LOCHARD ENERGY

CBTA

Working at Heights & Dropped Objects

SP/TRN/TM82

Candidate's Name: _____

Candidates Signature: _____

Assessor's Name: _____

Assessor's Signature: _____

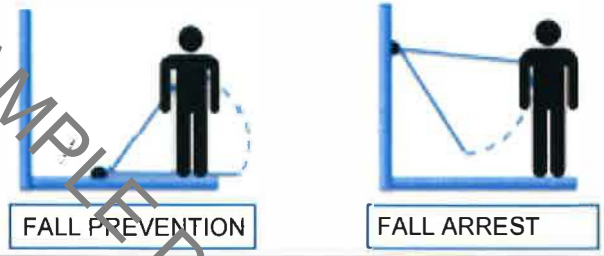
Date Completed: ☑ **CBT A** ☐ **Reassessment:**

Those with a formal Working at Heights qualification must complete this CBTA once, all others must complete the demonstrative component 3 yearly.

Written

Question	Answer	Assessor check
What procedure covers the topics of Working at Heights and Dropped Objects?	WORKING AT HEIGHTS GP/PS/PC31	
According to the procedure, when is a worker considered to be Working at Heights?	WHEN WORKING ABOVE 2 METERS	
Name two different methods that can be used to prevent a fall from heights.	FALL ARREST, FALL RESTRAINT, PASSIVE FALL PREVENTION	
What important step can you take to determine the most effective form of fall prevention?	A DOCUMENTED FALL RISK ASSESSMENT	
What should be considered in a JHA aimed at preventing a fall from heights?	-THE CAPACITY OF THE WORKING SURFACE, ENVIROMENTAL CONDITONS, THE TOOLS REQUIRED, THE NATURE OF THE WORK ECT	
What is a passive fall prevention device?	A PASSIVE FALL PREVENTION DEVICE PROVIDES THE HIGHEST LEVEL OF SAFETY (LEVEL 2) EXAMPLES ARE A SCAFFOLD, ELEVATED WORK PLATFROM	
Name four hazards in **our** workplace that must be considered when planning to work from heights.	WORK ABOVE LIVE PLANT, UNSTABLE SOFT GROUND, COLD OR HOT WORK AREA(TYPE OF WORK), WIND SPEED. Dropped objects, lack of delineation	
When would you use a ladder to conduct work at heights (above 2 metres)?	WHEN A SAFER OPTION IS NOT AVAILIABLE, A LADDER IS A HIGH RISK PLATFORM TO WORK FROM. SUITABLE FOR GAINING ACCESS FOR THE PURPOSE OF INSPECTION. Connected to a scaffold, apart from that never.	

Oral

Question	Assessor check	
What is a safety lanyard and how would you determine whether the safety lanyard is safe to use?	A SAFETY LANYARD IS USED WHEN WORKING IN A FALL ARREST POSTION, THEY SLOW YOUR RATE OF FALL AND REDUCE INJURY. MUST BE USED A HEIGHT TO ALLOW FULL EXTENSION OF THE SAFETY LANYARD PLUS THE HEIGHT OF THE PERSON WITHOUT HITTING THE GROUND.	✓
Which picture demonstrates fall prevention and which one demonstrates fall arrest? Explain the difference between fall prevention and fall arrest?	 FALL PREVENTION FALL ARREST	✓
When preparing your JHA for working at heights, what methods can you take to prevent an object falling?	ELIMINATION, SUBSTITUTION, ENGINEERING, ADMIN, PPE.	✓
What must you put in place around your work area to ensure other workers nearby or passing through aren't in the line of fire of a falling object?	A HARD OR SOFT BARRICADE WITH INFORMATION TAGS IN PLACE.	✓
Name four controls you can put in-place to prevent a dropped object?	TOOL LANYARD, CATCH NET LIKE SHADE CLOTH, COMPLETE THE WORK ON THE GROUND IF POSSIBLE, HOUSE KEEPING, SECURE LOADS.	✓

Demonstrative

Question	Assessor check
Based on a Working at Heights scenario, or real work to be conducted, prepare a JHA demonstrating your understanding of the procedure GP/PS/PC31. Put in place realistic Working at Heights & Dropper Object controls to prevent a fall or a dropped object. Or Conduct a Permit to Work Audit on a job where Working at Heights is being conducted. Assess the JHA linked to the permit and identify any gaps.	

The candidate is assessed as being:

☑ Competent

☐ Not yet competent

Areas requiring improvement:

For first time candidates only:
Department Manager's name:

Department Manager's signature: Date:

JOB HAZARD ANALYSIS (JHA)

JHA NUMBER:	**ACTIVITY OR TASK TO BE PERFORMED:** REPLACE TIT 3183 ON E-315 (TEG TRAIN 1)		
REVISION DATE:	**1**		
CWP #	**NO FLAME HWP # XXXXXXX1**	**FLAME HWP #**	**CSEP #**
JHA REVIEWED BY			
Name:	**Signature:**	**Name:**	**Signature:**

SITE MANDATORY PPE: Hard Hat / Safety Glasses / Safety Boots / Gloves / High Visibility Pants / Long Sleeve Shirt **(for chemical use check SDS for additional PPE)**

WORK LOCATIONS:	IONA GROUNDS		TRAIN 1	X	TRAIN 2		MLV		NORTH PAARATTE		WALLABY CREEK		OTHER				

HAZARDS TO BE CONSIDERED

Remote Sites		Confined Space		Falling/Dropped Objects	X	Flammable Materials Present		Sharp Materials		Manual Handling		Lighting					
Working Alone		Access/Egress	X	Pressurised Fluids / Gas		Poor visibility / lighting		Suspended Loads		Ladders		Spill					
Electricity		Working at Heights	X	Inhale Dusts / Fibres		Potential for difficult Rescue		Weather Conditions	X	Fire/Explosion		Heat	X				
Stored Energy	X	Toxic Gases/substances		Trip Hazards		High Noise Levels		Tools / Equipment	X	Communication	X	Other:					
Use of Chemicals		Hydrocarbon Release		Slippery Surfaces		Moving Equipment		Competence/Skill	X	Pneumatics							

ENVIRONMENTAL HAZARDS (IMPACTS)

Air Pollution (dust, fumes)		Spills to drains water ways		Hazard to Flora / Fauna		Soil Erosion		Spills to Ground		Other:	

EQUIPMENT REQUIRED

Mobile Plant & Equipment	X	Static Plant & Equipment		Scaffolding		Safety Equipment	X	Rescue Equipment	X	2 Way Radio	X	Other:			

ADDITIONAL PRECAUTIONS REQUIRED

SDS		Face Shield		Welding Face Shield		Barricading	X	Breathing Apparatus		Chemical Gloves		Respirator or Dust Mask		Warning Signs			
Goggles		Harness		Fall Arrest Systems	X	Ventilation		Personal Locks/Tags	X	Fire Extinguishers		Low Voltage Lighting		Other:			

MANDATORY REQUIREMENTS

JOB HAZARD ANALYSIS (JHA)

Licensed Operator	X	Tested and Tagged Electrical Equipment		Trade Qualified	X	Certified Lifting Equipment		Spotter/Safety watcher	X	Other:	

JOB HAZARD ANALYSIS (JHA)

DESCRIBE JOB STEP List the natural steps of the job. (Do not make the steps too broad or too fine)	**POTENTIAL HAZARDS** What are the potential hazards or risks identified for this part of the job step	**MITIGATION – CONTROL** Describe how the identified hazards / risks can be managed or removed (use hierarchy of controls to reach ALARP)	**PERSON RESPONSIBLE** for Implementing the Control
MOBILISE TO WORK FRONT AND ERRECT BARRICADE AROUND WORK AREA	ELEVATED WORK PLATFORM MALFUNCTION	PRE-START CHECK, LICENCED OPERATOR	P.I.C
	PEOPLE IN AREA	ERRECT BARRICADE BEFORE WORK BEGINS	SPOTTER
	VEHICLE TRAFFIC, ROUGH GROUND	SPOTTER TO WALK IN FRONT OF EWP TO WATCH FOR HAZARDS	Tech
	UNSTABLE GROUND/ Visit workplace prior	ENSURE OUTRIGGERS ARE STABLE	Tech
Prepare working at heights equipment.	Equipment damage	Check condition of harness, lanyards on tools, Radio, Ensure all tools and equipment are secure.	Work party
Review emergency rescue plan	Contact control room before operations	Confirm rescue plan and communication techniques with spotter, The Spotter must lower the JLG with the ground controls for height rescue. Confirm with control room when commencing work to check plant stability before working at height.	Work party
	Electric shock	Check isolation, Check work party are locked onto CCP	RO- ISO AUTH, Work party
Complete change of TIT gauge	Stored energy- damaged thermos well	Remove with care not to damage thermos well	Tech
	Thermal energy	Wear PPE if equipment is online	Tech
	Dropped tools	Always maintain lanyard's, never unhook	Tech
Pack up work area	Trip hazards	Housekeeping, leave workplace as you found it.	Work party
	Remove vehicle from area	Keep people clear, use spotter, gas detector	Work party
Debrief, Sign off	Review job to look for improvement's in process	Communicate with RO what has been found/ Completed	Work Party

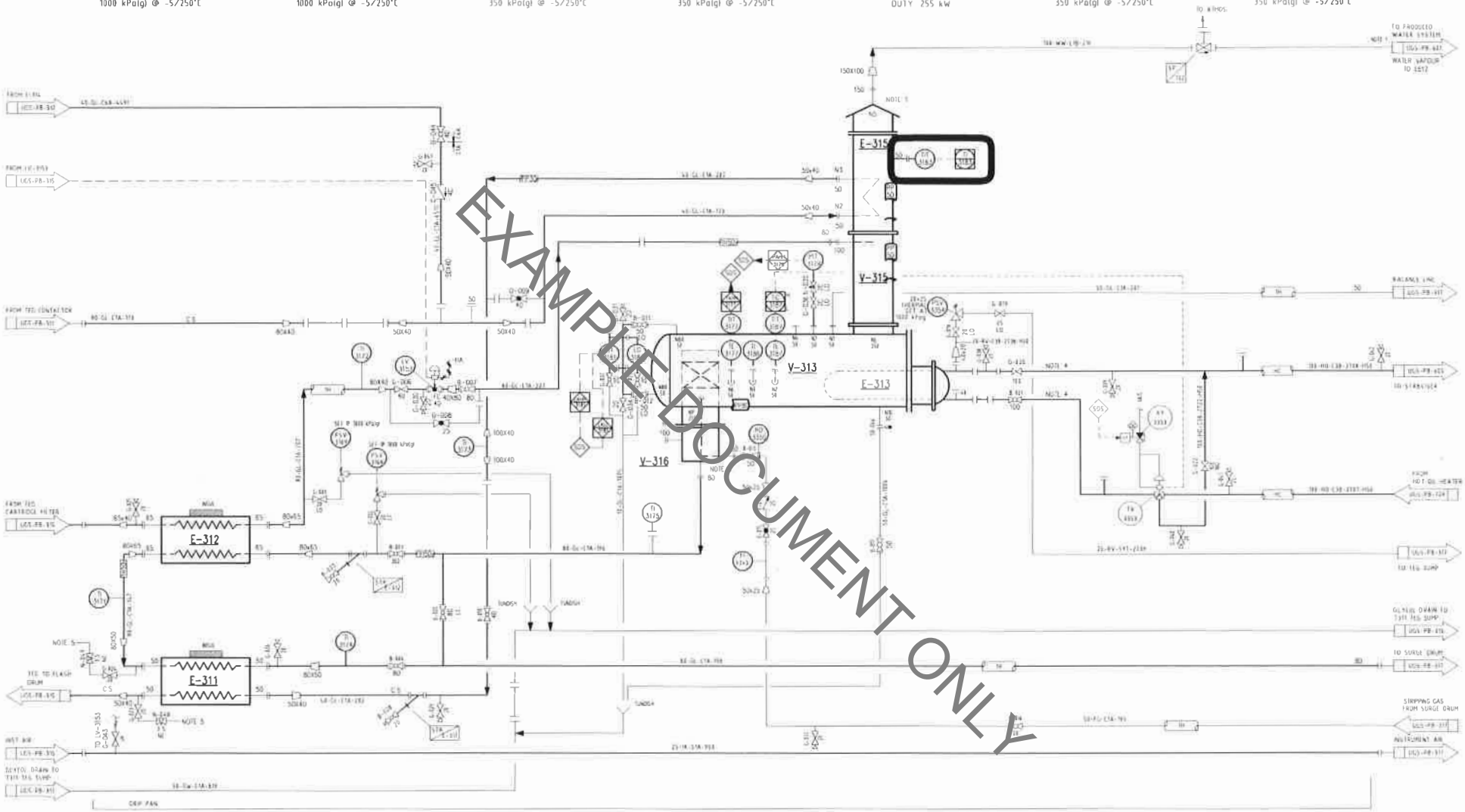
JOB HAZARD ANALYSIS (JHA)

JHA SIGN ON

Sign on when entering the work area and once you have reviewed and are familiar with the JHA contents.

Name:	Date / Time:	Signature:	Name:	Date / Time:	Signature:

E-312	E-311	E-315	V-313	E-313	V-316	V-315
HOT GLYCOL HEAT EXCHANGER	COLD GLYCOL HEAT EXCHANGER	TEG REFLUX CONDENSER	TEG REBOILER	TEG REBOILER TUBE BUNDLE	TEG STRIPPING COLUMN	TEG STILL COLUMN
1000 kPa(g) @ -5/250°C	1000 kPa(g) @ -5/250°C	350 kPa(g) @ -5/250°C	4000mm X 1050mm NB 350 kPa(g) @ -5/250°C	1000 kPag @ -5/250°c DUTY 255 kW	1423 mm I/F x 250 NB 350 kPa(g) @ -5/250°C	7300 mm F/F x 350 NB 350 kPa(g) @ -5/250°C



NOTES

1. FUTURE TIE-IN LINE TO BE BLANKED OFF – PHASE 1 OFFGAS GOES TO ATMOSPHERE
   PHASE 2 – OFFGAS PIPED TO WATER SYSTEM
2. DRAIN LINES TO BE MODIFIED AT SITE AS SHOWN ABOVE
3. INJECTION NOZZLE FITTED ON STRIPPING GAS INLET
4. REMOVABLE SPOOL FOR TUBE BUNDLE REMOVAL
5. OPEN END TO DRIP PAN

Uhde Shedden
A company of ThyssenKrupp Technologies

			13	21/08/15	LOPS PROJECT – AS BUILT	NW		DHW		KAB	BM	SIGNATURE
			14	07/06/14	CHANGE 11-3177 TO TIT 3177	MP		RG		NM	SP	
			12	17/11/13	VALVE G-169 LOCKED OPEN	MP		MB		RM	SP	DATE
	UGS-PB-317	TEG REGENERATION SYSTEM	11	27/08/13	STRAINERS NUMBERED	MP		MM		RM	SP	
	UGS-PB-315	TEG REGENERATION SYSTEM	10	25/11/13	MODIFICATION OF SAMPLE POINTS AS PER EC6576	MP		LA		LLW	LLW	
	UGS-PB-311	TEG REGENERATION SYSTEM	09	13/09/11	GENERIC REVISION	PMD		DP		LLW	LLW	
	DRAWING No	REFERENCE DRAWINGS	No	DATE	REVISION	ORIGINATOR		DESIGN CHECKED		ENGINEER APPROVED	PROJECT APPROVED	CLIENT APPROVED

ICAD) A1
JOB DIRECTORY 25640 | FILE NAME PB-316-18

IONA GAS PLANT
TEG REGENERATION (TRAIN 1 OF 2)

PIPING & INSTRUMENTATION DIAGRAM

SCALE NTS | DRG NO UGS-PB-316 | REV 18