JHA	JHA Contributors (minimum team of two)			
JHA No: 201	1.	Dave Pennney	4.	
Revision No: V3	2.	Lance Vulgar	5.	
Date: Feb 2018	3.	Corey Penney	6.	

Review Date: **On Site Review Required**
Reviewed By:

Specific Permits & SOPs Required

Hot Work	☐	Containment of Slurry	☑
Working at Height	☐	Geothermal Wells	☐
Excavation / Trenching	☑	Confined Drill Space	☐
Equipment Isolation	☐	Unstable Ground	☑
Overhead power lines	☐	Other	☐

Client Permit to Work required: Yes ☐ No ☐ Other permits required (tick page 2)

Likelihood	Consequence				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A (Almost Certain)	11	16	20	23	25
B (Likely)	7	12	17	21	24
C (Possible)	4	8	13	18	22
D (Unlikely)	2	5	9	14	19
E (Rare)	1	3	6	10	15
	Low	Medium	High	Extreme	

Reviewed at Pre-Shift Meeting (where required): **Date:**

Prepared by:	Print Name	Signature	Date
	Dave Penney		

Work Order / Job No:	Plant No:	Plant Name: Vacuum Trailer Unit

HAZARD CHECK SHEET

Substance		Situation		Energy		Other Specific to Task
Chemicals & Solvents	☐	Confined Space	☐	Biological	☐	
Gasses, Fumes & Vapours	☐	Manual Handling	☑	Electrical	☐	
Asbestos/Fibreglass	☐	Materials Storage	☑	Kinetic	☐	
Flammable Materials	☐	Working over Water	☐	Mobile Equipment	☑	
Process Materials	☐	Working at Heights	☐	Noise / Vibration	☑	
Oils & Grease	☑	Working Below/Above Level	☐	Radiation	☐	
Hydraulics	☑	Moving / Mobile Equipment	☑	Chemical	☐	
Dust	☑	Guarding	☑	Gravitational	☐	
Inhalation of gasses/fumes	☐	Falling Objects	☐	Mechanical	☑	
Fuel Oil	☑	Lighting	☐	Muscular	☑	
Diesel/Petrol	☑	Adjacent Workers	☑	Pressure Stored Energy	☑	
Glue/Adhesive	☐	Projectiles / Incorrect tools	☑	Thermal	☐	
	☐	Slipping / Tripping	☑	Blasting/ Mining	☐	
	☐	Struck By / Against	☑	Heat / Furnace	☐	
	☐	Caught By / Between	☑	Water / Ocean	☐	

Act No	Job Steps	Hazards Identified	Initial Risk Ranking	Systems, Checks and Controls Required	Inherent Risk Ranking
1.	Drill site set up	• Pedestrian, traffic and site access acute injuries and equipment damage through vehicle impact	High	• Formal procedure for Rigging Up and Drilling in place as per SOP-100 Rigging Up and Drilling Operations Procedure. • Job Commencement JHA – Ensures site specific hazards are identified and controlled, including drill site set up to ensure all drill and ancillary equipment are positioned in stable and safe manner. • Set out cones, signs and barriers around working area and vehicles, high visibility vests to be worn and awareness of surroundings and any associated site specific hazards to be addressed.	Medium
2.	Rig and ancillary equipment set up and stability	• Uncontrolled movement of equipment causing equipment damage and acute injuries such as crushing, bruising or fracture	High	• Level rig with stabilizing jacks and ensure the ground has enough timber blocks if requirement to make the rig stable. • Ensure Vacuum unit is on level ground, braking systems engaged and chocks used where required to prevent uncontrolled movement	Medium
3.	Location of Services	• Sticking overhead or underground obstruction i.e. powerlines, gas pipes, water, services	High	• Services must be located by services plans and scanner. Hand clearing or Vacuum Excavating is mandatory on all sites prior to drilling. Services must be clearly marked with high visibility pain. Drill rigs must be a minimum of 4 metres away from any overhead lines unless there is a written consent and close approach permit	Medium
4.	Vacuum unit start up and set up	• Uncontrolled movement or instability of unit causing injury or equipment damage	High	• Pre-Start Equipment Checks – ensures all operational parameters of unit are functioning and in safe order • Checks on hoses, fittings, safety devices, guards, pressure levels are completed and documented prior to operations	Medium
5.	Vacuum unit, Hand Clearing	• Acute injuries such as strains sprains, Damage to underground services	Medium	• With the use of the water blaster loosen material and vacuum hole to 1.5 meters in the proposed drilling location. Or alternatively hand clear to 1.5 metres when vacuum is not available • Use two personnel for lifting equipment where required	Medium
6.	Vacuum unit	• Environmental spills drill cuttings • Hydrocarbon spills	Medium	• When drilling near a water way set up silt filters where possible use the Vacuum unit to contain drill cuttings.	Low

				• Once contained and vacuumed up, dispose of cutting at an approved disposal point. • Pre-start equipment checks include checks of hoses and fittings. • Spill kits are supplied on all rigs and are checked monthly to ensure they are fully stocked with adsorbents.	
7.	General Operations – Walking around drill site.	• Slips trips and falls	High	• Daily site inspection and documented log of hazards. • Work areas to be kept clean and tidy all tools or equipment no longer being used to be put away. • PPE Requirements – use of steel capped boots with good grip and ankle support. • Job commencement JHA to consider drill site ground conditions and eliminate risks	Medium
8.	General Operations – Drilling and Vacuum excavations unit	• Fire risk	High	• Equipment preventative maintenance, servicing and licencing systems in place • Pre-start equipment checks ensure fire extinguishers are in place and charged, in addition to checking for any ignition sources remaining on equipment or at drill site • Pre-start JHA to include site clearance of debris or long grass that could be ignited by equipment operations, exhaustions or other ignition sources generated from drilling. • If required the use of geotextile matting or plywood to protect grassed areas.	Medium
9.	General Operations Vacuum unit	• Caving excavations causing injury to operator	Medium	• Ensure excavations are monitored for any cave in signs and safe distances from the edge or excavation hole is maintained.	Medium
10.	General Operations Vacuum unit	• Exposure to airborne contaminants	Medium	• All equipment and piping connections to be inspected and checked prior to operations • Operators to be situated upwind of the product to be vacuumed • Any vent hoses to be routed away from the work areas • Pre-start JHAs to consider any potential contaminants that could be present in material to be vacuumed.	Medium

				• Appropriate PPE to be applied where respiratory contaminants are identified. • Where contaminants are identified ensure that air quality monitoring at the work site is continuous at discharge area of the vacuum unit venting hose.	
Additional Site Specific Hazard Assessment and Risk Controls to be listed here at Job Start up by the on-site Drill Crew					
11.		•		•	
12.		•		•	
13.		•		•	
14.		•		•	
15.		•		•	
16.		•		•	

Signature to this JHA verifies that you have reviewed the work area for task job steps, have read and understand the risk/hazards and system, checks and control actions associated with the task, accept and will follow through with the system as outlined in all risk/hazard job steps and will follow up with further reviews through the JHA as job progresses with new job steps that have not been risk assessed.

Name	Signature	Date
Approved By: **Supervisor**	**Signature**	**Date**

Review comments :	Is a detailed procedure required for this task?	Revision Details			
		Rev	Date	By	Initial
This JHA is an active document, that is reviewed by the Drill Crew at the start of each job where the Vacuum Trailer Unit is in use.	Yes ☐ No ☑ By Whom? _____ By When? _____				

The completed JHA remains on the rig for the duration of the works and is then submitted to records management system for filing and future audit.