

## Canadian Natural and Quinn Contracting Dashboard MGSA # 810354-1 - Supplement 3

Q4 2018

Review held on October 18, 2018



Safety ComplyWork State	us = Accepta	ble													
Leading Indicator	2015	2016	2017	Q1 2018	Q2 2018	Q3 2018	Key Notes	otes - Leading Exposure Hours						OT Exposure Hours	
Man-Hours	231,066	210,544	214,425	58,961	74,397	86,313	- Reduced N	_		באן	osaic iloui	3		·	
Hazard ID's	843	935	1,267	358	351	382	Hit/Near Mis		300 ¬		1		1	12,000	
Safety Meetings	15	15	18	3	4	4	increase in N	•						Larger Turnarounds in	
Work Site Inspections	289	265	336	126	155	198	due to Turna		250 -		1		239	10,000 - both Apr/May and Sep/Oct 2018 21% - 20%	
Pre-Task Analysis Cards	7,770	6,373	5,982	1,544	2,018	1,926	activities							3ep/Oct 2016	
Pre-job Toolbox Meetings	1,828	1,606	1,829	458	541	524	1		200		Turn	arounds in		y 8,000 -	
Behaviour-based Safety Observations	2,243	1,946	2,033	809	664	682			r.			pr/May and		8,000 - 15%	
Near Hit/Near miss	2	16	6	2	4	0			รัก มี 150 -		•	Oct 2018		± 6,000 - 11%	
Lagging Indicator	2015	2016	2017	Q1 2018	Q2 2018	Q3 2018	Key Notes	- Lagging	9 100					10%	
TRIF - Quinn Staff	0	0	0	0	0	0	T	al F:at A:al.			i '-			6 4,000 1 °/2	
TRIF - Subcontractors	0	0	0	0	0	0	- Turnaroun		50 -					- 5%	
Lost Time Incidents	0	0	0	0	0	0	Shoulder Pai							2,000 -	
Recordable Medical Aid	0	0	0	0	0	1	- Environme	entai: Giycoi	0						
First Aid	3	2	7	2	1	1	Tracing line	IO KDI	20	015 2016 2017	Q1 2018 Q2 2	018 Q3 2018 Q4 201	8 F- 2018 F-Cast	0 / 0%	
Vehicle Incidents	1	2	6	1	0	1	(See Sep 201 report for de					Cast	t	Q4 2017 Q1 2018 Q2 2018 Q3 2018	
Modified Work	0	0	0	0	0	0		etails on			■ Staff ■ Sub			Maint. TA Maint. Scaff. TA Scaff. OT	
Environmental Events	2	1	1	0	1	1	these)								
<b>Operational Performance</b>									Continuous Im	provement & Valu	e Opportunitie	s		Anticipated start of	
Measure	Target	2015	2016	2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018 Trend	Initiative Measure Savings Go		Savings Goal	Status	Value Improvement  Vehicle HSE initiativ  Nov 1, 2018  \$140 7 Key efforts of Quinn/Canadian Natural team focused on:		
Rework	<\$10,000 / year / unit	\$2,715	\$3,126	\$2,487	\$0	\$0	\$0	\$0	1) Vehicle cost 8	& Safety Optimization	#of vehicles & km's driven	\$0.13M + 911,748 km's per year reduced HSE exposure	Estimate launch: November 1, 2018	\$120 - 1) Safe TA executions Q2 and Q3 2018	
NCR's	<10 / year / operating unit	7	3	5	0	2	0	1	2) 7 x7 Schedule Optimization		Less OT - lower labour cost	Estimated: \$0.3M	Being Reviewed: Q4 2018 / Q1 2019	Vehicle Cost and HSE Improvement Initiative  \$60 -	
Repair Rate	<3% All Weld Counts	No Data	No Data	1.3%	2.2%	2.5%	0.9%	1.8%	3) Scaffold	ling optimization	Reduce break-in	TBD	In Progress	\$20 - Fall 2018 Turnaround: Personnel time: 1-day SUV not charged	
Total Welds	# of Welds (Actual)	No Data	No Data	1,168	272	237	323	277	4) Non-productive KPI tool  5) Huddle Board  6) 2018 Fall TA - Mass Orientation/SUV's		Improved value delivery	Based on root non- productive causes	In Progress		
Total Repairs	# of Repairs (Actual)	No Data	No Data	15	6	6	3	5			Idea Generation & Recognition	Generate ideas to implement	In Progress: See Note below		
Packages: Signed off by Quinn/In CNRL Review	Data is "snap- shot" in time as at	313	399	155	27	50	133				Time not invoiced	\$10,236.42	Delivered	■ Cost Avoidance ■ Cost Savings	
Packages: In Review by Quinn	end of period	27	16	11	4	38	53							Annual Coand has Coanas	
Packages: Completed and Scanned	noted	225	304	186	21	45	76			اAnnual S	end - All Wolf Lake			Annual Spend - by Segment	
Overtime Drivers	Overtime Drivers									\$18 7 \$17 2016 to '17 spend increase				\$14.0 7	
- Material & equipment availability/ Operations delays									·   -	partly due to bi-a	nnual ¢15	T 1		\$12.0	
- Emergent /as found work. Schedule conflicts/ simultaneous operations conflict.									516 - Orsd maintenance				\$12.0		
, , ,									\$14 - \$13				\$13	\$10.0 -	
- Inclement weather Manpower shortage. 3 shift cycles.									\$12 -			\$10		\$ \$8.0 - \$7.6	
Canadian Natural Operational Feedback / Updates									<b>8</b> \$10 -					\$4.9	
- Fall 2018 Turnaround in final stages of completion									\$6 -				¢2.5		
- Request Quinn to look into ticket authorization/LEM approval processes for more efficiencies													\$2.3 \$2.8 \$2.8		
- More thorough review on rework - learnings focused for improvement.														\$2.0	
- Scaffold rent costs - review for optimization									\$4 -					\$0.0	
Quinn Natural Operational Feedback / Updates									\$2 -					2015 2016 2017 2018 YTD Jan- 2018 F-Cast	
- Huddle Board support requested	d: Tin Town ro	om prep for	idea generat	tion - cost an	d safety impi	rovement			\$0					Sep	
										2015 2016	2017	2018 YTD Jan-Sep	2018 F-Cast	■ Operations ■ Wells Servicing ■ Turnaround	