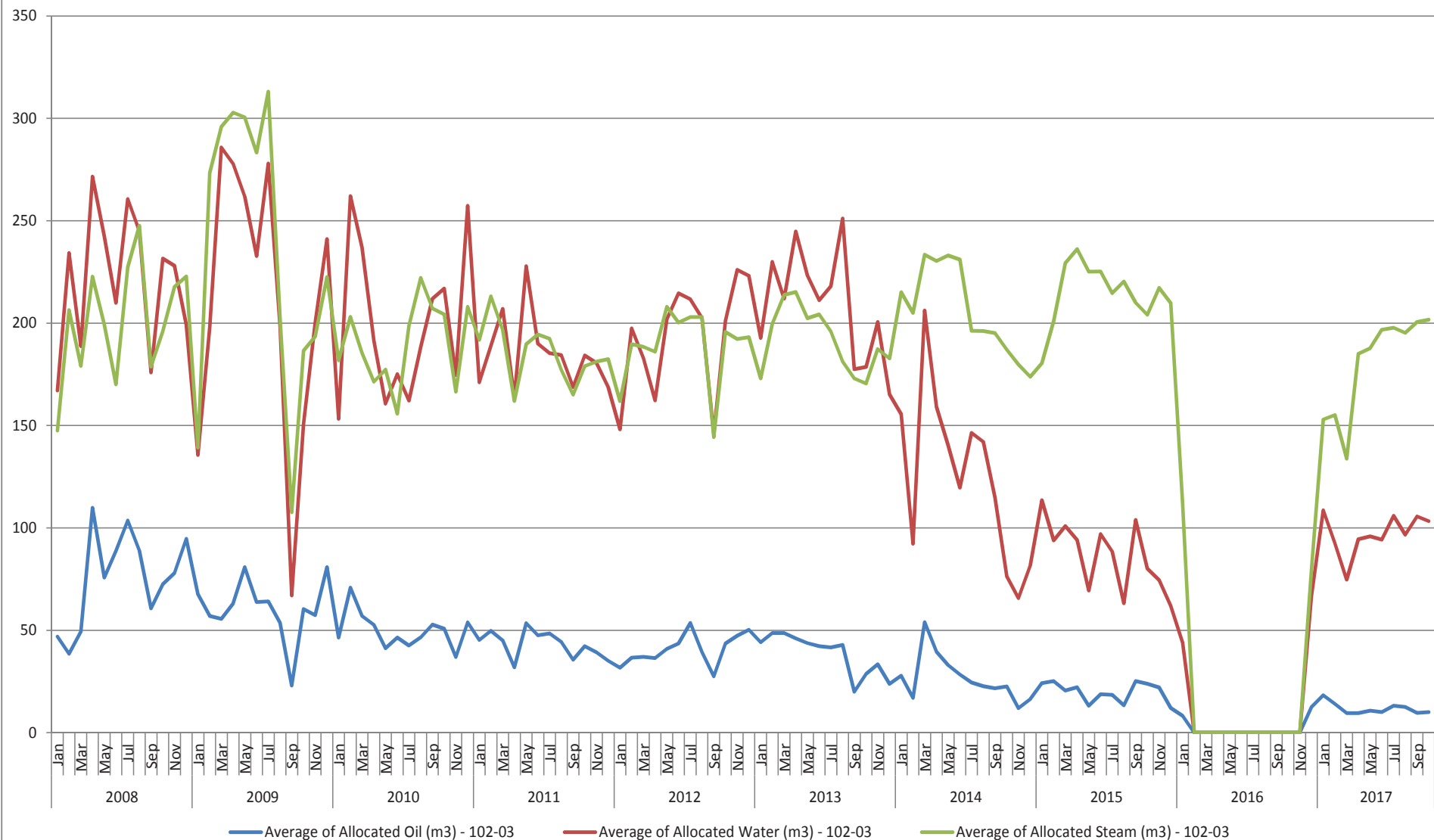
Pod One Pad 102W - 102-01



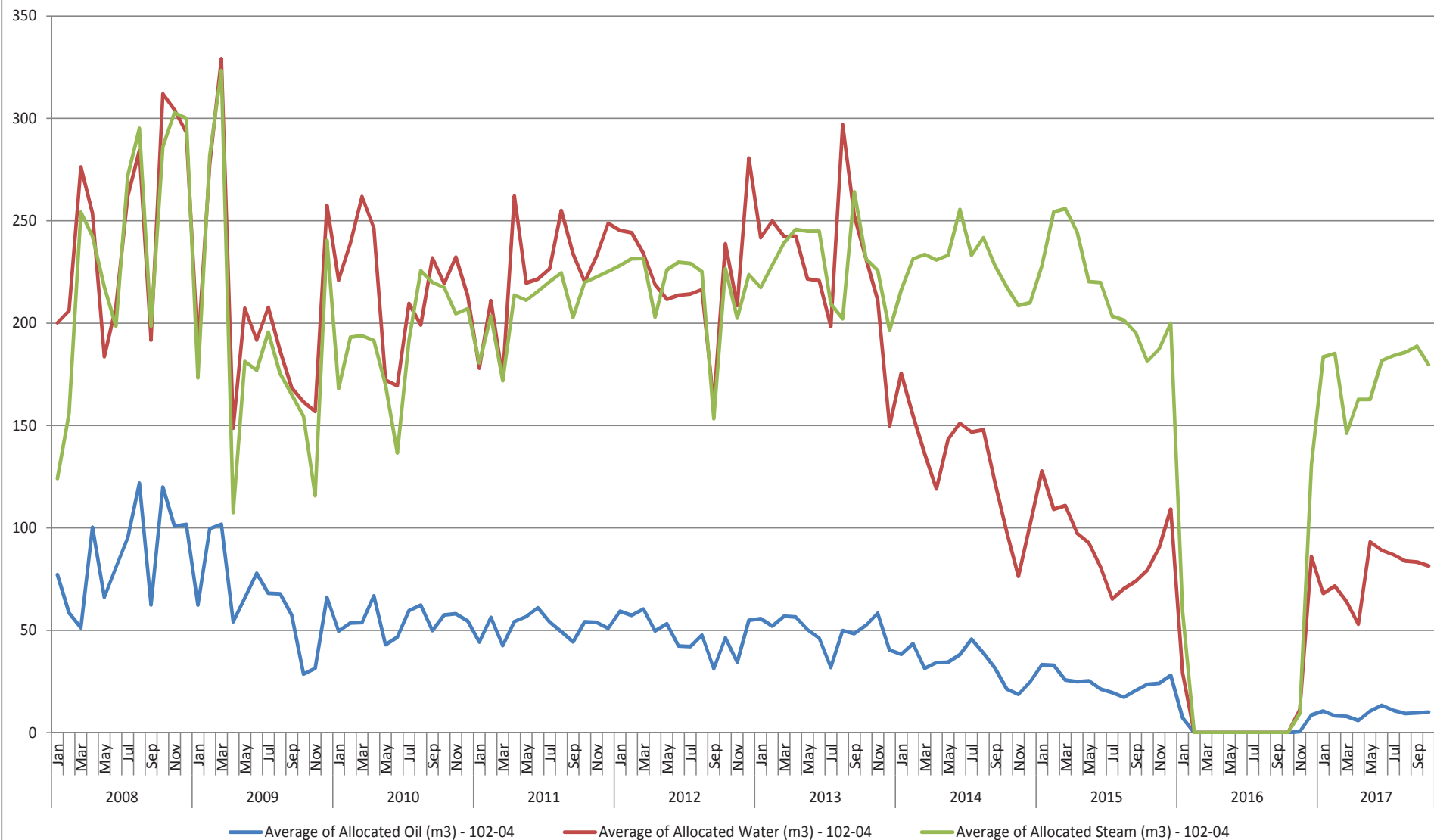
Pod One Pad 102W - 102-02



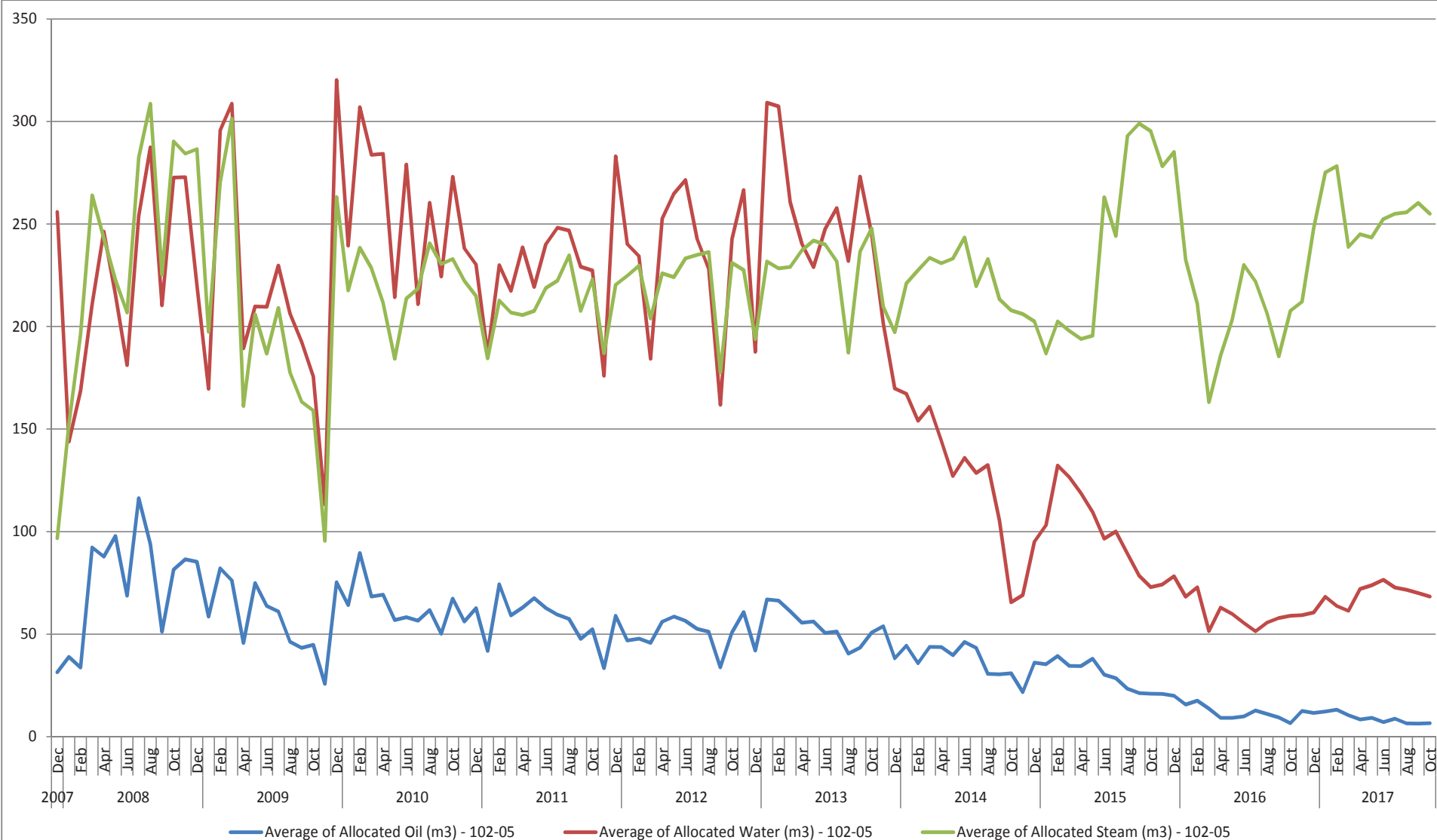
Pod One Pad 102W - 102-03



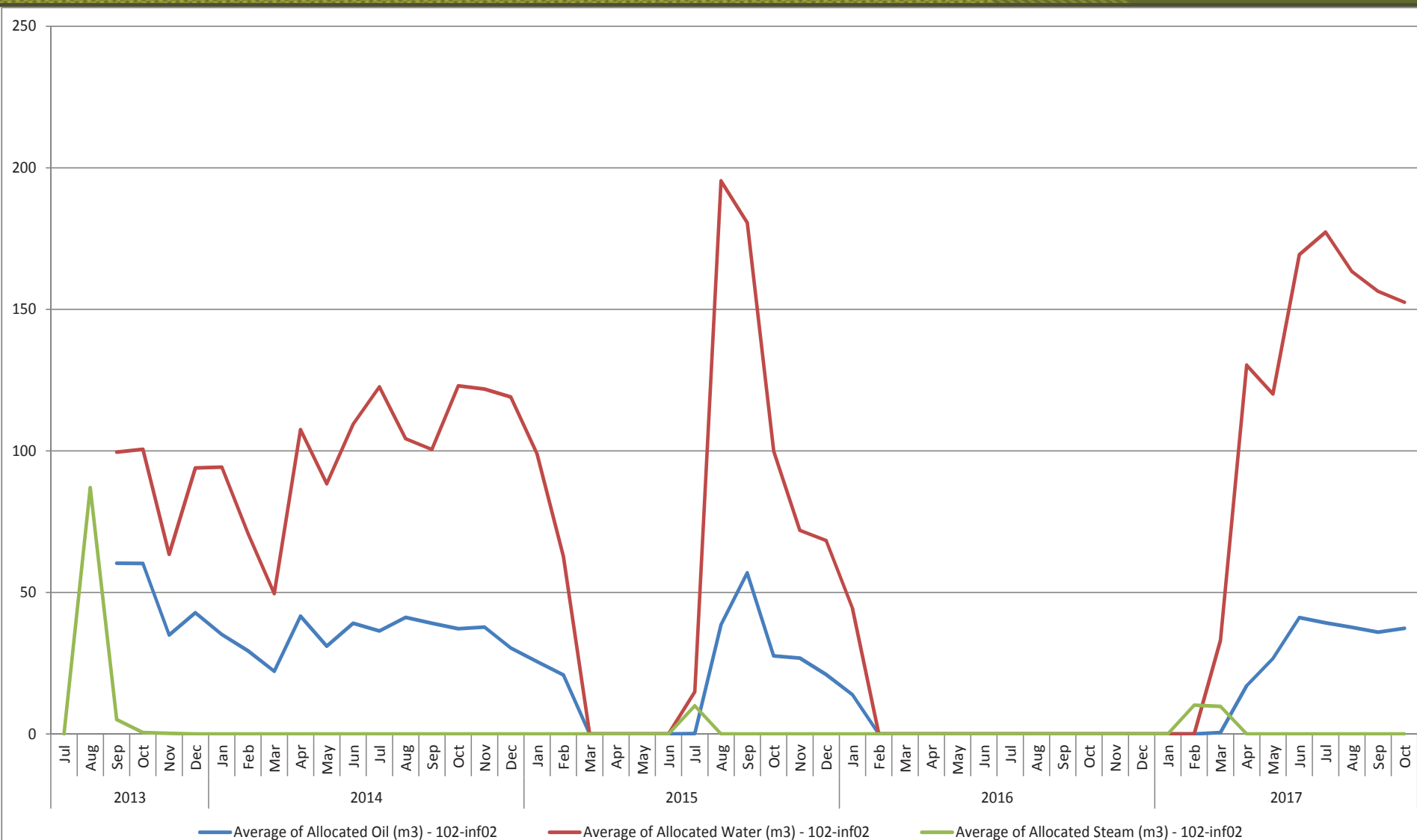
Pod One Pad 102W - 102-04



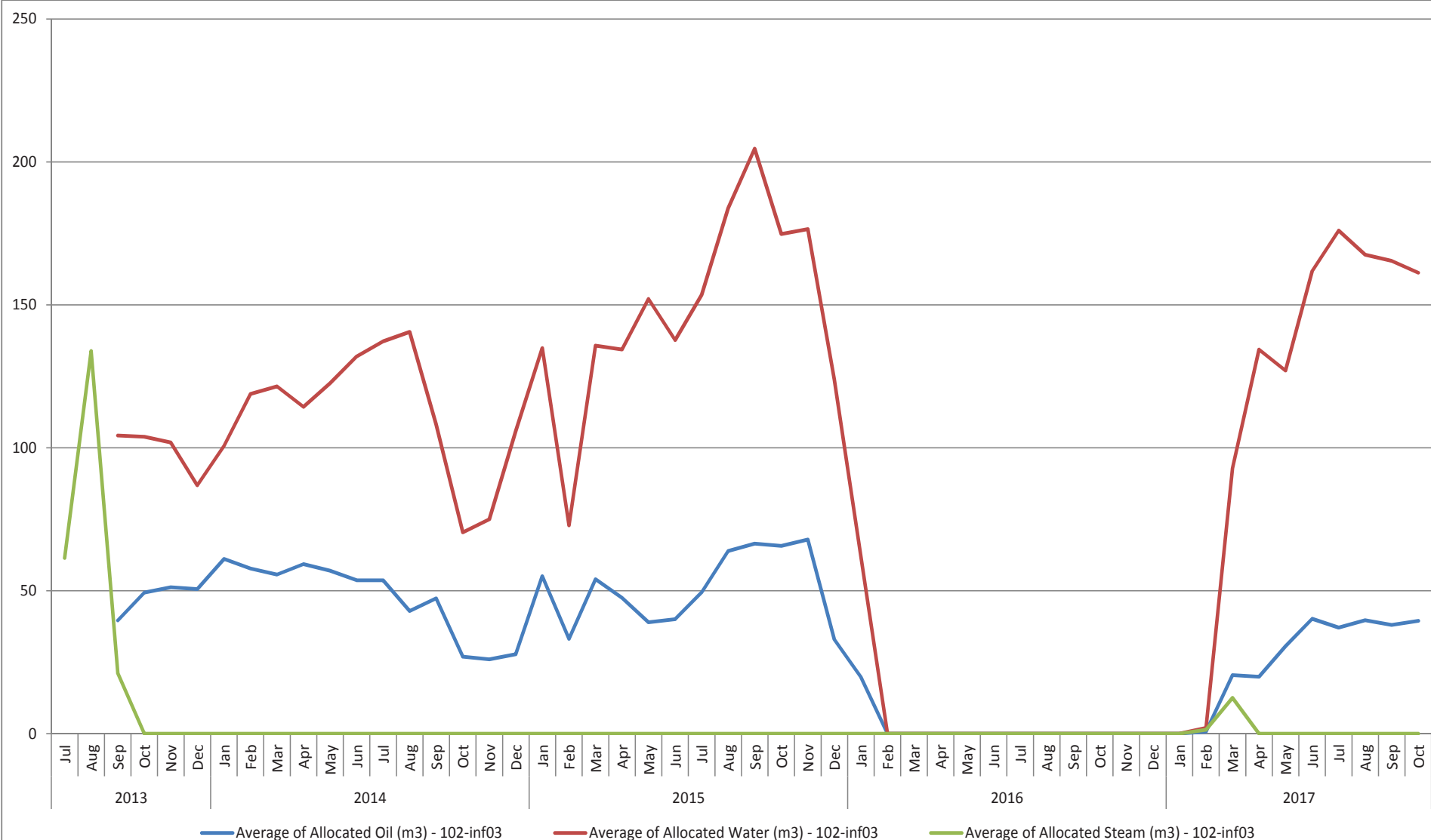
Pod One Pad 102W - 102-05



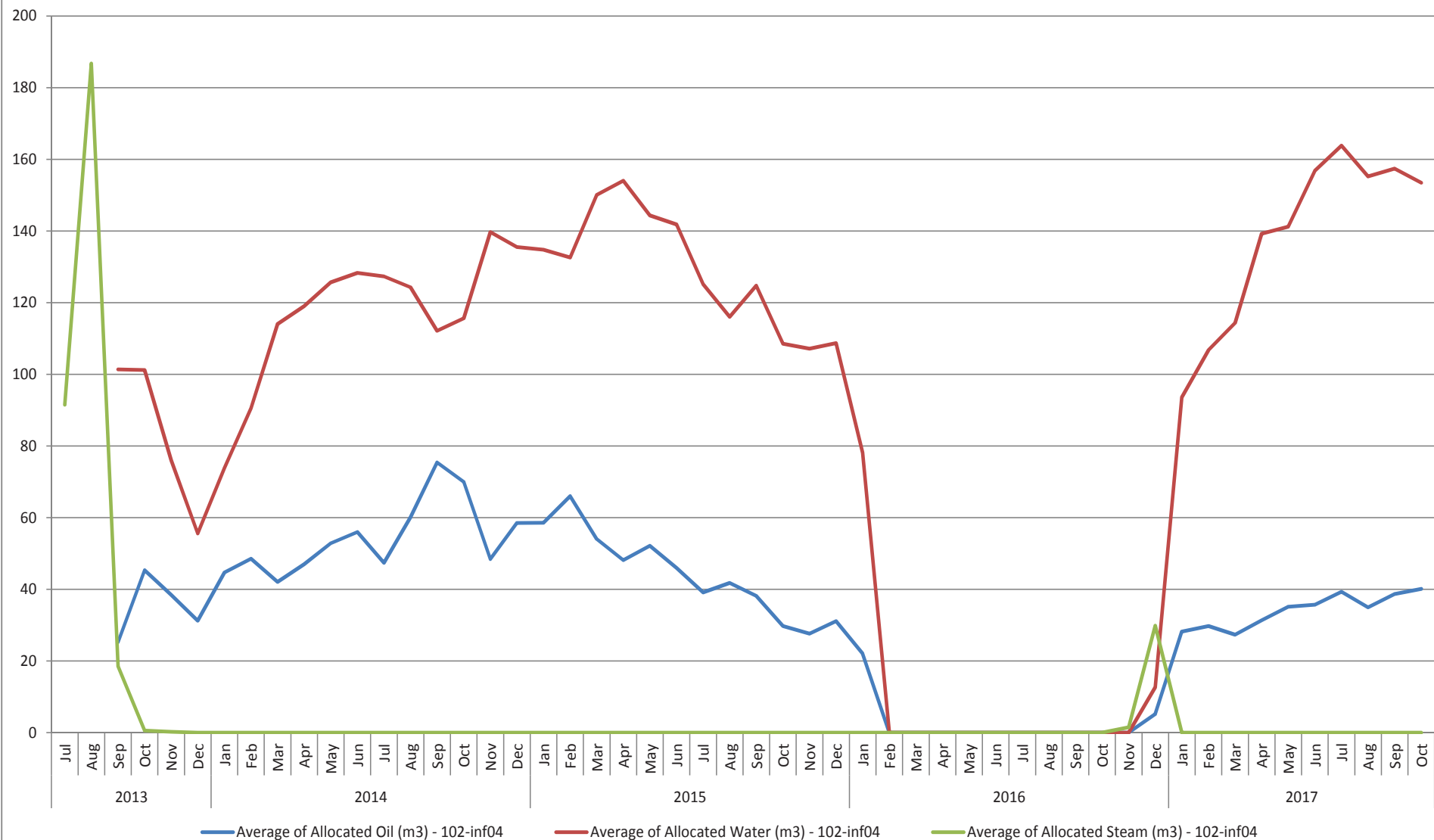
Pod One Pad 102W - 102-F02



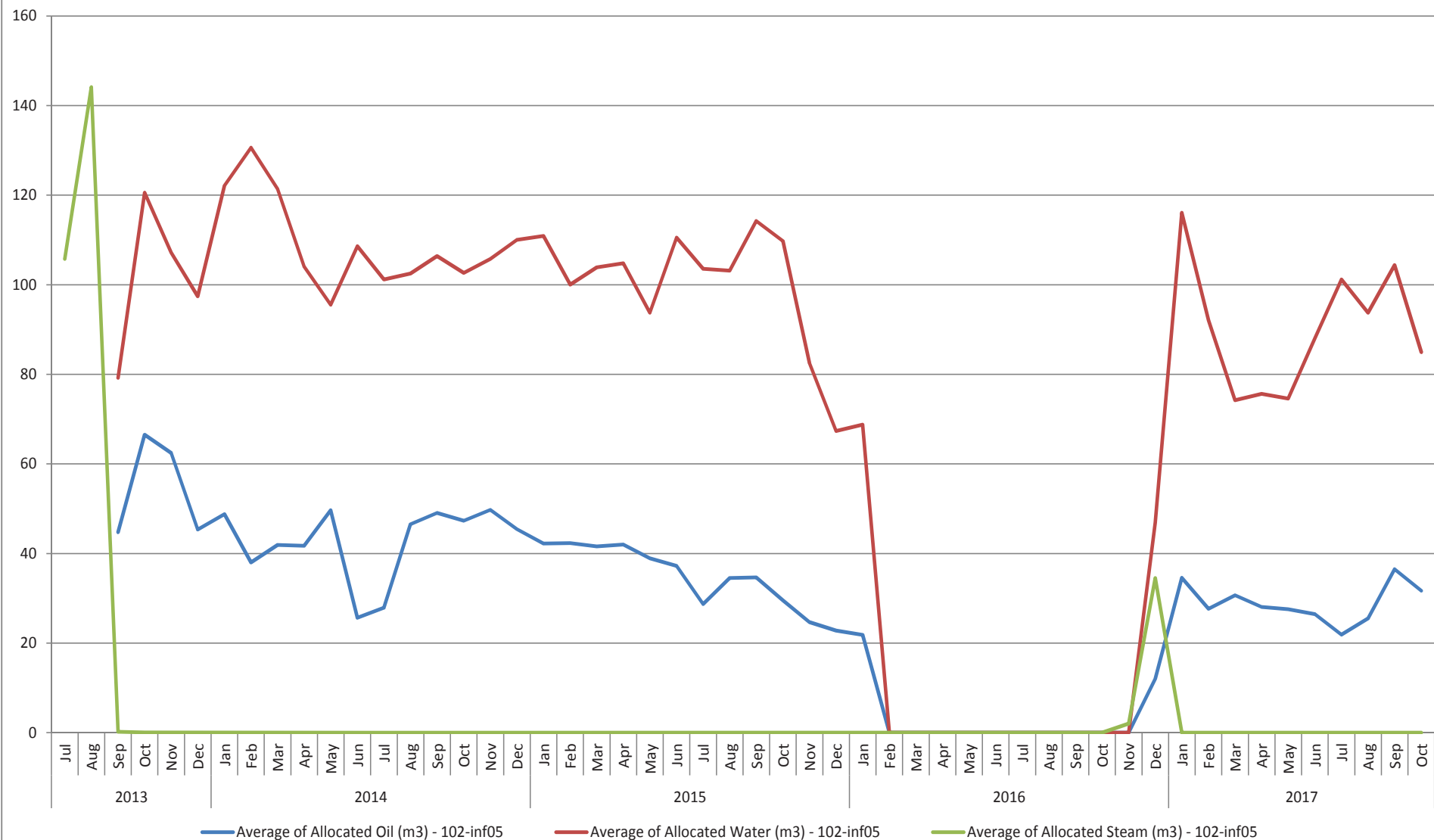
Pod One Pad 102W - 102-F03



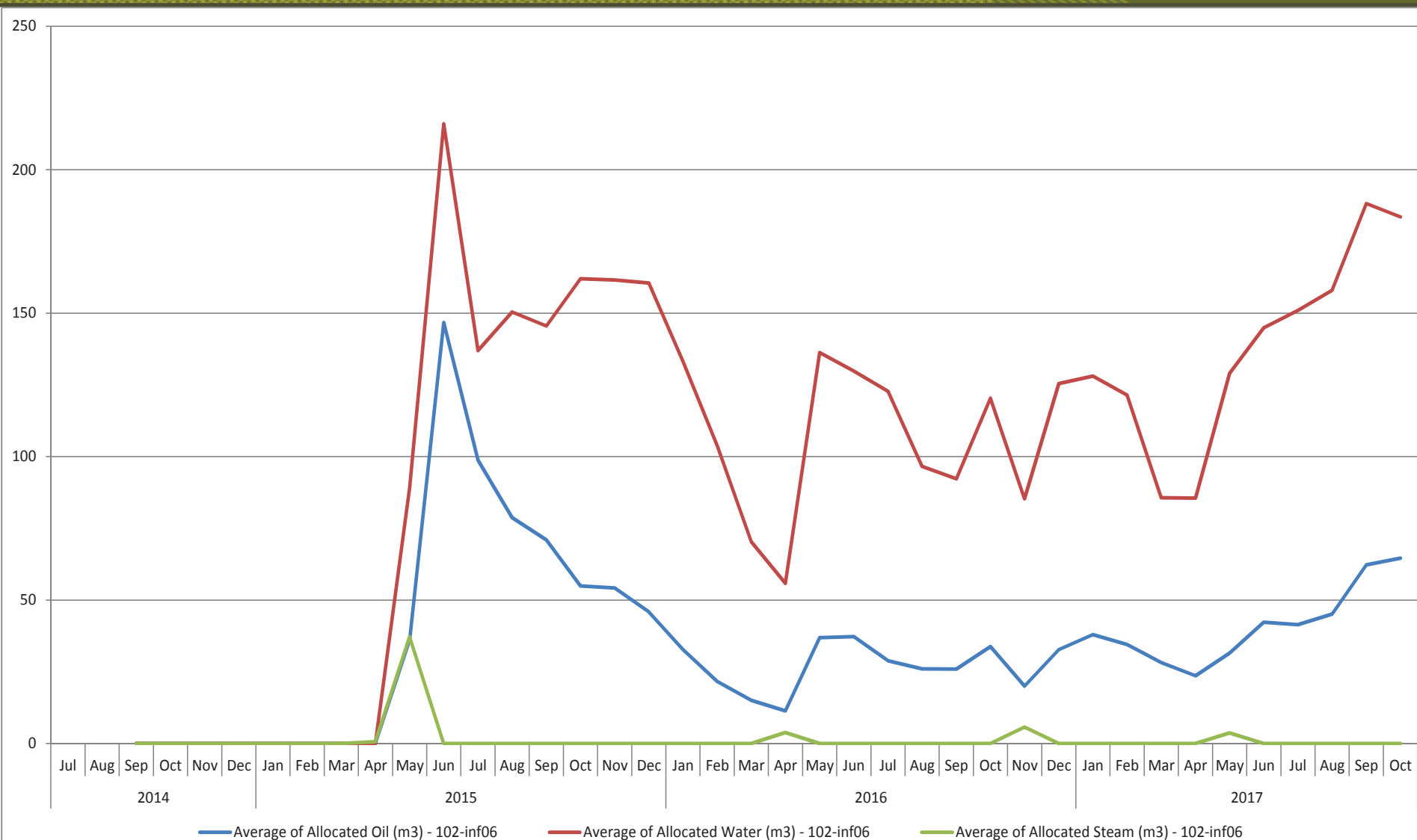
Pod One Pad 102W - 102-F04



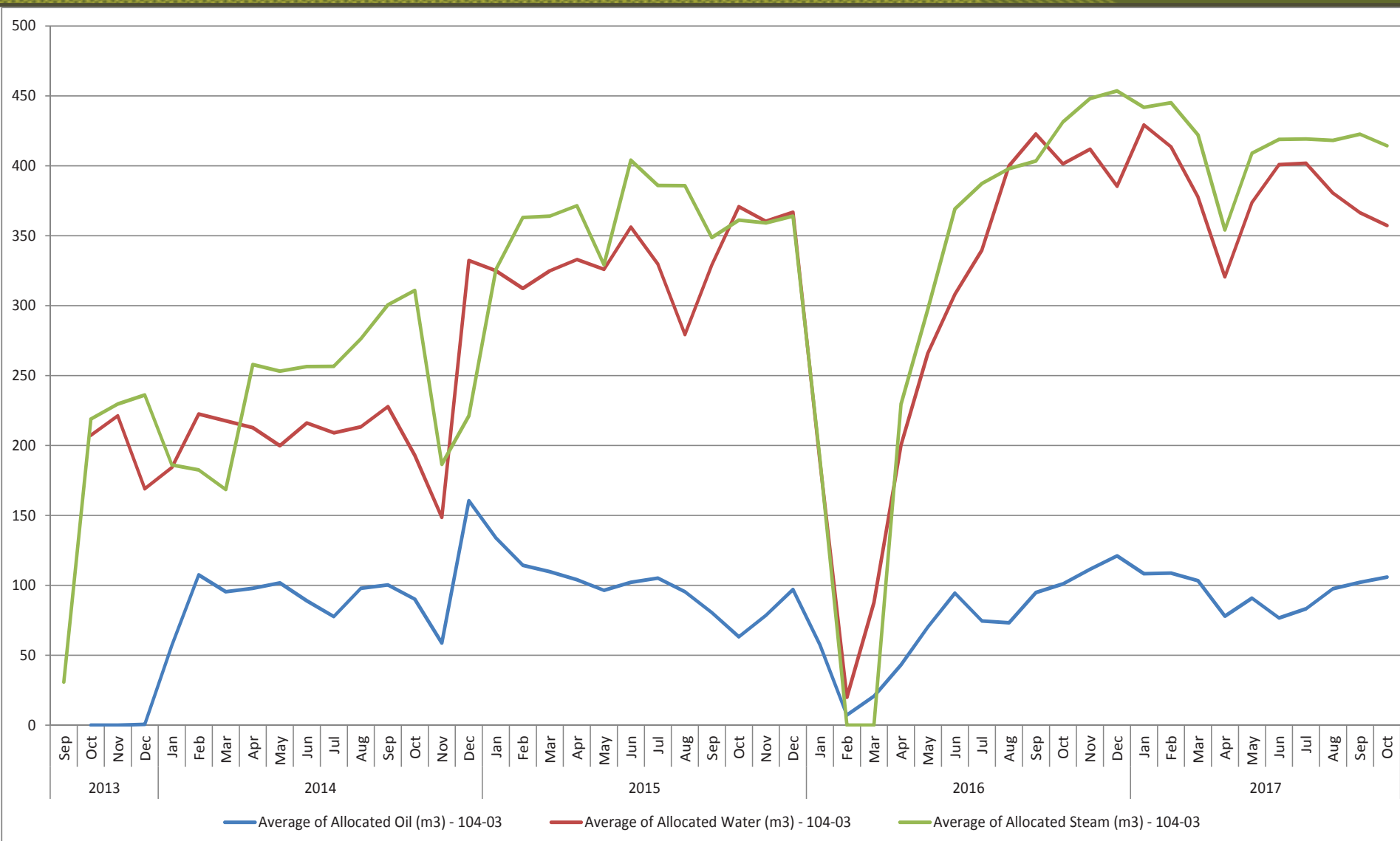
Pod One Pad 102W - 102-F05



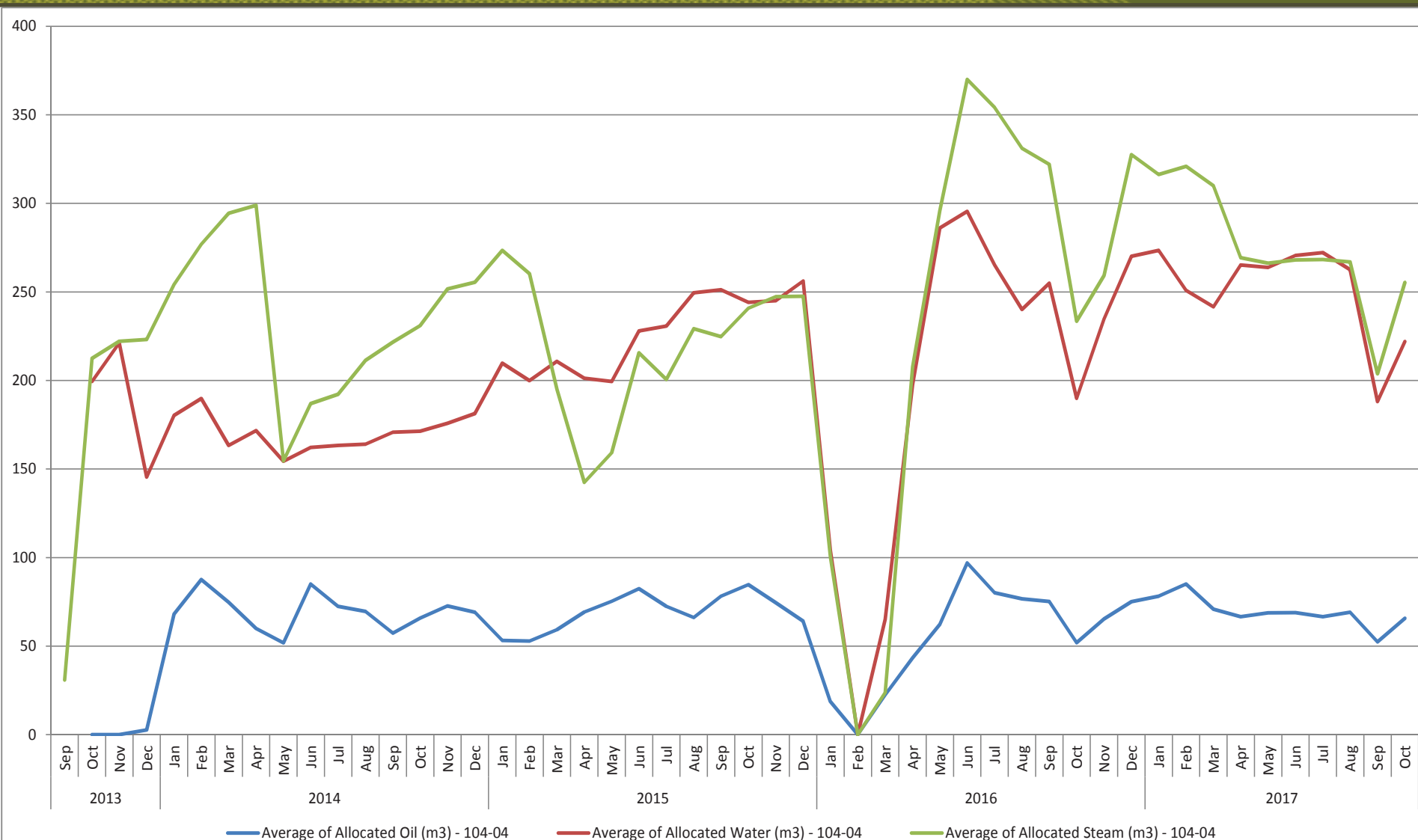
Pod One Pad 102W - 102-F06



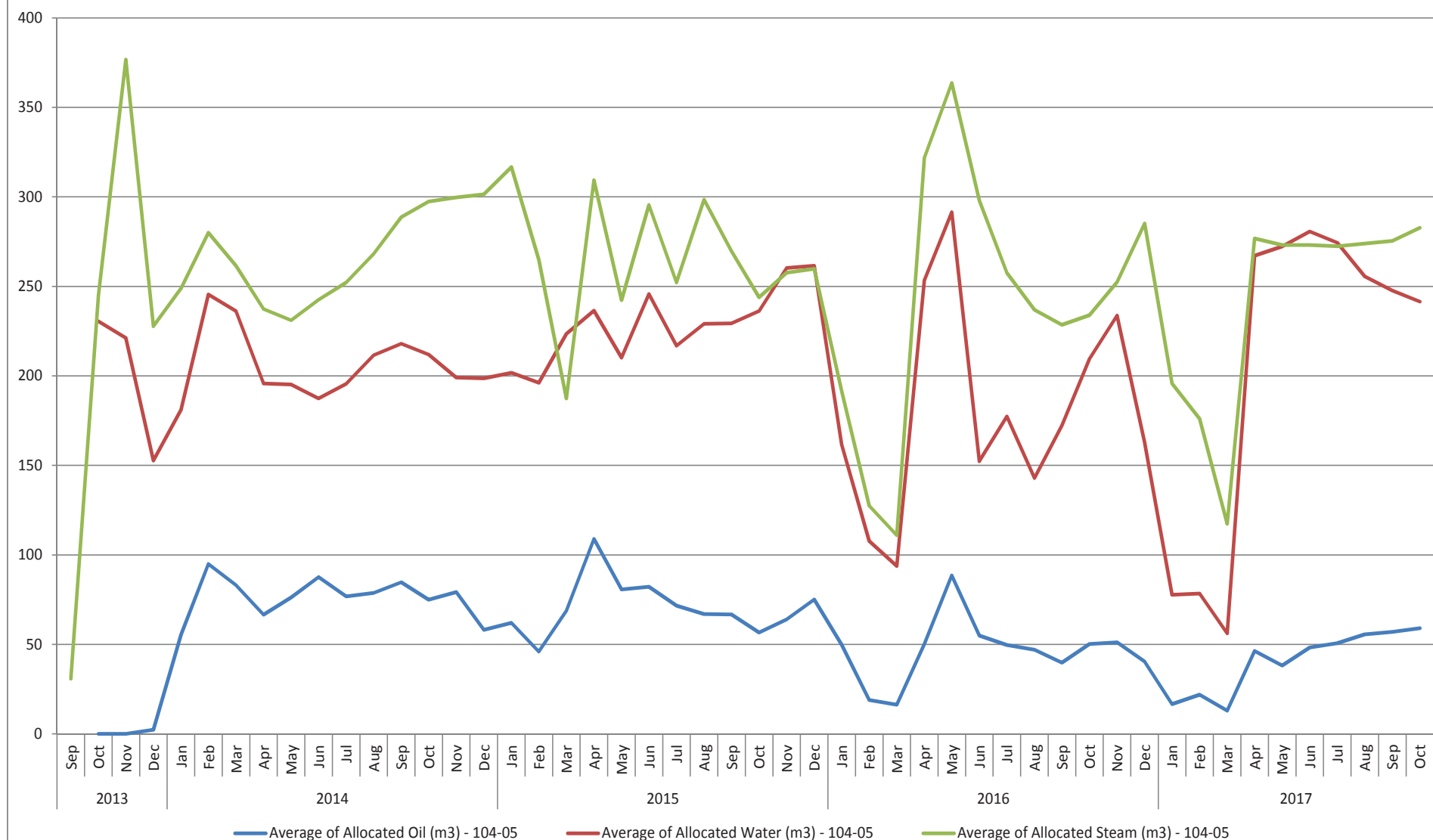
Pod One Pad 104 - 104-03



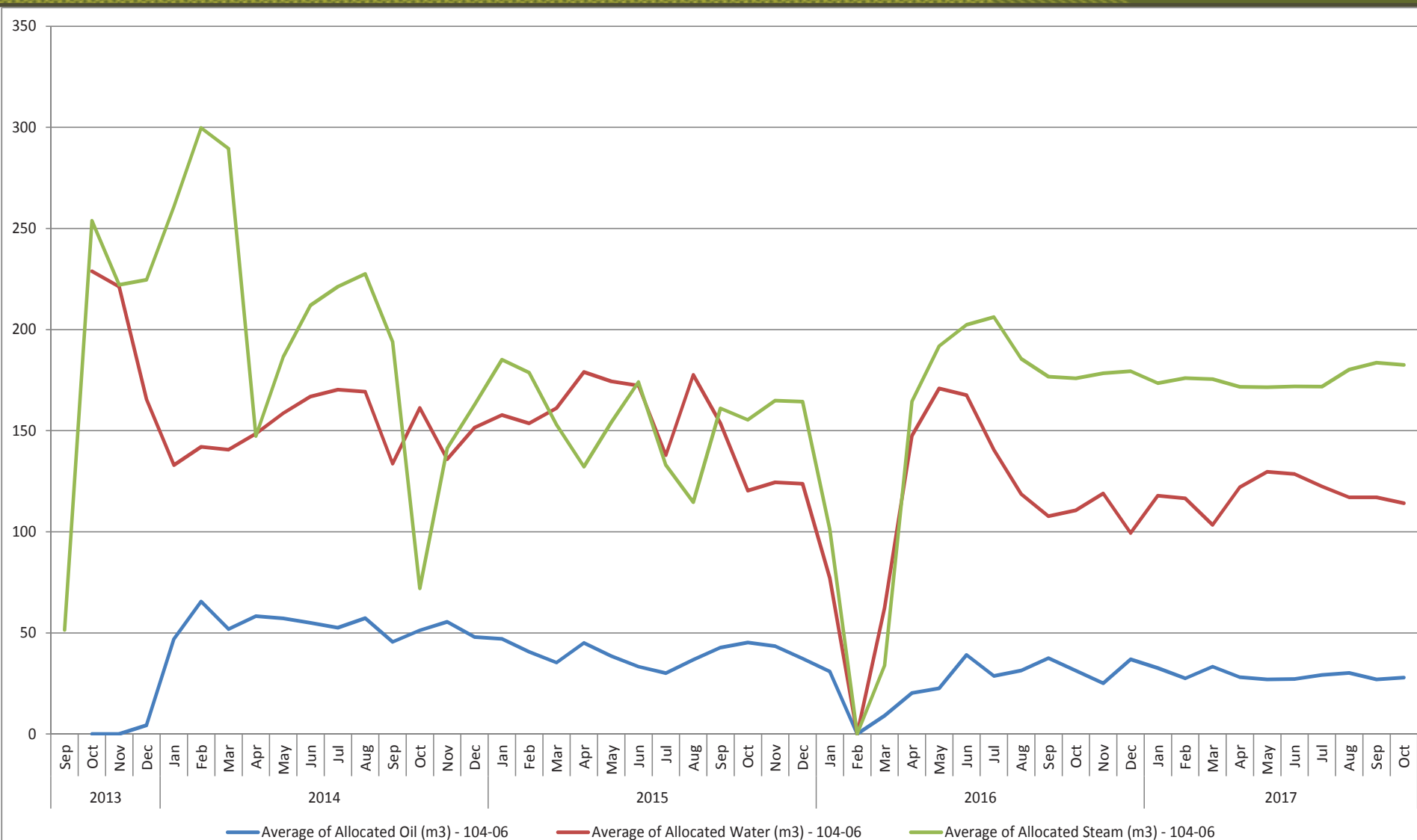
Pod One Pad 104 - 104-04



Pod One Pad 104 - 104-05



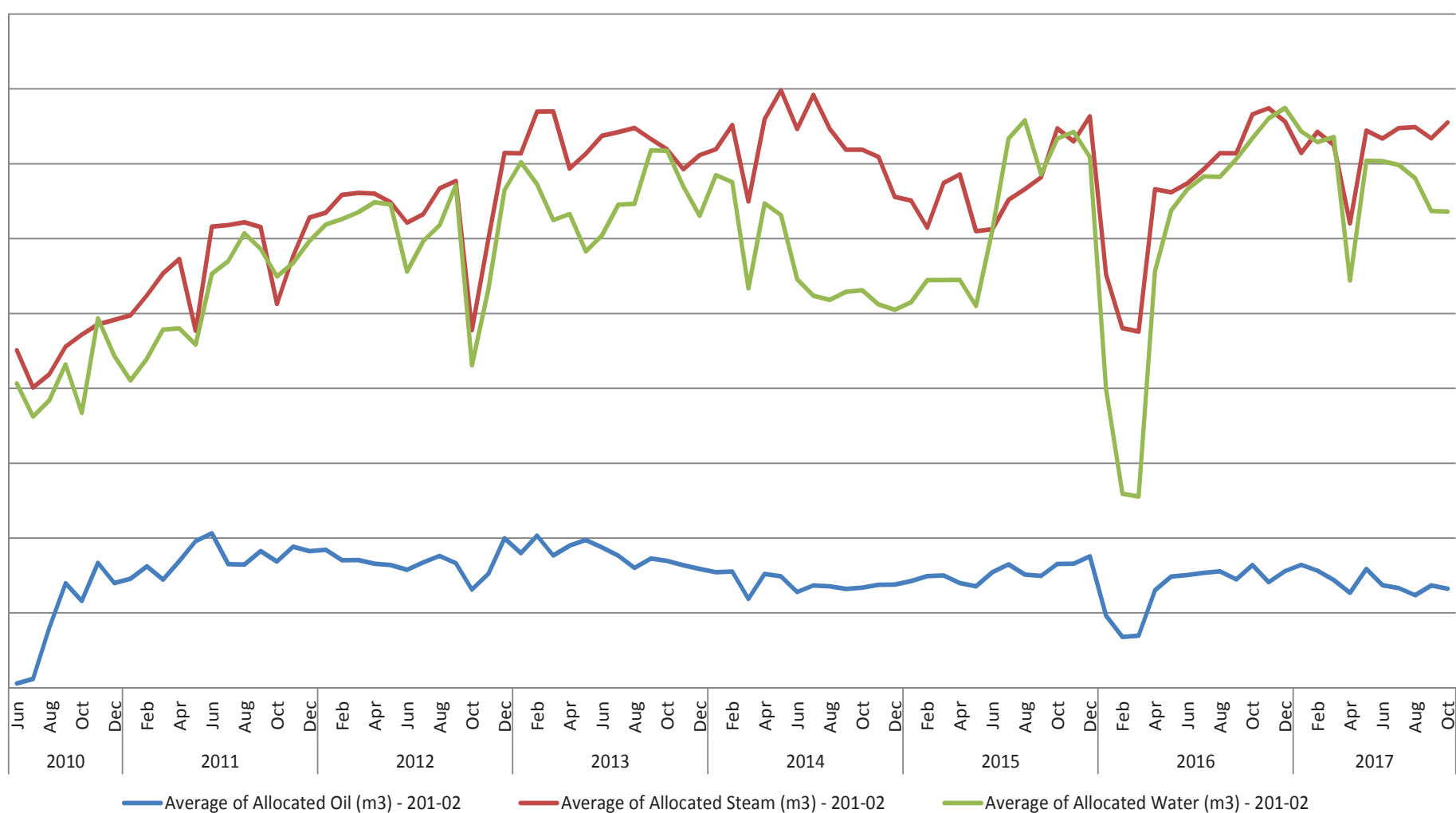
Pod One Pad 104 - 104-06



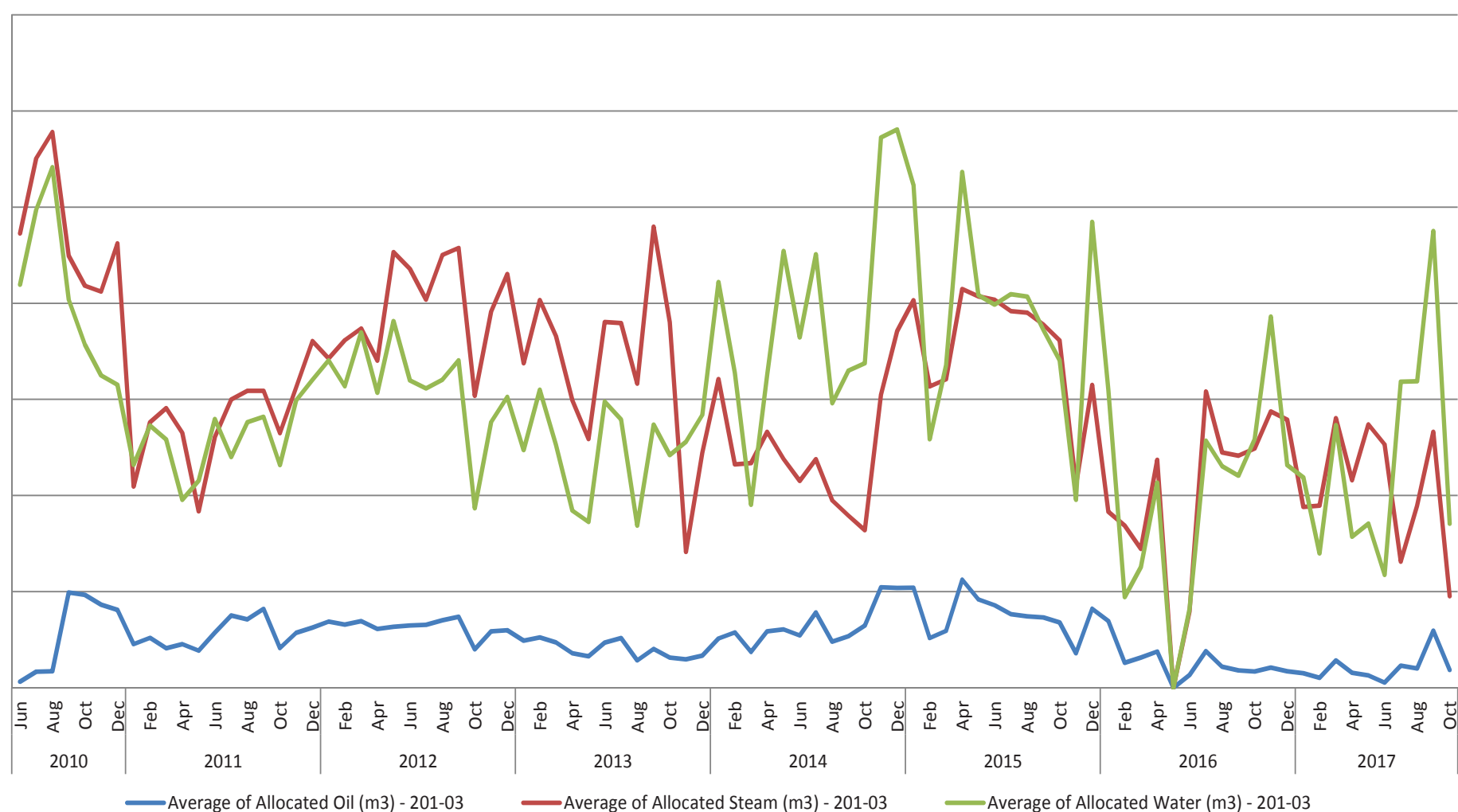
201-01



201-02



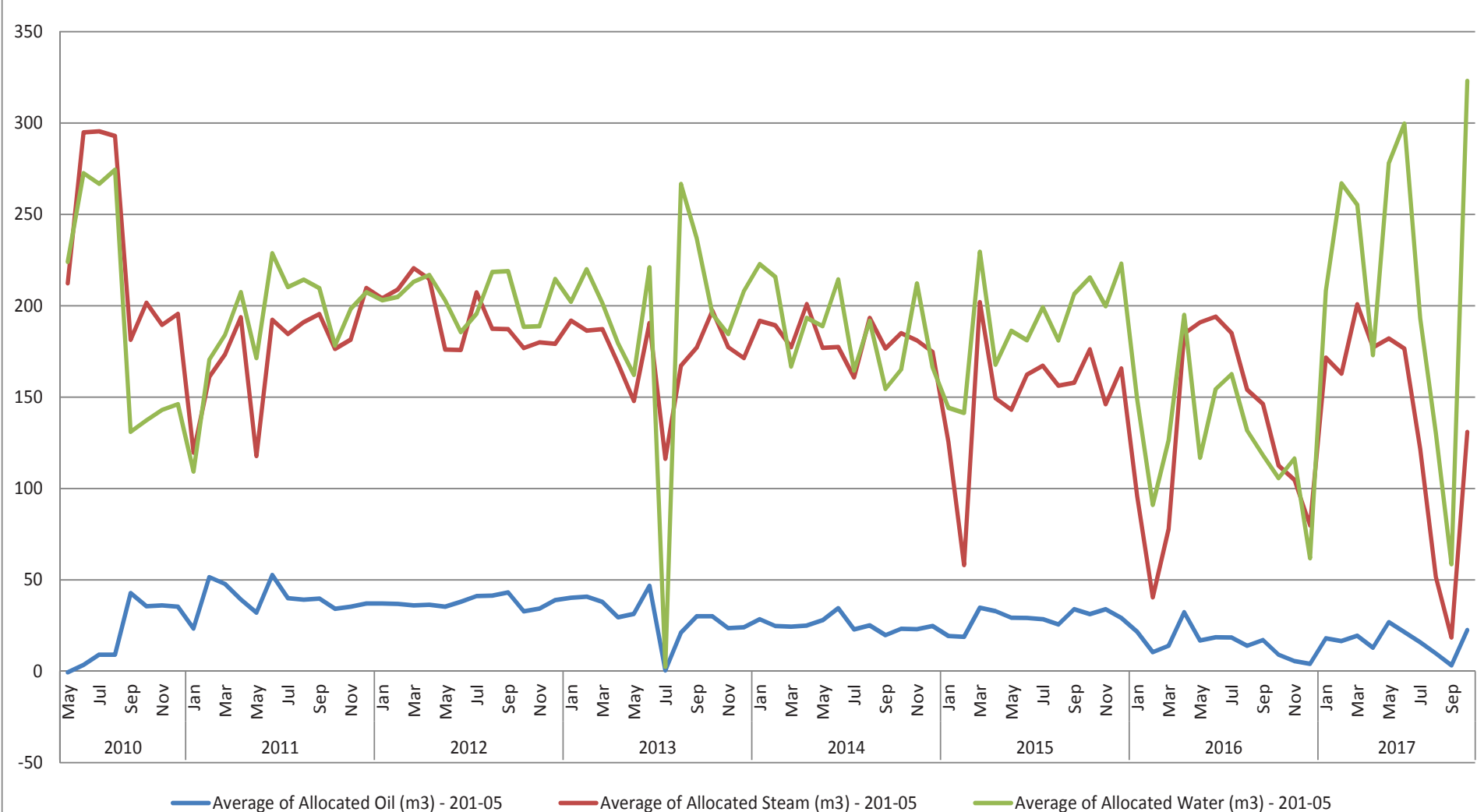
201-03



201-04

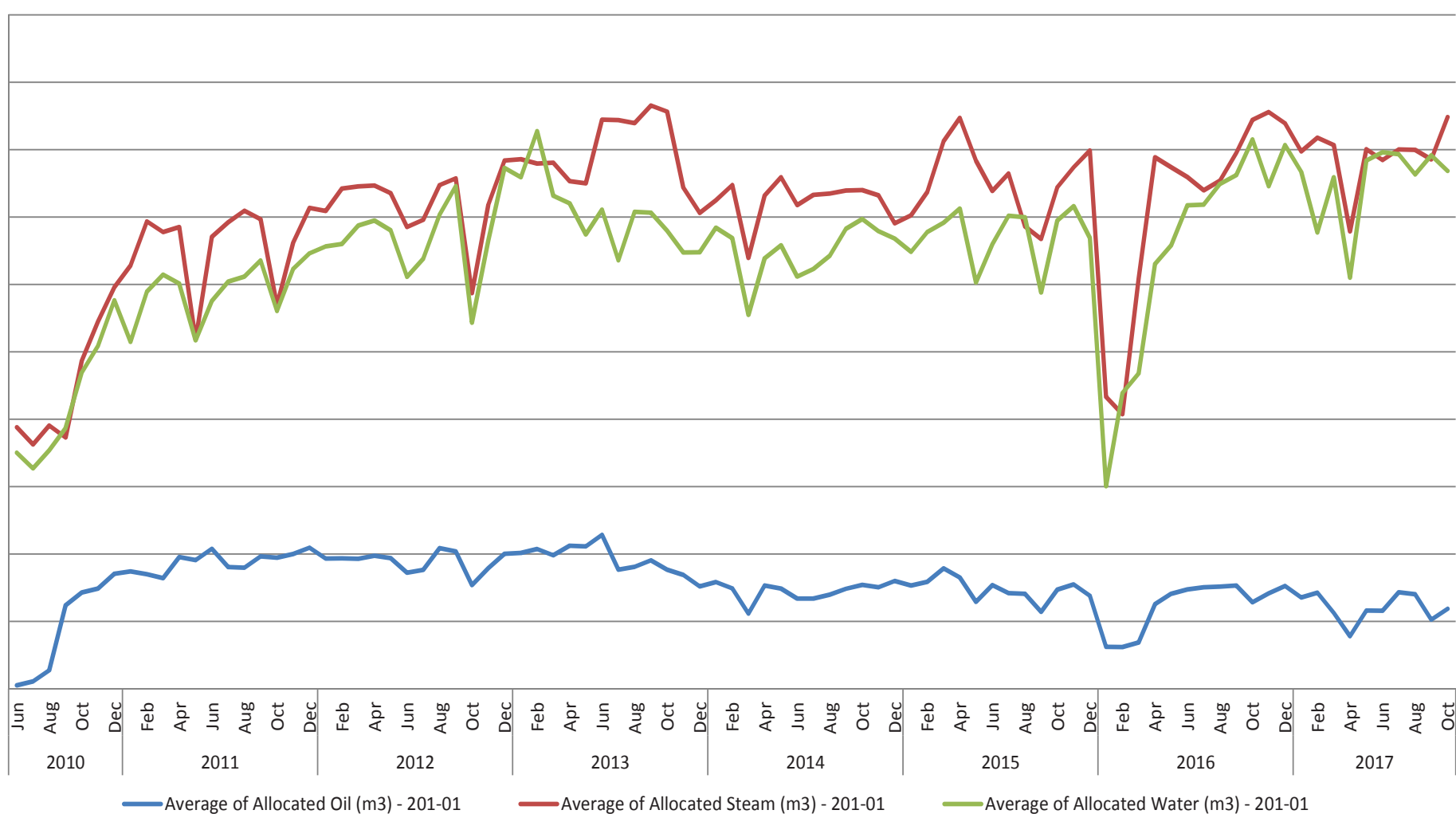


201-05

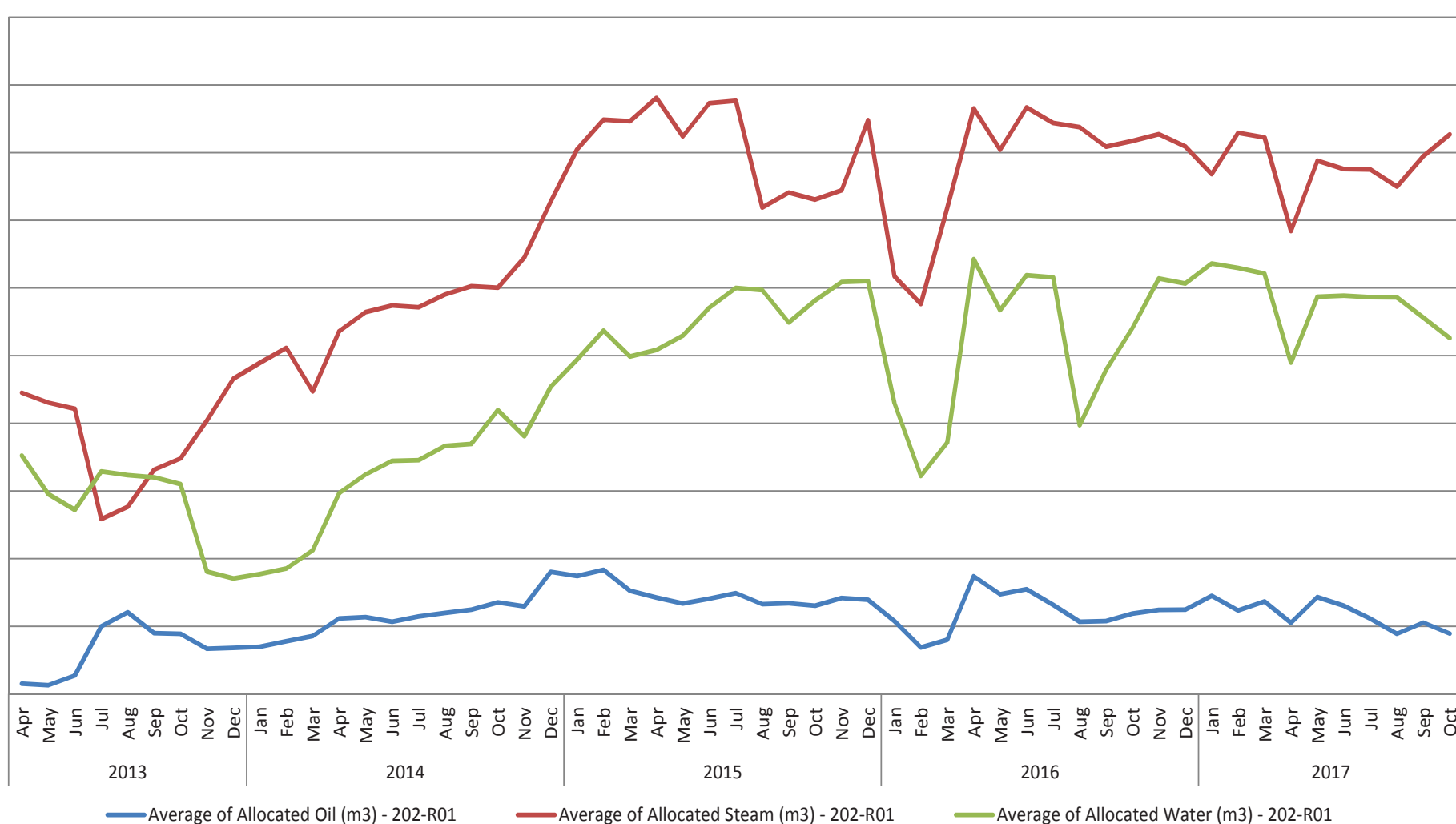


Algar Pad 202S - 202-01

201-01



202-R01



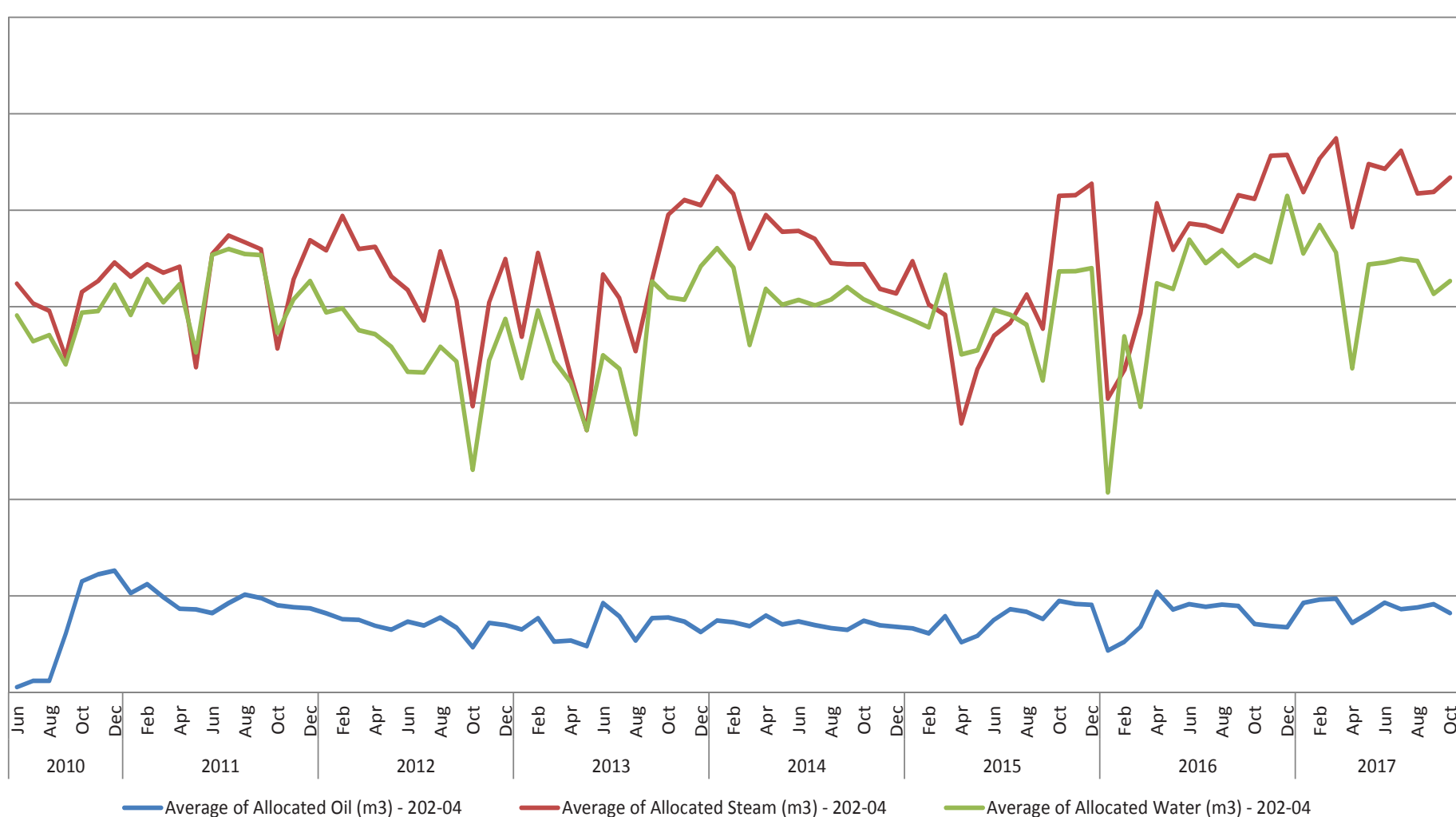
202-02



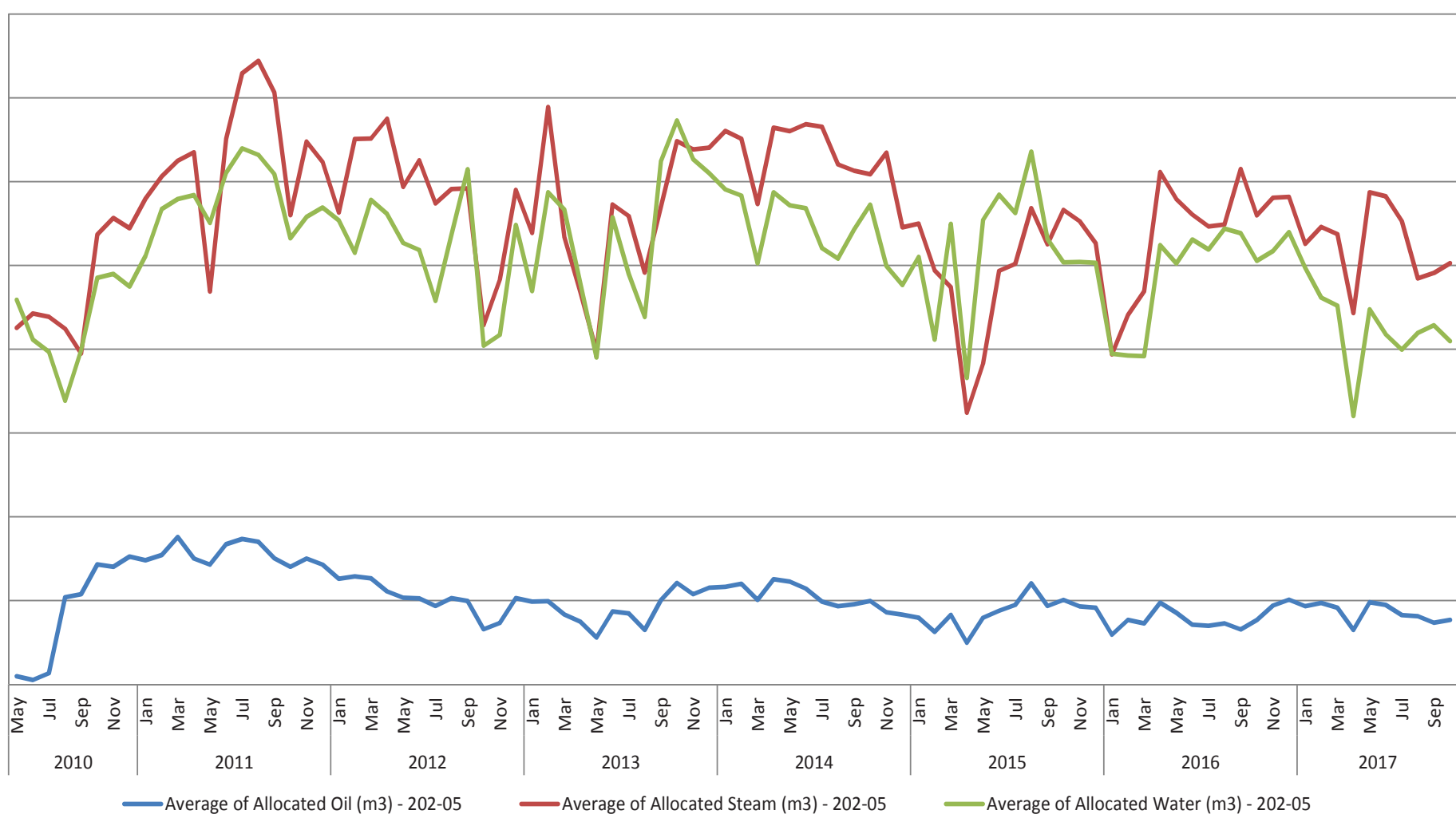
202-03



202-04

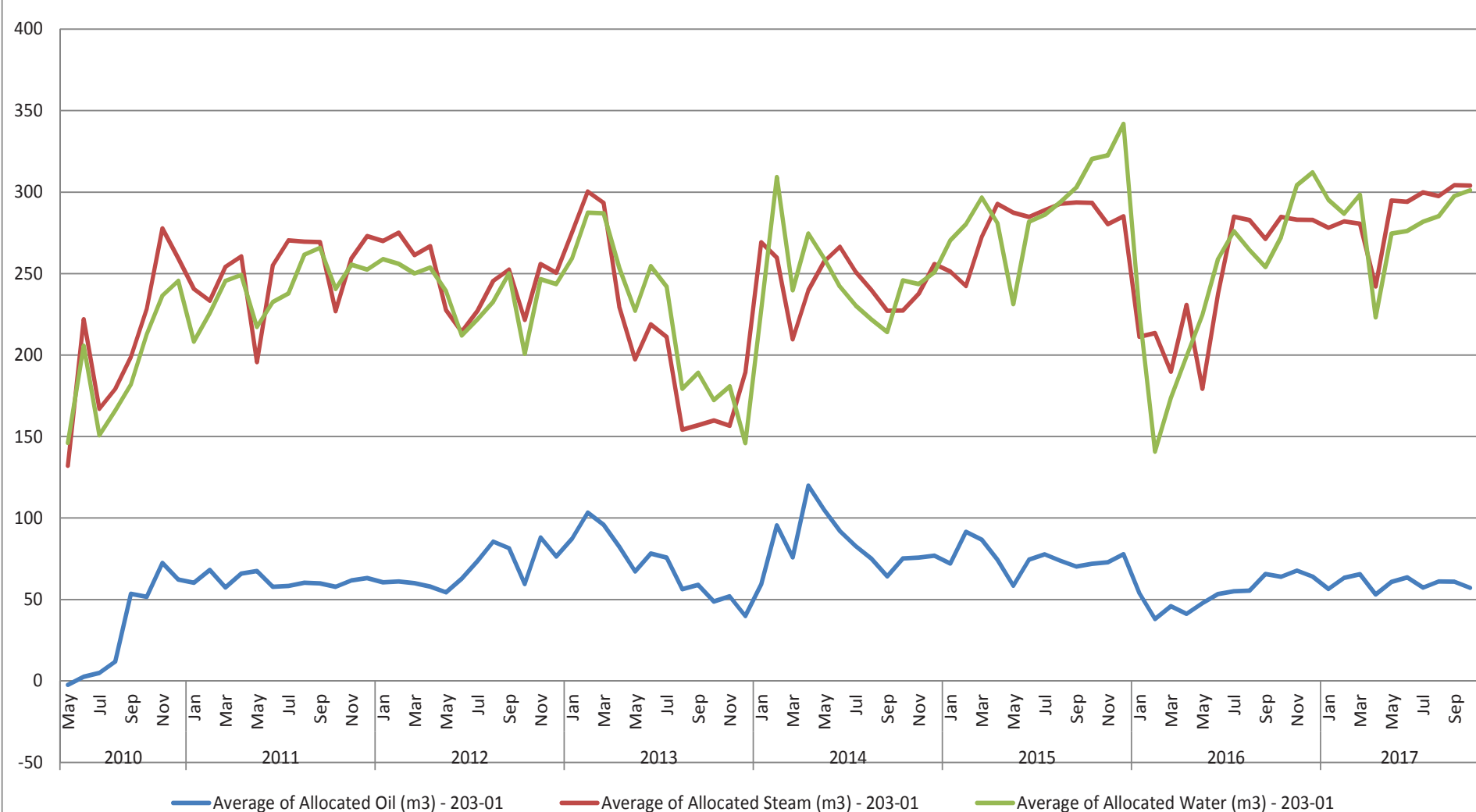


202-05

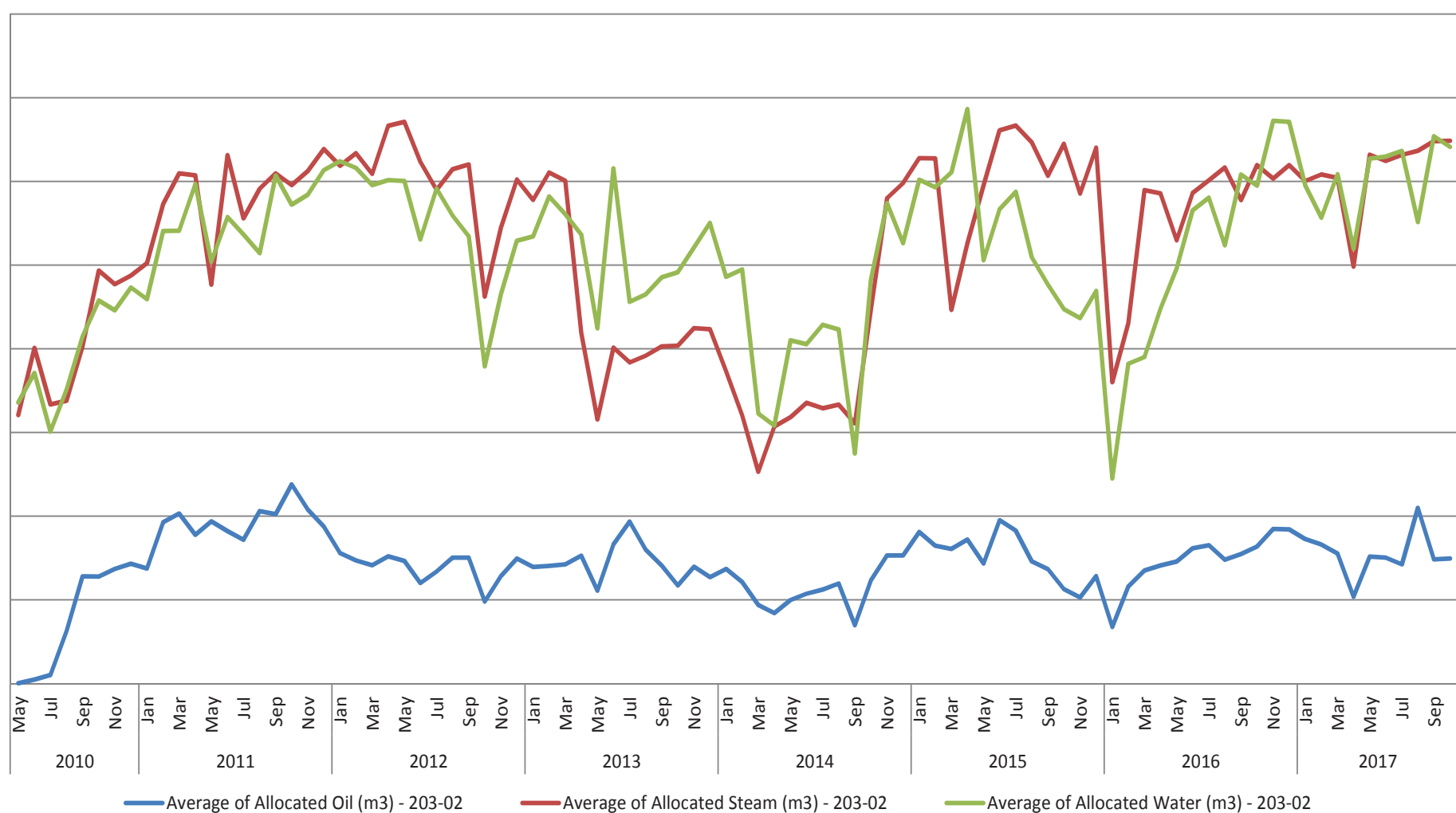


Algar Pad 203 - 203-01

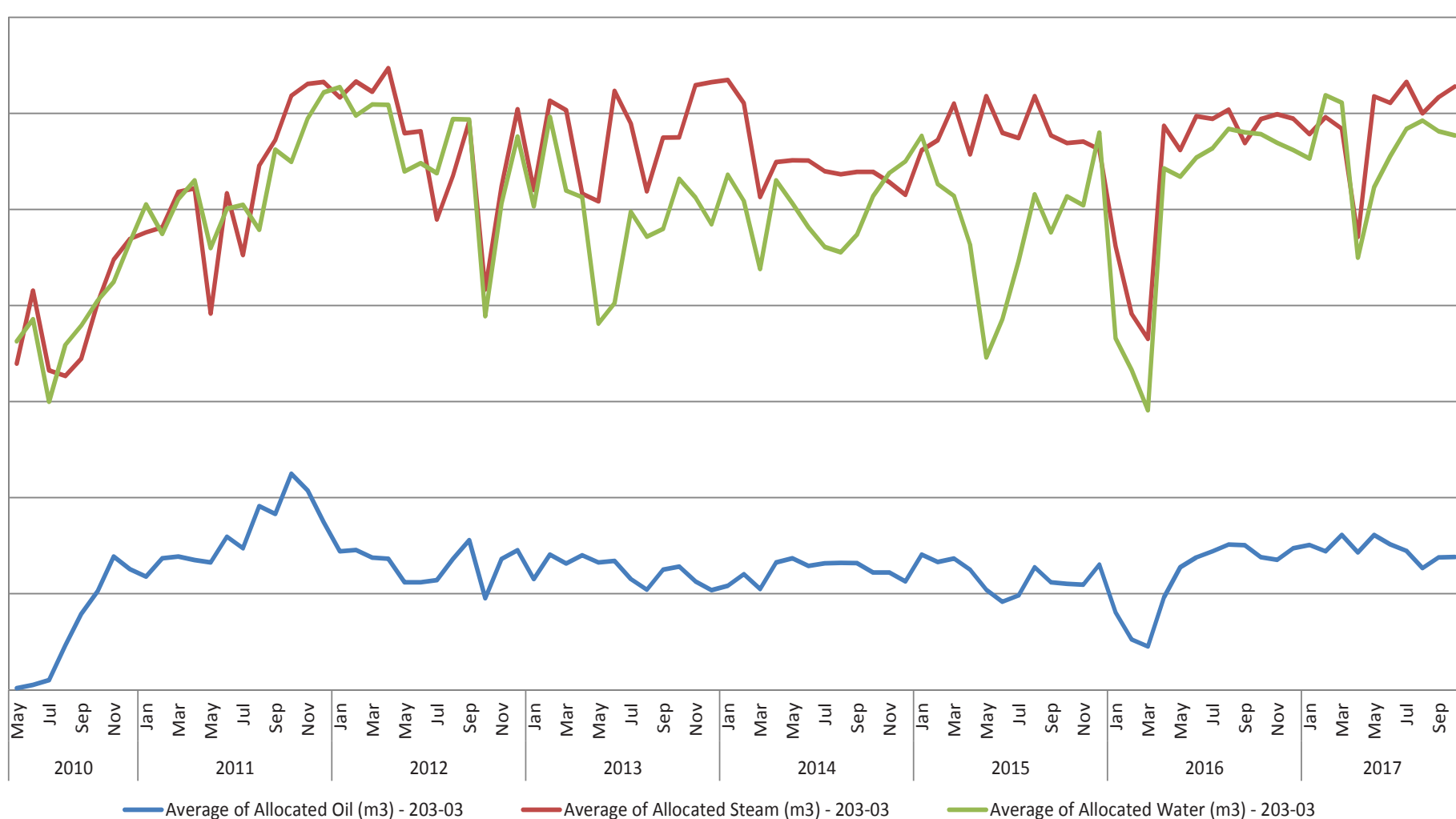
203-01



203-02

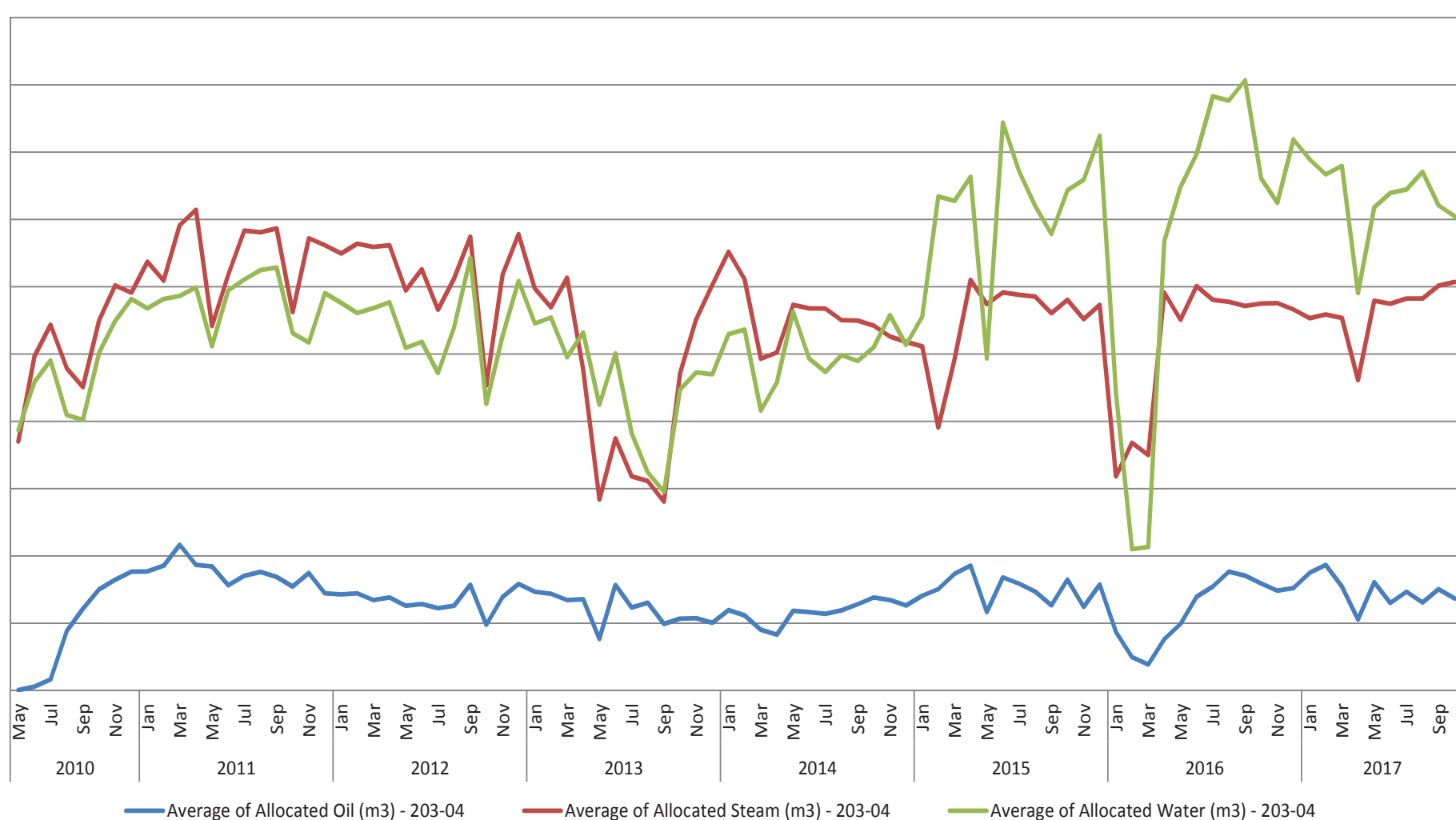


203-03



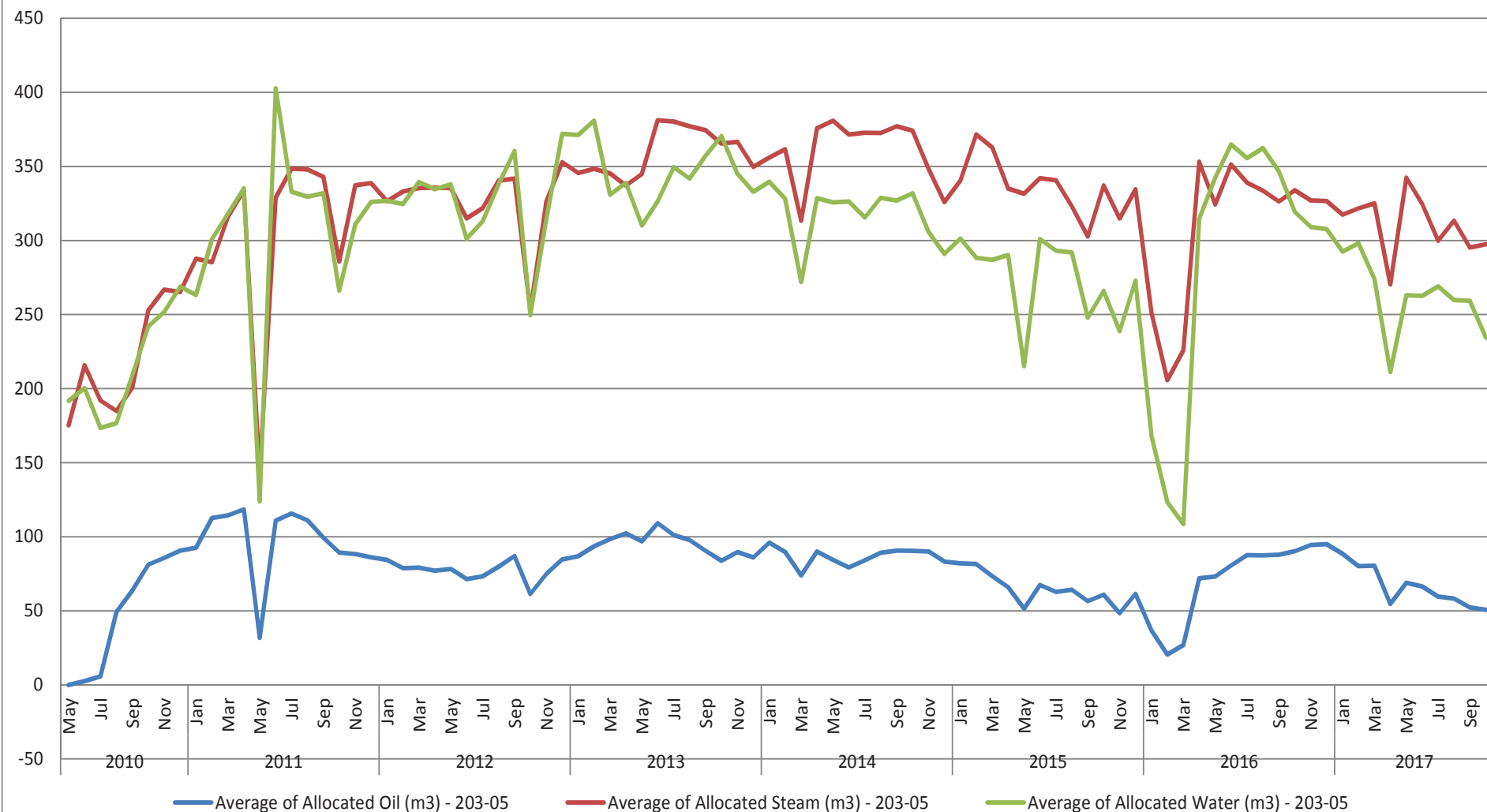
Algar Pad 203 - 203-04

203-04

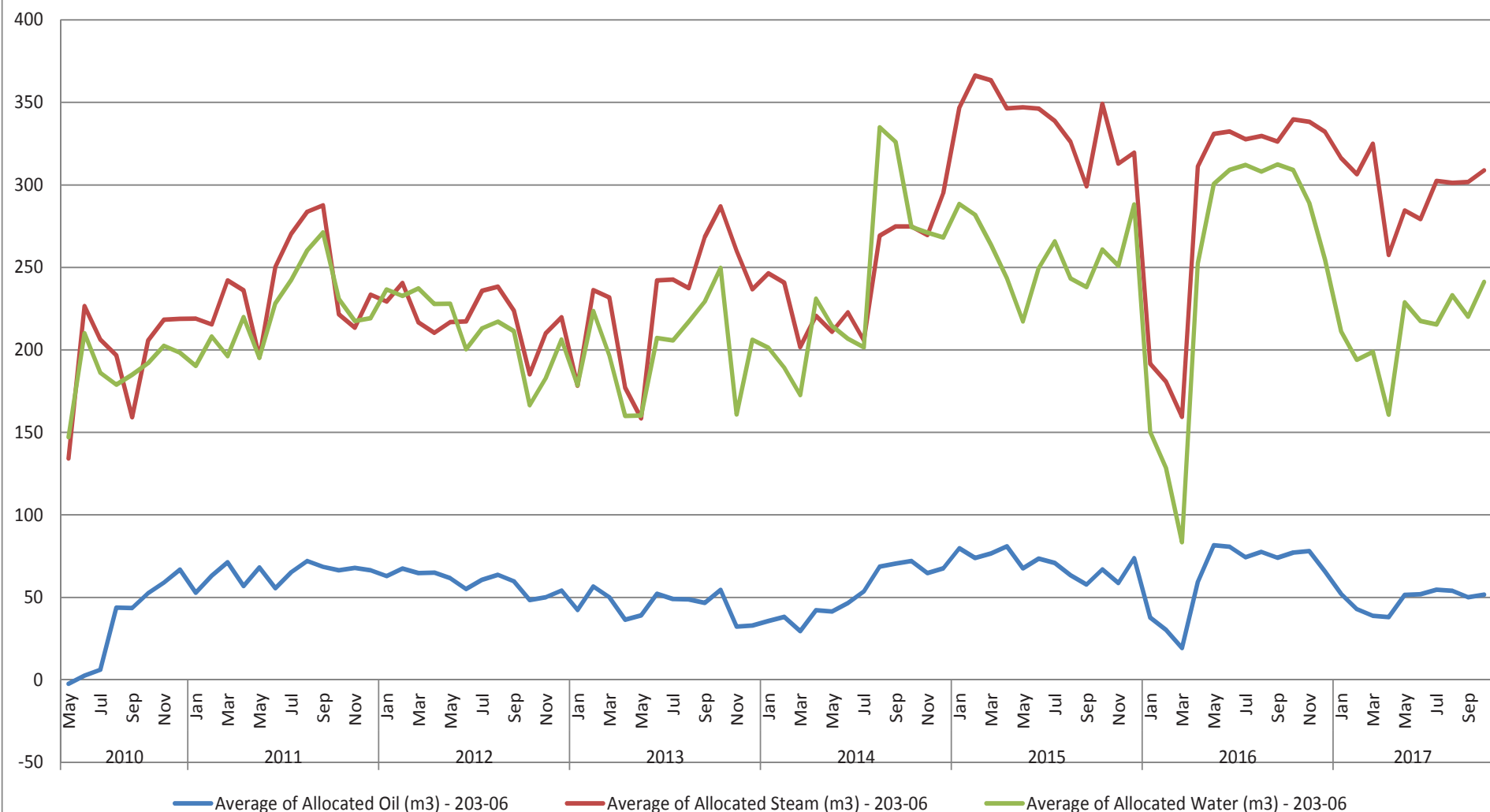


Algar Pad 203 - 203-05

203-05



203-06



203-07

