



Shell Puget Sound Refinery: Clay Treater Project

Primary Driver: Income - increase jet finishing rates by +150 bph

Front End Loading 09 Jan 2015 - 16 Jul 2015

Authorization 16 Jul 2015

	Baseline	Performance
Safety	0 lost time injuries 0 recordable injuries	0 lost time injuries 0 recordable injuries 15,000+ construction hours
Budget	\$ 3.00M	\$ <u>2.93M</u> (98%)
IFC	29 Feb 2016	26 Feb 2016
Construction Complete (except tie-ins)	01 Jul 2016	01 Jul 2016
Tie-In Outage (<u>decon</u> , flush & line packing)	7 days (max)	6 days
In-Service Milestone	15 Jul 2016	15 Jul 2016
Jet finishing rates	+150 <u>bph</u>	+400 <u>bph</u>



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Primary Partners:

- Anvil - Design & Procurement
- JH Kelly - Civil & Mechanical construction
- Pederson Brothers - Steel fabrication
- Petrochem Insulation
- Birch Equipment
- Dunkin & Bush – painting & coatings
- Barnhardt - heavy cranes
- Safway – Scaffolding
- Valin Corp
- VECA



15 Oct 2015



10 Nov 2015



16 Dec 2015



22 Feb 2016



25 Feb 2016





25 Apr 2016





29 Jun 2016



15 Jul 2016



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Primary Driver: Income - increase jet finishing rates by 150 bph

Secondary Benefits:

- Safety – confined space entry no longer required for media changeout
- Environmental – no longer need steam-out for media changeout (eliminates odor complaints); waste reduced from 116,000 lbs/year to 3,300 lbs/year
- Operability – no longer need to throttle flow to prevent media channeling or to prevent pressure-relief valves from lifting
- Maintenance – Frequency, complexity, and duration of media changeout are all reduced

