

# Alberta Operations Emergency Response Plan

24 Hour Emergency Number: 1-866-556-7838

Enercapita Energy Ltd. 600, 215 - 2nd Street SW Calgary, Alberta T2P 1M4 Bus: 403-294-9199

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# **Revision History**

This Emergency Response Plan is effective June 2023. Enercapita Energy Ltd. Emergency Response Program Coordinator is responsible for updating this plan annually or as required. Any errors or omissions in the plan should be brought to their attention.

Date of Issue	Reason For Revision	Section	Affected Pages
		Foreword	All
			Step 1– Level of Emergency
		Section 1: Initial Response	Step 2– Internal Emergency Notification Flowchart
			Step 3 - External Emergency Notification Flowchart
June 2023	Annual Update	Section 2: Roles & Responsibilities	Response Team Phone List
		Section 4: Emergency Response Procedures	Alberta Spill Reporting Requirements
			Alberta Notification Matrix
		Section 5: External Agencies	Government Consultation Summary
			Supporting Agency Roles
		Area Specific Information	All
	Annual Update	Foreword	All
		Section 1: Initial Response	Step 1– Level of Emergency
			Step 2– Internal Emergency Notification Flowchart
June 2022			Step 3 - External Emergency Notification Flowchart
			General Staff Roles – Operations
		Section 2: Roles & Responsibilities	Public Safety Roles
			Air Monitors
			Roadblocks

			Rovers Telephoners Response Team Phone List
		Section 5: External Agencies	All
		Appendices	All
		Area Specific Information	All
June 2021	Annual Update	Foreword	TOC, Revision History
		Section 1: Initial Response	Internal Notification Flowchart, External Notification Flowchart
		Section 2: Roles & Responsibilities	Response Team Phone List
		Section 5: External Agencies	All
		Area Specific Information	All
June 2020	New ERP Manual	All	All

# Enercapita Energy - Alberta Operations ERP

## **Distribution List**

Manual #	Туре	Res Info	Branch	Title / Agency	Name
				Corporate	
44475	Binder	Full	Calgary	HSE Manager	Patrick Corbiell
44476	Digital	Full	Calgary	HSE Manager	Patrick Corbiell
61383	Binder	Full	Calgary	HSE Manager	c/o Reception Desk
72485	Binder	Full	Calgary	Field Safety Advisor	Julie Kobylanski

#### 3 Hard Corporate Manuals

#### 1 Digital Corporate Manuals

	Field				
61380	Binder	Full	Boundary Lake	06-27-86-13 W6M Battery	c/o Shaun Moskaluk
72488	Binder	Full	Boundary Lake	Boundary Lake Field	c/o Shaun Moskaluk
72489	Binder	Full	Boundary Lake	10-10-84-12 W6M Boundary Lake South	c/o Shaun Moskaluk
72490	Binder	Full	Boundary Lake	04-16-86-13 W6M Battery	c/o Shaun Moskaluk
72491	Binder	Full	Central	Sunset / Sakwatamau Fields	c/o Greg Shrode
72492	Binder	Full	Central	Sunset / Sakwatamau Fields	c/o Mike Sherk
72494	Binder	Full	Central	06-22-70-20 W5M Sunset B Plant	c/o Greg Shrode
72495	Binder	Full	Central	14-29-69-19 W5M Sunset A Plant	c/o Greg Shrode
61382	Binder	Full	Viking	Viking Field	c/o Will Nordstrom
72497	Binder	Full	Viking	11-16-048-13 W4M	c/o Will Nordstrom
72498	Binder	Full	Worsley	Worsley Field	c/o Darin McLarty
72499	Binder	Full	Worsley	Worsley Field	c/o Chris Wurz
72500	Binder	Full	Worsley	08-21-87-09 W6M #1	c/o Chris Wurz
72501	Binder	Full	Worsley	08-21-87-09 W6M #2	c/o Chris Wurz
61377	Binder	Full	Worsley	09-11-88-10 W6M	c/o Chris Wurz
61378	Binder	Full	Worsley	08-35-87-07 W6M	c/o Chris Wurz
61379	Binder	Full	Worsley	04-06-88-09 W6M	c/o Chris Wurz
72505	Binder	Full	Worsley	Roland Jannsen	c/o Chris Wurz
72506	Binder	Full	Worsley	Trevor Blake	c/o Chris Wurz

#### 19 Hard Field Manuals

	External				
44477	Digital	Full	Calgary	Alberta Energy Regulator (AER) - Web Upload	EPA Section
44480	Digital	None	Worsley	Clear Hills County	Allan Rowe
44481	Digital	None	Valleyview	M.D. of Greenview	Wayne Brown
44482	Digital	None	High Level	Alberta Health Services - Z5 North	Shane Hussey
44483	Digital	None	Valleyview	RCMP - Valleyview	NCO in Charge
44484	Digital	None	Fairview	RCMP - Fairview	NCO in Charge
44485	Digital	None	Fox Creek	RCMP - Fox Creek	NCO in Charge

# Enercapita Energy - Alberta Operations ERP

### **Distribution List**

Manual #	Туре	Res Info	Branch	Title / Agency	Name
44486	E2	None	Whitecourt	Whitecourt Fire Dept.	Brian Wynn
44487	E2	None	Fox Creek	Fox Creek Fire Dept.	Les Paul
44488	E2	None	Valleyvew	Valleyview Fire Dept.	Danny McCallum
44716	Binder	Full	Calgary	H <sub>2</sub> Safety Services Inc.	H2Safety Services

1 Hard External Manuals

7 Digital External Manuals

3 Environmental Emergency External Manuals

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- ICS 209 Incident Status Summary
- ICS 211 Check-In / Out List
- ICS 214 Activity Log
- ICS 215 Operational Planning Worksheet
- ICS 215A IAP Safety Analysis
- ICS 221 Demobilization Checkout
- ICS 230 Meeting Schedule
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- ICS 233 Incident Open Action Tracker

#### **Emergency Forms**

- A1 Initial Emergency Report Form
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- A3 Regulatory First Call Communication
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#### Section 6: Forms, continued

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# **Section 1: Initial Response**

- A1 Initial Emergency Report Form
- Five Step Initial Response Guide
- Step 1 Level of Emergency
- Step 2 Internal Notification
- Step 3 External Notification
- Step 4 Incident Briefing
- Step 5 Public Safety

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Evacuate	<ul> <li>Get to a safe area immediately.</li> <li>Move upwind if release is downwind of you.</li> <li>Move crosswind if a release is upwind from you.</li> <li>Move to higher ground if possible.</li> </ul>
Alarm	<ul> <li>Call for help ("Man Down").</li> <li>Sound bell, horn or whistle, or call by radio.</li> <li>For medical emergencies, call 911.</li> </ul>
Assess	<ul> <li>Take head count, locate any casualties. Consider all of the hazards.</li> <li>Fill out information below to complete assessment.</li> </ul>
Protect	Put on breathing apparatus before attempting rescue.
Rescue	Remove victim to a safe area.
First Aid	□ Follow the standard first aid protocols at worksite. (CPR, etc.)
Medical Aid	<ul> <li>Arrange transport of casualties to medical aid.</li> <li>Provide information to Emergency Medical Services (EMS).</li> </ul>

#### First On-Scene Actions

Incident D	etails To be	e completed by the	person involved or notified				
Report take	n by			Date / Time			
Name of pe	rson calling			Caller Telephone			
Incident Loc	ation						
			(LSD / NT	S)			
Event Sumn	nary						
Agencies	□ Yes V	Who?					
Notified	□ No						
Event	Incident	t contained or c	ontrolled	□ Intermittent control pos	sible		
Status	□ Immine	ent control possi	ble	□ Incident is uncontrolled			
Site Type	□ Well	Pipeline	□ Tank Farm/Storage	□ Battery/Plant/Facility	Other		
Incident	□ Sour Ga	as Release	□ Sweet Gas Release	□ Pipeline Break	Security (theft, threat, terrorism)		
Туре	□ Loss of	Containment	□ Fire/Explosion	□ Worker Injury/Fatality	□ Vehicle/Transportation		
	🗆 Liquid S	Spill	Other				

### A1 Initial Emergency Report Form

Impacts								
Public Health and S	Safety	□ Could	be jeoparc	lized	□ Is jeopard	lized		
Public Protection M	Measures Taken	Notific	ation 🗆	Evacuatio	n 🗆 Shelter-in	-place 🛛	Roadblo	cks
Worker Injuries		□ First A	√id 🗆	Hospitaliz	ed 🛛 Fatality	□ Othe	r	
Distance to nearest	surface developr	nent	km	Distance	e to nearest urban	centre _		km
Details								
Release Impact	□ On-Lease	□ Off-Lease	Product_			Amount		
Gas Readings	H <sub>2</sub> S	SO <sub>2</sub>	LEL	Ot	her			
Distance to nearest	watercourse		km	Weathe	r Conditions		0* 360° N	
Details						NW		NE
						WNW.	$\backslash$ /	ENE
						270° W		ESE
						sw	SSW SSE	SE
						225°	5 180°	135°
Media		Regulator			Public			
Involvement?	Yes 🗆 No	Involvement?	□ Yes	□ No	Affairs/Commun Relations Issues	nity s?	□ Yes	□ No
Details								
Notes / Instructio	ons Provided:							

**Distribute this completed report to all Key Response Personnel** Note: Ensure the First On-Scene Actions have been completed before proceeding to the Five Step Initial Response Guide.

First       Determine Level of Emergency: <ul> <li>Follow the Internal Emergency Notification Flowchart to determine who needs to be notified.</li> <li>Relay the information in the completed A1 Initial Emergency Report Form.</li> <li>Mobilize internal resources to the site, to the Incident Command Post (ICP), to the Corporate Emergency</li> <li>Operations Centre (CEOC), or place them on standby as required.</li> </ul> Evacuate Alarm         Use the following resources: <ul> <li>Section 1: Initial Response (Level of Emergency)</li> <li>The Emergency Assessment SmartPhone App. (Search H<sub>2</sub>Safety or Emergency Assessment in the App Store).</li> </ul> Use the following resources:              Section 6: Forms (A1)               First Aid Medical Aid             Note: The OGC and the AER state that the licensee must use either the Incident Classification Matrix (BC) or the Assessment Matrix for Classifying Incidents (AB) to
Refer to A1 Initial       determine the Level of Emergency. If the incident overlaps more than one level, always choose the highest level.         Form       always choose the highest level.

#### **Step 3 - External Notification**

Health Authority / Health Services

Follow the External Emergency Notification Flowchart to determine which external agencies need to be notified.

- □ 911 (police, fire, ambulance)
- □ Regulatory agency to confirm the Level of Emergency □ Air Monitoring (at all levels of emergency)
- Local Authority (Cities, Towns, Villages, Counties, M.D.s, R.D.s, R.M.s, Special Areas, Reserves, etc.)

Use the following resources:

- Section 1: Initial Response (External Emergency Notification Flowchart)
- Section 5: External Agencies (Provincial Notification Matrix)
- Area Specific Information (White tabs)

#### Step 4 - Incident Briefing

Complete an ICS 201 Incident Briefing Form:

- □ Define incident details and an operational period (page 1).
- Establish the On-Site Command Post (OSCP) and ICP.
- Document current incident objectives, strategies and tactics (page 2).
- □ Prioritize objectives (page 2).
- Define initial Incident Command Structure (page 3).
- □ Identify required resources and when they'll be available (page 4).

Use the following resources:

- Section 1: Initial Response (ICS 201)
- Section 6: Forms (ICS 201)

	Step 5 - Initiate Public Safety	
Public Protection Measures	Rovers	Telephoners
<ul> <li>Determine the hazard area; start with Emergency Planning Zone (EPZ) as default.</li> <li>Identify the affected surface developments and area users. (Houses, businesses, guides/outfitters, trappers, schools, other oil and gas operators, etc.)</li> <li>Determine the appropriate public protection measure for the affected surface developments and area users. (Evacuation, shelter-in-place and/or ignition)</li> <li>Coordinate evacuation outside of the EPZ with the local authority, if required.</li> <li>Utilize broadcast media to notify public outside of the EPZ in immediate evacuation situations.</li> <li>Use the following resources:         <ul> <li>Section 1: Initial Response (Public Protection Measures Flowchart)</li> <li>Section 4: Emergency Response Procedures (Public Protection Measures)</li> <li>Area Specific Information (Map / EPZ calculation tables)</li> </ul> </li> </ul>	<ul> <li>Dispatch Rovers to patrol the EPZ.</li> <li>Follow safety procedures and have appropriate PPE.</li> <li>Search the EPZ for transients.</li> <li>Assist residences that require evacuation assistance.</li> <li>Investigate surface developments that are identified as vacant or those who were unable to contact.</li> <li>Post notices on all outside doors of empty surface developments, vehicles, etc.</li> <li>Record all contacts, communications and monitoring readings using the following forms: ICS 214, A5, B3 &amp; B5.</li> <li>Monitor and record air quality readings using the following forms: ICS 214 &amp; A5. (Smoke, plumes, wind, etc.)</li> <li>Provide status updates to the Public Safety Group Supervisor at established intervals.</li> <li>Use the following resources:     <ul> <li>Section 2: Roles &amp; Responsibilities (Rovers)</li> <li>Section 6: Forms</li> <li>Area Specific Information (Map)</li> </ul> </li> </ul>	<ul> <li>Establish a Telephoner Team to notify residents to evacuate or shelter-inplace as required.</li> <li>Notify special needs residents at a Level 1 Emergency and provide the option to evacuate voluntarily.</li> <li>Follow-up phone calls to address resident inquiries.</li> <li>Record all phone calls and communications using the following forms: ICS 214, B3, B6, B7, &amp; B8.</li> <li>Regularly provide status updates to the Public Safety Group Supervisor.</li> <li>Use the following resources: <ul> <li>Section 2: Roles &amp; Responsibilities (Telephoners)</li> <li>Section 6: Forms</li> </ul> </li> </ul>
Roadblocks	Air Monitors	Reception Centre Rep
<ul> <li>Follow safety procedures to safely establish roadblocks wherever a road intersects with the EPZ and advise vehicles to reroute.</li> <li>Record all vehicle encounters and air monitoring readings. Complete the following forms: ICS 214, A5, B3 &amp; B4.</li> <li>Gain permission from the Public Safety Group Supervisor for response vehicles to enter the hazard area.</li> <li>Provide status updates to the Public Safety Group Supervisor at established intervals.</li> <li>Use the following resources:         <ul> <li>Section 2: Roles &amp; Responsibilities (Roadblocks)</li> <li>Section 6: Forms</li> <li>Area Specific Information (Map)</li> </ul> </li> </ul>	<ul> <li>Dispatch Air Monitoring personnel to the nearest residence / public facility downwind of the incident.</li> <li>Follow safety procedures and have appropriate PPE.</li> <li>Monitor and record air quality readings using the following forms: ICS 214 &amp; A5. (Smoke, plumes, wind, etc.)</li> <li>Provide status updates to the Public Safety Group Supervisor at established intervals.</li> <li>Use the following resources:         <ul> <li>Section 2: Roles &amp; Responsibilities (Air Monitors)</li> <li>Section 6: Forms</li> </ul> </li> </ul>	<ul> <li>If residents are evacuated, dispatch a Reception Centre Representative to the reception centre location.</li> <li>Meet and register evacuated residents.</li> <li>Record contact information for those who choose to stay elsewhere. Complete the following forms: ICS 214, B1, B2 &amp; C2.</li> <li>Regularly provide status updates to the Public Safety Group Supervisor (those who have arrived and those who have not yet arrived).</li> <li>Use the following resources:         <ul> <li>Section 2: Roles &amp; Responsibilities (Reception Centre Rep)</li> <li>Section 6: Forms</li> </ul> </li> </ul>
Note: This document is to	be used as a quide only. It is not meant to replace the use of the ERP and does no	t eliminate the need for ERP related training. Revised January 2019



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En Re	ergy A gulator	Ssessment Matrix for Classifying Incidents Follow these 3 steps to determine the Level of Emergency
	Step 1	Table 1 – Consequence of Incident
Rank	Category	Example of Consequence in Category
1	Minor	<ul> <li>No worker injuries.</li> <li>Nil or low media interest.</li> <li>Liquid release contained on lease.</li> <li>Gas release impact on lease only.</li> </ul>
2	Moderate	<ul> <li>First Aid treatment required for on-site worker(s).</li> <li>Local and possible regional media interest.</li> <li>Liquid release not contained on lease.</li> <li>Gas release impact has potential to extend beyond site.</li> </ul>
3	Major	<ul> <li>Worker(s) requires hospitalization.</li> <li>Regional and national media interest.</li> <li>Liquid release extends beyond lease – not contained.</li> <li>Gas release impact extends beyond lease – public health / safety could be jeopardized.</li> </ul>
4	Catastrophic	<ul> <li>Fatality.</li> <li>National and international media interest.</li> <li>Liquid release off lease not contained – potential for, or is, affecting water or sensitive terrain.</li> <li>Gas release impact extends beyond lease – public health / safety jeopardized.</li> </ul>

Under "Example of Consequence in Category" column, select the box with the worst consequence that currently fits the incident. For example, if there is a fatality on site you must select the "Catastrophic" category which would give you a "Rank" of 4.

	Step 2	Table 2 – Likelihood of Incident Escalating *								
Rank	Descriptor	Example of Consequence in Category								
1	Unlikely	The incident is contained or controlled, and is unlikely to escalate. There is no chance of additional hazards. Ongoing monitoring required.								
2	Moderate	Control of the incident may have deteriorated but imminent control of the hazard by the duty holder is probable. It is unlikely that the incident will escalate.								
3	Likely	Imminent or intermittent control of the incident is possible. The duty holder has the capability of using internal and external resources to manage and bring the hazard under control in the near term.								
4	Almost Certain or Currently Occurring	The incident is uncontrolled and there is little chance that the duty holder will be able to bring the hazard under control in the near term. The duty holder will require assistance from outside parties to remedy the situation.								

\* What is the likelihood that the incident will escalate, resulting in an increased exposure to public health, safety, or the environment?

#### Sum the "Rank" from Table 1 and Table 2 to obtain the Risk Level and the Incident Classification

Combine the two rankings from the above tables to obtain the "Risk Level" and "Level of Emergency".

For example, if the "Consequence Rank" is 4 and the "Likelihood Rank" is 1 then the combined score or "Risk Level" is 5.

A "Risk Level" of 5 would be classified as a Level 1 Emergency.

Refer to the appropriate column in Table 4 (reverse of this page) for responses to the Level of Emergency that has been determined.

Note:

- 1. In Alberta, the duty holder **must** use the Assessment Matrix for Classifying Incidents to classify an incident.
- In Alberta, the duty holder must contact the Alberta Energy Regulator (AER) after it has communicated and activated internal response resources to confirm the level of emergency and convey the specifics of the incident.
- 3. After contacting the Alberta Energy Regulator (AER), the duty holder in Alberta, must notify the local authority, the RCMP/police and the local health authority if the hazardous release goes off lease and has the potential to impact the public or if the duty holder has contacted members of the public or the media.
- Once the situation improves, the duty holder must make the decision to downgrade or stand down an emergency in consultation with the government regulator.

Step 3	Table	3 – Incident Classification				
Risk Leve	el	Assessment Results				
Very Low 2	- 3	Alert				
Low 4 – 5	5	Level – 1 Emergency				
Medium	6	Level – 2 Emergency				
High 7 –	8	Level – 3 Emergency				

The H<sub>2</sub>Safety Services Inc. Emergency Assessment Smart Phone app is the preferred method for determining the level of emergency. Search H<sub>2</sub>Safety or Emergency Assessment in the Apple or Android app store.



## Step 1 – Level of Emergency



Step	o 4	Table 4 – Incident	Response – Incident Classif	ication
Responses	Alert	Level – 1 Emergency	Level – 2 Emergency	Level – 3 Emergency
Communication	1S			
Internal	Discretionary, depending on the duty holder policy.	Notification of off-site management.	Notification of off-site management.	Notification of off-site management.
Public	Courtesy, at duty holder's discretion.	Mandatory for individuals in the EPZ who have requested notification.	Planned and instructive in accordance with the specific ERP.	Planned and instructive in accordance with the specific ERP.
Media	Reactive	Reactive, as required.	Proactive media management to local or regional interest.	Proactive media management to national interest.
Government	Reactive. Notify AER if public or media is contacted.	Notify local AER field centre. Call local authority and health authority if public or media is contacted.	Notify local AER field centre, local authority & health authority.	Notify local AER field centre, local authority & health authority.
Actions				
Internal	On site, as required by duty holder.	On site, as required by the duty holder. Initial response is in accordance with the AER- approved ERP or corporate ERP.	Predetermined public safety actions are under way. Corporate management team alerted and may be engaged to support on-scene responders.	Full implementation of incident command system.
External	On site, as required by the duty holder.	On site, as required by the duty holder.	Potential for multiagency response (i.e., operator, municipal, provincial, federal).	Immediate multiagency response (i.e., operator, municipal, provincial, federal).
Resources				
Internal	Immediate and local. No additional personnel required.	Establish what resources are required.	Limited supplemental resources or personnel are required.	Significant resources are required.
External	None.	Begin to establish resources that may be required.	Possible assistance from government agencies and external support services.	Assistance from government agencies and external support services are required.
Responses	Alort	Level – 1 Emergency	Level – 2 Emergency	Level – 3 Emergency
Definition	An incident that can be handled on site by the duty holder through normal operating procedures and is deemed-a very low risk to the public.	The incident presents no danger outside the duty holder's property or threat to the public and has a minimal environmental impact. Duty- holder personnel can manage the incident themselves with immediate control of the hazard. There is little or no media interest.	The incident presents no immediate danger outside the duty holder's property but could potentially extend beyond the duty holder's property. Outside agencies must be notified. Imminent control of the hazard is probable, but there is a moderate threat to the public or the environment or both. There may be local and regional media interest in the	The safety of the public is in jeopardy from a major uncontrolled hazard. There are likely significant and ongoing environmental impacts. Immediate multiagency municipal and provincial government involvement is required.
	Alert	Level – 1 Emergency	Level – 2 Emergency	Level – 3 Emergency
Responses	Investigate and escalate level if required initiate control procedures	In addition to Alert level responses: - Isolate the hazard area - Activate the ERP - Conduct public safety actions for special needs residents - If special needs residents decide to voluntarily evacuate, activate a reception centre - Notify appropriate internal personnel and government agencies - Have air monitoring conducted at the site if necessary	In addition to Level-1 responses: - Fully activate emergency response procedures with command centres established or on standby - Inform government agencies of situation and incorporate support (government regulator, local authority, health authority, RCMP) - Identify the hazard and emergency operating areas and take any required action to protect the public through shelter or evacuation. - Prepare ignition team (butane gas related) - Respond to media, company and public questions - Prepare for the potential of the situation to escalate to a Level-3 - Record activities and keep government and municipal agencies advised, if applicable - Establish roadblocks - Activate the EOC, if it has not already been established at a Level-1 emergency	In addition to Level-2 responses: - Emergency response plan and command centres are fully activated - Company Management has been notified and all internal support positions staffed - Continue to monitor and adjust hazard and emergency operating areas (maintain security) - Mobilize additional people and resources - Ignite a gas release if ignition criteria are met - Continue to advise company and government - Activate the reception centre, if it has not already been established at a Level- 1 or Level-2 emergency - Continue to maintain the EOC, once it is activated

### **Internal Emergency Notification Flowchart**



Enercapita
External Notification
External Agencies

Note: After Initial Notifications are complete, please reference Step 4 – Incident Briefing and begin building the initial Organizational Structure (pg 3) within the ICS 201 Incident Briefing form.

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### **External Emergency Notification Flowchart**



Refer to Section 5: External Agencies for the Government Notification Matrix, Provincial Lead and Supporting Agencies and Federal Agencies required to be contacted or notified



Note: After Initial Notifications are complete, please reference Step 4 – Incident Briefing and begin building the initial Organizational Structure (pg 3) within the ICS 201 Incident Briefing form.

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Inc	cide	nt N	lam	e:																			
Da	ite/T	īme	e Ini	tiate	ed:																		
Pr	Prepared By: ICS Position:																						
Level of Emergency Alert / Minor Level 1 Level 2 Level 3																							
Ma	Map Sketch: Note: Maps can be drawn or attached here.																						
		iviap										·											
													-										
													-										
													-						 				
Si	tuat	ion	Su	mm	ary	': (W	/rite	e de	scr	ipti	on o	or a	ttac	h A	1)								
Sa	fet	/ Br	iefi	na:																			
-00	rety			ng.																			

<b>Current and Planned</b>	Current and Planned Objectives:									
Priorities: (1) Life Sat	fety (2) Incident Stabilization (3)	Environment & Property								
1. Ensure Safety of Citiz	zens and Response Personnel:	4. Minimize Economic Impacts:								
□ 1a. Identify hazard(s) c	of released product.	□ 4a. Consider tourism and local economic impacts.								
1b. Establish site contr security).	ol (hot zone, warm zone, cold zone, &	□ 4b. Protect public and private assets, as resources permit.								
1c. Establish an Emerge Safety Actions.	gency Response Zone and Initiate Public	□ 4c. Establish damage claims process.								
□ 1d. Consider evacuatio	ons if needed.	5. Keep Stakeholders and Public Informed of Response Activities:								
□ 1e. Establish aircraft re	estrictions.	5a. Provide forum to obtain stakeholder input and concerns.								
□ 1f. Monitor air in impac	ted areas	□ 5b. Provide stakeholders with details of response actions.								
1g. Develop site safety briefings are conducted	plan for personnel and ensure safety d.	□ 5c. Identify stakeholder concerns and issues, and address as practical.								
2. Control the Source o	f the Release:	□ 5d. Provide timely safety announcements.								
□ 2a. Complete emergen	icy shutdown.	□ 5e. Conduct regular news briefings.								
□ 2b. Conduct firefighting	].	□ 5f. Conduct public meetings, as appropriate.								
□ 2c. Initiate temporary re	epairs.									
3. Manage a Coordinate	ed Response Effort:									
□ 3a. Complete or confirm	m notifications.									
□ 3b. Establish a unified (command post, etc.).	command organization and facilities									
3c. Ensure mobilization personnel and equipment	n and tracking of resources and account for ent.									
□ 3d. Complete documer	ntation.									
<b>Current and Planned</b>	Actions, Strategies and Tactics:									
Time:	Actions:									
ННММ										
HHMM										
HHMM										
HHMM										
HHMM										
HHMM										
HHMM										
HHMM										
HHMM										



Note: Refer to ICS 207 Incident Organization Chart in Section 6: Forms (Blue Tab) for full command structure.

Resources Summar	Resources Summary:											
Resource(s)	Time Called	ETA	On-Site	Notes (Location/Assignment/Status)								
External Notification	ns: (Governmen	it)										
Agency	Time Called			Notes								

Si	e Safety and Hazard Control Analysis				
Si	e Control				
1.	Is Site Control set-up? □ Yes □ No	2.	Is there an On-Scene Command Post? If so, where?	□ Yes	□ No
3.	Have all personnel been accounted for?	Inj Un	uries: Fatalities: naccounted: Trapped:		
4.	Are observers involved or rescue attempts planned? Observers:  Yes No Rescuers: Yes No	5.	Are Decon areas setup?	□ No	
На	zard Identification, immediate signs of: (if yes,	exp	lain in remarks)		
1.	Electrical line(s) down or overhead?   Yes  No	2.	Unidentified liquid or solid products visible?	□ Yes	□ No
3.	Wind direction across incident:	4.	Is a safe approach possible?	□ Yes	□ No
5.	Odours or smells?	6.	Vapours visible?	□ Yes	□ No
7.	Holes, ditches, fast water, cliffs, etc. nearby? □ Yes □ No	8.	Fire, sparks, sources of ignition nearby?	□ Yes	□ No
9.	Is local traffic a potential problem?   Page Yes  No	10	. Product placards, colour codes visible?	□ Yes	□ No
11.	Other Hazards?	12	. As you approach the scene from the upwinc a change in the status of any of the above?	l side, do y □ Yes	′ou note □ No
13.	Remarks:	•			
На	zard Mitigation: have you determined the neces	ssitv	y for any of the following?		
1.	Entry Objectives:		,		
2.	Warning sign(s), barriers, colour codes in place?	S	□ No		
3.	Hazardous material being monitored? 3a. Sampling equipment: 3b. Sampling location(s): 3c. Sampling frequency: 3d. Peak reading: 3e. Personal exposure monitoring:	)			
4.	Protective gear / level:		4a. Gloves:		
	4b. Respirators 4d. Boots:		4c. Clothing: 4e. Chemical cartridge change frequency:		
5.	Decon 5a. Instructions: 5b. Decon equipment and materials:				
6.	Emergency escape route established?	)			
7.	Field responders briefed on hazards?	)			
8.	Remarks:				
Pro	tective Zones: record initial control perimeters (see Figure 1)				



### **Public Protection Measures Flowchart**



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# **Section 2: Roles and Responsibilities**

#### **Field Response Team**

#### **Key Response Personnel**

#### **General Safety Equipment and Resource Lists**

Operator, Truck & Other Safety Equipment

#### Field Response Team – Command Staff

**Command Staff Roles Chart** 

#### Field Response Team – General Staff

Operations Section Roles Chart Planning Section Roles Chart Logistics Section Roles Chart Finance / Admin. Section Roles Chart

#### Field Response Team – Public Safety Staff

Public Safety Roles Chart Air Monitors Module Reception Centre Rep Module Roadblocks Module Rovers Module Telephoners Module

#### **Ongoing Response**

Planning "P" Five Step Ongoing Response Guide Objectives Meeting Tactics Meeting Planning Meeting Operations Briefing

#### **Response Teams Phone List**

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### **Field Response Team**



### Key Response Personnel

Command Staff	Incident Commander	Area Foreman Lead Operator (Alternate Incident Commander)		
On-Site	On-Site Group Supervisor	Lead Operators Please see the <b>Response Teams Phone List</b> (Yellow tab) or Area Specific Information (White tabs) for a list of Area Operators.		
	Trained in Ignition (H <sub>2</sub> S & HVP)	Area Foreman / Lead Operator		
	Public Safety Group Supervisor	Lead Operator Area Foreman (Alternate)		
Public Safety	Air Monitors / Roadblock / Rovers	Area Operators / Third-Party Service Please see the <b>Response Teams Phone List</b> (Yellow tab) or Area Specific Information (White tabs) for a list of Area Operators.		
	Telephoners	Calgary EOC Support		
	Reception Centre Representative	Area Operators / Calgary EOC Support Please see the Response Teams Phone List (Yellow tab) or Area Specific Information (White tabs) for a list of Area Operators.		

The following individuals are likely to fill the key response roles identified:

Please refer to the **Response Teams Phone List (Yellow tabs)** or **Area Specific Information (White tabs)** for the full list of personnel and their contact information.

### **General Safety Equipment and Resource Lists**

### **Operator, Truck & Other Safety Equipment**

Each operator is required to drive a suitable vehicle (4x4 truck) for their service areas and should carry the following equipment: 20-30lb fire extinguisher, vehicle emergency roadside kit, cell phone and a 4 head monitor.

Refer to Area Specific Information Section (white tabs) for further details on specific air monitoring equipment, back-up communication methods, ignition and roadblock kit contents as well as their locations, specialty fire-fighting equipment and/or service companies and their contact information for if the aforementioned equipment is not available.

	Incident Commander	D	Peputy Incident Commander		Information Officer	
The As No	e Incident Commander is in charge of overall management of the incident and must be fully qualified to manage the incident. incidents grow in size or complexity, a more highly qualified Incident Commander may be assigned by the company. te: The highest ranking authority arriving at the site of the incident (first on-scene) becomes the Incident Commander and	Th re pc	The <b>Deputy Incident Commander</b> may assume sponsibility for a specific portion of the primary sition, work as relief, or be assigned other after the Deputy characteristic and always he as gualified	The for infe	e Information Officer is responsible developing and releasing ormation about the incident to the	Th no the
est coi	ablishes command and control. The first on-scene will remain the Incident Commander until there is formal transfer of nmand to a more senior company employee and / or qualified personnel.	to	make decisions and manage the incident as the cident Commander.	to	other appropriate agencies and ganizations.	а5 СО
Init	ial Response - *Refer to the 5 Step Initial Response Guide in Section 1: Initial Response*		If no scribe has been assigned to the		Receive incident briefing from	
Ste	p 1: Level of Emergency		Incident Commander, support the		the Incident Commander	ł
	If necessary, investigate and confirm the emergency. If the incident involves a release of sour product, the investigation should be conducted in teams of two. Take appropriate safety precautions (PPE, SCBA, etc.). Ensure personal safety at all times.		details of the emergency, focusing on activities and decisions made		agencies.	
	Determine the Level of Emergency using the OGC Incident Classification Matrix for BC or AER's Assessment Matrix for Classifying Incidents for all other provinces (e.g. Alert/Minor, Level 1, 2, 3) found in Section 1: Initial Response or using the Emergency Assessment SmartPhone App. (Search H <sub>2</sub> Safety or Emergency Assessment in the App Store).		Record, update and maintain a chronological summary of the incident		that will be provided to internal company personnel to keep	
St	ep 2: Internal Notification Follow the Internal Emergency Notification Flowchart outlined in Section 1: Initial Response to contact required field resources. Refer to the Section 2: Roles and Responsibilities / Response Team Phone List. Relay the information from the A1 Initial Notification Form. Mobilize internal resources to the site, to the Incident Command Post (ICP) or place them on standby as required.		<ul> <li>Names of personnel in each assigned position and their location</li> <li>Control and containment measures</li> </ul>		Identify and document any media involvement that has already taken place	
u	Contact required company resources and communicate the level of emergency. Refer to Section 2: Roles and Responsibilities / Response Team Phone List.		Environmental monitoring information		yet been prepared ensure that	
Ste	p 3: External Notification		Injuries / deaths / missing persons		the generic media statement	ł
	Follow the External Emergency Notification Flowchart in Section 1: Initial Response for communication structure and the Provincial Notification Matrix in Section 5: External Agencies to determine which external agencies need to be patilized.		Phone calls     Actions and decisions		from the ERP is communicated and being used in the field.	
	External Agencies and the Area Specific Information for the location of the incident.		<ul> <li>Actions and decisions</li> <li>Status of the public protection actions</li> </ul>		Assist head office with the	
Ste	p 4: Incident Briefing		Manage the flow of traffic to and		preparation of a	ł
	The following positions are always filled regardless of the size of the incident: <b>Incident Commander</b> , <b>On-Site Group Supervisor</b> and <b>Documentation</b> .		communication with the <b>Incident</b> Commander so that he can focus on		statement if required C1	
	Assess the situation, identify the incident source, and consider how to stop the source. Carry out a site assessment that includes the following: identify hazardous materials, evaluate risk to workers and the public, determine the potential for the incident to escalate, identify safety concerns, determine which other company's facilities are involved.		managing the incident. Conduct status update meetings.		Media Statement form. Document all	
	Detail and prioritize the objectives for the next operational period taking into consideration the <b>priorities of (1) Life Safety, (2)</b> Incident Stabilization, (3) Property & Environment using the ICS 201 Incident Briefing Form.		Provide status to head office. Deal with some day-to-day decision		communications with the media using the	
	Assign other positions as required to meet the identified objectives. Review and complete the ICS 207 Incident Organization Chart in Section 6: Forms. Depending on the scale of emergency, all positions may not be assigned. The Incident Commander assumes responsibility for all unassigned roles until personnel have been assigned to them.		making. Assume duties of the <b>Incident</b>		Media Contact Log. Develop a detailed media strategy for the incident.	
	Conduct a role review with each of the positions above to ensure they clearly understand their roles and responsibilities.		Maintain communication with the Incident		Designate and prepare media	ł
	Develop detailed plans of action (strategies) to achieve the objectives and determine what tactics and resources are required to implement the strategies (oil spill services, safety services, etc.).		Commander.		briefing rooms away from the Incident Command Post.	
	Activate the Incident Command Post (ICP). Refer to the Appendices for Incident Command Post activation guidelines.	Г	Inconstant		Organize tours and photo	ł
	Ensure the Planning Section posts and updates the status board with incident details.		<b>Prior</b> to beginning any activities each		opportunities il required.	
Ste	p 5: Public Safety		person in a role must:		Maintain communication with	ł
u	in Area Specific Information.		Obtain a completed ICS 201 Incident Briefing and ICS 207 Incident		Media releases must be	
	Use the Public Protection Measures Flowchart located in Section 1: Initial Response to assist with determining if evacuation / shelter / ignition are required.		Organization Chart from the Incident Commander.	[	coordinated with applicable regulatory agency.	
	Ensure the affected public are contacted and advised to shelter or evacuate as required.		Throughout the duration of the incident,		If pagagage ( according to with	ł
	Establish Air Monitoring, Reception Centre Representatives, Roadblocks, Rovers, and Telephoners as required.		each person in a role must.		and use broadcast media to	
On	going Response - *Refer to the Five Step Ongoing Response Guide in Section 2: Ongoing Response*		decisions, contacts and requests on an		notify residents in the hazard	ł
	Establish a method to track responders and resources to ensure they are accounted for at all times.		ICS 214 Activity Log. Copies can be		area.	ł
	Monitor implementation of IAP and revise as the situation dictates. Prepare for next operational period.		After the incident is over each person in a		Work with Communications /	ł
	Support the <b>Operations Section Chief</b> in the preparation of an incident control and containment action plan.		role must:		Media to develop a	ł
	Ensure each section chief has adequate starr, is not violating span of control and clearly understands the roles and responsibilities.		Assist with post-incident activities.		communications plan that	ł
	If transfer of command occurs, an incident status briefing must take place. Provide all documentation and review situation status, objectives and priorities, current organization and resources, facilities, communications plan, concerns and introductions to staff		All forms referenced can be found in Section 6: Forms		for responders and all company	
	As the emergency is brought under control, the decision to downgrade the level and/or stand down the emergency will be based on air monitoring readings in consultation with the <b>Incident Commander</b> and the applicable government regulator.				incident information remains confidential (i.e. restriction on	

D The Demobilization Unit will develop and implement objectives/strategies for demobilization.

#### All team members are located at the Incident Command Post (ICP), unless otherwise noted.

cell phone usage for

photography, social media, speaking to the media, etc.).

Escalate, Downgrade or Stand-Down Levels of Emergency: As the emergency is brought under control, the decision to downgrade the level and/or stand down the emergency will be based on air monitoring readings in consultation with the Incident Commander and the applicable government regulator. All affected persons and the media must be kept informed of the status of an emergency. Emergency Follow-up: Once the emergency is over, the area residents, transients, industrial users, involved government agencies, and any individual notified will be informed of the stand-down by the Information Officer or Public Safety Group Supervisor.

Command	<b>Staff Roles</b>				
Liaison Officer	Safety Officer				
The Liaison Officer is responsible for notifying government agencies and is the contact for agency representatives assigned to the incident by assisting or cooperating agencies.	The <b>Safety Officer</b> develops and recommends measures for assuring personnel safety, and assesses and / or anticipates hazardous and unsafe situations.				
<ul> <li>Complete Regulatory First Call Communication Form.</li> <li>Refer to Section 5: External Agencies for the Government Notification Matrix. Notify as soon as possible and provide status updates at agreed upon intervals to:         <ul> <li>Government regulator</li> <li>Local authorities (counties, cities, towns, MDs, RDs, First Nations Reserves, etc.)</li> <li>Health authority</li> <li>Environment</li> <li>Provincial emergency management organization</li> </ul> </li> </ul>	<ul> <li>Ensure the site is evacuated if unsafe.</li> <li>Initiate rescue plans if safe to do so.</li> <li>Review the Incident Action Plan to identify and correct any potential occupational and health hazards.</li> <li>Ensure work / rest guidelines are followed.</li> <li>Continuously monitor workers for exposure to ensure they are wearing the required PPE.</li> <li>Take appropriate action to mitigate or eliminate unsafe conditions, operations, or hazards.</li> <li>Immediately stop any unsafe</li> </ul>				
<ul> <li>Other agencies</li> <li>Keep track of all government correspondence using the Government Agency Contact Log.</li> </ul>	<ul> <li>Immodulely oup dify directory practices.</li> <li>Conduct a general inspection of the facilities, food services and sanitation services soon after they become operational and</li> </ul>				
<ul> <li>Obtain cooperating and assisting agency information that includes: contact information, radio frequencies, cooperative agreements, equipment type, number of</li> </ul>	<ul> <li>follow up on a periodic basis</li> <li>throughout the incident for</li> <li>compliance to all health and</li> <li>safety standards. Provide a</li> <li>report of deficiencies.</li> <li>Document both safe and unsafe</li> </ul>				
equipment and personnel, agency constraints, etc.	acts, corrective actions taken on the scene, accidents or injuries, and ways to improve safety on				
<ul> <li>Conduct appropriate periodic briefings to keep agencies informed of planning actions.</li> </ul>	<ul> <li>tuture incidents.</li> <li>Investigate accidents that have occurred within the incident</li> </ul>				
Coordinate with any government agency representatives attending the	area. Identify "Hot Zone" and declare when responders may enter it.				
<ul> <li>ICP or REOC.</li> <li>Coordinate with mutual aid groups.</li> </ul>	<ul> <li>Ensure that responders inside the "Hot Zone" are accounted for and initiate search if required.</li> <li>Prepare a site-specific health and safety plan.</li> </ul>				

Revised October 2018

# **General Staff Roles – Operations Section**

Notesting of a statistic direction of a	<b>Operations Section Chief</b>	On-Site Group Supervisor	Staging Area Manager	Site Safety	Control	Containment
<ul> <li>Markey in the forward workey hashes as in the second of a second</li></ul>	The <b>Operations Section Chief</b> is responsible for managing all tactical operations occurring at the location of the incident. The Incident Action Plan provides the necessary guidance. The need to expand the <b>Operations Section</b> is generally dictated by the number of tactical resources involved and is influenced by span of control considerations.	<b>On-Site Group Supervisor</b> is responsible for coordinating all activities of <b>Control</b> , <b>Containment</b> and <b>Site Safety</b> at the scene of the emergency / incident.	The <b>Staging Area Manager</b> is responsible for managing all activities within a Staging Area.	Site Safety is responsible for responder safety and safety advice at all times at the scene of the emergency / incident.	<b>Control</b> is responsible for implementing measures designed to bring the incident under control or stop the incident.	<b>Containment</b> is responsible for implementing measures designed to reduce the impact of the incident on and prevent the spread of the incident to the surrounding areas.
All forms referenced can be found in Section 6: Forms         All forms referenced can be found in Section 6: Forms         Revised November 2021         Located at the Incident Command Post (ICP)       Located at the On-Site Command Post (OSCP)       Located at the Staging Area       Located at the On-Site Command Post (OSCP)       Located at the On-Site Command Post (OSCP)	<ul> <li>Identify and confirm communication links.</li> <li>Ensure the On-Site Command Post (OSCP) is established.</li> <li>Manage the following positions, as required: On-Site Group Supervisor, Public Safety Group Supervisor.</li> <li>In conjunction with the Incident Commander, the Planning Section Chief, and the Public Safety Group Supervisor, develop and implement an Incident Action Plan (IAP)</li> <li>Ensure responder safety at all times.</li> <li>Oversee control / containment procedures; ensure the hazard is isolated.</li> <li>Determine the current and potential environmental impact of product released, response activities, or waste disposal.</li> <li>Ensure that all environmental laws and regulations are complied with during emergency response operations.</li> <li>Provide technical advice to Incident Commander to determine public protection measures.</li> <li>Assess the requirements for on-site safety supervision, personnel, equipment, and other contract services. Coordinate with Logistics to obtain equipment and resources.</li> <li>Assist the On-Site Group Supervisor in determining whether ignition is appropriate. If at all possible, input is to be obtained from the Incident Commander and the applicable government regulator.</li> <li>Maintain continuous communications with the Incident Commander.</li> </ul>	<ul> <li>Ensure all personnel are accounted for. Release nonessential personnel from the site</li> <li>Oversee and maintain control of all on-site personnel.</li> <li>Establish On-Site Command Post (OSCP).</li> <li>Obtain incident briefing and environmental impact information.</li> <li>Coordinate activities of Staging Area Manager, Site Safety, Control and Containment.</li> <li>Report air monitoring to Incident Commander (third party and regulatory).</li> <li>Call police, fire and ambulance as needed.</li> <li>Coordinate with ambulance / fire / RCMP / regulatory agencies / spill co-ops.</li> <li>Conduct meetings with on-site personnel to review action plans, communication and safety.</li> <li>Request additional resources needed to implement on-site response actions.</li> <li>Supervise the execution of the on-site response actions.</li> <li>The On-Site Group Supervisor has the authority to ignite the release if ignition criteria are met. If at all possible, the On-Site Group Supervisor must consult with higher authority individuals within the company (ideally the Operations Section Chief, Incident Commander, etc.) and the applicable government regulator before making the decision to ignite a release. Refer to Section 4: Emergency Response Procedures.</li> </ul>	<ul> <li>Establish a staging area near the incident site and outside of the EPZ. When choosing a site for the staging area ensure the following conditions are met:         <ul> <li>Adequate sized site that is stable and level with suitable access roads</li> <li>No entry problems such as narrow approach ways, gates, power lines, buried pipelines, etc.</li> <li>Approval has been received from landowner</li> <li>Reception of communication equipment is adequate</li> </ul> </li> <li>Erect staging area information and directional signs to the staging area, if required.</li> <li>Flag the perimeter of the staging area.</li> <li>Obtain an office trailer and emergency lighting, if required.</li> <li>Coordinate traffic and maintain a log of personnel and services dispatched to, or arriving from the site of the emergency. Communicate this information to the Logistics Section Chief.</li> <li>Respond to Operations Section Chief or Incident Commander requests for resources.</li> <li>Confirm all workers have required training before they are dispatched to the incident.</li> <li>Maintain and provide status to the Planning Section of all resources in Staging Area.</li> <li>Demobilize or move Staging Area as required.</li> </ul>	<ul> <li>Assess hazards &amp; potential risks e.g. fire/explosion, toxicity, oxygen deficiency, ignition sources, access/egress.</li> <li>Ensure responder safety at all times.</li> <li>Ensure that on-site personnel are taking appropriate safety actions: PPE, SCBA / SABA, Safe Work Procedures, proper grounding / bonding procedures, work in teams, etc.</li> <li>Maintain security of the site to ensure authorized personnel are allowed access and to protect response personnel.</li> <li>Ensure security of any evidence for investigative purposes.</li> <li>Ensure workers that show signs of stress, fatigue, and other symptoms are demobilized and sent for treatment if necessary.</li> <li>Maintain records of all injuries and onsite medical treatments.</li> <li>Conduct responder safety orientations.</li> <li>Monitor activities and conduct a head count on a regular basis.</li> <li>Continually evaluate risks and stop unsafe activities immediately.</li> <li>Recommend alternatives for activities that are considered to be unsafe.</li> </ul>	<ul> <li>Assist with the development of control procedures.</li> <li>Identify immediate response tactics (i.e. offensive / defensive response tactics). Only when safety is assured, take immediate operational actions to bring the incident under control (i.e. shut down, isolate, de-pressure, etc.).</li> <li>Provide or seek technical / engineering advice around all control-related issues.</li> <li>Inform Operations Section Chief of any interactions with regulatory agencies or environmental personnel.</li> <li>Prior to beginning any activities, each person in Obtain a completed ICS 201 Incident Briefin Incident Commander.</li> <li>Throughout the duration of the incident, each person is Copies can be found in Section 6: Forms. After the incident is over, each person in a role</li> <li>Assist with post-incident activities.</li> </ul>	<ul> <li>Assist with the development of containment procedures.</li> <li>Identify immediate response tactics (i.e. offensive / defensive response tactics). Only when safety is assured, take actions to contain the incident so as to prevent the incident from spreading offsite and to reduce the impact on the public, sensitive terrain, watercourses, etc.</li> <li>Provide or seek technical / engineering advice around all containment-related issues.</li> <li>Secure the scene and restrict access to essential and authorized personnel only.</li> <li>Inform Operations Section Chief of any interactions with regulatory agencies or environmental personnel.</li> <li>Coordinate oil spill cooperative activities (booms, dams, etc.).</li> </ul>
Located at the Incident Command Post (ICP) Located at the On-Site Command Post (OSCP) Located at the Staging Area Located at the On-Site Command Post (OSCP) Located at the On-Site Command Post (OSCP)					All forms referenced	can be found in Section 6: Forms
	Located at the Incident Command Post (ICP)	Located at the On-Site Command Post (OSCP)	Located at the Staging Area	Located at the On-Site Command Post	Located at the On-Site Command Post (OSCP)	Located at the On-Site Command Post (OSCP)

Escalate, Downgrade or Stand-Down Levels of Emergency: As the emergency will be based on air monitoring readings in consultation with the Incident Commander and the applicable government regulator. All affected persons and the media must be kept informed of the status of an emergency. Emergency Follow-up: Once the emergency is over, the area residents, transients, involved government agencies, and any individual notified will be informed of the stand-down by the Information Officer or Public Safety Group Supervisor.
# **General Staff Roles – Planning Section**

	Planning Section Chief	Documentation Unit	Technical Specialists Unit	Situation Unit	Resou
Th fo th PI Se sta pr de int Ac ar	e Planning Section Chief is responsible providing planning and status services for e incident. Under the direction of the anning Section Chief, the Planning ection collects situation and resources atus information, evaluates it, and pocesses the information for use in veloping action plans. Dissemination of ormation can be in the form of the Incident tion Plan, formal briefings, or through map d status board displays.	The <b>Documentation Unit</b> is responsible for the maintenance of accurate, up-to-date incident files. Duplication services will also be provided by the <b>Documentation Unit</b> .	Certain incidents or events may require the use of <b>Technical Specialists</b> who have specialized knowledge and expertise. <b>Technical Specialists</b> may function within the Planning Section, or be assigned wherever their services are required.	The collection, processing, and organization of all incident information. The <b>Situation</b> <b>Unit</b> may prepare future projections of incident growth, maps, and intelligence information.	The <b>Resources</b> maintaining the s resources at an inci
	<ul> <li>Identify and confirm communication links.</li> <li>Assign personnel to assume the following positions, as required: Documentation, Technical, Situation, Resources, and Demobilization.</li> <li>Assist with setup of the Incident Command Post.</li> <li>Review the details of the incident and support the Incident Commander with the development of a preliminary response strategy.</li> <li>Identify the need for technical specialists.</li> <li>Collect and analyze information on the current situation, prepare situation displays and situation summaries, and develop maps and projections.</li> <li>Establish special information collection activities as necessary, e.g., weather, environmental, toxics, etc.</li> <li>Provide technical support to the Incident Commander to develop the Incident Action Plan (IAP).</li> <li>Review any changes to the Incident Action Plan (IAP) to ensure consistency.</li> <li>Assemble information on alternative strategies.</li> <li>Coordinate with Logistics to determine current available resources and resource availability for future plans of action.</li> <li>Establish reporting sc hedules.</li> <li>Conduct long-range and / or contingency planning.</li> <li>Develop plans for demobilization.</li> </ul>	<ul> <li>Document the Incident Action Plan (IAP) strategies using the ICS 201 Incident Briefing Form provided in Section 1: Initial Response or Section 6: Forms and disseminate them to all key responders.</li> <li>Be prepared to document the Incident Commander's status update meetings using whiteboards, PC or Action Logs.</li> <li>Ensure consistent documentation.</li> <li>Ensure timely dissemination of all documentation.</li> <li>Participate in planning meetings, capturing key information, decisions made, commitments and status.</li> <li>Collect documentation from response team members and maintain a consistent system for organizing the data.</li> <li>Records must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.</li> <li>Establish duplication services.</li> <li>Incident files will be stored for legal, analytical, and historical purposes.</li> </ul>	<ul> <li>Determine what technical support is available now and in the future.</li> <li>Work with Logistics to determine the key locations for the required technical support and appropriate time to acquire.</li> <li>Gather data (weather, etc.) and forecast changes considering incident potential and develop new or modified response strategies.</li> <li>As required, obtain plume dispersion modelling.</li> </ul>	<ul> <li>Collect and evaluate information to establish an accurate picture of the situation and creates a detailed summary. Use this information to create maps and projections.</li> <li>Prepare, post, or disseminate resources and situation status information as required, including special requests.</li> <li>Provide photographic services and maps if required.</li> </ul>	<ul> <li>Monitor the statuincident resource to the incident.</li> <li>Oversee the chee</li> <li>Maintenance of resources, e.g., personnel, prima etc.</li> <li>May assist in preIncident Action F</li> <li>Maintain and polocation of all restination of all restin</li></ul>
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urces Unit	Demobilization Unit						
Unit is responsible for status of all assigned dent.	The <b>Demobilization Unit</b> is responsible for developing the Incident Demobilization Plan.						
us and location of all es / personnel responding	Prepare plan for the demobilization of all personnel and equipment upon resolution of the incident.						
eck-in of all resources. a master list of all	<ul> <li>Ensure resources in available status are still required. Identify surplus resources and probably release time.</li> </ul>						
ary and support resources,	<ul> <li>Debrief non-required resources and dismiss resources being demobilized.</li> </ul>						
eparing the written Plan.	<ul> <li>Coordinate demobilization with agency representatives.</li> </ul>						
est the current status and sources.	Develop incident check-out function for all units.						
	Ensure the demobilization process is organized, safe and cost effective.						
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Important Ny activities, each person in a role must: ted ICS 201 Incident Briefing and ICS 207 Incident Organization Chart from the ander. ation of the incident, each person in a role must: document all actions, decisions, contacts and requests on an ICS 214 Activity Log. bund in Section 6: Forms. over, each person in a role must: incident activities. All forms referenced can be found in Section 6: Forms							

# **General Staff Roles – Planning Section**

	Planning Section Chief	Documentation Unit	Technical Specialists Unit	Situation Unit	Resou
Th fo th PI Se sta pr de int Ac ar	e Planning Section Chief is responsible providing planning and status services for e incident. Under the direction of the anning Section Chief, the Planning ection collects situation and resources atus information, evaluates it, and pocesses the information for use in veloping action plans. Dissemination of ormation can be in the form of the Incident tion Plan, formal briefings, or through map d status board displays.	The <b>Documentation Unit</b> is responsible for the maintenance of accurate, up-to-date incident files. Duplication services will also be provided by the <b>Documentation Unit</b> .	Certain incidents or events may require the use of <b>Technical Specialists</b> who have specialized knowledge and expertise. <b>Technical Specialists</b> may function within the Planning Section, or be assigned wherever their services are required.	The collection, processing, and organization of all incident information. The <b>Situation</b> <b>Unit</b> may prepare future projections of incident growth, maps, and intelligence information.	The <b>Resources</b> maintaining the s resources at an inci
	<ul> <li>Identify and confirm communication links.</li> <li>Assign personnel to assume the following positions, as required: Documentation, Technical, Situation, Resources, and Demobilization.</li> <li>Assist with setup of the Incident Command Post.</li> <li>Review the details of the incident and support the Incident Commander with the development of a preliminary response strategy.</li> <li>Identify the need for technical specialists.</li> <li>Collect and analyze information on the current situation, prepare situation displays and situation summaries, and develop maps and projections.</li> <li>Establish special information collection activities as necessary, e.g., weather, environmental, toxics, etc.</li> <li>Provide technical support to the Incident Commander to develop the Incident Action Plan (IAP).</li> <li>Review any changes to the Incident Action Plan (IAP) to ensure consistency.</li> <li>Assemble information on alternative strategies.</li> <li>Coordinate with Logistics to determine current available resources and resource availability for future plans of action.</li> <li>Establish reporting sc hedules.</li> <li>Conduct long-range and / or contingency planning.</li> <li>Develop plans for demobilization.</li> </ul>	<ul> <li>Document the Incident Action Plan (IAP) strategies using the ICS 201 Incident Briefing Form provided in Section 1: Initial Response or Section 6: Forms and disseminate them to all key responders.</li> <li>Be prepared to document the Incident Commander's status update meetings using whiteboards, PC or Action Logs.</li> <li>Ensure consistent documentation.</li> <li>Ensure timely dissemination of all documentation.</li> <li>Participate in planning meetings, capturing key information, decisions made, commitments and status.</li> <li>Collect documentation from response team members and maintain a consistent system for organizing the data.</li> <li>Records must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.</li> <li>Establish duplication services.</li> <li>Incident files will be stored for legal, analytical, and historical purposes.</li> </ul>	<ul> <li>Determine what technical support is available now and in the future.</li> <li>Work with Logistics to determine the key locations for the required technical support and appropriate time to acquire.</li> <li>Gather data (weather, etc.) and forecast changes considering incident potential and develop new or modified response strategies.</li> <li>As required, obtain plume dispersion modelling.</li> </ul>	<ul> <li>Collect and evaluate information to establish an accurate picture of the situation and creates a detailed summary. Use this information to create maps and projections.</li> <li>Prepare, post, or disseminate resources and situation status information as required, including special requests.</li> <li>Provide photographic services and maps if required.</li> </ul>	<ul> <li>Monitor the statuincident resource to the incident.</li> <li>Oversee the chee</li> <li>Maintenance of resources, e.g., personnel, prima etc.</li> <li>May assist in preIncident Action F</li> <li>Maintain and polocation of all restination of all restin</li></ul>
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# **General Staff Roles – Logistics Section**

Market sport spor		Medical unit	Food Unit	Supply Unit	Facilities Unit	Ground Support Unit
<ul> <li>Indext part confirm confi</li></ul>	All incident support needs are provided by the Logistics Section. The section is responsible for providing: facilities, transportation, communications, supplies, equipment maintenance and fuelling, food services, medical services, and ordering resources. Six units may be established within the Logistics Section and the Logistics Section Chief will determine the need to activate or deactivate a unit. If a unit is not activated, responsibility for that unit's duties will remain with the Logistics Section <b>Chief</b> .	The Medical Unit is responsible for all medical services for incident assigned personnel. The unit will develop procedures for managing major medical emergencies; and provide medical aid. Note: Medical assistance to the public or victims of the emergency is an operational function.	Responsible for supplying the food needs for the entire incident, including all remote locations, (e.g., Camps, Staging Areas), as well as providing food for personnel unable to leave tactical field assignments. The Food Unit interacts with the Facilities Unit for location of fixed-feeding site; the Supply Unit for food ordering; and the Ground Support Unit for transporting food.	The <b>Supply Unit</b> is responsible for ordering, receiving, processing, and storing all incident-related resources.	The <b>Facilities Unit</b> is responsible for set-up, maintenance, and demobilization of all incident support facilities except staging areas. The <b>Facilities Unit</b> will also provide security services to the incident as needed.	The Ground Support Unit is primarily responsible for the maintenance, services, and fuelling of all mobile equipment and vehicles, with the exception of aviation resources. The unit also has responsibility for the ground transportation of personnel, supplies, and equipment.
	<ul> <li>Identify and confirm communication links.</li> <li>Assign personnel as required.</li> <li>List and obtain all immediate resources requested by the Incident communications equipment and facilities.</li> <li>Identify anticipated and known incident service and support requirements.</li> <li>Maintain continuous communications with the Incident Commander.</li> <li>Develop plans to move required resources to site.</li> <li>Confirm spending authorities with the Finance / Admin Section.</li> <li>Mobilize resources.</li> <li>Move required resources to site.</li> <li>Coordinate spending with the Finance / Admin Section Chief.</li> </ul> Important Prior to beginning any activities, each person in a role must: <ul> <li>Obtain a completed ICS 201 Incident Briefing and ICS 207 Incident Organization Chartocopies can be found in Section 6: Forms.</li> </ul> After the incident is over, each person in a role must: <ul> <li>Assist with post-incident activities.</li> </ul>	<ul> <li>Arrange and provide response personnel with first aid and minor medical services.</li> <li>Develop Incident Medical Plan.</li> <li>Develop procedures for handling serious injuries of responder personnel.</li> <li>Provide medical aid to personnel.</li> <li>Assist the Finance / Administration Section with processing injury-related claims.</li> <li>Note: Provision of medical assistance to the public or victims of the emergency is an operational function and would be done by the Operations Section And not by the Logistics Section Medical Unit. If there is a requirement for victims of an incident the local public ambulance service is most often utilized.</li> </ul>	<ul> <li>Responsible for supplying the food needs for the entire incident, including all remote locations (e.g., Camps, Staging Areas), as well as providing food for personnel unable to leave tactical field assignments.</li> <li>Works with the Planning Section - Resources Unit to anticipate the numbers of personnel to be fed and develop plans for supplying food to all incident areas.</li> <li>Interacts with the Facilities Unit for location of fixed-feeding site; the Supply Unit for food ordering; and the Ground and Air Support Units for transporting food.</li> <li>Obtain necessary equipment and supplies and establish cooking facilities.</li> <li>Order sufficient food and potable water from the Supply Unit.</li> <li>Maintain inventory of food and water.</li> <li>Maintain food services areas, ensuring that all appropriate health and safety measures and being followed.</li> <li>Supervise caterers, cooks, and other Food Unit personnel as appropriate.</li> </ul>	<ul> <li>Order, receive, distribute and track all incident equipment and supplies.</li> <li>Ordered all off-incident resources including: tactical and support resources (including personnel), all expendable and non-expendable support supplies.</li> <li>Management of tool operations, including the storage, disbursement, and service of all tools and portable non-expendable equipment.</li> </ul>	<ul> <li>Set-up, maintain, and demobilize incident support facilities with the exception of staging areas.</li> <li>Facilities may include: Incident Command Post, Incident Base, Camps, and other facilities within the incident area to be used for feeding, sleeping and sanitation services.</li> <li>Prepare layout of facilities; inform appropriate unit leaders.</li> <li>Will provide security services to the incident as needed.</li> <li>Contact local law enforcement agencies as required.</li> <li>Investigate and document all complaints and suspicious occurrences.</li> <li>Ensure strict compliance with applicable safety regulations.</li> <li>Provide facility maintenance services, e.g., sanitation, lighting, etc.</li> <li>Demobilize base and camp facilities.</li> </ul>	<ul> <li>Responsible for the maintenance, service and fuelling of all mobile equipment and vehicles, with the exception of aviation resources.</li> <li>Coordinates the transportation of all personnel, supplies, and equipment.</li> <li>Update the Resources Unit with the status (location and capability) of transportation vehicles.</li> <li>Develop the Incident Traffic Plan as required.</li> </ul>

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# **General Staff Roles – Finance / Admin Section**

Finance / Admin Section Chief	Time Unit	Procurement Unit	Compensation & Claims Unit	Cost Unit
The Finance / Administration Section Chief is responsible for managing all financial aspects of an incident. The Finance / Administration Section Chief will determine the need to activate or deactivate a unit.	The <b>Time Unit</b> is responsible for ensuring the accurate recording of daily personnel time, compliance with specific agency time recording policies and managing commissary operations if established at the incident.	All financial matters pertaining to vendor contracts, leases and fiscal agreements are managed by the <b>Procurement Unit</b> . The unit is also responsible for maintaining equipment time records. The <b>Procurement Unit</b> establishes local sources for equipment and supplies; manages all equipment rental agreements; and processes all rental and supply fiscal document billing invoices.	This unit oversees the completion of all forms required by workers' compensation and local agencies. A file of injuries and illnesses associated with the incident will also be maintained and all witness statement will be obtained in writing. Close coordination with the medical Unit is essential. The <b>Compensation &amp;</b> <b>Claims Unit</b> is also responsible for investigating all claims involving property associated with or involved in the incident.	The <b>Cost Unit</b> provides all incident cost analysis. It ensures the proper identification of all equipment and personnel requiring payment; records all cost data; analyzes and prepares estimates of incident costs; and maintains accurate records of incident costs.
<ul> <li>Identify and confirm communication links.</li> <li>Assign personnel to assume the following positions, as required: Time Unit, Procurement Unit, Compensation &amp; Claims Unit, and Cost Unit.</li> <li>Review legal issues with the Incident Commander.</li> <li>Maintain continuous communications with the Incident Commander.</li> <li>Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up.</li> <li>Manage all financial aspects of an incident.</li> </ul>	<ul> <li>Record daily personnel time, ensure compliance with specific agency time recording policies, and manage commissary operations if established at the incident.</li> <li>Submit cost estimate data forms to Cost Unit as required.</li> <li>Ensure that all records are current and complete prior to demobilization.</li> </ul>	<ul> <li>Manage finances relating to vendor contracts, leases and fiscal agreements.</li> <li>Maintain equipment time records.</li> <li>Establish local sources for equipment and supplies. Coordinate with local jurisdiction on plans and supply sources.</li> <li>Manage all equipment rental agreements. Establish contracts and agreement with supply vendors.</li> <li>Processes all rental and supply fiscal document billing invoices.</li> <li>Prepare and authorize contracts and land use agreements, as needed.</li> </ul>	<ul> <li>Handle all matters relating to compensation for injury or property damage due to the incident.</li> <li>Oversees the completion of all forms required by workers' compensation and local agencies.</li> <li>Maintain a file with all the injuries and illnesses associated with the incident.</li> <li>Obtain witness statements in writing.</li> <li>Investigate all claims involving property associated with or involved in the incident.</li> <li>Ensure the completion of a Resident Compensation Log for any out-of-pocket expenses incurred by evacuees.</li> <li>All claims must be submitted to the Finance and Legal departments for processing and disbursement of funds.</li> <li>If applicable, Finance and Legal will deal with insurers as well as any other extraneous circumstances (affected parties want more, etc.).</li> </ul>	<ul> <li>Collect and evaluate cost data to establish an accurate picture of the incident costs.</li> <li>Create cost summaries, cost estimates, and cost saving recommendations.</li> <li>Prepare resources-use cost estimates for the Planning Section.</li> <li>Identify all equipment and personnel requiring payment.</li> </ul>
			<ul> <li>Prior to beginning any activities, each perior to beginning any activities, each period of the incident of the incident commander.</li> <li>Throughout the duration of the incident, and the incident of the incident all actions, copies can be found in Section 6: For After the incident is over, each person in</li> <li>Assist with post-incident activities.</li> <li>All forms reference</li> </ul>	Important rson in a role must: Briefing and ICS 207 Incident Organization Chart from the each person in a role must: decisions, contacts and requests on an ICS 214 Activity Log. orms. a role must: nced can be found in Section 6: Forms

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		Operati	ions Sectio	n - Public S	afety Roles
Public Safety Group Supervisor	Air Monitors	<b>Reception Centre Rep</b>	Roadblocks	Rovers	Telephoners
The <b>Public Safety Group Supervisor</b> is responsible for the management, planning, consideration, and implementation of external public protection activities for the duration of the incident.	Air Monitoring personnel are responsible for acquiring and providing air quality readings to the Public Safety Group Supervisor.	Reception Centre Reps are responsible for establishing reception centres, managing evacuee accommodation, communication and documentation for compensation	<b>Roadblock</b> personnel are responsible for restricting unauthorized entry into the hazard areas during an incident that could potentially jeopardize public safety.	<b>Rovers</b> travel to assigned locations to locate the public and personally provide public safety instructions and assistance as required. This may be completed via truck, ATV, boat, helicopter, etc.	<b>Telephoners</b> are responsible for the notification of impacted residences and businesses to provide public safety instructions.
Confirm communication links with the Incident Commander and Operations Section Chief.     In conjunction with the Incident Commander: determine the size of the EP2; identify the residents, businesses, industrial operators, and / or translents in the area; and determine the initial public protection measures to be taken. Consider the impact of major highways, navigable water courses, cleared pipeline rights of way & railways in the hazard area. Refer to Section A: Emergence, Response Difficultors, Reception Centre Representative, Roadblocks, Rovers, and Telephoners can be toru of in Section 2: Roles & Responsibilities.     In conjunction with the Incident Commander, Planning Section Chief, and Operations Section Chief, develop and implement an Incident Action Plan (AP).     Review resident lists, area user lists, reception centres, and telephone numbers within the ERP.     If required, etablish a Regional Emergency Operations Centre (RECC).     Assign personnel to assume the following positions as required: Air Monitors, Reception Centre Representative, Roadblocks, Rovers, and Telephoners and 1 Supervisor for every 10 Telephoners.     Dispatch Rinado personnel to every 7 residences and 1 Supervisor for every 10 Telephoners.     Dispatch Air Monitors at a Level 1 emergency (hand-held and mobile).     Dispatch Air Monitors at a Level 1 emergency (hand-held and mobile).     Dispatch and perations Section Chief to determine the need for evacuation / sheltering. This is based on air monitoring readings at the nearest downwind residence.     Mobilize third party mobile at the aver and test there evident and virtual environment agency regarding air monitoring readings. Science: Level Notification / Voluntary Evacuation, Science Phone Message, Evacuation / sheltering. This is based on air monitoring readings. Science Chief to determine the need for evacuation / sheltering. This is based on air monitoring readings. Science Phone Message, Science Phone Message, Science Chief to advirt as science with special needs to	<ul> <li>Provide air monitoring readings to assist with decision making (evacuation / shelter / ignition).</li> <li>Obtain and check equipment and information (maps, forms, communications, reports, monitors, safety, and breathing equipment).</li> <li>Confirm communication links.</li> <li>Monitor closest downwind public location or residence.</li> <li>Monitor environment for adverse effects.</li> <li>Record all readings on the Air Monitoring Log.</li> <li>Report all readings at established intervals to the Public Safety Group Supervisor.</li> <li>For your own safety, ensure Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL and / or 10 ppm H<sub>2</sub>S.</li> <li>Prepare Mobile Monitoring Plan.</li> </ul>	<ul> <li>Confirm reception centre is available for use.</li> <li>Establish reception centre. Refer to Section 2: Roles &amp; Responsibilities.</li> <li>Confirm communication links.</li> <li>Receive evacuees and maintain a Reception Centre Registration Log.</li> <li>Arrange for food and accommodations for the evacuees.</li> <li>Provide evacuees with a place to request counselling services, if required.</li> <li>Record and follow up on all evacuees who choose to make their own accommodation arrangements.</li> <li>Arrange for temporary care of livestock (if possible) and the security of evacuated property.</li> <li>Establish and oversee compensation administration activities at the reception centre.</li> <li>Reimburse evacuees for their immediate out-of-pocket expenses and log details on a Resident Compensation Log.</li> <li>Where possible, provide evacuees with information regarding their property, livestock, and the incident.</li> <li>Forward all media and incident inquiries to the Information Officer.</li> <li>Address resident concerns and forward them to the Public Safety Group Supervisor.</li> <li>Address resident concerns and forward them to the Public Safety Group Supervisor.</li> <li>Address resident concerns and forward them to the Public Safety Group Supervisor.</li> <li>Address contacts and requests on the found in Section 6: Forms.</li> </ul>	<ul> <li>In conjunction with the Public Safety Group Supervisor determine the need for and location of roadblocks.</li> <li>Pickup and check roadblock kits.</li> <li>Proceed to roadblock locations.</li> <li>Determine driving directions to assigned roadblock location that does not have you pass through the hazard area.</li> <li>Confirm communication links.</li> <li>Establish roadblocks to secure the EPZ.</li> <li>Follow the scripts and procedures in the ERP. Refer to either Section 2: Roles &amp; Responsibilities or Section 6: Forms.</li> <li>If media personnel show up at your roadblock, forward all requests to your direct supervisor who'll direct them to the Information Officer.</li> <li>Monitor area for H<sub>2</sub>S and / or LEL with personal monitors and document readings on the Air Monitoring Log.</li> <li>Report all H<sub>2</sub>S and / or LEL reading changes / increases to the Public Safety Group Supervisor.</li> <li>For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL and / or 10 ppm H<sub>2</sub>S.</li> <li>Record all incoming and outgoing traffic, personnel, and equipment on the Roadblock Log.</li> <li>Forward information given to you by people passing through your location to the Public Safety Group Supervisor.</li> <li>Report any person that insists on going through the roadblock into the hazard area as well as any suspicious activity to the Public Safety Group Supervisor.</li> <li>Maintain communication with the Public Safety Group Supervisor.</li></ul>	<ul> <li>Confirm resident contact lists are available.</li> <li>Confirm communication links.</li> <li>Know safe routes in and out of the EPZ.</li> <li>Search for residents and transients in the Emergency Response and Planning Zones.</li> <li>Check all buildings including barns, shops, sheds, etc.</li> <li>Assist, as required, with the notification, evacuation or sheltering of persons within the EPZ. Record all contact with residents using the Resident Contact Log.</li> <li>Post Evacuation Notices for residents that are not at their residence.</li> <li>Follow the scripts and procedures in the ERP. Refer to Section 2: Roles &amp; Responsibilities or Section 6: Forms.</li> <li>Monitor area for H<sub>2</sub>S and / or LEL with personal monitors and document readings on the Air Monitoring Log.</li> <li>Report all H<sub>2</sub>S and / or LEL reading changes / increases to the Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL or 10 ppm H<sub>2</sub>S.</li> <li>Report any suspicious behaviour to the Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL or 10 ppm H<sub>2</sub>S.</li> <li>Report any suspicious behaviour to the Public Safety Group Supervisor.</li> <li>Note: See Section 2: Roles &amp; Responsibilities for a media script for Roadblock and Rover personnel.</li> </ul>	<ul> <li>Confirm resident contact lists are available.</li> <li>Confirm communication links.</li> <li>In conjunction with the Public Safety Group Supervisor, determine who needs to be notified (residents, businesses, area users, etc.).</li> <li>Review with the Public Safety Group Supervisor which telephoner scripts to use: Early Notification / Voluntary Evacuation Message, Shelter-in-Place Phone Message, Evacuation Phone Message.</li> <li>Contact special needs residents at a Level 1 Emergency and provide them with the option to evacuate.</li> <li>Contact special needs residents at a Level 1 Emergency and provide them with the option to evacuate.</li> <li>Contact the other residents and area users in the EPZ and advise them to evacuate or shelter.</li> <li>Contact the schools / school buses to make arrangements for school age children (if applicable).</li> <li>Advise that buses in the affected area leave immediately and that buses should not enter the area.</li> <li>Request a school administrator for the reception centre to assist in managing the children and releasing them to their guardians.</li> <li>Document all resident interactions using the Resident Contact Log and report this information to the Public Safety Group Supervisor about unsuccessful contacts and any residents requiring assistance.</li> </ul>
					Revised November 2021
Located at the Incident Command Post (ICP) or the Regional Emergency Operations Centre (REOC).	Location will be assigned.	Location will be the reception centre.	Location will be assigned.	Location will be assigned.	Location will be Incident Command Post (ICP) or Regional Emergency Operations Centre (REOC).

Escalate, Downgrade or Stand-Down Levels of Emergency: As the emergency is brought under control, the decision to downgrade the level and/or stand down the emergency will be based on air monitoring readings in consultation with the Incident Commander and the applicable government regulator. All affected persons and the media must be kept informed of the status of an emergency. Emergency Follow-up: Once the emergency is over, the area residents, transients, industrial users, involved government agencies, and any individual notified will be informed of the stand-down by the Information Officer or Public Safety Group Supervisor.

### Overview

H<sub>2</sub>S, SO<sub>2</sub>, LEL or other toxic substance concentrations will be monitored continuously during the incident response. It is crucial that Air Monitors continuously update the Public Safety Group Supervisor with monitored results. If air monitoring readings show high levels of H<sub>2</sub>S, SO<sub>2</sub>, or LEL the Public Safety Group Supervisor may need to initiate evacuation / shelter of additional residences, change the location of the roadblocks, or ignite the release.

### **Air Monitor Roles**

- Dobtain and check equipment and information (maps, forms, communications, reports, monitors, safety, and breathing equipment).
- Confirm communication links.

□ Monitor closest downwind public location or residence.

- Monitor environment for adverse effects.
- A5 Record all readings on the Air Monitoring Log provided.
- □ Report all readings at established intervals to the **Public Safety Group Supervisor**.
- □ For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching the following levels: 10% LEL or 10 ppm  $H_2S$ .
- Prepare Mobile Monitoring Plan.
- Document activities using the ICS 214 Activity Log.
- □ Assist with post-incident activities.
- □ Monitor H<sub>2</sub>S and LEL concentrations along the edge of the EPZ to determine if sheltering and/or evacuation criteria has been met beyond the EPZ.

ICS 214

### **Air Monitoring Equipment**

### Air monitoring equipment is used to:

- Track the plume.
- · Determine if ignition criteria are met.
- Determine whether evacuation and / or shelter-in-place criteria have been met.
- · Determine roadblock locations.
- Determine concentrations in areas being evacuated to ensure that evacuation is safe.
- Assist in determining when the emergency can be downgraded.

### Tips

□ Air monitors should be dispatched at a Level 1 Emergency.

- Ensure all equipment is operational and the appropriate documentation is available to verify testing and calibration requirements.
- Use the buddy system where possible.
- □ Breathing apparatus be prepared to don apparatus quickly.

Ensure all personnel have a personal gas monitor.

□ Speed and direction of wind may vary, therefore, be prepared to track gas plume.

Record all information:

- Concentrations in ppm or ppb
- Location and time of readings
- Wind speed and direction

### **Drilling & Completions**

### Critical / Special Sour Wells

If the EPZ includes a portion of urban density development or urban centre: · There must be minimum of two mobile air monitors:

- One to monitor the boundary of the urban density development or urban centre and the other to track the plume.
- · Ensure that one unit is in the area during drilling and / or completion, testing, and workover operations in potentially critical sour zones.
- · Dispatch a mobile air quality monitoring unit(s) at a level 1 emergency and request additional units as required.
- · Dispatch a mobile air quality monitoring unit(s) when it is evident that well control measures are deteriorating and that a sour gas release is likely to occur.
- Prior to conducting operations in the sour zone, determine where the monitoring equipment is located and what the estimated travel time is to the well site.

If the EPZ DOES NOT include a portion of urban density development or urban centre:

- · Dispatch a mobile air quality monitoring unit(s) at a level 1 emergency and request additional units as required.
- Dispatch a mobile air quality monitoring unit(s) when it is evident that well control measures are deteriorating and that a sour gas release is likely to occur.
- Prior to conducting operations in the sour zone, determine where the monitoring equipment is located and what the estimated travel time is to the well site.

### **Continuous Detection Devices**

A continuous H<sub>2</sub>S/LEL system must be used while in the critical sour zone. The detection system requirements are as follows:

- A minimum of four sensors able to detect H<sub>2</sub>S concentrations of 5 ppm or greater.
- · Audible and visual alarms near the driller's station.
- Set alarms at 10 ppm.
- · Locate sensors at the shale shaker, near the bell nipple, on the rig floor, and at the mud mixing unit.

### **Portable Detection Devices**

• One portable H<sub>2</sub>S detection device is required while drilling in the critical sour zone.

A5

		Form								
Timo	Location of Complete	H₂S	LEL	0,	SO₂	Other	Tomm (%C)	Wind Conditions *		Commonto
Time	Location of Samples	(ppm)	(%)	(%)	(ppm)	Other	remp (°C)	From	Speed (km/hr)	Comments
19:06	12-05-13-16 W5M	5	4		10		19	NW	12	Picked up 5 ppm reading upon entering lease access. Contacted control room at plant.
19:15	12-05-13-16 W5M	6	7		12		18	NW	11	H <sub>2</sub> S reading increased 1 ppm at the access point.
19:25	12-05-13-16 W5M	6	7		12		17	NW	11	No change in readings. Wind and temperature is down.

### \* Estimate meteorological conditions where accurate readings are not available.

- If notified of a release by alarm or by a reported odour, the licensee must investigate the source of the release and dispatch air monitors upon confirmation of the release location or when it is evident that spill control measures are not effective.
- Air quality monitoring occurs downwind with priority being directed to the nearest un-evacuated residence or area where people may be present.
- · Air monitors (personal handheld, stationary, and mobile) should be dispatched at a level 1 emergency.
- occur.
  - · Licensee personnel will monitor and record the concentrations until a mobile air monitoring unit arrives or until the incident is over. At minimum, these readings must include LEL and  $H_2S$ .
- · If a sour gas release has been ignited, the licensee should continue to monitor response zones for H<sub>2</sub>S from incomplete combustion, as well as SO<sub>2</sub>.
- The licensee is expected to provide monitored  $H_2S$  and  $SO_2$  information on a regular basis throughout a sour gas emergency to the relevant government regulator, environmental agency, health authority, local authorities, and on request to the public.

### HVP Product Release

- · Air quality monitoring may occur downwind or upwind depending on how the plume is tracking, with priority being directed to the nearest un-evacuated residence or areas where people may be present.
- · The licensee is expected to provide monitored HVP product LEL information on a regular basis throughout the emergency to the relevant government regulator, environmental agency, health authority, local authorities, and on request to the public.

### Downgrading Level of Emergency

results.

- 1.Us do un pre
- 2.Cor Su ass

Reporting and Contacts
Air Monitors report to the Public Safety Group Supervisor.
Name:
Phone Number:
Reception Centre
Location:
Phone Number:
Wind Direction:

### **Regulatory Requirements**

### **Production Operations & General Information**

### Sour Gas Release

• Dispatch a mobile air quality monitoring unit(s) when it is evident that spill control measures are not effective and that a sour gas release is likely to

The decision to downgrade an incident will be based on the air monitoring

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Date:		Responder Name:	
Page	of	Responder Position:	

	Comments						
onditions *	Speed (km/hr)						
Wind C	From						
Tamn	(°C)						
Other							
ç	, (mdd)						
ć	(%)						
H <sub>2</sub> S LEL (ppm) (%)							
	Location of Samples						
	Time						

## ICS 214 Activity Log

Incident Name:									
Date / Time Initiated:									
Prepared by:									
Personnel As	Personnel Assigned								
	Name	ICS Pos							
Activity Log									
Time									

Position / Title:	
tion	Location
Actions	

### **Overview**

In the event of an emergency in which residents need to be evacuated, a Reception Centre must be established to receive and register the evacuees. A Reception Centre Representative is assigned to manage / coordinate activities at the Reception Centre. The Reception Centre Representative continuously updates the Public Safety Group Supervisor with a list of those who have, and have not, checked in at the Reception Centre.

### **Reception Centre Rep Roles**

Confirm Reception Centre is available for use.

- Establish Reception Centre.
- Confirm communication links.
- Receive evacuees and maintain a Reception Centre B1 Registration Log.
- Arrange for food and accommodations for the evacuees.
- Provide evacuees with a place to request counselling services, if required.
- Record and follow up on all evacuees who choose to make their own accommodation arrangements.
- Arrange for temporary care of livestock (if possible) and B2 the security of evacuated property.
- Establish and oversee compensation administration activities at the reception centre.
- Reimburse evacuees for their immediate out-of-pocket expenses and log details on a Resident Compensation Log.
- U Where possible, provide evacuees with information regarding their property, livestock, and the incident.
- General Forward all media and incident inquiries to the Form Information Officer. C2
- Report all names of evacuees who have registered at the Reception Centre to the Public Safety Group Supervisor. Form ICS 214
- Document activities using the ICS 214 Activity Log.
- Assist with post-incident activities.
- Confirm information to be released to public with the Information Officer.
- Address resident concerns and forward them to the Public Safety Group Supervisor.

### **Choosing a Reception Centre**

- Reception Centres are usually located in schools, hotels / motels, or community halls.
- □ It may be useful to coordinate the location of the Reception Centre with the local authority (city, town, county, M.D., etc.).
- See Area Specific Information (white tabs) for pre-identified Reception Centres in your area.
- A Reception Centre should:
- □ Have a conference room of some type where a large number of people can gather.
- Have conferencing services including fax machine, internet access, and phone access.
- Be large enough to house all of the evacuees.
- Be outside of the hazard area.
- □ Allow residents to evacuate to the Reception Centre without travelling through the hazard area.
- Allow pets.

### Tips

- Ensure you have enough staff to handle the needs of all of the evacuees.
- Allow evacuees to vent their emotions.
- Do not make any promises that cannot be kept.
- Attempt to reunite families as quickly as possible.
- Document the details of anyone who may have trouble coping with the incident so that they can be given proper psychological support.
- Difference Monitor whether residents that have been contacted by the Telephoners, Rovers, and Roadblock personnel have checked in at the Reception Centre.



	Reception Centre Registration Log - Example										
Resident ID	Name (List all r	names in party)	# of Occupants	Number Arrived	Arrival Time	Depart Time	Destination Ph (Where they ca	none # an be	Comments		
G124-A	John	Doe	2	2	19:06	19:21	555-555-55	55	John and his wife arrived safely then left to stay at a friend's house in Red Deer.		
H131-B	Jane	Doe	3	3	19:12	19:28	555-555-55	55	Jane and her 2 children arrived safely then left to stay with her mother in Bentley.		
F122-A	James	Doe	5	3	19:20		555-555-55	55	James, his wife and 1 child arrived safely. The other two children are away on a school trip. They will stay at the reception centre for the night.		
							Г	-	Media Statement		
								Refer Howe "V en envii onc lea repro	Refer all media inquiries to the Media Representative in Cal However, if they insist on a statement, please use the follow "We are currently dealing with the situation at hand the ensure the safety of the public, our personnel, and the environment. A statement will be released by the comp once the facts have been determined. If you would like leave your business card or phone number, a compar representative will provide you with more information a becomes available."		
								Note: S	See Section 3.0 Communication & Media for more information on med		

Resident Compensation Log

□ ICS 214 Activity Log

□ Media Contact Log

# $\bigcirc$ entre eception

Reporting	and	Contact	S
			-

Form ICS 214

Form

Form

B1 B2 C2

Form

on Centre Reps report to the Public Safety Group sor.
Name:
Phone Number:
n Centre
_ocation:
Phone Number:
ection:

### B1 Reception Centre Registration Log

Date:	Responder Name:									
Page	of		Responde	r Position: _				_ Responders Phone No.:		
Resident	Name (list all	names in party)	# Of	Number	Arrival	Depart	Destination			
id	First	Last	Occupants	arrived	time	time	(where they can be reached)	Comments		

### B2 Resident Compensation Log

Resident's Name:	Home Address:	Home Telephone #:	Location of Land (LSD):
		Business Telephone #:	
Number of Residents Evacuated:	Evacuated to:	Telephone # While Evacuated:	

No.	Date	Location	Trans.	Accom.	Meals	Phone	Sundry	Total	Details of Expense
	Total Repo	orted Expenses							

### ICS 214 Activity Log

Incident Name:								
Date / Time Initiated:								
Prepared by:		Position / Title:						
Personnel Assigned								
Name	ICS Po	Sition	Location					
Activity Log								
Time		Actions						

### Overview

In the event of an emergency, roadblock locations and road detours will be established. The company will initially establish and maintain roadblocks until relieved by highway maintenance contractors or the RCMP. Roadblock personnel will be assigned in teams of two, one member to stop approaching traffic, the other will record the information gathered and relay to The Public Safety Group Supervisor. The Public Safety Group Supervisor must be continuously updated by Roadblock personnel so that all vehicles entering and exiting the EPZ are accounted for.

### **Roadblock Personnel Roles**

- In conjunction with the Public Safety Group Supervisor, determine the need for and location of roadblocks.
- Pickup and check roadblock kits.
- Proceed to roadblock locations.
- Determine driving directions to assigned roadblock location that does not have you pass through the hazard area.
- Confirm communication links and establish communication interval times.
- Establish roadblocks to secure the EPZ.
- □ Follow the scripts and procedures in the ERP.
- □ If media personnel show up at your roadblock, forward all requests to your direct supervisor who'll direct them to the Information officer or Corporate
- □ Knowledge and ability to communicate safest route away from hazard.
- $\Box$  Monitor area for H<sub>2</sub>S and / or LEL with personal monitors and A5 document readings on the Air Monitoring Log.
- Report all reading changes / increases to the Public Safety Group Supervisor.
- Group Supervisor is For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching 10% LEL and / or 10 ppm
- □ Move location of Roadblock immediately if readings are approaching 10% LEL and / or 10 ppm  $H_2S$ .
- Record all incoming and outgoing traffic, personnel, and equipment on B4 the Roadblock Log.
- Groward information given to you by people passing through your location to the Public Safety Group Supervisor.
- Document activities using the ICS 214 Activity Log.
- Report any person that insists on going through the roadblock into the hazard area as well as any suspicious activity to the Public Safety Group Supervisor
- A Maintain communication with the **Public Safety Group Supervisor**.
- A Maintain roadblock locations. Do not leave until requested to do so by the Public Safety Group Supervisor or until relieved by other Roadblock personnel
- Assist with post-incident activities.

### **Roadblock Kit Contents - Sample**

The roadblock kit may contain the following items: Recommended Direct communication capability (radio, cell phone, etc.) ERP maps and roadblock forms Flashlight and batteries □ High visibility / reflective vests □ Orange traffic cones / reflectors Pens and / or pencils □ Personal Air Monitoring Device (H<sub>2</sub>S, CO, O<sub>2</sub>, LEL) Portable rotating emergency light □ SCBA Hand-held stop sign with reflective tape U Waterproof bag Optional Caution tape Rain suit Road barrier

### Tips

- Uhen talking to motorists at the roadblock, ONLY provide them with the information as directed by the Public Safety Group Supervisor. Ask for identification prior to granting access. □ You do not have the legal authority to restrict access to the area
- without an order from the relevant authority. Report any person who chooses to proceed, without permission, through the roadblock.
- Check with the motorists and ensure all members of their B3 residence are accounted for and documented on the Resident Contact Log. Report any resident that is left behind in the EPZ.
- The roadblock should be setup to allow optimal visibility and sufficient distance for traffic to come to a safe and complete stop.
- **Roadblock** personnel should be highly visible on the side of the road and have an escape route in case of an emergency.

DO NOT leave your position until you are directed to do so.

### Choosing a Roadblock

- Roadblocks should be established:
- Approximately where the EPZ intersects any highways / roads.
- Outside of the hazard area.

2

- At a conspicuous location where the **Roadblock** personnel will be visible to approaching traffic, providing them with enough time to safely stop.
- At a location where traffic can easily turn around or detour (consider the potential for larger vehicles such as buses, semi-trailers, drilling rigs, etc.).
- Where possible at natural roadblock locations (e.g., gates, bridges, junctions, etc).

### **Before Departure**

- A Make sure your vehicle is equipped and suitable for the travel conditions.
- Check roadblock kit to confirm all items are present (see sample of roadblock kit contents to left)
- Confirm that your handheld monitor for H<sub>2</sub>S and / or LEL is functioning properly.
- Check all communications devices.
- Check that the red signaling baton flashlight is working and has spare batteries.
- Confirm that you have enough copies of the Roadblock Log form.
- Confirm the location of the roadblock with the Public Safety Group Supervisor and make sure you have a safe route to the assigned location that does not cross the hazardous area.

_					tins po
3.	Setting	up a Roadblock	Г	Note:	
F	<ul> <li>Park vehicle as illustrated, activating four way flashers and roof mounted rotating beacon.</li> <li>Put on reflective vests.</li> <li>Take a reading with your handheld monitor for H<sub>2</sub>S and / or LEL; ensuring your roadblock is not too close to the edge of the EPZ. Record readings on the Air Monitoring Log.</li> <li>Notify the Public Safety Group Supervisor once your roadblock is set up.</li> <li>Continue to monitor and record H<sub>2</sub>S and / or LEL levels at scheduled intervals. Report to the Public Safety Group Supervisor at scheduled intervals.</li> <li>Maintain roadblock until the emergency is over and the "all clear" message is given or until relieved by other Roadblock personnel.</li> </ul>		WARNING MARKERS - these markers will be indicators that there is a roadblock ahead	<ul> <li>Record ariver's T vehicles approac vehicle took when</li> <li>Remember you f protect and notif danger and seco.</li> <li>Should someone safety, then use and the matter sf</li> <li>Sb.</li> <li>If the media arrives at "We are curren public, our pers company once business card o</li> <li>Contact the Public Sa NEVER offer your opin be interpreted as the regarding the emerger</li> <li>If the questioning</li> </ul>	ame, ve hing you a leaving ave no le y – to pr ndly to pr continue the 2-way iall be im your road to nel a the fac r phone more fety Gro hion of wi company icy situat
Ro Sa	Reporting and Contacts - adblock personnel report to the Public rety Group Supervisor.	To give motorists time to p recommended that the <b>Ro</b> available collapsible reflectiv a minimum distance of 200 n	repare to come to a stop, it is adblock personnel set up all e triangles 100 metres apart, at netres before the roadblock.	Record information on Roadblock Log Resident Conta Air Monitoring L	the follow
	Name:	Roadblock personnel canno access to the area unles	ot force an evacuation or restrict		Log
	Phone Number:	granted. The authority for for through the declaration of a	State of Local Emergency by		
Re	ception Centre	the local authority.		Possible Scenarios f	or Road
	Location:	When establishing a	Remember to:	<ul> <li>Motorist obeys req</li> <li>Motorist is leaving</li> </ul>	the EPZ
	Phone Number:			<ul> <li>Emergency responder to the inci-</li> </ul>	iaers (se dent.
Wii	nd Direction:	Bends in the road Level of the ground	Notify the Public Safety     Group Supervisor	<ul> <li>Motorist disobeys in In all cases, notify the</li> </ul>	equest to Public

### **How to Stop Traffic**

- 2. Look directly at the approaching driver.
- 4. Bring the vehicle to a full stop.

4

5a.

can be seen by other approaching vehicles

Because visibility is reduced at night, it is important that you use utmost care when stopping traffic through a roadblock area, and that you protect yourself from injury by:

□ Standing in a safe position on the shoulder of the road. U Waving the red signaling baton flashlight back and forth.

Note: The red signaling baton flashlight should only be used in place of the reflective stop / slow paddle at night or in conditions of low / poor visibility.

"I am representing [Insert Company Name] and we are presently experiencing control problems ahead. This situation is serious enough to warrant restricted access beyond this point. For your own safety I must ask you not to proceed."

1. Hold the reflective stop / slow paddle erect and away from your body. Never wave the sign.

3. Raise your free arm with the palm of your hand exposed to the driver.

5. After the first vehicle has stopped, move to a spot (near the centre line of the roadway) where you

### **Roadblock Script**

hicle make, colour, etc. and at least the license plate number of all ur roadblock; also make a note of the time and of the direction the r (e.g., east, south, west, north) on your log sheet.

legal position to restrict access to the general public. You are there to rotect the health and safety of the people by notifying them of the rotect the property of the residents who have evacuated the area.

e into the restricted area, regardless of your warning about personal y radio or cell phone to notify the Public Safety Group Supervisor mediately turned over to the Police.

### **Media Statement**

dblock location, company personnel may give the following statement:

ling with the situation at hand to ensure the safety of the and the environment. A statement will be released by the ts have been determined. If you would like to leave your e number, a company representative will provide you with e information as it becomes available.

up Supervisor if a media representative arrives at your roadblock.

hat is happening at the location to a media person or stranger. This can 's position. DO NOT give statements, other than the above message, tion to the MEDIA. Refer them to the Information Officer.

Be courteous but firm. just keep politely repeating word for word the statement above.

### **Record Information**

ving forms located within this section:



### block Personnel:

I drives away from the EPZ. and agrees not to return until further notice. ervice companies, fire, ambulance, etc.) are entering the EPZ to help

o leave the area and enters the EPZ.

Safety Group Supervisor and log all information.



### **B3 Resident Contact Log**

Date:			Responder Name:_				
Page	of		Responder Position	ו:			_ Responders Phone No.:
Time	Resident name	Resident ID	Shelter / Evacuate	Number	of people	Assistance or transportation	Comments
			<ul> <li>O Shelter</li> <li>O Evacuate</li> </ul>	Inside	Outside	required? O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	

### B4 Roadblock Log

Date:		Responder Na	ame:			
Page	of	Responder Po		_ Responders Phone No.:		
Vehicle type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering zone	Time Exiting zone	Comments (record all vehicles turned away)

### ICS 214 Activity Log

Incident Na	me:	
Date / Time	Initiated:	
Prepared by	/:	Po
Personnel	Assigned	
	Name	ICS Position
Activity Lo	g	

Position / Title:	
sition	Location
Actions	

### **Overview**

Rovers are responsible for patrolling the Emergency Planning Zone to locate and notify residents, businesses, industrial operators, transients (i.e. hunters, trappers, recreational users, non-resident landowners), and the general public. This may be completed via truck, ATV, boat, helicopter, etc. The **Public** Safety Group Supervisor must be continuously updated by the Rovers so that unsuccessful attempts to evacuate residents, transients, etc. can be followed up on immediately.

### **Rover Personnel Roles**

- Confirm resident contact lists are available.
- Confirm communication links.
- □ Know safe routes in and out of the EPZ.
- Search for residents and transients in the Emergency Planning and Response Zones.
- Check all buildings including barns, shops, sheds, etc.
- Assist, as required, with the notification, evacuation or sheltering of persons within the Emergency Planning B3 Zone. Record all contact with residents using the Resident Contact Log.
- Post Evacuation Notices for residents that are not at their Form residence B5
- □ Follow the scripts and procedures in the ERP.
- $\Box$  Monitor area for H<sub>2</sub>S and / or LEL with personal monitors Form and document readings on the Air Monitoring Log. A5
- Report all reading changes / increases to the **Public** Safety Group Supervisor.
- Generation For your own safety, ensure the Public Safety Group Supervisor is notified immediately if readings are approaching the following levels: 10% LEL and / or 10 ppm H<sub>2</sub>S.
- Report any suspicious behaviour to the **Public Safety Group** Supervisor who will notify the police as required.
- Document all activities using the ICS 214 Activity Log. Maintain communication with the Public Safety Group
- ICS 214 Supervisor.
- Assist with post-incident activities.

### **Media Statement**

If a media representative approaches you, company personnel may give the following statement:

"We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you

would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available.'

Contact the Public Safety Group Supervisor if a media representative approaches you.

**NEVER** offer your opinion of what is happening at the location to a media person or stranger. This can be interpreted as the company's position. DO NOT give statements, other than the above message, regarding the emergency situation to the MEDIA. Refer them to the Information Officer.

Be courteous but firm. If the questioning persists, just keep politely repeating word for word the statement above.

Re	portina	and	Cont	acts
		ana	00110	

Rovers report to the Public Safety Group Supervisor.

Name:	

Phone Number:

- Reception Centre:
  - Location:
  - Phone Number:

Wind Direction:

# DATE: TIME

**Evacuation Notice - Example** 

# EVACUATION NOTICE

[Insert Company Name] has an emergency at its nearby location.

### As a safety precaution, please leave the area in a (north / east / south / west) direction and proceed to the **Reception Centre located at**

[Insert Company Name] representatives will be available at the Reception Centre to address your questions or concerns.

For assistance, call [Insert Company Name] at

Thank you

Tips

Remember to: Remain calm Be courteous Document all actions and comments □ Notify the Public Safety Group Supervisor

Remember to use a handheld  $H_2S$  and / or LEL monitor to continually test the atmosphere. Report all H<sub>2</sub>S and / or LEL reading changes / increases to the Public Safety Group Supervisor.

Response personnel cannot force an evacuation or restrict access to the area unless proper authority has been granted. The authority for forced evacuation is gained only through the declaration of a State of Local Emergency by the local authority.

### Protect yourself Ensure you are equipped with all necessary equipment:

B5

- □ SCBA Gas monitors
- Mobile communications or other form of communication
- Forms □ Vehicle (4x4) with full tank of fuel
  - 🗆 Map

- safe route to the assigned location that does not cross the hazardous area.

The Public Safety Group Supervisor may request you to patrol the Emergency Planning and Response Zones in search of transients (people passing through the area) and / or residents that couldn't be reached by phone. Make contact with residents / transients and after providing an explanation record their names, contact information, purpose for being in the area (travelling through, live in the area, etc.), current condition, timing of your arrival, and whether or not they require evacuation assistance.

"Hi, I am [Insert Name] representing [Insert Company Name]. The company is presently experiencing control problems at a nearby location. The situation is serious enough that we are evacuating the public in the area. For your own safety I must ask you to leave the area immediately and check in with a company representative at the Reception Centre. Representatives at the Reception Centre will address any questions you may have and will make arrangements for your temporary accommodations.

- necessarv
- A Make sure they are all accounted for. etc.).
- will keep them away from the hazard. Ask them if they have any questions.
- Report to the Public Safety Group Supervisor.

The Public Safety Group Supervisor may request you to provide evacuation assistance for residents that have requested it. Ensure you obtain the number of residents requiring assistance, resident's names, location (legal and address), and the reason evacuation assistance is required (medical issue, children home alone, etc). A **Telephoner** should have already contacted and explained the situation to the residents; however, it is a good idea to confirm with the Public Safety Group Supervisor that they know you are coming to assist them. If they have not already been informed, contact the resident to tell them you are on your way and provide an estimated time of arrival.

"Hi, I am [Insert Name] representing [Insert Company Name]. I am here to help you evacuate out of the hazard area and make sure you arrive safely at the Reception Centre. A company representative at the Reception Centre will address any questions you may have and will make arrangements for your temporary accommodations.

- □ Make sure they are all accounted for.
- etc.) Ask them if they have any questions.
- Reception Centre.
- and estimated time of arrival at the Reception Centre.
- Representative before you leave for your next assignment.

4.		Rec
Rec	ord information on the follow	ing forms lo
	Air Monitoring Log	Form Fo

Evacuation Notice

### **Before Departure**

Confirm that your handheld monitor for H<sub>2</sub>S and / or LEL is functioning properly. Confirm that you have enough copies of the Evacuation Notice. Confirm your assignments with the Public Safety Group Supervisor and make sure you have a

### **Notifying Residents / Transients**

Ask if they will require evacuation assistance and arrange additional transportation assistance if

Ensure they gather any supplies they will need for the next 24 hours (medicines, baby food, diapers,

If they are able to transport themselves to the Reception Centre provide them with directions that

□ Provide them with your name and contact information in case they need assistance later.

### **Requested Evacuation Assistance**

Try not to scare them. They are aware you might be coming but don't know what to expect.

Ensure they gather any supplies they will need for the next 24 hours (medicines, baby food, diapers,

□ Once you are satisfied that all personnel from the residence are accounted for, deliver them to the

On the way to the Reception Centre, notify the **Public Safety Group Supervisor** of your progress Ensure that the residents check in at the Reception Centre with the Reception Centre

### ord Information

ocated within this section:



Revised November 2021

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Date:			Responder Name:_				
Page	of		Responder Position				Responders Phone No.:
Time	Resident name	Resident ID	Shelter / Evacuate	Number o Inside	of people Outside	Assistance or transportation	Comments
			O Shelter O Evacuate			O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	

### ICS 214 Activity Log

Incident Name:							
Date / Time Initiated:							
Prepared by: Position / Title:							
Personnel Assigned							
Name	ICS Po	sition	Location				
Activity Log							
Time		Actions					

Overview	Shelter-In-Place Phone Message	2b. Evacuation Phone Message			
In the event of an emergency in which residents and area users need to be sheltered and / or evacuated, a team of Telephoners will be established to contact people in the area and provide instructions to ensure their safety. The Public Safety Group Supervisor must be continuously updated with the Telephoners progress so that unsuccessful contact attempts and requests for evacuation assistance can be followed up on immediately. Telephone Personnel Roles	Hello, this is	Hello, this is			
<ul> <li>In conjunction with the Public Safety Group Supervisor, determine who needs to be notified (residents, businesses, area users, etc.).</li> <li>Review with the Public Safety Group Supervisor the telephoner scripts to be used: Early Notification / Voluntary Evacuation Message, Shelter-in-Place Phone Message, Evacuation Phone Message.</li> <li>Contact special needs residents at a Level 1 Emergency and provide them with the option to evacuate.</li> <li>Contact the other residents and area users in the EPZ and advise them to evacuate or shelter.</li> <li>Contact the schools / school buses to make arrangements for school age children (if applicable).</li> <li>Advise that buses in the affected area leave immediately and that buses should not enter the area.</li> </ul>	How many people are at your location now?         Adults	How many people are at your location now?         Adults			
<ul> <li>Request a school administrator for the reception centre to assist in managing the children and releasing them to their guardians.</li> <li>Document all resident interactions using the Resident Contact Log and report this information to the Public Safety Group Supervisor about unsuccessful contacts and any residents requiring assistance.</li> <li>Document all activities using the ICS 214 Individual Activity Log.</li> <li>Assist with post-incident activities.</li> </ul>	Do you have children in school at this time?         If Yes       No         IF YES       What school?         Children's names	Do you have children in school at this time?         Pres       No         IF YES       What school?         Children's names         We will contact the school to ensure the safety of your children. Buses will be directed to leave the area immediately. If school is in session, your children will be redirected to the reception centre by their regular bus driver when the school day is over.			
Shelter-In-Place Instructions       B7         Immediately gather everyone indoors and stay there. Do not leave even if you see people outside.       Close and lock all outside doors and windows. Tape gaps around doors and windows. Leave all inside doors open.         Turn off appliances or equipment that blows out indoor air or sucks in outside air.       Turn down furnace thermostats to the minimum setting and turn off air conditioners.         Extinguish all potential sources of ignition (do not smoke or attempt to start your vehicle).	Do you have the "Shelter-in-Place" instructions previously provided to you by (company name)       ?				
<ul> <li>Stay off of the phone so that you can be contacted by emergency personnel.</li> <li>Stay tuned to local radio and television for possible updates.</li> <li>Note: For the full Shelter-In-Place instructions see page 2 of the Shelter-In-Place Telephoner Text form located in SECTION 6.0: FORMS.</li> </ul>	Is there an alternate number we can contact you at?	Please contact (company name)       if you are unable to make it to the reception centre for any reason. Please keep your phone line free so that we can contact you if necessary.         Is there an alternate number we can contact you at?			
1. Who to Contact	If you have any urgent questions, please contact (company name)       at (telephone number)         Thank you for your cooperation.         (Pass on all information regarding this call to the Public Safety Group Supervisor immediately)	A company representative at the reception centre will address any questions you may have and will make arrangements for your temporary accommodations. Do you understand everything I have told you? Are you leaving immediately? If you have any urgent questions, please contact <u>(company name)</u> at <u>(telephone number)</u> . Thank you for your cooperation. (Pass on all information regarding this call to the Public Safety Group Supervisor immediately)			
<ul> <li>Recreation Areas</li> <li>Urban Centres (contact local authority to coordinate)</li> <li>Area Users (other oil and gas operators, rail, logging, etc.)</li> <li>Trappers</li> <li>Guides / Outfitters</li> <li>Grazing Lease / Allotment Holders</li> <li>Priority is given to:</li> </ul>	Note: Refer to Shelter-in-Place instructions on page 2 of the Shelter-in-Place Phone Message located in this section.           Telephoner Communication Flow	Record Information         Record information on the following forms located within this section:         Resident Contact Log         ICS 214 Individual Activity Log         ICS 214 Individual Activity Log         Voluntary Evac Message			
<ul> <li>Those closest to the hazard</li> <li>Those downwind of the hazard</li> <li>Those downwind of the hazard</li> <li>Those with sensitivity issues (health issues, require assistance, etc.)</li> </ul> <b>Tips</b> <ul> <li>Ensure you have enough personnel to quickly and efficiently shelter / evacuate the required residents / area users.</li> <li>A general guideline is to have one <b>Telephoner</b> for every seven residences that need to be contacted and one <b>Telephoners Leader</b> for every ten <b>Telephoners</b>.</li> <li>Special needs residents should be contacted at a Level 1 Emergency and given the option to evacuate.</li> <li>Response personnel cannot force an evacuation or restrict access to the area unless proper authority has been granted. The authority for forced evacuation is gained only through the declaration of a Local State of Emergency by the local authority.</li> </ul>	Telephoners receive a list of residents / area users from the Public Safety Group Supervisor.       Provide appropriate message       Provide Public Safety Group Supervisor with a list of unsucce contacts.         Voluntary Evacuation Message       Provide Public Safety Group Supervisor.       Provide Public Safety Group Supervisor with a list of unsucce contacts.         Voluntary Evacuation Message       Provide Public Safety Group Supervisor.       Provide Public Safety Group Supervisor with a list of unsucce contacts and those requirin evacuation assistance.	up			

### **B3 Resident Contact Log**

### ICS 214 Activity Log

Date:								Incident Name	e:			
Page     of     Responder Position:							_Responders Phone No.:	Date / Time In	itiated:			
Time	Resident name	Resident ID	Shelter / Evacuate	Number Inside	of people Outside	Assistance or transportation required?	Comments	Prepared by:			Position / Title:	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No		Personnel As	signed	100 8		Location
			O Shelter O Evacuate			O Yes O No			Name		DSITION	Location
			O Shelter O Evacuate			O Yes O No						
			O Shelter O Evacuate			O Yes O No						
			O Shelter O Evacuate			O Yes O No						
			O Shelter O Evacuate			O Yes O No						
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No						
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No					Actions	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No						
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No						
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No						
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No						
B6 Ea Phon	arly Notif e Messa	ication ge	) / Volunt	ary I	Evac	uation						
Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.												
reception centre.         Hello, this is <u>(your name)</u> calling from <u>(company name)</u> . Is this the <u>(name of residence / business)</u> at <u>(telephone number)</u> ?												
(Company	name) is responding	to a <i>(potential)</i> e	emergency at <u>(loca</u>	ation)	in your ar	ea.						
You are in no danger at this time. All efforts are being made to resolve the problem and this phone call is only to inform you and provide you with an early notification.						nly to inform you and provide you with an early						
Το help us ι	Inderstand and your i	immediate need	s we need to know:									
How many	people are at your I	ocation now?	(Adults)		(Children	)						
	h to leave your resid	dence at this til	me?	* *****	a antra la a							
IF TES Plea	se traver in a <u>norm</u>	/ east / south /	west direction to our									
IF NO Plea with	ase standby for furthe updated information	er contact. Pleas or when the pro	e do not use your te bblem has been elimi	lephone fo inated.	or outgoing	calls as this may	prevent us form contacting you					
If you have	urgent questions, p	please contact	<u>(C(</u>	ompany n	iame)	_at <u>(telephon</u>	e number) -					
Thank you	for your cooperatio	n.										
(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)												

### Initial Response:

All incidents begin with the initial response (reactive phase) during the first operational period. At the onset of an emergency response an Initial Emergency Report (A1) Form is completed to determine the severity of the emergency and extent of the response. 95% of emergency responses begin and end in the first operational period.

After response personnel ensure their own personal safety by following the First On-Scene Actions, the Five Step Initial Response Guide, and associated tools, provide a structure for the Incident Commander to formulate a response and outlines the steps (key considerations) that need to be addressed and readdressed when evaluating the incident and associated emergency response.

### **Ongoing Response:**

An ongoing response (proactive phase) is required for an extended emergency response that spans over multiple operational periods and revolves around establishing the objectives, strategies, and tactics for the next upcoming operational period. 5% of incidents require an ongoing response, but once engaged emergency responders will circulate through this cycle multiple times.

After the initial response has been completed, the Five Step Ongoing Response Guide and associated tools provide a cycle to plan the next steps of the emergency response. This continual cycle provides a structure for the Command Staff and General Staff to complete the Incident Action Plan (IAP) and associated documents. The ongoing response cycle and an associated IAP must be completed for each operational period until the incident is stood down.



Section 2: Ongoing Response

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### **Step 1 - Objectives Meeting**

- Incident Commander conducts the meeting.
- Review the ICS 201 form completed during the Initial Response phase and begin the ICS 209 form by evaluating the current incident status.
- Identify issues/problems to resolve using the PPOST methodology.
- Develop SMART (Specific, Measurable, Attainable, Realistic, & Time-Sensitive) objectives to mitigate the identified problems.
- □ Prioritize the objectives using the ICS 202 form.
- Complete the ICS 202 form and identify initial staffing on the ICS 207 form.
- Utilize IAP Checklist (A4) to complete the IAP.

### Step 2 - Tactics Meeting

- Operations Section Chief conducts the meeting.
- □ Review the incident status using the ICS 209 form that was completed during the Objectives Meeting.
- Operations Section Chief proposes strategies and tactics.
- Evaluate and assign resources and personnel.
- Ensure that all strategies have associated tactics to ensure responder safety and complete the ICS 215A form.
- □ Complete the ICS 215 form and update the ICS 207 form started during the Objectives Meeting.

### Step 3 - Planning Meeting

- Planning Section Chief conducts the meeting.
- □ Review the incident status using the updated ICS 209 form.
- □ Confirm the strategies and tactics assigned to achieve the defined objectives.
- □ Ensure that all assigned tactics can be performed safely and follow the defined safety analysis using the ICS 215A form.
- Incident Commander to give tentative approval of proposed plan and review with key response personnel.

### **Prepare for Tactics Meeting**

- Develop draft strategies and tactics for each defined objective.
- Dutline work assignments and develop an operations organization chart using the ICS 207 form.
- Identify future tactical plans to optimize the Tactics Meeting.
- Begin to prepare a safety analysis once all hazards have been identified using ICS 215A form.

### Prepare for Planning Meeting

- Review and update the ICS 209 form.
- Confirm availability of resources and locations.
- Prepare all information for review at the Planning Meeting.
- Gather any additional incident documentation (i.e., maps and status boards).

### Incident Action Plan Preparation and Approval

- Produce a coordinated and sustainable Incident Action Plan using the IAP Checklist (A4), ICS forms 202, 207, 209, 215, 215A, and gather any additional incident documentation (i.e., maps and status boards).
- □ Receive final approval from the Incident Commander.
- Define work assignments and break the work into manageable units.





Owner: Incident Commander		Time:						
**Roles belo	w will attend onl	v if designated a	nd available**					
Attendees:								
☐ Incident Commander:		Planning See	ction Chief:					
Deputy Incident Commander:		Logistics Se	ction Chief:					
Operations Section Chief:		□ Finance/Adn	nin. Section Chief:					
Planning Section Chief:		□ Safety Office	er:					
Liaison Officer:		Other:						
□ Information Officer:		Other:						
Summary:								
The objectives of this meeting are to	0:							
<ul> <li>Have a completed ICS 202 form agreed upon by all attendees (Command and General Staff).</li> <li>Establish objectives and priorities for the uncoming operational period.</li> </ul>								
<ul> <li>Establish objectives and priorities for the upcoming operational period.</li> <li>Begin an ICS 209 Incident Status Summary report</li> </ul>								
<ul> <li>Begin an ICS 209 incident status summary report.</li> <li>Begin identifying all required roles on the ICS 207 form.</li> </ul>								
Begin addressing the Incident Action Plan Checklist (A4).								
Schedule and prepare for the Tactics Meeting.								
Resources: ICS 202, 207, 209 forms, and the IAP Checklist (A4)								
Agenda Items:								
□ Status Update and review the ICS 201 Incident Briefing form.								
Determine incident priorities. Reference the PPOST methodology.								
Establish an incident organization that is capable of meeting initial and long-term challenges required to mitigate the incident.								
□ Determine the incident response objectives and complete and <b>ICS 202</b> Incident Objectives form. They must be <b>SMART</b> (Specific, Measurable, Attainable, Realistic, & Time Sensitive).								
Identify initial staffing requirement	nts and begin filling	g out the <b>ICS 207</b>	Incident Organizational Chart.					
□ Identify and select incident suppo	ort facilities.							
Review the incident objectives for on the IAP.	or the next operation	onal period so you	ur management team can begin work					
□ Document the incident status to	relay to all respon	ding personnel.						
Key Points:								
Ensure that the meeting is doe	cumented / recor	ded. (Utilize the	back side of this page.)					
Define the hours of work and op	erational period.							
Utilize Incident Action Plan Check	cklist ( <b>A4</b> ).							
Identify constraints and limitation	ıs.							
Clarify any staff roles and respon	nsibilities.							
Determine expectations of the termine expectations of ter	am for how all co	mmunications are	e to be made.					
<ul> <li>Discuss and agree on process is and sensitive information.</li> </ul>	ssues such as res	ource ordering, co	ost accounting, operations security,					
Continue to develop tasks for Co	ommand and Gen	eral Staff.						
Agree on division of command workload, such as press and agency briefings.								

Notes:

Owner: Operations Section Chief Date:	Time:						
**Roles below will attend	only if designated and available**						
Attendees:	only in designated and available						
Incident Commander:	Planning Section Chief:						
Deputy Incident Commander:	Logistics Section Chief:						
Operations Section Chief:	Finance/Admin. Section Chief:						
Planning Section Chief:	Safety Officer:						
Liaison Officer:	Other:						
L mormation Officer:							
Summary: The objectives of this meeting are to:							
<ul> <li>Define factics work assignments and resour.</li> </ul>	rces to meet actions identified during the Objectives						
Meeting.	tes to meet actions identified during the objectives						
<ul> <li>Have completed ICS 215 and 215A forms ag</li> </ul>	reed upon by all attendees (Command and General Staff).						
Update the ICS 207 Incident Organization Ch	hart.						
• Refer to Incident Action Plan Checklist (A4) and continue to add to items accomplished.							
Schedule and prepare for the Planning Meeting.							
Resources: ICS 209, 215, 215A, and IAP	P Checklist (A4)						
Agenda Items:							
Review ICS 209 Incident Status Summary.							
□ Review incident objectives.							
□ Define tactics to complete objectives set out during the Objectives Meeting.							
□ Provide an operational update and identify tactics to deal with incident.							
□ Identify roles and responsibilities that have to be performed to implement tactics.							
Build on already established ICS 207 Incident with ICS 215 assignments.	t Organization Chart, check span-of-control, and match up						
Complete the Operational Planning Worksheet, I	<b>ICS 215</b> (Utilize one form for every established objective).						
Identify resources requirements to achieve	each work assignment						
Identify overhead staffing needs to support	t each work assignment						
□ Identify specialized equipment and supply	needs for each work assignment						
Specify reporting times and location for per	rsonnel						
Complete the Incident Action Plan Safety Analys	sis, <b>ICS 215A</b> .						
□ Identify potential hazard types	VDOC						
	урез						
Key Points:							
Ensure that the meeting is documented / r	recorded (I Itilize the back side of this page )						
Review planned actions against incident obje	uctives and priorities						
Itilize a man or chart to denict the operations	al areas support facilities and any key information						
Discuss any applicable open action items							
Discuss any applicable open action items.							
<ul> <li>Consider contingencies and secondary option</li> </ul>	ns.						

Notes:

### Planning Meeting

Owner: Planning Section Chief	Date:		Time:
**Roles below w	vill attend only	if designated	and available**
Attendees:			
□ Incident Commander:		Planning Sec	tion Chief:
Deputy Incident Commander:		Logistics Sec	tion Chief:
Operations Section Chief:     Department Section Chief:		Finance/Adm	in. Section Chief:
Liaison Officer		Conternation of the second sec	
□ Information Officer:		Other:	
Summary:	· · ·		
<ul> <li>The objectives of this meeting are to</li> <li>Finalize an Incident Action Pla strategies outlined from the previo</li> <li>Schedule and prepare for the Operation</li> </ul>	: n with the neces ous command mee erations Briefing.	sary forms bas etings.	ed on the objectives, tactics, and
Resources: IAP Checklist (A	<ol> <li>and all associa</li> </ol>	ated ICS forms	
Agenda Items:			
Review Incident Action Plan forms	s (ICS 202, 207, 2	<b>09, 215</b> , and <b>215</b>	<b>A</b> ).
Review Command's incident object	ctives, priorities, d	ecisions, and dire	ection.
Provide briefing on current situation	on, resources at ris	sk, weather forec	ast, and incident projections.
<ul> <li>Operations Section Chief provides</li> <li>Current operations.</li> <li>An overview on the propos commitment, contingencies, or</li> </ul>	s briefing on: ed plan including rganization structu	g strategy, taction re, and needed s	cs or work assignments, resource support facilities.
Review the proposed plan to ens met.	sure that Comman	d direction, prior	ities, and operational objectives are
Delegate assignments and dead development.	lines to appropriat	te staff members	s to assure timely and effective IAP
Key Points:			
Ensure that the meeting is doct	umented / record	ed. (Utilize the b	back side of this page.)
Review IAP Checklist (A4) to ens	ure that all critical	materials have b	een accounted for in the IAP.
<ul> <li>Planning Section Chief brings me</li> </ul>	eting to order, cov	er ground rules,	and review agenda.
Planning Section Chief requests t	acit Command ap	proval of the plar	n as presented.
<ul> <li>Planning Section Chief reviews a objectives.</li> </ul>	nd validates respo	nsibility for any o	pen actions and management
Planning Section Chief conducts and commitment to the proposed	round table of Cor plan.	nmand and Gene	eral Staff to solicit their final input

Notes:

Owner: Incident Commander Date:	Time:
**Roles below will attend	only if designated and available**
Attendees:	
Incident Commander:	On-Site Group Supervisor
Deputy Incident Commander:	Public Safety Group Supervisor
Operations Section Chief:	Air Monitor Team Lead
Planning Section Chief:	Roadblock Team Lead     Rever Team Lead
Information Officer:	Telephoner Team Lead
□ Planning Section Chief:	Reception Centre Representatives
Logistics Section Chief:	□ Other:
Finance/Admin. Section Chief:	Other:
Safety Officer:	Other:
The objectives of this meeting are to:	
The objectives of this meeting are to:	all responders
Review a summary of the incident status with     Relay objectives, testics, and strategies	an responders.
<ul> <li>Relay objectives, lactics, and strategies.</li> <li>Reinforce/relay the safety message.</li> </ul>	
<ul> <li>Reinforce/relay the safety message.</li> <li>Assign roles &amp; responsibilities and tasks for all</li> </ul>	Il responders to accomplish
<ul> <li>Assign roles &amp; responsibilities and tasks for all</li> <li>Execute the response</li> </ul>	i responders to accomplish.
<ul> <li>Execute the response.</li> <li>Tentatively schedule payt Objectives Meeting.</li> </ul>	and identify notential problems/issues to address in the
next operational period.	and identity potential problems/issues to address in the
Resources: IAP Checklist (A4) and all a	ssociated ICS forms
Agenda Items:	
Dispring Section Chief briefly welke through the	he IAD components and makes changes as peeded
Planning Section Chief bleny waiks through the	the Operation Section Supervisers and provides a briefing
	the Operation Section Supervisors and provides a briefing
Onerations Section Chief briefs supervisory (	personnel on their assignments along with clarification on
any of their issues and concerns.	bersonner on their assignments along with claimcation on
□ Safety Officer covers major safety issues.	
Logistics Section Chief covers logistical supp	ort of operations (communications, supply, transportation,
medical, etc).	
□ Finance / Admin. Section Chief covers time &	cost tracking, procurement, and compensation process.
General Staff to cover issues applicable to Op	perations Section personnel.
Key Points:	
Ensure that the meeting is documented / re	ecorded. (Utilize the back side of this page.)
<ul> <li>Planning Section Chief opens briefing, covers and General Staff members.</li> </ul>	ground rules, agenda, and conducts roll call of Command
Establish a briefing and message for all respo	nders.
Review pre-determined public and media state	ements.

• Planning Section Chief solicits final comments and adjourns briefing.

Notes:

# **ENERCAPITA**

OFFICE - CALGARY		Cell	Email
Devin Carrington	Operations Manager North Team	403-815-2357	dcarrington@enercapita.com
Brett Petrie	Operations Manager Central Team	403-701-1571	bpetrie@enercapita.com
Patrick Corbiell	HSE Manager / HR Manager	403-499-8662	pcorbiell@enercapita.com
Julie Kobylanski	Field Safety Advisor	780-832-1460	jkobylanski@enercapita.com
Duane Masse	COO	403-669-6369	dmasse@enercapita.com
Trevor Duncan	VP Exploration	587-894-7773	tduncan@enercapita.com

NORTH AREA		Cell	Email
Darin Mclarty	North Area Superintendent	780-834-7004	dmclarty@enercapita.com
Chris Wurz	North Area Foreman	780-834-6006	cwurz@enercapita.com
Shaun Moskalyk	Boundary Lake Foreman	780-834-0100	smoskalyk@enercapita.com
Roland Janssen	Optimization North	780-719-8283	rjanssen@enercapita.com
Trevor Blake	Pipeline Integrity	780-772-2555	tblake@enercapita.com

CENTRAL AND CENTRAL NON CORE		Cell	Email
Greg Shrode	Central Area Superintendent	780-305-6541	gshrode@enercapita.com
Mike Sherk	Central Area Lead Operator	780-524-6720	msherk@enercapita.com

VIKING REGION		Cell	Email
Will Nordstrom	Viking Area Superintendent	780-385-1909	wnordstrom@enercapita.com

# Section 3: Communication & Media

	1
Generic Media Statement	1
Media Management	1
On-Site Media Spokesperson	2
Managing the Media On-Site	2
Internal Communication	3
Internal Communication	3 3
Internal Communication Communicating With the Public Information Disseminated to the Public	3 3 3

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### **Media Relations and Generic Media Statement**

Any incident that affects the environment, the health and safety of individuals, or causes extensive property damage could be a news "item". When such an incident occurs, the media should not be avoided. The key is to establish good rapport with the media early in the life of the emergency. Open and honest communication will help to create favourable public opinion and could help to prevent the public from overreacting to the incident.

Media releases are generated and released as significant developments occur. The company is expected to coordinate media releases with the relevant government agencies prior to release to provide consistency and accuracy of information. Information is communicated through written news releases, news conferences, and any other effective means that the company chooses to use. The company must identify a spokesperson to carry out this role and to interact with applicable government agencies.

Media releases will be developed by the Incident Commander in conjunction with the applicable regulatory agency. The Incident Commander will assign a Media Spokesperson to deliver the approved messages.

Media at the field level will be coordinated by the Information Officer with the Support of the Incident Commander. If media have arrived at the emergency site and the designated Information Officer is not yet available, only the Incident Commander or their designate can act as the company spokesperson, and will issue only the information below.

Future statements will be prepared by the Incident Commander and should be issued only by the designated Media Spokesperson. All media statements will be reviewed with the regulatory agency's Media Coordinator.

All information that is given to the media should be recorded. See **Section 6: Forms** for the C2 Media Contact Log.

### **Generic Media Statement**

"We are currently dealing with the situation at hand to ensure the safety of the public, our personnel, and the environment. A statement will be released by the company once the facts have been determined. If you would like to leave your business card or phone number, a company representative will provide you with more information as it becomes available."

### Media Management

- Do not wait until you are contacted by the media to react to their inquiries. By preparing in advance, the company will appear to be organized, aware, and actively responding to the situation. The essence of effective media management is preparation in advance of any media contact.
- It is important when contacting the media with a news release that you do not favour one media organization or agency over another. To minimize the chances of creating a prejudicial situation, deal solely with major umbrella press agencies.
- If media representatives are not provided with the basic information, it can be assumed that they will fill the gap with material from less reliable sources.

Be aware at all times that it is possible for the media or others to be monitoring your radio, cellular phone, or telephone conversations.

### **On-Site Media Spokesperson**

Depending on the specific emergency an on-site spokesperson may be required to handle all on-camera activities requested by the media. Only approved and trained spokespeople will be allowed to provide comment to the media. The Information Officer or Incident Commander will identify any and all media spokespersons. The Information Officer or Incident Commander may serve as the on-site Media. This representative will endeavor to maintain a favourable public image on behalf of the company. It is important that they keep in mind the following:

- The Dos and Don'ts of conducting yourself on camera; 75% of information comes from non-verbal actions (gestures, tone, posture, etc.)
- Public appearance, ensuring appropriate and approved wardrobe
- Preparation in communicating the media release in advance so the message feels natural
- How to handle impromptu or "off the record" inquiries from the media

### Managing the Media On-Site

Depending upon the size and/or scope of the emergency to the incident site, the media will likely travel to site and attempt to secure coverage of the situation. Usually the size and nature of an emergency will determine the amount of media attention garnered. It is important everyone on-site understands how to properly manage the media and that only designated individuals are to speak to the media. It is recommended that only individuals with adequate media training have even casual interactions with the media.

Media Briefing Areas are to be designated by the Incident. The Information Officer will, if required by the Incident Commander, determine the need for media management at the incident site.

As appropriate, the Information Officer should be designated to oversee local news media management. In order to address the needs of the media at the incident site, the following guidelines should be considered:

- If practical, an information centre will be set up nearby the incident site. All on-site media will be informed that this will be the only place where information is to be released.
- During an emergency situation, media access to company property is strictly prohibited unless prior approval has been given by the Incident Commander. If the Incident Commander deems the situation safe and access is granted to company property, media personnel must be accompanied at all times and wearing appropriate personal protective equipment (PPE).
- Ensure that if any media personnel are granted access on-site all potential hazards are identified and handled appropriately prior to their arrival (i.e. all on-site personnel are wearing proper PPE, operating equipment safely, etc.).
- With the exception of providing the initial prepared company statement, any requests by the media for information or interviews should be referred to the Information Officer.
- For an emergency that lasts more than 24 hours, consideration will be given to establishing a newsroom for all required personnel.
  - Ensure it is located a safe distance away from the incident.
  - Ensure proper internet and telephone access is made available.
  - Large enough to accommodate all of the potential media personnel.

### **Internal Communication**

Internal communication plans for company personnel must include:

- Identification of primary and secondary communication methods during an incident.
- Procedures to control flow of information\*:
  - Ensure facts and relevant information are distributed to key responders
  - Proper management of sensitive information
  - Camera and cellphone photo restrictions
  - Social media protocol

\* Note: These procedures are developed by the Information Officer during the incident.

### **Communicating With the Public**

Communication plans for contacting affected parties must be in place:

- When affected parties are within the Hazard Planning Zone (HPZ) / Emergency Planning Zone (EPZ) at the beginning of drilling and initial completion operations.
- A minimum of 24 hours before drilling operations enter a sour zone.
- At the conclusion of drilling and initial completion operations.
- At the beginning and conclusion of other operations including workovers, flaring, fracking, etc.

### Information Disseminated to the Public

The company must make the following information available to the public, while maintaining documentation, as soon as possible during an incident:

- To the affected public at the onset of the incident:
  - Type and status of the incident.
  - o Location and proximity of the incident to people in the vicinity.
  - Public protection measures to follow, evacuation instructions, and any other emergency response measures to consider.
  - o Actions being taken to respond to the situation, including anticipated time period.
  - Contacts for additional information.
- To the affected public during the incident:
  - Description of the products involved and their short-term and long-term effects.
  - Effects the incident may have on people in the vicinity.
  - Areas impacted by the incident.
  - o Actions the affected public should take if they experience adverse effects.
  - An explanation of the steps taken to address concerns.
  - An explanation of the steps to be taken to prevent similar emergencies in the future.

### Information Disseminated to the Public, continued

- To the general public during the incident:
  - o Type and status of the incident.
  - Location of the incident.
  - Areas impacted by the incident.
  - o Description of the products involved.
  - o Contacts for additional information.
  - Actions being taken to respond to the situation, including anticipated time period.
- To the evacuated or sheltered public post-incident:
  - Status of recovery.
  - Financial reimbursement information.
  - Contacts for additional information.

### **Preparing a Preliminary Media Statement**

This verbal or written statement is the initial information given only to the media by the Information Officer, Incident Commander (or alternate) when the company's designated Media Spokesperson is unavailable, or authorizes a press release at the local level. See **Section 6: Forms** for the C1 Preliminary Media Statement form.

### The preliminary statement shall contain:

- What, when, and where the incident occurred:
  - State the general nature and description of the incident.
  - Associate the incident location to the nearest major centre and the exact time the incident began or was discovered.
  - For example: At 11:00 am, today, September 13th, 2012, a warehouse at our battery location northeast of Wainwright caught on fire.
- Injuries / fatalities / damages:
  - o Clearly distinguish the severity of the injuries sustained and if any fatalities occurred.
  - o State the number of people currently receiving treatment.
  - Ensure no names are released to the media; it is important to keep this information private until all families and next-of-kin notifications are made.
  - For example: We have confirmed that three employees sustained injuries, two minor and one major. All of the injured casualties have been transported to the nearest care facilities and are receiving treatment.
- The current status of the emergency:
  - o Indicate the nature of the situation; i.e. what is being done by whom.
  - For example: Emergency crews currently have the fire under control and local authorities are investigating the cause. We are actively notifying the employee's families of the incident.
- When to expect more information:
  - For example: Our designated spokesperson will be issuing a formal statement once we have more information confirmed. Thank you for your cooperation and we will not be accepting any questions at this time.

### Preparing a Preliminary Media Statement, continued

### What not to do:

- Don't downplay the seriousness of the event or speculate on volumes, damage or timelines.
- Don't point fingers; liability will be determined later by appropriate authorities.
- Primary focus must remain on the company's commitment to addressing the response and recovery effort.
- Attempt to avoid any questions if possible, as designated media personnel should handle all media questions.
- Avoid saying "no comment." It sounds like you're hiding something. If necessary, explain why it is not appropriate or possible for you to answer the question.

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# Section 4: Emergency Response Procedures

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### **Public Protection Measures**

There are three primary public protection measures that are used to ensure the safety of the public in the event of an incident: shelter-in-place, evacuation, and ignition.

### Shelter-In-Place

Shelter-in-place is considered the primary safety measure when the hazard is of a limited duration or the public would be at a higher risk if evacuated. Sheltering within a building creates an indoor buffer to protect affected individuals from higher (more toxic) concentrations that may exist outdoors. The goal is to reduce the movement of air into and out of the building until either the hazard has passed or other appropriate emergency actions can be taken (such as evacuation).

Sheltering indoors is a viable public protection measure in circumstances when:

- There is insufficient time or warning to safely evacuate the public
- Residents are waiting for evacuation assistance
- The release will be of a limited size and /or duration
- The location of the release has not been identified
- The public would be at a higher risk if evacuated
- Escape routes traverse the hazards

Refer to either Section 2: Roles and Responsibilities or Section 6: Forms for the Shelter-in-Place Phone Message script to be used when contacting residents. Residents advised to shelter-in-place will be notified if additional measures are required, and when it is "all-clear".

### Evacuation

For long-term releases, evacuation is preferred to sheltering if public safety can be assured during the evacuation process.

Evacuation is a viable public protection measure in circumstances when:

- The location of the plume is known and safe egress routes can be assured
- The release will not likely be contained in the near future
- Visibility and road conditions are good
- The residents clearly understand their directions

The licensee is expected to monitor the air quality along the edge of the EPZ to determine if sheltering or evacuation criteria have been met outside the EPZ.

Appropriate methods must be utilized to ensure transients (hunters, trappers, recreational users, non-resident landowners, etc.) within the EPZ are located and evacuated. When a tactical evacuation has taken place, the appropriate local authority must be notified.

Residents should also be evacuated during ongoing emergency flaring or burning if their health and safety could be affected by the operation.

Special procedures may be required for evacuating large industrial operations and/or public facilities. If large numbers of people are involved, the permit holder must address assistance with transportation. Refer to the Area Specific Information Section (white tabs) for information regarding transportation (e.g., providing school buses) or other changes in the normal notification procedures.

## **Public Protection Measures, continued**

### Ignition

In conjunction with shelter-in-place and evacuation strategies, the release may be ignited at the source in order to reduce public exposure to the hazard. The combustion of the hydrogen sulphide ( $H_2S$ ) results in the produced sulphur dioxide ( $SO_2$ ) being carried high into the atmosphere allowing additional time for the public to safely evacuate. If an immediate threat to human life exists and there is not sufficient time to evacuate the hazard area or the Emergency Planning Zone (EPZ) – whichever is bigger – the On-Site Group Supervisor is authorized to ignite the release.

Note: Only those personnel trained in ignition procedures can determine if ignition is required and operate the ignition equipment.

Ignition of an HVP product release should occur only after the position of the plume has been established, after careful deliberation, and when safe to do so.

Until such time that a decision has been made to ignite a release, the licensee should take steps to minimize any chance of unplanned ignition in the area.

When making the decision to ignite, the licensee must take the following into consideration:

- the increased risk(s) of delayed ignition,
- whether the perimeter of the hazard area has been established,
- whether the public has been evacuated from the area,
- whether ignition will worsen the situation by endangering the public or the environment or damaging the equipment used to control the product,
- whether wind direction has been established and is it being continually monitored, and
- whether the possibility of an explosion has been assessed (i.e. obstructions or regions of congestion within the perimeter of the dispersing vapour cloud).

If at all possible, the On-Site Group Supervisor must consult with higher authority individuals within the company (ideally the Operations Section Chief, Incident Commander, EOC Director, etc.) and the appropriate government regulator.

### **Road and Airspace Closures**

The company should receive authorization from local authorities or the RCMP before establishing roadblocks on public roads. The company must contact the RCMP and the transportation authority to have one-, two- or three-digit highways closed. However, if the safety of the public is in jeopardy, the company must be prepared to quickly restrict access to the area before contacting these agencies.

If warranted, the regulatory agency can issue a Closure Order that provides legal authority to close the area. The local authority may, if warranted, declare a Local State of Emergency. This grants the local authority special powers to do such things as road closures or declare mandatory evacuation.

The public must also be prevented from flying into the airspace above a gas release. It may be necessary for NAV CANADA to issue a Notice to Airmen (NOTAM) to advise the pilots of restrictions in the airspace above the EPZ or to close the airspace for a certain radius from the release (a no-fly zone). NOTAMs or closure of airspace may be requested by the regulatory agency at a level 2 or level 3 emergency.

### **Public Protection Measures, continued**

1. Identify the location of the incident on the map:



#### 3. Determine the wind direction

Look for wind direction indications such as flags, windsocks, direction of smoke, etc..



#### 5. Isolate the hazard area with roadblocks

If any residences exist between the optimal roadblock location and the EPZ, expand the EPZ to include those

residences. Additionally, if any residences only route of egress is through the EPZ, expand the EPZ to include those residences.

Legend



## 2. Determine the size of response zones (hazard areas):

EPZ - Emergency Planning Zone IIZ - Initial Isolation Zone PAZ - Protective Action Zone

You can find this information:

- a) Labeled on the map
- b) In the site specific tables
- c) As the yellow area on the map

If the incident is at a facility or if you have not yet confirmed the exact location of the incident, you must use the largest EPZ for the area. The largest EPZ for the area is shown in yellow on the map.

#### 4. Draw the zones on map:

- a) EPZ The entire hazard area
- b) IIZ Those closest to the hazard
- c) PAZ Those downwind of the hazard



# 6. Following the appropriate provincial public protection measures chart, initiate public safety activities.

Residents in the IIZ are closest to the hazard and are the most at risk of being adversely affected.

Residents in the PAZ are the second group to be evacuated / sheltered in place as being downwind of the hazard puts them at a higher risk than the rest of the residences in the EPZ that are upwind or crosswind from the hazard.

Section 4: Emergency Response Procedures

### **Public Protection Measures, continued**



#### H<sub>2</sub>S / HVP Ignition Procedure Pre-Ignition Considerations – On-Site Group Supervisor

#### When making the decision to ignite, the licensee must take the following into consideration:

#### Hydrogen Sulphide (H<sub>2</sub>S)

- Proximity to residences, public facilities, towns or urban centres.
- Risk of exposure / injury to the public or response workers.
- Status of evacuation.
- Wind conditions and general topography.
- Fire hazard after ignition in relation to adjacent forested or cropland area.
- □ Safety of the Ignition Team (hazard area identification, protective gear).



#### □ The increased risk(s) of delayed ignition

- U Whether the perimeter of the hazard area has been established.
- U Whether the public has been evacuated from the area
- U Whether ignition will worsen the situation by endangering the public or the environment or damaging the equipment used to control the product.
- U Whether wind direction has been established and is being continually monitored.
- U Whether the possibility of an explosion has been assessed (i.e., obstructions or regions of congestion within the perimeter of the dispersion vapour cloud).

- Ensure all nonessential personnel are evacuated.
- □ Isolate the hazard area using manned roadblocks.
- Assemble the Ignition Team (2 people).
- Ensure the Ignition Team is protected with personal protective equipment, clothing and breathing apparatus (cover exposed skin).

- Allow for safe retreat.
  - Be upwind of the gas leak (300m minimum from edge of identified vapor plume, approach no closer than 100m on repeated ignition attempts).

#### **Example Ignition Kit**

#### 2 Flare Pistol

- 36 Flares
- 2 Safety harness with front D-ring
- 30m (100ft) flame resistant rope 2
- 2 Flame resistant coveralls
- 2 Sets of ear protection
- Hard hats with face shield 2
- 2 Flame resistant hard hat liners (balaclava or regular style)
- LEL Gas detector
- H<sub>2</sub>S Gas detector
- Self contained breathing apparatus 4 (positive pressure) with 30 minute air supply, includes 2 spare bottles
- Radio equipped vehicle



# Ignition must take place when one of the following conditions has been met:

- Although required, evacuation of the response zones has not taken place.
- □ Monitoring results indicate H<sub>2</sub>S concentrations in excess of 10 ppm over a 3-minute average in unevacuated parts of the EPZ.
- $\square$  H<sub>2</sub>S concentrations exceed 1 ppm per one hour average in urban density developments.
- □ Monitoring is not taking place due to weather or other unforeseen circumstances
- □ The release cannot be brought under control in the short term (ignition decision will be made by Incident Commander. Notify Regulatory Agency intention to ignite. AND
- Personnel working at the site can be cleared to a safe distance

If monitoring levels are declining, then the situation needs to be continuously assessed for ignition.

Once any of the above conditions have been met, ignition must occur within 15 minutes of the decision to ignite.



### Ignition Procedure – On-Site Group Supervisor

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# Alberta Petroleum Industry Release Reporting Requirements

All spills exceeding the spill/release quotas listed in the table on the following page MUST be reported immediately to the appropriate regulatory agency.							
Agency	Reportable Spills	Report Type	Report to				
Alberta Energy Regulator (AER) - Oil & Gas Regulation	<ol> <li>Any release that has caused, is causing, or may cause an adverse affect*</li> <li>Any pipeline release regardless of volume</li> </ol>	Verbal	AER 24 Hour Number 800-222-6514				
Alberta Energy Regulator (AER) - Environment Regulation	<ul> <li>3) Any release greater than 2m<sup>3</sup> on-site</li> <li>4) Any release off-site</li> <li>5) Any release into a water body (as defined in the <i>Water Act</i>) or a watercourse, groundwater, or surface water (as stated in the <i>Release Reporting Regulation</i>)</li> <li>6) Any spill while substance is being transported from a well or facility to the intended destination.</li> <li>7) Any release of substance listed as toxic, prohibited or restricted by CEPA</li> <li>8) Any release that meets or exceeds the reporting threshold in the Environment Reporting Requirements column in the Release Reporting Thresholds table on the following page.</li> <li>Note: The AER Table of Reportable Releases found below further breaks down release types by industry activity.</li> </ul>	Written	Next business day following verbal report of spill, the AER forwards a copy of the Release Report form to the company to complete. The form is to be submitted with supporting documentation within 7 days to the local field centre (if the release caused adverse affect)*				
	Environmental emergencies if:	Verbal	AER 24 Hour Number				
Canadian Environmental Protection Agency (CEPA)	<ol> <li>The emergency involves any of the substances identified in Environment &amp; Climate Change Canada's E2 List of regulated substances. See the website link at the bottom of the following page for more information.</li> <li>Note: CEPA has not identified specific reporting thresholds; however, CEPA has suggested that existing provincial reporting thresholds or TDG reporting thresholds are acceptable for use.</li> <li>A Schedule 8 written report through SWIM must be completed in the case of:</li> <li>An environmental emergency involving the release of a hazardous substance that:         <ul> <li>a) Has or may have an immediate or long-term harmful effect on the environment</li> <li>b) Constitutes or may constitute a danger to the environment on which human life depends</li> <li>c) Constitutes or may constitute a danger in Canada to human life or health</li> </ul> </li> </ol>	Written	As soon as possible, submit a Schedule 8 through the SWIM (Single Window Information Manager) system				
Alberta Environmental and Dangerous Goods Emergencies (EDGE)	<ul> <li>Substances regulated by Transportation of Dangerous Goods if:</li> <li>1) A release is anticipated, or the release meets or exceeds the reporting threshold in the TDG Reporting Requirements column in the <b>Release Reporting Thresholds</b> table on the following page.</li> </ul>	Verbal	911 Local Authority Environmental and Dangerous Goods Emergencies (EDGE)				
Canadian Transport Emergency Centre (CANUTEC)	Loss and theft reporting: 1) CANUTEC - all loss or theft of dangerous goods materials 2) Natural Resources Canada Inspector - Class 1 explosive materials only	Verbal	1) 888-226-8832 or 613-996-6666 2) 613-995-5555 3) 613-995-0479				
	3) Canadian Nuclear Safety Commission - Class 7 radioactive materials only	vvritten	Within 30 days				
Department of Fisheries and Oceans (DFO)	1) A release of any substance deleterious to fish into a fish bearing water body	Verbal	AER 24 Hour Number 800-222-6514				
	Immediately reportable and near-miss events as defined in the Event Reporting Guidelines:	Verbal	Reporting Hotline 819-997-7887				
Canada Energy Regulator	1) An incident that harms people or the environment,	Written	PipelineNotifications@tsb.gc.ca				
(CER) &	3) A toxic plume	Written	CER Online Event Reporting System (OERS)				
Transportation Safety Board (TSB)	the TSB Reporting Hotline and CER's OERS. If applicable, refer to the Federal Roles & Responsibilities chart in SECTION 5: EXTERNAL AGENCIES and the CER site section behind the AREA SPECIFIC INFORMATION tab for further	Written	CER - Within 21 days after the day of incident/near-miss TSB - Within 30 days after the day of the				
	regulations, definitions and reporting guidelines.	vvritten	incident/near-miss				
Canadian Nuclear Safety	All radioactive releases must be reported immediately.	Verbal	613-995-0479				
Commission (CNSC)	Immediately reportable events on First Nation records lands only	Written	Within 21 days				
Indian Oil & Gas (IOGC)	<ol> <li>Any health or environment-threatening emergency or off-lease spills.</li> <li>On-lease spills greater than 1m<sup>3</sup>.</li> </ol>	Verbal	IOGC Tsuu T'ina Office 403-292-5625				

Note: Spills must be reported promptly to avoid possible prosecution.

Lead Agency Contact Numbers		AER Table of Reportable Releases						
Alberta Alberta Energy Regulator (AER)				o≞≤	⊆ <sub>∓</sub>	Pip	Pi Install	Activ Equi
Spill Reporting Line	800-222-6514	Reportable Release	& Gas	ining - Sands	۱ Situ - Sands	pelines	ipeline lations	peline telated ities & pment
Canada		Any leak or break from a pipeline				Х		
Alberta Environmental and Dangerous (EDGE)	Goods Emergencies	Release of a substance that has caused, is causing, or may cause an adverse effect			х	х	х	х
Province Wide	800-272-9600	Release of a substance into a water body (as defined in the Water Act)	Х	Х	Х	Х	Х	Х
CANUTEC		Release of a substance into a watercourse, groundwater, or surface water (as stated in the <i>Release Reporting Regulation</i> )	х	х	х	х	Х	Х
	888-CAN-UTEC (888-226-8832) 613-996-6666	Release of oil, water or unrefined product off-site	Х	Х	Х	Х	Х	Х
All Provinces		Release of oil, water, or unrefined product exceeding 2 cubic metres $(m^3)$ on-site	х	x	х	х	Х	Х
Canada Energy Regulator (CER) / Transportation Safety Board of		A liquid spill (as defined in the Oil Sands Conservation Rules)		Х	Х			
Canada (TSB)		Release of a liquid hydrocarbon exceeding 2 $m^3$		Х	Х	Х	Х	Х
TSB Reporting Hotline (Pipelines)	819-997-7887	Uncontrolled gas release of more than 30,000 m <sup>3</sup>	Х	Х	Х	Х	Х	
		Release of gas or gas equivalent exceeding 30,000 m <sup>3</sup>		Х	Х	Х	Х	
* Definition of Adverse Affect		Well flowing uncontrolled	Х	Х	Х			
Is defined by the Environmental Protection & Enhancement Act (EPEA) as "impairment of or damage to the environment, human health or safety, or property." For the purpose of reporting, the industry shall use the following guidelines to assess whether the release may cause, is causing or has caused an adverse affect.					-			
<ul> <li>Any third party impact (off-lease), e.g. crop damage, vegetation damage or livestock impact</li> </ul>		See following page for spill / release quotas.						
Unrecovered spilled substance likely to contaminate surface or groundwater								
Contaminated groundwater and / or surface water								
Release or spill has potential for offsite odour complaints								

• Toxic or flammable release to air going off-site

Alberta spill reporting document updated April 2023

# Alberta Petroleum Industry Release Reporting Requirements

All spills exceeding the spill/release quotas listed in the table on the following page MUST be reported immediately to the appropriate regulatory agency.								
Chemical Class	Substance /	T.D.G. R	leporting Requirements	Alberta (AER) Reporting Requirements				
	Hydraulic Oil	No TDG						
	Methanol	S	requirements					
	Natural Gas		30,000 m <sup>3</sup>					
	Crude Oil / Emulsion							
	(Unrefined) Produced / Salt Water	No TDG	Reporting Requirements					
Other Released	(Unrefined)							
Substances	Bitumon (Liprofined)		ARR and notify landowner)					
			Any release that has caused, is causing, or may cause an					
	Ammonia		adverse effect					
		No TDG	or a watercourse, or surface water					
	Drilling Waste (Unrefined)							
	Oilfield Waste (Unrefined)		Any quantity in Class 1.1.1.2, and 1.2					
Class 1 Explosives	Ammunition Nitro-glycerine	Any quantity of Packing Group II	Total quantity of 450 kg or more in Class 1.4 (except 1.4S), 1.5, or 1.6	All releases which could pose a danger, or 50 kg				
Class 2.1 Flammable Gases	Methane Propane Butane Natural Gas		Total quantity of 450 kg or more	All releases which could pose a danger, or any sustained release of 10 minutes or more				
Class 2.2 Non-Flammable Gases	Compressed Air O <sub>2</sub> N <sub>2</sub> CO <sub>2</sub>	Any quantity	No TDG Reporting Requirements	30,000 m <sup>3</sup>				
Class 2.3 Toxic Gases (poisonous or corrosive)	H <sub>2</sub> S SO <sub>2</sub> Hydrogen Cyanide Nitric Acid Anhydrous Ammonia		Any quantity	All releases which could pose a danger, or any sustained release of 10 minutes or more				
				> 2m <sup>3</sup> on-site				
	Gasoline Diesel		Total quantity of 450 kg or more of desensitized explosives	> 200 L on land				
Class 3 Flammable Liquids	Methanol Demulsifiers		Any quantity of UN1261, Nitromethane	is causing, or may cause an adverse effect				
	Lube Oil			Any release into a water body,				
			Total quantity of 450 kg or more of deconstituted evaluation	or a watercourse, groundwater, or surface water				
Class 4.1	Calcium Resinate Naphthalene		Any quantity of UN1357, Urea Nitrate, with not less than 20% water,	> 25 kg on land				
	Crude		by mass; UN3370, Urea Nitrate, Wetted, with not less than 10% water by mass	Any release that has caused,				
Class 4.2 Spontaneously Combustible	Activated Carbon Potassium Sulphide		Total quantity of 450 kg or more in Packing Groups I or II	adverse effect				
Class 4.3	Molten Sulphur Calcium Carbide			Any release into a water body or a watercourse,				
Dangerous when Wet	Sodium Activated Carbon		Total quantity of 450 kg or more in Packing Groups I or II	groundwater, or surface water				
	Calcium Nitrate Ammonium Nitrate Bleaches	Any quantity of Packing Group I or II	Total quantity of 450 kg or more in Packing Groups I or II					
		More than 30 L or 30 kg of Packing Group III	Nitrate; UN 1487, Potassium Nitrate and Sodium Nitrate Mixture; UN1489, Potassium Perchlorate; UN1495, Sodium Chlorate;	> 50 kg or 50 L on land				
Class 5.1			UN1498, Sodium Nitrate; UN1499 Sodium Nitrate and Potassium Nitrate Mixture; UN1511, Urea Hydrogen Peroxide; UN1942	Any release that has caused, is causing, or may cause an				
Oxidizing Substances			Ammonia Nitrate, with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substances: UN2014 Hydrogen	adverse effect				
			Peroxide, Aqueous Solution with not less than 20% but not less than 60% hydrogen peroxide (stabilized as necessary); UN2015, Hydrogen	or a watercourse, groundwater, or surface water				
			Peroxide, Stabilized; UN2031, Nitric Acid, other than red fuming; UN3149, Hydrogen Peroxide and Peroxyacetic Acid Mixture with acid					
Class 5.2	Methyl Ethyl Ketone Peroxide		Any quantity in Class 5.2, Type B, liquid or solid, temperature	1 kg or 1 l				
Organic Peroxides	Peroxide		controlled	> 5 kg or 5 L on land				
	Arsenic Lead Acetate			Any release that has caused,				
Class 6.1 Poisonous Toxic Substances	Mercuric Chloride Mercuric Oxide		Any quantity of Packing Group I	adverse effect				
	Methanol Toxic Pesticides			Any release into a water body, or a watercourse,				
Class 6.2	Infectious Substances affecting	Any quantity of Category A or B	Any quantity	groundwater, or surface water				
Infectious Substances	Humans / Animals	For packages being transported under exclusive use:						
	Uranium	(i) 10 mSv/h on the external surface (ii) 2 mSv/h on the surface of the conveyance, and (iii) 0.1 mSv/h at a distance of 2 m from the surface						
Class 7 Radioactivo Substancos	Plutonium Naturally Occurring	For packages not being transported under exclusive	Any quantity	Discharge or radiation level exceeding 10 mSv/h at				
Radioactive Substances	Radioactive Materials (N.O.R.M.)	use: (i) 2 mSv/h on the external surface (ii) 0.1 mSv/h at a		1 m from the package surface				
		ustance of 1 m from the package, (iii) 2 mSv/h on the surface of the conveyance, and (iv) 0.1 mSv/h at a distance of 2 m from the surface of the conveyance						
				> 50 kg or 50 L on land				
Class 8	Acids Bases	Any quantity of Packing Group I or II	Total quantity of 450 kg or more in Packing Group I or II Any quantity of UN1796, Nitrating Acid Mixture with more than 50%	Any release that has caused, is causing, or may cause an				
Corrosives	Caustic	30 L or 30 kg of Packing Group III	nitric acid; UN1826, Nitrating Acid Mixture, Spent, with more than 50% nitric acid; UN2032, Nitric Acid, Red Fuming	Any release into a water body.				
				or a watercourse, groundwater, or surface water				
Class 9								
vilscellaneous Products, Substances & Organisms, Environmentally Hazardous	P.C.B. Asbestos	30 L or 30 kg of Packing Group II or III, or without Packing Group	No TDG Reporting Requirements	25 kg or 25 L				
Substances								
Other	Any well flowing unc	ontrolled, any burning of effluent from a well or facility and	any fire where loss exceeds 2m <sup>3</sup> of oil, or 30,000m <sup>3</sup> of gas where damage	to well head occurs				

#### For all other reportable substances/quantities, please refer to company SDS sheets for more information.

List of Environment & Climate Change Canada's E2 Regulated Substances: http://gazette.gc.ca/rp-pr/p2/2019/2019-03-06/html/sor-dors51-eng.html

### **Spill Response Guidelines**

This section provides basic hydrocarbon spill response guidelines. For greater detail, refer to the Western Canada Spill Services (WCSS) manuals, applicable Safety Data Sheets (SDS) and the Emergency Response Assistance Canada (ERAC) Plan. Refer to the Petroleum Industry Release Reporting Requirements chart at the beginning of this section to determine the TDG and Provincial Reporting Requirements for each class of chemicals (as classified by the TDG Hazard Classification System).

#### **Initial Response Actions:**

- Determine the Level of Emergency using the Assessment Matrix in Section 1: Initial Response.
- Determine spilled substance. If it can be classified as an LPG release, isolate the area to a minimum distance of 1600 meters (1 mile) and refer to the BLEVE portion of the fire / explosion section.
- Assess spill hazards and risks. Determine what PPE will be required.

#### **Considerations:**

- Are there any nearby public (workers, traffic, residents) that would need to be evacuated or diverted from the spill area?
- Is there a fire or explosion hazard? What is the ignition source?
- Is there H<sub>2</sub>S or other toxins present? Are concentrations safe or is additional PPE needed?
- Are there any areas deemed hazardous? (Mark with flags)
- What are the ground and weather conditions? (Snow, gravel, sand etc.)
- Where is the location of the leak, the type of release and the volume released? Is it reportable? Has it been reported to the regulator?
- How long has the spill been taking place?
- Are air monitoring trailers required?
- Is the spill into a watercourse, watershed or a water body?
- Is the spill contained or migrating? Which direction? How far can it go?
- If the spill is not contained, determine and prioritize the containment points and methods to be used.
- What lands or water bodies may be affected? (Farm, livestock, brush, drinking water, etc.)
- How is it going to be contained and cleaned up?
- How to access the spill site, the source of the spill and recovery points?
- What equipment is required? Is oil spill equipment (oil spill co-op) required?
- Where can spill responders park so as not to interfere with spill equipment? (Minimize vehicular traffic as much as possible at the spill site.)
- Are there any residences in the area? Do they have water wells that could be affected?
- Should the spill site be cordoned off to prevent wildlife / livestock from entering?
- Will a media response be required?

#### **Control/Containment**

- Remove all sources of ignition.
- Stop the spill if safely possible (e.g. shut off pump, replace cap, tip drum upward, patch leaking hole). Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so.
- Assess speed and direction of spill and cause of movement (water, wind and slope).
- Use contents of spill kits to place sorbent materials on the spill, or use shovel to dig to contain spill. Methods may vary depending on the nature of the spill.
- Prioritize and set up containment points.
- Where possible, prevent a spill from entering a watercourse.
- Have a contingency plan ready in case spill worsens beyond control or if the weather or topography impedes containment.
- Avoid excessive walking or driving on the spill area.
- Consider ground disturbance guidelines.
- Surface run off may have to be diverted from the spill site if wet conditions are present.
- Mitigate or eliminate any danger to life, health, the environment or property arising from the spill.
- Ensure the health and safety of the persons responding to the spill.
- Once containment has been achieved, recovery and clean-up operations begin immediately.
- Recover as much product and saturated debris as possible.
- Keep environmental disturbance to a minimum.
- Take steps to rehabilitate any land affected by the spill.
- Take steps to prevent the occurrence of a similar spill.

#### **External Notifications**

- Follow notification procedures outlined at the beginning of this section as per the applicable provincial Petroleum Industry Release Reporting Requirements chart.
- Contact the applicable spill service (as outlined in the table below) to determine the closest available spill equipment and towing requirements. See contact information below:

British Columbia	Western Canadian Spill Services (WCSS)	866-541-8888
Alberta	Western Canadian Spill Services (WCSS)	866-541-8888
	Saskatchewan Oil Spill Cooperative	See Website
Saskatchewan	or	or
	Western Canadian Spill Services (WCSS)	866-541-8888
Manitoba	MEP Environmental Products	204-632-4118
	or	
	Manitoba Producers Oil Spill Cooperative	204-748-3095

### **Spill Control Points**

Control points are pre-identified locations on watercourses that allow for the staging and deployment of oil spill containment and recovery equipment in response to oil spills that have occurred upstream of the control point. Control point selection is critical to an effective oil spill response and part of your risk assessment and development of site-specific emergency response plan information. For a detailed list of control points utilize the WCSS website (http://www.wcss.ab.ca).

An ideal control point should have:

- Quick access to the watercourse in all seasons, using clear ground, a road or a trail
- Adequate work space to conduct operations and to store required equipment with minimal need for clearing of brush and vegetation
- Sufficient space to deploy containment and recovery equipment quickly with minimal effort or obstructions (i.e. trees, rocks, steep banks, etc.) and minimal environmental impact
- Boat launch location(s) for boats assisting in containment and recovery operations.

Selection of control points with public access is preferred.

For control points on private property - landowner approval and necessary permits for emergency access should be obtained in advance.

Designated site specific control points need to be reviewed at least annually. Each control point site should be visited periodically to evaluate suitability and to ensure information is accurate and complete. Old unsuitable control points should be removed and new control points added, as a part of revisions to site specific information, as required. Control point listings should include a site description, site diagram, access description, landowner/occupant phone number, site suitability and any other information related to the site.

### Action

Where a spill occurs, the person who had possession immediately before the spill shall take all reasonable and practical action. They should have due regard for the safety of the public, themselves, to stop and contain and minimize the effects of the spill.

Provincial oil and gas regulations require operators to take immediate steps to contain and clean up spilled upstream petroleum product. Upstream petroleum product refers to crude oil, salt water, emulsions, condensates, sour gas natural gas liquids and / or any combination of the materials listed that are generated during exploration and production activities.

### **Recovery Techniques**

There are two basic means of stopping the flow of petroleum products floating on a stream or river: a boom or a dam. If the stream or river if relatively large, booms are used. A dam may be constructed across the channel of a small stream with a low flow.

If a stream or river is to be boomed, the appropriate equipment should be obtained from the Local Spill Response Cooperative or mutual aid partners. Decisions must incorporate the following considerations:

- Width of stream or river to be boomed (where possible, the entire river width should be boomed)
- Allowable boom angle based on stream or river current and length of boom required
- Anchoring methods for the booms
- Methods to lay out and deploy a boom

If a dam is to be constructed across the stream, some allowance must be made for the flow of water past the dam. The Western Canadian Spill Services plan provides detailed information about oil spill containment and recovery.

### **Containment and Storage of Product**

When commercial barriers are not suitable or available, particularly in remote areas, barriers must be improvised. Improvising depends on the materials at hand and the situation in which the spill occurred. In each case, the experience and innovative ability of the personnel at the spill site is needed for the successful containment of the oil spill.

Tank trucks, storage tanks or an earthen pit may be used to store recovered petroleum products. Access must be close enough to the recovery site so that hoses from the pumps can reach a tank truck. Storage tanks must be located on level, stable ground with access available for tank truck use. An earthen pit should only be constructed when tank trucks or storage tanks cannot be used. Earth-moving equipment and appropriate ground disturbance procedures will be required to construct a pit. A plastic lining should be used.

### **Disposal and Remedial Operations**

Disposal of the product and site restoration actions will be determined for each site by consultation among operations personnel, the provincial environmental protection agency or other environmental regulators and any external contracted professional environmental consultants.

It is the company's responsibility when reporting a release to the regulatory agency or the Ministry of Environment (as appropriate) to inform any private individuals whose lands may be affected by the release. The company must notify the landowner of any release that occurs off a lease site, migrates off a lease site or occurs on an easement or right-of-way. The company is reminded that landowner cooperation is essential in being able to quickly respond to a release that is not on the normal working area of a lease site.

### Western Canadian Spill Services (WCSS)

WCSS maintains spill contingency plans and provides spill response equipment to all member companies.

WCSS - http://www.wcss.ab.ca/

Spill Contingency Plan - http://www.wcss.ab.ca/contingency-manual.shtml

Live Equipment Report - http://emis.wcss.ab.ca/PublicInventoryReport.aspx

### **Post-Incident**

Ensure all statements, event logs, forms and documentation on the incident remain securely stored following the incident. Records must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.

### **Call Down Notification**

After consultation with a senior company representative or the appropriate Regulatory Agency, Provincial Emergency Management or local County / Municipality, the Incident Commander will:

- 1. Give the "all clear" signal. Prior to the "all-clear" signal, the Incident Commander will confirm that all evacuated areas are safe to re-enter. This may involve such activities as:
  - Ensuring all equipment and locations are free of any pockets of fire, smoke and / or toxic gases.
  - Ensuring all equipment and debris are removed from offices and / or public areas.
  - Cordoning off the incident area to isolate any remaining hazards.
  - o Checking low-lying areas and basements for contamination, if a toxic leak has occurred.

After the "all-clear" message has been given, the Incident Commander will be responsible for:

- Ensuring all evacuees are promptly notified once the call down is given.
- Coordinating the return of any evacuees to the area. Ensure the public and employees receive any assistance they may require.
- Maintaining security in any evacuated areas until the evacuees have returned and the businesses in the area have again become occupied.
- 2. Coordinate the deactivation of all emergency response operations, personnel, equipment and incident areas.
- 3. Ensure all previous contacts, including other companies; government agencies, etc. are notified of the emergency status call down.
- 4. Advise all response team members to document their call down notification calls.
- 5. Prepare and release an "all clear" statement to the media in conjunction with the Regulatory Agency.
- 6. Organize debriefing meetings for advisory personnel involved. In the case of incidents that have involved a death or serious injury, consult with Human Resources personnel about arranging critical incident counselling.
- 7. Notify and debrief Joint Interest Partners and Insurance company representatives.

Note: Ensure all statements, event logs, forms and documentation on the incident remain securely stored following the incident.

### **Public Care and Assistance**

The decision to recall evacuees will be coordinated by the regulatory agency in consultation with other applicable government agencies and the licensee. Ensure the following tasks are completed as required:

- 1. Ensure all evacuees are promptly notified once the call down is given.
- 2. Coordinate the return of any evacuees to the area. Ensure the public and employees receive any assistance they may require.
- 3. Maintain security in any evacuated areas until the evacuees have returned and the businesses in the area have again become occupied.
- 4. Ensure homes and businesses are ventilated and checked for gas pockets before allowing the occupants to enter. Rovers must check each room, office and public area.

### Post-Incident, continued

- 5. Ensure members of the Response Teams and other key participants in the emergency are debriefed as soon as possible.
- 6. Designate a senior company representative to act as the company Liaison with the public and other companies.
- 7. Ensure the affected employees and public are provided with post-incident company contact names and telephone numbers. If the emergency has impacted a large number of the public or has caused significant damage to private property or the environment, a temporary Public Relations Office should be established in the affected area.
- 8. Schedule a follow-up meeting with the public to clearly explain the cause of the incident and to address their concerns. Organize critical incident counselling as required.
- 9. Ensure public expense / damage claims have been collected and are processed in a timely manner.

### **Clean-up and Repair**

If a serious injury or death has occurred, the scene must be left undisturbed, as much as possible, until an investigation of the site can be completed by the appropriate authorities.

Ensure the following tasks are completed as required:

- Ensure the incident site is not disturbed if there has been a fatality or a serious injury until police, regulatory officials and company representatives complete necessary investigations.
- Ensure that site clean-up continues.
- Ensure that the correct procedures are developed and implemented for the decontamination of equipment.
- Ensure the On-Site Group Supervisor disposes of all hazardous waste according to applicable regulations (confer with the safety support personnel, the Response Team or other company safety personnel).

Note: The position of On-Site Group Supervisor during the remediation phase may be best filled by an Environmental Specialist.

- Ensure that priority is given to clearing debris and restoring the site to normal operating conditions after the government and company investigations are complete.
- Ensure that all safety equipment is demobilized, cleaned and inspected for contamination.
- Ensure all roadblocks, staging area and detour equipment is demobilized.
- Ensure that all clean-up and repair actions follow the companies safety and environment policies and safe-work procedures.

### Third Party Investigations

The Incident Commander will coordinate and observe all site investigations. Third party investigators such as police, government agencies and insurance companies may be required to investigate an incident site. It is important to co-operate with third party investigators. However, company personnel should be aware of the corresponding corporate guidelines.

• Obtain the name, title, address and telephone number of all inspectors and immediately inform the Incident Commander before proceeding with the investigation.

### **Post-Incident, continued**

- Ensure a company representative accompanies the inspector at all times. Never leave an inspector unattended.
- Give the inspectors the information they request, the facts only, no speculative information. Always tell the truth.

Document all items of evidence that the inspector has retained. Where possible, keep copies of the evidence provided to the Inspectors.

Wait until legal counsel is present before answering questions where the inspector indicates that any statements may be used as evidence or indicates that you have the right to counsel.

### **Review and Debriefing**

The effectiveness of the ERP shall be reviewed after the end of the emergency. In some situations, a formal debriefing may be held. The objective of the debriefing should be to improve emergency preparedness and response by identifying areas of success and areas requiring improvement (a debriefing should not be a fault-finding mission). If one is held, all groups that responded to the emergency should be represented. The representatives should come prepared with complete details of their activities during the emergency and, where possible, provide supporting documentation. Common elements of an effective debriefing include:

- a) A facilitator;
- b) A secretary to record the proceedings;
- c) A review of the sequence of events, including timing and actions taken; and
- d) Identification of those portions of the ERP that were effective and those that require improvement.

Action items identified during the debriefing should be documented and assigned with completion timelines, key lessons learned from emergency outcome should be shared with the appropriate parties, and the ERP should be revised as necessary. Separate debriefings may be held with different groups that participated in the emergency (e.g., emergency services organizations, the media, etc.).

### **Critical Incident Stress Debriefing (CISD)**

Responders are often under a great deal of stress. They must act quickly, often in the face of pain and fear, to assess the situation, determine priorities and begin rescuing others who are in danger. They may have experienced a serious injury themselves or witnessed the death of co-workers or the public.

If necessary, the Incident Commander will request that the company's Human Resource personnel dispatch specially trained counselors to meet with responders, preferably within 24 to 48 hours, to provide support and reassurance to those affected by an emergency. Team members should include a mental health professional and trained peer support personnel (fire-fighters, paramedics, police, military, etc.).

CISDs allow individuals to express the circumstances they were confronted with, how they felt at the incident and what their reactions were after the incident. The participants must understand that the meetings are strictly confidential and are not intended to judge or lay blame on an individual's actions. Recording devices and note taking should be prohibited. Meetings should be limited to a maximum of 20 individuals. Individuals who are perceived to be responsible for the incident should be excluded from group meetings and met on a one-on-one basis.

These sessions provide the responders with a supportive environment that helps them deal with their emotions. It also provides them with information about stress and its effects (severe agitation, emotional upset, inability to sleep, etc.) and it educates them about stress management techniques.

## Post-Incident, continued

### Post-Incident / Accident Investigation

Once the emergency status has been removed, a senior company representative will appoint a subcommittee to investigate the event. This subcommittee will consist of appropriate management and technical specialists as required.

The objective of the investigation will be to analyze and evaluate the event in order to establish a cause, to provide advice on how to prevent a reoccurrence of the event, and to make recommendations on procedures that will improve the company's emergency response efforts in the future.

The post-incident / accident investigation should include:

- A review of the events leading up to the incident / accident.
- An analysis of the on-site remedial procedures, including an evaluation of the safety standards that were applied.
- An appraisal of the company's shelter-in-place / evacuation response for the affected public.
- An evaluation of the effectiveness of the notification and communication systems between the incident site and the head office, as well as within the company.
- An appraisal of the effectiveness of any media or public relations efforts.
- An assessment of any potential legal or environmental issues that may be raised as a result of the event or as a result of the company's response efforts.
- A summary of current and future costs.
- Completed appropriate event report forms and applicable attachments.
- An assessment of the strengths and weaknesses of the company's response.

This report will be directed to the attention of a senior company representative. It will be his / her responsibility to ensure all recommendations for improvements to the Corporate and Field Emergency Response Plans are incorporated where applicable and promptly communicated to the appropriate company personnel.

Within 30 days of the end of an incident, a Licensee must file with the Provincial Agency, Canada Energy Regulator (CER), and / or the Transportation Safety Board (TSB), an Operator Incident Summary Report structured as outlined by the Provincial / Federal Agency. After reviewing the Operator Incident Summary Report, the Provincial and / or Federal agency may require that the licensee attend a meeting to further discuss the incident.

All documentation recorded during and following an emergency must be retained for up to five years in the event the Regulatory Agency requests it.

### **Medical Emergencies**

DISCLAIMER: The information contained in this section does not replace formal First Aid, CPR & AED training. The company makes no guarantee as to, and assumes no responsibility for, the correctness, sufficiency or completeness of such information or recommendations. A First Aid provider is someone who has completed formal first aid training from a recognized provider. Training can be obtained from the Canadian Red Cross (www.redcross.ca) or St. John Ambulance (www.sja.ca).

The 3 basic steps to follow in any emergency:

Remember: stay calm, look for dangers, never risk your own safety



Canadian Red Cross (2013). Check, Call, Care First Aid Poster. Retrieved February 2013, from Canadian Red Cross Web site: http://www.redcross.ca/cmslib/general/tp\_fa\_poster\_checkcallcare\_web.pdf

### First Aid Information

#### CPR

The simplified Adult Basic Life Support algorithm includes five steps. The algorithm diagram provided by the American Heart Association emphasizes the following:

- 1. Assess the victim's responsiveness. If a victim is not breathing, or is not breathing normally (i.e., gasping), initiate CPR. Health care professionals should be trained to recognize cardiac arrest that presents as seizure-like activity or with agonal respirations.
- 2. Activate EMS (Emergency Medical Response) by calling 911.
- 3. Retrieve a defibrillator, usually an automatic external defibrillator (AED).
- 4. The algorithm proceeds in a loop of CPR and rhythm checks with defibrillation.
- 5. Check PULSE before chest compressions for at least five seconds and no more than ten seconds. If in doubt, begin compressions
- 6. CPR: push hard and fast. Begin chest compressions before ventilation. Chest compressions allow blood flow to the heart and brain. Delays in chest compressions result in diminished survival. Be sure to allow the chest to recoil between compressions. The chest should be compressed 100-120/min to a depth of 2"-2.4" (5-6cm)
- **7.** For effective breathing, watch for chest rise and avoid excessive ventilation. 10 BREATHS should be delivered each minute, or one breath every six seconds. Each breath should be delivered over 1 second. Observe visible chest rise.
- 8. Avoid gastric inflation, as it may result in aspiration, pneumonia or vomiting.
- **9.** The ratio of chest compressions to breaths is 30 to 2.
- **10.** After the defibrillator becomes available, check rhythm. Use the AED when indicated and available. The victim should receive a shock that is repeated every two minutes or 5 cycles.

#### Burns

The American Red Cross recommends these steps to care for minor burns.

- Stop the burning. Put out the flames or remove the victim from the source of the burn.
- Cool the burn. Use large amounts of water to cool the burned area. DO NOT use ice or ice water other than on small superficial burns. Ice causes body heat loss. Use whatever resources are available: tub, shower or garden hose. You can apply soaked towels, sheets or other wet cloths to a burned face or other areas that cannot be immersed. Be sure to keep cloths cool by adding more water.
- Cover the burn. Use dry, sterile dressings or a clean cloth to cover a burn. Loosely bandage them in place. Covering the burn helps keep air out and reduces pain. Covering the burn also prevents infection. If the burn covers a large area of the body, cover it with clean, dry sheets or other cloth.

For minor burns and burns with open blisters that are not serious enough to need medical care, wash the areas with soap and water. Keep it clean. Put on an antibiotic ointment. Watch for signals of infection.

#### **Burns, continued**

Critical burns will need immediate medical attention. Call 911 or your emergency number if any one of the following instances occurs:

- Victim is having difficulty breathing.
- More than one part of the body is burned.
- There are burns to the head, neck, hands, feet or genitals.
- A child or an elderly person has been burned.
- Chemicals, electricity or explosions have caused the burns.

#### **Chemical Exposure Guidelines**

- In the event of chemical exposure, emergency services or poison control centre should be contacted as soon as possible.
- The eye may be irrigated using copious amounts of clean water, preferably using an eyewash bottle, eyewash station or shower.
- First aid providers may use continuous, large volumes of clean water for irrigation of chemical injuries where chemical exposure has occurred to other parts of the body.

#### **Wounds & Abrasions Guidelines**

- Superficial wounds and abrasions should be irrigated with clean water, preferably tap water because of the benefit of pressure.
- First aid providers may apply antibiotic ointment to skin abrasions and wounds to promote faster healing with less risk of infection.
- First aid providers may apply an occlusive dressing to wounds and abrasions with or without antibiotic ointment.
- The use of triple antibiotic ointment may be preferable to double- or singleagent antibiotic ointment or cream.
- If antibiotic is not used, antiseptic could be used.
- There is some evidence that traditional approaches, including applying honey, are beneficial and may be used on wounds by first aid providers.
- People with wounds that develop redness, warmth or become painful or with wounds where the person develops fever should seek assessment from a healthcare provider.

#### **Bleeding Guidelines**

- First aid providers must control external bleeding by applying direct pressure.
- The use of pressure points and elevation is NOT recommended.
- When direct pressure fails to control life-threatening external limb bleeding or is not possible (e.g. multiple injuries, inaccessible wounds, multiple casualties), tourniquets could be considered in special circumstances (such as disaster, war-like conditions, remote locations or in instances where specially trained first aid providers are providing care).
- Localized cold therapy with or without pressure may be beneficial in haemostasis for closed bleeding in extremities. Caution is advised when applying this recommendation to children due to a potential for hypothermia.
- The out-of-hospital application of a topical haemostatic agent to control lifethreatening bleeding not controlled by standard techniques and in situations where standard techniques could not be applied could be considered with appropriate training.

Source: www.redcross.ca/crc/documents/1303501\_FirstAid-2016\_Guidelines\_LR-PDF.pdf

### **Next-of-Kin Notification**

When an employee, contractor or member of the public is seriously injured, missing, or pronounced dead, the next-of-kin must be notified as promptly as possible. Keep in mind the following policies before notifying any next-of-kin:

- Death is never presumed, and first aid must be administered until relieved by a paramedic.
- No telephone or radio discussion is to take place regarding the name(s) of the injured.
- Notification is not to occur until the casualty has been pronounced dead by a medical doctor or medical examiner.

If an employee, contractor or member of the public is injured or killed as a result of company operations; notifications will be coordinated through local RCMP / municipal police and designated company personnel.

#### Before Notifying the Next-of-Kin

- Never release the names of the injured, missing, or persons pronounced dead before the next-of-kin are notified.
- Triple-check the identity of any casualty.
- If the casualty is conscious, document concerns. Do not make promises that cannot be kept.
- Confirm the casualty's relationship with the people being notified.
- Be prepared to support the next-of-kin. Provide assistance such as transportation, child care, alternative accommodation, reimbursements for daily expenses, and the temporary care of the family home if required.

#### During the Notification of the Next-of-Kin

- Make the notification in person, not by telephone or through an intermediary.
- Provide the relatives with as much information as possible; too few details can cause excessive worry. Present only the facts; do not speculate.
- Do not discuss personal views of liability or fault.
- Allow the next-of-kin to vent their emotions.
- Attempt to support and reunite families as quickly as possible.
- Offer assistance; document key issues and concerns. Do not make promises that cannot be kept. Follow up on relatives' requests.
- Document the details of anyone who appears to be having trouble coping with the incident so that he / she can be given prompt psychological support.

#### During the Notification of the Next-of-Kin, continued

- Do not leave the next-of-kin alone.
- Offer to contact a neighbour, friend, relative, minister, doctor, or counsellor.
- Leave your name and telephone number with family members.
- Ensure the next-of-kin are protected from media harassment as required.

#### Follow-Up

- The same representative who conducted the initial notification should continue to contact and support the next-of-kin.
- If required, a senior company representative will ensure that a trained psychologist conducts critical incident stress debriefing sessions with next-of-kin, friends and company employees involved or affected by the tragedy.
- Advise the employee's family that a senior company representative will be contacting them to discuss any immediate needs and to provide information on insurance coverage and benefits support. Follow up on this commitment.

# **Medical Evacuation (MEDEVAC) Procedure**



#### A: Considerations for Air MEDEVAC

#### Consider air transport when:

- Patient requires critical care life support during transport that is not available locally
  - Patient's condition requires that time spent in transport be as short as possible. Potential delays associated with ground transport (road obstacles or conditions
  - traffic, distance) are likely to worsen the patient's condition.
  - Patient is located in an area inaccessible to regular ground transport.
  - The use of medical transportation resources would leave the local area or
  - worksite without adequate medical coverage.

#### **B: Requesting MEDEVAC**

#### When requesting MEDEVAC, be prepared to supply the following information:

- Location of patient pickup (facility, airport, road intersection, GPS)? Who will be meeting MEDEVAC crew (radio callsign / frequency, cell number)? Will the patient meet the MEDEVAC crew at the pickup location or will the
  - MEDEVAC crew need to be transported to the patient?
  - Any special equipment required (ventilator, bariatric transport equipment, etc.)? Will any additional personnel be necessary (physician, nurse)?
  - Is there an intended destination (major hospital, community)?
  - Has any consultation with medical providers at the intended destination been done?
- Do not delay launch / dispatch of MEDEVAC, provide the following information once available:
  - Mechanism of injury (and time of injury if known)
  - Injury or illness sustained
  - Symptoms and vital signs
  - Treatment given

#### **C: Monitoring MEDEVAC**

When requesting MEDEVAC, ensure that you are monitoring the transport and are aware of who to contact for updates and in case changes to plan are required.

When is MEDEVAC transport scheduled to arrive?: \_\_

What number should be contacted if something in the plan needs to be changed?

If transport doesn't arrive, or if no updates are heard, what time will we contact MEDEVAC for an update?

#### **Emergency MEDEVAC Phone Numbers**

#### **PROVINCIAL AIR AMBULANCE:**

Alberta British Columbia Manitoba Saskatchewan

800-661-3822 911 800-689-6559 888-782-8247

STARS (AB, BC, SK, MB): 24 Hour Emergency: 888-888-4567

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### **Security Incidents**

A security incident is a security-related occurrence, threat or action that has adversely affected people, the environment, assets and economic stability, or could potentially do the same.

#### **General Notes on Prevention of Security Incidents**

As defined in the CSA Standard Security Management for Petroleum and Natural Gas Industry Systems (Z246.1-17), a Security Management Program should be implemented to ensure security incidents and threats are identified and managed with appropriate safeguards and response procedures in place.

This documented security risk management process should incorporate threat, vulnerability, risk assessment and asset characterization. Asset characterization, in particular, identifies and ranks any assets that could result in adverse consequences if damaged or destroyed.

To minimize the possibility of threats within a company property, an adequate physical security system must be in place. This should include the following:

- Perimeter fencing and gates to protect against unauthorized entry into a facility gates should be closed when not in use and locked when unoccupied
- Appropriate signage at the perimeter and entrances
- Intrusion detection systems / alarm systems
- Sufficient lighting in darkness or areas of poor visibility
- Pedestrian access control
- Security guard force, both static and mobile
- Employee awareness

#### Types of Security Threats

Security-related threats have the intent to cause harm and could include bomb threats, suspicious packages, terrorism, vandalism, trespassing and cyber-attacks.

### **Responding to Threats**

Should any facility or office be the subject of a threat, or be advised of the potential of a terrorist attack, or of the potential of an attack to an adjoining facility being operated by another company, the person receiving the initial threat should remain calm, document all information in writing and notify his supervisor immediately. The supervisor should make an immediate assessment of the circumstances then:

- Obtain all data from the person who received the threat.
- If there is clear and imminent danger, the plant should be immediately evacuated, and the Field Response Team activated from a remote location.
- Contact local police / Royal Canadian Mounted Police (RCMP).
- Notify the Regulatory Agency and the EOC Director.

Once the Field Response Team is activated, the Field Response Team Incident Commander and a senior company representative will consider the threat and options available to respond to the threat. There are a myriad of potential short and long term responses available and they will be dependent on the evaluation of the threat, time available to respond, resources available locally or that can be brought in a reasonable time, and police and military resources available.

• If the threat is considered possible, the Canadian Security Advisor recommends that the following immediate/short term responses should be considered:

#### **Field Operations:**

- Establish intelligence liaison with local authorities (e.g. police).
- Report all suspicious activity to Corporate Security.
- Discontinue all site tours and visits.
- Restrict vehicle access to specifically authorized vehicles only.
- ID all visitors seeking access.
- Assign a person to patrol the perimeter of the facility at the beginning of each operational shift and note any deficiencies; look for signs of attempted break and enter.
- Conduct an evacuation exercise.

# Remotely Operated Facilities (also applies to any facility operated by a single person):

- Establish full lock down on fences and assets on the lease/site everything that can be secured and locked is secured and locked.
- Conduct a fence perimeter patrol before entering the site look for signs of illegal entrance.
- Conduct a full exterior building patrol before entering a building look for signs of unlawful entrance (doors pried, windows open, broken glass etc.).
- When working, lock the gates upon entering and leaving the facility, and rigidly adhere to the work alone guidelines.

### Bomb Threats

Bomb threats are delivered in a variety of ways. The majority of threats are called in to the target, though occasionally these calls are through a third party. Sometimes a threat is communicated in writing, or by a recording.

Persons making bomb threats generally have one of two motivations:

- 1. The caller has definite knowledge or believes that an explosive or incendiary bomb has been, or will be, placed. He or she wants to minimize personal injury or property damage. The caller may be the person who placed the device or someone who has become aware of such information.
- 2. The caller wants to create an atmosphere of anxiety and panic which will, in turn, result in a disruption of the normal activities at the location where the device is purportedly placed.

While most bomb threats are unfounded, some are not. As such, each one must be dealt with as though it is real and handled seriously and calmly.

#### **Bomb Appearance**

Bombs can be constructed to look like almost anything, and can be placed or delivered in any number of ways. The probability of finding a bomb that looks like the stereotypical bomb is almost non-existent. Most bombs are homemade, and are limited in their design only by the imagination and resources available to the bomber.

Remember, when searching for a bomb, suspect anything that looks unusual. Ultimately, however, let a trained bomb technician determine what is or is not a bomb.

#### **Responding to Bomb Threats over the Phone**

Most threats or implied threats are received by telephone, generally at a publicized or switchboard number. Should that occur, obtain as much information as possible, filling out the Threatening Call / Bomb Threat form (Section 6: Forms).

If a bomb threat is received over the telephone, the employee receiving the phone call should take the following actions:

- Stay calm and keep their voice calm.
- Pay close attention to details. Write information down as the caller says it. Attempt to get the following information from the caller:
  - What type of bomb is being used?
  - Did you place the bomb?
  - Who is the target?
  - Where has the bomb been placed?
  - o What time is the bomb set to explode?
  - Why was the bomb placed?
  - What type of container is the bomb placed in?
  - What does it look like?
  - What is the bomber's name?
  - What is the bomber's address?
- While the first employee is dealing with the threatening phone call, they should have a co-worker or another person contact the police (dial 911) using another telephone, and as covertly as possible. As the first employee writes down answers to the questions above, these answers should be relayed to the police.
- The call recipient should attempt to keep the caller on the phone.
- The call recipient should note the caller's:
  - Age and gender
  - Emotional state (angry, agitated, calm, etc.)
  - Speech patterns (accent, tone)
  - o Background noise (traffic, people talking and accents, music and type, etc.)

#### **Responding to Bomb Threats Received in Writing**

If a threat has been received in writing, minimize the handling of the document to ensure preservation of forensic evidence - DO NOT PHOTOCOPY.

#### Supervisor Responsibilities after Receiving a Bomb Threat

The supervisor should then:

- Obtain all data from the person who received the threat
- Activate the ERP if the situation warrants
- Contact local police / Royal Canadian Mounted Police (RCMP) if this has not already been done
- Notify the Regulatory Agency
- Decide on partial or total evacuation (if needed)
- Decide on partial or total search of the facility (if needed)

#### **Evacuating the Facility**

If it seems prudent to evacuate the building:

- Have all employees briefly check their work areas for unfamiliar items.
- Instruct all employees not to touch suspicious items, but simply to report them to their supervisors (taking pictures if feasible).
- Instruct all employees not to take personal belongings when they leave.
- Leave doors and windows open
- Do not to turn light switches on or off.
- Do not activate the fire alarm.
- Use stairs only; do not use elevators.
- Use of radio communications should be restricted as the signal could detonate a device.
- All evacuees should report to an outside pre-designated muster area for accountability.

#### **IED Evacuation Distances**

#### Improvised Explosive Device (IED) SAFE STAND OFF DISTANCE

	Threat Description	ption Explosives Mass (TNT equivalent) <sup>1</sup>		Build Evacu Dista	ling ation nce²	Outdoor Evacuation Distance <sup>3</sup>		
	Pipe Bomb	5 lbs	2.3 kg	70 ft	21 m	850 ft	259 m	
) (ti	Suicide Belt	10 lbs	4.5 kg	90 ft	27 m	1,080 ft	330 m	
High Explosives (TNT Equivale	Suicide Vest	20 lbs	9 kg	110 ft	34 m	1,360 ft	415 m	
	Briefcase/Suitcase Bomb	50 lbs	23 kg	150 ft	46 m	1,850 ft	564 m	
	Compact Sedan	500 lbs	227 kg	320 ft	98 m	1,500 ft	457 m	
	Sedan	1,000 lbs	454 kg	400 ft	122 m	1,750 ft	53 <mark>4</mark> m	
	Passenger/Cargo Van	4,000 lbs	1 814 kg	640 ft	195 m	2,750 ft	838 m	
	Small Moving Van/ Delivery Truck	10,000 lbs	4 536 kg	860 ft	263 m	3,750 ft	1 143 m	
	Moving Van/Water Truck	30,000 lbs	13 608 kg	1,240 ft	375 m	6,500 ft	1 982 m	
	Semitrailer	60,000 lbs	27 216 kg	1,570 ft	475 m	7,000 ft	2 134 m	

### **Bomb Search Guidelines**

Employees must not touch anything - only law enforcement explosive disposal units or qualified private consultants are qualified to search for a bomb or suspicious package.

In the event of a search, however, employees may be called upon to unlock drawers, cabinets, and the like for the search crew, and to identify any strange or unfamiliar objects.

#### **Explosive Device Located**

If a device or suspected device is located:

- Do not touch or move the object.
- Evacuate the immediate area.
- If possible, take steps to minimize effects of an explosion in the vicinity by evacuation or isolation of the area.
- Ensure RCMP are apprised of the location so explosive disposal unit can be called.

#### If there is an Explosion

- Have employees take cover under sturdy furniture, or leave the building if directed to do so by emergency responders.
- Stay away from windows.
- Do not light matches.
- Move well away from the site of the hazard to a safe location.
- Use stairs only; do not use elevators.
- Call 911 if no one has called.

### **Suspicious Packages**

The likelihood of receiving a bomb in the mail is remote. Unfortunately, however, a small number of explosive devices have been mailed over the years resulting in death, injury and destruction of property.

A bomb can be enclosed in either a parcel or an envelope, and its outward appearance is limited only by the imagination of the sender. However, mail bombs have unique characteristics that may assist in identifying suspect packages.

### Appearance of Suspicious Packages



- Mail bombs may display restricted endorsements such as "Personal" or "Private". This factor is important when the addressee does not usually receive personal mail.
- Addressee's name / title may be inaccurate.
- Return address may be fictitious.
- Mail bombs may reflect / distort handwriting or the name and address may be prepared with homemade labels or cut-and-paste lettering.
- Cancellation or postmark may show a different location than the return address.
- Mail bombs may have excessive postage.
- Mail bombs may feel rigid or appear uneven or lopsided and may have an irregular shape, soft spots or bulges.
- Parcel bombs may be unprofessionally wrapped with several combinations of tape used to secure the package and may be endorsed "Fragile Handle With Care" or "Rush Do Not Delay".
- Parcel bombs may have a buzzing or ticking noise or a sloshing sound.
- Pressure or resistance may be noted when removing contents from an envelope or parcel.

#### Dealing with Suspicious Packages

If an employee is suspicious of a mailing and is unable to verify the contents with the addressee or sender:

- Do not open the article.
- Isolate the item and evacuate the immediate area.
- Do not put the package or envelope in water or a confined space such as a desk drawer or filing cabinet.
- If possible, open windows in the immediate area to assist in venting potential explosive gases.

If an employee suspects a harmful chemical or biological substance is in a package already on company property they should:

- Cover the package or envelope with a plastic sheet, raincoat, etc.
- Evacuate the room closing all doors and windows.
- Call their supervisor who will contact the local police.
- Isolate the area where the package is.
- Isolate themselves in another area that has a telephone and wait for the emergency responders to arrive.

If an employee has touched a package that possibly contains a harmful substance or got some on their clothes, they should:

- Wash their hands well.
- Shower with their clothes on
- Undress and seal their clothes in a plastic bag.
- Shower again and put on fresh clothes.

If an employee has any reason to believe a letter or parcel is suspicious, they should never take a chance or worry about possible embarrassment if the item turns out to be innocent.

### Trespassing

Any person who enters land where entry is prohibited or does not leave land immediately after being directed to do so by the owner or occupier of the land is guilty of trespassing.

#### **Dealing with Trespassing**

If any personnel encounter a trespasser:

- Ask the trespasser to leave the unauthorized area.
- Give the trespasser a reasonable amount of time to leave peacefully.
- If the trespasser refuses to leave, call the RCMP / local authority.

### Vandalism

Vandalism is the willful damaging or defacing of property belonging to another person or to the public. Acts of vandalism can include:

- **Defacing** removing, marking or damaging a part of an object to draw attention to it.
- Criminal damage willful and unlawful destruction of other people's property.
- **"Tagging" or graffiti** gangs use "tags" to mark their territory and usually spray-paint walls and doors of homes and business establishments.

Vandalism can happen at any time of the day or night and in any season, but it most often occurs:

- In the evening during summer and fall
- On weekday evenings
- At night when fewer people are around and the property isn't under as much scrutiny
- Where building design and lighting offers concealment and anonymity
- In areas frequented by young people such as schools, parks, shopping plazas and public buildings
- In unoccupied buildings, open spaces or parked vehicles where minimum surveillance is given to property

#### Dealing with Vandalism

- Report all incidents of vandalism to a supervisor
- Do not paint over vandalism and graffiti until the police department gives clearance to do so.

### Terrorism

Terrorism is the use of violence and threats against persons or property for the purposes of intimidation, coercion or ransom. The direct targets of violence are not the main targets of a terrorist but a means to draw the attention of the local populace, the government and the world to their cause. A terrorist group commits acts of violence to:

- Produce widespread fear
- Obtain worldwide, national, or local recognition for their cause by attracting the attention of the media
- Destroy facilities or disrupt lines of communication in order to create doubt that the government can provide for and protect its citizens
- Discourage foreign investments, tourism or assistance programs that can affect the target country's economy and support of the government in power
- Influence government decisions, legislation or other critical decisions
- Satisfy vengeance

Acts of terrorism include threats of terrorism, assassinations, kidnappings, hijackings, bomb scares and bombings, cyber-attacks, and the use of chemical, biological, nuclear and radiological weapons.

#### **Examples of Petroleum Assets Subject to Risk**

- Buildings: Administration offices, corporate offices, control rooms
- Equipment: Process units and associated control systems, product storage tanks, surge vessels, boilers, turbines, process heaters, sewer systems
- Support Systems: Utilities such as natural gas lines, electrical power grid and facilities (including back-up power systems), water-supply systems, wastewater treatment facilities
- Transportation Interfaces: Railroad lines and railcars, product loading racks and vehicles, pipelines entering and leaving facility, marine vessels and dock area, off-site storage areas
- Cyber systems and information technology: Computer systems, networks, all devices with remote maintenance ports, SCADA systems, laptops, PDAs and cell phones.

#### **Dealing with Terrorism**

All threats and incidents should be reported to the RCMP Terrorism Tip Line at 1-800-420-5805.

In order to deal with threats of terrorism, it is important to establish a security management system to effectively manage security risks. This system should include a security risk management process incorporating asset characterization, threat assessment, vulnerability assessment, risk assessment, risk mitigation, communication and recommendations.

This system should be reviewed at regular intervals and updated as necessary.

### Cyber-Attacks

Cyber-attacks are computer-to-computer attacks that undermine confidentiality, integrity or availability of a computer or the information contained.

Cyber-attacks can make computer systems malfunction or result in a disrupted flow of data and have the potential to create extreme economic damage.

This threat includes a risk to SCADA and DCS systems, which collect, display and store information in support of controlling equipment, devices and facilities.

#### Preventing Cyber-Attacks

Steps that can be taken to enhance your cyber security:

- Know who owns and operates the IT system and its operating framework.
- Map the network include all internal/external connections, configuration control, etc.
- Develop a security policy structure and implement compliance monitoring.
- Apply as much security and hardening as appropriate.
- Accredit the IT system and follow a risk management approach.
- Know the system's possible vulnerabilities.
- Patch the system in a timely manner the longer this is delayed, the longer the system is vulnerable.
- Reduce Internet access points.
- Reduce or eliminate potential sources of infection USB flash drives (thumb drives, USB keys, etc.), flash media, etc.

• Communicate, train and educate staff and users.

Source: 10 IT Security "Commandments" - Communications Security Establishment Canada

#### **Dealing with Cyber-Attacks**

In the event of a cyber-incident:

• After obtaining corporate approval, local police or RCMP should be notified.

Serious cyber incidents:

 Should be reported to Public Safety Canada by email at <u>contact@cyber.gc.ca</u> or by phone at 1-833-292-3788.
# **Section 5: External Agencies**

Provincial Notification Matrix Provincial Lead Agency Roles Government Consultation Summary Specific Government Agency Roles Local Authority Health Services Provincial Supporting Agency Roles Federal Agency Roles This page is intentionally left blank



a) Contact the local fire department if there is potential for secondary fires resulting from the ignition of spilled liquids or escaping gases.

b) Contact Alberta Health Services (AHS) if the incident has the potential to impact public health (e.g., contaminated drinking water).

c) Contact Occupational Health & Safety and report when: an injury or accident results in death; an injury results in a worker being admitted to a hospital; a potentially serious incident (PSI) where a reasonable and informed person would determine that under slightly different circumstances, there would be a high likelihood for a serious injury to a person; there is an unplanned or uncontrolled explosion, fire or flood that causes a serious injury or that has the potential to cause a serious injury; there is a collapse or upset of a crane derrick or hoist or; there is a collapse or failure of any component of a building or structure necessary for its structural integrity.

- d) Alberta EDGE (Environmental and Dangerous Goods Emergencies) is the first call for all transportation related spills/incidents. If spill is contained on-site, Alberta EDGE will contact the AER. If the spill moves off-site or into a waterbody, Alberta EDGE will contact Alberta Environment and Protected Areas (EPA) and/or Environment & Climate Change Canada (ECCC). Contact Alberta EDGE or the RCMP if an oil & gas emergency affects a highway designated by 1, 2, or 3 digits (e.g., Hwy 2, Hwy 47, Hwy 837). Alberta EDGE and RCMP have the authority to shut down highways.
- e) Contact the Workers' Compensation Board within 72 hours of being notified of an injury/illness that results in or will likely result in: Lost time or the need to temporarily or permanently modify work beyond the date of accident, death or permanent disability, a disabling or potentially disabling condition caused by occupational exposure or activity, the need for medical treatment beyond first aid, or medical aid expenses.
- f) ECCC will be notified by AER as required for incidents involving regulated substances at E2 registered facilities, incidents involving PCBs or any spills on first national Parks, into river or lake systems containing fish, or onto railway right-of-way.
- g) Contact the Canadian Transport Emergency Centre (CANUTEC) when a highway is shut down, there is an injury or fatality, there is lost, stolen or unlawfully interfered with dangerous goods (except Class 9), the incident involves infectious substances, there is an accidental release from a cylinder that has suffered a catastrophic failure, where the shipping documents display CANUTEC's telephone number, where a railway vehicle, ship, aircraft aerodrome or an air cargo facility is involved, when a facility is closed, evacuation/shelter-in-place procedures take place as a result of the transportation of dangerous goods, containment has been damaged and integrity compromised, or the centre/stub sill of a tank car is broken or there is a crack in the metal ≥ 15cm(6"). CANUTEC can also provide guidance on handling procedures for toxic material releases.
- h) Emergency Response Assistance Canada will only respond to incidents that involve the following UN numbers: 1075 (Propane, Butane, etc.) and 1010 (Butadiene); with a tank storage capacity of 450 litres or greater. Advisory assistance will be provided to incidents involving tank storage capacities less than 450 litres.
- i) Contact the Department of Fisheries and Oceans Canada to report an oil spill that occurs in or around fresh and marine waters.
- i) Indian Oil & Gas (IOGC), the First Nation and the provincial authority must be notified immediately in the event of any health or environment-threatening emergency or off-lease spills on First Nation reserve lands. On-lease spills greater than 1m<sup>3</sup> must be reported to IOGC immediately.
- 1 In the event of a fatality, request that the RCMP contact the Medical Examiner. The RCMP must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infections substances.
- <sup>2</sup> Alberta Energy Regulator is designated as the lead agency (single window approach) to implement the Gov't of Alberta Emergency Response Support Plan for a Petroleum Industry Incident.
- 3 Local Authorities include: cities, towns, villages, counties, municipal districts, improvement districts, special areas, Métis settlements, and first nations reserves.
- 4 Request that Alberta Emergency Management Agency identify the affected local authorities and implement Emergency Services. The Emergency Management Field Officer may provide assistance in contacting some or all of the local authorities.
- 5 Contact the Canada Energy Regulator (via the Transportation Safety Board of Canada) for emergencies and near-misses involving CER regulated sites and inter-provincial pipelines.
- 6 Occupational Health and Safety see c) for further details on this agency's role





	Before the Incident	During the Incident	1 -
	□ All departments/agencies should participate in training and exercises for this plan and the Energy Resources Industry Emergency Support Plan (ERIESP).	□ The AER may activate the ERIESP based on the following criteria: □ Level 2 or 3 emergencies (as defined by the AER)	Complete a F involvement ar
non (S	<ul> <li>This plan will be reviewed as required.</li> <li>A join multi-department/agency exercise will be held as required.</li> </ul>	☐ Any level of emergency: ☐ requires coordination of multi-agency response; ☐ requires coordination of information and communication between departments/agencies and/or has significant	<ul> <li>Integrate PIA in</li> <li>All department</li> <li>Participation from</li> </ul>
mr ask		provincial/national media interest. □ Elevations of the POC has been escalated by AEMA. Once the elevations level of the POC has been escalated, provincial-level	the emergency
GC		□ The AER will develop emergency objectives to guide the GoA response and support to duty holders and local authorities. AEMA will assist the AER by providing leadership and strategic policy direction for the GoA as per the Government Emergency Management	to the appropri
		Regulation (AR 248/2007). GoA emergency management assistance will be provided to the local authority as requested and as long as is required by the local authority	
	Confirm and act as lead Government of Alberta (GoA) organization in energy	Receive notification of energy resources industry emergencies.	Conduct the PI
	<ul> <li>Set requirements for planning for, and responding to energy resources industry emergencies.</li> </ul>	<ul> <li>Determine the emergency level of an emergency through consultation with the duty holder.</li> <li>Dispatch AER representative to the site of the emergency, as required.</li> <li>Confirm that local resources have been notified as appropriate.</li> </ul>	As part of the coordination of
$\mathbf{\mathbf{x}}$	<ul> <li>Participate in exercises of this plan.</li> <li>Review and recommend changes to this plan.</li> <li>Mainten 24/2 talaphase contract where concerns recourses inductor emergencies.</li> </ul>	Monitoring discharges and ensuring appropriate mitigation and response actions are taken to reduce the impact of liquid releases for land based spills and to ensure watercourses are protected.	<ul> <li>Review and up</li> <li>Communicate</li> </ul>
erg) ER	a Maintain 24/7 emergency contact numbers where resources can be accessed to	Fire Hazard Orders or requesting NOTAMs.	
En∉ r (A	Carry Out a response to this plan. □ Make this plan available to stakeholders. □ Communicate changes to the plan with stakeholders	Caracteria Control Request a local authority liaison officer to be present at the REOC, if necessary. Caracteria Activate the Energy Resources Industry Emergency Support Plan. Caracteria Advise AEMA to escalate POC activation (if required).	
rta ato	□ Maintain emergency response resources. □ Act as Subject Matter Expert (SME).	Identify and request initial provincial resources to support the emergency response, to be coordinated at the regional level if necessary through a local or regional EOC.	
gul		<ul> <li>Binitiale Consolided Situation Reports to AEMA if requested.</li> <li>Send an AER representative to the emergency location and/or the incident command post.</li> </ul>	
*AI		Establish an EOC at the local AER Field Centre until the duty holder or local authority establishes a REOC. AER ECC will be expanded if a REOC is not established.           Image: Dispatch an AER representative to the REOC when it opens.	
		Request the deployment of other provincial GoA department/agency representative to be present at the REOC, or the local AER Field Centre ECC.	
		□ Notify all participants when the emergency has concluded and there is no longer any hazard to the public.	
	Act as the provincial coordinating agency in energy resources industry emergency responses as per the Emergency Management Act.	Confirm AER has been notified.	<ul> <li>Participate in a</li> <li>Complete docu</li> </ul>
٩A	<ul> <li>Maintain list of 24 hour emergency contact numbers.</li> <li>Maintain 24 hour duty manager system.</li> </ul>	Confirm the level of emergency. Elevate the POC as required.	and the emerge
<b>A En</b>		<ul> <li>Notify the appropriate provincial officials as per standard operating procedures.</li> <li>Release consolidated Situation Reports in accordance with section 3.4.4.</li> <li>Coordinate the Government of Alberta response including requests for provincial/federal resources.</li> </ul>	
*		<ul> <li>Provide ongoing situation reports or briefing notes to appropriate provincial officials in accordance with the AEP or as requested.</li> <li>Notify partners and stakeholders when the event is over.</li> </ul>	
	Work with the operator to effectively prepare for a petroleum industry incident.	Receive notification and work with the licensee/operator.	Complete a "le
	compatible with the Municipal Emergency Plan (MEP), where feasible.	from AER and AEMA. If the local authority, licensees or operators are unable to manage the response, the AER with assistance from AERA will manage the response.	Participate in n
	Dossible. Train personnel to carry out functions as assigned by MEP or procedures. Maintain 24 hour emergency contact numbers.	□ Send a local authority flaison officer to be present at the AER regional EOC if necessary. □ If AEMA is providing support provide regular situation reports. □ Respond to and assess the emergency incident.	
Ņ	Meaningful planning (including confirmation and coordination of roles and responsibilities) between the local authority and the licensee/operator has taken place	<ul> <li>Establish contact with the industrial operator in order to:</li> <li>Obtain additional hazard information.</li> <li>Obtain endpities of blocks should be or are established</li> </ul>	
orit	Details on municipal emergency response capacity and planning are found in the applicable municipal emergency plan.	<ul> <li>Determine the direction of approach to the incident.</li> <li>Determine if there are any injuries.</li> <li>Find out whet response and public protection actions have been taken</li> </ul>	
uth		☐ Identify the location of the On-site Command Post (OSCP) and any Emergency Operations Centres (EOCs). ☐ Activate the MEP, when required.	
al A		<ul> <li>Manage the Local Authority's emergency response.</li> <li>Activate the emergency public warning system to alert people to life threatening hazards, as required.</li> <li>Activate the Municipal EOC (MEOC), as required.</li> </ul>	
000		<ul> <li>Initiate public protection measures, as necessary.</li> <li>May dispatch a representative to the Provincial Operations Centre (POC), when it is established, to coordinate the response, if requested.</li> </ul>	
		<ul> <li>If necessary, declare a local State of Emergency.</li> <li>If the hazard area extends beyond the Emergency Planning Zone (EPZ), the county will coordinate evacuation of the public as well as reception centre establishment and maintenance with the industrial operator.</li> </ul>	
		<ul> <li>When possible, work with all other responders to establish a single Regional EOC (REOC).</li> <li>Establish a public information service, including the use of the news media to inform and instruct the public of the emergency and of</li> </ul>	
		□ Coordinate news releases with the licensee, if required. □ Inform AEMA and the public when the emergency is over.	
	Alberta Health Services (AHS) - Environmental Public Health (EPH) roles and	Provide guidance to stakeholders and local municipal authorities in identifying sites suitable for establishing and operating an	Record and re
	gas industry are outlined below. The provision of services during an emergency depends upon our assessment of legislative responsibilities, impact to services, and	evacuation centre and/or reception centre, including operational requirements. Provide guidance to stakeholders on substances that may affect public health in consultation with the Zone Medical Officer of Health (MOH), including Alberta Health Acute Exposure Health Effects for Hydrogen Sulphide and Sulphur Dioxide information	Tollowing and in Participate in s
IS)	business continuity. Environmental Public Health will endeavor to:	Conduct assessments, inspections and give regulatory direction, when appropriate, to ensure the requirements of provincial legislation and EPH program areas of responsibilities for public health protection and disease prevention are maintained.	
leal (AH	Participate with the licensee in the development of their Emergency Response	Modify the Zone interaction of the and in any incident allecting of potentially affecting other AHS programs of facilities. The Zone MOH will notify and coordinate emergency response in other program areas and facilities as necessary.	
ta F es	Provide the AHS Zone Single-Point-of-Contact (SPOC) emergency phone number	Emergency Operations Centre, Municipal Emergency Operations Centre and/or Industry Emergency Operations Centre, if needed. Assist the Zone Medical Officer of Health, local municipal authority, and Public Information/Communication officers in the development issuance, and rescinding of public health public evacuation, and shelter in-place advisories.	
beri vic	to enable the Licensee to notify and alert the Zone of an emergency. From the initial notification or alert, AHS emergency response will fan out to and coordinate with other AHS programs and facilities as necessary. The 911 EMS services	Provide guidance to stakeholders on matters relating to evacuation, and state in place advisines.	
All Ser	remain independent of the Zone SPOC notification/alert process. □ Participate with stakeholders in preparedness training and exercises associated	LI Record and respond to health complaints or concerns from the public during and following and incident.	
	with a Licensee's simulated activation of an Emergency Response Plan in which Environmental Public Health has a role and responsibility.		
	Response Plan development process when appropriate and as resources allow.		

Note: The roles for the local authority(s) and regional health authority(s) are not outlined in the Energy Resources Industry Emergency Support Plan (ERIESP) Plan and will be coordinated during the public consultation program. \*AER - Alberta Energy Regulator \*AEMA - Alberta Emergency Management Agency \*AHS - Alberta Health Services

## After the Incident

Post Incident Assessment (PIA) based on the scope of their and the outcome. into internal response processes. nts/agencies will participate in a joint PIA to be coordinated by AER. from each department/agency will be determined by the response to

rised by other regulatory authorities must be completed and delivered riate regulatory body within the time lines they prescribe.

<sup>1</sup>A related to the response, as described by the ERIESP. e PIA, recommend any mitigation actions that may improve the f the GoA response, as described by the ERIESP. esses to receive and address community concerns. pdate the ERIESP, in consultation with AEMA. any changes to the ERIESP to applicable stakeholders.

all PIAs related the ERIESP. cumentation or reporting in relation to the activation of the ERIESP gency for all GoA-wide PIAs.

essons learned" process based on the scope of involvement and edback to the industrial operator. multi-agency debriefings.

espond to health complaints or concerns from the public during and incident. stakeholder debriefings as necessary.





### **Before the Incident**

The first level of emergency response is provided by fire and/or police services and may involve the activation of the Emergency Operations Centre (EOC). Other first responders, such as the RCMP and Emergency Medical Services, or EMS, have a provincial mandate but with a local presence through detachments or stations. These agencies are usually accessed through 911 and have internal dispatch arrangements.

# Services

- G First responders work at the site level of an event and include police, fire and ambulance. Activities of first responders include medical response, firefighting and managing crowds or evacuation zones
- U When a local authority EOC is activated, police and fire first responder agencies provide situational awareness to the local authority and submit requests for 5
- support to the local authority EOC gen First response services provided by a fire department are determined by the local authority responsible, and may include hazardous material incident response, road
- rescue, and medical rescue P
- Emergency Medical Services, or EMS, operates under the authority of the Alberta
- Health Services. No matter where an emergency happens in Alberta, AHS EMS can transport patients by either a ground ambulance or air ambulance – fixed wing
- Ш airplane or helicopter.
- ш AHS EMS staff actively participates in emergency planning, mock emergency exercises and other joint training initiatives to ensure emergency preparedness and response resources are identified and deployed quickly and effectively when
  - they are needed most
  - Maintain readiness status for emergency notification
  - D Participate in industrial operators' exercises where possible
  - Maintain 24 hour emergency contact numbers

## **During the Incident**

- RCMP
  - CMP or local police would also become involved if there are fatalities, as they are required to participate in the investigations. This could be through the medical examiner.
- D Maintain law and order and assist the operator with local security but would require discussion with the local police at the time. The Office of the Fire Commissioner (OFC) has a working relationship with the RCMP and the RCMP may conduct selected duties of the Fire Commissioner where the fire's impact is not significant.
- Assist with traffic control, crowd control, evacuation, and residence security.
- Typically would not be involved in setting up or maintaining roadblocks unless the emergencies impacted or required the closure of 1, 2 and 3 digit Provincial or Secondary highways.
- Establish and maintain communications with industrial operator.
- Dispatch a representative to the off-site Regional Emergency Operations Centre, when established, to coordinate the response.
- Coordinate with the industrial operator both the establishment and the administration of reception centres for evacuees.
- □ Maintain a 24 hour emergency contact number where resources can be accessed for a response related to Emergency Response Plans.

#### Fire

- □ Respond to and assess emergency incident to the scope of their abilities.
- Establish a unified OSCP / ICP (On-site Command Post / Incident Command Post).
- Communicate to MEOC and provide site reps as required.
- Assist with fire protection where trained personnel are available.
- D Provide emergency medical assistance, as required.
- Coordinate news releases with the licensee. if required.

#### FMS

- C Respond to and assess emergency incident to the scope of their abilities.
- The Alberta Health Services provides and coordinates ambulance services within Alberta, including triage, treatment, transportation and care of casualties
- D Provide emergency medical assistance, as required. Emergency Medical Technicians (EMT) or Emergency Medical Responders (EMR) provide basic patient assessment and treatment including obtaining vital signs, administering oxygen and splinting extremities. ALS ambulances have at least one paramedic with expanded training, scope of practice, and can provide advanced treatment in airway management and medication administration.

Alberta

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## After the Incident

Complete a "lessons learned" process based on the scope of involvement and provide any feedback to the industrial operator. Participate in multi-agency debriefings.





Type of Agency	Agency Name	Provided Specific Roles	Agreed to Generic Roles	Unable to Contact	Willing to consider a single REOC	Evacuation outside of the EPZ	Location of EOC	Suggested Reception Centres	Notes
Local Authority	Clear Hills County	$\checkmark$			Yes, where possible	Unable to coordinate or assist	N/A	N/A	
Local Authority	MD of Greenview	$\checkmark$			Yes, where possible	Unable to coordinate or assist	N/A	N/A	
Health Authority	Alberta Health Services – Zone 5	$\checkmark$			Yes, where possible	Requires assistance	Virtual	N/A	

# H2Safety

## CLEAR HILLS COUNTY ROLES

**Clear Hills County** must be contacted at a Level **1** Emergency if any members of the public are notified or road blocks are established on any County road(s) or numbered provincial highways. Clear Hills County must be contacted automatically at a Level **2** or **3** Emergency.

**Please note:** Clear Hills County will dispatch a representative to liaison with the Incident Commander/ Operations Chief at the Incident Command Post.

### Responsibilities

- Initiates and manages the local disaster services response in accordance with County Policy.
- May dispatch representative(s) to the Government's Off-Site Emergency Operations Centre.
- Ensures all local emergency and public information services are available in accordance with County Policy. (Public Information Releases will be coordinated with the Companies Public Information Officer)
- If required, activates Municipal Emergency Operations Centre (MEOC) and coordinates activities at this centre. The MEOC is available to the Company for use as a REOC subject to limitations as may be imposed by Clear Hills County due to current operational requirements at the time.
- Upon request, may assist with set-up and administration of Reception Centre.
- May assist with arrangement of temporary accommodations for residents who have been evacuated in accordance with County Policy.
- May assist with set up and maintenance of road blocks in accordance with County Policy.
- May assist with Fire Protection in accordance with County Policy in areas where accessible.
- If necessary, may declare a local state of emergency to provide local authorities with special powers.
- Supports the Company in dealing with the emergency in accordance with County Policy.

#### Resources

There is 1 County Fire Department, located at Worsley and 3 Fire Departments on contract from Hines Creek, Fairview and Berwyn for the Hines Creek and east area, each with approximately 20 volunteer firefighters.

**Please note:** The Fire Departments are not equipped for Industrial Fire Protection and would be responsible for anything off-site or outside the Emergency Perimeter Zone (EPZ). Some Fire Department resources may be useful for on-site actions such as Water Tanker Trucks, Portable Tanks, etc. and may be made available if requested. Certain areas of Clear Hills County have limited access or are extremely remote from any Fire Station.

Alberta Sustainable Resource Development - Peace Wildfire Management Area is responsible for Wildland Fire Protection in these areas. The County has no Special Constables. All policing duties are covered by the RCMP - Fairview Detachment. The Public Works Department employs about 6 personnel, which expands to 20 employees during the summer.

Emergency Medical Services are under Alberta Health, dial 911.

P 403.212.2332 | F 403.313.9180 | E <u>info@h2safety.ca</u> 210, 7260 12 St. SE | Calgary, AB, T2H 2S5

#### h<sub>2</sub>safety.ca



## LOCAL AUTHORITY - M.D. OF GREENVIEW

Resources would be provided in support of an upstream emergency on an "as available" basis and in accordance with Local Authority Policy.

### Before the Event

- □ Work with the upstream operator to effectively prepare for an upstream petroleum industry incident. Provide input to the industrial operator's site-specific plan to ensure it is compatible with the Municipal Emergency Plan (MEP) where feasible.
- Participate in industrial operators' preparatory training and exercises where possible.
- □ Train personnel to carry out functions as assigned by MEP or procedures.
- □ Maintain 24-hour emergency contact numbers.

### Upon the Notification of and during an Event

- □ Establish contact with the industrial operator in order to (the following roles/responsibilities are entirely contingent upon the communication of accurate and timely information from the industrial operator to the MD of Greenview):
  - Obtain additional hazard information.
  - Determine where roadblocks should be or are established.
  - Determine the direction of approach to the incident.
  - Determine if there are any injuries.
  - □ Find out what response and public protection actions have been taken by the upstream operation.
  - □ The location of the On-site Command Post (OSCP) and any Emergency Operations Centres (EOCs).
- Activate the MEP, when required.
- □ Manage the Local Authority's emergency response.
- Activate the Municipal EOC (MEOC), as required.
- □ Initiate public protection measures, as necessary.
- □ If necessary, declare a State of Local Emergency.
- □ When possible work with all other responders to establish a single Regional EOC (REOC).
- □ Establish a public information service *on behalf of the MD of Greenview*, including the use of the news media to inform and instruct the public of the emergency and of any protective actions to be taken.
- Provide timely news releases on behalf of the MD of Greenview, if required.
- □ If a State of Local Emergency has been declared, inform AEMA and the public when the emergency is over.

#### After the Event

□ Participate in multi-agency debriefings.

# H2Safety

## Emergency Services (as managed / operated by the Local Authority)

Emergency Services will also, as a general rule, provide resources in support of a petroleum incident, on an "as available" basis.

## **Before the Event**

- □ Maintain readiness status for emergency notification.
- □ Participate in industrial operators' exercises where possible.
- □ Maintain 24-hour emergency contact numbers.

## **During the Event**

- Respond to and assess emergency incident to the scope of their abilities.
- Establish a unified OSCP / ICP (On-site Command Post / Incident Command Post).
- □ As available technology allows, communicate to MEOC and provide site reps as required.
- □ Assist with fire protection where trained personnel are available.
- □ Provide emergency medical assistance, as required, understanding that Alberta Health Services is primarily responsible for ground ambulances in the Peace Country Health region.
- Provide timely news releases with respect to the MD of Greenview, if required.

## After the Event

□ Participate in multi-agency debriefings.

h2safety.ca

Alberta Health Services (AHS) - Environmental Public Health (EPH) roles and responsibilities in public health emergency preparedness and response to the oil and gas industry are outlined below. The provision of services during an emergency depends upon our assessment of legislative responsibilities, impact to services, and business continuity.

## EPH will endeavor to:

- Participate with the Licensee in the development of their Emergency Response Plans as it relates to the Environmental Public Health Program's role and responsibility.
- Provide the AHS Zone Single-Point-of-Contact (SPOC) emergency phone number to enable the Licensee to notify and alert the Zone of an emergency. From the initial notification or alert, AHS emergency response will fan out to and coordinate with other AHS programs and facilities as necessary. The 911 EMS services remain independent of the Zone SPOC notification/alert process.
- Participate with stakeholders in preparedness training and exercises associated with a Licensee's simulated activation of an Emergency Response Plan in which EPH has a role and responsibility.
- Participate in public information sessions during the Licensee's Emergency Response Plan development process when appropriate and as resources allow.
- Provide guidance to stakeholders and local municipal authorities in identifying sites suitable for establishing and operating an evacuation centre and/or reception centre, including operational requirements.
- Provide guidance to stakeholders on substances that may affect public health in consultation with the Zone Medical Officer of Health (MOH), including Alberta Health Acute Exposure Health Effects for Hydrogen Sulphide and Sulphur Dioxide information.
- Conduct assessments, inspections and give regulatory direction, when appropriate, to ensure the requirements of provincial legislation and EPH program areas of responsibilities for public health protection and disease prevention are maintained.

Notify the Zone Medical Officer of Health of any incident affecting or potentially affecting other AHS programs or facilities. The Zone MOH will notify and coordinate emergency response in other program areas and facilities as necessary.





## Oil and Gas Industry Emergency Preparedness and Response | 2

- Establish EPH emergency management operations, when appropriate, to support regional response efforts and liaise with the Government Emergency Operations Centre, Municipal Emergency Operations Centre and/or Industry Emergency Operations Centre, if needed.
- Assist the Zone Medical Officer of Health, local municipal authority, and Public Information/Communication officers in the development, issuance, and rescinding of public health, public evacuation and shelter-in-place advisories.
- Provide guidance to stakeholders on matters relating to evacuation of the public and/or public facilities, and the re-occupancy of those evacuated areas or facilities.
- Record and respond to health complaints or concerns from the public during and following an incident.
- Participate in stakeholder debriefings as necessary.

## 24 Hour Emergency Notification

Phone: 1-844-755-1788

Email: edp@ahs.ca

Use the phone number and email for all notifications across Alberta.

Contact us at 1-833-476-4743 or submit a request online at ahs.ca/eph.

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Common Tasks	<ul> <li>Before the Incident</li> <li>All departments/agencies should participate in training and exercises for this plan and the Energy Resources Industry Emergency Support Plan (ERIESP).</li> <li>This plan will be reviewed as required.</li> <li>This plan will be reviewed as required.</li> <li>A join multi-department/agency exercise will be held as required.</li> </ul>	During the Incident The AER may activate the ERIESP based on the following criteria: Level 2 or 3 emergencies (as defined by the AER) Any level of emergency: requires coordination of multi-agency response; requires coordination of information and communication between departments/agencies and/or has significant provincial/national media interest. Elevations of the POC will be escalated by AEMA. Once the elevations level of the POC has been escalated, provincial-level emergency control will be coordinated by AEMA under the leadership of the lead agency. The AER will develop emergency objectives to guide the GoA response and support to duty holders and local authorities. AEMA will assist the AER by providing leadership and strategic policy direction for the GoA as per the Government Emergency Management Regulation (AR 248/2007). GoA emergency management assistance will be provided to the local authority as requested and as long as is required by the local authority.	Complete a involvement Integrate PI/ All departme AER. Partici response to Reports req delivered to prescribe.
SHO*	<ul> <li>Maintain and provide resources to support 24\7 employer reporting of incidents to OHS.</li> <li>Maintain capacity for OHS attendance to a work site when warranted.</li> <li>Maintain a formal Incident Management Program is in place to ensure compliance to OHS requirement to reporting, investigation, risk management, and monitoring.</li> </ul>	<ul> <li>Ensure appropriate response and management of the scene is conducted:         <ul> <li>Ensure appropriate medical response is initiated and emergency response is contacted.</li> <li>Ensure safety of those on-site.</li> <li>Ensure security and integrity of the incident site is maintained.</li> </ul> </li> <li>Inspect the work activities and processes to ensure legislative standards are being met by all work site parties. (Attendance to be determined by Occupational Health and Safety management.)</li> <li>Ensure the appropriate provincial/territorial agencies are notified, where required.</li> </ul>	<ul> <li>Ensure work entry by wor</li> <li>Investigate t</li> <li>current Alber</li> <li>Ensure inte corrective a incidents.</li> <li>Ensure outco</li> <li>Ensure heal defined by C</li> </ul>
*AAI	<ul> <li>Act as subject matter expert (SME) relating to agriculture and livestock impacts.</li> <li>Act as the liaison between farming/ranching community and the Government of Alberta (GoA).</li> <li>Maintain emergency response resources.</li> </ul>	<ul> <li>Act as SME relating to agriculture and livestock impacts.</li> <li>Act as the liaison between farming/ranching community and GoA during energy resources industry emergencies.</li> <li>Provide information relating to agricultural and livestock impacts to the GoA during energy resources industry emergencies.</li> </ul>	□ Conduct agr
*АҒРТ	<ul> <li>Maintain 24/7 contact numbers and duty officer where resources can be accessed for emergency response.</li> <li>Maintain emergency response resources.</li> <li>Act as subject matter expert (SME).</li> </ul>	<ul> <li>Notify forestry staff in the area of the emergency.</li> <li>Forest Areas Wildfire Coordination Centres will notify duty holder if energy resources industry infrastructure is threatened by wildfire, where practical and in order of priority. Priority contact will be through the contact information indicated in the company's Industrial Wildfire Control Plan for the identified locations. Can fight wildfires started as the result of the energy resources industry product release.</li> <li>Alberta Wildfire is responsible for managing all wildfires within the Forest Protection Area. Will suppress wildfires caused from industry operations when industry has appropriately shut-in the operation and notified Alberta wildfire to ensure the safety of first responders.</li> </ul>	Conduct fore
*ATEC	<ul> <li>Maintain a 24/7 call centre (EDGE - Environmental and Dangerous Goods Emergencies) to receive emergency calls related to the transportation and handling of dangerous goods as well as environmental spills/releases/ incidents, and AER emergency notifications.</li> <li>Act as SME for dangerous goods incidents.</li> </ul>	<ul> <li>Handle inter-departmental communication as needed during energy resources industry emergencies.</li> <li>Maintain ability to process calls for new emergencies.</li> <li>Provide information on the impacts to transportation routes.</li> <li>Provide response support if dangerous goods are released.</li> </ul>	Provide a su applicable)
*CPE	<ul> <li>Maintain a team of trained Communications and Public Engagement personnel.</li> <li>Activate crisis communications plan and crisis communications response.</li> </ul>	Confirm distribution of AER messaging. Provide support as required.	<ul> <li>Participate ir</li> <li>Coordinate k</li> </ul>
Alberta Justice	<ul> <li>Maintain the list of Critical Infrastructure and key assets in the Province of Alberta.</li> <li>Maintain and regularly test the Emergency Notification System.</li> <li>Maintain awareness of threats, vulnerabilities, and risks related to human induced intentional hazards.</li> </ul>	<ul> <li>Provide intelligence and threat risk assessments when appropriate and when requested, in relation to critical infrastructure and key assets.</li> <li>Communicate with owners and operators of critical infrastructure and key assets, through normal communication channels, or if necessary through the Emergency Notification System maintained by ASSIST.</li> </ul>	<ul> <li>Participate ir</li> <li>Communical assets, throu</li> <li>Emergency</li> </ul>

\*OHS - Occupational Health & Safety \*AAI - Alberta Agriculture & Irrigation \*AFPT – Alberta Forestry, Parks and Tourism

After the Incident	
a Post Incident Assessment (PIA) based on the scope of their int and the outcome. PIA into internal response processes. ments/agencies will participate in a joint PIA to be coordinated by ticipation from each department/agency will be determined by the to the emergency. equired by other regulatory authorities must be completed and to the appropriate regulatory body within the time lines they	
ork site parties have implemented appropriate controls prior to re- vorkers. e the incident if the incident is a reportable incident in line with berta OHS Legislation. nternal investigation has been conducted and that identified actions have been minimized to reduce recurrence of similar utcomes and corrective actions are communicated to workers. ealth and safety committee or health and safety representative as y OHS legislation has been involved in internal investigations.	S
agriculture and livestock impact assessments. t response activities as required.	ncy Role
orest impact assessment. (if applicable)	g Age
summary of transportation impacts during the PIA process. (if e)	ortinę
e key messaging with the AER.	

in all PIAs related to the ERIESP. cate with owners and operators of critical infrastructure and key ough normal communication channels, or if necessary through the y Notification System maintained by ASSIST.





*EPA	Before the Incident         Maintain 24 hour emergency contact numbers and duty officer where resources can be accessed for a response related to this plan.         Maintain emergency response resources.         Maintain a specialty air monitoring team and equipment used to oversee and verify air monitoring during incident response.         Act as SME.         Prepare to act as lead agency when appropriate.	During the Incident         Ensure that non-energy industry resources environmental impacts are mitigated.         Provide expertise to mitigate the impacts of non-energy resources industry liquid releases on land and into watercourses.         Provide technical assistance related to emergency drinking water supply engineering.         Notify Fish and Wildlife staff in the area of the emergency.
*WCB	<ul> <li>The Workers' Compensation Board is a statutory corporation created by government under the Workers' Compensation Act to administer a system of workplace insurance for the workers and employers of the province of Alberta.</li> <li>WCB has the overall responsibility for the administration of the workers' compensation system in Alberta.</li> <li>Be a neutral and autonomous administrator of the worker's compensation system.</li> <li>Strive to balance the interests of workers and employers.</li> <li>Delivery of workers' compensation services to the workers and employers of Alberta.</li> <li>Make decisions based on evidence, law and policy and fair, impartial and transparent processes.</li> <li>Encourage safer workplaces and promote disability management.</li> </ul>	<ul> <li>Employer must report to WCB within 72 hours of being notified of an injury/illness that results in or will likely result in:         <ul> <li>Lost time or the need to temporarily or permanently modify work beyond the date of accident</li> <li>Death or permanent disability (amputation, hearing loss, etc.)</li> <li>A disabling or potentially disabling condition caused by occupational exposure or activity (poisoning, infection, respiratory disease, dermatitis, etc.)</li> <li>The need for medical treatment beyond first aid (assessment by a physician or chiropractor, physiotherapy, etc.)</li> <li>Medical aid expenses (dental treatment, eyeglass repair/replacement, prescription medications, etc.)</li> </ul> </li> <li>Note: Immediately report fatalities and serious injuries to the OHS Contact Centre 1-866-415-8690.</li> <li>Determines whether the injury or illness is caused by work.</li> <li>Responds to all client inquiries forwarded by the Minister and all other elected officials.</li> </ul>
*ABSA	<ul> <li>Review, accept and register pressure equipment designs and construction procedures that relate to pressure equipment.</li> <li>Issue certificate of inspection permits for pressure equipment before the equipment is placed into service.</li> <li>Ensure that regular inspections of in-service pressure equipment are conducted.</li> <li>Keep records for pressure equipment that has been registered for use, or manufactured, in Alberta.</li> <li>Examine, certify and register Pressure Welders and Welding Examiners, Power Engineers, and Pressure Equipment Inspectors.</li> <li>Authorize and monitor, through quality management systems, organizations that have been permitted to conduct some of the activities subject to the regulations.</li> <li>Conduct safety education and training.</li> </ul>	Receive notification of an incident. As required under the Pressure Equipment Safety Regulation Section 35, the accident scene must not be disturbed (except when it is absolutely necessary to prevent death or injury, or to prevent further property damage) unless approval to do so has been given by an ABSA Safety Codes Officer.

## After the Incident

mpile and maintain environment/emergency related records onitor environmental recovery, when required.

compensates injured workers for lost income, health care and other costs elated to a work-related injury. afely restores injured workers through return-to-work services to a level of ompetitive employability. ake reasonable measures to maintain a reasonable quality of life for severely jured workers through the provision of services allowed by legislation and plicy.

restigate accidents or unsafe conditions that involve pressure equipment.

se all or part of the accident site for 48 hours (or longer if authorized by a

stice) bhibit any person from entering the site for safety reasons or to preserve rohibit any person from entering the site for safet vidence e accompanied by any person for assistance spect and photograph any thing equire any person to make full disclosure equire closure or disconnection of any thing equire to be performed any tests or evaluations emove evidence equire production of documents



	Before the Incident	During the Incident	
*ECCC	<ul> <li>Environment &amp; Climate Change Canada's Environmental Emergencies Program (EEP) protects Canadians and their environment from the effects of environmental emergencies through provision of <u>science-based expert advice</u> and <u>regulations</u>.</li> <li>The key Acts and Regulations that govern ECCC's role in environmental emergencies that allow it to deliver its mandate are: <ul> <li>Canadian Environmental Protection Act, 1999</li> <li>Fisheries Act—Pollution Prevention Provisions;</li> <li>Migratory Birds Convention Act, 1994;</li> <li>Statutory Notification Requirements—EC's Environmental Notification System.</li> <li>Environmental Emergencies Regulations.</li> </ul> </li> </ul>	<ul> <li>During an environmental emergency, <i>The National Environmental Emergencies Centre (NEEC)</i> is the focal point for ECCC.</li> <li>ECCC's services during an environmental emergency: <ul> <li>Collaborate with federal, provincial, territorial and international environmental protection agencies to enable rapid sharing of information.</li> <li>Convene and chair a Science Table of experts and stakeholders to develop consensus based advice to the Lead Agency.</li> <li>Identify environmentally sensitive areas and priorities (sensitivity and resource at risk mapping).</li> <li>Advise on mitigation and cleanup measures.</li> <li>Provide support and guidance in the assessment of oiled shorelines to prioritize their protection and cleanup (Shoreline Cleanup Assessment Technique (SCAT)).</li> <li>Advice on the fate and behavior of the spilled product.</li> <li>Advice on sampling and laboratory analysis.</li> <li>Provide weather forecasting and spill dispersion modelling to identify where these substances are likely to move in the environment.</li> <li>Provide expertise on the migratory bird resources and species at risk, including on-site assessment and determination of wildlife impact.</li> </ul> </li> </ul>	<ul> <li>□ ECCC can co</li> <li>□ Provide speci</li> <li>□ Provide Advis</li> </ul>
*DFO	<ul> <li>The Canadian Coast Guard is the lead federal agency for ensuring appropriate response to all ship-source and unknown mystery spills in Canadian waters and waters under international agreements.</li> <li>Establishes appropriate and nationally consistent level of preparedness and response services in Canadian waters.</li> <li>Design and develop related regulations, policies, strategies and tools.</li> <li>Review, assess and monitor activities associated with fish habitat to ensure their compliance with the Fisheries Act and Species at Risk Act.</li> <li>Conduct environmental assessments under the Canadian Environmental Assessment Act.</li> <li>Design, develop and implement communication and education strategies.</li> </ul>	<ul> <li>Any amount of hydrocarbons entering a waterway frequented by fish or occupied by waterfowl is deemed to be in contravention of the Federal Fisheries Act and must be reported to the Department of Fisheries and Oceans.</li> <li>Work together with provincial environment protection agencies and may be initially notified by ECCC.</li> <li>May send personnel to the site if there has been or could potentially be an impact to fish or fish habitat.</li> <li>Monitors and investigates all reports of marine pollution in Canada in conjunction with other federal departments.</li> <li>Maintains communications with the program's partners, including Transport Canada and ECCC, to ensure a consistent coordinated approach to marine pollution incident response.</li> <li>Aids in search and rescue operations.</li> </ul>	Uwork closely environmenta
NAV Canada	NAV Canada is a private company who coordinates the safe and efficient movement of aircraft in Canadian domestic airspace and international airspace assigned to Canadian control. Flight Information Centre (FIC) – FIC Services Each Flight Information Centre is responsible for providing its particular service area with the following services, which pilots rely upon for safe flight planning and operations:	<ul> <li>As requested by the oil and gas company, the Flight Information Centre will issue a NOTAM (Notice to Airmen).</li> <li>To close air space beyond an airport (e.g. above a sour gas release), Refer to Transport Canada on back side of this page.</li> </ul>	□ Rescind the N
Health Canada	<ul> <li>Sets national standards to keep the environment healthy, keep water and air pollution low and Canadians safe.</li> <li>Maintains a nationwide network of radiation monitoring stations and can act if levels spike.</li> <li>Under Chemicals Management Plan, assess health risks from chemicals used in manufacturing and agriculture and require users to prove they actually need the chemicals to make their products</li> <li>Sets strict rules on how chemicals are used in order to limit human exposure.</li> <li>Preparedness exercises are designed to test how well the plans and procedures work during simulated emergency situations. Such exercises help the government identify strengths as well as any problems or inadequacies in preparedness plans and procedures so that these can be addressed before, not after, an actual emergency.</li> </ul>	During a health emergency or disaster, Health Canada and the Public Health Agency of Canada are responsible for supporting emergency health and social services in the provinces and territories.	Work collabo Canadian hea future.
Public Health Agency of Canada	<ul> <li>The Centre for Emergency Preparedness and Response (CEPR) is responsible for:</li> <li>Developing and maintaining national emergency response plans for the Public Health Agency of Canada and Health Canada.</li> <li>Assessing public health risks during emergencies.</li> <li>Contribution to keeping Canada's health and emergency policies in line by collaborating with other federal and international health and security agencies.</li> <li>The health authority in the Government of Canada on bioterrorism, emergency health services and emergency response.</li> <li>Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning.</li> <li>Manages emergency preparedness and emergency response plans and keeps them up to date.</li> <li>Develops and runs exercises to train emergency workers.</li> <li>Develops and delivers training courses that teach health workers how to respond to emergencies.</li> </ul>	<ul> <li>In an emergency situation, the Office of Emergency Response Services (OERS) is responsible for supporting emergency health and social services in the provinces, territories or abroad. It manages the National Emergency Stockpile System (NESS), which includes medical, pharmaceutical and related emergency supplies. The Office is responsible for the federal response to emergencies that have health repercussions; this includes the deployment of health emergency response teams (HERT).</li> <li>If a public health emergency grows beyond one province and/or territory, the Public Health Agency of Canada usually gets involved.</li> </ul>	U Work with He

## After the Incident

onduct post-emergency assessments. ialized advice in shoreline clean-up assessment techniques (SCAT). se on mitigation and cleanup measures..

with ECCC, The Canadian Coast Guard and other provincial l agencies.

NOTAM.

pratively with the provinces and territories to test ways in which the alth care system can be improved and ensure its sustainability for the

ealth Canada to test ways in which the Canadian health care system oved and ensure its sustainability for the future.





Before the incident	During the Incident
<ul> <li>Maintain a 24 hour emergency telephone service.</li> <li>*CANUTEC</li> <li>Regulate the handling, offering for transport and the transport of dangerous goods by all modes in order to ensure public safety.</li> <li>Federal regulations require that CANUTEC be contacted in the event of an incident or accident involving dangerous goods and infections substances.</li> <li>Maintains records of over 3 million Safety Data Sheets (SDS).</li> <li>Aviation Operations Centre (AVOPS)</li> <li>Federal regulations require that AVOPS be contacted if there is imminent and immediate threat to aviation and public safety.</li> </ul>	<ul> <li>*CANUTEC</li> <li>Assist emergency response personnel in handling dangerous good emergencies including advice on</li> <li>Chemical, physical and toxicological properties and incompatibilities of the dangerous goods</li> <li>Health hazards and first aid</li> <li>Fire, explosion, spill or leak hazards</li> <li>Remedial actions for the protection of life, property and the environment</li> <li>Evacuation distances</li> <li>Personal protective clothing and decontamination</li> <li>CANUTEC staff does not go to the site of an incident, however, should on-site assistance be required, CANUTEC can assist i activation or industry emergency response plans.</li> <li>Provide communication links with the appropriate industry, government or medical specialists.</li> </ul> Aviation Operations Centre (AVOPS) <ul> <li>To close air space beyond an airport in a defined area (e.g. above a sour gas release), AVOPS can be contacted by the oil and company.</li> </ul>
<ul> <li>Public Safety Canada works with provincial and territorial officials to ensure first responders and emergency management personnel are well-prepared through education, support and exercises.</li> <li>Responsible for promoting and coordinating the preparation of departmental emergency management plans as well as coordinating the government's response to an emergency through the Government Operations Centre (GOC).</li> </ul>	<ul> <li>Public Safety Canada houses the Government Operations Centre at the hub of the national emergency management system. I advanced centre for monitoring and coordinating the federal response to an emergency.</li> </ul>
*Canada Energy The CER's top priority in any emergency is to make sure that people are safe and so attend the site to oversee a company's immediate response. The CER will require that the regulated company conducts adequate and appropriate clean-up and remediation of	gy Regulator Roles & Responsibilities ecure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may t all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that of any environmental effects caused by the incident.
<ul> <li>*Canada Energy</li> <li>The CER's top priority in any emergency is to make sure that people are safe and so attend the site to oversee a company's immediate response. The CER will require that the regulated company conducts adequate and appropriate clean-up and remediation of As lead regulatory agency, the CER:</li> <li>Monitors, observes and assesses the overall effectiveness of the company's emergency management</li> <li>Safety</li> </ul>	gy Regulator Roles & Responsibilities         ecure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may tall reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that that gove and air mention of any environmental effects caused by the incident.         gency response in terms of: <ul> <li>ide</li> <li>max</li> <li>rep</li> </ul>
<ul> <li>*Canada Energy</li> <li>The CER's top priority in any emergency is to make sure that people are safe and so attend the site to oversee a company's immediate response. The CER will require that the regulated company conducts adequate and appropriate clean-up and remediation of As lead regulatory agency, the CER:</li> <li>Monitors, observes and assesses the overall effectiveness of the company's emergency Management</li> <li>Safety</li> <li>Security</li> <li>Environment</li> <li>Integrity of operations and facilities; and</li> <li>Energy Supply.</li> </ul>	gy Regulator Roles & Responsibilities         ecure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may tall reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that that gove and air magency response in terms of:         gency response in terms of:
<ul> <li>*Canada Energy</li> <li>The CER's top priority in any emergency is to make sure that people are safe and so attend the site to oversee a company's immediate response. The CER will require that the regulated company conducts adequate and appropriate clean-up and remediation of As lead regulatory agency, the CER:</li> <li>Monitors, observes and assesses the overall effectiveness of the company's emergency Management</li> <li>Safety</li> <li>Security</li> <li>Environment</li> <li>Integrity of operations and facilities; and</li> <li>Energy Supply.</li> <li>Investigates the event, either in cooperation with the Transportation Safety Board of Act (whichever is applicable)</li> <li>Inspects the pipeline or facility</li> <li>Examines the integrity of the pipeline or facility</li> <li>Requires appropriate repair methods are being used</li> <li>Appropriate environmental remediation of contaminated areas is conducted</li> </ul>	gy Regulator Roles & Responsibilities         ecure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may t all reasonable actions are taken to protect employees, the public and the environment. Further, the CER will verify that of any environmental effects caused by the incident.         gency response in terms of: <ul> <li>ide</li> <li>ma</li> <li>rep</li> <li>As part of identifies</li> <li>reduce in</li> </ul> of Canada, under the Canada Labour Code, or as per the Canada Energy Regulator Act or Canada Oil & Gas Operations              Gas Operations in accidents independ Parliame
*Canada Energy     The CER's top priority in any emergency is to make sure that people are safe and so     attend the site to oversee a company's immediate response. The CER will require tha     the regulated company conducts adequate and appropriate clean-up and remediation of     As lead regulatory agency, the CER:     Monitors, observes and assesses the overall effectiveness of the company's emerge     Emergency Management     Safety     Security     Environment     Integrity of operations and facilities; and     Energy Supply.     Investigates the event, either in cooperation with the Transportation Safety Board of     Act (whichever is applicable)     Inspects the pipeline or facility     Requires appropriate repair methods are being used     Appropriate environmental remediation of contaminated areas is conducted     Coordinate stakeholder and Aboriginal community feedback regarding environment     Confirms that a company is following its Emergency Procedures Manual (s), comm     Initiates enforcement actions as required     Approves the restart of the pipeline.	gy Regulator Roles & Responsibilities         ecure, and that property and the environment are protected. Any time there is a serious incident, CER inspectors may that government al effects caused by the incident.         of any environmental effects caused by the incident.         gency response in terms of:         of Canada, under the Canada Labour Code, or as per the Canada Energy Regulator Act or Canada Oil & Gas Operations         atal clean-up and remediation         nitments, plans, procedures, and CER regulations and identifies non-compliances

Since the Government of Canada's renewed commitment to a stronger relationship with Indigenous peoples in Canada, measures were initiated to effect a shift in the way the Government delivers services to Indigenous peoples. This included the creation of two new departments, which was announced on December 4, 2017. The two newly created departments, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Indigenous Services Canada (ISC), are intended to improve the delivery of services while accelerating movement towards self-government and self-determination of Indigenous peoples.

As part of the departmental transition, both the former Regional Operations (RO) part of Indigenous and Northern Affairs Canada (INAC) and all of First Nations and Inuit Health Branch (FNIHB) of Health Canada have been absorbed into the newly created Indigenous Services Canada (ISC). RO and FNIHB work closely and collaborate towards the provision of emergency preparedness and response activities to First Nations communities in Canada

In regards to First Nations emergency management, the role of RO is to liaise, communicate, cooperate, coordinate and collaborate with First Nations and public, private, and non-government sector partners in support of on reserve emergency management service delivery. ISC-RO supports First Nations in the four pillars of emergency management through service agreements with partners such as provincial emergency management agencies and the Red Cross.

FNIHB carries out the public health preparedness and response activities related to natural and man-made disasters. This includes Communicable Disease Control and Environmental Public Health Services. In addition, FNIHB administers Non-Insured Health Benefits to First Nations clients, which includes extended coverage for medical transportation, pharma-care, medical devices and mental health supports. During an emergency, FNIHB works with First Nations leadership and health service providers to ensure health needs of First Nations communities are met.

Provincial specific FNIHB roles & responsibilities will be found in this section of the ERP, if applicable or as appropriate

## After the Incident

#### ANUTEC

Maintain voice communication and written information records for two years for the protection of all parties.

viation Operations Centre (AVOPS) Rescind the NOTAM and re-open air space that was closed due to emergency.

In the event of a large-scale natural disaster where response and recovery costs exceed what individual provinces and territories could reasonably be expected to bear on their own, PS provides financial assistance to the provincial and territorial governments through the Disaster Financial Assistance Arrangements (DFAA). Assistance is paid to the province or territory - not directly to individuals or communities. The provincial or territorial governments design, develop and deliver disaster financial assistance, determining the amounts and types of assistance that will be provided to those who have experienced losses.

## \*Transportation Safety Board Mandate

prtation Accident Investigation and Safety Board Act provides the legal framework ities. Our mandate is to advance transportation safety in the marine, pipeline, rail portation by:

bendent investigations, including public inquiries when necessary, into selected currences in order to make findings as to their causes and contributing factors; deficiencies, as evidenced by transportation occurrences

ndations designed to eliminate or reduce any such safety deficiencies; and on our investigations and on the findings in relation thereto.

investigations, the TSB also reviews developments in transportation safety, and hat they believe the government and the transportation industry should address to

the public regarding the transportation accident investigation process, it is essential gency be independent and free from any conflicts of interest when investigating afety deficiencies, and making safety recommendations. As such, the TSB is an separate from other government agencies and departments, that reports to President of the Queen's Privy Council for Canada. Our independence enables us making findings as to causes and contributing factors, and in making transportation

es and contributing factors of a transportation incident, it is not the function of the r determine civil or criminal liability. However, the Board does not refrain from fully s and contributing factors merely because fault or liability might be inferred from the nding of the Board should be construed as assigning fault or determining civil or gs of the Board are not binding on the parties to any legal, disciplinary, or other

/qui-about/index.html

## \*Indian Oil & Gas Canada

IOGC is an organization committed to managing and regulating oil and gas resources on First Nation reserve lands. It is a special operating agency within Indigenous Services Canada.

IOGC is responsible for oil and gas on First Nation reserve lands across Canada, but only a handful of reserves exist north of the 60th parallel. Therefore, practically all of IOGCs work is south of the 60th parallel, with most of that in the Western Canada Sedimentary Basin.

IOGC's general responsibilities are to:

identify and evaluate oil and gas resource potential on Indian reserve lands:

concurage companies to explore for, drill and produce these resources through leasing activity;

c ensure equitable production, fair prices and proper collection of royalties on behalf of First Nations; and Secure compliance with and administer the regulatory framework in a fair manner.

IOGC operates pursuant to the Indian Oil and Gas Act, 2009, and its associated Indian Oil and Gas Regulations, 2019, as well as other relevant legislation and guidelines (see Acts and Regulations) which came into force and became law on August 1, 2019. Oil and gas activity on First Nation reserve lands depends on agreements involving First Nation band councils, oil and gas companies, and Indian Oil and

Additional information is available at: <u>http://www.pgic-iogc.gc.ca/eng/1100110010458/1100110010464</u> Acts and Regulations: <u>https://www.pgic-iogc.gc.ca/eng/1100110010437/1100110010438</u>



Gas Canada.

Revised June 2022



# **Section 6: Forms**

### **Documentation During and After an Incident**

**Form Descriptions** 

### Incident Command System (ICS) Forms

ICS 201 Incident Briefing ICS 202 Incident Objectives ICS 203 Organization Assignment List ICS 204 Assignment List ICS 207 Incident Organization Chart ICS 208 Safety Message / Plan ICS 209 Incident Status Summary ICS 211 Check-In / Out List ICS 214 Activity Log ICS 215 Operational Planning Worksheet ICS 215A IAP Safety Analysis ICS 221 Demobilization Checkout ICS 230 Meeting Schedule ICS 231 Meeting Summary ICS 233 Incident Open Action Tracker

#### **Emergency Forms**

A1 Initial Emergency Report Form A2 Odour Complaint Script A3 Regulatory First Call Communication A4 Incident Action Plan Checklist A5 Air Monitoring Log A6 Threatening Call / Bomb Threat A7 STARS Landing Zone Card

#### **Resident Forms**

- B1 Reception Centre Registration Log
- B2 Resident Compensation Log
- B3 Resident Contact Log
- B4 Roadblock Log
- **B5** Evacuation Notice
- B6 Early Notification / Voluntary Evacuation Phone Message
- B7 Shelter-In-Place Phone Message
- **B8 Evacuation Phone Message**

#### Media Forms

- C1 Preliminary Media Statement
- C2 Media Contact Log
- C3 Government Agency Contact Log
- C4 Media Centre Site

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## **Documentation During and After an Incident**

It is imperative that accurate documentation is kept throughout the duration of an incident for record keeping purposes. Records kept may be used for legal, investigation, audits, historical and/or analytical purposes. All documentation must be held for a minimum of 5 years as it may be requested by the regulatory agency at any point during that time.

It is the Documentation Units responsibility to collect documentation (forms, checklists, event logs, etc.) from response team members and maintain a consistent system for organizing the data.

## **Form Descriptions**

The Incident Command System uses a series of standard forms and supporting documents that convey directions for the accomplishment of the objectives and distributing information. Listed below are the standard ICS form titles and descriptions of each form utilized.

Further ICS forms can be found through the ICS Canada website: http://www.icscanada.ca/en/forms.html.

Standard ICS Form Title	ICS Form Description
ICS 201 Incident Briefing	Provides the Incident Command and General Staffs with basic information regarding the incident situation and the resources allocated to the incident. This form also serves as a permanent record of the initial response to the incident.
ICS 202 Incident Objectives	Describes the basic strategy and objectives for use during each operational period.
ICS 203 Organization Assignment List	Provides ICS personnel with information on the units that are currently activated and the names of personnel staffing each position.
ICS 204 Assignment List	Informs Division and Group supervisors of incident assignments.
ICS 207 Incident Organization Chart	A complete picture of the organizational structure for the incident.
ICS 208 Safety Message / Plan	Expands on the Safety Message and Site Safety Plan.
ICS 209 Incident Status Summary	Summarizes incident information for staff members and external parties, and provides information to the Public Information Officer for preparation of media releases.
ICS 211 Check-In/Out List	Used to check in personnel and equipment arriving at or departing from the incident. Check-in / out consists of reporting specific information that is recorded on the form.
ICS 214 Activity Log	Provides a record of unit activities. Unit Logs can provide a basic reference from which to extract information for inclusion in any after- action report.
ICS 215 Operational Planning Worksheet	Documents decisions made concerning resource needs for the next operational period. The Planning Section uses this Worksheet to complete Assignment Lists, and the Logistics Section uses it for ordering resources for the incident. This form may be used as a source document for updating resource confirmation on other ICS forms such as the 209 Incident Status Summary.
ICS 215A Incident Action Plan Safety Analysis	Used to communicates to the Operations and Planning Section Chiefs the potential hazards identified by the Safety Officer. It identifies mitigation measures to address the identified hazards.

## Form Descriptions, continued

Standard ICS Form Title	ICS Form Description
ICS 221 Demobilization Checkout	Ensures that resources checking out of the incident have completed all appropriate incident business, and provides the Planning Section information on resources released from the incident.
ICS 230 Meeting Schedule	To record information about the daily scheduled meeting activities.
ICS 231 Meeting Summary	Provides more detailed information concerning the attendees and notes from a particular meeting.
ICS 233 Incident Open Action Tracker	Used by Command Staff to track time sensitive tasks / actions assigned to incident personnel.

Emergency Form Title	Emergency Form Description
A1 Initial Emergency Report Form	Used by recipient of a phone call from either a member of the public or other company personnel to record detailed information about incident.
A2 Odour Complaint Script	Used to record odour information from a member of the public as well as scripts to follow.
A3 Regulatory First Call Communication	A regulatory required form used to send detailed information to the regulator about an emergency used for assessment, historical, and analytical purposes following an incident.
A4 Incident Action Plan Checklist	A checklist of other forms and information required to accurately create an incident action plan.
A5 Air Monitoring Log	A form used by designated Air Monitor personnel to log information about air quality readings.
A6 Threatening Call / Bomb Threat	Detailed point driven form used to document incoming phone calls pertaining to personnel threats and bomb threats.
A7 Stars Landing Zone Card	An information card utilized if medical evacuation is required via STARS Air Ambulance.

Resident Form Title	Resident Form Description
B1 Reception Centre Registration Log	Log used by Reception Centre Rep to record information from evacuees being received at the reception centre. Can also be faxed to reception centre in case a representative has not been identified or cannot make it before evacuees start arriving.
B2 Resident Compensation Log	Detailed spreadsheet for expenses incurred by evacuees so that compensation may be properly dealt with.
B3 Resident Contact Log	A log used by various company personnel to record contact made with residents, whether they're sheltered / evacuated and if assistance is required.
B4 Roadblock Log	A log used by designated Roadblock personnel to identify details about vehicles and persons entering or exiting a hazard area.
B5 Evacuation Notice	A document to be left in doors / windows of surface developments that are unable to be contacted as a way to issue evacuation instructions

# Form Descriptions, continued

Resident Form Title	Resident Form Description
B6 Early Notification/Voluntary Evacuation Message	A script and document filled out by Telephoner personnel issuing calls to residents for early notification and voluntary evacuation purposes.
B7 Shelter-In-Place Message	A script and document filled out by Telephoner personnel issuing calls to residents with shelter-in-place instructions.
B8 Evacuation Phone Message	A script and document filled out by Telephoner personnel issuing calls to residents with evacuation instructions.

Media Form Title	Media Form Description
C1 Preliminary Media Statement	A generic script used by the Media Spokesperson to issue media statements until which time more detailed information is known and can be issued.
C2 Media Contact Log	A log used to identify what media outlets/persons have contacted the company and their contact information.
C3 Government Agency Contact Log	A log used to identify what government agencies have been notified about the incident.
C4 Media Centre Site	A document to distribute to media outlets/persons about the location for further media enquiries and press releases as well as details to get there.

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# ICS 201 Incident Briefing Form

In	Incident Name:																							
Da	ate/	Time	e Ini	itiate	ed:																			
Pr	epa	red	By:												IC	SP	ositi	ion:					 	
Le	evel	of Emergency Alert / Minor Level 1 Level 2 Level 3																						
Ma	ap S	Sket Ma	ch:	an	he c	drau	n o	r att	ach	ed	hore	2												
7 4 4																								
													-							 				
Si	tuat	tion	Su	mm	ary	': (V	/rite	e de	scr	iptio	on d	or a	ttac	h A	1)									
6	fot	v Da	iofi	nat																 				
38	arety	у Бі	Teri	ng:																				

Current and Planned Objectives:										
Priorities: (1) Life Safety (	2) Incident Stabilization (3) E	nvironment & Property								
1. Ensure Safety of Citizens a	nd Response Personnel:	4. Minimize Economic Impacts:								
□ 1a. Identify hazard(s) of relea	sed product.	□ 4a. Consider tourism and local economic impacts.								
1b. Establish site control (hot security).	zone, warm zone, cold zone, &	□ 4b. Protect public and private assets, as resources perm								
1c. Establish an Emergency F Safety Actions.	Response Zone and Initiate Public	□ 4c. Establish damage claims process.								
□ 1d. Consider evacuations if n	eeded.	5. Keep Stakeholders and Public Informed of Response Activities:								
□ 1e. Establish aircraft restrictio	ns.	5a. Provide forum to obtain stakeholder input and concerns.								
□ 1f. Monitor air in impacted are	eas	□ 5b. Provide stakeholders with details of response actions.								
Ig. Develop site safety plan for briefings are conducted.	or personnel and ensure safety	□ 5c. Identify stakeholder concerns and issues, and address as practical.								
2. Control the Source of the F	telease:	□ 5d. Provide timely safety announcements.								
□ 2a. Complete emergency shu	tdown.	□ 5e. Conduct regular news briefings.								
□ 2b. Conduct firefighting.		□ 5f. Conduct public meetings, as appropriate.								
□ 2c. Initiate temporary repairs.										
3. Manage a Coordinated Res	ponse Effort:									
□ 3a. Complete or confirm notifi	cations.									
□ 3b. Establish a unified comma (command post, etc.).	and organization and facilities									
3c. Ensure mobilization and the personnel and equipment.	racking of resources and account for									
□ 3d. Complete documentation.										
Current and Planned Action	ons, Strategies and Tactics:									
Time:	Actions:									
HHMM										
HHMM										
ННММ										
HHMM										
HHMM										
ННММ										
ННММ										
ННММ										
ННММ										



Note: Refer to ICS 207 Incident Organization Chart in Section 6: Forms (Blue Tab) for full command structure.

Resources Summary:											
Resource(s)	Time Called	ΕΤΑ	On-Site	Notes (Location/Assignment/Status)							
External Notification	ns: (Governmen	nt)									
Agency	Time Called			Notes							

Si	e Safety and Hazard Control Analysis	
Si	e Control	
1.	Is Site Control set-up? □ Yes □ No	2. Is there an On-Scene Command Post? □ Yes □ No If so, where?
3.	Have all personnel been accounted for?	Injuries: Fatalities: Unaccounted: Trapped:
4.	Are observers involved or rescue attempts planned? Observers:  Yes No Rescuers:  Yes No	<ol> <li>5. Are Decon areas setup? □ Yes □ No If so, where?</li> </ol>
На	zard Identification, immediate signs of: (if yes,	, explain in remarks)
1.	Electrical line(s) down or overhead?   Yes  No	2. Unidentified liquid or solid products visible?   Yes  No
3.	Wind direction across incident:          □ Towards your position         Wind Speed:         □ Away from your position	A. Is a safe approach possible? □ Yes □ No
5.	Odours or smells?	6. Vapours visible? □ Yes □ No
7.	Holes, ditches, fast water, cliffs, etc. nearby? □ Yes □ No	8. Fire, sparks, sources of ignition nearby? □ Yes □ No
9.	Is local traffic a potential problem? □ Yes □ No	10. Product placards, colour codes visible?
11.	Other Hazards?	12. As you approach the scene from the upwind side, do you note a change in the status of any of the above? □ Yes □ No
13.	Remarks:	
H	zard Mitigation: have you determined the nece	essity for any of the following?
1.	Entry Objectives:	assity for any of the following:
2.	Warning sign(s), barriers, colour codes in place?	ies 🗆 No
3.	Hazardous material being monitored? 3a. Sampling equipment: 3b. Sampling location(s): 3c. Sampling frequency: 3d. Peak reading: 3e. Personal exposure monitoring:	lo
4.	Protective gear / level:	4a. Gloves:
	4b. Respirators	4c. Clothing:
5.	4d. Boots: Decon 5a. Instructions: 5b. Decon equipment and materials:	4e. Chemical cartridge change frequency:
6.	Emergency escape route established?	lo
7.	Field responders briefed on hazards?	lo
8.	Remarks:	
Pro	tective Zones: record initial control perimeters (see Figure 1)	



Incident Name:									
Date / T	Fime Initiated:								
Prepare	ed by:	ICS Position:							
Genera	I Control Objectives for the Incident:								
1									
2									
3									
4									
5									
Weathe	er Forecast:								
Genera Note: C	al Safety Message: Create and prioritize SMART (Specific, Measure yes that address the incident issues and utilize	eable, Attainable, Realistic, & Time-Sensitive)							
page.		are contained on the operations bliening							

# ICS 203 Organization Assignment List

Incident	Name			Operational Period (Date/Time)				
				From:	To:			
Incident	Commander(s	5)		Operations Section				
Ag	gency	IC	Deputy		Chief			
					Deputy			
				Staging Area	Manager			
				On-Site Group				
				Su	Ipervisor			
S	Safety Officer				Lead			
	Assistant				Lead			
Inform	nation Officer				Lead			
	Assistant				Lead			
Li	aison Officer				Lead			
	Assistant							
				Public Safety Gro	up			
A	Downooowtotiu			Si	ipervisor			
Agency	Representativ	es			Lead			
Agency	Name				Lead			
					Lead			
					Lead			
					Leau			
				Branch - Division	Group			
				Branch Branch	Director			
				Diditch	Director			
Planning	Section			Division/Group	Lead			
Tianning	Chief			Division/Group	Lead			
	Deputy			Division/Group	Lead			
Re	sources Unit			Division/Group	Lead			
5	Situation Unit			Division/Group	Lead			
Enviro	nmental Unit							
Docum	entation Unit			Branch – Divisior	/ Group			
Demot	ilization Unit			Branch	Director			
Technica	al Specialists				Deputy			
				Division/Group	Lead			
				Division/Group	Lead			
Logistics	Section			Division/Group	Lead			
	Chief			Division/Group	Lead			
	Deputy			Division/Group	Lead			
	Supply Unit							
F	acilities Unit			Finance / Admin Section	T			
Ground	Support Unit				Chief			
Commur	nications Unit				Deputy			
	Medical Unit			T	ime Unit			
	Food Unit			Procuren	nent Unit			
				Compensation / Cla	aims Unit			
				(	Jost Unit			
Prepared	By: (Resourd	es Unit)				Date/Time		

Branch:					Division / Group / Staging:							
Incident Nar	ne:				Operational Period:							
					From:	ne						
					To:	Date	ne					
Division / Gr	oup / Stagir	ng										
Operations (	Chief				Division/Group Supervisor							
Branch Dire	ctor				Staging Area Manager							
Resources	Assigned t	o This Period										
Resour Identifi	rce ier	Leader	No. of Persons	Cell	Contact I #, radio fre	eq. Etc.	Reporting Lo Equipment and	ocation, Sp Supplies, F	ecial Iemarks			
Work Assign	iments:											
Special Instr	uctions:											
Division / G	roup Com	nunications Summa	ary									
Funct	tion	Frequencies	System	Chan.	Func	tion	Frequencies	System	Chan.			
Command	Local Repeat				Logistics	Local Repeat						
Div. / Group	Tactical			<mark>.</mark>	Ground to A	Air						
Prepared By	': Init I and	-	·					Date:	Time:			
Signature:	mit Leader)							-				


# **ICS 207 Incident**

# ICS 208 Safety Message / Plan

Incident Name:	Operational Per	iod:
	From: Date	Time
	To: Date	Time
Safety Message/Expanded Safety Message, Safety	Plan, Site Safety	Plan:
Site Safety Plan Required? □ Yes □ No		
Approved Site Safety Plan(s) Located At:		
Prepared By:		
(Name and Position)		Date Prepared:
Signature:		Time Prepared:

Incident Name:		Location of Incident:					
Date / Time Initiated:		(LSD / NTS)					
Prepared by:		ICS Position					
Incident Details:							
Gas readings: H <sub>2</sub> S		SO <sub>2</sub>	LEL				
Level of Emergency:							
Incident Severity:	lert / Minor		Level 2 🛛 Level 3				
Affect Medium: (Check all that apply)							
□ Air □ Water □	Soil 🗆 C	Other – Specify:					
Site Type: (Select only 1)							
U Well (Active)	□ Well (Aband	loned/Suspended)	Remote Sump				
U Well (Drilling & Completions): Rig	Name:		Ι				
□ Battery/Plant/Facility	□ Tank Farm/S	Storage	Pipeline				
□ Riser (Pipeline)							
Road or Road Structure	Name:		Location on Road:				
□ Other – Specify:							
Incident Type: (Check all that appl	y)						
		Release					
□ Natural Disaster/Weather	□ Fire/Explosi	on	Drilling Kick				
□ Worker Injury/Fatality	□ Security (the	eft, threat, terrorism)	□ Induced Seismicity				
Well Bore Communication	Pipeline Bor	ing	□ Vehicle/Transportation				
Equipment/Structural Damage	Pipeline Bre	ak	Well Control				
□ Other – Specify:							
Activity: (Check all that apply)		oration					
		ing					
		шу					
	Elaring (Em.	ergency					
	Flaring (Eme	ergency)	Well Testing				

Consequence or Impacts: (Check all that apply, if none, leave blank)									
□ Worker Safety (Injuries, Fatalities) □ Property									
Economic (Loss of and/or damage to equipment or infrastructure, loss of production, work stoppage)									
□ Other – Specify:									
Material Information:									
Is spill off lease? □ Yes - Estimated spill quantity: □ No									
□ Liquid Hydrogen (Crude, Oil, Diesel, Fuel) □ Toxic Gas Liquid (>1% Different Toxins)									
□ Acid	Emulsion	(Oil, Gas, Water)	□ Sv	veet Natur	al Gas	□ Salt Water			
□ Methanol	□ Non-Toxic	Liquids	🗆 Fre	esh Water					
□ Sour Natural Gas	🗆 Sour Liqui	ds (<1% H₂S)	□ Ot	her – Spec	cify:				
□ Non-Toxic Gases (N	itrogen, Carbo	n Dioxide, Inert C	Gases)						
Area Information:									
Land Type: 🛛 Priva	ate Land	🗆 Crown Lan	d Field	Name:					
Area Type:	st □M	uskeg 🛛 🗆 Fa	rmland	□ Resid	ential	□ Other			
Access:	copter	rv □ 4W	/D	🗆 2WD		Unknown			
Name of road the asset	is located on:								
KM where the incident occurred:									
Distance to nearest residence/public facility:									
Nearest City/Town/Ope	n Camp:								
Weather Conditions:									
Weather Conditions	□ Clear	□ Cloudy	□ Oth	er:					
Wind Direction	N NE	NW E	SE	S	SW	W			
Wind Strength	□ Calm	□ Moderate	□ Strong □ Gusty						
Temperature	°C								
Public / Worker Injurie	es / Medical E	mergencies:							
□ First Aid □ Hosp	italization [	☐ Fatality	□ Other	- Specify	:				
Notification: (Notify al	I agencies as	required)	<u> </u>	A					
Fire, EMS) $\Box$ 911 (Police/RCMP,	(OGC, AE	Regulator R*, etc.)	Local County,	Town, City	(MD, /)	□ Health Authority			
Canada Energy		ational Health	□ Emer	gency		☐ Ministry of			
Regulator (CER) □ Workers'	a Safety (	OH&S) ency Response	Manage	ment Ager	<u>асу</u>	Iransportation			
Compensation Board (WCB)	Assistance (ERAC)	e Canada	☐ Weste Spill Ser	ern Canad vices (WC	ian SS)				
□ Transportation Dangerous Goods (TDG)	□ Other		□ Othe	□ Other		□ Other			
□ Other	□ Other		□ Othe	r		□ Other			
*Request that the AER notif (ECCC) and the Department	y Alberta Environ of Fisheries and (	nment & Parks (Fore Oceans as required.	stry/Fish/W	ildlife/Lands)	Environn	nent & Climate Change Canada			
Refer to the Govern	ment Notifica	tion Matrix and r complete list o	External of agenci	Agencies es requiri	Conta	ct List or Area Specific			

# ICS 209 Incident Status Summary

Agency Notification								
Agency Nan	ne Contact Nam	ne	Contact Number	Notified (Y/N)				
				(111)				
Collect all compl	leted C3 Government Agency Conta	ct Logs fron	m responders for full documenta	ation.				
Notes:								
Roadblock Location	IS:							
Roadblock Number	Name		Location/LSD					
Collect all o	completed B4 Roadblock Logs fi	rom respoi	nders for full documentation					
Notes:								

# ICS 209 Incident Status Summary

Air Monitor Locations:								
Air Monitor	Name	Locat	ion/LSD					
Number								
Collect all cor	mpleted A5 Air Monitoring Logs	from responders for fu	Il documentation					
Notoci	inpleted A3 All Monitoring Logs	s nom responders for fu						
Notes.								
<b>Reception Centres</b>								
Name	L	ocation	Phone Number					
Collect all complet	ted B1 Reception Centre Registrati	on Logs from responders f	for full documentation.					
Notes:								

Incident Name:									
Date / Time Initiated:									
Prepared by:				ICS Position:					
Check-in Location		Staging Area	C	] ICS Res. Unit	Other:				
Name of Company	Date of Check-in	Supervisor Name	Total # of Personnel	Incident Assignment	Assigned	Available	Date of Check-out		
Notes:									

Incident Name:								
Date / Time Initiate	ed:							
Prepared by:			Position / Title:					
Personnel Assign	hed		- 141					
Nam	le la	ICS Pos	Sition	Lo	cation			
Activity Log								
Time			Actions					

### ICS 215 Operational Planning Worksheet

Incid	Incident Name:			0	Operational Period:													
						Т	o: Date_			Time			To: I	Date		_ Time		_
Branch	Division, Group, or Other	Work Assignments & Special Instructions	Resources												Overhead Position(s)	Special Equipment & Supplies	Reporting Location	Requested Arrival Time
			Req.															
			Have												]			
			Need															
			Req.				<u> </u>				]	<u> </u>						
			Have												]			
			Need				_			<u> </u>								
			Req.				_			<u> </u>		<u> </u>			_			
			Have							<u> </u>								
			Need							<u>_</u>	ļ	ļ						
			Req.				_					<u> </u>						
			Have				_			<u> </u>		<b>_</b>						
			Need									<u> </u>						
			Req.												_			
			Have							<u> </u>		<u> </u>						
			Need							<u> </u>								
			Req.						<u> </u>	ļ		L						
			Have				_			<u> </u>		<u> </u>						
			Need				_		<u> </u>	ļ								
			Req.							<u> </u>		L						
			Have							<u></u>		<u> </u>						
			Need															
		Total Resources Requir	red:												-	Prepared b Name:	y:	
		Hand:														Position/Ti	le:	
		Total Resources Need t Order:	to													Signature:		

#### **ENERCAPITA**

### ICS 215a Incident Action Plan Safety Analysis

Incident Name:								Date / Time Initiated:			
Prepared by:							ICS Position:				
Division or Group	Potenti	ial Hazar	ds							Controls (e.g., PPE, buddy system, escape routes)	
	Type of Hazard	Type of Hazard									

Incident Name / Number:					Date / Time:		Demob. Number:	
Unit/Personnel Released:								
Transportation Type / Numbe	er:							
Actual Release Date / Time:							Manifest Completed?	□ Yes □ No
Destination:		Notify:	□ HQ	□ Agency	□ Region	□ Area		Dispatch
		Name:						
		Date:						
Unit Leader responsible for	r ing							
conecting performance ratio	ing			Unit / Persor	nnel			
You and your resources have	e been released	subject to Sig	n-Off from the foll	lowing:				
Demobilization Unit Leader –	- Check the appr	opriate box						
	do.r							
	ber							
Planning Section								
Demobilization Unit								
Finance/Admin Section								
Time Unit								
Other								
Remarks:								
Dana	Prepare	d By:				Signature:		
Page or	(Name a	and Position)						

Incident Name	:		Operational Period:					
			From: Date	е Т	ime			
Meeting Sche	dule (Commonly-held	meetings are inc	luded)					
Date / Time	Meeting Name	Purpo	se	Attendees	Location			
Prepared by: (	Situation Unit Leader)			Date / Time:				

Incident Name:	Meeting Date / Time:
Meeting Name:	
Meeting Location:	
Meeting Facilitator:	
Attendees:	
Notes: (with summary of decisions and action items)	
Prepared by:	Date / Time:

Incide	ent Name:						
No.	ltem	For	Status	Start Date	Briefed	Target Date	Actual Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

# ICS 233 Incident Open Action Tracker

<b>N</b> •	EN	ER	CAI	PIT	A
------------	----	----	-----	-----	---

No.	Item	For	Status	Start Date	Briefed	Target Date	Actual Date
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Evacuate	<ul> <li>Get to a safe area immediately.</li> <li>Move upwind if release is downwind of you.</li> <li>Move crosswind if a release is upwind from you.</li> <li>Move to higher ground if possible.</li> </ul>					
Alarm	<ul> <li>Call for help ("Man Down").</li> <li>Sound bell, horn or whistle, or call by radio.</li> <li>For medical emergencies, call 911.</li> </ul>					
Assess	<ul> <li>Take head count, locate any casualties. Consider all of the hazards.</li> <li>Fill out information below to complete assessment.</li> </ul>					
Protect	<ul> <li>Put on breathing apparatus before attempting rescue.</li> </ul>					
Rescue	Remove victim to a safe area.					
First Aid	□ Follow the standard first aid protocols at worksite. (CPR, etc.)					
Medical Aid	<ul> <li>Arrange transport of casualties to medical aid.</li> <li>Provide information to Emergency Medical Services (EMS).</li> </ul>					

### First On-Scene Actions

Incident D	Incident Details To be completed by the person involved or notified						
Report take	n by			Date / Time			
No				O-llas Talashasa			
Name of per	rson calling			Caller Telephone			
Incident Loc	ation						
			(LSD / NTS	S)			
Event Sumn	nary						
Agencies Notified		Vho?					
Event		antained or a	antrollad		nihlo		
Status         Imminent control possible			ble	□ Incident is uncontrolled			
Site Type	□ Well I	Pipeline	□ Tank Farm/Storage	□ Battery/Plant/Facility	Other		
Incident	□ Sour Ga	as Release	□ Sweet Gas Release	Pipeline Break	□ Security (theft, threat, terrorism)		
Type	□ Loss of	Containment	□ Fire/Explosion	□ Worker Injury/Fatality	□ Vehicle/Transportation		
	□ Liquid S	Spill	□ Other				

### A1 Initial Emergency Report Form

Impacts							
Public Health and	d Safety		Could	be jeopa	rdized	□ Is jeoparo	dized
Public Protection	n Measures Take	en	□ Notific	ation [	Evacuatio	on 🗆 Shelter-ir	-place
Worker Injuries			First A	Aid E	] Hospitaliz	ed D Fatality	□ Other
Distance to nearest surface development				km	Distanc centre	e to nearest urbar	۱km
Details					Contro		
Release Impact	□ On-Lease		ff-Lease	Product			Amount
Gas Readings	H <sub>2</sub> S	SO <sub>2</sub>		LEL	0	ther	
Distance to neares	st watercourse			km	Weathe	r Conditions	0° 360° N
Details							
							WHW
							270° W
							SSW SSE SE
							225° 5 180°
Media		Requ	lator			Public	
Involvement?	□ Yes □ No	Involv	vement?	□ Yes	□ No	Affairs/Commu Relations Issue	nity □Yes □No ∙s?
Details							
Notes / Instruct	ions Provided						
Notes / Instruct		•					
Notes / Instruct	tions Provided	:					

**Distribute this completed report to all Key Response Personnel** Note: Ensure the First On-Scene Actions have been completed before proceeding to the Five Step Initial Response Guide.

Date:		Prepared by:
Time:	🗌 a.m. 🗌 p.m.	Duration of call:

### To help us understand your immediate needs, we need to know:

Name:					
Contact number:					
Description of the c	oncern:				
How many people are you v	vith right now?				
Adults	Children				
Can you provide the locatio	n of the incident?				
Location of the inci	dent (address, legal, la	ndmark, etc.): _			
Where are you right now?					
Home / Work	In a Vehicle	Outside	Other		
If the resident is at I	nome / work / outside t	tell them:			
The company will send someone to investigate. To be safe, you and anyone that you may be with need to go inside and stay inside. Close all doors and windows and turn off any appliances that blow out indoor air (i.e. clothes dryer) or suck in outside air (i.e. heating / air conditioning). Do not go outside or attempt to start any vehicles until you are told it is safe to do so.					
The company will send someone to investigate. To be safe, you and anyone that may be with you need to get inside the vehicle and stay inside. Keep all doors and windows closed and shut off the air conditioning / heat. If you see or hear anything that might indicate where the incident is occurring, travel in the opposite direction of the hazard; otherwise, continue travelling on your current course which will likely take you out of the hazard area.					
Someone will call you back contact you. If you have an	with further instruction urgent questions ple	on so please sta ase call the com	y off of the phone so that we can pany at		

### **A3 First Call Communication**



This form is to be used when taking information for spills/releases. It will assist in consistent gathering of data and should be attached to the FIS record.

General Incident Information						
AER contact:			Field	d centre:		
Licensee:		Caller:	Phone:			
E-mail address for release report:						
Licence #:		Pipeline line #:			Approval	#:
Incident location:/	/	W M				
Emergency level:						
Serious event?  Yes  No						
If yes, what kind of serious event?	🗌 Blowou	t Explosion	□ F	Fire D Other control le	oss 🗌 F	Fracking
Land type (jurisdiction):	old 🗌 Fi	rst Nations	Métis		wn – Dispos	ition #:
Agencies notified:					Date	9:
FIRST duty office (DO) contacted:	🗌 Yes	□ No If yes, da	ate & t	ime DO was contacted:		
DO contact name:						
Release Details						
Volumes	. <u> </u>			2 2	•	1
Substance*	Released	(m³/10° m³)		Recovered (m <sup>3</sup> /10 <sup>3</sup> m	°)	Disposal/storage location
* For emulsion, break down oil & water	if possible.					
Description of how the release vol	ume was de	termined and verifi	fied (in	cluding calculations; e.g	g., spill lengt	$h \times width \times depth$ ):
Area affected (length x width): $m^2$						
How was the area affected determined? (Aerial survey, perimeter walk, range finder, samples taken.etc.):						
Who delineated the spill area (env	ironmental t	echnologist, opera	ator, etc	c.) and what process wa	as used?	

Reminded licensee to update the AER immediately if release volumes or area changes from what was originally reported.				
Asked for the immediate submission of photos of the entire spill site to the AER and communicated that photos of the cleanup will need to be submitted with the release report.				
Cause of release (suspected or actual):				
Impact				
Release off lease? Yes No (pipeline right-of-way is off lease)				
If yes, was the landowner notified? Yes No Name of landowner/agency:				
Release within disposition boundary?  Yes No				
Outside disposition – was leaseholder notified?  Yes No Name of leaseholder:				
If outside disposition, reminded licensee that they will need a TFA.				
Actual incident H <sub>2</sub> S concentration (if applicable): % / ppm / mol/kmol				
Nearest town: Distance and direction to town:				
Environment affected:				
Distance of release to the nearest water body, watercourse, or waterway:				
How was this distance determined?				
Wildlife/waterfowl/livestock affected: None Habitat affected Animals injured/killed				
Notes/description:				
Confirms how the values a hope or will be contained.				
Comminimities the release has been of will be contained.				
Confirm how the release has been or will be cleaned up:				
Evacuees (#): People injured (#): Fatalities (#):				
Were members of the public affect?				
If yes, indicate if they were				
☐ notified  ☐ instructed to shelter in place  ☐ advised to evacuate				

Notes/description:					
Media interest?					
Damage to public property?  Minor/no damage  Substantial (home covered in oil)  Extensive (home destroyed)					
Hit?         Yes         No         Line #:         Test failure?         Yes         No					
Normal operating pressure: kPa Maximum operating pressure: kPa					
Is the pipeline shut in, depressured, and isolated?  Yes No					
If yes, date & time:					
What is the total volume of liquid in the pipeline?					
Are there isolation valves?  Yes No If yes, have they been activated?  Yes No					
Are there any other pipelines that tie into the failed line? 🗌 Yes 🗌 No If yes, have they been shut in/isolated? 🗌 Yes 🗌 No					
Reminded the company to contact the AER before excavating the pipeline.					
Reminded, advised, or directed the company that the pipeline is not to be returned to service without the AER's permission.					
Right-of-way (ROW)					
Licensee has confirmed when the pipeline ROW and well were last checked. Date:					
How was the ROW surveillance conducted (from the air, by quad, on foot, using infrared, etc.)?					
Requested that daily production volumes for the well/pipeline be submitted within 24 hours.					
Investigation information					
What operations are currently taking place (containment, sampling, line locating, retaining contractors/consultants, pipeline excavation, repair, site access, EM survey, etc.)?					
Requested that daily production volumes for the well/pipeline be submitted within 24 hours.         Investigation information         What operations are currently taking place (containment, sampling, line locating, retaining contractors/consultants, pipeline excavation, repair, site access, EM survey, etc.)?					

### A5 Air Monitoring Log

Date:		Responder Name:	
Page	of	Responder Position:	

	Location of Samples	H₂S (ppm)	LEL (%)	O₂ (%)	SO₂ (ppm)	Other	Temp (°C)	Wind Conditions *		
Time								From	Speed (km/hr)	Comments

\*Estimate meteorological conditions where accurate readings are not available.

### A5 Air Monitoring Log

	Location of Samples	H₂S (ppm)	LEL (%)	O₂ (%)	SO₂ (ppm)	Other	Temp (°C)	Wind Conditions *		
Time								From	Speed (km/hr)	Comments

\*Estimate meteorological conditions where accurate readings are not available.

# A6 Threatening Call / Bomb Threat

Date:			Time Call Rece	eived:		Time Call R	Time Call Reported:			
Perso	n Receiving Call:			What/Whom Call			Directed To:			
Caller	Caller's Sex: 🗌 Male 🔄 Female 🗌 Unknown Approximate Age:									
Accer	Accent: Yes No Type: Familiar voice: Yes No Who:									
Threa	t (Exact Wording):									
Tips: • • • • • • • • • •	Listen carefully Do not interrupt Attempt to keep Attempt to ask o Obtain as much <b>Signal someor</b> <b>Do not hang u</b> For telephone to	and remain caller. caller talki questions b informatio <b>ne to call y</b> <b>p or disco</b> i racing, call <b>following</b> (	n calm. ng. elow. n as you can while <b>our supervisor; gi</b> n <b>nect your phone</b> , the local telephone <b>questions:</b>	call is in pro <b>ve him / he</b> r even after t company ar	gress. r <b>this inforn</b> he caller hai nd local polic	<b>nation.</b> ngs up. ce.				
When (d <i>ate</i>	will the bomb go o and time)	ff?								
Where	e is it located?									
Why o	Why did you place it?									
What	What kind of bomb is it?									
What does it look like?										
What	What is your name?									
Where	Where are you calling from?									
Was t	Was the caller familiar with company facilities, or employees? (e.g.: nicknames, familiarity with staff, etc.) Yes No									
Did caller appear familiar with building / facility by the description of the bomb location?										
Identi	fying Characteris	tics of Cal	ler							
	Voice	Spe	eech	Language		Manner		Background		
	Loud	Fast		Excellent		Calm		Office Machines		
	Soft	Slow	/	Good		Angry		Factory Machines		
	High Pitched Deep Raspy Pleasant Intoxicated	<ul> <li>Disti</li> <li>Disto</li> <li>Disto</li> <li>Stutt</li> <li>Naso</li> <li>Slum</li> </ul>	nct Depred Depre	Fair Poor Foul Langu Accent	age	Rational Irrational Coherent Incoherent Deliberate /		Street Traffic Airplanes Trains Animals Party		
						Serious Emotional		Atmosphere Music		
Notify proper authorities as soon as possible. Have employees take a look around their immediate work stations for unusual packages. Evacuate building if necessary.										
Name	of the supervisor f	irst notified	:							



escorted by the STARS crew.



### STARS® LANDING ZONE BRIEFING FOR STARS CREW.



#### **\*** STEP 1

Identify yourself and confirm the Landing Zone Officer is present with the landing zone secure.

#### **\* STEP** 4

State what marking the corners of the landing zone: LED beacons, heavy pylons or any other bright conspicuous objects easily seen from the air.

#### STEP 2

Communicate the location of the landing zone using N/E/S/W to reference the accident scene or other landmarks.

#### **\*** STEP 5

Communicate the wind direction and approximate speed.

#### **\*** STEP 3

Identify the type of surface for the landing zone (field, road, other).

#### **\*** STEP 6

Identify the hazards in the area of the landing zone such as wires, poles, trees, or hazardous materials using N/E/S/W in reference to the landing zone.



STARS LANDING ZONE

#### **SPECIAL CONSIDERATION**

Remove any loose debris and indicate if there is snow or dust in the landing zone. If dusty, water down the landing zone if possible prior to the helicopter's arrival. As marshaller, maintain your position at the middle of the upwind side of the landing zone, knees and **DO NOT MOVE** from your position as the helicopter lands.

If you have any questions or comments regarding this landing zone information card or would like to watch our landing zone video, please visit **www.stars.ca** 

### **INDUSTRY EMERGENCY LINE 1-888-888-4567**

This number can also be used to provide a landing briefing to the STARS crew if radio communications are not available.

### WE ARE ALL STARS<sup>®</sup>

#### Section 6: Forms
Due to cover p evacue	travel and time constraints, the company may not always be able bage can be included with the forms on the next 2 pages and sen es until a company representative arrives.	e to have a company employee at the Reception t to a representative at the Reception Centre t	on Centre before evacuees begin arriving. In this case this o provide them with guidance on how to register and track							
Evacue	ee registration guidelines									
[Insert (	Company Name] requires your assistance with receiving evacuees	s at the following Reception Centre:								
Your co	Your company contact is:									
Name:	Position:	Contact Number:	Fax Number:							
1) 2) 3) 4) 5)	Record all evacuees as they arrive on the forms provided. Provide all evacuees with the statement below and any other stat Provide the evacuees with food and lodging as required. Record if any evacuees choose to leave the Reception Centre (n Continually update the company of any residences arriving at or	itus updates as provided by your company cont name, contact number, where are they going, et leaving the Reception Centre so that they can f	act. c.). ollow up on any residents that are unaccounted for.							

Date:	Responder Name:									
Page	of		Responde	r Position: _				Responders Phone No.:		
Resident ID	Name (list all	l names in party)	# Of Occupants	Number arrived	Arrival time	Depart time	Destination phone # (where they can	Comments		
							be reached)			

Resident's Name:	Home Address:	Home Telephone #:	Location of Land (LSD):
		Business Telephone #:	
Number of Residents Evacuated:	Evacuated to:	Telephone # While Evacuated:	

No.	Date	Location	Trans.	Accom.	Meals	Phone	Sundry	Total	Details of Expense
	Total Repo	orted Expenses							

Approved By: \_\_\_\_\_\_

Date: \_\_\_\_\_

Resident's Name:	Home Address:	Home Telephone #:	Location of Land (LSD):
		Business Telephone #:	
Number of Residents Evacuated:	Evacuated to:	Telephone # While Evacuated:	

No.	Date	Location	Trans.	Accom.	Meals	Phone	Sundry	Total	Details of Expense
	Total Repo	orted Expenses							

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

## **B3 Resident Contact Log**

Date:			Responder Name:_				
Page	of		Responder Position	າ:			_ Responders Phone No.:
					<i>c</i> 1	A a sistema a ar	
Time	Resident name	Resident ID	Shelter / Evacuate	Number Inside	of people Outside	transportation	Comments
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
			O Shelter O Evacuate			O Yes O No	
			O Shelter O Evacuate			O Yes O No	

Time	Resident name	Resident ID	Shelter / Evacuate	Number of people	Assistance or	Comments
------	---------------	-------------	--------------------	------------------	---------------	----------

# **B3 Resident Contact Log**

		Inside	Outside	transportation required?	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	
	<ul><li>O Shelter</li><li>O Evacuate</li></ul>			O Yes O No	

### B4 Roadblock Log

Date:		Responder Name:	
Page	of	Responder Position:	Responders Phone No.:

Only emergency responders should be allowed to enter the Emergency Planning Zone (EPZ).

Vehicle Type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering Zone	Time Exiting Zone	Comments (record all vehicles turned away)

Vehicle type	License plate # and province / state	Name of driver (if available)	# of people in vehicle	Time entering zone	Time Exiting zone	Comments (record all vehicles turned away)

DATE:	 
TIME:	 

# EVACUATION NOTICE

[Insert Company Name] has an emergency at its nearby location.

As a safety precaution, please leave the area in a

(north / east / south / west) direction and proceed to the

**Reception Centre located at** 

[Insert Company Name] representatives will be available at the Reception Centre to address your questions or concerns.

For assistance, call [Insert Company Name] at

Thank you for your cooperation.

Section 6: Forms

Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.

Hello, th	is is(y	our name)	calling from	(compa	ny name)				
Is this th	e <u>(name c</u>	of residence / busi	ness)at	(telephon	e number) ?				
(cor	npany name)	is responding to a	(potential) emergen	cy at(locat	in your area.				
You are in no danger at this time. All efforts are being made to resolve the problem and this phone call is only to inform you and provide you with an early notification.									
To help us understand and your immediate needs we need to know:									
How many people are at your location now?									
	Adults								
	Children								
Do you	wish to leave you	Ir residence at this	s time?						
If Yes	Please travel in	a <u>north / east / so</u>	<i>uth / west</i> direction	to our reception ce	entre located at:				
lf No	Please standby may prevent us eliminated.	for further contact. from contacting you	Please do not use y with updated inform	your telephone for mation or when the	outgoing calls as this problem has been				
If you have urgent questions, please contact (company name) at (telephone number).									
Thank y	ou for your coop	eration.							

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

## **B7 Shelter-In-Place Phone Message**

Hello, th	s is <u>(your name)</u> of <u>(company name)</u> .								
Is this th	e (name) residence at (telephone number) ?								
(con	<i>ppany name)</i> is responding to a ( <i>potential</i> ) emergency at <u>(location)</u> in your area.								
For your hazard n	safety, it is extremely important that you, and those with you, stay indoors until the potential o longer exists, or you are advised to evacuate.								
To help us understand your immediate needs, we need to know:									
How ma	ny people are at your location now?								
	Adults								
	Children								
Is there a to get in	anyone in your household that you cannot contact to inform them of the situation and advise them doors or stay out of the area?								
	Yes     Image: No								
If Yes	Whom?								
	Location of the person(s)								
	We will send someone to find them as soon as possible.								
Do you	nave children in school at this time?								
	Yes   No								
If Yes	What school?								
	Children's names								
	We will contact the school to ensure the safety of your children. Buses will be directed to leave the area immediately. If school is in session, your children will be redirected to the reception centre by their regular bus driver when the school day is over.								
Do you	nave the "Shelter-in-Place" instructions previously provided to you by <u>(company name)</u> ?								
	☐ Yes ☐ No								
If Yes	Please follow the Shelter-in-Place instructions located inside the resident pamphlet.								
lf No	Verbally walk the resident through the Shelter-in-Place instructions on the next page.								
Do you understand what I have told you?									
Is there an alternate number we can contact you at?									
lf you ha Thank y	ive any urgent questions, please contact <u>(company name)</u> at <u>(telephone number)</u> . ou for your cooperation.								

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

### **Shelter-In-Place Instructions**

For your safety:

- Immediately gather everyone indoors and stay there
- Close and lock all windows and outside doors
  - If convenient, tape the gaps around the exterior door frames
- Leave open all inside doors
- Extinguish indoor wood burning fires
  - If possible, close flue dampers
- Turn off appliances or equipment that either:
  - Blows out or uses indoor air, such as:
    - Bathroom and kitchen exhaust fans
    - Built-in vacuum systems
    - · Clothes dryers
    - Gas fireplaces and gas stoves
  - Sucks in outside air, such as:
    - Heating, ventilation and air conditioner (HVAC) systems for apartments, commercial or public facilities
    - Fans for heat recovery ventilators or energy recovery ventilators (HRV / ERV)
- Turn down furnace thermostats to the minimum setting and turn off air conditioners
- Avoid using the telephone, except for emergencies, so that you can be contacted by company emergency response personnel
- Call the company emergency numbers you have been provided:
  - If you are experiencing symptoms or smelling odours (so that we can address your concerns and adjust our response priorities)
  - If you have contacted fire, police or ambulance (so that we can coordinate our response)
- Stay tuned to local radio and television for possible information updates
- Do not leave your residence, even if you see people outside, until you are told to do so
- After the hazardous substance has passed through the area you will receive an "all-clear" message from the company emergency response personnel. You may also receive, if required, instructions to:
  - Ventilate your building by opening all windows and doors; turning on fans and turning up thermostats. During this time the air outside may be fresher and you may choose to leave your building while ventilating.
  - Once the building is completely ventilated return all equipment to normal settings & operation.
- Do not leave your sheltered location or attempt to start any vehicle until a company representative advises you that the area is safe.

If you are unable to follow these instructions, please notify company emergency response personnel.

Before calling, determine a safe evacuation route for the residents to travel, away from the emergency hazard area, upwind if possible, towards the reception centre.

Hello, thi	s is	(your name)	of		(company na	ame)
Is this the	Э	(name)	residence at	(	(telephone nu	<u>umber)</u> ?
<u>(Comp</u> For your travel in	bany name) safety, it is ex a north / east	is responding to a tremely important the t / south / west direct	( <i>potential)</i> emerge at you and your far ction to our receptio	ency at( mily leave yo on centre loca	(location) ur residence i ated at:	in your area. mmediately and
To help ι	us understand	your immediate nee	eds, we need to kno	w:		
How ma	ny people are	e at your location n	ow?			
	Adults Children					
Is there a to evacua	anyone in you ate away from	r household that you the area?	cannot contact to i	inform them	of the situation	n and advise them
	C Yes	🗆 No				
ITYES	wnom?	the nerson(s)				
	We will send	someone to find the	em as soon as poss	sible.		
Do vou l	have children	in school at this ti	me?			
	Yes	🗆 No				
If Yes	What schoo	p/?				
	Children's I	names				
	We will conta the area imn centre by the	act the school to ens nediately. If school is eir regular bus driver	sure the safety of yo in session, your ch when the school d	our children. hildren will be av is over.	Buses will be e redirected to	directed to leave the reception
Do you i	require evacu	uation / transportat	on assistance?	,		
	🛛 Yes	🗇 No				
If Yes	We are send until a Rover	ling someone to ass r or the local police a	ist you. Please stay arrive to evacuate y	/ indoors and ou.	d close all doo	ors and windows
lf No	Provide the	resident with:				
	Directi	ons to safely travel	to the reception of	centre		
	A list o	f items to bring wit	h them to the rece	eption centr	e (medicatio	ns, cell phone,
	□ An idea	a of how long they	may be expected	to stay at th	e reception d	centre
	□ The op	tion to bring their l	nouse pets to the	reception ce	entre	
Please c Please k	ontact <u>(com</u> eep your phor	p <u>any name)</u> if ne line free so that w	you are unable to r e can contact you i	make it to the f necessary.	e reception ce	entre for any reason.
Is there a	an alternate nu	umber we can conta	ct you at?			
A compa arrangen leaving ir	ny representa nents for your mmediately?	tive at the reception temporary accommo	centre will address odations. Do you ur	any questio nderstand ev	ns you may h rerything I hav	ave and will make re told you? Are you
lf you ha Thank y	ave any urger ou for your c	nt questions, pleas ooperation.	e contact (col	mpany nam	e) at <u>(tel</u>	ephone number)

(Pass on all information regarding this call to the Public Safety Group Supervisor immediately)

Date:(YY/MM/DD)	Responder Name:
Responder Position:	Responder Phone No.:
This is the information I can give you so far:	
At(time – 24hr local clock)on (date),a(n) (fire, ethe Company's(location name)site, locatednorth / south)of(nearest town or city)	xplosion, gas release, spill) occurred at (distance) kilometres (east / west /
Presently, <u>(number of personnel)</u> workers are being the injured cannot be released until their families have been	reated for injuries. The names and condition of contacted.
The <u>(well site, plant, pipeline, office, drilling location)</u> <u>still flowing)</u> .	has been <u>(shut down, isolated, or is</u>
Company staff have been activated and are directing en public, our workers and the environment.	nergency response procedures to protect the
The cause of the <u>(fire, explosion, gas release, spill)</u> is available. As information becomes available, news releas	is not yet known and no estimate of damage es will be issued from the Information Office.
Any further inquiries should be directed to the Incident Collater time.	mmander, who will issue a press release at a
Contact:	
Offic	ce:
Fa	ax:
Note: Only the <b>Media Spokesperson</b> designated by the la information to the public or the media. Refer to page 1 o generic media statement to be used by all other response pe	ncident Commander is to provide any specific f Section 3: Communications & Media for the ersonnel.

			5						
Date:	Kesponder Name:								
Page	of		Respon	der Position:		Respond	lers Phone No.:		
If you feel y	you are not the a	ppropriate pers	on to be answerir	ng the media agencies quest	ions, use the foll	owing series of	statements.		
		"[Inser	t Company Nam	e] has an Information Offic	er to answer al	l media questio	ons."		
		"May I reque	st the following	information to expedite yo	ur request?" (c	omplete the fo	rm below).		
	"Thank you. [Ir	isert Company	Namej apprecia	ates your cooperation and	I will pass on th	is information	to the appropriate person."		
Time	Call To	Call From	Media Outlet	Reporter / Contact Name	Telephone	Numbers	Remarks / Information Required		
					Work	Fax			

Document all key events, conversations, and meetings on this form. Where lengthy notes are necessary, use additional copies or the back of the page.

## C2 Media Contact Log

Time	Call To	Call From	Media Outlet	Reporter / Contact Name	Telephone	Numbers	Remarks / Information Required
			modia Outlot		Work	Fax	

Date:	Responder Name:									
Page	of Responder Position: Responders Phone No.:									
If you fee	you are not the a	appropriate perse	on to be answerin	ig the media agencies ques	tions, use the foll	owing series of	statements.			
		"[Insert	Company Name	] has a Government Liais	son to answer al	l media questio	ons."			
		"May I reque	st the following i	information to expedite y	our request?" (c	omplete the fo	rm below).			
	"Thank you. [I	nsert Company	Name] apprecia	tes your cooperation and	I will pass on th	nis information	to the appropriate person."			
Time				Contact Name	Telephone	Numbers				
Time			Agency	Contact Name	Work	Fax	Remarks / Comments			

Document all key events, conversations, and meetings on this form. Where lengthy notes are necessary, use additional copies or the back of the page.

# C3 Government Agency Contact Log

#### **ENERCAPITA**

Timo	Call From	Δαορογ	Contact Name Telephone Numbers Remarks / Com	Telephone Numbers		Pomarks / Commonts
Time	Call I TOIL	Agency		Work	Fax	

Location	
Address:	
City / Town:	
Phone #:	
Contact	
Office #:	
Unice #.	
nome #.	
Map or Directi	ions to Site

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## Appendix A: ERP Scope, Training and Plan Maintenance

### Scope

This plan defines the emergency response process related to all hazards affecting petroleum operations. This Emergency Response Plan (ERP) outlines the process for an Alert/Minor, Level-1, Level-2, or Level-3 emergency for any jurisdiction or incident type.

### **Plan Objectives**

The primary objective of this Emergency Response Plan (ERP) is to define the incident management system and organizational structure, process and tools to respond effectively to all incidents regardless of size or complexity. It has been designed to be intuitive and have natural process flow utilizing the Incident Command System (ICS) and to comply with applicable regulations, standards, and industry best practices.

### Purpose

This ERP clearly defines emergency response team roles, functions and duties to protect people, environment, and assets during an incident. This plan clarifies the following:

- Overall Incident Command System (ICS) response organization.
- Incident Command System (ICS) Roles and responsibilities.
- Guidance to determine the Alert or Emergency Level.
- Mechanisms to activate the ERP.
- Notification /communication requirements to stakeholders (public /government /responders).
- Documentation tools for accurate records management of events and decisions during an event.
- Guidance for post-emergency actions.

The intent of this Emergency Response Plan (ERP) is to define effective measures in place to:

- Notify and protect the workers and the public.
- Minimize environmental impact.
- Minimize asset and property loss.
- Regain steady state of operations.
- Minimize emergency response time.
- Maximize response effectiveness.
- Coordinate with government agencies and stakeholders.
- Minimize business and reputational impact.

This manual outlines the framework, tools and reference materials to facilitate a prompt, safe, efficient and properly managed response to all incidents regardless of size or complexity. Therefore this plan provides employees and contractors with practical tools that will guide them through the Preparedness and Response principles of Emergency Management.

#### **Emergency Management Process Flow**



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# **ENERCAPITA**

#### HEALTH, SAFETY AND ENVIRONMENTAL POLICY

The safety of workers and the protection of the environment are integral parts of the business operations of Enercapita Energy Ltd. The company will operate in a manner that minimizes adverse effects to the environment and ensures the safety and health of its employees, contractors and the public.

In fulfilling this commitment, Enercapita Energy Ltd. will maintain a safe work environment directed by acceptable industry practices and in compliance with legislative requirements. Enercapita believes that zero incidents are the only acceptable level and will work towards this goal each and every day.

Employees and contractors are responsible to work in a conscientious manner, which safeguards themselves, co-workers, the public and the environment.

We will strive to eliminate any foreseeable hazard that could possibly result in hazardous product releases/spills, fire, explosion, security breaches, loss or damage to property, personal injuries/illnesses, damage to the environment or danger to public safety.

Enercapita Energy Ltd. management, employees and contractors are collectively responsible for implementing the Health, Safety and Environmental Policy. To assist Enercapita employees and contractors in accomplishing these objectives; guidance and specific duties are described in the Corporate Safety Management Program and the Emergency Response Plans.

Duane Masse Executive VP and Chief Operating Officer Enercapita Energy Ltd.

October 2019

The information in this policy does not take precedence over any applicable government legislation, with which all employees and contractors must be familiar.

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# Appendix A: ERP Scope, Training and Plan Maintenance, continued

### **Training Requirements**

Frequency / Action	As Required	Semi- Annually	Annually*	Every Three (3)	Every Five (5) Years***					
	Training									
Employee Orientation New / Transfer	~									
On-the-job Training	~									
Response Discussion During Pre-Job Meetings	~									
Drills	~									
Tabletop Exercise			✓							
Communication / Partial Mobilization Exercises			exercises							
Major (Full Scale) Exercise	✓ Start-up of facility or transmission line (OGC)			✓	4					
Post Incident (Actual) Review	~									
ERP Review / Self Audit		✓								

\* Must be held annually.

\*\* CSA Z246.2-18, CER, OGC & AER requires Major Exercises be held every three (3) years.

\*\*\* Environment & Climate Change Canada (ECCC) requires Major Exercises be held every five (5) years for facilities with E2 required substances.

# Appendix A: ERP Scope, Training and Plan Maintenance, continued

### Plan Maintenance

#### Responsibility

The licensee is responsible to ensure that an ERP is created for all provincial and federally regulated oil and gas activities (i.e. sour operations, HVP pipelines, cavern storage facilities, etc.), they are maintained regularly, and any updates are disseminated to the regulatory agency and other plan holders as required. In order for this to occur the following responsibilities are designated:

- Each individual plan holder is responsible for ensuring their assigned manuals are current, all updates are applied / downloaded / inserted, and any errors or omissions are reported to a supervisor.
- Each Area Manager is responsible for ensuring that a semi-annual review of their ERP is conducted. The ERP Revision Request Form is located in this section and can be used to track this information and provide documentation in the case of an ERP assessment.
- Any requests for revisions to this plan should be forwarded to the applicable Area Manager for review. These revisions will be discussed with the company's Emergency Response Program Coordinator and H<sub>2</sub>Safety Services Inc. Any significant changes including those resulting from exercises and incidents will require immediate updates sent out to all plan holders; less significant changes will be implemented during the ERP's next annual update.
- The company's Emergency Response Program Coordinator is responsible for ensuring that the plans and distribution lists are updated, training is performed, and new projects are included in the plan. Information in this plan will be verified and updated at least once a year.
- Old manuals must be sent to H<sub>2</sub>Safety Services Inc. or destroyed. If a plan holder no longer requires their manual (job changes, position changes, etc.), it must be returned to the company's Emergency Response Program Coordinator to be tracked, reassigned, or destroyed.

The licensee must distribute changes in information that are instrumental to implementing the ERP to all required plan holders.

Errors identified in the ERP by the regulatory agency, licensee, and other party must be corrected immediately upon identification.

#### Modifications to New or Existing Operations

The licensee must submit a supplement for review and approval to the regulatory agency for all newly added wells, pipelines, well / pipeline tie-ins, facilities and operating areas prior to commencement of operations if there are new surface developments within the Emergency Planning Zone. For example, the EPZ for a new pipeline tie-in does not fall entirely within the existing Emergency Planning Zone and impacts a new residence / public facility / trapper cabin / etc. that was not previously included in the Emergency Response Plan. The licensee must conduct a public involvement program for all new members of the public. Before any new or major modifications to an existing facility / pipeline are brought on-stream, any additions or changes will be added to the Emergency Response Plan. If required, a site specific Emergency Response Plan will be developed. Meetings to review response plan requirements must be held before major facility modifications are commissioned.

# Appendix A: ERP Scope, Training and Plan Maintenance, continued

### **ERP Revision Request Form**

Plan Holder Name / Title / Company:
ERP Name:
Manual Number:
If any of the following items have changed, please check the box beside it and provide a description of the change in the space provided:
<ul> <li>Company information</li> <li>Mapping information</li> <li>Resident contact information</li> <li>Response staff information or capacity changes</li> <li>Facility additions, such as well or pipeline tie-ins</li> <li>Other</li> </ul>
Description of the change: Please attach additional pages and/or support documentation as required.
Please return the completed checklist to: H <sub>2</sub> Safety Services Inc. 210, 7260 – 12 Street SE
Email: erp@h2safety.ca Fax: 403-313-9180

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### Appendix B: Incident Command Post (ICP)

### **Communication Methods Between Command Posts - Alberta**



# Appendix B: Incident Command Post (ICP), continued


# Appendix B: Incident Command Post (ICP), continued

# ICP Activation and Setup

The Incident Command Post is activated by the Incident Commander.

The following tasks must be addressed once the ICP has been activated:

Position	Task										
Incident Commander	<ul> <li>Establish briefings with the Field Response Team (FRT).</li> <li>Ensure staffing is adequate for the task(s).</li> <li>Consider the time difference, if applicable, and determine how time will be communicated throughout the incident.</li> </ul>										
Safety Officer	<ul> <li>Ensure the room / floor / building is secure.</li> <li>Ensure a safe work area, i.e. remove clutter or cords causing slips, trips, falls, etc.</li> <li>Notify the receptionist that there is an incident. Provide details of what message</li> </ul>										
Information Officer	<ul> <li>Notify the receptionist that there is an incident. Provide details of what message should be given out to the public and media, as well as where to direct incoming calls.</li> <li>Ensure inbound and outbound calls received or made are centrally logged.</li> <li>Ensure responders have their office phones forwarded to their cell phones.</li> </ul>										
Logistics / IT Support	<ul> <li>Turn on all computers; ensure the relevant systems are operational and that they all have internet/email access.</li> <li>Bring up any ERP related electronic tools (ie; H<sub>2</sub>CommandCentre) and ensure they are working and that they can all be displayed on various projectors / screens as required.</li> <li>Check that printers are connected to the computers and working. Print a test page to confirm.</li> <li>Check that the fax machine is setup and working.</li> <li>Check that any phone conferencing systems are set up and working.</li> <li>Ensure that telephone lines are available and active.</li> <li>Ensure TVs are working properly and set up to local news or CNN.</li> <li>Obtain any additional equipment as required.</li> </ul>										
Logistics / Security	<ul> <li>Ensure the room/floor/building is secure. Arrange for additional security if required.</li> <li>If the location of the Incident Command Post is closed to general staff, provide a list of staff needing access clearance to the meeting area.</li> <li>The following supplies should be available: notepaper, pens, printer cartridges and paper, documentation forms, dry erase markers, staplers and staples, spare power bars and extension cords, etc.</li> <li>Arrange for refreshments (coffee, food, water, etc.) for those working there, as well as sleeping space if required.</li> <li>Ensure there are sufficient tables and chairs for the team.</li> </ul>										

# Appendix B: Incident Command Post (ICP), continued

## ICP Activation and Setup, continued

Position	Task
	Determine which emergency response plans and other ERP tools are needed and pull them out to be readily accessible.
	Determine what laminated maps and charts are going to be utilized and put them up on the wall with dry erase markers. Set up the white boards and roles chart.
	Ensure clocks are displaying the correct time, including any clocks with a different time zone.
	As each person arrives: provide them with a vest, provide them with a print out of the Initial Emergency Report Form, ensure they synchronize their watches and ensure they check in with their assigned supervisor.
Planning /	$\Box$ As team members arrive, write their name in the appropriate position on the Field
Documentation	Response Team Assignment Chart.
	Pass out documentation forms and provide an overview of the documentation process.
	□ Ensure the latest contact list for Field Response Team members are available.
	<ul> <li>Begin documenting all actions, decisions and major events. Start-up H<sub>2</sub>CommandCentre if available.</li> </ul>
	Continually update the laminated maps and charts as information becomes available (Field Response Team Assignment Chart, Emergency Status Board, etc.).
	Post a schedule of events, including shift changes and status updates.

### **Incident Command Post Briefings**

Once the ICP has been activated and team members arrive, the Incident Commander or Deputy needs to conduct an initial briefing to provide the team with the status of the situation, establish operational periods for the ICP, establish a meeting schedule for both a planning meeting and periodic briefings and outline broad goals to guide the ICP throughout the emergency.

In additional to periodic briefings for status updates, the Incident Commander also has to conduct a meeting once the approved Incident Action Plan is in place. This meeting will outline the planned objectives and tasks and will ensure that resources required for implementation of the action plan are in available or en route.

At the end of each operational period, all departing members of the Field Response Team will be debriefed and must brief their replacements.

### Documentation

It is critical to ensure that all ICP documentation is compiled, properly stored and readily available after the event. Proper documentation will aid in investigations, inquiries, debriefs and support for financial claims and budgets. Everything that happens during the Response/Recovery Operations should be recorded at the ICP. The forms at the back of this manual are designed to aid in this process

# **Appendix C: Toxic Gases**

## Hydrogen Sulphide (H<sub>2</sub>S)

### Background

Hydrogen sulphide ( $H_2S$ ) is a flammable, colourless gas with a characteristic odour of rotten eggs that people can smell at low levels. It is also known as hydrosulphuric acid and sewer gas.  $H_2S$  occurs naturally in crude petroleum, natural gas, volcanic gases and hot springs. It can also result from bacterial breakdown of organic matter. Industrial sources include emissions from industrial paper plants; combustion of coal, fuel oil and natural gas (including gas flares); kraft paper mills; tanneries; and emissions from sewers and waste treatment facilities. Cigarette smoke is also a source of hydrogen sulphide.

 $H_2S$  is released primarily as a gas and spreads in the air. Its residence time in the atmosphere ranges from about one day to more than 40 days, depending on ambient temperature and other atmospheric variables, including humidity, sunshine and presence of other pollutants. The decreased temperatures and decreased levels of hydroxyl ions in northern regions in winter increase the residence time. When released  $H_2S$  gas is ignited, it will change into sulphur dioxide (SO<sub>2</sub>), be carried into the atmosphere and dispersed over a larger area at lower concentrations.

### Signs and Symptoms

Exposure to hydrogen sulphide may cause irritation to the eyes, nose or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulphide can cause a loss of consciousness and possibly death. In most cases, the person appears to regain consciousness without any other effects. However, in some individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory and poor motor function. No health effects have been found in humans exposed to typical environmental concentrations of hydrogen sulphide (0.00011-0.00033 ppm).

#### **Acute Exposure Effects**

The effects on humans will vary depending on the duration and  $H_2S$  concentration of exposure. The health effects of acute exposure to  $H_2S$  are shown in the following table. Acute exposure reflects a range from a few seconds up to several weeks.

Concentration (ppm)	Effects
Less than 1	Most people smell "rotten eggs".
3 – 5	Odour is strong.
20 – 150	Nose and throat feel dry and irritated. Eyes sting, itch or water and "gas eye" symptoms may occur. Prolonged exposure may cause coughing, hoarseness, shortness of breath and runny nose.
150 – 200	Sense of smell is blocked (olfactory fatigue).
200 – 250	Major irritation of the nose, throat and lungs, along with headache, nausea, vomiting and dizziness. Prolonged exposure can cause fluid buildup in the lungs (pulmonary edema), which can be fatal.
300 – 500	Symptoms are the same as above, but more severe. Death can occur within 1-4 hours of exposure.
Above 500	Immediate loss of consciousness. Death is rapid, sometimes immediate.

### Hydrogen Sulphide Toxicity Table (BC Regulations)

Adapted from Hydrogen Sulfide in Industry, WorkSafe BC February 2010

### Acute Health Effects of Hydrogen Sulphide (AB Regulations)

Concentration in Air (ppm)	Description of Potential Health Effects
1	A noticeable odour that may be offensive to some individuals. People may temporarily experience mild symptoms of discomfort, including nausea, headache, and irritability due to the odour. Asthma symptoms may worsen.
10 – 20	An obvious offensive odour. Temporary eye irritation may occur after a single exposure and last several hours. Symptoms include mild itchiness, dryness, increased blink reflex and slight watering. Some people may experience headaches, nausea and vomiting. Symptoms of asthma, bronchitis or other forms of chronic respiratory disease may worsen.
50	A strong, intense offensive odour that may irritate eyes and breathing passages. Eyes may be itchy, stinging, and red with increased blinking, tearing and tendency to rub eyes. Breathing passages could feel tingly or sting, with increased tendency to clear throat and cough. Symptoms of pre-existing respiratory disease may worsen. No permanent injury to eyes or breathing passages is expected unless exposure is prolonged. Odour–sensitive individuals may experience headaches, nausea, vomiting and diarrhea.
100	Initially there is a strong objectionable odour that lessens with prolonged exposure due to olfactory "fatigue." Eyes and breathing passages are often irritated within one hour of exposure. Eyes may be sore, stinging, burning, tearing, redness, swelling of eyelids, and possible blurred vision. Respiratory irritation may include sore throat, cough, soreness or stinging of breathing passages, and wheezing. The symptoms of asthma, bronchitis or other forms of chronic respiratory disease will worsen. Odour may cause headache, nausea, vomiting and diarrhea.
250	There may or may not be an odour present due to olfactory paralysis. Eyes and breathing passages will become irritated within minutes of exposure, and the irritation will worsen with longer exposure. The outer surface of the eyes and inner eyelids will be inflamed, red and sore. Eyes will begin watering and tearing immediately and vision may be blurred. Eyes may be permanently harmed if exposure is prolonged. Respiratory irritation will include sore throat, cough, difficulty breathing, soreness of chest, and wheezing. Asthma symptoms will worsen. People may experience "systemic" effects, including headache, nausea and vertigo depending on duration of exposure.
500	No odour is present due to olfactory paralysis. Severe irritation and possible permanent injury to the eyes and breathing passages within 30 minutes of exposure. Lung and breathing passage damage may cause 'chemical pneumonia' following exposure if the exposure was prolonged. Systemic effects involving the central nervous system may occur within one hour of exposure and include headache, anxiety, dizziness, loss of coordination and slurred speech. People may lose consciousness or collapse suddenly, and die if exposure persists.

### Acute Health Effects of Hydrogen Sulphide (AB Regulations), continued

Concentration in Air (ppm)	Description of Potential Health Effects
750	No odour is present due to olfactory paralysis. Central nervous system effects will be most obvious, and could include anxiety, confusion, headache, slurred speech, dizziness, stumbling, loss of coordination, and other signs of motor dysfunction. People may lose consciousness, collapse suddenly and possibly die, if exposure continues for more than a few minutes. Lung and breathing passage damage will likely cause 'chemical pneumonia' among survivors.
1000	Immediate "knock-down" and loss of consciousness. Death within moments to minutes. Immediate medical attention needed if victim is to survive.

Adapted from: Technical Advisory Committee on Public Health and the Oil and Gas Industry, Environmental Public Health Manual for Oil and Gas Activities in Alberta, 2007

Source: Alberta Health Services, Environmental Public Health

http://www.albertahealthservices.ca/assets/wf/eph/wf-eh-alberta-health-acute-exposure-health-effects-ofhydrogen-sulphide-and-sulphur-dioxide.pdf

### Chronic Exposure Effects of Hydrogen Sulphide

Chronic effects from  $H_2S$  exposure is a developing area of research. Chronic exposure may inflame and irritate the upper respiratory tract.

#### Medical treatment for hydrogen sulphide exposure

(Please note: This information was provided by a medical source other than the Provincial Regional Health Authorities. See Hydrogen Sulphide ( $H_2S$ ) Guidelines - Revised November 2000)

#### Guidelines for in Hospital Assessment/Treatment of Possible Hydrogen Sulphide Exposure

This is provided to assist medical staff in assessing a worker who has a possible or actual H<sub>2</sub>S exposure.

Section I provides information on H<sub>2</sub>S

Section II summarizes possible health effects, which should be evaluated at the time of presentation

Section III depicts a summary of possible clinical management

Section IV provides a guideline regarding return to work (RTW) considerations

#### I. Hydrogen sulphide

H<sub>2</sub>S is a colourless gas. It is heavier than air and tends to flow in ditches, trenches and low-lying areas.

H<sub>2</sub>S is clearly recognizable in small concentrations at around one part per million (ppm) by its characteristic rotten egg smell.

At concentrations of about 150 ppm in the air, or after prolonged exposure to lower concentrations, the olfactory sense is paralyzed and the presence of  $H_2S$  can no longer be detected by odour.

#### II. Health effects of hydrogen sulphide

H<sub>2</sub>S can be rapidly fatal. It acts by paralyzing the respiratory control centre in the brain and by inhibiting cellular respiration.

Hydrogen sulphide is a mucous-membrane and respiratory-tract irritant. Pulmonary edema, which may be immediate or delayed, can occur after exposure to high concentrations.

#### Acute exposure may include the following symptoms and signs:

#### **Central Nervous System**

CNS injury is immediate and significant after exposure to hydrogen sulphide. At high concentrations, only a few breaths can lead to loss of consciousness, coma, respiratory paralysis, seizures, and death. CNS stimulation may precede CNS depression. Stimulation manifests as excitation, rapid breathing, and headache; depression manifests as impaired gait, dizziness, and coma, possibly progressing to respiratory paralysis and death. In addition, decreased ability to smell occurs at 100 to 150 ppm.

#### Respiratory

Inhaled Hydrogen sulphide initially affects the nose and throat. Low concentrations (50 ppm) can rapidly produce irritation of the nose, throat, and lower respiratory tract. Pulmonary manifestations include cough, shortness of breath, and bronchial or lung hemorrhage. Higher concentrations can provoke bronchitis and cause accumulation of fluid in the lungs, which may be immediate or delayed for 24 hours or more. Lack of oxygen may result in cyanosis.

#### Medical Treatment for Hydrogen Sulphide Exposure, continued

#### Cardiovascular

High dose exposure may cause insufficient cardiac output, irregular heartbeat and conduction abnormalities.

#### Renal

Although very unlikely, transit renal effect may include blood, casts, and protein in the urine. Renal failure as a direct result of hydrogen sulphide toxicity has not been described, although it may occur secondary to cardiovascular compromise.

#### Gastrointestinal

Symptoms may include nausea and vomiting.

#### Dermal

Prolonged or massive exposure may cause burning, itching, redness and painful inflammation of the skin.

#### Ocular

Eye irritation may result in inflammation (i.e. kerato-conjunctivitis) and clouding of the eye surface. Symptoms include blurred vision, sensitivity to light, and spasmodic blinking or involuntary closing of the eyelid.

#### Potential Sequelae

Inflammation of the bronchi can be a late development. Survivors of severe exposure may suffer psychic disturbances and permanent damage to the brain and heart.

#### III. Approach to the worker with suspected hydrogen sulphide exposure

Although this document refers only to  $H_2S$ , it is important for the clinician to keep in mind the possibility of coexposure to numerous other agents. Sulphur dioxide may have been present if there has been combustion of hydrogen sulphide. Sulphur dioxide does not cause loss of consciousness but is a respiratory tract irritant. Therefore, the management of sulphur dioxide intoxication is similar to that for hydrogen sulphide. Other agents capable of causing asphyxia include carbon monoxide (toxic asphyxia) as well as a wide array of gases that act as simple asphyxiants (carbon dioxide, methane, nitrogen, etc.) by displacing oxygen. Finally, other conditions (MI, syncope, seizure, etc.) that may cause sudden collapse must be investigated and managed as appropriate.

#### History

The history is the key to the diagnosis of hydrogen sulphide (or other industrial) intoxication. There are two facets to the history in such cases:

Exposure history: This attempts to define, in qualitative terms, the likelihood of, and amount of exposure to hydrogen sulphide. This should include questions about work processes, the presence of a rotten egg odour and inquiring as to effects in co-workers. If possible, this should be supplemented by Industrial Hygiene information, which might include the triggering of alarms for hydrogen sulphide and historical data on air measurements. For suspected exposures, the workplace can often provide useful estimates regarding the level of exposure, although such data may require several days to reconstruct.

Clinical history: The physician should attempt to establish the presence of as many of the symptoms as possible associated with  $H_2S$  exposure. Determining the presence of respiratory tract irritation (conjunctivitis, rhinitis, tracheitis) is of particular importance since this symptom distinguishes hydrogen sulphide from several other asphyxiants and serious toxicity is unlikely in the absence of this symptom at presentation.

#### Investigations

There are no specific tests in routine clinical use to establish hydrogen sulphide intoxication. Rather, testing is aimed at characterizing the sequels of intoxication, as well as to rule out other causes for the presentation.

#### Medical Treatment for Hydrogen Sulphide Exposure, continued

#### Treatment

Treatment is entirely supportive in nature and includes supplemental oxygen, managing eye and skin exposure as a chemical bum and maintenance of circulatory status. Although nitrite therapy has been advocated as an antidote, there is little evidence to support its use and as it is potentially dangerous it is not recommended.

On arrival - check blood gases and assess for lactic acidosis. Take chest film and repeat as necessary keeping in mind the delayed possibility of pulmonary edema. ECG may assist as arrhythmias and bradycardia are not uncommon. Temporary T wave depression may occur and ECG may mimic infarction.

For the unconscious patient, give oxygen using mechanical ventilation with positive end expiratory pressure.

Assess for associated musculo-skeletal and internal traumatic injury.

Maintain circulating fluid volume, but be alert for delayed onset of pulmonary edema.

At times, strong physical restraint may be required. Keep the patient as inactive as possible.

A pulmonary function test should be done near time of discharge and, if abnormal should be repeated at appropriate intervals thereafter.

# If symptoms and/or exposure history are strongly clinically suggestive, because of the possibility of delayed pulmonary edema, adequate monitoring and follow-up for at least 24 hours is essential.

#### IV. Guidelines for Return to Work (RTW)

Three possible scenarios may be considered by the attending medical personnel:

Possible exposure, without symptoms

Possible exposure, with symptoms (that are compatible with H<sub>2</sub>S)

Known exposure including "knockdown", with symptoms that require medical treatment and/or hospitalization.

In each scenario, a clinical decision about appropriate medical investigations, treatment, follow-up evaluation, and timing of return-to-work (RTW) will have to be made. It is emphasized that with scenarios (1) and (2), it may be preferable to either monitor the employee in the hospital or as an outpatient (with follow-up examination) for 24-48 hours prior to RTW.

# Appendix C: Toxic Gases, continued Sulphur Dioxide (SO<sub>2</sub>)

### Background

Sulphur Dioxide  $(SO_2)$  belongs to the family of sulphur oxide gases  $(SO_2)$ . Sulphur is prevalent in raw materials including crude oil and coal, as well as in ore that contains common metals. Sulphur oxide gases form when fuels containing sulphur are burned and when gas is processed or metals are extracted from ore. Like other sulphur oxide gases,  $SO_2$  dissolves in water or water vapour to form acid, and interacts with other gases and particles in the air to form sulphates and other products.

Sulphur dioxide is a colourless gas that is about 2.5 heavier than air. It has a sweet pungent odour, and can be detected by taste and smell at concentrations as low as 300 parts per billion (ppb). Acids that are formed when SO<sub>2</sub> (and nitrogen oxides) react with other substances in the air may be carried great distances before falling to earth as rain, fog, snow or dry particles. Acid rain damages forests and crops, changes the chemical make-up of soils, and increases the acidity of lakes and streams. Continued long-term exposure will affect the natural variety of plants and animals in an ecosystem. As well as contributing to smog, SO<sub>2</sub> emissions cause aesthetic damage and accelerate the decay of building materials and paints.

General guidelines dictate evacuation where  $SO_2$  concentrations reach 5 ppm averaged over a 15 minute period. However, as a precaution, evacuation will be established under the criteria when the  $SO_2$  level reaches 1 ppm for two to three hours, or averages 0.3 ppm over twenty-four hours.

### Signs and Symptoms

Sulphur dioxide causes a wide variety of health and environmental impacts because of the way it reacts with other substances in the air. Acute and chronic exposure to  $SO_2$  affects the respiratory system. Acute exposure effects, with increasing exposure, include irritation of the eye, nose and throat, choking, coughing, bronchitis and pneumonia. Exposure to low concentrations can aggravate chronic pulmonary diseases, such as asthma and emphysema. Co-exposure to cold or dry air may further exacerbate the respiratory effects of  $SO_2$  on sensitive asthmatics. Particularly sensitive groups include children, the elderly and those with existing heart or lung disease.

Concentration (ppm)	Effects								
0.13	24 hour level (MWLAP Level B Criteria).								
0.34	One hour average evacuation level (MWLAP Level B criteria).								
2	Eight hour occupational Exposure Limit (BC WCB)								
3 – 5	Odour threshold.								
5	15 minute Occupational Exposure Limit (BC WCB)								
8 – 12	Throat irritation, coughing, constriction in chest, tearing and smarting of the eyes.								
10 – 50	5 – 15 minutes exposure produces increased irritation of eyes, nose, and throat, choking, coughing, and in some cases wheezing due to narrowing of the airways (which increases the resistance of the air flow).								
150 Short-term endurance lost due to the severe eye irritation and because of the effects on the membranes of the nose, throat, and lungs.									
500	Highly dangerous after exposure of 30 – 60 minutes.								

### Sulphur Dioxide Toxicity Table (BC Regulations)

Adapted from the Canada Safety Council Data Sheet "Sulphur Dioxide" No. B-4 Oil and Gas Commission November 2003.

Concentration (ppm)	Acute Health Effects					
0.1	Transient bronchoconstriction <sup>1</sup> in sensitive exercising asthmatic individuals that ceases when exposure ceases. <sup>2</sup>					
0.3 – 1	Possible detection by taste or smell.					
0.75	Transient lung function changes in healthy, moderately exercising, non-asthmatic individuals.					
<ul> <li>Lung function changes in healthy non-asthmatics. Symptoms in asthmatics would likely increase in severity. There may be a shift to clinical symptoms from change detectable only via spirometry.</li> </ul>						
3	Easily detected odour.					
6 – 12	May cause nasal and throat irritation.					
10	Upper respiratory irritation, some nosebleeds.					
20 Definitely irritating to the eyes; chronic respiratory symptoms develop; protection is necessary.						
50 – 100	Maximum tolerable exposures for 30-60 minutes.					
Greater than 100	Immediate danger to life (NIOSH recommendation).					

### Acute Health Effects of Sulphur Dioxide (AB Regulations)

<sup>1</sup> At low levels, bronchoconstriction was generally observed as changes in airway conductance detectable by spirometry rather than as clinical symptoms.

<sup>2</sup> It should be noted that clinical studies on humans are generally designed to elicit a response and consequently subject study volunteers to challenging conditions such as exercising, mouth breathing, cold, dry air, etc. Real-life responses in asthmatics should be viewed as being individual-specific dependent on severity of asthma, whether the individuals are medicated or not, how cold and/or dry the air is, mouth breathing (vs. nose breathing, which can act as an effective scrubber mechanism) and exercise.

Adapted from: Technical Advisory Committee on Public Health and the Oil and Gas Industry, Environmental Public Health Manual for Oil and Gas Activities in Alberta, 2007

Source: Alberta Health Services, Environmental Public Health http://www.albertahealthservices.ca/assets/wf/eph/wf-eh-alberta-health-acute-exposure-health-effects-ofhydrogen-sulphide-and-sulphur-dioxide.pdf

#### Medical treatment for sulphur dioxide exposure

(Please note: This information was provided by a medical source other than the Provincial Regional Health Authorities. See Sulphur Dioxide (SO<sub>2</sub>) Guidelines - Revised July 2001)

#### Guidelines for in Hospital Assessment/Treatment of Possible Sulphur Dioxide Exposure

This is provided to assist medical staff in assessing a worker who has a possible or actual SO<sub>2</sub> exposure.

Section I provides information on SO2

Section II summarizes possible health effects which should be evaluated at the time of presentation

Section III depicts a summary of possible clinical management

Section IV provides a guideline regarding return to work (RTW) considerations.

#### I. Sulphur Dioxide

 $SO_2$  is a colourless gas with a pungent odour detectable by the human nose at concentrations of about 0.5 to 0.8 ppm.

SO<sub>2</sub> is highly soluble in water resulting in the formation of sulphurous acid.

Approximately 90% of inhaled SO<sub>2</sub> is absorbed in the upper respiratory tract.

Asthmatics and individuals with underlying bronchial hyperactivity may be more susceptible to low level exposure to SO<sub>2</sub>.

#### II. Health Effects of Sulphur Dioxide

SO<sub>2</sub> causes almost immediate coughing with significant exposure.

SO<sub>2</sub> causes irritation of the conjunctive and nasal mucosa at levels between 5 and 10 ppm.

Exposures of  $SO_2$  as low as 8 ppm has been associated with symptoms of cough, phlegm, wheezing and exertional dyspnea.

Acute high-dose exposures leading to severe injury are unusual, parenchyma lung damage occurs above 50 ppm.

#### Medical treatment for sulphur dioxide exposure, continued

#### Acute exposure may include the following symptoms and signs:

#### Respiratory

Inhaled  $SO_2$  is a moderate to strong respiratory irritant. Reddening of the throat and nose may occur. Repeated exposure to 10 ppm has caused nosebleeds. Sensitivity varies among people, short exposure to low concentrations may produce a reversible decrease in lung function, and symptoms may include chest tightness.

Exposure to high concentrations of SO<sub>2</sub> has caused severe airways obstruction, hypoxia and pulmonary edema. The effects of pulmonary edema include coughing and shortness of breath which can be delayed until hours or days after the exposure; these symptoms are aggravated by physical exertion. Survivors of high concentration exposures may suffer chemical bronchopneumonia and bronchiolitis obliterans, which can be fatal after a few days. Delayed chemical pneumonitis and bronchial asthma can also result.

#### Dermal

The gas will react with moisture on the skin and cause irritation (redness, itching).

#### Ocular

Eye irritation may result in smarting of the eyes and tearing. In severe cases (high concentrations in a confined area), SO<sub>2</sub> has caused temporary corneal burns.

#### **Potential Sequelae**

Survivors of high concentration exposures may suffer chemical bronchopneumonia and bronchiolitis obliterans, which can be fatal after a few days. Delayed chemical pneumonitis and bronchial asthma can also result.

#### III. Approach to the worker with suspected Sulphur Dioxide Exposure

Although this document refers only to SO<sub>2</sub>, it is important for the clinician to keep in mind the possibility of coexposure to numerous other agents.

#### History

The history is the key to the diagnosis of  $SO_2$  (or other industrial) intoxication. There are two facets to the history in such cases:

Exposure history: This attempts to define, in qualitative terms, the likelihood of, and amount of exposure to sulphur dioxide. This should include questions about work processes, the presence of an odour and inquiring as to the effects in co-workers. If possible, this should be supplemented by industrial hygiene information which might include the triggering of alarms for sulphur dioxide and historical data on air measurements. For suspected exposures, the workplace can often provide useful estimates regarding the level of exposure, although such data may require several days to reconstruct.

Clinical history: The physician should attempt to establish the presence of as many of the symptoms as possible associated with  $SO_2$  exposure.

#### Investigations

There are no specific tests in routine clinical use to establish sulphur dioxide intoxication. Rather, testing is aimed at characterizing the sequels of intoxication as well as to rule out other causes for the presentation.

#### Medical treatment for sulphur dioxide exposure, continued

#### Treatment

Treatment is entirely supportive in nature and includes supplemental oxygen, managing eye and skin exposure as a chemical burn and maintenance of respiratory status.

On arrival - check blood gases. Take chest film and repeat as necessary keeping in mind the delayed possibility of pulmonary edema.

Oxygen should be delivered by nasal cannula or mask, or if pulmonary injury leads to severe hypoxia by mechanical ventilation.

If bronchospasm occurs, bronchodilators may be of value.

A pulmonary function test should be done near time of discharge and, if abnormal, should be repeated at appropriate intervals thereafter.

Conjunctival irritation should be treated with copious irrigation with saline and the eyes examined with fluorescein for corneal defects.

Assess for associated musculo-skeletal and internal traumatic injury.

Prophylactic antibiotics should be avoided.

If symptoms and/or exposure history are strongly clinically suggestive, because of the possibility of delayed pulmonary edema, adequate monitoring and follow-up for at least 24 hours is essential.

#### IV. Guidelines for Return to Work (RTW)

Three possible scenarios may be considered by the attending medical personnel:

Possible exposure, without symptoms;

Possible exposure, with symptoms (that are compatible with SO<sub>2</sub>) or

Known exposure, including "knockdown", with symptoms that require medical treatment and/or hospitalization.

In each scenario, a clinical decision about appropriate medical investigations, treatment, follow-up evaluation and timing of return-to-work (RTW) will have to be made. It is emphasized that with scenarios (2) and (3), it may be preferable to either monitor the employee in the hospital or as an outpatient (with follow-up examination) for 24 - 48 hours prior to RTW.

# Appendix D: Key Elements of the Incident Command System (ICS)

**Management by Objectives** – Objectives are ranked by priority, should be as specific as possible, must be attainable and if possible given a working time-frame. Objectives are accomplished by first outlining strategies (general plans of action), then determining appropriate tactics (how the strategy will be executed) for the chosen strategy

**Unity and Chain of Command** – Each individual takes direction from and reports to only one designated supervisor; this is called Unity of Command. Higher level personnel have authority over lower level personnel; the lower level personnel are subordinate to and take direction from higher level personnel. Orders and instructions travel down the chain of command from one supervisor to each subordinate. This is called Chain of Command.



# Appendix D: Key Elements of the Incident Command System (ICS), continued

**Organizational Flexibility** – Only positions that are required at the time should be assigned. In most cases, very few positions will need to be assigned.



**Span of Control** – ICS requires that any single person's span of control (number of people reporting to them) should be between three and seven, with five being ideal.

**Common Terminology** – When different organizations are required to work together, the use of common terminology is essential.

**Incident Action Plan (IAP)** – Every incident must have a written or oral Incident Action Plan. The following information is part of an Incident Action Plan and must be communicated to the rest of the organization:

- Objectives, strategies and tactics outlined by the Incident Commander.
- Resources assignments what resources do we have and what are they doing? What resources are on order and what are they going to do?
- A description of the ICS organizational structure what positions will be filled?
- Supporting materials incident map, communications plan, evacuation plan, stick diagrams, etc.

**Integrated Communications** – The use of a common communications plan is essential for ensuring effective communication during an incident.

# Appendix D: Key Elements of the Incident Command System (ICS), continued

**Establishment and Transfer of Command** – The highest ranking authority arriving onscene at an incident will assume the role of the Incident Commander. That person will continue to be the Incident Commander until there is a formal transfer of command. A transfer of command briefing usually consists of:

- Reviewing a description of the incident.
- Reviewing the actions taken thus far to contain and control the incident.
- Reviewing the current ICS organizational structure.
- A summary of the resources available and ordered.

**Resources Management** – A resource must either be in assigned, available, or out-of-service status.

- Assigned a resource in assigned status is currently doing whatever tasks have been assigned to it.
- Available a resource in available status is ready to be deployed at a moments notice. Resources in available status often wait for assignments at an incident Staging Area.
- Out-of-Service a resources in out-of-service status might be sleeping, receiving medical aid, getting repairs, etc. and is not ready for assignment.

### Summary of Responsibilities

These management functions are handled by the General Staff once they have been delegated by the Incident Commander.

#### **Command** Ensures safety. Assumes overall responsibility for the incident.

The Incident Commander is responsible for the Command of the incident as well as the following management functions until they are assigned to other response personnel:

- **Operations** Implements the Incident Action Plan (IAP) focusing on control, containment, and site safety.
- **Public Safety** Implements the Incident Action Plan (IAP) focusing on notification and evacuation of the public.
- Planning Help create and track (document) the success of the Incident Action Plan (IAP).
- **Logistics** Secure the resources and put them in place to allow Operations to implement the Incident Action Plan.
- **Finance/Admin** Ensures procedures are in place to allow logistics to secure the resources (spending) and track and control the expenditures.
- **Communications** Disseminates information and liaises with external agencies.

Communications is handled by the Information Officer once one has been appointed by the Incident Commander. The Information Officer is part of the Command Staff.

# **Appendix E: Land Descriptions**

# **Dominion Land Survey (DLS) System**

- Each township (6 mile x 6 mile) is divided into 36 sections (1 mile x 1 mile)
- Each section is divided into 16 legal sub-divisions (L.S.D.)
- Each section is divided into four quarters (N.W., N.E., S.W., and S.E.)

The numbering of sections and L.S.D.s is shown below:

	•		– Rang	е —				Secti	on	
Î	31	32	33	34	35	36	13 N	14 w	15	16 E
Ļ	30	29	28	27	26	25	12	11	10	9
o w n	19	20	21	22	23	24	5	6	7	8 F
s h i	18	17	16	15	14	13	4	3	2	1
р   	7	8	9	10	11	12				
	6	5	4	3	2	1				

- Townships increase in number from South to North starting at the Canada USA border
- Ranges increase in number from East to West within a Meridian. A Range is one (1) Township wide (6 miles).
- Meridians run from the North Pole to the South Pole and are spaced every four degrees. The principal Meridian in Canada originates in Central Manitoba and increases West or East from there.
- Legal land description is listed in the following order:

	L.S.D		Section	_	Township		Range	_	Meridian
Example	02	-	01	-	38	-	09	_	West of the 4 <sup>th</sup>

# Appendix E: Land Descriptions, continued

# National Topographic System (NTS)

Based on the National Topographic System (NTS), the map labelling terms are as follows:

1) Series	A rectangular area that has a width of 8 degrees of longitude and 4 degrees of latitude. There are 9 Series in British Columbia (82, 83, 92, 93, 94, 102, 103, 104, and 114).
2) Area	1/16 of a map Series that has a width of 2 degrees of longitude by 1 degree of latitude (labelled from A to P).
3) Sheet	1/16 of map Area that has a width of 30' in longitude and 15' of latitude (labelled from 1 to 16).
4) Block	1/12 of a map Sheet with a width of 7'30" in longitude and 5' in latitude (labelled from A to L).
5) Unit	1/100 of a map Block, and has a latitudinal extent of 30" and longitudinal extent of 45" (labelled from 1 to 100).
6) Quarter Unit	1/4 of a map Unit (labelled from a to d).

Note: 1 degree is equivalent to approximately 111 km in British Columbia. Degrees vary in size around the planet. They become smaller the closer they get to the poles (north or south) and very large as they reach the equator.

#### Example a-29-H / 93-P-9

Ser	ies						Area	is						SI	hee	ts						
Γ							М		N	С	)	<b>-P</b>			13		14		15		16	
								_	K	J		I			12	/	11	/	_10_		9	
	93						Е		F	G	i	н			5		6		7		8	
							D		С	В		А			4		3	$\langle$	2		1	
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D	)	С	В	А		40	39	38	37	36	35	34	33	32	2 3	31		)			2	
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						20	19	18	07	16	15	14	13	12	$\frac{2}{2}$	11						
						10	09	00	07	00	05	04	05	02	2   (	71						
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# Appendix F: ERP Reference Material

# Acronyms

Acronym	Meaning	Acronym	Meaning
ABSA	Alberta Boilers Safety Association	ICS	Incident Command System
AEMA	Alberta Emergency Management Agency	IIZ	Initial Isolation Zone
AER	Alberta Energy Regulator	INAC	Indigenous and Northern Affairs Canada
AH	Alberta Health	LA	Local Authority
AHS	Alberta Health Services	LBV	Line Block Valve
AT	Alberta Transportation	LEL	Lower Explosive Limit
BLEVE	Boiling Liquid Expanding Vapour Explosion	LPG	Liquefied Petroleum Gas
CANUTEC	Canadian Transport Emergency Centre	MARS	Mapping and Response System
CAPP	Canadian Association of Petroleum Producers	MD	Municipal District
CEPA	Canadian Environmental Protection Act	MEP	Municipal Emergency Plan
CER	Canada Energy Regulator	MOP	Maximum Operating Pressure
CERC	Corporate Emergency Response Centre	NGL	Natural Gas Liquids
CISD	Critical Incident Stress Debriefing	NOTAM	Notice to Airmen
CPE	Communications and Public Engagement	OGC	Oil & Gas Commission
CSA	Canadian Standards Association	OHS	Occupational Health and Safety
DFO	Department of Fisheries and Oceans	OSCAR	Oil Spill Containment and Recovery
EAZ	Emergency Awareness Zone	OSCP	On-Site Command Post
ECCC	Environment & Climate Change Canada	PAD	Protective Action Distance
EMBC	Emergency Management BC	PAZ	Protective Action Zone
EMO	Emergency Measures Organization	POC	Provincial Operations Centre
EOC	Emergency Operations Centre	PPB	Parts Per Billion
EPZ	Emergency Planning Zone	PPE	Personal Protective Equipment
ER	Ministry of Energy and Resources	PPM	Parts Per Million
ERAC	Emergency Response Assistance Canada	RCMP	Royal Canadian Mounted Police
ERP	Emergency Response Plan	RD	Rural District
ESD	Emergency Shut Down	REOC	Regional Emergency Operations Centre
ESDV	Emergency Shut-Down Valve	RHA	Regional Health Authority
ETA	Estimated Time of Arrival	RM	Rural or Regional Municipality
FH Order	Fire Hazard Order	SABA	Supplied Air Breathing Apparatus
FNIHB	First Nations and Inuit Health Branch – Health Canada	SCBA	Self-Contained Breathing Apparatus
GEOC	Government Emergency Operations Centre	SDS	Safety Data Sheet
HPZ	Hazard Planning Zone	SHA	Saskatchewan Health Authority
HVAC	Heating Ventilation Air Conditioning	SO <sub>2</sub>	Sulphur Dioxide
HVP	High Vapour Pressure	STARS	Shock Trauma Air Rescue Society
HVPL	High Vapour Pressure Liquid	TDG	Transportation of Dangerous Goods
H <sub>2</sub> S	Hydrogen Sulphide	WCSS	Western Canadian Spill Service
IAP	Incident Action Plan	WHMIS	Workplace Hazardous Materials Information System

### **Glossary of Terms**

#### Adjacent to

Within 25 m.

#### Air Quality Monitoring

Measurement of atmospheric concentrations of a hazardous substance, such as H<sub>2</sub>S or SO<sub>2</sub>.

#### Alberta Energy Regulator (AER)

The AER ensures the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. This includes allocating and conserving water resources, managing public lands, and protecting the environment while providing economic benefits for Albertans.

#### Alert (Alberta specific)

An incident that can be handled on-site by the licensee through normal operating procedures and is deemed to be a very low risk to members of the public.

#### Auto-ignition temperature

All NGL products are flammable and will flash at extremely low temperatures. An open flame or spark is not necessary to cause ignition. Any hot surface which exceeds the auto-ignition temperature of a product can cause a fire if the vapours reaching the hot surface are within their flammable range.

#### Best practices

A technique or methodology that, through experience and research, has proven to reliably lead to a desired result. A commitment to using the best practices in any field is a commitment to using all the knowledge and technology at one's disposal to ensure success.

#### Body of water

Streams, lakes, and rivers.

#### **Boiling Liquid Expanding Vapour Explosion (BLEVE)**

Boiling Liquid Expanding Vapour Explosion, which is associated with natural gas liquids and high vapour pressure liquids.

#### **Boiling point**

This is the temperature that a liquid changes to a gas. NGL products change to a gas at extremely low temperatures and will absorb heat from the surrounding environment during the phase change. Therefore, caution must be used when working with NGLs because contact with flesh can reduce the temperature of the flesh to the NGL boiling point and cause severe frostbite.

#### British Columbia Oil and Gas Commission (OGC)

The OGC is the lead agency for all regulated oil and gas related activities within British Columbia.

#### British Columbia Emergency Management (EMBC) (British Columbia specific)

Aids local governments in analyzing hazards and risks, develop and test emergency plans, train and organize emergency staff and volunteers. EMBC also manages all agencies in the event of an emergency or disaster, which cannot be handled locally.

#### Businesses

Industrial operators, retail outlet operators, suppliers, residents, outfitters, foresters and other entities that normally operate within the Emergency Planning Zone, but do not necessarily reside in the Emergency Planning Zone.

### **Glossary of Terms, continued**

#### **Closure order** (British Columbia specific)

When the OGC believes that, because of hazardous conditions in a field or at a well, it is necessary or expedient to close an area and to shut out all persons except those specifically authorized, the commission may make an order in writing setting out and delimiting the closed area. For Alberta see Fire Hazard (FH) Order.

#### Corporate Emergency Response Plan

This Emergency Response Plan is to facilitate a co-ordinated response by company executive and management personnel to an emergency situation, which may affect the company or its affiliated companies. The Corporate Emergency Response Plan is an integral part of all site-specific company Emergency Response Plans and procedures.

#### Critical Incident Stress Debriefing (CISD)

Critical Incident Stress Debriefing is a specially structured counselling process between the debriefers and those who are directly involved and/or impacted by an incident.

#### Critical sour well (Alberta specific)

A well with an H<sub>2</sub>S release rate greater than 2.0 m3/s or wells with lower H<sub>2</sub>S release rates in close proximity to an urban centre as defined in ID 97-6: Sour Well Licensing and Drilling Requirements.

#### Emergency

A present or imminent event outside the scope of normal operations that requires prompt coordination of resources to protect the health, safety, and welfare of people and to limit damage to property and the environment.

#### **Emergency Operations Centre (EOC)**

An Emergency Operations Centre is a designated facility in a suitable location (i.e. head office, regional office, etc.) established by the permit holder to support Incident Command and to manage the larger aspects of an emergency. In a high-impact emergency, there may be a number of EOCs established to support the response. They may include the Incident Command Post, regional and corporate EOCs, a municipal EOC (MEOC), and the provincial government EOC (POC).

#### Emergency Awareness Zone (EAZ) (British Columbia specific)

A distance outside of the EPZ where public protection measures may be required due to poor dispersion of the hazard. This area is twice the radius of the Emergency Planning Zone (EPZ).

#### **Emergency Planning Zone (EPZ)**

The geographical area that surrounds a well, pipeline or facility containing hazardous product that requires specific emergency response planning by the licensee.

#### **Emergency Response Plan (ERP)**

A comprehensive plan to protect the public that includes criteria for assessing an emergency situation and procedures for mobilizing response personnel and agencies and establishing communication and coordination among the parties.

#### Emergency Support Team (EST)

Provides advice and logistical support to the Field Response Team and Incident Commander in particular. The team is comprised of head office personnel and any contract emergency experts.

#### **EOC Director**

The EOC Director activates the Corporate Emergency Operations Centre with staff to provide advice and support to the Incident Commander (Field Response Team).

### Glossary of Terms, continued

#### EOC Director, continued

Note: If the emergency happens outside an area that has a site specific Emergency Response Plan, only then will the EOC Director assume or appoint the role of Incident Commander and dispatch a Field Response Team to the incident site.

#### ERCBH2S (Alberta specific)

A software program that calculate site-specific EPZs using thermodynamics, fluid dynamics, atmospheric dispersion modelling and toxicology.

#### Evacuation

Organized, phased, and supervised withdrawal of members of the public from dangerous or potentially dangerous areas to safe areas.

**Tactical Evacuation** – A measure to immediately move people to a safe area as part of emergency response and operations. Does not require approval from local authority but the local authority may enact an evacuation order, if required, and local authority must be advised if a tactical evacuation has occurred.

**Planned Evacuation** – An evacuation coordinated by local government authority that can authorize evacuation alerts and orders.

#### **Explosive Limits (Lower and Upper)**

Each gaseous hydrocarbon substance has a minimum (Lower Explosive Limit or LEL) and a maximum (Upper Explosive Limit or UEL) percentage in air below or above which combustion will not take place. Explosive limit and flammability limit are used interchangeable. The terms "Too Lean" and "Too Rich" are used for levels outside of the explosive range.

#### Facility

Any building, structure, installation, equipment, or appurtenance that is connected to or associated with the recovery, development, production, handling, processing, treatment, or disposal of hydrocarbon-based resources or any associated substance or wastes. This does not include wells or pipelines.

#### Field Response Team (FRT)

Company and contractor personnel directly involved in controlling the incident at the emergency site and from the EOC.

#### Fire Hazard (FH) Order (Alberta specific)

An order issued by the AER during an emergency to restrict public access to a specified area.

#### **Functional Exercise**

As described in CAN/CSA Z246.2-18, an activity designed to evaluate capabilities and multiple functions using simulated response. A functional exercise will simulate the deployment of resources and rapid problem solving. Participants will evaluate management of the command and coordination centres and assess the adequacy of emergency response plans and resources.

#### Gathering system

The network of pipelines, pumps, tanks, and other equipment that carries oil and gas to a processing plant or to other separation equipment.

#### Hazard

A situation with potential to harm persons, property, or the environment.

### **Glossary of Terms, continued**

#### Hazard Planning Zone (HPZ) (British Columbia specific)

A geographical area (a) determined by using the hazard planning distance as a radius, and (b) within which persons, property or the environment may be affected by an emergency. Defined in Emergency Management Regulation.

#### Hazardous product

A substance released in quantities that may harm persons, property, or the environment.

#### High Vapour Pressure Liquids (HVPLs)

HVPLs have a vapour pressure greater than 240 kPa at 38°C (34.8 PSIG @ 100°F) and include ethane, propane, butane, and pentanes plus, either as a mixture or as a single component. Note: Comparisons

Gasoline - Vapour pressure between 55 and 100 kPa at 38°C (8 - 14.5 PSIG @ 100°F).

**Condensate -** Often a component of a propane/butane mixture, has a vapour pressure of 59 to 72 kPa at 38°C (8.6 - 10.4 PSIG @ 100°F).

#### High Vapour Pressure (HVP) plume dispersion geometry

An uncontrolled release of NGL product on flat terrain will form a vapour plume as it disperses. If the vapour plume formed at the leak site has not been ignited, it will most likely reach its maximum size within the first half hour of the leak occurrence. Two unique features of an NGL plume are:

The downwind edge of the plume tends to spread out significantly forming a broad frontal edge.

Under certain conditions, the plume will travel upwind for a short distance.

#### High Vapour Pressure (HVP) pipeline

A pipeline system conveying hydrocarbons or hydrocarbon mixtures in the liquid or quasi-liquid state with a vapour pressure greater than 110 kilopascals absolute at 38°C. Some examples are liquid ethane, ethylene, propane, butanes, and pentanes plus.

#### High Vapour Pressure (HVP) products

HVP products have a vapour pressure greater than 240 kPa at 38°C (34.8 PSIG at 100°F) and include ethane, propane, butane and pentanes plus, either as a mixture or as a single component. A leak from a vessel or pipe containing HVP products can result in a BLEVE.

#### Hydrogen sulphide (H<sub>2</sub>S)

A naturally occurring gas found in a variety of geological formations and also formed by the natural decomposition of organic matter in the absence of oxygen.  $H_2S$  is colourless, has a molecular weight that is heavier than air, and is extremely toxic. In small concentrations, it has a rotten egg smell and causes eye and throat irritations. Depending on the particular gaseous mixture, gas properties, and ambient conditions, a sour gas release may be:

Heavier than air (dense), so it will tend to drop towards the ground with time,

Lighter than air (buoyant), so it will tend to rise with time, or

About the same weight as air (neutrally buoyant), so it will tend to neither rise nor drop but with time disperse.

#### Hydrogen sulphide (H<sub>2</sub>S) release rate

The rate that sour gas escapes into the atmosphere is often calculated for sour gas wells. It is usually defined in cubic metres per second ( $m^3/s$ ). The size of the emergency planning zone is estimated from the H<sub>2</sub>S release rate.

### **Glossary of Terms, continued**

#### Hydrogen sulphide (H<sub>2</sub>S) release volume

The volume of sour gas that escapes into the atmosphere is often calculated for facilities that have a defined retention volume, usually defined in cubic metres. Emergency planning zone sizes are often estimated using the volume of  $H_2S$  that may be released from a facility. More sophisticated models may also incorporate the rate at which the release could occur and the nature of the gas and the atmospheric conditions when determining the emergency planning zone size.

#### Hyper-susceptible

A person or persons who may be abnormally reactive to a given exposure to toxins and whose reaction may occur in orders of magnitude greater than that of the susceptible population. Hypersusceptibles include those persons with impaired respiratory function, heart disease, liver disease, neurological disorders, eye disorders, severe anemia, and suppressed immunological function.

#### Ignition

Process of setting a hydrocarbon release on fire.

#### Ignition Team

Consists of at least two personnel trained in plume ignition.

#### Incident

An unexpected occurrence or event that requires action by emergency personnel to prevent or minimize the impacts on people, property, and the environment.

#### Incident classification

A system that examines the risk level to members of the public following an incident and assigns a level of emergency based on the consequence of the incident and the likelihood of the incident escalating.

#### Incident Command Post (ICP)

A designated place where the Incident Commander and staff is located. The ICP should be located outside of the hazard area, but close to the incident. The ICP may be a vehicle, trailer, fixed facility or any location suitable to accommodate the function.

#### **Incident Commander**

Manages the overall response to emergency incidents. The Incident Commander is responsible for: developing objectives, strategies and tactics that guide the response; assigning personnel to fill necessary positions; ensuring the safety of all personnel; keeping internal and external stakeholders updated; coordinating with other response agencies.

#### Incident Command System (ICS)

A standardized, on-scene, all-hazard incident management system. The Incident Command System (ICS) is flexible in that it can be adapted for large and small incidents.

#### Initial Isolation Zone (IIZ)

An area in close proximity to a continuous hazardous release where indoor sheltering may provide limited protection due to proximity of release.

#### Incident Management System

A system used to coordinate preparedness and incident management.

#### Isolating the release

Ensuring access to the hazard area is controlled.

### **Glossary of Terms, continued**

#### Level 1 Emergency (Alberta specific)

There is no danger outside the licensee's property, there is no threat to the public, and there is minimal environmental impact. The situation can be handled entirely by licensee personnel. There will be immediate control of the hazard. There is little or no media interest.

#### Level 1 Emergency (British Columbia specific)

There is no immediate danger to the public or environment as no H<sub>2</sub>S has been released; the emergency is confined to the lease or company property.

#### Level 2 Emergency (Alberta specific)

There is no immediate danger outside the licensee's property or the right-of-way, but there is the potential for the emergency to extend beyond the licensee's property. Outside agencies must be notified. Imminent control of the hazard is probable but there is a moderate threat to the public and/or the environment. There may be local and regional media interest in the event.

#### Level 2 Emergency (British Columbia specific)

There is potential risk to the public or environment, as the emergency could extend beyond company property. However, control is still possible.

#### Level 3 Emergency (Alberta specific)

The safety of the public is in jeopardy from a major uncontrolled hazard. There are likely significant and ongoing environmental impacts. Immediate multi agency municipal and provincial government involvement is required.

#### Level 3 Emergency (British Columbia specific)

An immediate danger to the public or environment exists; control of the situation has been lost.

#### Licensee

The responsible duty holder as specified in legislation.

#### Liquid to gas expansion

NGL products will expand greatly when released to the atmosphere. For example, propane expands 272 times its liquid volume. Other products expand at different rates, but all have a high gas to liquid ratio.

#### Liquefied Petroleum Gas (LPG)

Mixture of heavier, gaseous hydrocarbons (butane and propane), liquefied as a portable source of energy.

#### Local Authority

A local authority is considered to be:

- 1) The council of a city, town, village or municipal district;
- 2) in the case of an improvement district or special area, the Minister of Municipal Affairs;
- 3) for a national park, the park superintendent or the par superintendent's delegate;
- 4) the settlement council of a Métis settlement; or
- 5) the band council of a First Nations Reserve.

#### Local State of Emergency

See State of local emergency.

#### Lower Explosive Limit (LEL)

The lowest concentration of gas or vapour (per cent by volume in air) that explodes if an ignition source is present at ambient temperatures.

### **Glossary of Terms, continued**

#### Manitoba Agriculture and Resource Development (ARD) Petroleum Branch

The Manitoba Agriculture and Resource Development – Petroleum Branch administers The Mines and Minerals Act and related regulations governing the exploration, development, production, transportation and storage of crude oil and natural gas.

#### M.D.

**Municipal District** 

#### Major (full-scale) exercise

As described in CAN/CSA Z246.2-18, a multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response, as if a real emergency had occurred. The full-scale exercise includes the mobilization of units, personnel, and equipment. Participants will assess plans and procedures and evaluate coordinated responses under crisis conditions.

#### Maximum Operating Pressure (MOP)

The maximum licensed operating pressure for a vessel or pipeline or a section of it.

#### Ministry of Energy and Resources (ER)

ER is the lead regulatory agency for the upstream petroleum industry in Saskatchewan.

#### Mobile air quality monitoring

Use of sophisticated portable equipment to track substances such as  $H_2S$  or  $SO_2$  at very low parts per billion atmospheric concentrations.

#### Municipality

See local authority.

#### **Municipal Emergency Operations Centre (MEOC)**

The centre from which responsible municipal officials manage and support emergency operations within their jurisdiction, as well as formulate protective actions and provide public information. The centre has adequate workspace, maps, status boards, and communications capability.

#### Municipal Emergency Plan (MEP)

The emergency plan of the local authority.

#### Natural Gas Liquids (NGL)

These are hydrocarbons liquefied under pressure in field facilities or in gas processing plants. Natural gas liquids include ethane, propane, butane and pentanes plus and normally occur as a mixture of these compounds.

Physical Properties of NGL Products:

**Colour -** NGL products are colourless except when they include a condensate component, which gives them a light-yellow appearance. Releases during winter conditions can discolour snow. NGL products may appear as a white cloud when released to the atmosphere. This white cloud is formed by the condensing of moisture in the air.

**Odour -** Most NGL products have a mild petroleum odour. During pipeline transport NGL products are almost odourless.

**Vapour Density -** A measure of the mass per unit volume of the vapour (i.e. kg/m3). All NGL products transported by the company have a vapour density greater than air or a relative vapour density greater than 1.0.

### **Glossary of Terms, continued**

#### NAV Canada

Canada's civil air navigation services provider, with operations coast to coast. NAV Canada provides air traffic control, flight information, weather briefings, aeronautical information services, airport advisory services, and electronic aids to navigation.

#### Notice to Airmen (NOTAM)

An order issued by Transport Canada restricting access to airspace in a defined area.

#### Notification

The distribution of project-specific information to participants that may be directly and adversely affected by the proposed energy development.

#### Odour complaint

A report that someone smells an offensive odour (may be sour gas) in the area.

#### **Oil Spill Containment and Recovery Unit (OSCAR)**

Trailer containing oil spill equipment for containment and recovery.

#### On-site command post (OSCP)

An emergency operations centre established in the immediate vicinity of the incident to provide immediate and direct response to the emergency and initially staffed by licensee personnel.

#### Partially controlled flow

A restricted flow of product at surface that cannot be shut off at the licensee's discretion with equipment onsite.

#### Personal consultation

Consultation through face-to-face visits or telephone conversations with all requisite individuals.

#### **Petroleum industry**

Refers to all petroleum industry operations.

#### Plume (gas plume)

An elongated mobile column of gas or smoke.

#### Protective Action Zone (PAZ)

An area downwind of a hazardous release where outdoor pollutant concentrations may result in life threatening or serious and possibly irreversible health effects on the public.

#### **Protective Action Distance (PAD)**

The distance from the incident to the EPZ outer boundary.

#### **Provincial Operations Centre (POC)**

An operations centre with the capacity to accommodate representatives from each government department.

#### Public

The group of people who may be or are impacted by an emergency (e.g., employees, contractors, neighbours, emergency response organizations, regulatory agencies, the media, appointed or elected officials, visitors, customers, etc., as appropriate).

### **Glossary of Terms, continued**

#### Public facility (Alberta specific)

A public building, such as a hospital, rural school, or major recreational facility, situated outside of an urban centre that can accommodate more than 50 individuals and/or that requires additional transportation to be provided during an evacuation.

#### Public protection measures

The use of sheltering, evacuation, ignition, and isolation procedures to mitigate the impact of a hazardous release on members of the public.

#### Public Safety Group Supervisor

Member of the field response team. Individual charged with the responsibility of co-ordinating the evacuation or shelter of people in the emergency hazard Area. The Public Safety Group Supervisor reports to and may be located in the same location as the Incident Commander.

#### Publicly used development (Alberta specific)

Places where the presence of 50 individuals or less can be anticipated (e.g., places of business, cottages, campgrounds, churches, and other locations created for use by the non-resident public).

#### Publicly used facility (British Columbia specific)

Places where the presence of people can be anticipated. Examples include places of business, cottages, campgrounds, churches, and other locations created for use by the public. Includes any similar development the OGC may designate as a public facility.

#### Publicly used facility

Places where the presence of people can be anticipated. Examples include places of business, cottages, campground, churches, and other locations created for use by the public.

#### **Reception centre**

A centre established to register evacuees for emergency shelter, to assess their needs, and, if temporary shelter is not required because evacuees will stay elsewhere, to ascertain where they can be contacted.

#### **Regional Emergency Operations Centre (REOC)**

An operations centre established in a suitable location to manage the larger aspects of the emergency that is manned jointly by government and industry staff.

#### Residence

A dwelling that is occupied full time or part time.

#### Resident

Individual living in the area at a fixed location.

#### **Resident data record**

Form used to track the contact made with residents, businesses and transients.

#### Response zones (Alberta specific)

The Initial Isolation Zone (IIZ), Protective Action Zone (PAZ) and Emergency Planning Zone (EPZ).

#### **Roadblock Crew**

Personnel responsible for controlling access to the Emergency Hazard Area, reporting to the Public Safety Group Supervisor.

### Glossary of Terms, continued

#### Rover

Member of the field response team. Individual responsible for assisting in the evacuation of the Hazard Area, reporting to the Public Safety Group Supervisor. May also be directed to shut-in / shut down equipment that may cause future safety hazards.

#### Rover Kit

A briefcase containing maps, forms, supplies and instructions needed by the Rover to carry out their duties.

#### S.A.B.A.

Supplied Air Breathing Apparatus.

#### S.C.B.A.

Self Contained Breathing Apparatus.

#### Serious injury

A serious injury includes the following:

- an injury that results in death;
- fracture of a major bone;
- amputation other than a portion of a finger or toe;
- loss of sight in an eye;
- internal haemorrhage;
- third degree burns;
- unconsciousness;
- An injury that results in paralysis (permanent loss of function).

#### Shelter-in-Place

Remaining indoors for short-term protection from exposure to toxic gas releases.

#### Sour gas

Natural gas, including solution gas, containing hydrogen sulphide (H<sub>2</sub>S).

#### Sour gas release

An uncontrolled release of natural gas containing hydrogen sulphide (H<sub>2</sub>S).

#### Sour multiphase product (British Columbia specific)

Any liquid that contains H<sub>2</sub>S in the gas phase.

#### **Sour multiphase pipeline** (British Columbia specific)

A pipeline that transmits a multiphase product that contains more than 10 moles of H<sub>2</sub>S per kilomole of natural gas in the gas phase.

#### Sour pipeline

Pipeline that conveys gas and/or liquid that contains sour gas.

#### Sour production facility

Facility that processes gas and/or liquid that contains sour gas

#### Sour well

An oil or gas well expected to encounter during drilling formations bearing sour gas or any oil or gas well capable of producing sour gas.

### **Glossary of Terms, continued**

#### **Special needs**

Those persons for whom early response actions must be taken because they require evacuation assistance, requested early notification, do not have telephones, require transportation assistance, have a language or comprehension barrier, or have specific medical needs. Special needs also include those who decline to give information during the public consultation process and any residences or businesses where contact cannot be made.

#### **Special sour well** (British Columbia specific)

A designation that reflects the proposed well's proximity to populated centers and its maximum potential H<sub>2</sub>S release rate during the drilling state. The casing or open-hole flow configuration is used in arriving at this designation.

#### Standing well

A well that has been drilled and cased but not perforated. A company is generally allowed to leave the well as standing for up to one year.

#### State of local emergency

A declaration by a local authority providing the necessary authority, resources, and procedures at the municipal level to allow an emergency to be resolved effectively and efficiently.

#### Sulphur dioxide (SO<sub>2</sub>)

A colourless, water-soluble, suffocating gas formed by burning sulphur in air; also used in the manufacture of sulphuric acid.  $SO_2$  has a pungent smell similar to a burning match.  $SO_2$  is extremely toxic at higher concentrations. The molecular weight of  $SO_2$  is heavier than air; however, typical releases are related to combustion, which makes the gaseous mixture lighter than air (buoyant).

#### Surface development

Dwellings that are occupied full-time or part-time, publicly used development, public facilities, including campgrounds and places of business, and any other surface development where the public may gather on a regular basis. Surface development includes residences immediately adjacent to the EPZ and those from which dwellers are required to egress through the EPZ.

#### Susceptible

The subpopulation of persons who may be considered more sensitive to the effects of H<sub>2</sub>S and SO<sub>2</sub>, including the elderly, pregnant women, and the very young, particularly preschool-aged children.

#### Tabletop exercise

As described in CAN/ CSA Z246.2-18, an informal exercise generally used to review resource allocations and roles and responsibilities of personnel and to familiarize new personnel with emergency operations without the stress and time constraints of a major exercise.

#### Technically complete Emergency Response Plan (ERP)

A plan that meets all applicable requirements.

#### Telephoners

Telephoners place calls to residents as directed by the Public Safety Group Supervisor.

#### Threatening telephone call

Any communication that threatens the well-being of company personnel or property. A form is provided in the manual to capture data from or about a person who calls with a threatening message.

#### Transient

An individual that is temporarily in the area (e.g. camper, cross-country skier).

### Glossary of Terms, continued

#### Trapper

The holder of a provincial licensed and registered trapline for the purpose of hunting and trapping fur bearing animals.

#### **Uncontrolled flow**

A release of product that cannot be shut off at the licensee's discretion.

#### Urban centre

A city, town, village, summer village, or hamlet with no fewer than 50 separate buildings, each of which must be an occupied dwelling, or any similar development.

#### **Unrestricted country development**

Any collection of permanent dwellings situated outside of an urban centre and having more than eight permanent dwellings per quarter section.

#### Urban density development

Any incorporated urban centre, unincorporated rural subdivision, or group of subdivisions with no fewer than 50 separate buildings, each of which must be an occupied dwelling.

#### Vapour pressure

The pressure exerted by the vapour when the rate of evaporation is equal to the rate of condensation of the vapour. All NGL products have vapour pressure greater than atmospheric pressure air and therefore have to be kept under pressure or else they will vaporize.

#### Vapour-air plume / vapour cloud

When released to atmosphere, products form a vapour-air plume that is colourless, heavier than air and has a faint gasoline odour. Depending on the product released and the atmospheric conditions, water vapour may condense to form a cloud.

#### Water body

Natural or manmade; contains or conveys water continuously, intermittently, or seasonally. A natural water body is any location where water flows or is present, whether the flow or the presence of water is continuous, seasonal, intermittent, or occurs only during a flood. This includes, but is not limited to, the bed and shore of a river, stream, lake, creek, lagoon, swamp, marsh, slough, muskeg, or other natural drainage, such as ephemeral draws, wetlands, riparian areas, floodplains, fens, bogs, coulees, and rills. Examples of a manmade water body include, but are not limited to, a canal, drainage ditch, reservoir, dugout or other manmade surface feature.

#### Well servicing

The maintenance procedures performed on a producing or injecting well after the well has been completed and operations have commenced. Well servicing activities are generally conducted to maintain or enhance well productivity or injectivity.

#### Workover

The process of re-entering an existing well to perform remedial action that will restore or improve the productivity or injectivity of the target formation.

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# Boundary Lake CER Regulated Pipelines

### **Emergency Contact Information**

For Emergencies involving inter-provincial pipelines, the Canada Energy Regulator is the primary management agency – they will be contacted by the Transportation Safety Board.			
**A pipeline is CER-regulated due to the fact that it crosses a provincial or federal border. **			
This must be your first call			
Transportation Safety Board (TSB) – for pipeline incidents	24 Hr Incident Line	819-997-7887	
	Facsimile	819-953-7876	
	Email	PipelineNotifications@tsb.gc.ca	
Call the TSB 24 Hr Incident Line when an incident meets the Immediately Reportable Events (see page 2 for criteria) for all Canada Energy Regulator (CER) regulated pipelines and facilities.			
CEP's Online Event Reporting System (CEPS): https://apps.cor.rep.gc.co/org/home/index			
cer s online event reporting System (CERS). <u>Intps://apps.cer-rec.gc.ca/ers/nome/index</u>			
For all other events (non-immediate) companies are only required to input the information via the OERS			
Secondary Calls			
Contact as needed <b>AFTER</b> contacting the TSB and CER.			
BC Oil & Gas Commission (OGC)	24 Hr	800-663-3456	
Alberta Energy Regulator	24 Hr	800-222-6514	
Hazardous occurrences (under Part XVI of the Canada Oil and Gas Occupational Safety and Health Regulations) and incidents requiring medical evacuations are to be reported to the CER immediately.			
Canada Energy Régie de l'énergie Regulator du Canada			

### **Definition of an Emergency**

CAN /CSA Z246.2-18 defines an emergency as "an event or imminent event, outside of the scope of normal operations that requires prompt coordination of resources to protect people, the environment, and property".

Emergencies can result from numerous causes including pipeline and equipment failure, human error and natural perils such as tornadoes, hurricanes, floods, or earthquakes and terrorism or other criminal activities. Multi-hazard emergencies such as an earthquake causing pipeline breaks, fires and explosions, which result in injury and further property damage, can also occur.

Companies must consider all probable emergencies and have applicable procedures in place to deal with potential effects and threats to people, property and the environment, as determined through a formal hazard assessment.

### **CER Immediately Reportable Events (Significant Incident)**

Section 52 of the Onshore Pipeline Regulations (OPR) requires companies to notify the CER of all incidents relating to the construction, operation, or abandonment of their pipelines.

A significant incident is an acute event that results in:

- 1. death;
- 2. missing person (as reportable pursuant to the Canada Oil and Gas Drilling and Production Regulations (DPR) under the Canada Oil and Gas Operations Act (COGOA) or the Oil and Gas Operations Act (OGOA));
- 3. a serious injury (as defined in the OPR or TSB regulations);
- 4. a fire or explosion that causes a pipeline or facility to be inoperative;
- 5. a LVP hydrocarbon release in excess of 1.5m3 that leaves company property or the right of way;
- 6. a rupture; or
- 7. a toxic plume as defined in CSA Z662.

Note: A "rupture" is an instantaneous release that immediately impairs the operation of a pipeline segment such that the pressure of the segment cannot be maintained.

Companies are required to report a death or serious injury to a person only where the death or injury is a result of an occurrence that relates to the construction, operation, or abandonment of a "pipeline". Whether a death or injury is related to the construction, operation, or abandonment of a pipeline will depend on whether the person who was killed or injured was working at the time of the incident and/or whether the work was a cause or contributing factor to the incident. It is important to note that, unlike the Canada Labour Code (CLC), the OPR does not differentiate between different types of "persons". Therefore, companies must report all deaths or serious injuries to any person that occur relating to pipeline construction, operation, or abandonment regardless of whether or not that person was directly employed by the company.

The definition of "serious injury" in the OPR is not exhaustive and contains multiple injuries that qualify as serious, including "the fracture of a major bone". The CER uses the following definition of "major bone": skull, mandible, spine, scapula, pelvis, femur, humerus, fibula, tibia, radius, and ulna.

### **TSB Immediately Reportable Events**

Call the TSB as soon as possible after discovery of any of the following occurrences:

- An occurrence that results in:
  - o a death;
  - o a serious injury (as defined in the OPR or TSB regulations);
  - an unintended or uncontrolled LVP hydrocarbon release in excess of 1.5 m<sup>3</sup> that leaves company property or occurs on or off the right of way;
  - o an unintended or uncontrolled sweet natural gas or HVP release >30,000 m<sup>3</sup>;

- o any unintended or uncontrolled release of sour natural gas or hydrogen sulfide;
- a significant adverse effect on the environment (a release of any chemical or physical substance at a concentration or volume sufficient to cause an irreversible, long-term, or continuous change to the ambient environment in a manner that causes harm to human life, wildlife, or vegetation);
- o a fire, ignition, or explosion that poses a threat to the safety of any person, property, or the environment.
- A rupture:
  - an instantaneous release that immediately impacts the operation of a pipeline segment such that the pressure of the segment cannot be maintained.
- A Toxic Plume:
  - a band of service fluid or other contaminant (e.g. hydrogen sulfide or smoke) resulting from an incident that causes people, including employees, to take protective measures (e.g. muster, shelter-in-place or evacuation).

Where an event meets any of the above definitions, companies are required to notify the TSB Reporting Hotline at (819) 997-7887. Subsequently, the company is required to input the details required by both the TSB (see TSB regulations) and the CER into the OERS. The phone notification and the input of information into OERS are required to occur as soon as possible and no later than three hours of the incident being discovered. The goal of the initial phone notification is to allow the relevant agencies to mobilize a response to an incident, if required. Note that OERS will automatically determine whether the event meets the definition of an "Incident that Harms People or the Environment", however the company will be responsible for specifically indicating whether the incident meets the definitions of "Rupture" and "Toxic Plume".

For all other events that do not meet any of the definitions in this section, companies are not required to phone the TSB Reporting Hotline but must report the event as soon as possible and no later than twenty-four hours after the event was discovered.

## Multiple Incident Types

It is possible that a single occurrence may result in multiple incident types. If multiple incident types occur as a result of a single occurrence, companies are expected to report those incident types under a single incident report.

Examples of situations where this might be the case include but are not limited to:

- A pipeline rupture (occurrence) where there is a release of gas (incident type) and an explosion (incident type);
- An industrial accident (occurrence) that causes a death (incident type), a serious injury (incident type) and a fire (incident type);
- An operational malfunction (occurrence) that causes an overpressure (incident type) and a release of product (incident type); or
- An operational malfunction (occurrence) that causes several concurrent or immediately consecutive overpressures (incident types).

In cases where an incident has occurred, and a second incident occurs during the response to the initial incident (e.g. a fire occurs during the clean-up of a spill), the second incident is considered distinct and should be reported separately.

The events that are reportable using the online reporting system are:

- incidents under the OPR, PPR, and DPR/Oil and Gas Drilling Regulations;
- emergency burning or flaring under the PPR;
- hazard identification under the PPR;
- suspension of operations under the PPR;
- near-misses under the DPR;

- serious accidents or incidents under the Canada Oil and Gas Geophysical Operations Regulations/Oil and Gas Geophysical Operations Regulations;
- emergencies or accidents under the Canada Oil and Gas Installation Regulations/Oil and Gas Installation Regulations; and
- accidents, illnesses, and incidents under the Canada Oil and Gas Diving Regulations/Oil and Gas Diving Regulations.

In the event that OERS is unavailable, companies are directed to report events to the TSB Reporting Hotline at 819-997-7887.

## **Reporting Timelines**

Section 52 of the OPR requires companies to immediately notify the CER of any incident. Section 52 of the OPR also requires the submission of a Preliminary Incident Report (PIR) and a Detailed Incident Report (DIR) "as soon as is practicable". Generally, companies' initial notification of an incident will satisfy the PIR requirements. The information required for a DIR must be submitted within 12 weeks of reporting an incident. For complex incidents, companies may request an extension for submission of a DIR.

The CER and the TSB have adopted a single window reporting approach. However, in some areas, the TSB reporting requirements are somewhat different than the CER requirements. For additional details on the TSB reporting requirements, companies should refer to the TSB website (<u>http://www.bst-tsb.gc.ca/eng/incidents-occurrence/index.asp</u>).

Transportation Safety Board of Canada Place du centre, 4th Floor 200 Promenade du Portage Hull, Quebec K1A 1K8 Facsimile 819-953-7876

### **Supporting Information**

The table below indicates the location of CER supporting documentation in this emergency response plan.

Supporting Information	Found in	
CER Distribution	Foreword: Distribution List Page 3	
Company 24/7 Emergency Number	Area Specific Information: Binder Cover	
Area Map of CER Regulated Facilities	Area Specific Information	
TSB Roles & Responsibilities	Section 5: External Agencies Federal Roles Chart	
CER Roles & Responsibilities	Section 5: External Agencies Federal Roles Chart	
Safety data sheets (SDS)	Available electronically to all personnel	
Health and Safety Plan	Please refer to the company's Health & Safety Plan located at the corporate head office and available electronically to all personnel	
# **Emergency Preparedness & Response Policy**

# **Emergency Management Expectations**

An effective emergency management program includes being prepared for emergencies, responding in the event of an emergency and ensuring that operations are able to continue safely and can recover in a timely, efficient manner.

Emergency management is critical to ensuring that people, the environment, the public, the organization's assets and reputation are protected in the event of an unanticipated hazard event, be it natural, technological or human-induced.

# **Emergency Management Preparedness**

Emergency preparedness is a continuous process of all-hazards planning and coordination in order to effectively minimize the adverse effects and consequences inherent in any emergency incident. Through the use of such tools as exercises, proactive resource management and capability analysis, preparedness is one of the key pillars with which to ensure the adaptation of comprehensive approaches for the company's emergency management strategy. The emergency management process must include the following:

- Hazard Risk and Vulnerability Assessment
- Public Involvement
- Communications Planning
- Situational Awareness
- Crisis Management Plans
- Emergency Response Plans
- Emergency Management Resources
- Competence, Training and Awareness
- Exercises and Drills
- Record Keeping
- Distributions Lists (Internal and External)
- Continuous Improvement

Emergency Response Plans should contain:

- Communication procedures
- Emergency contacts
- Evacuation and Rescue plans
- Equipment locations and supply companies
- Spill response and containment (where required)
- Meet regulatory requirements
- Event classification
- Activation and Stand Down Levels
- Guidelines for medical emergencies
- Defined roles and responsibilities
- Maps and Emergency Planning Zones
- Mutual Aid Understandings (where applicable)

Confidential ERPs will be available at the field Incident Command Post and the Corporate Emergency Response Centre.

## **Extended Emergencies**

In an extended emergency, company responders will develop an Incident Action Plan utilizing forms found within ERP, which may include:

- ICS Form 201 Incident Briefing
- ICS Form 202 Incident Objectives
- Form A1 Initial Emergency Report
- Form A4 Incident Action Plan (IAP) Checklist

# **Emergency Response, Continuity and Recovery**

In the event of an emergency, each business unit shall determine the level of emergency as per established protocols and respond according to their respective emergency response plans. Response includes the mobilization and ongoing management of resources, people, equipment, and assets to manage the effects of an incident; functions inclusive of the Incident Command System (ICS), the company's primary response platform.

Each business unit shall establish, implement, and maintain procedures for communicating information related to emergency management, including:

- Communication of plans and procedures to employees, operating partners, contractors, the supply chain, regulators, and local communities; and
- Emergency and crisis communications to stakeholders, including emergency responders, regulators, the media, family members and the public.

## **Emergency Management Monitoring, Assessment and Continuous**

## Improvement

Lessons learned and knowledge generated from monitoring results should be used to develop "improved practices", which are then shared widely. After emergencies or disasters occur, a systematic approach is used to learn lessons from the experience, increase effectiveness and improve emergency management practices and processes.

## Manual Updating Procedures and Schedule

The company's Corporate and Site-Specific ERPs are to be updated annually and submitted to the CER on or before April 1st of each year, or when significant changes (either operational or identified from exercises/incidents and resulting debriefs) occur or are identified. If an update occurs outside of the January 1st to April 1st period, a letter must be submitted to the CER indicating that there have been no changes to operations since the ERP was last submitted. ERP updates are performed by a third-party company (H2Safety), whose expertise in the field provides company personnel with the education, training, and resources to excel in Emergency Response. Approvals for ERP updates will be carried out by the company's Emergency Management Coordinator.

# Debriefing

## Internal Debriefing

The Incident Commander, in consultation with the Lead Agency and/or other regulatory body, will order "Return to Normal" status.

- All response team members and on-site personnel, including contract personnel and emergency services, will be notified.
- All previous contacts including public, workers, landowners, government and industrial operators must also be notified of the end of the emergency.
- Ensure a media statement is prepared and delivered by Senior Management.
- Debriefing meeting(s) with company personnel (including insurance, legal, and human resources as appropriate) must be conducted.
- Debriefing meeting(s) to review effectiveness of the Emergency Response Plan must be conducted. Feedback and comments as a result of the debrief must be incorporated into the ERP revision and procedures. This feedback should be submitted to the ERP provider.
- Debriefing meeting(s) with residents, landowners, Lead Agency and other government agencies and all other impacted parties may be conducted.
- Document all "Return to Normal" activities.
- Complete response debriefing for all response teams. Submit, in writing, response findings and recommendations to the Incident Commander when applicable, which will be submitted to the overall report writer.

# Public Debriefing

When the public has been impacted, company operations should provide the public information as soon after the emergency as possible, to answer any questions or concerns. This should be done by a senior company representative, a trained Media Advisor, or by the Incident Commander.

After an emergency, a number of additional items should be considered:

- Debriefings, as mentioned above.
- Crisis management for company personnel and for other members of the public that may have been significantly affected by the emergency.
- If the emergency is of a level where it has impacted the public, an information center may be established within the community where the emergency occurred to answer any questions posed by the public.
- Establish a means of compensating citizens who may have had out-of-pocket expenses (such as meals and lodging costs) as a result of the emergency.
- Through the media, provide details of the investigation into the incident that are pertinent to the public, as it becomes available.

## Health and Safety Plan

The company's extensive Health and Safety program is to be implemented at all times during and after an incident. Training is provided to all company employees and contractors; all information and documentation can be found in the Health and Safety Manual.

## **Site Specific Control Points and Response**

In the event of an incident (reported from an external source and/or confirmed by a drop in pressure), an operator would be sent out to visually confirm the need to shut down operations. Operators have the ability to manually trip the ESDs at the risers on the CER line. The operator would then immediately contact his/her supervisor and the TSB, and then work with internal support and outside agencies to determine a plan of action for resolving the source of the release.

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# **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

## Primary Incident Command Post

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### Staging Areas

Staging area (s) would be established at the nearest Plant or Battery at the time of the
incident.

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

## **KEY RESPONSE PERSONNEL**

ield Personnel			
Shaun Moskalyk	Boundary Lake Foreman	Cell:	780-834-0100
Greg Shrode	Boundary Lake Superintendent	Cell:	780-305-6541
Trevor Blake	Area Pipeline Integrity	Cell:	780-772-2555

Refer to the "Response Teams Phone List" yellow tab, behind the Section 2.0: Roles and Responsibilities blue tab for additional contact information

## **OPERATIONS SUMMARY**

Enercapita's Boundary Lake Alberta field is a sweet and sour oil and gas field, located in Northwestern Alberta. The field is spread across Townships 83 to 84, and Ranges 10 to 13 W6M, in Clear Hills County, AB.

The wells and satellites gather sour oil effluent, and the product is lined or trucked to the 10-10-84-12 W6M battery. At the battery, the produced water is separated from the oil and is then pipelined out to injection wells at 05-10-84-12 W6M, 13-15-84-12 W6M and 15-15-84-12 W6M, to be injected back into the formation. The oil is treated on-site and Sweet oil is trucked out daily to Spirit River in Alberta. Oil trucks load product from 10am to 10pm daily. Fuel gas is used on site or lined through Enercapita pipelines to the CNRL gas gathering system, where it ultimately ends up at the CNRL 01-14-85-13 W6M Gas Plant. Hydraulic ESD valves are installed at the 10-10 battery and throughout the gathering system, which will shut-in if there is an abnormal change in operating pressure.

## EPZ Information

The maximum H<sub>2</sub>S concentration for the wells is 2%, with a maximum EPZ of 120 m. The maximum  $H_2S$  concentration for the pipelines is 2%, with a maximum EPZ of 980 m.

## **On-Site Storage**

Refer to the EPZ Calculation tables for a list of on-site storage, at the end of this section

#### Closest Major Urban Centre

The town of Fairview is approximately 90 km west of the field and has population of +/-2.817.

#### Hydrology

Clear River, Eureka River, Little Clear River, McLean Creek, Peace River, Sweeny Creek. Slim's Lake, and various unnamed creeks and water bodies. Refer to the map for more information.

#### Highways / Rail

Highway 64 and Highway 717. could be impacted in the event of an incident. Contact the RCMP and Alberta Transportation to authorize the closure of any highways and in the interim, be prepared to quickly restrict access if public safety could be jeopardized. Refer to the map for more information.

## Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

## SAFETY EQUIPMENT

## **Operator / Truck Safety Equipment**

Each field operator's truck contains the following: 20lb fire extinguisher, first aid kid,

PPE, flashlight, personal 4 head monitor, pail, and shovel. Nearby locations with additional safety equipment are listed below:

Item	Quantity / Location
Fire Extinguishers - various sizes	Located throughout the field & every Plant site
First aid kit	1 @ 06-27-86-13 W6M
SCBA	2 @ 10-10-84-12 W6M 4 @ 06-27-86-13 W6M 2 @ 04-16-86-13 W6M (BC) 2 @ 06-29-87-14 W6M (BC)

## Notification

The field has some assets on remote monitoring units and some on net flow as well. The pipelines are protected from over-pressure by ESD valves and by control and relief valves in the wellsite equipment packages. Operators monitor the wells and facilities on a daily basis. Process alarms, including high level tank alarms, go to a callout centre which alerts operators on their cellular phones.

## Communications

Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters.

#### Roadblock Kits

There are 3 roadblock kits located at the 08-21-87-09 W6M Worsley Gas Plant. They contain safety vests, flashlights, road block signs, media / landowner statement cards, pen, clipboards, and actual road blocks. Roadblock locations will be determined at the time of the incident.

#### Ignition Equipment

There are auto-igniters on all flare stacks within the field.

In the event that ignition must take place Enercapita will contact an Ignition Service support company. Refer to the support services section.

\*\* If any of the above safety equipment is insufficient, Enercapita Energy Ltd. personnel will contact a local safety company who will be asked to provide additional equipment.

## **EMERGENCY SERVICES**

Note: All numbers, unless otherwise indicated, are 24 hours

<b>911</b> 888-888-4567 to Reception Centres
780-864-3993 780-835-6100 780-685-3752
800-332-1414
800-668-5506 780-412-4500 866-717-3113
800-242-3447 w.utilitysafety.ca

# **GOVERNMENT AGENCIES**

Iberta Energy Regulator (AER)		800-222-6514*
Wildfire Reporting One call number for regulatory agency, spill reporting and Alberta Environment &	3 Parks (lands.)	10-FIRE(34/3) fish. forest. wildlife).
For incidents involving the CER regulated pipeline: Canada Energy Regulator (CER)*		
TSB Incident Line (Pipeline emergencies)		819-997-7887
Clear Hills County Crystal Dei, Deputy Director of Emergency Management	Admin: Cell:	780-685-3925 780-835-9527
Alberta Health Services (AHS) - Z5 North		844-755-1788
Alberta Emergency Management Agency (AEMA) Northwest - Ian Fox, EMFO	Cell:	866-618-2362 780-646-0180
Alberta Boilers Safety Association (ABSA)		780-437-9100
Alberta Safety Services - Electrical Branch	Admin:	866-421-6929
Alberta Ministry of Transportation		780-638-1128
Alberta Environmental and Dangerous Goods Emergencies (	EDGE)	800-272-9600
Workers' Compensation Board (WCB)		866-922-9221
CANUTEC		888-226-8832
Air Traffic Control		
NAV Canada*		866-541-4102
*If flight information or a NOTAM advisory is required, contact the NAV Canada *If a NOTAM is required for airspace closure, contact the Transport Canada Av	Flight Informat viation Operatic	677-992-6853 tion Centre (FIC) ons Centre (AVOPS)
Department of Fisheries and Oceans Canada (DFO)		780-422-4505
Environment and Climate Change Canada		
Meteorological Services		780-951-8907

AREA USEF Note: All numbers, unles	<b>RS / TRANSIENTS</b> s otherwise indicated, are 24 hours.	
Oil and Gas Blue Sky Resources Ltd Bonterra Energy Corp. Canadian Natural Resources Ltd. Kelt Exploration North Peace Gas Co-Operative Ltd. Pembina Pipeline Corp. TC Energy Whitecap Resources		844-514-2462 780-542-9255 888-878-3700 855-845-9787 780-835-5444 800-360-4706 888-982-7222 866-590-5289
Trappers Trapper ID 2226 2237 2598 2774	<b>Name</b> Pat Lund Justin Wasylciw Larry Smith AER	Number 780-685-2501 780-835-8541 780-685-2159 800-222-6514
Company 101294388 Saskatchewan Alberta Racks N Tracks Outfitting Alberta Racks N Tracks Outfitting Alberta Wilderness Adventures Bear Canyon Outfitters Bk Outfitters CIS Field Quarter Gerard Van Den Boogaard Green Island Outfitters Ltd. Heavy Horn Holdings Ltd. Jzs Enterprise Ltd. Lock N Load Outfitting Ltd. Mustang Ranch & Guides Top Of The Flyway Outfitters Trophy North Outfitters	gement Units (WWO) # 323 & 3 Name Justin Redlick Ken Steinbru Russell Moore Herb Bean Larry Smith Trevor Manteufel Sean Snider Russell Moore Devin Aherne Adam Luka Justin Redlick William Klyne Herb Bean Allen L. Trider Larry Smith	Number           306-580-4868           780-882-6664           936-225-3330           780-685-2509           780-685-2159           780-625-6736           780-203-0909           936-225-3330           905-572-0262           780-834-0152           412-999-8792           780-219-2694           780-85-2509           780-855-2509           780-835-2443           780-685-2159
Udell'Ś Guiding And Outfitting Wild Alberta High Country Outfitters Xcalibrr Hunts	Justin Redlick Trevor Manteufel Gerard Van Den Boogaard	306-580-4868 780-625-6736 226-622-0464
Grazing Lease Grazing ID GRL16761 GRL37361	<b>Name</b> Janice Maxwell AER	<b>Number</b> 780-595-2183 800-222-6514
Forestry Management Units & Agreer P19 - Mercer Peace River Pulp I td	ments (FMU / FMA) Admin <sup>.</sup>	780-624-7000

P52 - See Alberta Energy Regulator (AER)

SUPPORT S	ERVICES	
Note: All numbers, unless otherw	ise indicated, are 24 hours.	
Mobile Air Monitoring* Firemaster Oilfield Services - Grande Prairie HSE Integrated - Red Deer Trojan Safety Services - Grande Prairie		877-342-3473 888-346-8260 877-785-9558
Oilfield Fire Fighting / Safety Contractors* Firemaster Oilfield Services - Grande Prairie HSE Integrated - Grande Prairie United Safety Ltd Grande Prairie Trojan Safety Services - Grande Prairie		877-342-3473 888-346-8260 800-432-1809 877-785-9558
Well Control Specialists* Capstone Oilfield Services - Airdrie Firemaster Oilfield Services - Grande Prairie United Safety - Grande Prairie		866-347-3911 877-342-3473 800-432-1809
Ignition Services* HSE Integrated - Grande Prairie Firemaster Oilfield Services - Grande Prairie Superior Fire Control Ltd Grande Prairie		888-346-8260 877-342-3473 877-882-0035
Roadblock Services (kits/personnel)* HSE Integrated - Grande Prairie Trojan Safety Services - Grande Prairie Firemaster Oilfield Services - Grande Prairie * Due to response time, dispatch support services at Level 1 E on location where support is coming from.	(kits only) mergency. Response times vary (1	888-346-8260 877-785-9558 877-342-3473 - 6hours) depending
Bus Transportation* BC Bus North - Fort St. John Diversified Transportation Ltd Dawson Cree *Due to response time, dispatch transportation services at depending on location where support is coming from.	ek Level 1 Emergency. Response tim	844-564-7494 250-788-3909 les vary (2 - 6 hours)
Helicopter Companies* Heli Source Ltd Grande Prairie Canadian Helicopters - Grande Prairie Bailey Helicopters - Fort St. John (will respon * If required, a helicopter with a loud hailer should be reque	nd to Alberta)	855-876-5716 780-532-2047 250-785-2518
Emergency Response Assistance Canada ( (ERAP 2-0010-448)	ERAC)	800-265-0212
Emergency Response Management H <sub>2</sub> Safety Services Inc Calgary Toll Free		403-212-2332 888-216-2332
Spill Response / Environmental Services Bad Bob's Vacuum Services Ltd Fairview Brian's Pressure Services Ltd Fairview Cordova Oilfield Services - Fort St. John Drive Logistics Inc Peace River HD Services Ltd Charlie Lake Ridgeline Canada Inc Grande Prairie Tempest Energy Services Ltd Goodlow Tidy Trucking Ltd Fort St. John		780-835-3793 780-835-8382 250-787-7378 780-624-4090 250-263-4379 866-574-7928 250-781-3515 250-785-7515
Western Canadian Spill Services (WCSS) - ( *See WCSS's website (http://www.wcss.ab.ca) for more inf	COOP 5, 8 & 9 crmation, equipment details, locatio	866-541-8888 ns, and directions.
Reception Centres Worsley Gateway Inn 355 Highway 726, Worsley, AB	Admin:	780-685-8020
Hillview Inn 10704 - 113 Street, Fairview, AB	Admin:	780-835-2466

**ENERCAPITA** 

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SURFACE DEVELOPMENT INFORMATION

There is 1 trapper cabin that falls within close proximity to the EPZ.

Note: The detailed Resident Information List can be found behind the white "Confidential Information"

#### June 2023 www.h2safetv.c



BOUNDARY LAKE ALBERTA

# **ENERCAPITA**

Draft Date: June 7, 2023 ET	Scale: 1:110,000 Map: 9	0499
Revision Date: June 29, 2023 AS	UTM ZONE 11 NAD83	
0 1 2	3 4 5	
	(km)	
Third Party Well	<ul> <li>Surface Developmen</li> </ul>	t
🌣 Gas Well	<ul> <li>Trapper Cabin</li> </ul>	
✗ Suspended Gas Well	ส์ Farm Use Area	
Oil Well	× Locked Gate	
<ul> <li>Suspended Oil Well</li> </ul>	Staging Area	
Injection Well	<ul> <li>River Flow Direction</li> </ul>	1
Suspended Well	Hydrology	
<ul> <li>Third Party Facility</li> </ul>	Waterbody	
Third Party Gas Plant	Grazing Lease	
Facility	Grazing Reserve	
Gas Plant	AER Field Centre	
- Third Party Dipeline	Health Authority	
Gas Pipeline	Local Authority     PCMD	
Discontinued Gas Pineline	Trapper Boundarios	
- Oil Pipeline	Provincial Boundary	
Discontinued Oil Pipeline	EPZ	
	EPZ	
ESD .	Egress	
Other Roads	8	
Street		
Main Hwy		
Divided Hwy		
1:2 100 (	(km)	
		Ň
	MAPPED AREA	
	Sec. 19	
	RECEPTION CENT	RE
	INSET	<u> </u>
	WORSLEY	
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RECEPTIO	N CENTRE	
	SPIRIT RIVEP	~
DAWSON CREEK	731	

## BOUNDARY LAKE ALBERTA FIELD ACCESS

## DIRECTIONS TO THE BOUNDARY LAKE 10-19-86-11 W6M GAS PLANT

From Fairview, AB, at the intersection of Highway 732 and Highway 64A:

- Travel west on Highway 64A for 6.6 km
- Turn right (north) onto Highway 64 and travel for 62.1 km
- Turn right (north) onto Highway 726 and travel for16.4 km
- Turn left (west) onto Clear Prairie Rd. (Twp. Rd. 870) and travel for 8.7 km
- Turn right (north) onto Rge. Rd. 90 and travel for 2.9 km
- Turn left (west) onto Clear Prairie Rd. and travel for 18.1 km
- Turn left (southwest) to continue on Clear Prairie Rd. and travel for 15.3 km
- Turn left (southeast) onto Access Rd. and travel for 1.8 km to reach the gas plant

## DIRECTIONS TO THE BOUNDARY LAKE 10-33-85-11 W6M GAS PLANT

From Fairview, AB, at the intersection of Highway 732 and Highway 64A:

- Travel west on Highway 64A for 6.6 km
- Turn right (north) onto Highway 64 and travel for 102.2 km
- Turn right (north) onto Twp. Rd. 870 and travel for 9.2 km
- Turn right (northeast) onto Access Rd. and travel for 3.9 km to reach the gas plant



# Boundary Lake Alberta - Facilties

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA OPERA	TING						
ENERCAPITA ENERGY LTD.	ENERCAPITA 01-04-084-12W6	F46241	01-04-084-12W6	56.2471489	-119.8223790	56° 14' 49.736"	-119° 49' 20.564"	BT	UN	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 3-19-84-12	F42550	03-19-084-12W6	56.2929000	-119.8920000	56° 17' 34.439"	-119° 53' 31.2"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-19-088-12W6	F27382	04-19-088-12W6	56.6426589	-119.9106240	56° 38' 33.572"	-119° 54' 38.246"	BT	UN	0.14
ENERCAPITA ENERGY LTD.	WORSLEY 05-08-084-09 W6M	W 0204139	05-08-084-09W6	56.2659540	-119.3947380	56° 15' 57.434"	-119° 23' 41.056"	BT	AC	-
ENERCAPITA ENERGY LTD.	WORSLEY 05-08-084-09 W6M	W 0204139	05-08-084-09W6	56.2659540	-119.3947380	56° 15' 57.434"	-119° 23' 41.056"	BT	AC	-
ENERCAPITA ENERGY LTD.	ULTRAMAR BDY LK TRIASSIC H		05-10-084-12W6	56.2650953	-119.8160105	56° 15' 54.343"	-119° 48' 57.637"	IP	AC	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-03-087-12W6	F28807	06-03-087-12W6	56.5123145	-119.8276680	56° 30' 44.332"	-119° 49' 39.604"	BT	UN	0.30
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-06-086-11W6	F42973	06-06-086-11W6	56.4255254	-119.7336736	56° 25' 31.891"	-119° 44' 1.224"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 06-36-083-13W6	W 0150207	06-36-083-13W6	56.2389930	-119.9124490	56° 14' 20.374"	-119° 54' 44.816"	BT	AC	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 07-24-084-11W6	W 0204453	07-24-084-11W6	56.2946190	-119.5923640	56° 17' 40.628"	-119° 35' 32.510"	BT	AC	-
ENERCAPITA ENERGY LTD.	BLS 08-03-084-13W6	W 0134740	08-03-084-13W6	56.2529710	-119.9532850	56° 15' 10.695"	-119° 57' 11.826"	BT	AC	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 08-02-084-11W6	W 0375937	09-02-084-11W6	56.2541540	-119.6124410	56° 15' 14.954"	-119° 36' 44.787"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-02-084-11W6	F38115	09-02-084-11W6	56.2541539	-119.6124410	56° 15' 14.954"	-119° 36' 44.787"	BT	UN	0.06
ENERCAPITA ENERGY LTD.	STAR BOUNDARY LAKE SOUTH	F17014	10-10-084-12W6	56.2710317	-119.8023435	56° 16' 15.714"	-119° 48' 8.436"	GP	А	
ENERCAPITA ENERGY LTD.	STAR OIL & GAS LTD	F21987	10-10-084-12W6	56.2710317	-119.8023435	56° 16' 15.714"	-119° 48' 8.436"	CS	AC	0.01
ENERCAPITA ENERGY LTD.	STAR BOUNDARY LAKE		10-10-084-12W6	56.2710317	-119.8023435	56° 16' 15.714"	-119° 48' 8.436"	GS	AC	0.01
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-19 GS	F39494	10-19-086-11W6	56.4740809	-119.7220979	56° 28' 26.691"	-119° 43' 19.552"	GS	AC	0.96
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-19 GP	F39494	10-19-086-11W6	56.4740809	-119.7220979	56° 28' 26.691"	-119° 43' 19.552"	GP	AC	0.96
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-19-86-11W6	W 0350763	10-19-086-11W6	56.4739670	-119.7222040	56° 28' 26.281"	-119° 43' 19.934"	BT	AC	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-19 GS	F39494	10-19-086-11W6	56.4740809	-119.7220979	56° 28' 26.691"	-119° 43' 19.552"	GS	AC	0.96
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-19-086-11W6	F39494	10-19-086-11W6	56.4740809	-119.7220979	56° 28' 26.691"	-119° 43' 19.552"	GP	UN	0.96
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 10-31-083-12W6	W 0135803	10-31-083-12W6	56.2427190	-119.8815870	56° 14' 33.788"	-119° 52' 53.713"	BT	AC	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-33 PLANT	F22199	10-33-085-11W6	56.4159723	-119.6702739	56° 24' 57.500"	-119° 40' 12.986"	GP	AC	0.96
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 10-33 PLANT	F22199	10-33-085-11W6	56.4159723	-119.6702739	56° 24' 57.500"	-119° 40' 12.986"	GP	AC	0.96
ENERCAPITA ENERGY LTD.	ENERCAPITA 11-10-084-12W6	F17017	11-10-084-12W6	56.2713156	-119.8106665	56° 16' 16.736"	-119° 48' 38.399"	SA	UN	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 11-22-84-12W6	W 0128561	11-22-084-12W6	56.2993740	-119.8105220	56° 17' 57.746"	-119° 48' 37.879"	BT	AC	-
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE CENTRAL 12-02-085-10W6	W 0318903	12-02-085-10W6	56.3426820	-119.4717650	56° 20' 33.655"	-119° 28' 18.354"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-11-084-11W6	F35988	12-11-084-11W6	56.2685469	-119.6327610	56° 16' 6.768"	-119° 37' 57.939"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-11-084-11W6	F35988	12-11-084-11W6	56.2685469	-119.6327610	56° 16' 6.768"	-119° 37' 57.939"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-25-086-12W6	F29334	12-25-086-12W6	56.4898719	-119.7628486	56° 29' 23.538"	-119° 45' 46.254"	SA	UN	0.06
ENERCAPITA ENERGY LTD.	BOUNDARY LK SOUTH 13-01-084-11W6/00	W 0338990	13-01-084-11W6	56.2575690	-119.6036760	56° 15' 27.248"	-119° 36' 13.233"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-01-084-11W6	F35318	13-01-084-11W6	56.2575689	-119.6036760	56° 15' 27.248"	-119° 36' 13.233"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE SOUTH 13-19	W 0249331	13-19-083-10W6	56.2145520	-119.5776990	56° 12' 52.387"	-119° 34' 39.716"	BT	AC	-

# Boundary Lake Alberta - Facilties

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA SUSPE	NDED						
ENERCAPITA ENERGY LTD.	ENERCAPITA 02-22-084-12W6	W 0063124	02-22-084-12W6	56.2935500	-119.8026180	56° 17' 36.780"	-119° 48' 9.424"	BT	S	
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE 3-23-84-11W6	F35645	03-23-084-11W6	56.2931000	-119.6280000	56° 17' 35.160"	-119° 37' 40.8"	BT	S	
ENERCAPITA ENERGY LTD.	CLEAR 00/04-13-084-11W6/00	F33867	04-13-084-11W6	56.2782000	-119.6060000	56° 16' 41.520"	-119° 36' 21.6"	BT	S	
ENERCAPITA ENERGY LTD.	KER BOUNDARY LAKE 06-25-086-12W6	F26240	06-25-086-12W6	56.4850251	-119.7552151	56° 29' 6.090"	-119° 45' 18.774"	BT	S	
ENERCAPITA ENERGY LTD.	BOUNDARY 6-25U	W 0242912	06-25-086-12W6	56.4852110	-119.7554280	56° 29' 6.759"	-119° 45' 19.540"	BT	S	
ENERCAPITA ENERGY LTD.	BIR CECIL 102/8-19-84-9W6 SWB	W 0379586	08-19-084-09W6	56.2970660	-119.4033240	56° 17' 49.437"	-119° 24' 11.966"	BT	S	
ENERCAPITA ENERGY LTD.	ENERCAPITA 103/10-22-084-12W6	W 0146156	10-22-084-12W6	56.3001410	-119.8020990	56° 18' 0.507"	-119° 48' 7.556"	BT	S	
ENERCAPITA ENERGY LTD.	BOUNDARY LAKE 12-13-84-11W6	F38147	12-13-084-11W6	56.2861252	-119.6026740	56° 17' 10.050"	-119° 36' 9.626"	BT	S	
ENERCAPITA ENERGY LTD.	WORSLEY 13-08-084-09 W6M	W 0301501	13-08-084-09W6	56.2723170	-119.3937100	56° 16' 20.341"	-119° 23' 37.356"	BT	S	
ENERCAPITA ENERGY LTD.	BOUNDARY LKS. 13-29	W 0135143	13-29-083-12W6	56.2297750	-119.8688850	56° 13' 47.19"	-119° 52' 7.986"	BT	S	
ENERCAPITA ENERGY LTD.	CLEAR 100/14-13-084-11W6	W 0337790	14-13-084-11W6	56.2864050	-119.6020080	56° 17' 11.057"	-119° 36' 7.228"	BT	S	
ENERCAPITA ENERGY LTD.	SET BOUNDARY LAKES 16-2-84-11W6	W 0367115	16-02-084-11W6	56.2579870	-119.6124410	56° 15' 28.753"	-119° 36' 44.787"	BT	S	
ENERCAPITA ENERGY LTD.	ENERCAPITA BOUNDARY 102/16-03	W 0092323	16-03-084-12W6	56.2586300	-119.7996970	56° 15' 31.067"	-119° 47' 58.909"	BT	S	
ENERCAPITA ENERGY LTD.	BONAVISTA BOUNDARY LK 16-27-86-12W6	W 0290944	16-27-086-12W6	56.4907910	-119.7988400	56° 29' 26.847"	-119° 47' 55.824"	BT	S	

Facility EPZ's are assigned based on the largest EPZ of a sour pipeline entering or leaving the facility or an on-site sour well.

#### LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant

LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants

RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active

UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

# Boundary Lake Alberta - Sour Wells

						H₂S					
LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.		LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	
						(m3/s)					
ENERCAPITA ENERGY I TD	FEL BDYLKS 1-22-86-13	442259	100012208613W600	01-21-086-13W6	1 80	0.0011	0.02	0.00	0.02	l evel na	FLOWING OIL
ENERCAPITA ENERGY LTD	FEL BDYLKS 3-9-86-13	400296	100030908613W600	03-09-086-13W6	1.50	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 7-9-86-13	367464	102070908613W602	03-09-086-13W6	1.50	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-19-88-12	262123	100041908812W600	04-19-088-12W6	0.70	0.0008	0.02	0.00	0.01	Level na	PUMPING GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 5-9-86-13	364678	100050908613W600	05-09-086-13W6	1.50	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 5-10-84-12	57685	100051008412W600	05-10-084-12W6	0.03	0.0001	0.01	0.00	0.00	Level na	WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL BDYLKS 5-16-86-13	322847	100051608613W600	05-16-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-16-86-13	411746	102121608613W600	05-16-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-3-87-12	189259	100060308712W600	06-03-087-12W6	0.70	0.0007	0.02	0.00	0.01	Level na	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL HILL 6-6-86-11	418136	100060608611W602	06-06-086-11W6	0.97	0.0005	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-21-86-13	418759	102132108613W600	06-21-086-13W6	1.80	0.0011	0.02	0.00	0.02	Level na	FLOWING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-25-86-12	242912	100062508612W600	06-25-086-12W6	2.00	0.0012	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 9-22-86-13	250610	100092208613W600	09-22-086-13W6	1.80	0.0137	0.11	0.04	0.10	Level 1	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL HZ BDYLKS 10-15-84-12	482801	102101508412W600	10-10-084-12W6	0.03	0.0001	0.01	0.00	0.00	Level na	WATER INJECTOR
ENERCAPITA ENERGY LTD.	TERRA HILL 10-19-86-11	350763	100101908611W600	10-19-086-11W6	2.00	0.0152	0.12	0.04	0.10	Level 1	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-2-84-11	345255	100110208411W602	11-02-084-11W6	0.07	0.0001	0.01	0.00	0.00	Level na	COMMINGLED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-12-84-11	333194	100111208411W600	11-12-084-11W6	0.07	0.0001	0.01	0.00	0.00	Level na	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-15-86-13	334729	100121508613W600	12-15-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 15-15-84-12	92450	100151508412W600	15-15-084-12W6	0.03	0.0001	0.01	0.00	0.00	Level na	WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-15-86-13	434602	100131508613W600	15-15-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 15-15-86-13	362232	100151508613W600	15-15-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 15-33-86-12	282332	100153308612W600	15-33-086-12W6	0.70	0.0009	0.03	0.00	0.02	Level na	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-16-86-13	364765	102161608613W600	16-16-086-13W6	1.45	0.0009	0.02	0.00	0.01	Level na	PUMPING OIL
			ENERCAPITA SOUR SUS	SPENDED							
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-9-86-13	400296	100030908613W602	03-09-086-13W6	1.50	0.0031	0.05	0.02	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-9-86-13	400296	100030908613W603	03-09-086-13W6	1.50	0.0031	0.05	0.02	0.05	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-23-84-11	337793	100032308411W600	03-23-084-11W6	0.07	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL HILL 4-6-86-11	431742	102040608611W600	04-06-086-11W6	0.97	0.0003	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 5-9-86-13	364678	100050908613W602	05-09-086-13W6	1.50	0.0031	0.05	0.02	0.05	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL HILL 6-6-86-11	418136	100060608611W600	06-06-086-11W6	0.97	0.0005	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-21-86-13	373785	100062108613W600	06-21-086-13W6	1.80	0.0038	0.06	0.02	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-21-86-13	373785	100062108613W603	06-21-086-13W6	1.80	0.0038	0.06	0.02	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	TERRA HILL 7-6-86-11	431914	100070608611W600	07-06-086-11W6	0.97	0.0004	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL CECIL 7-19-84-10	348426	102071908410W602	07-19-084-10W6	0.07	0.0001	0.01	0.00	0.00	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 CECIL 8-19-84-9	379586	102081908409W602	08-19-084-09W6	0.07	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-2-84-11	345255	100110208411W603	11-02-084-11W6	0.07	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-13-84-11	376335	100121308411W600	12-13-084-11W6	0.07	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-25-86-12	284376	100122508612W600	12-25-086-12W6	2.00	0.0005	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-25-86-12	284376	100122508612W603	12-25-086-12W6	2.00	0.0012	0.02	0.00	0.02	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-25-86-12	284376	100122508612W602	12-25-086-12W6	2.00	0.0042	0.06	0.02	0.05	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-34-86-12	290686	100133408612W600	13-34-086-12W6	0.70	0.0001	0.01	0.00	0.00	Level na	SUSPENDED GAS

# **Boundary Lake Alberta - Sour Wells**

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	H₂S RELEASE RATE (m3/s)	EPZ (km)	IIZ (km)	PAZ (km)	SETBACK LEVEL	STATUS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-3-84-12	95242	100140308412W600	14-03-084-12W6	0.40	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-4-86-13	370870	100140408613W600	14-04-086-13W6	1.50	0.0031	0.05	0.02	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-4-86-13	370870	100140408613W602	14-04-086-13W6	1.50	0.0031	0.05	0.02	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-3-84-12	92323	100160308412W600	16-03-084-12W6	0.40	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-11-84-11	342931	100161108411W602	16-11-084-11W6	0.07	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS
			ENERCAPITA SOUR DI	RILLED							
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-13-84-11	337790	100141308411W600	14-13-084-11W6	0.07	NO PR	RODUCT	ION DA	TA AVA	ILABLE	DRILLED AND CASED

## LEGEND

Other: UWI=Unique Well Identifier EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone

# Boundary Lake Alberta - Sour Gas Pipelines

						-								SEGMENT			EXDECTED					DIR 56				
LICENSEE / OPERATOR	WATER	FROM		то	START	END	LICENSE	LINE	SEGMENT	UNIQUE	INCLUDES	SUB	OD	LENGTH	WALL	PRESSURE	PRESSURE	LICENSED	EXPECTED	TEMP	z	RELEASE	EPZ	IZ PAZ	SETBACK	STATUS
	CROSS				VALVE	VALVE	NO.	NO.	MODIFIER	LINE #	UNIQUE #		(mm)	(km)	(mm)	(kPa)	(kPa)	H2S (%)	H2S (%)	(°C)		VOLUME	(km) (l	.m) (km)	LEVEL	
								EN														(1115)				
ENERCAPITA ENERGY I TD	- 12	-02-085-10W6	WE 04-01-	085-10W6 PI			40379		-	1	1 to 14	NG	114.3	1 71	32	9 930	9 930	0.07	0.07	5	na	na		01 0 04	na	0
ENERCAPITA ENERGY LTD.	- 04	-01-085-10W6	WE 07-36-	084-10W6 PL	-	-	40379	3	-	2	1 to 14	NG	114.3	2.65	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
TERRA ENERGY CORP.	- 16	-25-084-10W6	WE 07-36-	084-10W6 PL	-	-	44005	10	-	3	1 to 14	NG	114.3	0.93	3.2	9,930	9,930	0.07	0.07	5						0
ENERCAPITA ENERGY LTD.	- 07	-36-084-10W6	WE 14-30-	084-09W6 PL	-	-	59375	1	-	4	1 to 14	NG	114.3	1.54	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 14	-30-084-09W6	WE 10-30-	084-09W6 PL	-	-	40379	2	-	5	1 to 14	NG	114.3	0.40	3.2	9.930	9.930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 09	-02-084-11W6	WE 16-02-	084-11W6 PL		-	58047	12	-	6	1 to 14	NG	114.3	0.35	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 16	-02-084-11W6	WE 16-02-	084-11W6 PL		-	58047	11	-	7	1 to 14	NG	114.3	0.08	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 11	-02-084-11W6	WE 13-01-	084-11W6 PL		-	58047	7	-	8	1 to 14	NG	168.3	1.49	4.0	9,930	9,930	0.07	0.07	5	na	na	0.09 0	01 0.07	na	0
ENERCAPITA ENERGY LTD.	- 13	-01-084-11W6	6 PL 11-12-	084-11W6 B1	- 1	-	58047	4	-	9	1 to 14	NG	168.3	1.40	4.8	9,930	9,930	0.07	0.07	5	na	na	0.09 0	01 0.07	na	0
ENERCAPITA ENERGY LTD.	- 11	-12-084-11W6	WE 15-12-	084-11W6 PL		-	58047	2	-	10	1 to 14	NG	114.3	0.74	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 12	-13-084-11W6	WE 12-13-	084-11W6 PL		-	58047	13	-	11	1 to 14	NG	114.3	0.05	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 14	-13-084-11W6	WE 04-13-	084-11W6 PL		-	58047	3	-	12	1 to 14	NG	114.3	0.97	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
ENERCAPITA ENERGY LTD.	- 04	-13-084-11W6	WE 05-09-	084-10W6 PL		-	58047	1	-	13	1 to 14	NG	114.3	5.40	3.2	9,930	9,930	0.07	0.07	5	na	na	0.06 0	01 0.04	na	0
CANADIAN NATURAL RESOURCES LIMITED	- 05	-09-084-10W6	PL 06-33-	084-09W6 PL		-	30760	23	-	14	1 to 14	NG	168.3	12.36	4.8	9,930	9,930	0.07	0.07	5						0
ENERCAPITA ENERGY LTD.	- 15	-33-086-12W6	WE 06-03-	087-12W6 PL		-	40270	1	-	15	15 to 18	NG	114.3	0.79	3.2	9,930	9,930	0.70	0.70	5	na	na	0.30 0	09 0.26	na	0
ENERCAPITA ENERGY LTD.	- 13	-34-086-12W6	WE 06-03-	087-12W6 PL	-	-	40985	1	-	16	15 to 18	NG	114.3	1.60	4.8	9,930	9,930	0.70	0.70	5	na	na	0.29 0	08 0.25	na	0
ENERCAPITA ENERGY LTD.	C 06	-03-087-12W6	6 PL 01-14-	087-13W6 PL		-	30551	3	-	17	15 to 18	NG	114.3	9.04	4.0	9,930	9,930	0.70	0.70	5	na	na	0.30 0	08 0.25	na	0
CANADIAN NATURAL RESOURCES LIMITED	- 01	-14-087-13W6	CS 16-11-	088-13W6 GF	· -	-	51748	1	-	18	15 to 18	SG	168.3	9.54	4.0	8,270	8,270	2.00	2.00	5						0
ENERCAPITA ENERGY LTD.	- 06	-03-087-12W6	WE 03-04-	087-12W6 PL		-	30551	1	-	19	19,20	NG	114.3	1.90	3.2	4,960	4,960	0.70	0.70	5	na	na	0.20 0	05 0.17	na	0
CANADIAN NATURAL RESOURCES LIMITED	- 04	-04-087-12W6	WE 06-07-	087-12W6 PL		-	55868	2	-	20	19,20	SG	114.3	5.15	3.2	4,960	4,960	2.00	2.00	5						0
ENERCAPITA ENERGY LTD.	- 04	-19-088-12W6	WE 15-13-	088-13W6 PL		-	44292	1	-	21	21,22	NG	88.9	1.45	3.2	4,960	4,960	0.70	0.70	5	na	na	0.14 0	03 0.12	na	0
CANADIAN NATURAL RESOURCES LIMITED	- 15	-13-088-13W6	WE 15-12-	088-13W6 PL		-	58302	5	-	22	21,22	NG	114.3	1.35	3.2	4,960	4,960	0.99	0.99	5						0
ENERCAPITA ENERGY LTD.	- 05	-08-084-09W6	WE 14-07-	084-09W6 PL		-	40379	1	-	23	23,24	NG	114.3	2.27	3.2	9,930	9,930	0.07	0.07	5	na	na	0.05 0	01 0.04	na	0
BLUE SKY RESOURCES LTD.	- 14	-07-084-09W6	WE 16-24-	084-10W6 PL	-	-	37383	1	-	24	23,24	NG	114.3	3.65	4.0	9,930	9,930	0.07	0.07	5						0
ENERCAPITA ENERGY LTD.	R 10	-19-086-11W6	WE 10-33-	085-11W6 GF	P ESD	-	48655	1	-	25	25	SG	168.3	8.50	4.8	9,930	9,930	2.00	2.00	5	0.68	511	0.96 0	29 0.82	Level 2	0
ENERCAPITA ENERGY LTD.	C 05	-16-086-13W6	CS 11-27-	086-13W6 PL		-	49866	1	-	26	26 to 30	SG	168.3	5.67	4.0	9,930	9,930	2.00	2.00	5	0.68	778	0.98 0	30 0.84	Level 2	0
ENERCAPITA ENERGY LTD.	C 11	-27-086-13W6	PL 14-27-	086-13W6 PL		-	49866	2	-	27	26 to 30	SG	168.3	0.83	4.0	9,930	9,930	2.00	2.00	5	0.68	778	0.98 0	30 0.84	Level 2	0
ENERCAPITA ENERGY LTD.	C 11	-27-086-13W6	PL 06-27-	086-13W6 B	-	-	61364	1	-	28	26 to 30	SG	168.3	0.24	4.0	9,930	9,930	2.00	2.00	5	0.68	//8	0.98 0	30 0.84	Level 2	0
	- 06	-27-086-13006	BI 14-27-	086-13W6 PL	ESD	-	40093	2	-	29	26 to 30	SG	114.3	0.87	3.2	8,270	8,270	1.80	1.80	5	0.69	573	0.49 0	16 0.42	Level 2	0
	C 14	-27-086-13006	PL 01-14-	087-13006 C	> -	-	51748		-	30	26 to 30	56	168.3	5.66	4.8	8,270	8,270	2.00	2.00	5	0.74	<b>E</b> 4	0.40	10 0.00		
ENERCAPITA ENERGY LTD.	- 03	-09-086-1300	WE 03-09-	086-13W6 PL		-	45001	5 4	-	31	31 to 38	36	114.3	0.05	3.2	7,380	7,380	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
	- 03	04 096 13100	WE 11 00	086 13W6 PL	· ·	-	45001	4	-	32	21 to 29	80	114.3	1.25	3.2	7,300	7,300	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
ENERCAPITA ENERGY LTD.	- 14	00 086 13/0	WE 11.09-	086 13W6 PL		-	45001	3 0	-	34	31 to 38	80	114.3	0.10	3.2	7,300	7,300	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
	- 11	00 086 13/06		086 13W6 PL		-	45001	7	-	35	31 to 38	86	114.3	0.10	3.2	7,300	7,300	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
ENERCAPITA ENERGY I TD	- 11	-09-000-13000	PI 11-09-	086-13W6 PI	· · ·	-	45001	6		36	31 to 38	SC	114.3	0.10	3.2	7,300	7,300	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
ENERCAPITA ENERGY I TD	- 14	-09-086-13W6	PI 14-09-	086-13W6 PI	· · ·		45001	2		37	31 to 38	SG	114.3	0.45	3.2	7,380	7 380	1.50	1.50	5	0.71	54	0.42 0	12 0.36		
ENERCAPITA ENERGY I TD	- 05	-09-000-13000	WE 14-09-	086-13W6 PI	·	-	45001	1		38	31 to 38	SG	114.3	1.02	3.2	7,380	7,380	1.50	1.50	5	0.71	54	0.42 0	12 0.30		
ENERCAPITA ENERGY I TD	- 16	-28-086-13W6	WE 06-27-	086-13W6			40070			30	30 to 44	NG	114.3	1.02	4.0	9,660	9,660	0.62	0.62	5	0.7 i na	na	0.42 0	07 0 22	na	
ENERCAPITA ENERGY I TD	- 09	-22-086-13W6	WE 06-27-	086-13W6 BT		-	36259		-	40	39 to 44	SG	114.3	1.66	32	9,960	9,960	1.80	1.80	5	0.68	167	0.53 0	16 0 45	Level 1	0
ENERCAPITA ENERGY I TD	- 06	-21-086-13WF	WE 13-22-	086-13W6 PI	-	- 1	26873	$\frac{1}{2}$	-	41	39 to 44	SG	114.3	1.94	3.2	9,660	9,660	1.80	1.80	5	0.68	162	0.52 0	16 0.44	Level 1	0
ENERCAPITA ENERGY LTD	- 13	-22-086-13W6	BT 06-27-	086-13W6 BT		- 1	26873	3	-	42	39 to 44	SG	114.3	1.23	3.2	9.660	9.660	1.80	1.80	5	0.68	162	0.52 0	16 0.44	Level 1	0
ENERCAPITA ENERGY LTD.	- 06	-27-086-13W6	BT 03-27-	086-13W6 PI		- 1	26873	6	-	43	39 to 44	SG	114.3	0.39	3,2	9,660	9,660	1.80	1.80	5	0.68	162	0.52 0	16 0.44	Level 1	0
ENERCAPITA ENERGY LTD.	- 03	-27-086-13W6	PL 13-22-	086-13W6 B	- 1	- 1	26873	5	-	44	39 to 44	SG	88.9	0.73	3.2	9,660	9,660	1.80	1.80	5	0.68	162	0.36 0	12 0.31	Level 1	0
ENERCAPITA ENERGY LTD.	- 07	-19-084-10W6	WE 14-13-	084-11W6 BT	- 1	-	58047	9	-	45	45	NG	114.3	2.37	3.2	9,930	9,930	0.07	0.07	5	0.68	2	0.05 0	01 0.03	Level na	0
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# Boundary Lake Alberta - Sour Gas Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM	то	START VALVE	END VALVE	LICENSE NO.	LINE NO.	LINE SEGMENT MODIFIER	UNIQUE LINE #	INCLUDES UNIQUE #	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	EXPECTED PRESSURE (kPa)	LICENSED H2S (%)	EXPECTED H2S (%)	TEMP (°C)	z	DIR 56 RELEASE VOLUME (m3)	EPZ (km)	IIZ PAZ (km) (km)	SETBACK LEVEL	STATUS
							ENE	RCAPITA SC	OUR DISC	CONTINUED															
ENERCAPITA ENERGY LTD.	-	13-12-087-12W6 B	E 06-03-087-12W6 B	E -	-	30551	2	-	46	46	NG <sup>′</sup>	114.3	3.91	3.2	0	0	0.70	0.70							D
ENERCAPITA ENERGY LTD.	-	13-12-087-12W6 B	E 13-12-087-12W6 B	E -	-	30551	4	-	47	47	NG ′	114.3	0.33	3.2	0	0	0.70	0.70							D
ENERCAPITA ENERGY LTD.	-	12-25-086-12W6 F	L 13-34-086-12W6 B	E -	-	41023	1	-	48	48	SG ′	114.3	4.80	4.8	0	0	2.00	2.00							D
ENERCAPITA ENERGY LTD.	-	06-25-086-12W6 B	E 12-25-086-12W6 F	'L -	-	41814	2	-	49	49	SG ′	114.3	0.85	3.2	0	0	2.00	2.00							D
ENERCAPITA ENERGY LTD.	-	16-27-086-12W6 B	E 15-33-086-12W6 B	E -	-	42353	1	-	50	50	NG	114.3	3.32	3.2	0	0	0.70	0.70							D
ENERCAPITA ENERGY LTD.	-	08-19-084-09W6 B	E 16-24-084-10W6 B	E -	-	49770	1	-	51	51	NG	88.9	2.01	4.0	0	0	0.07	0.07							D
ENERCAPITA ENERGY LTD.	-	04-13-084-11W6 B	E 16-11-084-11W6 B	E -	-	58047	5	-	52	52	NG	114.3	1.07	3.2	0	0	0.07	0.07							D
ENERCAPITA ENERGY LTD.	-	16-11-084-11W6 B	E 11-12-084-11W6 B	E -	-	58047	6	-	53	53	NG <sup>′</sup>	114.3	1.05	3.2	0	0	0.07	0.07							D
ENERCAPITA ENERGY LTD.	-	03-23-084-11W6 B	E 14-13-084-11W6 B	E -	-	58047	8	-	54	54	NG	114.3	1.91	3.2	0	0	0.07	0.07							D
ENERCAPITA ENERGY LTD.	-	13-03-087-13W6 B	E 08-04-087-13W6 B	E -	-	30444	1	-	55	55	NG	88.9	0.86	3.2	0	0	0.60	0.60							D
ENERCAPITA ENERGY LTD.	-	06-26-086-13W6 B	E 06-27-086-13W6 B	E -	-	36271	1	-	56	56	NG <sup>′</sup>	114.3	1.59	3.2	0	0	0.85	0.85							D
ENERCAPITA ENERGY LTD.	-	03-27-086-13W6 B	E 03-27-086-13W6 B	E -	-	38242	1	-	57	57	SG	88.9	0.07	3.2	0	0	1.60	1.60							D
ENERCAPITA ENERGY LTD.	-	03-27-086-13W6 B	E 06-27-086-13W6 B	E -	-	60826	1	-	58	58	SG	88.9	0.57	3.2	0	0	1.60	1.60							D
ENERCAPITA ENERGY LTD.	-	02-28-086-13W6 B	E 13-22-086-13W6 B	E -	-	26873	4	-	59	59	SG	114.3	0.91	4.0	0	0	1.80	1.80							D
ENERCAPITA ENERGY LTD.	-	10-13-086-13W6 B	E 10-13-086-13W6 B	E -	-	48219	4	-	60	60	SG	114.3	0.08	4.0	0	0	1.80	1.80							D

## LEGEND

<u>Water Cross</u>: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir UG=Underground Cap or Tie-in

Valve: CV=Check Valve ESD=Emergency Shutdown Valve MBV=Manual Block Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water

MP=Multiphase NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated

Other: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature



# **Boundary Lake Alberta - Sour Liquid Pipelines**

LICENSEE / OPERATOR	WATER CROSS	FROM	то	START VALVE	END VALVE	LICENSE NO.	LINE NO.	LINE SEGMENT MODIFIER	UNIQUE LINE #	INCLUDE UNIQUE	S SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	EXPECTED PRESSURE (kPa)	LICENSED H2S (%)	EXPECTED H2S (%)	GAS FLOW RATE (1000 H m3/d)	LIQUID FLOW RATE (m3/d)	GLR	TEMP (°C)	z	DIR 56 RELEASE VOLUME (m3)	E EPZ	IIZ (km)	PAZ (km)	SETBACK LEVEL	STATUS
										ENE	RCAPIT	ASOUR	OPERATING	6															
ENERCAPITA ENERGY LTD.	-	12-25-086-12W6	WE 06-25-086-12W6 PL		-	40545	1	-	1	1,2	OE	88.9	0.98	4.8	10,200	10,200	2.00	2.00	3.00	15.00	200.00	5	0.68	91	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	С	06-25-086-12W6	WE 08-11-086-12W6 BT	- 1	-	36235	2	-	2	1,2	OE	114.3	5.50	4.8	10,200	10,200	2.00	2.00	3.00	15.00	200.00	5	0.68	83	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	С	06-06-086-11W6	WE 10-01-086-12W6 SA	۰ ۱	-	52191	1	-	3	2	OE	114.3	1.81	3.2	4,960	4,960	0.97	0.97	3.00	15.00	200.00	5	0.78	8	0.02	0.01	0.01	Level na	0
ENERCAPITA ENERGY LTD.	-	10-15-084-12W6	SA 10-10-084-12W6 IF	' -	-	59788	1	-	4	3	OE	114.3	1.56	3.2	4,830	4,830	0.10	0.10	3.00	15.00	200.00	5	0.79	1	0.01	0.00	0.00	Level na	0
ENERCAPITA ENERGY LTD.	-	15-15-086-13W6	WE 08-15-086-13W6 PL		-	50233	3	-	5	5 to 9	OE	114.3	0.98	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	23	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	С	08-15-086-13W6	PL 07-15-086-13W6 PL		-	50233	2	-	6	5 to 9	OE	114.3	0.44	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	23	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	WE 07-15-086-13W6 PL		-	50233	6	-	7	5 to 9	OE	114.3	0.09	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	23	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	PL 07-15-086-13W6 PL		-	50233	5	-	8	5 to 9	OE	114.3	0.09	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	23	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	PL 12-15-086-13W6 BT	- 1	-	50233	4	-	9	5 to 9	OE	114.3	0.96	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	23	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	12-15-086-13W6	WE 16-16-086-13W6 PL		-	50233	1	-	10	10 to 13	3 OE	88.9	0.65	4.0	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	31	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	16-16-086-13W6	WE 05-16-086-13W6 PL		-	49766	1	-	11	10 to 13	3 OE	114.3	1.64	3.2	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	31	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	05-16-086-13W6	WE 06-16-086-13W6 PL		-	49766	4	-	12	10 to 13	3 OE	114.3	0.40	3.2	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	31	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	06-16-086-13W6	PL 14-09-086-13W6 B	- 1	-	49766	2	-	13	10 to 13	3 OE	114.3	0.87	3.2	7,380	7,380	1.45	1.45	3.00	15.00	200.00	5	0.71	31	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	01-21-086-13W6	WE 10-21-086-13W6 PL		-	53554	2	-	14	14,15	OE	114.3	0.90	4.0	9,930	9,930	1.80	1.80	3.00	15.00	200.00	5	0.68	26	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	10-21-086-13W4	SA 13-22-086-13W6 B	-	-	53554	1	-	15	14,15	OE	114.3	0.95	4.0	9,930	9,930	1.80	1.80	3.00	15.00	200.00	5	0.68	26	0.02	0.01	0.02	Level 1	0
ENERCAPITA ENERGY LTD.	-	10-10-084-12W6	BT 12-15-084-12W6 PL		-	19737	1	-	16	16,17,1	8 SW	114.3	1.80	3.2	14,000	14,000	0.05	0.03	N/A	48.00	7.00	5	na	na	0.01	0.00	0.00	na	0
ENERCAPITA ENERGY LTD.	-	12-15-084-12W6	PL 13-15-084-12W6 WI	= -	-	19737	3	-	17	16,17,1	8 SW	62.3	0.44	7.2	14,000	14,000	0.05	0.03	N/A	48.00	7.00	5	na	na	0.01	0.00	0.00	na	0
ENERCAPITA ENERGY LTD.	-	13-15-084-12W6	PL 15-15-084-12W6 WI	Ξ -	-	19737	4	-	18	16,17,1	8 SW	62.3	0.83	7.2	14,000	14,000	0.05	0.03	N/A	48.00	7.00	5	na	na	0.01	0.00	0.00	na	0
										ENER	CAPITA	SOUR DI	SCONTINUI	ED															
ENERCAPITA ENERGY LTD.	-	14-03-084-12W6	BE 15-03-084-12W6 BE	-	-	20947	1	-	19	19	OE	88.9	0.57	4.0	0	0	0.40	0.40											D
ENERCAPITA ENERGY LTD.	R	15-03-084-12W6	BE 02-10-084-12W6 BE	- 1	-	20947	2	-	20	20	OE	88.9	0.10	4.0	0	0	0.40	0.40											D
ENERCAPITA ENERGY LTD.	C	02-10-084-12W6	BE 10-10-084-12W6 BE	-	-	20947	3	-	21	21	OE	88.9	1.01	4.0	0	0	0.40	0.40											D
ENERCAPITA ENERGY LTD.	-	15-03-084-12W6	BE 16-03-084-12W6 BE	- 1	-	20947	7	-	22	22	OE	88.9	0.40	4.8	0	0	0.40	0.40											D
ENERCAPITA ENERGY LTD.	-	16-03-084-12W6	BE 15-03-084-12W6 BE	- 1	-	20947	8	-	23	23	OE	88.9	0.40	4.8	0	0	0.40	0.40											D
ENERCAPITA ENERGY LTD.	-	07-06-086-11W6	BE 06-06-086-11W6 BE	-	-	52191	4	-	24	24	OE	114.3	0.64	4.0	0	0	0.97	0.97											D
ENERCAPITA ENERGY LTD.	-	04-06-086-11W6	BE 06-06-086-11W6 BE	- 1	-	52191	5	-	25	25	OE	114.3	0.53	4.0	0	0	0.97	0.97											D

## LEGEND

<u>Water Cross</u>: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir UG=Underground Cap or Tie-in

Valve: CV=Check Valve ESD=Emergency Shutdown Valve MBV=Manual Block Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water

MP=Multiphase NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated <u>Other</u>: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio TEMP=Temperature

# Boundary Lake Alberta - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
	EN	ERCAPITA	SWEET OPERATING			
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 1-4 HZ BDYLKS 8-34-83-12	456989	100083408312W602	01-04-084-12W6	0	DRAIN
ENERCAPITA ENERGY LTD.	EEL BDYLKS 2-22-84-12	63124	100022208412W600	02-22-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-9-86-13	400296	100030908613W604	03-09-086-13W6	0	COMMINGLED
ENERCAPITA ENERGY LTD.	1332915 BDYLKS 3-19-84-12	161165	100031908412W602	03-19-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 5-2-84-13	150464	100050208413W600	05-02-084-13W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-27-86-13	143386	102062708613W603	06-27-086-13W6	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 6-36-83-13	150207	102063608313W600	06-36-083-13W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 7-24-84-11	204453	100072408411W602	07-24-084-11W6	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 8-3-84-13	134740	100080308413W600	08-03-084-13W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	TERRA BDYLKS 8-2-84-11	375937	100080208411W600	09-02-084-11W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 9-15-84-12	491719	100091508412W600	10-10-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-12-86-13	133319	100101208613W602	10-12-086-13W6	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-15-84-12	56351	100101508412W600	10-15-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 2-21-86-13	436098	102022108613W600	10-21-086-13W6	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 10-31-83-12	135803	100103108312W600	10-31-083-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-22-84-12	128561	100112208412W600	11-22-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-10-84-12	120023	100121008412W600	12-10-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-15-84-12	237840	100121508412W600	12-15-084-12W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-1-84-11	338990	100130108411W600	13-01-084-11W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL BONANZA 13-19-83-10	249331	100131908310W602	13-19-083-10W6	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-31-84-12	15798	100143108412W602	14-31-084-12W6	0	COMMINGLED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-15-86-13	476445	100101508613W600	15-16-086-13W6	0	PUMPING OIL
	ENE	RCAPITA	SWEET SUSPENDED			
ENERCAPITA ENERGY LTD.	EEL BDYLKS 1-10-84-12	117172	100011008412W600	01-10-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 2-15-84-12	123816	100021508412W600	02-15-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 2-28-86-13	391668	100022808613W600	02-28-086-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 2-33-85-13	73069	100023308513W602	02-33-085-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-27-86-13	267940	100032708613W600	03-27-086-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 3-27-86-13	267940	100032708613W602	03-27-086-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-13-84-11	319434	100041308411W600	04-13-084-11W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-15-84-12	119536	100041508412W600	04-15-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-22-84-12	64511	100042208412W600	04-22-084-12W6	0	SUSPENDED WATER INJECTOR

# Boundary Lake Alberta - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 5-15-84-12	119709	100051508412W600	05-15-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-1-84-11	388831	100060108411W600	06-01-084-11W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-10-84-12	237875	102061008412W600	06-10-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-15-84-12	123885	102061508412W600	06-15-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	STAR ET AL BDYLKS 7-15-84-12	62976	100071508412W600	07-15-084-12W6	0	SUSPENDED WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL BDYLKS 8-16-84-12	99289	100081608412W602	08-16-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-10-84-12	54959	100101008412W600	10-10-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-15-87-13	304197	102101508713W600	10-15-087-13W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF BDYLKS 10-18-84-12	161793	100101808412W600	10-18-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-21-86-13	436038	102042108613W600	10-21-086-13W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-22-84-12	146156	103102208412W600	10-22-084-12W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-28-85-13	62893	100102808513W600	10-28-085-13W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL HILL 10-33-85-11	62988	100103308511W600	10-33-085-11W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 6-7-85-11	338609	100060708511W600	11-07-085-11W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-10-84-12	64279	100111008412W600	11-10-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-11-84-12	57337	100111108412W600	11-11-084-12W6	0	SUSPENDED WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL BDYLKS 11-15-84-12	63646	100111508412W600	11-15-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 12-15-86-13	334729	100121508613W602	12-15-086-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-3-87-13	139024	100130308713W600	13-03-087-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-3-87-13	139024	100130308713W602	13-03-087-13W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-15-84-12	120502	100131508412W600	13-15-084-12W6	0	SUSPENDED WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF BDYLKS 10-18-84-12	178281	102101808412W600	13-18-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 13-29-83-12	135143	100132908312W600	13-29-083-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-13-84-11	337790	100141308411W602	14-13-084-11W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 14-31-84-12	15798	100143108412W600	14-31-084-12W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL BDYLKS 15-10-84-12	92449	100151008412W600	15-10-084-12W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL BDYLKS 9-2-84-11	367115	100090208411W600	16-02-084-11W6	0	SUSPENDED OIL

# Boundary Lake Alberta - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
	ENERC	APITA SWE	EET DRILLED AND CASED			
ENERCAPITA ENERGY LTD.	SURE ET AL HILL 2-30-86-11	373639	100023008611W600	02-30-086-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	STAR BDYLKS 3-15-84-12	237876	100031508412W602	03-15-084-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-7-85-11	251177	100040708511W600	04-07-085-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-7-85-11	251177	100040708511W602	04-07-085-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 4-22-84-12	64511	100042208412W602	04-22-084-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF BDYLKS 5-2-85-11	380445	100050208511W600	05-02-085-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF BDYLKS 5-2-85-11	380445	100050208511W602	05-02-085-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM BDYLKS 6-36-83-13	150207	102063608313W602	06-36-083-13W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	SURE BDYLKS 6-36-86-12	334423	100063608612W600	06-36-086-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 1-25-86-12	291330	100012508612W600	07-25-086-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 8-10-84-12	108532	100081008412W602	08-10-084-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 8-16-84-12	99289	100081608412W600	08-16-084-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 10-15-87-13	304197	102101508713W602	10-15-087-13W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 9-10-84-11	352462	100091008411W600	12-11-084-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 13-22-86-13	148086	100132208613W603	13-22-086-13W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	SURE BDYLKS 15-26-86-12	320754	100152608612W600	15-26-086-12W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-1-84-11	418360	100160108411W600	16-01-084-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-1-84-11	418360	100160108411W602	16-01-084-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-1-84-11	418360	100160108411W603	16-01-084-11W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL BDYLKS 16-26-86-12	284456	100162608612W600	16-26-086-12W6	0	DRILLED AND CASED

## LEGEND

Other: UWI=Unique Well Identifier

# Boundary Lake Alberta - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
				ENERAPITA SWEET OF	PERA	TING								
ENERCAPITA ENERGY LTD.	-	02-22-084-12W6	WE	02-22-084-12W6	PL	10833	7	OE	88.9	0.13	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	CC	02-22-084-12W6	PL	10-15-084-12W6	SA	10833	9	OE	88.9	0.74	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	-	11-10-084-12W6	SA	10-10-084-12W6	BT	10833	11	OE	88.9	0.50	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	-	01-10-084-12W6	WE	10-10-084-12W6	BT	10833	14	OE	88.9	0.90	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	-	12-10-084-12W6	WE	11-10-084-12W6	SA	10833	18	OE	88.9	0.29	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	-	12-15-084-12W6	WE	10-15-084-12W6	PL	10833	22	OE	88.9	1.08	3.2	4,830	0	0
ENERCAPITA ENERGY LTD.	-	10-10-084-12W6	IP	05-10-084-12W6	WE	22422	10	SW	60.3	1.09	3.2	14,000	0	0
ENERCAPITA ENERGY LTD.	-	06-27-086-13W6	WE	06-27-086-13W6	PL	25366	1	NG	88.9	0.18	5.5	9,930	0	0
ENERCAPITA ENERGY LTD.	-	02-33-085-13W6	WE	15-34-085-13W6	PL	35299	1	NG	88.9	2.04	3.2	7,380	0	0
ENERCAPITA ENERGY LTD.	-	14-09-086-13W6	WE	14-10-086-13W6	PL	45944	1	NG	88.9	1.72	3.2	7,380	0	0
ENERCAPITA ENERGY LTD.	CC	10-13-086-13W6	ΡL	07-15-086-13W6	PL	48194	1	FG	60.3	4.12	3.2	8,450	0	0
ENERCAPITA ENERGY LTD.	-	08-15-086-13W6	ΡL	15-15-086-13W6	PL	48194	2	FG	60.3	0.98	3.2	9,930	0	0
ENERCAPITA ENERGY LTD.	-	10-13-086-13W6	MS	08-15-086-13W6	PL	48194	8	FG	114.3	3.60	4.0	8,450	0	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	ΡL	12-15-086-13W6	WE	48194	9	FG	60.3	0.96	3.2	8,450	0	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	PL	07-15-086-13W6	WE	48194	10	FG	60.3	0.09	3.2	8,450	0	0
ENERCAPITA ENERGY LTD.	-	07-15-086-13W6	PL	07-15-086-13W6	PL	48194	11	FG	60.3	0.09	3.2	8,450	0	0
ENERCAPITA ENERGY LTD.	-	14-09-086-13W6	ΡL	11-09-086-13W6	PL	49039	1	FG	60.3	1.35	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	06-09-086-13W6	PL	05-09-086-13W6	WE	49039	2	FG	60.3	0.48	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	05-16-086-13W6	PL	16-16-086-13W6	WE	49039	3	FG	60.3	1.64	5.5	690	0	0
ENERCAPITA ENERGY LTD.	-	05-16-086-13W6	CS	14-09-086-13W6	PL	49039	4	FG	60.3	1.10	5.5	690	0	0
ENERCAPITA ENERGY LTD.	-	03-09-086-13W6	PL	03-09-086-13W6	WE	49039	5	FG	60.3	0.05	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	16-16-086-13W6	ΡL	05-16-086-13W6	CS	49039	6	FG	60.3	1.64	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	12-15-086-13W6	ΡL	16-16-086-13W6	PL	49039	7	FG	60.3	0.66	3.2	9,930	0	0
ENERCAPITA ENERGY LTD.	-	11-09-086-13W6	PL	14-04-086-13W6	WE	49039	8	FG	60.3	0.49	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	11-09-086-13W6	PL	11-09-086-13W6	WE	49039	9	FG	60.3	0.10	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	11-09-086-13W6	ΡL	11-09-086-13W6	PL	49039	10	FG	60.3	0.10	3.2	690	0	0
ENERCAPITA ENERGY LTD.	-	11-16-086-13W6	PL	13-22-086-13W6	BT	49039	11	FG	114.3	2.70	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	07-24-084-11W6	WE	14-13-084-11W6	PL	50646	1	NG	114.3	1.34	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	-	05-16-086-13W6	CS	14-09-086-13W6	BT	57248	1	SW	130.0	1.06	15.5	7,380	0	0
ENERCAPITA ENERGY LTD.	CC	10-12-086-13W6	WE	14-09-086-13W6	BT	57248	2	SW	124.0	5.64	12.5	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-10-084-12W6	BT	12-11-084-12W6	CS	57719	1	NG	88.9	1.02	3.2	9,930	0	0
ENERCAPITA ENERGY LTD.	-	10-13-086-13W6	GP	10-12-086-13W6	WE	57849	1	FG	114.3	1.70	4.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	11-21-084-12W6	PL	08-29-084-12W6	CS	58362	1	NG	114.3	1.80	4.8	9,930	0	0

# Boundary Lake Alberta - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	10-22-084-12W6	WE	11-21-084-12W6	ΡL	58362	2	NG	88.9	2.80	4.8	9,930	0	0
ENERCAPITA ENERGY LTD.	-	13-22-086-13W6	ΒT	10-21-086-13W6	ΡL	59334	1	FG	88.9	0.95	4.0	9,660	0	0
ENERCAPITA ENERGY LTD.	-	10-21-086-13W6	PL	01-21-086-13W6	WE	59334	2	FG	88.9	0.95	3.2	9,660	0	0
			EN	IERAPITA SWEET DISC	CONT	INUED								
ENERCAPITA ENERGY LTD.	-	11-15-084-12W6	ΒE	10-15-084-12W6	BE	10833	10	OE	88.9	0.51	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	15-10-084-12W6	ΒE	10-10-084-12W6	BE	10833	13	OE	88.9	0.58	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	05-15-084-12W6	ΒE	11-10-084-12W6	BE	10833	16	OE	88.9	1.30	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	04-15-084-12W6	ΒE	11-10-084-12W6	BE	10833	17	OE	88.9	0.88	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	02-15-084-12W6	ΒE	10-10-084-12W6	BE	10833	20	OE	88.9	0.68	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	06-15-084-12W6	ΒE	10-15-084-12W6	BE	10833	21	OE	88.9	0.51	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	03-15-084-12W6	ΒE	11-10-084-12W6	BE	10833	23	OE	88.9	0.50	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	06-10-084-12W6	ΒE	11-10-084-12W6	BE	10833	24	OE	88.9	0.50	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	06-01-084-13W6	ΒE	10-10-084-12W6	BE	16682	1	FW	88.9	8.19	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	08-21-084-12W6	ΒE	16-09-084-12W6	BE	20691	1	OE	88.9	2.23	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	16-16-084-12W6	ΒE	16-09-084-12W6	BE	20691	2	OE	88.9	1.72	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	08-16-084-12W6	ΒE	16-09-084-12W6	BE	20691	3	OE	88.9	0.86	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	16-09-084-12W6	WE	16-09-084-12W6	S	20691	4	OE	88.9	0.06	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	16-09-084-12W6	ΒE	10-10-084-12W6	BE	20697	1	NG	114.3	1.44	2.8	0	0	D
ENERCAPITA ENERGY LTD.	-	16-03-084-12W6	BE	15-03-084-12W6	BE	20697	2	NG	88.9	0.56	4.0	0	0	D
ENERCAPITA ENERGY LTD.	CC	15-03-084-12W6	ΒE	10-10-084-12W6	BE	20697	3	NG	88.9	1.01	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	10-10-084-12W6	BE	02-10-084-12W6	BE	20946	1	SW	60.3	0.87	3.9	0	0	D
ENERCAPITA ENERGY LTD.	CC	15-03-084-12W6	BE	12-02-084-12W6	BE	20946	3	SW	60.3	1.41	3.9	0	0	D
ENERCAPITA ENERGY LTD.	-	16-09-084-12W6	BE	10-10-084-12W6	BE	21716	1	CO	114.3	1.44	2.8	0	0	D
ENERCAPITA ENERGY LTD.	-	10-10-084-12W6	ΒE	16-09-084-12W6	BE	21887	1	FW	88.9	1.44	4.8	0	0	D
ENERCAPITA ENERGY LTD.	-	16-09-084-12W6	BE	08-21-084-12W6	BE	21887	2	FW	88.9	2.23	4.8	0	0	D
ENERCAPITA ENERGY LTD.	-	14-34-083-10W6	BE	03-03-084-10W6	BE	32890	1	NG	114.3	0.72	3.2	0	0	D
ENERCAPITA ENERGY LTD.	CC	02-33-085-13W6	PL	02-33-085-13W6	BE	35299	2	NG	60.3	0.13	3.9	0	0	D
ENERCAPITA ENERGY LTD.	CC	02-33-085-13W6	PL	02-33-085-13W6	PL	35299	3	NG	60.3	0.06	3.9	0	0	D
ENERCAPITA ENERGY LTD.	-	10-28-085-13W6	BE	02-33-085-13W6	PL	35299	4	NG	60.3	0.63	3.9	0	0	D
ENERCAPITA ENERGY LTD.	CC	05-26-084-12W6	BE	10-22-084-12W6	BE	36464	1	NG	114.3	1.63	4.0	0	0	D

## **Boundary Lake Alberta - Sweet Pipelines**

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	CC	11-02-084-11W6	BE	06-34-083-11W6	BE	46878	1	NG	168.3	4.44	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	06-25-085-13W6	BE	06-25-085-13W6	ΒE	48257	1	NG	88.9	0.13	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	11-07-085-11W6	BE	04-13-085-12W6	ΒE	57649	7	NG	119.3	2.93	13.1	0	0	D

## LEGEND

 Water Cross:
 C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

 Facility:
 BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater

 MS=Meter Station PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals RE=Reservoir UG=Underground Cap or Tie-in

 Substance:
 CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent

 SG=Sour Gas SW=Salt Water NL=NGL MG=Miscellaneous Gases
 Status:

 A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled

 S=Suspended R=Removed X=Not AER Regulated

Other: Wall=Wall Thickness OD=Outside Diameter

## **Boundary Lake - CER Pipelines**

LICENSEE	WATER CROSS	FROM		то	STAF	rt /E L	START VALVE ATITUDE	START VALVE LONGITUDE	END VALVE	END VALVE LATITUDE	END VALVE LONGITUDE	E LICENSI E NO.	E LINE NO.	LINE SEGMENT MODIFIER	UNIQUE LINE #	INCLUDES UNIQUE LINE #	SUB (mm	SEGMEN LENGTH (km)	T WALL (mm)	LICENSED PRESSURE (kPa)	LICENSED H2S (%)	TEMP (°C)	z	SEGMENT H2S RELEASE VOLUME (m3)	CUMULATIVE H2S RELEASE VOLUME (m3)	SOUR HPZ (m)	THERMAL RADIATION HPZ (m)	ASSIGNED EPZ (m)	STATUS
											ENE	RCAPITA	SOUR O	PERATING															
ENERCAPITA ENERGY LTD.	-	04-16-087-13W6	PL	04-16-087-13W6	PL -		-	-	-	-	-	280032	2 2	-	1	1,2	NG 114.	3 0.01	3.2	10,200	0.62	5	0.70	0.084954	104.611971	350	22	385	0
ENERCAPITA ENERGY LTD.	-	10-18-087-13W6	PL	10-13-086-13W6	GP -		-	-	-	-	-	80022	1&2	2 -	2	1,2	SG 114.	3 13.57	4.0	9,660	0.62	5	0.71	104.527	104.611971	350	48	385	0
ENERCAPITA ENERGY LTD.	-	04-16-086-13W6	SA	05-16-086-13W6	WE -		-	-	-	-	-	280166	3 1	-	3	2	NG 114.	3 0.49	3.2	7,380	2.00	5	0.77	8.951693	8.95169324	100	32	110	0
ENERCAPITA ENERGY LTD.	-	04-16-086-13W6	SA	05-16-086-13W6	WE -		-	-	-	-	-	280167	7 1	-	4	3	PW 114.	3 0.49	3.2	7,380	0.003	5	0.77	0.013428	0.01342754	100		110	0
											ENE	RCAPITA S	SWEET C	DPERATING															
ENERCAPITA ENERGY LTD.	-	05-16-086-13W6	WE	04-16-086-13W6	SA -		-	-	-	-	-	280168	3 1	-	5	5	FG 60.3	0.49	4.0	3,450	0	5					13	15	0
											ENER	CAPITA SV	EET DIS	SCONTINUED															
ENERCAPITA ENERGY LTD.	-	10-28-085-13W6	WE	14-29-085-13W6	PL -		-	-	-	-	-	280178	3 2	-	6	6	OE 73.0	2.20	3.0	2,070	0								D

There may be hazards associated with third party assets in addition to the ones listed in the table above. For more information see the map(s). All Facility, Well and ESD locations listed in the table above also have manual block valves at these locations.

#### LEGEND

Facility: BT=Battery BE=Blind End CS=Compressor Station DH=Dehydrator GM=Gas Sales Meter GP=Gas Plant GS=Gas Gathering System IP=Injection Plant PN=Plant LH=Line Heater MS=Meter Station PG=Gathering Point PL=Pipeline PS=Pump Station SA=Satellite WE=Well HD=Header JN=Junction UG=Underground cap or tie-in PR=Pigging Receiver/Launcher Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: AG=Acid Gas CO=Crude Oil FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas FG=Fuel Gas ST=Sweet Gas SW=Salt Water SE=Sour Oilwell Effluent SC=Sour Crude MG=Miscellaneous Gases OM=Oil Emulsion WS=Sour Water PW=Produced Water UN=Unknown ML=Miscellaneous Liquids MP=Multiphase Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active I=Inactive S=Suspended R=Removed T=New V=Deactivated Z=Approved J=Out of Jurisdiction

Other: HPZ=Hazard Planning Zone EPZ=Emergency Planning Zone WALL=Wall Thickness OD=Outside Diameter Z=Compressibility Factor GLR=Gas-To-Liquid Ratio GVF=Gas Volume Fraction TEMP=Temperature ROW=Pipeline Right of Way

# Boundary Lake Alberta - Tanks / Bullets

FACILITY / LOCATION	SUBSTANCE	NO. OF TANKS	TANK VOLUME	ECCC REGISTRATION REQUIRED? <sup>(1)</sup>	ECCC ERP REQUIRED?	EPZ (km)
10-10-084-12W6M	Methanol	1	1000 Gal	No	No	
Boundary Lako	Methanol	1	500 Gal	No	No	
	Produced Salt Water	2	400 bbl	No	No	
Gas Plant	Oil Emulsion	3	750 bbl	No	No	

<sup>(1)</sup> E2 Schedules 2 only.

<sup>(2)</sup> E2 Schedules 2, 3, 4 and 5.

## LEGEND

Other: EPZ=Emergency Planning Zone

# **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

## Primary Incident Command Post

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### **Staging Areas**

Staging area (s) would be established at the nearest Plant or Battery at the time of the incident

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

## **KEY RESPONSE PERSONNEL**

Field Personnel	
Greg Schrode	Central Area Superintend
Mike Sherk	Central Area Lead Opera

Mike Sherk	Central Area Lead Operator	Cell:	780-524-6720
Trevor Blake	Area Pipeline Integrity	Cell:	780-772-2555
Refer to the "Response Team additional contact information	s Phone List" yellow tab, behind the Section 2.0: Roles a	nd Respor	nsibilities blue tab fo

## **OPERATIONS SUMMARY**

Enercapita's Sunset House field is a sweet and sour oil and gas field located in Northwestern Alberta. The field is spread across Townships 69 to 71, and Ranges 19 to 21 W5M in the Municipal District of Greenview No. 16, in Alberta.

The pipelines gather sour oil effluent and line the product to the 14-29-69-19 W5M Oil battery. At the battery, the produced water is separated from the oil and is pipelined out to an injection facility at 02-31-069-19 W5M. Oil is pipelined to Pembina Peace 13-07-69-24 W5M location. The gas is gathered and pipelined to our Sunset B 06-22-70-20 W5M Gas Plant. Hydraulic ESD valves are installed at the 14-29 battery and throughout the gathering system, which will shut-in if there is an abnormal change in operating pressure.

The pipelines gather oil effluent and gas, and line the product to the 06-22-70-20 W5M Gas Plant. At the plant, the produced water is separated from the oil and gas and is pipelined out to a disposal well at 14-23-70-20 W5M. Hydraulic ESD valves are installed at the 06-22 plant and throughout the gathering system, which will shut-in if there is an abnormal change in operating pressure.

#### **EPZ** Information

The maximum  $H_2S$  concentration for the wells is 0.2%, with a maximum EPZ of 20 m. The maximum H<sub>2</sub>S concentration for the pipelines is 0.2%, with a maximum EPZ of 120 m

#### **On-Site Storage**

Refer to the EPZ Calculation tables for a list of on-site storage, at the end of this section

Refer to the yellow Sunset House 06-22-70-20 W5M Gas Plant tab for a list of CEPA regulated on-site storage.

## **Closest Major Urban Centre**

The town of Valleyview is approximately 20 km west of the field and has a population of +/- 1.673.

## Indigenous Treaty & Metis Region Boundaries

Treaty 8 Metis Nation of Alberta Region 6

## Hydrology

Snipe Creek, Snipe Lake, Steep Creek, Sturgeon Creek, and various unnamed creeks and water bodies. Refer to the map for more information.

#### Highways / Rail

Highway 669 and Highway 747 could be impacted in the event of an incident. Contact the RCMP and Alberta Transportation to authorize the closure of any highways and in the interim, be prepared to quickly restrict access if public safety could be jeopardized. Refer to the map for more information.

#### Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

## SAFETY EQUIPMENT

#### Operator / Truck Safety Equipment

Each field operator's truck contains the following: 20lb fire extinguisher, first aid kid, PPE, flashlight, and a personal 4 head monitor, pail and shovel and media landowner statement cards.

Nearby locations with safety equipment are listed below.

ltem	Quantity / Location
Fire Extinguishers - 30lb	Various throughout the field
First aid kit	1 @ 06-22-70-20 W5M GP 1 @ 14-29-69-19 W5M Battery
SCBA	2 @ 06-22-70-20 W5M GP 2 @ 14-29-69-19 W5M Battery
Stretcher	1 @ 06-22-70-20 W5M GP
Road Block Kits	3 @ 06-22-70-20 W5M GP 3 @ 14-29-69-18 W5M Battery

#### Notification

Cell: 780-305-6541

There is a SCADA system within this field. Control and relief valves are in place in the wellsite equipment packages and hydraulic ESD valves are installed at the 06-22-70-20 W5M gas plant, the 14-29-69-19 W5M battery and throughout the gathering systems, which will shut-in if there is an abnormal change in operating pressure. Operators monitor the wells and facilities on a daily basis. Process alarms, including high level tank alarms, go to a callout centre which alerts operators on their cellular phones

## Communications

Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters

## Roadblock Kits

Roadblock locations will be determined at the time of the incident. Road block kits contain: Safety vests, flashlight, road block signs, media/landowner statement cards, pen, clipboards and flares.

## Ignition Equipment

Oil and Gas

Trappers

Auto-ignition equipment is attached to all flare stacks. In the event backup is needed, flare guns are available as above.

* If any of the above safety equipment scal safety company who will be asked	is insufficient, Enercapita Energy Ltd.   I to provide additional equipment. **	oersonnel will contact
AREA US Note: All numbers	SERS / TRANSIENTS , unless otherwise indicated, are 24 hours.	
<b>iil and Gas</b> East Smoky Gas Co-Op Ltd. Pembina Pipeline Corp. TC Energy		780-831-202 800-360-470 888-982-722
rappers Trapper ID 821 2696 2819	<b>Name</b> Richard Caron Devin Huggard-McInnis AER	Numbe 780-552-322 780-552-308 800-222-651

Number

780-850-9024 780-524-2417

780-536-7290

780-536-5554

780-849-0743

780-300-1111

780-910-2323

Number

#### Guides and Outfitters Wildlife Management Unit (WMU) # 360 Cor

Company	Name	
Blue Sky Outfitters	Kyle Mudge	
Eagle Eye Outfitting	Doreen Hebert	
Hebert's Guide Services	Kevin Mcneil	
North Alberta Outfitters Inc.	Don K. Lind	
Red Willow Outfitters Ltd.	Troy A. Foster	
South Peace Outfitters	Taylor Loewen	
Grazers		
Grazer ID	Name	
GRL990022	Ken Tritten	

Forestry Management Units & Agreements (FMU / FMA) GO4, SO2 - See Alberta Energy Regulator (AER)

# **GOVERNMENT AGENCIES**

Wildfire Reporting One call number for regulatory agency, spill reporting and Alberta Environment	310-FIRE(3473) & Parks (lands, fish. forest. wildlife)
I.D. of Greenview No. 16 Wavne Brown, Regional Fire Chief	780-524-7600 Admin: 780-524-4513
Iberta Health Services (AHS) - Z5 North	844-755-1788
Iberta Emergency Management Agency (AEMA) Northwest - Ian Fox, EMFO	866-618-2362 Cell: 780-646-0180
Iberta Boilers Safety Association (ABSA)	780-437-9100
Iberta Safety Services - Electrical Branch	Admin: 866-421-6929
Iberta Ministry of Transportation	780-638-1128
Iberta Environmental and Dangerous Goods Emergenc	ies (EDGE) 800-272-9600
Vorkers' Compensation Board (WCB)	866-922-9221
ANUTEC	888-226-8832
ir Traffic Control NAV Canada* Transport Canada** "If flight information or a NOTAM advisory is required, contact the NAV Canac **If a NOTAM is required for airspace closure, contact the Transport Canada.	866-541-4102 877-992-6853 la Flight Information Centre (FIC) Aviation Operations Centre (AVOPS)
epartment of Fisheries and Oceans Canada (DFO)	780-422-4505
nvironment and Climate Change Canada Meteorological Services	780-951-8907
EMERGENCY SERVICE	-8
EMERGENCY SERVICE Note: All numbers, unless otherwise indicated, are	ES 24 hours.
EMERGENCY SERVICE Note: All numbers, unless otherwise indicated, are Imbulance / Fire / RCMP STARS Air Ambulance	ES 24 hours. 911 888-888-4567
EMERGENCY SERVICE Note: All numbers, unless otherwise indicated, are mbulance / Fire / RCMP STARS Air Ambulance Nospitals Valleyview Health Centre High Prairie Health Complex Grande Prairie Regional Hospital	ES 24 hours. 911 888-888-4567 780-524-3356 780-523-6440 825-412-4000
EMERGENCY SERVICE Note: All numbers, unless otherwise indicated, are mbulance / Fire / RCMP STARS Air Ambulance Ospitals Valleyview Health Centre High Prairie Health Complex Grande Prairie Regional Hospital Iberta Poison and Drug Information Service (PADIS)	ES 24 hours. 911 888-888-4567 780-524-3356 780-523-6440 825-412-4000 800-332-1414
EMERGENCY SERVICE Note: All numbers, unless otherwise indicated, are mbulance / Fire / RCMP STARS Air Ambulance Ospitals Valleyview Health Centre High Prairie Health Complex Grande Prairie Regional Hospital Ilberta Poison and Drug Information Service (PADIS) Ilectrical Distribution ATCO Electric - Alberta-wide EPCOR Utilities - Alberta-wide Fortis Alberta - Alberta-wide	ES 24 hours. 911 888-888-4567 780-524-3356 780-523-6440 825-412-4000 800-332-1414 800-668-5506 780-412-4500 866-717-3113
<b>EXERCISENCY SERVICE</b> Note: All numbers, unless otherwise indicated, are <b>nbulance / Fire / RCMP</b> STARS Air Ambulance <b>ospitals</b> Valleyview Health Centre High Prairie Health Complex Grande Prairie Regional Hospital <b>berta Poison and Drug Information Service (PADIS)</b> <b>ectrical Distribution</b> ATCO Electric - Alberta-wide EPCOR Utilities - Alberta-wide Fortis Alberta - Alberta-wide Fortis Alberta - Alberta-wide	ES 24 hours. 911 888-888-4567 780-524-3356 780-523-6440 825-412-4000 800-332-1414 800-668-5506 780-412-4500 866-717-3113 800-242-3447 www.utilitysafety.ca

\*See Rec Ρ 36 V

	Note: All numbers, unless otherwise indicated, are 24 hours.	
ļ	Mobile Air Monitorina*	
1	Firemaster Oilfield Services - Grande Prairie	877-342-3473
	HSE Integrated - Red Deer	888-346-8260
	Trojan Safety Services - Grande Prairie	877-785-9558
(	Dilfield Fire Fighting / Safety Contractors*	
	Firemaster Oilfield Services - Grande Prairie	877-342-3473
	HSE Integrated - Grande Prairie	888-346-8260
	Superior Fire Control - Grande Prairie	877-882-0035
١	Well Control Specialists*	
	Capstone Oilfield Services - Prov-Wide	866-347-3911
	Firemaster Oilfield Services - Grande Prairie	877-342-3473
I	gnition Services*	077 000 000
	Superior Fire Control - Grande Prairie	8//-882-0035
	HSE Integrated - Grande Prairie	888-346-8260
I	Roadblock Services* (kits/personnel)	000 010 000
	HSE Integrated - Grande Prairie	888-346-8260
	I rojan Satety Services - Grande Prairie	0//-/05-9558
,	I ITEMIASTER ONNER JERVICES - GTATICE MAIL (KITS ONLY)	011-342-3413 vary (1 - 6 bours)
(	depending on where the support is coming from.	, (i o nouis)
I	Bus Transportation	
	Golden Arrow Motor Coaches - Edmonton	877-447-1538
ļ	Helicopter Companies	
Ĵ	Canadian Helicopters - Grande Prairie	780-429-6900
	Slave Lake Helicopters - Slave Lake	780-849-6666
	Synergy Aviation - Grande Prairie	780-750-4994
I	Emergency Response Assistance Canada (ERAC) (ERAP 2-0010-448)	800-265-0212
ļ	Emergency Response Management	100 010 000
	H2Satety Services Inc Calgary	403-212-2332
		000-210-2332
Ş	Spill Response / Environmental Services	
	CJC Enterprises Ltd Valleyview	780-524-8884
	Direct Pressure Trucks - Valleyview	782-524-8614
	Double I Tank Trucks - Valleyview	/80-524-6531
	NicLean Environmental - Valleyview	100-300-4400
	Nugeline Canava - Oldi lue Fidine	000-074-7928
١	Western Canadian Spill Services (WCSS) - COOP 5 & 6*	866-541-8888
1	"See WCSS's website (http://www.wcss.ab.ca) for more information, equipment details, locations,	and directions.
ļ	Reception Centres	
	Paradise Inn & Suites	877-552-2338
	3609 Highway Street, Valleyview, AB	
	Valleyview Memorial Hall	780-524-5153

4810 - 50 Street, Valleyview, AB

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June 2023

www.h2safetv.ca

## SURFACE DEVELOPMENT INFORMATION

There is a total of 3 occupied residences within the field.

Note: The detailed Resident Information List can be found behind the white "Confidential Information" tab

# ENERCAPITA





## **Sunset House Field - Facilties**

LICENSEE	NAME	LICENSE NO.	LICENSE NO. LOCATION		LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA OP	ERATING						
ENERCAPITA ENERGY LTD.	SUNSET 14-29-069-19W5 IF-SW	F14870	02-31-069-19W5	55.0122676	-116.8834756	55° 0' 44.163"	-116° 53' 0.512"	IP	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 02-36-069-20W5	F31451	02-36-069-20W5	55.0127866	-116.9083950	55° 0' 46.031"	-116° 54' 30.222"	SA	0	0.02
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-31-069-19W5	F36594	04-31-069-19W5	55.0126691	-116.8960192	55° 0' 45.608"	-116° 53' 45.669"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-31-069-19W5	F36594	04-31-069-19W5	55.0126691	-116.8960192	55° 0' 45.608"	-116° 53' 45.669"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	SUNSET 6-22-070-20W5 IF-SW	F22621	06-22-070-20W5	55.0740776	-116.9661174	55° 4' 26.679"	-116° 57' 58.022"	IP	AC	0.12
ENERCAPITA ENERGY LTD.	SUNSET 06-22-070-20W5 BT-O	F22621	06-22-070-20W5	55.0753010	-116.9668054	55° 4' 31.083"	-116° 58' 0.499"	BT	AC	0.12
ENERCAPITA ENERGY LTD.	DEFIANT ENERGY SUNSET 6-22	NA	06-22-070-20W5	55.0753010	-116.9668054	55° 4' 31.083"	-116° 58' 0.499"	GS	AC	0.12
ENERCAPITA ENERGY LTD.	SUNSET 06-22-070-20W5 BT-G	F22621	06-22-070-20W5	55.0753010	-116.9668054	55° 4' 31.083"	-116° 58' 0.499"	BT	AC	0.12
ENERCAPITA ENERGY LTD.	DEFIANT ENERGY SUNSET PLANT 6-22	F22621	06-22-070-20W5	55.0753010	-116.9668054	55° 4' 31.083"	-116° 58' 0.499"	GP	AC	0.12
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-36-069-20W5	F36393	08-36-069-20W5	55.0154821	-116.9026410	55° 0' 55.735"	-116° 54' 9.507"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-35-069-20W5	F46078	09-35-069-20W5	55.0196970	-116.9283473	55° 1' 10.909"	-116° 55' 42.050"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-35-069-20W5	F46078	09-35-069-20W5	55.0196970	-116.9283473	55° 1' 10.909"	-116° 55' 42.050"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-30-069-19W5	F36304	10-30-069-19W5	55.0058432	-116.8828108	55° 0' 21.035"	-116° 52' 58.118"	SA	UN	0.02
ENERCAPITA ENERGY LTD.	SUNSET 14-29-069-19W5 BT-SRC	NA	14-29-069-19W5	55.0087712	-116.8640947	55° 0' 31.576"	-116° 51' 50.740"	BT	AC	0.09
ENERCAPITA ENERGY LTD.	SUNSET 14-29-069-19W5 BT-O	F14869	14-29-069-19W5	55.0087712	-116.8640947	55° 0' 31.576"	-116° 51' 50.740"	BT	AC	0.09
ENERCAPITA ENERGY LTD.	SUNSET 14-29-069-19W5 BT-SRC	NA	14-29-069-19W5	55.0087712	-116.8640947	55° 0' 31.576"	-116° 51' 50.740"	BT	AC	0.09
ENERCAPITA ENERGY LTD.	SUNSET 14-29-069-19W5 GS	F14869	14-29-069-19W5	55.0087712	-116.8640947	55° 0' 31.576"	-116° 51' 50.740"	GS	AC	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-30-069-19W5	F36337	16-30-069-19W5	55.0100935	-116.8748764	55° 0' 36.336"	-116° 52' 29.555"	SA	UN	0.02
			ENERCAPITA SUS	SPENDED						
ENERCAPITA ENERGY LTD.	PEMBINA SUNSET 2-14	NA	02-14-070-20W5	55.0567352	-116.9331270	55° 3' 24.246"	-116° 55' 59.257"	BT	S	
ENERCAPITA ENERGY LTD.	PEMBINA SUNSET 2-14	NA	02-14-070-20W5	55.0567352	-116.9331270	55° 3' 24.246"	-116° 55' 59.257"	BT	s	
ENERCAPITA ENERGY LTD.	TRIAD STURLS 3-7	W 0019214	03-07-069-21W5	54.9536240	-117.1938420	54° 57' 13.046"	-117° 11' 37.831"	BT	s	
ENERCAPITA ENERGY LTD.	FLAGSTONE 102/03-07	W 0019214	03-07-069-21W5	54.9536240	-117.1938420	54° 57' 13.046"	-117° 11' 37.831"	BT	S	
ENERCAPITA ENERGY LTD.	DEFIANT SUNSET 4-13	W 0272719	04-13-070-20W5	55.0559900	-116.9214880	55° 3' 21.563"	-116° 55' 17.356"	BT	S	
ENERCAPITA ENERGY LTD.	DEFIANT SUNSET 07-28-069-19 W5	W 0272173	07-28-069-19W5	54.9997530	-116.8340730	54° 59' 59.110"	-116° 50' 2.662"	BT	s	
ENERCAPITA ENERGY LTD.	DEFIANT SUNSET 07-28-069-19 W5	W 0272173	07-28-069-19W5	54.9997530	-116.8340730	54° 59' 59.110"	-116° 50' 2.662"	BT	S	
ENERCAPITA ENERGY LTD.	PEMBINA SUNSET	NA	12-12-070-20W5	55.0494891	-116.9198990	55° 2' 58.160"	-116° 55' 11.636"	IP	S	
ENERCAPITA ENERGY LTD.	DEFIANT SUNSET 13-14	W 0272723	13-14-070-20W5	55.0668620	-116.9469590	55° 4' 0.703"	-116° 56' 49.052"	BT	S	
ENERCAPITA ENERGY LTD.	GOOSE RIVER 14-11 SWB	W 0437051	14-02-069-19W5	54.9518990	-116.7859030	54° 57' 6.836"	-116° 47' 9.250"	BT	S	

#### Facility EPZ's are assigned based on the largest EPZ of a sour pipeline entering or leaving the facility or an on-site sour well. For Environment Canada regulated storage EPZ's, please refer to the Tanks and Bullets page at the end of this section.

LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant

LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants

RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active

UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone



# Sunset House Field - Sour Wells

						H₂S					
LICENSEE / OPERATOR	WELLNAME	LICENSE	LIWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
Elocitore / of English		NO.	om	LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	CIAIGO
		ENI			(m3/s)						
ENERCAPITA ENERGY I TD	1 ONGVIEW/ STUMP 1-25-71-21	276454	100012507121W/500	01-25-071-21\/5	0.20		0.01	0.00	0.00	l evel na	PLIMPING GAS
ENERCAPITA ENERGY LTD	LONGVIEW ETAL 102 SUNSET 4-36-69-20	118130	1020/12507 12100500	01-25-069-20\/5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW STUMP 6 30 71 20	2027/0	10204300032077500	01-33-003-20105	0.20	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD		202140	1000030071200300	04 23 070 20\/5	0.20	0.0001	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW STUMP 4 20 71 20	313000	10004230702000500	04-23-070-20005	0.20	0.0001	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD	LONGVIEW STOWN 4-29-71-20	3/3503	10004290712000500	04-29-07 1-20005	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD		353076	100033100919W500	04-31-009-19W5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 1 36 60 20	3/353/	10013300091900500	04-31-009-19005	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ETAL 102 SUNSET 3 31 60 10	353000	10001300092000500	04-31-009-19W5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW 102 SUNSET 3 31 60 10	365287	102033106010W500	04-31-009-19W5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW 102 3003E1 3-31-03-19	26543	102033100919W500	04-31-009-19005	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ET AL HZ SUNSET 9 29 69 19	153056	10004320091900500	04-32-009-19005	0.02	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	EEL 102 SUNSET 12 28 60 10	433030	102122806010\//500	04-32-009-19005	0.02	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LEE 102 SUNSET 12-20-09-19	400009	102122000919W500	04-32-009-19W5	0.02	0.0001	0.01	0.00	0.00		
ENERCAPITA ENERCY LTD	ECINGVIEW 102 SONGET 15-29-09-19	420400	102132900919W500	04-32-009-19005	0.02	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		407000	10211310091900500	04-32-009-19W5	0.02	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD		377851	10000300092000500	06 36 069 20105	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 12 36 69 20	363880	10004300092000500	06 36 069 20105	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 5 36 60 20	363824	10012300092000500	06 36 069 20105	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 3-36-69-20	363810	100033606020W500	06 36 069 20105	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW ETAL 102 SUNSET 6 36 60 20	363024	10005300092000500	06 36 069 20105	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW STUMP 7 20 71 20	310873	10200300092000500	07 20 071 20\/5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW 103 HZ SUNSET 1 36 69 20	16/283	103013606020W500	07-20-07 1-20005	0.20	0.0004	0.01	0.00	0.01		
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 8-36-69-20	332168	10001300032000500	08-36-069-2010/5	0.20	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 7-36-69-20	342943	100003000320W300	08-36-069-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 9-35-69-20	378598	102093506920W500	09-35-069-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 10-35-69-20	377835	100103506920W500	09-35-069-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD	I ONGVIEW SUNSET 10-29-69-19	26414	100102906919W500	10-29-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 10-30-69-19	42334	100103006919W500	10-30-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 15-30-69-19	354529	100153006919W500	10-30-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 11-19-71-20	205376	100111907120W500	11-19-071-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	FLOWING GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 12-14-70-20	302858	100121407020W502	12-14-070-20W5	0.20	0.0006	0.02	0.00	0.01	Level na	FLOWING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 12-31-69-19	44474	100123106919W500	12-31-069-19W5	0.20	0.0001	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 15-29-69-19	344730	100152906919W500	14-29-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 16-30-69-19	355307	100163006919W500	16-30-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 1-31-69-19	354959	100013106919W500	16-30-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL



# Sunset House Field - Sour Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	H <sub>2</sub> S H2S RELEASE (%) RATE (m3/s)		liZ (km)	PAZ (km)	SETBACK LEVEL	STATUS		
ENERCAPITA SOUR SUSPENDED													
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 2-36-69-20	41278	100023606920W500	02-36-069-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL		
ENERCAPITA ENERGY LTD.	LONGVIEW ETAL 102 SUNSET 1-36-69-20	377778	102013606920W500	02-36-069-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL		
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 4-31-69-19	40660	100043106919W502	04-31-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL		
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 4-35-71-21	304045	100043507121W502	04-35-071-21W5	0.20	0.0002	0.01	0.00	0.00	Level na	SUSPENDED GAS		
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 7-19-71-20	281980	100071907120W500	07-19-071-20W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS		
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 14-25-71-21	181554	100142507121W502	14-25-071-21W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS		
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 9-25-71-21	310351	100092507121W502	14-25-071-21W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED GAS		
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-29-69-19	18470	100142906919W500	14-29-069-19W5	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL		
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 16-25-69-20	46582	100162506920W500	16-25-069-20W5	0.20	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL		
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 16-26-71-21	285092	100162607121W500	16-26-071-21W5	0.20	0.0002	0.01	0.00	0.00	Level na	SUSPENDED GAS		
		ENERCA	PITA SOUR DRILLED AND	CASED									
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 4-29-71-20	313909	100042907120W502	04-29-071-20W5	0.20	NO PRO	DUCT	ION DA	TA AV	AILABLE	DRILLED AND CASED		
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 6-15-70-20	253025	100061507020W502	06-15-070-20W5	0.20	NO PRO	DUCT	ION DA	TA AV	AILABLE	DRILLED AND CASED		

#### LEGEND

Other: UWI=Unique Well Identifier EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone



# Sunset House Field - Sour Gas Pipelines

	WATER			START	END	LICENSE	LINE	LINE	UNIQUE	INCLUDES		OD	SEGMENT	WALL	LICENSED	EXPECTED	LICENSED	EXPECTED	ТЕМР		DIR 56 RELEASE	EPZ IIZ	PAZ	SETBACK	
LICENSEE / OPERATOR	CROSS	FROM	ТО	VALVE	VALVE	NO.	NO.	SEGMENT MODIFIER	LINE #	UNIQUE #	SUB	(mm)	LENGTH (km)	(mm)	PRESSURE (kPa)	PRESSURE (kPa)	H2S (%)	H2S (%)	(°C)	Z	VOLUME	(km) (kn	i) (km)	LEVEL	STATUS
								EN	ERCAPITA	SOUR OPER	ATING	i									(m3)				
ENERCAPITA ENERGY LTD.	-	01-25-071-21W5 WE 01-	25-071-21W5 PL	-	-	34935	27	-	1	1 to 10	NG	88.9	0.21	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.08	na	0
ENERCAPITA ENERGY LTD.	R	01-25-071-21W5 PL 11-	19-071-20W5 PL	-	-	34935	52	-	2	1 to 10	NG	114.3	1.07	4.0	9.900	9.900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	С	03-30-071-20W5 WE 11-	19-071-20W5 PL	-	-	34935	33	-	3	1 to 10	NG	88.9	0.97	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.08	na	0
ENERCAPITA ENERGY LTD.	-	05-20-071-20W5 PL 05-	20-071-20W5 PL	-	-	34935	51	-	4	1 to 10	NG	114.3	0.25	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	11-19-071-20W5 WE 12-	20-071-20W5 PL	-	-	34935	10	-	5	1 to 10	NG	114.3	1.09	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	04-29-071-20W5 WE 14-	20-071-20W5 PL	-	-	34935	44	-	6	1 to 10	NG	88.9	0.52	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.08	na	0
ENERCAPITA ENERGY LTD.	-	14-20-071-20W5 PL 06-	20-071-20W5 PL	-	-	34935	43	-	7	1 to 10	NG	88.9	0.84	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.08	na	0
ENERCAPITA ENERGY LTD.	-	07-20-071-20W5 WE 05-	20-071-20W5 CS	- 1	-	34935	42	-	8	1 to 10	NG	88.9	0.82	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.08	na	0
ENERCAPITA ENERGY LTD.	-	12-20-071-20W5 PL 05-	20-071-20W5 PL	-	-	34935	50	-	9	1 to 10	NG	114.3	0.30	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	05-20-071-20W5 CS 06-	22-070-20W5 GP	-	-	35520	1	-	10	1 to 10	NG	168.3	12.25	4.0	9,900	9,900	0.10	0.10	5	na	na	0.12 0.0	2 0.09	na	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5 BT 02-	14-070-20W5 PL	-	-	34935	46	-	11	11 to 25	NG	88.9	7.70	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	02-14-070-20W5 WE 11-	14-070-20W5 PL	-	-	34935	7	-	12	11 to 25	NG	88.9	0.98	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	12-13-070-20W5 WE 11-	14-070-20W5 PL	-	-	34935	20	-	13	11 to 25	NG	88.9	0.99	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	06-14-070-20W5 WE 11-	14-070-20W5 PL	-	-	34935	15	-	14	11 to 25	NG	88.9	0.46	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	13-14-070-20W5 WE 13-	14-070-20W5 PL	-	-	34935	26	-	15	11 to 25	NG	88.9	0.11	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	12-14-070-20W5 WE 13-	14-070-20W5 PL	-	-	34935	34	-	16	11 to 25	NG	88.9	0.36	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	11-14-070-20W5 WE 16-	15-070-20W5 PL	-	-	34935	5	-	17	11 to 25	NG	114.3	1.03	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	10-15-070-20W5 WE 16-	15-070-20W5 PL	-	-	34935	3	-	18	11 to 25	NG	114.3	0.37	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	16-15-070-20W5 WE 16-	15-070-20W5 PL	-	-	34935	38	-	19	11 to 25	NG	88.9	0.08	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	04-23-070-20W5 WE 02-	22-070-20W5 PL	-	-	34935	9	-	20	11 to 25	NG	88.9	0.82	3.2	9,900	9,900	0.20	0.20	5	na	na	0.09 0.0	2 0.07	na	0
ENERCAPITA ENERGY LTD.	-	16-15-070-20W5 PL 07-	22-070-20W5 PL	-	-	34935	2	-	21	11 to 25	NG	114.3	1.17	4.0	9,900	9,900	0.20	0.20	5	na	na	0.12 0.0	2 0.10	na	0
ENERCAPITA ENERGY LTD.	-	04-22-070-20W5 WE 06-	22-070-20W5 PL	-	-	34935	35	-	22	26,27	NG	88.9	0.20	3.2	9,900	9,900	0.20	0.20	5	na	na	0.08 0.0	1 0.07	na	0
ENERCAPITA ENERGY LTD.	-	08-21-070-20W5 WE 06-	22-070-20W5 PL	-	-	34935	19	-	23	26,27	NG	114.3	1.00	4.0	9,900	9,900	0.20	0.20	5	na	na	0.11 0.0	2 0.09	na	0
								ENER	RCAPITA S	OUR DISCON	ITINUE	D													
ENERCAPITA ENERGY LTD.	-	08-15-070-20W5 BE 10-	15-070-20W5 BE	-	-	34935	4	-	24	24	NG	114.3	0.41	4.0	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	06-15-070-20W5 BE 10-	15-070-20W5 BE	-	-	34935	16	-	25	25	NG	88.9	0.69	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	14-15-070-20W5 BE 02-	22-070-20W5 BE	-	-	34935	17	-	26	26	NG	88.9	0.67	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	16-16-070-20W5 BE 08-	21-070-20W5 BE	-	-	34935	21	-	27	27	NG	88.9	0.54	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	R	14-25-071-21W5 BE 01-	25-071-21W5 BE	-	-	34935	22	-	28	28	NG	114.3	2.01	4.0	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	06-21-070-20W5 BE 08-	21-070-20W5 BE	-	-	34935	23	-	29	29	NG	88.9	0.80	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	01-15-070-20W5 BE 06-	14-070-20W5 BE	-	-	34935	24	-	30	30	NG	88.9	0.72	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	04-13-070-20W5 BE 12-	13-070-20W5 BE	-	-	34935	25	-	31	31	NG	88.9	0.81	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	07-19-071-20W5 BE 05-	20-071-20W5 BE	-	-	34935	28	-	32	32	NG	88.9	0.95	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	16-26-071-21W5 BE 14-	25-071-21W5 BE	-	-	34935	29	-	33	33	NG	88.9	0.77	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	10-14-070-20W5 BE 11-	14-070-20W5 BE	-	-	34935	30	-	34	34	NG	88.9	0.39	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	07-21-070-20W5 BE 07-	21-070-20W5 BE	-	-	34935	36	-	35	35	NG	88.9	0.22	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	10-15-070-20W5 BE 10-	15-070-20W5 BE	-	-	34935	37	-	36	36	NG	88.9	0.20	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	04-35-071-21W5 BE 16-	26-071-21W5 BE	-	-	34935	40	-	37	37	NG	114.3	1.13	4.0	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	15-17-071-20W5 BE 04-	20-071-20W5 BE	-	-	34935	47	-	38	38	NG	88.9	1.00	4.0	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	04-20-071-20W5 BE 05-	20-071-20W5 BE	-	-	34935	48	-	39	39	NG	88.9	0.67	3.2	0	0	0.20	0.20							D
ENERCAPITA ENERGY LTD.	-	05-21-071-20W5 BE 07-	20-071-20W5 BE	-	-	34935	49	-	40	40	NG	88.9	0.55	3.2	0	0	0.20	0.20							D

## LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir UG=Underground Cap or Tie-in

Valve: CV=Check Valve ESD=Emergency Shutdown Valve MBV=Manual Block Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water

MP=Multiphase NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated

Other: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature



# **Sunset House Field - Sour Oil Pipelines**

LICENSEE / OPERATOR	WATER	FROM		то	START VAI VE				LINE SEGMEN			SUB	OD (mm)	SEGMENT LENGTH	WALL	LICENSED PRESSURE	EXPECTED PRESSURE	LICENSED	EXPECTED	GAS FLOW RATE (1000	LIQUID FLOW RATE	GLR	TEMP (°C)	z	DIR 56 RELEASE	EPZ I (km) (k	IZ PA	Z SETBAC	K STATUS
	GROOD				VALVE	VALVE	NO.	NO.	MODIFIER	R - ""				(km)	()	(kPa)	(kPa)	1120 (70)	1120 (70)	m3/d)	(m3/d)		(3)		(m3)	(KIII) (K	(KII	,	
			1				0540	40					SOURC	PERATING		1.000	4 0 0 0	0.00	0.00	00.00	504.00	40.05		0.00	7		01 0 0		
ENERCAPITA ENERGY LTD.		08-35-069-20W5 W		09-35-069-20W5 SA	<u> </u>	-	8516	18	-	1	1 to 1/		97.0	0.56	10.0	4,960	4,960	0.20	0.20	22.00	504.00	43.65	5	0.82	/	0.02 0.	01 0.0	2 Level n	
ENERGAPITA ENERGY LTD.	-	09-35-069-20005 00		06-36-069-20005 SA	<u> </u>	-	8516	15	-	2	1 to 17		106.0	1.13	8.6	4,960	4,960	0.20	0.20	22.00	504.00	43.65	5	0.82	/	0.02 0.		2 Level n	
ENERCAPITA ENERGY LTD.		01-35-069-20005 00		06-36-069-20005 SA	<u> </u>	-	8516	17	-	3	1 to 17		120.0	1.06	9.5	4,960	4,960	0.20	0.20	22.00	504.00	43.65	5	0.82	/	0.02 0.		2 Level n	
ENERCAPITA ENERGY LTD.	-	06-36-069-20W5 W		04-31-069-19W5 SA	<u> </u>	-	8516	14	-	4	1 to 17		167.0	1.46	6.0	4,960	4,960	0.20	0.20	22.00	504.00	43.65	5	0.82	<u> </u>	0.02 0.	01 0.0	2 Level n	
ENERCAPITA ENERGY LTD.	-	08-36-069-20005 00		02-36-069-20W5 SA	<u> </u>	-	8516	10	-	5	1 to 17		88.9	0.53	4.0	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	01 0.0	2 Level n	
ENERCAPITA ENERGY LTD.	-	02-36-069-20W5 S		04-31-069-19W5 PL		-	8516	13	-	6	1 to 1/	1 OE	60.3	0.80	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	00 0.0	1 Level n	
ENERCAPITA ENERGY LTD.	-	16-30-069-19W5 W	/E 1	16-30-069-19W5 PL		-	8516	11	-	/	1 to 1/	1 OE	88.9	0.13	4.0	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	01 0.0	2 Level n	
ENERCAPITA ENERGY LTD.	-	04-31-069-19W5 W	/E 1	14-29-069-19W5 BT	-	-	8516	6	-	8	1 to 17	OE	114.3	2.60	4.0	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	01 0.0	2 Level n	a O
ENERCAPITA ENERGY LTD.	-	04-31-069-19W5 S	A 1	14-29-069-19W5 BT	-	-	29165	18	-	9	1 to 17	OE	167.0	2.24	6.0	4,960	4,960	0.20	0.20	22.00	504.00	43.65	5	0.82	7	0.02 0.	01 0.0	2 Level n	a O
ENERCAPITA ENERGY LTD.	-	10-30-069-19W5 W	/E 1	15-30-069-19W5 PL		-	29165	8	-	10	1 to 17	OE	60.3	0.33	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	00 0.0	1 Level n	
ENERCAPITA ENERGY LTD.	-	15-30-069-19W5 P	<sup>2</sup> L 1	14-29-069-19W5 BT		-	29165	19	-	11	1 to 17	OE	88.9	1.10	4.0	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	01 0.0	2 Level n	a O
ENERCAPITA ENERGY LTD.	-	12-31-069-19W5 W	/E 1	12-31-069-19W5 PL		-	29165	13	-	12	1 to 17	OE	60.3	0.06	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	0.0 0.0	1 Level n	
ENERCAPITA ENERGY LTD.	-	12-31-069-19W5 W	/E 0	04-31-069-19W5 PL		-	29165	4	-	13	1 to 17	OE	60.3	0.54	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	00 0.0	1 Level n	ia O
ENERCAPITA ENERGY LTD.	-	10-29-069-19W5 W	/E 1	14-29-069-19W5 BT		-	29165	11	-	14	1 to 17	OE	60.3	0.61	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	0.0 0.0	1 Level n	i <mark>a O</mark>
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5 W	/E 1	14-29-069-19W5 BT		-	29165	12	-	15	1 to 17	OE	60.3	0.06	3.9	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	0.0 0.0	1 Level n	ia O
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5 W	/E 1	14-29-069-19W5 BT		-	29165	17	-	16	1 to 17	OE	88.9	0.55	4.0	2,760	2,760	0.20	0.20	22.00	504.00	43.65	5	0.89	5	0.02 0.	01 0.0	2 Level n	ia O
ENERCAPITA ENERGY LTD.	-	04-32-069-19W5 W	/E 1	14-29-069-19W5 BT		-	58057	1	-	17	1 to 17	OE	143.0	0.86	11.1	4,960	4,960	0.02	0.02	22.00	504.00	43.65	5	0.82	1	0.01 0.	0.0 0.0	0 Level n	a O
											ENERCA	PITA S	OUR DIS	SCONTINUE	D														
ENERCAPITA ENERGY LTD.	-	06-36-069-20W5 B	BE 0	)2-36-069-20W5 BE	-	-	8516	2	-	18	18	OE	60.3	0.72	3.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	02-36-069-20W5 B	BE 0	04-31-069-19W5 BE	- 1	-	8516	3	-	19	19	OE	88.9	0.64	4.0	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	CC	08-35-069-20W5 B	BE 0	08-35-069-20W5 BE	-	-	8516	8	-	20	20	OE	60.3	0.07	3.2	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	08-35-069-20W5 B	BE 0	06-36-069-20W5 BE	- 1	-	8516	9	-	21	21	OE	60.3	0.95	3.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	06-36-069-20W5 B	BE 0	02-36-069-20W5 BE	- 1	-	8516	12	-	22	22	OE	60.3	0.95	3.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	09-35-069-20W5 B	BE 0	08-35-069-20W5 BE	-	-	8516	16	-	23	23	OE	65.0	0.35	6.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	10-36-069-20W5 B	3E   1	12-31-069-19W5 BE	- 1	-	29165	2	-	24	24	OE	60.3	0.69	3.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	12-31-069-19W5 B	BE 0	04-31-069-19W5 BE	-	-	29165	3	-	25	25	OE	88.9	0.65	4.0	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	CC	09-25-069-20W5 B	BE 1	13-30-069-19W5 BE	- 1	-	29165	6	-	26	26	OE	60.3	0.70	1.8	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	16-25-069-20W5 B	3E   1	13-30-069-19W5 BE	-	-	29165	9	-	27	27	OE	60.3	0.46	3.9	0	0	0.20	0.20										D
ENERCAPITA ENERGY LTD.	-	04-32-069-19W5 B	3E   1	14-29-069-19W5 BE	-	-	29165	14	-	28	28	OE	60.3	0.61	3.9	0	0	0.20	0.20										D

## LEGEND

<u>Water Cross</u>: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

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Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated <u>Other:</u> EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature



# **Sunset House Field - Sweet Wells**

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
	0					
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 13 25 60 20	137112	100011307020W502	01-13-070-2005	0	
ENERCAPITA ENERGY LTD		437442	100132300920W302	01-33-009-20005	0	
ENERCAPITA ENERGY LTD	LONGVIEW ET AL 102 SUNSET 2 32 60 10	42233	102023206010W500	02-31-009-19005	0	
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 15 25 60 20	377706	100152506020\\\\500	02-32-009-19005	0	
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 4-22-70-20	303371	100132300320W300	02-30-009-20005	0	
ENERCAPITA ENERGY LTD	LONGVIEW ETAL 102 SUNSET 5-31-69-19	418138	102053106919W/500	04-22-070-20003	0	WATER IN IECTOR
ENERCAPITA ENERGY LTD	EEL HZ SUNSET 12-31-69-19	482805	102123106919W500	04-37-069-19W5	0	
ENERCAPITA ENERGY LTD	LONGVIEW ET AL SUNSET 5-29-69-19	362476	100052906919W500	05-29-069-19W5	0	WATER INJECTOR
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 6-14-70-20	259136	100061407020W500	06-14-070-20W5	0	PUMPING OIL
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 6-22-70-20	291562	100062207020W500	06-22-070-20W5	0	PUMPING OIL
ENERCAPITA ENERGY LTD	LONGVIEW SUNSET 6-27-70-20	217635	100062707020W500	06-27-070-20W5	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 8-21-70-20	254052	100082107020W500	08-21-070-20W5	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 8-29-69-19	43922	100082906919W500	08-29-069-19W5	0	OBSERVATION
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 8-35-69-20	42346	100083506920W500	08-35-069-20W5	0	WATER INJECTOR
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 10-15-70-20	303900	102101507020W500	10-15-070-20W5	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 10-36-69-20	41717	100103606920W500	10-36-069-20W5	0	WATER INJECTOR
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 11-25-69-20	420464	100112506920W500	11-25-069-20W5	0	WATER INJECTOR
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 12-13-70-20	254688	100121307020W500	12-13-070-20W5	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 13-14-70-20	272723	100131407020W500	13-14-070-20W5	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 13-29-69-19	331861	100132906919W500	13-29-069-19W5	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-23-70-20	172555	100142307020W503	14-23-070-20W5	0	WATER DISPOSAL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-29-69-19	18470	100142906919W503	14-29-069-19W5	0	WATER SOURCE
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-30-69-19	42486	100143006919W500	14-30-069-19W5	0	WATER INJECTOR
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 16-19-71-20	338938	100161907120W500	15-19-071-20W5	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 16-15-70-20	303383	100161507020W500	16-15-070-20W5	0	PUMPING OIL
	ENERCAF	PITA SWEE	T SUSPENDED			
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 1-22-70-20	270474	100012207020W500	01-22-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 2-14-70-20	52483	100021407020W500	02-14-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 2-30-71-20	186731	100023007120W500	02-30-071-20W5	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	FLAGSTONE STURLS 3-7-69-21	19214	102030706921W502	03-07-069-21W5	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 3-35-71-21	308118	102033507121W500	03-35-071-21W5	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 4-13-70-20	272719	100041307020W500	04-13-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 4-29-69-19	26792	100042906919W500	04-29-069-19W5	0	SUSPENDED WATER DISPOSAL
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 5-20-71-20	249572	100052007120W500	05-20-071-20W5	0	SUSPENDED GAS

# Sunset House Field - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 6-15-70-20	253025	100061507020W500	06-15-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 6-21-70-20	259139	100062107020W500	06-21-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 8-15-70-20	143697	100081507020W500	08-15-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 10-14-70-20	285327	100101407020W500	10-14-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 10-15-70-20	66046	100101507020W500	10-15-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 10-22-70-20	169454	100102207020W500	10-22-070-20W5	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 11-14-70-20	167803	100111407020W502	11-14-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 12-28-69-19	43161	100122806919W500	12-28-069-19W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-11-70-20	101641	100141107020W500	14-11-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-15-70-20	253084	100141507020W500	14-15-070-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 3-29-71-20	241300	100032907120W500	14-20-071-20W5	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 14-29-69-19	72876	1F1142906919W500	14-29-069-19W5	0	SUSPENDED WATER SOURCE
ENERCAPITA ENERGY LTD.	LONGVIEW ETAL 102 SUNSET 14-29-69-19	376058	102142906919W500	14-29-069-19W5	0	SUSPENDED WATER SOURCE
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 15-17-71-20	354543	100151707120W500	15-17-071-20W5	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 16-16-70-20	254593	102161607020W500	16-16-070-20W5	0	SUSPENDED OIL
	ENERC	APITA SWE	ET DRILLED			
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 4-35-71-21	304045	100043507121W500	04-35-071-21W5	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	LONGVIEW ET AL SUNSET 5-29-69-19	362476	100052906919W502	05-29-069-19W5	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 6-26-71-21	57447	100062607121W500	06-26-071-21W5	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	LONGVIEW STUMP 14-25-71-21	181554	100142507121W500	14-25-071-21W5	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	LONGVIEW SUNSET 16-16-70-20	254593	102161607020W502	16-16-070-20W5	0	DRILLED AND CASED

## LEGEND

Other: UWI=Unique Well Identifier



# Sunset House Field - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
				ENERCAPITA SWEET		RATING								
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	IP	03-31-069-19W5	PL	15865	2	SW	88.9	1.48	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	IP	02-31-069-19W5	WE	15865	3	SW	60.3	1.41	3.2	13,790	0	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	WE	14-29-069-19W5	IP	15865	6	SW	91.0	0.08	7.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	03-31-069-19W5	PL	14-30-069-19W5	WE	15865	12	SW	91.0	0.33	9.5	9,930	0	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	PL	02-32-069-19W5	WE	15865	13	SW	116.3	0.41	9.4	9,930	0	0
ENERCAPITA ENERGY LTD.	CC	14-29-069-19W5	BT	14-25-069-20W5	WE	15865	14	SW	116.3	3.60	9.4	9,930	0	0
ENERCAPITA ENERGY LTD.	-	14-25-069-20W5	PL	01-35-069-20W5	WE	15865	15	SW	89.2	1.01	7.4	9,930	0	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	BT	05-29-069-19W5	WE	15865	17	SW	89.2	0.74	7.4	9,930	0	0
ENERCAPITA ENERGY LTD.	-	03-31-069-19W5	PL	10-36-069-20W5	WE	15865	18	SW	88.9	1.73	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	-	01-35-069-20W5	PL	08-35-069-20W5	WE	15865	19	SW	90.0	0.64	8.9	9,930	0	0
ENERCAPITA ENERGY LTD.	CC	04-26-070-20W5	PL	13-23-070-20W5	PL	27865	2	NG	114.3	0.40	4.0	9,900	0	0
ENERCAPITA ENERGY LTD.	-	10-22-070-20W5	WE	06-22-070-20W5	BT	27865	3	NG	114.3	0.45	4.0	9,900	0	0
ENERCAPITA ENERGY LTD.	-	06-27-070-20W5	WE	04-26-070-20W5	PL	27865	4	NG	114.3	1.64	3.2	9,900	0	0
ENERCAPITA ENERGY LTD.	CC	13-23-070-20W5	PL	06-22-070-20W5	BT	27865	5	NG	114.3	1.49	4.0	9,900	0	0
ENERCAPITA ENERGY LTD.	-	03-07-069-21W5	WE	07-07-069-21W5	SA	35237	1	NG	60.3	0.60	2.8	7,000	0	0
ENERCAPITA ENERGY LTD.	-	07-07-069-21W4	PL	06-08-069-21W4	BT	35294	1	NG	88.9	1.30	4.0	7,000	0	0
ENERCAPITA ENERGY LTD.	-	02-30-071-20W5	WE	05-20-071-20W5	PL	35618	1	NG	114.3	2.20	3.2	9,930	0	0
ENERCAPITA ENERGY LTD.	-	06-22-070-20W5	IP	14-23-070-20W5	WE	37059	2	SW	88.9	1.60	3.2	9,900	0	0
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	ΒT	04-31-069-19W5	WE	60551	1	SW	122.0	2.67	15.6	14,890	0	0
			E	NERCAPITA SWEET I	DISCO	NTINUED								
ENERCAPITA ENERGY LTD.	CC	05-29-069-19W5	BE	05-29-069-19W5	BE	9649	4	SW	60.3	0.09	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	BE	05-29-069-19W5	BE	9649	5	SW	60.3	1.00	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	05-29-069-19W5	BE	04-29-069-19W5	BE	9649	6	SW	60.3	0.16	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	BE	02-32-069-19W5	BE	15865	4	SW	91.0	0.56	7.8	0	0	D
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	BE	05-29-069-19W5	BE	15865	5	SW	91.0	0.94	7.8	0	0	D
ENERCAPITA ENERGY LTD.	-	10-36-069-20W5	BE	06-36-069-20W5	PL	15865	7	SW	88.0	0.86	8.0	0	0	D
ENERCAPITA ENERGY LTD.	CC	06-36-069-20W5	PL	04-36-069-20W5	PL	15865	8	SW	88.0	0.82	8.0	0	0	D
ENERCAPITA ENERGY LTD.	-	04-36-069-20W5	PL	14-25-069-20W5	BE	15865	9	SW	88.0	0.74	8.0	0	0	D
ENERCAPITA ENERGY LTD.	-	14-29-069-19W5	BE	03-31-069-19W5	BE	15865	10	SW	91.0	1.65	9.5	0	0	D
ENERCAPITA ENERGY LTD.	-	04-36-069-20W5	PL	01-35-069-20W5	BE	15865	11	SW	92.0	0.21	10.0	0	0	D

## **Sunset House Field - Sweet Pipelines**

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	14-30-069-19W5	BE	14-30-069-19W5	BE	15865	16	SW	89.2	0.29	7.4	0	0	D
ENERCAPITA ENERGY LTD.	-	14-11-070-20W5	BE	02-14-070-20W5	BE	20647	1	OE	88.9	0.60	4.8	0	0	D
ENERCAPITA ENERGY LTD.	-	16-21-070-20W5	BE	06-22-070-20W5	BE	27865	1	NG	168.3	1.19	4.8	0	0	D

## LEGEND

<u>Water Cross</u>: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing <u>Facility</u>: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals RE=Reservoir UG=Underground Cap or Tie-in <u>Substance</u>: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water NL=NGL MG=Miscellaneous Gases <u>Status</u>: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated

Other: Wall=Wall Thickness OD=Outside Diameter


# **ENERCAPITA**

Page Redacted for Confidentiality

24 Hour Emergency Number: 1-866-556-7838

# E2 ID: 2219

# Environmental Emergency Plan

# Sunset House 06-22-70-20 W5M Gas Plant



TO BE USED WITH THE CORPORATE ERP

DESIGNED TO MEET ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC) ENVIRONMENTAL EMERGENCY REGULATIONS, 2019: SOR/2019-51



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# **Revision History**



Date	Reason for Revision	Affected Pages
June 2023	Annual Update	All
June 2022	Annual Update	All
April 2020	New Regulations	All

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# Location

Name: Sunset House 06-22-70-20 W5M Gas Plant GPS Coordinates

- Latitude: 55.07556
- Longitude: -116.96352
- **Directions and Access**

To access the Sunset House 06-22-70-20 W5M Gas Plant from the intersection of Hwy 43 and Hwy 49 Valleyview AB, at:

- Travel northeast on Hwy 49 for 3.2 km (road will curve north)
- Turn right (east) onto Hwy 669 and travel for 18.7 km
- Turn right (south) onto Access Rd. and travel for 0.8 km to reach the Gas Plant



### Environment and Climate Change Canada (ECCC) Regulated Substances



Substances listed below meet the ECCC threshold for registration and an Environmental Emergency Plan under the Canadian Environmental Protection Act (CEPA). It is not a complete list of all storage at the facility.

	Name	Propane
	ECCC Regulated Substance	Propane
Substance Details	CAS #	74-98-6
	UN #	1978
	ECCC Hazard Category	Explosive
Quantity	Tank volumes	1 @ 159,000 L
	Maximum Expected Quantity (tonnes)	94.83
	Single Largest Container Capacity (tonnes)	94.83
	CEPA EPZ (m)	200

Notes:

- CEPA EPZ (Emergency Planning Zone): is the zone based on a more likely to occur scenario which includes a partial release of the substance. This is considered the alternate case scenario.
- The CEPA EPZ is the zone used to define where Public Communication should take place prior to an Environmental Emergency.
- Additional information regarding the scenarios and modelling methodology can be found on the back of the Substance Specific Properties & Emergency Management pages located in the attachments.

### **ENERCAPITA**

## **Characteristics of the Facility** and the Surrounding Area



ECCC Sensitive Receptors	Inside the EPZ	Notes
Child care and educational facilities	No	
Health care facilities	No	
Senior citizen's and long-term facilities	No	
Residential buildings	No	
Commercial buildings (e.g. shopping malls, restaurants)	No	
Fire stations	No	
Industrial buildings	No	
Highways	No	
Railway stations	No	
Bus stations	No	
Airports	No	
Groundwater wells or intakes to drinking water systems	No	
Water bodies (e.g. rivers, lakes, and oceans)	Yes	Sweathouse Creek intersects the CEPA facility EPZ.
Parks or forests	No	
Fish and wildlife habitat areas	No	
Others (e.g. campgrounds, etc.)	No	

Response Considerations	Notes
Cities/Towns/Villages	• The town of Valleyview is approximately 20km east of the facility and has a population of +/- 1,673.
First Nations Reserves	• N/A
Communication Considerations	<ul> <li>Operators use cellular phones to communicate. Cell phone coverage is generally good in the area.</li> </ul>
Access Considerations	• N/A
Other	• N/A

Please refer to the Facility Map for additional details.

### **Roles & Responsibilities**

For Position Titles and Roles & Responsibilities – please see Section 2: Roles & Responsibilities (Blue Tab) in the Corporate ERP.

## Training

Response personnel that could potentially fill the roles below should be involved in the training identified in the table.

Role	CEPA Required Simulation (Tabletop) Exercise (Annually)	CEPA Required Full-Scale Exercise (Every 5 years)	
Incident Commander	~	>	
Emergency Operations Centre Director	~	~	
Public Safety Staff	~	>	
On-Site Group Supervisor	~	>	

To meet CEPA requirements for a simulation exercise:



One substance from each hazard category must be exercised.
The environmental emergency scenarios must be cycled through (a different one each year).

For full training requirements, refer to Appendix A: ERP Scope, Training and Plan Maintenance information located behind the Appendices (Blue Tab) in the Corporate ERP.



### **Public Communication**

Enercapita Energy Ltd. has created a Public Information Pamphlet (PIP) to discuss the following:

- the possibility that the environmental emergency could occur,
- the potential effects of the environmental emergency on the environment and on human life or health, taking into account the substance, the activity the substance is used, and the facility and surrounding area features.
- the measures that will be taken to protect the environment and human life or health
- the means of communications in the event that the environmental emergency occurs

The PIP was provided to any surface developments within the CEPA EPZ as well as mailed out to Area Users (Oil and Gas Operators, Railways, Trapper, Guides & Outfitters, Grazing Leases, and Forestry Management Units). Emergency contact information was gathered for the surface developments within the CEPA EPZ and has been included within this plan.

Enercapita's Public Safety Group Supervisor (or delegate) would be responsible for communicating with members of the public who may be adversely affected by an environmental emergency, during and after the emergency, with

 information and guidance concerning the actions that could be taken to reduce the potential harm to the environment and danger to human life or health, including an explanation of how those actions may help to reduce the harm or danger.

Related information can be found in the Corporate ERP behind the following Blue Tabs:

- Section 2: Roles & Responsibilities
- Section 3: Communication & Media
  - Local Authority Communication

Enercapita consulted with the local authority in the development of the Emergency Response Plan (ERP) regarding their roles & responsibilities in the event of an emergency. A copy of this is included in Section 5: External Agencies (Blue Tab) of the Corporate ERP.

The local authority, RCMP and local fire departments were provided with a copy of:

- the Public Information Pamphlet (PIP).
- the Environmental Emergency Plan.

### Substance Specific Properties & Emergency Management

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Page(s) specific to the substances stored at the facility are included as an attachment. These pages include:

- Properties and Characteristics of the substance
- The identification of what environmental emergencies could occur and the potential harm
- Preventative, Preparedness, Response and Recovery actions that could potentially be taken





### **Facility Site Section**

Refer to the Facility Site Section for the following:

- Operations Summary the commercial, manufacturing, processing or other activity involving the substance that takes place at the facility.
- Safety Equipment List list of emergency response equipment available to prepare for and respond to an environmental emergency.
- Phone List

**Facility Map** 

The Facility map is included as an attachment.





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Physical Properties	
Chemical Formula	C3H8
Flash Point	-104°C
Boiling Point	-42.1°C
Lower Explosive Limit (LEL)	2.1%
Upper Explosive Limit (LEL)	9.5%
Autoignition Temperature	450°C
Vapor Density (Air = 1)	1.5
Water Solubility	0.01%
IDLH	2100 ppm

#### **General Description**

A colorless gas with a faint petroleum-like odor. It is shipped as a liquefied gas under its vapor pressure. For transportation it may be ster Contact with the unconfined liquid can cause frostbite by evaporative cooling.

Easily ignited. The vapors are heavier than air and a flame can flash back to the source of leak very easily. The leak may be either a ligu The vapors can asphyxiate by the displacement of air.

Under prolonged exposure to fire or heat the containers may rupture violently and rocket.

NFPA Diamond		Hazard	Rating	Description
	$\diamondsuit$	Health	Hazardous	Can cause temporary incapacitation or residual injury.
4	$\blacklozenge$	Flammability	Flash Point below 73 °F	Burns readily. Rapidly or completely vaporizes at atmospheric pressu ambient temperature.
	$\diamond$	Instability	Stable	Normally stable, even under fire conditions.
$\checkmark$	$\diamond$	Special		

### **POTENTIAL HAZARDS**

#### FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Cylinders exposed to fire may vent and release flammable gas through pressure relief devices. Containers may explode when heated.
- Ruptured cylinders may rocket.

#### HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

### PUBLIC SAFETY

- As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).

#### **PROTECTIVE CLOTHING**

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/ cryogenic liquids.

### **PUBLIC SAFETY**

Information on this page is from CAMEO Chemicals and the Transport Canada Emergency Response Guide

#### **EVACUATION**

Large spill



- SPILL OR LEAK area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- areas
- Isolate area until gas has dispersed.

likely to break without warning.

#### **FIRST AID**

- take precautions to protect themselves.
- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
  - Administer oxygen if breathing is difficult.

  - water.

  - Keep victim calm and warm.



- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

Consider initial downwind evacuation for at least 800 meters (1/2 mile).

### **EMERGENCY RESPONSE**

### FIRE

Fire

• DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED

### **Small Fire**

• Dry chemical or CO<sub>2</sub>.

#### Large Fire

• Water spray or fog.

#### Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.







nched. d or vapor leak.	ECCC Hazard Catego
essure and normal	EXPLOSION
	UN # 1978
	TC ERG Guide # 115

### **EMERGENCY RESPONSE**



 $\mathbf{\hat{\mathbf{n}}}$ 

• ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate

- Prevent spreading of vapors through sewers, ventilation systems and confined

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are

• Ensure that medical personnel are aware of the material(s) involved and

- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm

• In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.

PANE





- Emergency Shutdown Valves (ESD's)
- Pressure Safety Valve
   (PSV)
- Excess Flow Valve
- Breakaway Couplings
- Discharge to Flare
- Gas Detection
- Fire Eyes
- Maintenance Program
- Physical Barriers
- Site Security
- Driver Competency
   Program
- SOP's for loading and unloading
- Signage and Labels

and the second

#### Possible Preparedness Measures

- Emergency Response Plan (ERP)
- Training and Exercises
- Keeping Response equipment on-site and in good order
- Audits of the Incident Command Post (ICP)
- Incident Command System (ICS) Certification
- Response Software

#### Possible Harm to the Environment

- Wildfire / Forest Fire
- Air Emissions
- Permanent loss of plants and animals
- Permanent Disability
- Contaminating water and/or land
- Cascading effects leading to the release of a toxic substance

#### Possible Danger to Human Health

- Fatality
- Permanent Disability
- Lost Time Injury
- First Aid
- Cascading effects leading to the release of a toxic substance



### Recovery

Response

Recovery

#### Possible Response Actions

- Evacuate
- Alarm
- Call 911 (if required)
- Assess
- Protect
- Rescue
- First Aid
- Medical Aid
- Initiate ERP

#### Possible Recovery Actions

- Incident Investigation
- Root Cause Analysis
- Environmental cleanup and remediation
- Facility repair and equipment replacement
- Review and revise equipment and processes at other locations
- Share learnings

H2Safety

### **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

#### Primary Incident Command Post

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### Staging Areas

Staging area (s) would be established at the nearest Plant or Battery at the time of the incident.

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

### **KEY RESPONSE PERSONNEL**

Field Personnel			
Greg Schrode	Central Area Superintendent	Cell:	780-305-6541
Mike Sherk	Central Area Lead Operator	Cell:	780-524-6720
Trevor Blake	Area Pipeline Integrity	Cell:	780-772-2555
D. (		and Deenen	- 1. WW I. L I I I.

es blue tab fo Refer to the "Response Teams Phone List" yellow tab, behind the Section 2.0: Roles and Responsi additional contact information.

#### **OPERATIONS SUMMARY**

Enercapita is the owner and operator of the Sunset House 06-22-70-20 W5M Gas Plant that is an Environment and Climate Change Canada (ECCC), CEPA registered facility located in the M.D. of Greenview. The registered substance of propane is stored onsite.

Enercapita pipelines gather oil effluent and gas and line the product to the 06-22-70-20 W5M Gas Plant. At the plant, the produced water is separated from the oil and gas and is pipelined out to a disposal well at 14-23-70-20 W5M. Oil is trucked out daily to Tervita's Vallevview Terminal in Alberta. Oil trucks load product from 10am to 10pm daily. Sweet gas is shipped through Nova Gas Pipelines where custody is transferred out. C2-C6 NGL's are processed on site and stored in a 159m<sup>3</sup> Propane Bullet. NGL's are trucked to Pembina's Fox Creek terminal for further processing. Hydraulic ESD valves are installed at the 06-22 plant and throughout the gathering system, which will shut-in if there is an abnormal change in operating pressure.

#### EPZ Information

The maximum expected H<sub>2</sub>S concentration for the wells is 0.20%, with a maximum EPZ of 20 m.

The maximum expected H<sub>2</sub>S concentration for the pipelines is 0.20%, with a maximum EPZ of 120 m.

#### **On-Site Storage**

Refer to the yellow Sunset House 06-22-70-20 W5M Gas Plant tab for a list of CEPA regulated on-site storage.

#### Closest Major Urban Centre

The town of Valleyview is approximately 20 km west of the facility EPZ and has a population of +/- 1,673.

Hydrology There is one unnamed creek within the facility EPZ. Refer to the map for more information.

#### Highways / Rail

Highway 669 and Highway 747 could be impacted in the event of an incident. Contact the RCMP and Alberta Transportation to authorize the closure of any highways and in the interim, be prepared to quickly restrict access if public safety could be jeopardized. Refer to the map for more information.

#### Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

### SAFETY EQUIPMENT

#### **Operator / Truck Safety Equipment**

Each field operator's truck contains the following: 20lb fire extinguisher, first aid kid, PPE, flashlight, and a personal 4 head monitor, pail and shovel, and media / landowner statement cards. Nearby locations with safety equipment are listed below.

Item	Quantity / Location
Fire Extinguishers - 30lb	Various throughout the field
First aid kit	1 @ 06-22-70-20 W5M GP 1 @ 14-29-69-19 W5M Battery
SCBA	2 @ 06-22-70-20 W5M GP 2 @ 14-29-69-19 W5M Battery
Stretcher	1 @ 06-22-70-20 W5M GP
Road Block Kits	3 @ 06-22-70-20 W5M GP 3 @ 14-29-69-18 W5M Battery

#### Notification

There is a SCADA system within this field. Control and relief valves are in place in the wellsite equipment packages and hydraulic ESD valves are installed at the 06-22-70-20 W5M gas plant, the 14-29-69-19 W5M battery and throughout the gathering systems, which will shut-in if there is an abnormal change in operating pressure. Operators monitor the wells and facilities on a daily basis. Process alarms, including high level tank alarms, go to a callout centre which alerts operators on their cellular phones.

#### Communications

Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters.

#### Roadblock Kits

Fo

Roadblock locations will be determined at the time of the incident. Road block kits contain: Safety vests, flashlight, road block signs, media/landowner statement cards, pen, clipboards and flares.

#### Ignition Equipment

Auto-ignition equipment is attached to all flare stacks. In the event backup is needed, flare guns are available as above.

\*\* If any of the above safety equipment is insufficient, Enercapita Energy Ltd. personnel will contact a local safety company who will be asked to provide additional equipment.

### **GOVERNMENT AGENCIES**

lberta Energy Regulator (AER) Wildfire Reporting One call number for regulatory agency, spill reporting and Alberta Environment	800-222-6514* 310-FIRE(3473) & Parks (lands, fish, forest, wildlife).
D. of Greenview No. 16	780-524-7600
Vayne Brown, Regional Fire Chief	Admin: 780-524-4513
erta Health Services (AHS) - Z5 North	844-755-1788
erta Emergency Management Agency (AEMA) Northwest - Ian Fox, EMFO	866-618-2362 Cell: 780-646-0180
erta Boilers Safety Association (ABSA)	780-437-9100
erta Safety Services - Electrical Branch	Admin: 866-421-6929
erta Ministry of Transportation	780-638-1128
rta Environmental and Dangerous Goods Emergenc	ies (EDGE) 800-272-9600
rkers' Compensation Board (WCB)	866-922-9221
NUTEC (Call collect)	888-226-8832
Traffic Control  AV Canada* ransport Canada** filight information or a NOTAM advisory is required, contact the NAV Canac If a NOTAM is required for airspace closure, contact the Transport Canada .	866-541-4102 877-992-6853 da Flight Information Centre (FIC) Aviation Operations Centre (AVOPS)
partment of Fisheries and Oceans Canada (DFO)	780-422-4505
vironment and Climate Change Canada Aeteorological Services	780-951-8907

	EMERGENCY SERVICES Note: All numbers, unless otherwise indicated, are 24	hours.
888-982-7222	Ambulance / Fire / RCMP STARS Air Ambulance Hospitals	<b>911</b> 888-888-4567
Number 800-222-6514	Valleyview Health Centre - Valleyview High Prairie Health Complex - High Prairie Grande Prairie Regional Hospital	780-524-3356 780-523-6440 825-412-4000
Number 780-850-9024 780-524-2417 780-536-7290	Alberta Poison and Drug Information Service (PADIS) Electrical Distribution ATCO Electric - Alberta-wide	800-332-1414 800-668-5506 780-412-4500
780-536-5554 780-849-0743 780-300-1111	Fortis Alberta - Alberta-wide Utility Safety Partners	866-717-3113 800-242-3447
		www.adiitySolety.ou

AREA U Note: All number	SERS / TRANSIENTS s, unless otherwise indicated, are 24 hour	rs.
Oil and Gas TC Energy		888-982
Trappers Trapper ID 2819	Name AER	<b>Νι</b> 800-222
Guides and Outfitters Wildlife N	lanagement Unit (WMU) # 360	
Company	Name	Nu
Blue Sky Outfitters	Kyle Mudge	780-850
Eagle Eye Outfitting	Doreen Hebert	780-524
Hebert's Guide Services	Kevin McNeil	780-536
North Alberta Outfitters Inc.	Don K. Lind	780-536

Troy A. Foster

South Peace Outfitters	Taylor Loewen
restry Management Units &	Agreements (FMU / FMA)

SO2 - See Alberta Energy Regulator (AER)

Red Willow Outfitters Ltd.

SUPPORT SERVICES Note: All numbers, unless otherwise indicated, are 24 hours.	
Mobile Air Monitoring* Firemaster Oilfield Services - Grande Prairie HSE Integrated - Red Deer Trojan Safety Services - Grande Prairie	877-342-3473 888-346-8260 877-785-9558
<b>Oilfield Fire Fighting / Safety Contractors*</b> Firemaster Oilfield Services - Grande Prairie HSE Integrated - Grande Prairie Superior Fire Control - Grande Prairie	877-342-3473 888-346-8260 877-882-0035
Well Control Specialists* Capstone Oilfield Services - Prov-Wide Firemaster Oilfield Services - Grande Prairie	866-347-3911 877-342-3473
Ignition Services* Superior Fire Control - Grande Prairie HSE Integrated - Grande Prairie	877-882-0035 888-346-8260
Roadblock Services* (kits/personnel) HSE Integrated - Grande Prairie Trojan Safety Services - Grande Prairie Firemaster Oilfield Services - Grande Prairie (kits only) * Due to response time, dispatch support services at a Level 1 Emergency. Response times depending on where the support is coming from.	888-346-8260 877-785-9558 877-342-3473 vary (1 – 6 hours)
Bus Transportation Golden Arrow Motor Coaches - Edmonton	877-447-1538
Helicopter Companies Canadian Helicopters - Grande Prairie Slave Lake Helicopters - Slave Lake Synergy Aviation - Grande Prairie	780-429-6900 780-849-6666 780-750-4994
Emergency Response Assistance Canada (ERAC) (ERAP 2-0010-448)	800-265-0212
Emergency Response Management H <sub>2</sub> Safety Services Inc Calgary Toll Free	403-212-2332 888-216-2332
Spill Response / Environmental Services CJC Enterprises Ltd Valleyview Direct Pressure Trucks - Valleyview Double T Tank Trucks - Valleyview Mclean Environmental - Valleyview Ridgeline Canada - Grande Prairie	780-524-8884 782-524-8614 780-524-6531 780-300-4400 866-574-7928
Western Canadian Spill Services (WCSS) - COOP 5 & 6* *See WCSS's website (http://www.wcss.ab.ca) for more information, equipment details, locations,	866-541-8888 and directions.
Reception Centres Paradise Inn & Suites 3609 Highway Street, Valleyview, AB	877-552-2338
Valleyview Memorial Hall 4810 - 50 Street, Valleyview, AB	780-524-5153

### SURFACE DEVELOPMENT INFORMATION

There are no surface developments located within the facility EPZ. In the event of an incident, assign Rovers to patrol the area.



### **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

#### Primary Incident Command Post:

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### Staging Areas:

Staging area (s) would be established at the nearest Plant or Battery at the time of the incident.

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

### **KEY RESPONSE PERSONNEL**

#### **Field Personnel**

Will Nordstrom	Viking Area Superintendent	Cell:	780-385-1909
Chris Horvat	Viking Area Operator	Cell:	780-632-8985
Refer to the "Response Teams P additional contact information.	hone List" yellow tab, behind the Section 2.0: Ro	oles and Respon	sibilities blue tab fo

### SAFETY EQUIPMENT

#### **Operator / Truck Safety Equipment**

Each field operator's truck contains the following: 20lb fire extinguisher, first aid kit, PPE, flashlight, personal 4 head monitor, pail & shovel, and media / landowner statement cards. Nearby locations with safety equipment are listed below.

Item	Quantity / Location
Fire Extinguishers - 30lb	1 @ 11-16-48-13 W4M
First aid kit - 30 lb	1 @ 11-16-48-13 W4M
Stretcher	1 @ 11-16-48-13 W4M

#### Notification

There is a SCADA system in place at the 02-22-48-13 W4M sales point site. There are ESD valves throughout the gathering system that will shut in if an abnormal change in operating pressure is detected.

Operators monitor the wells and facilities on a daily basis. Process alarms, including high-level tank alarms, go to a callout centre which alerts operators on their cellular phones.

#### Communications

Operators use cellular phones to communicate. Cell phone coverage is generally good in the area.

#### Roadblock Kits

Additional support and equipment are to be provided by safety companies at the time of the incident. See Support Services for more information. Roadblock locations will be determined at the time of the incident.

\*\* If any of the above safety equipment is insufficient, Enercapita Energy Ltd. personnel will contact a local safety company who will be asked to provide additional equipment.

#### **OPERATIONS SUMMARY**

Enercapita's Viking field is a sweet gas field in Northeastern Alberta. The field is spread across Townships 47 to 55, and Ranges 12 to 16 W4M, and is located in Beaver County, AB. Additional wells and pipelines are located in the County of Miniburn and Two Hills.

The area wells gather gas and the product is lined to the 11-16-48-13 W4M Gas Plant. At the plant, glycol dehydration and refrigeration processes are performed on the gas stream. Sweet gas is used on site or lined through Enercapita pipelines to the Pine Cliff 13-31-48-12 W4M Gas Plant. Hydraulic ESD valves are installed at the 11-16 Plant and throughout the gathering system, which will shut-in if there is an abnormal change in operating pressure.

#### **EPZ** Information

The maximum H<sub>2</sub>S concentration for wells and pipelines is 0%, therefore, there are no EPZs within the field.

#### **On-Site Storage**

Refer to the EPZ Calculation tables for a list of on-site storage, at the end of this section.

#### Closest Major Urban Centre

The town of Viking is within the field and has a population of +/- 986.

#### Hydrology

Egg Creek, Thomas Lake, Vermillion River, Whitford Lake, and various unnamed creeks and water bodies. Refer to the map for more information.

#### Highways / Rails

Highway 14, Highway 29, Highway 619, Highway 855 and CN Rail could be impacted in the event of an incident. Contact the RCMP and Alberta Transportation to authorize the closure of any highways and in the interim, be prepared to quickly restrict access if public safety could be jeopardized. Refer to the map for more information.

#### Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

#### **AREA USERS / TRANSIENTS** Note: All numbers, unless otherwise indicated, are 24 hours

Oil and Gas AlphaBow Energy Ltd. ATCO Gas And Pipelines Ltd. Axiom Oil And Gas Inc. Canadian Natural Resources Limited Pine Cliff Energy Ltd. Spur Petroleum Ltd. Tidewater Midstream And Infrastruct TC Energy Ltd.	d ture Ltd.	844-858-8038 877-496-9380 403-357-3919 888-878-3700 877-486-0470 866-453-6453 866-544-9875 888-982-7222
Rail Canadian National Railway (CN Rail	)	800-465-9239
Guides and Outfitters - Wildlife Man	agement Units (WMU) # 23	D, #238, #240
Company	Name	Number
1583888 Alberta Ltd.	Chris J. Dumbleton	780-657-2020
925879 Alberta Ltd.	Jonathan Mcmahon	780-818-6201
Alberta River Valley Lodge Ltd.	Robert E. Reynolds	780-210-0411
Alberta Waterfowl, Llc	Chris J. Dumbleton	780-275-2020
Baker, Douglas	Kyler Harms	780-603-7950
Big Knife Outfitters	Lloyd A. Mcmahon	780-205-0701
Bittern Lake Lodge And Outfitting	Jonathan Mcmahon	780-818-6201
Black Dog Outfitters Ltd.	Kirk P. Sharp	587-280-1470
Cody Rowledge Outfitting	Jordi Sullivan	780-603-0315
Diamond Willow Trophy Hunts	Dave Hansen	415-246-5979
Dog 'N Duck Outfitting	Kevin D. Loades	780-385-8246
Great White Holdings Ltd.	Bob (Robert) D. Clark	780-913-1337
Greater Canadians Ltd.	Sahara Burns	780-905-3550
Hill, Shaun	Kevin D. Loades	780-385-8246
Kirk Patrick Sharp	Bob (Robert) D. Clark	780-913-1337
Lock N Load Outfitting Ltd.	Lee T. Mcnary	780-842-8622
Nomad Adventures	Dave Hansen	415-246-5979
Ongaro Outdoor Outfitters	Brent Reil	780-490-9430
Ranchland Outfitters Inc.	Cody Rowledge	403-740-5696
Reil, Brent	Kyler Harms	780-603-7950
Rib Creek Outfitters Ltd.	Douglas Baker	780-608-7770
Sahara Raine Burns	Brennan Hudson	409-926-6042
Trophy Stalkers Inc.	Bob (Robert) D. Clark	780-913-1337
Wingshot Guiding Service Ltd.	Claudio Ongaro	800-465-6227
Grazing Leases		
Grazing ID	Name	Number
GRL34870	Greg Erickson	780-688-2442
GRL36188	Arnold Hanson	780-385-1673
GRL38730	Lloyd L Downing	780-857-2181

#### **GOVERNMENT AGENCIES** Note: All numbers, unless otherwise indicated, are 24 hours

800-222-6514\* Alberta Energy Regulator (AER) 310-FIRE(3473) Wildfire Reporting \* One call number for regulatory agency, Alberta Environment, spill reporting & sustainable resource development (lands, fish, forest, wildlife).

Beaver County Kay Spiess, Chief Administrative Officer	Admin:	866-663-1333 780-663-3730
County of Miniburn No.27 Mike Fudytus, DEM & Fire Chief	Admin: Cell:	780-632-2082 780-208-6434
County of Two Hills No.21 Elden Kozak, DEM		780-657-2800
Alberta Health Services - Z3 Central David Brown, Director	Office:	844-755-1788 403-356-6393
Alberta Emergency Management Agency - (AEMA) East Central - John Lamb, EMFO	Cell:	866-618-2362 587-322-6481
Alberta Boilers Safety Association (ABSA)		780-437-9100
Alberta Safety Services - Electrical Branch	Admin:	866-421-6929
Alberta Ministry of Transportation		780-638-1128
Alberta Environmental and Dangerous Goods Emergencies (E	DGE)	800-272-9600
Workers' Compensation Board (WCB)		866-922-9221
CANUTEC (Call collect)		888-226-8832
Air Traffic Control NAV Canada* Transport Canada** *If flight information or a NOTAM advisory is required, contact the NAV Canada Fi **If a NOTAM is required for airspace closure, contact the Transport Canada Avia	light Informa tion Operatio	866-541-4102 877-992-6853 tion Centre (FIC) ons Centre (AVOPS)
Department of Fisheries and Oceans Canada (DFO)		780-422-4505
Environment and Climate Change Canada Meteorological Services		780-951-8907

EMERGENCY SERVICES Note: All numbers, unless otherwise indicated, are 24 hours.		
Ambulance / Fire / RCMP	911	
STARS Air Ambulance	888-888-4567	
Hospitals		
Viking Health Centre	780-336-4786	
St. Mary's Hospital - Camrose	780 <b>-</b> 679-6100	
Two Hills Health Centre	780-657-3344	
Alberta Poison and Drug Information Service (PADIS)	800-332-1414	
Electrical Distribution		
ATCO Electric - Alberta-wide	800-668-5506	
EPCOR Utilities - Alberta-wide	780-412-4500	
Fortis Alberta - Alberta-wide	866-717-3113	
Utility Safety Partners	800-242-3447	
	www.utilitysafety.ca	

June 2023
www.h2safety.ca

Note: All numbers, unless otherwise indicated, are 24 hours.	
Mobile Air Monitoring* Safety Boss Inc Edmonton / Fort St. John Firemaster Oilfield Services - Grande Prairie	800-882-4967 877-342-3473
Oilfield Fire Fighting / Safety Contractors* HSE Integrated Ltd Lloydminster Safety Boss Inc Edmonton Firemaster Oilfield Services - Grande Prairie	888-346-8260 800-882-4967 877-342-3473
Well Control Specialists* Capstone Oilfield Services - Prov-wide Safety Boss Inc Edmonton Firemaster Oilfield Services - Grande Prairie	866-347-3911 800-882-4967 877-342-3473
Ignition Services* Superior Fire Control - Grande Prairie HSE Integrated - Grande Prairie	877-882-0035 888-346-8260
Roadblock Services (kits/personnel)* HSE Integrated Ltd Lloydminster Firemaster Oilfield Services - Grande Prairie (kits only) * Due to response time, dispatch support services at a Level 1 Emergency. Response times v depending on where the support is coming from.	888-346-8260 877-342-3473 ary (1 – 6 hours)
Bus Transportation Bi West Translines Ltd Camrose Northern Express - Edmonton	888-672-9550 780-926-0808
Helicopter Companies Canadian Helicopters Ltd Edmonton Synergy Aviation - Villeneuve	780-429-6900 780-750-4994
Emergency Response Assistance Canada (ERAC) (ERAP 2-0010-448)	800-265-0212
Emergency Response Management H <sub>2</sub> Safety Services Inc Calgary Toll Free	403-212-2332 888-216-2332
Spill Response / Environmental Services Nash Steamer Vac Services Ltd Dixon Ridgeline Canada Inc Grande Prairie Steam-N-Steves Oilfield Services Ltd Viking W-K Trucking Inc Mundare	778-400-2432 866-574-7928 780-336-6170 780-632-5555
Western Canadian Spill Services (WCSS) - COOP 6* *See WCSS's website (http://www.wcss.ab.ca) for more information, equipment details, locations	866-541-8888 , and directions.
Reception Centres Ramada 4702 - 73 Street, Camrose	780-672-5220
Vegreville Suites 6539 Hwy 16A, Vegreville	780-632-2094

SUPPORT SERVICES

**JIKING** 

ENERCAPITA 

### SURFACE DEVELOPMENT INFORMATION

Surface Development Information has not been gathered for this field. In the event of an incident, assign Rovers to patrol the area.







### VIKING FIELD ACCESS

#### DIRECTIONS TO THE VIKING 11-16-48-13 W4M GAS PLANT

From Viking, AB, at the intersection of Highway 14 and Highway 36:

- Travel northwest on Highway 14 for 5.5 km
- Turn right (north) onto Rge. Rd 134 and travel for 3.1 km
- Turn right (east) onto the Access Rd and travel for 0.6 km to reach the Gas Plant



### Viking Field - Facilities

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA OP	ERATING	2_00)					
ENERCAPITA ENERGY LTD.	POCO VIKING-KINSELLA	NA	08-01-049-14W4	53.1944976	-111.9086723	53° 11' 40.191"	-111° 54' 31.220"	GS	AC	-
ENERCAPITA ENERGY LTD.	POCO VIKING-KINSELLA	NA	08-01-049-14W4	53.1944976	-111.9086723	53° 11' 40.191"	-111° 54' 31.220"	GS	AC	-
ENERCAPITA ENERGY LTD.	SIGNALTA RESOURCES LIMITED	F12660	10-16-055-15W4	53.7548000	-112.1650000	53° 45' 17.279"	-112° 9' 54.0"	CS	Α	-
ENERCAPITA ENERGY LTD.	SIGNALTA RESOURCES LIMITED	F12660	10-16-055-15W4	53.7548000	-112.1650000	53° 45' 17.279"	-112° 9' 54.0"	CS	Α	-
ENERCAPITA ENERGY LTD.	VIKING 10-17-049-13W4 GAS BATTERY	F29828	10-17-049-13W4	53.2301449	-111.8640593	53° 13' 48.521"	-111° 51' 50.613"	BT	AC	-
ENERCAPITA ENERGY LTD.	SIGNALTA RESOURCES LIMITED	F29828	10-17-049-13W4	53.2301449	-111.8640593	53° 13' 48.521"	-111° 51' 50.613"	CS	AC	-
ENERCAPITA ENERGY LTD.	VIKING 10-17-049-13W4 COMPRESSOR	F29828	10-17-049-13W4	53.2301449	-111.8640593	53° 13' 48.521"	-111° 51' 50.613"	GS	AC	-
ENERCAPITA ENERGY LTD.	VIKING 10-17-049-13W4 GAS BATTERY	F29828	10-17-049-13W4	53.2301449	-111.8640593	53° 13' 48.521"	-111° 51' 50.613"	BT	AC	-
ENERCAPITA ENERGY LTD.	WILLINGDON 102/10-22-53-13W4M	W 0293650	10-22-053-13W4	53.5944830	-111.8297270	53° 35' 40.138"	-111° 49' 47.017"	BT	AC	-
ENERCAPITA ENERGY LTD.	WILLINGDON 102/10-22-53-13W4M	W 0293650	10-22-053-13W4	53.5944830	-111.8297270	53° 35' 40.138"	-111° 49' 47.017"	BT	AC	-
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING-KINSELLA 13-16	NA	13-16-048-13W4	53.1432281	-111.8523510	53° 8' 35.621"	-111° 51' 8.463"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 14-17-054-11W4	NA	14-17-054-11W4	53.6695161	-111.5882395	53° 40' 10.257"	-111° 35' 17.662"	MS	0	-
ENERCAPITA ENERGY LTD.	VIKING 14-22-047-13W4 INJ	F49133	14-22-047-13W4	53.0711655	-111.8271249	53° 4' 16.195"	-111° 49' 37.649"	IP	AC	-
ENERCAPITA ENERGY LTD.	SIGNALTA RESOURCES LIMITED	F36188	16-16-055-15W4	53.7559000	-112.1600000	53° 45' 21.240"	-112° 9' 36.0"	CS	RC	-
ENERCAPITA ENERGY LTD.	SIGNALTA RESOURCES LIMITED	F36188	16-16-055-15W4	53.7559000	-112.1600000	53° 45' 21.240"	-112° 9' 36.0"	CS	RC	-
			ENERCAPITA SU	SPENDED						
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING 2/9-3-48-13W4M	W 0293032	09-03-048-13W4	53.1114570	-111.8096730	53° 6' 41.245"	-111° 48' 34.822"	BT	S	
ENERCAPITA ENERGY LTD.	PETROVEN HB PLAIN 10-8	W 0052156	10-08-053-12W4	53.5652090	-111.7309480	53° 33' 54.752"	-111° 43' 51.412"	BT	S	
ENERCAPITA ENERGY LTD.	WHITE RAM 11-20 WEST VIKING	W 0043386	11-20-049-14W4	53.2456220	-112.0191660	53° 14' 44.239"	-112° 1' 8.997"	BT	S	
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING 11-22	W 0078162	11-22-047-13W4	53.0684050	-111.8218520	53° 4' 6.257"	-111° 49' 18.667"	BT	S	
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING 11-22	W 0078162	11-22-047-13W4	53.0684050	-111.8218520	53° 4' 6.257"	-111° 49' 18.667"	BT	S	
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-02-048-13W4	W 0241158	12-02-048-13W4	53.1111390	-111.8081470	53° 6' 40.100"	-111° 48' 29.329"	BT	S	
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING 14-22-47-13	W 0147039	14-22-047-13W4	53.0711630	-111.8268350	53° 4' 16.186"	-111° 49' 36.606"	BT	S	
ENERCAPITA ENERGY LTD.	SIGNALTA VIKING 14-22-47-13	W 0147039	14-22-047-13W4	53.0711630	-111.8268350	53° 4' 16.186"	-111° 49' 36.606"	BT	S	

Facility EPZ's are assigned based on the largest EPZ of a sour pipeline entering or leaving the facility or an on-site sour well.

#### LEGEND

 Facility:
 BT=Battery
 CP=Chemical Plant
 CS=Compressor Station
 GP=Gas Plant
 GS=Gas Gathering System
 IP=Injection
 Plant

 LH=Line Heater
 MS=Meter Station
 PS=Pump Station
 SA=Satellite
 TL=Terminals
 LR=Loading Rack
 WS=Water Source
 CT=Central Treating Plants

 RS=Regulator Station
 MR=Meter and Regulator Station
 WP=Waste Plant
 TF=Tank Farm

 Status:
 A=Abandoned
 D=Discontinued
 N=Not Constructed/Approved
 O=Operating
 P=To Be Constructed
 S=Suspended
 AC=Active

UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone

# Viking Field - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-15-48-13	165606	100011504813W402	01-15-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-21-48-13	186937	100012104813W400	01-21-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 5-12-48-13	272059	100051204813W402	05-12-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 6-14-48-13	48999	100061404813W400	06-14-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 6-19-52-13	101708	100061905213W402	06-19-052-13W4	0	COMMINGLED
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 7-15-48-13	70077	100071504813W400	07-15-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM INLAND 7-26-51-15	44083	100072605115W400	07-26-051-15W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 7-29-49-13	305513	100072904913W402	07-29-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 10-17-49-13	45933	100101704913W400	10-17-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 10-21-49-13	45042	100102104913W400	10-21-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM PLAIN 10-22-53-13	293650	102102205313W400	10-22-053-13W4	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 10-24-49-14	43395	100102404914W400	10-24-049-14W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-16-49-13	54497	100111604913W400	11-16-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-20-49-13	54498	100112004913W400	11-20-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-21-48-13	291869	102112104813W403	11-21-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 13-8-52-13	99178	100130805213W404	13-08-052-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 13-16-48-13	125025	100131604813W400	13-16-048-13W4	0	PUMPING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM HAIRY 13-31-55-14	215288	100133105514W400	13-31-055-14W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 14-15-48-13	251842	100141504813W402	14-15-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 14-22-47-13	147039	100142204713W402	14-22-047-13W4	0	WATER INJECTOR
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 14-28-47-13	134006	100142804713W400	14-28-047-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-2-48-13	200780	100160204813W404	16-02-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-8-49-13	313585	100160804913W400	16-08-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-9-49-13	99008	100160904913W400	16-09-049-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-11-48-13	126540	100161104813W402	16-11-048-13W4	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-16-48-13	187219	100161604813W400	16-16-048-13W4	0	PUMPING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-22-47-13	286528	100162204713W402	16-22-047-13W4	0	PUMPING GAS
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 16-32-47-13	91394	100163204713W403	16-32-047-13W4	0	PUMPING GAS

# Viking Field - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS					
ENERCAPITA SWEET SUSPENDED											
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-15-48-13	165606	100011504813W400	01-15-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-21-48-13	186937	100012104813W402	01-21-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-28-48-12	78124	100012804812W400	01-28-048-12W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 4-6-46-17	101887	100040604617W400	04-06-046-17W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 4-6-46-17	101887	100040604617W402	04-06-046-17W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 4-16-49-13	332959	100041604913W400	04-16-049-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 6-14-48-13	48999	100061404813W402	06-14-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 6-19-52-13	101708	100061905213W400	06-19-052-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 6-19-52-13	332189	102061905213W400	06-19-052-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 6-28-49-13	255065	100062804913W402	06-28-049-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 7-15-48-13	70077	100071504813W402	07-15-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 7-16-48-12	136132	100071604812W400	07-16-048-12W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 7-27-47-14	44631	100072704714W402	07-27-047-14W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 8-18-49-13	315596	100081804913W402	08-18-049-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 10-19-49-13	55777	100101904913W400	10-19-049-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM BRUCE 10-33-48-14	45290	100103304814W400	10-33-048-14W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM PINEDALE 11-10-54-16	73399	100111005416W405	11-10-054-16W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM PINEDALE 11-10-54-16	73399	100111005416W406	11-10-054-16W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-20-49-14	43386	100112004914W400	11-20-049-14W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-21-48-13	291869	102112104813W400	11-21-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 11-21-48-13	291869	102112104813W402	11-21-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM UKALTA 11-22-56-16	79942	100112205616W403	11-22-056-16W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 12-32-48-13	312631	102123204813W400	12-32-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 13-8-52-13	99178	100130805213W402	13-08-052-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM WARWICK 13-8-52-13	99178	100130805213W403	13-08-052-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 14-22-48-12	83778	100142204812W402	14-22-048-12W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM INLAND 16-5-51-15	122882	100160505115W402	16-05-051-15W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-11-48-13	126540	100161104813W400	16-11-048-13W4	0	SUSPENDED GAS					
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 16-22-47-13	286528	100162204713W400	16-22-047-13W4	0	SUSPENDED GAS					

### Viking Field - Sweet Wells

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
	ENER	CAPITA SWE	ET DRILLED			
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-21-48-13	186937	100012104813W403	01-21-048-13W4	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 1-28-48-12	78124	100012804812W402	01-28-048-12W4	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 5-12-48-13	272059	100051204813W403	05-12-048-13W4	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM HOLM 10-26-45-17	170258	100102604517W400	10-26-045-17W4	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 13-16-48-13	125025	100131604813W402	13-16-048-13W4	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	WHITE RAM VIK-KINS 14-22-48-12	83778	100142204812W400	14-22-048-12W4	0	DRILLED AND CASED

#### LEGEND

Other: UWI=Unique Well Identifier



### Viking Field - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
				ENERCAPITA SWEE	Τ ΟΡΕ	RATING								
ENERCAPITA ENERGY LTD.	-	07-26-051-15W4	WE	04-25-051-15W4	CS	10442	2	NG	168.3	0.79	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	13-31-055-14W4	WE	11-31-055-14W4	PL	15400	14	NG	114.3	0.49	3.2	3,720	0	0
ENERCAPITA ENERGY LTD.	-	02-27-051-15W4	WE	01-27-051-15W4	PL	17199	27	NG	88.9	0.55	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	01-15-048-13W4	WE	02-15-048-13W4	PL	18967	1	NG	114.3	0.36	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	07-15-048-13W4	WE	15-10-048-13W4	PL	18967	3	NG	88.9	1.10	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-28-047-13W4	ΡL	14-28-047-13W4	WE	19411	4	NG	114.3	0.77	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-05-051-15W4	WE	16-05-051-15W4	PL	19816	22	NG	88.9	0.48	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	13-08-052-13W4	WE	06-10-052-13W4	PL	20227	З	NG	114.3	4.87	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	15-08-048-13W4	WE	16-17-048-13W4	PL	21444	1	NG	114.3	1.66	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	13-16-048-13W4	WE	11-16-048-13W4	CS	21444	2	NG	114.3	0.35	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-11-048-13W4	WE	15-11-048-13W4	PL	21444	3	NG	114.3	0.29	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-17-048-13W4	ΡL	13-16-048-13W4	PL	21444	6	NG	114.3	0.73	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	15-11-048-13W4	ΡL	15-10-048-13W4	PL	21444	7	NG	114.3	1.81	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	15-10-048-13W4	WE	11-16-048-13W4	PL	21444	8	NG	114.3	2.48	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	14-28-047-13W4	WE	15-08-048-13W4	PL	21444	9	NG	114.3	5.20	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-32-047-13W4	WE	13-33-047-13W4	ΡL	21444	10	NG	114.3	0.43	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	14-22-047-13W4	WE	10-28-047-13W4	PL	21444	15	NG	114.3	2.02	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	06-14-048-13W4	WE	14-11-048-13W4	PL	21444	17	NG	114.3	0.67	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	01-21-048-13W4	WE	11-16-048-13W4	CS	21444	18	NG	114.3	1.43	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	04-23-048-13W4	WE	06-14-048-13W4	PL	21444	19	NG	114.3	1.50	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-02-048-13W4	WE	16-11-048-13W4	PL	21444	22	NG	114.3	1.70	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-36-048-14W4	PL	10-32-048-13W4	PL	21444	23	NG	114.3	2.90	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	08-01-049-14W4	GP	16-36-048-14W4	PL	21444	24	NG	168.3	0.56	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-21-049-13W4	WE	09-17-049-13W4	PL	21444	25	NG	114.3	2.13	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-24-049-14W4	WE	01-18-049-13W4	PL	21444	27	NG	114.3	3.14	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-29-049-13W4	PL	10-21-049-13W4	PL	21444	28	NG	114.3	1.92	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	11-20-049-13W4	WE	10-17-049-13W4	PL	21444	29	NG	114.3	1.61	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	11-16-049-13W4	WE	10-17-049-13W4	PL	21444	30	NG	114.3	1.21	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-19-049-13W4	WE	04-19-049-13W4	PL	21444	34	NG	88.9	1.30	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	05-12-048-13W4	WE	07-11-048-13W4	PL	21444	36	NG	88.9	0.75	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-22-047-13W4	WE	14-22-047-13W4	PL	21444	39	NG	114.3	0.91	3.2	4,960	0	0

### Viking Field - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	16-09-049-13W4	WE	11-16-049-13W4	PL	21444	40	NG	88.9	1.53	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	07-29-049-13W4	WE	10-29-049-13W4	PL	21444	41	NG	114.3	0.48	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-08-049-13W4	WE	10-17-049-13W4	PL	21444	43	NG	88.9	1.52	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	08-18-049-13W4	WE	08-18-049-13W4	PL	21444	44	NG	88.9	0.11	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	09-17-049-13W4	PL	08-01-049-14W4	GP	21444	49	NG	114.3	5.59	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-32-048-13W4	PL	10-16-048-13W4	PL	25360	6	NG	114.3	5.52	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	16-17-048-13W4	WE	14-16-048-13W4	PL	25360	8	NG	88.9	1.10	2.1	4,960	0	0
ENERCAPITA ENERGY LTD.	-	07-16-048-13W4	ΡL	10-16-048-13W4	PL	25360	16	NG	114.3	0.23	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-08-053-12W4	WE	10-08-053-12W4	PL	48906	1	NG	60.3	0.17	5.5	4,970	0	0
ENERCAPITA ENERGY LTD.	-	10-16-048-13W4	ΡL	02-22-048-13W4	WE	53876	1	NG	114.3	2.30	2.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	11-16-048-13W4	CS	11-16-048-13W4	PL	54799	1	NG	114.3	0.06	5.5	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-15-048-16W4	PL	09-08-048-15W4	PL	56243	1	NG	168.3	7.44	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	14-15-048-13W4	WE	13-15-048-13W4	PL	56244	1	NG	88.9	0.55	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	C	09-19-048-16W4	ΡL	10-15-048-16W4	PL	57157	1	NG	168.3	4.88	4.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-17-049-13W4	WE	10-17-049-13W4	PL	63134	1	NG	114.3	0.02	6.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	08-35-087-07W6	BT	04-36-087-07W6	WE	63392	1	SW	124.0	0.49	14.5	14,890	0	Р



### Viking Field - Sweet Pipelines

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
				ENERCAPITA SWEET	DISCO	ONTINUED								
ENERCAPITA ENERGY LTD.	-	02-28-055-15W4	ΒE	10-21-055-15W4	BE	15400	13	NG	88.9	0.90	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	01-01-046-18W4	ΒE	16-36-045-18W4	BE	19963	2	NG	114.3	0.60	2.8	0	0	D
ENERCAPITA ENERGY LTD.	-	11-16-048-13W4	BE	08-01-049-14W4	BE	21444	5	NG	114.3	7.53	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	16-18-048-13W4	BE	15-18-048-13W4	BE	21444	16	NG	114.3	0.40	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	14-22-048-12W4	BE	07-22-048-12W4	BE	21444	35	NG	88.9	0.55	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	07-16-048-12W4	BE	12-15-048-12W4	BE	21444	38	NG	88.9	0.96	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	04-16-049-13W4	BE	10-17-049-13W4	BE	21444	46	NG	88.9	1.24	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	01-28-048-12W4	BE	06-27-048-12W4	BE	21444	48	NG	88.9	0.80	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	01-24-051-15W4	ΒE	04-25-051-15W4	BE	27619	1	NG	88.9	2.30	3.2	0	0	D
ENERCAPITA ENERGY LTD.	C	11-22-047-13W4	BE	14-22-047-13W4	BE	45801	1	OE	88.9	0.49	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	06-28-049-13W4	BE	07-28-049-13W4	BE	55372	1	NG	114.3	0.23	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	14-09-048-13W4	ΒE	14-09-048-13W4	PL	55738	1	NG	88.9	0.10	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	04-06-046-17W4	BE	01-01-046-18W4	BE	56242	1	NG	114.3	0.60	2.8	0	0	D
ENERCAPITA ENERGY LTD.	-	11-20-049-14W4	BE	16-19-049-14W4	BE	57082	1	NG	88.9	0.71	3.2	0	0	D

#### LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater

MS=Meter Station PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals RE=Reservoir UG=Underground Cap or Tie-in

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent

SG=Sour Gas SW=Salt Water NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled

S=Suspended R=Removed X=Not AER Regulated

Other: Wall=Wall Thickness OD=Outside Diameter

### Viking Field - Tanks / Bullets

FACILITY / LOCATION	SUBSTANCE	NO. OF TANKS	TANK VOLUME	ECCC REGISTRATION REQUIRED? <sup>(1)</sup>	ECCC ERP REQUIRED?	EPZ (km)
11-16-048-13W4M	Methanol	1	500 Gal	No	No	
Gas Plant	Produced Salt Water	1	250 bbl	No	No	

<sup>(1)</sup> E2 Schedules 2 only.

<sup>(2)</sup> E2 Schedules 2, 3, 4 and 5.

#### LEGEND

Other: EPZ=Emergency Planning Zone



### **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

#### Primary Incident Command Post

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### Staging Areas

Staging area (s) would be established at the nearest Plant or Battery at the time of the incident.

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

#### **KEY RESPONSE PERSONNEL**

#### Field Personnel

Darin McLarty	North Area Superintendent	Cell:	780-834-7004
Chris Wurz	Area Foreman	Cell:	780-834-6006
Trevor Blake	Area Pipeline Integrity	Cell:	780-772-2555
Refer to the "Response Teal	ms Phone List" yellow tab, behind the Section 2.0:	Roles and Res	ponsibilities blue tab

#### **OPERATIONS SUMMARY**

Enercapita owns and operates sweet and sour oil and gas wells, with associated pipelines and multiple facilities in their Worsley field, located in Clear Hills County, northwest of Worsley, Alberta.

Gas is processed and sweetened at the Worsley 08-21-87-09 W6M Gas Plant, with sales gas pipelined to TC Energy's 05-22-87-09 W6M meter station.

Sour oil production is treated at the Worsley 08-21-87-09 W6M Oil Battery, then trucked to Tervita. Produced waste is trucked to Newalta or Enercapita's Boundary Lake Facility. Sour gas may also go to CNRL through their 11-08-88-10 W6M header.

The 08-35-87-07 W6M Oil Battery is a crude oil multi-well proration battery, where solution gas flows to the Sydco Energy (Orphan Well Association) for further processing and oil is trucked to Tervita's 09-10-70-10 W6M terminal. Produced water is piped to the 07-22-87-07 W6M disposal well. The 08-35 battery also accepts third party oil / condensate at the battery.

#### **EPZ** Information

The maximum H<sub>2</sub>S concentration for the wells is 2.93% with a maximum EPZ of 100 m.

The maximum H<sub>2</sub>S concentration for the pipelines is 0.99%, with a maximum EPZ of 350 m.

#### **On-Site Storage**

Refer to the EPZ Calculation tables in this section for a list of on-site storage. Refer to the yellow Worsley 08-21-87-09 W6M Gas Plant tab for a list of CEPA regulated on-site storage.

#### **Closest Major Urban Centre**

The town of Fairview is approximately 100 km southwest of the field and has a population of +/- 2,817. The hamlet of Worsley is within the field and has a population of +/- 28.

Hydrology Clear River, Lathrop Creek, Notikewin River, Slims Lake and various unnamed creeks and water bodies. Refer to the map for more information.

#### Highways / Rail

No highways have been identified within the field. Clear Prairie Road runs northwest / southeast through the EPZ.

#### Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

### SAFETY EQUIPMENT

**Operator / Truck Safety Equipment** Each field operator's truck contains the following: 20lb fire extinguisher, first aid kid, PPE, flashlight, portable  $H_2S$  detector, and a personal 4 head monitor. Nearby locations with safety equipment are listed below:

Item	Quantity / Location
Fire Extinguishers - various sizes	Throughout field & company vehicles
First aid kit	1 @ 08-21-87-09 W6M Gas Plant
SCBA	3 @ 08-21-87-09 W6M Gas Plant 2 @ 04-06-88-09 W6M Battery 2 @ 16-15-88-10 W6M Battery 3 @ 09-11-88-10 W6M Battery 2 @ 16-36-86-10 W6M Battery
Stretcher	1 @ 08-21-87-09 W6M Gas Plant
Road Block Kits (shared)	3 @ 08-21-87-09 Gas Plant

#### Notification

The field has some assets on SCADA (remote monitoring) at various locations in the area. The pipelines are protected from over-pressure by ESD valves and by control and relief valves in the wellsite equipment packages. Operators monitor the wells and facilities on a daily basis. Process alarms, including high level tank alarms, go to a callout centre which alerts operators on their phones.

#### Communications

Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters

#### Roadblock Kits

Roadblock locations will be determined at the time of the incident. Road block kits contain: Safety vests, flashlight, road block signs, media / landowner statement cards, pen, clipboards and road block boards.

#### Ignition Equipment

Auto-ignition equipment is attached to all flare stacks.

In the event that ignition must take place Enercapita will contact an Ignition Service support company. Refer to the support services section.

\*\* If any of the above safety equipment is insufficient, Enercapita Energy Corp. personnel will contact a local safety company who will be asked to provide additional equipme

#### EMERGENCY SERVICES Note: All numbers, unless otherwise indicated, are 24 hours

Ambulance / Fire / RCMP 911 STARS Air Ambulance 888-888-4567 \*Worsley Gateway Inn has a helicopter landing pad on site that can be used by STARS. Refer to Reception Centres for location and contact information Hospitals Central Peace Health Complex - Spirit River 780-864-3993 780-835-6100 Fairview Health Complex Worsley Community Health Centre 780-685-3752 800-332-1414 Alberta Poison and Drug Information Service (PADIS) Electrical Distribution ATCO Electric - Alberta-wide 800-668-5506 EPCOR Utilities - Alberta-wide 780-412-4500 Fortis Alberta - Alberta-wide 866-717-3113 **Utility Safety Partners** 800-242-3447 www.utilitysafety.ca

erta Energy Regulator (AER) Vildfire Reporting e call number for regulatory agency, spill reporting and Alberta Environment & F	Parks (lands,	800-222-6514* 310-FIRE(3473) fish, forest, wildlife).
ar Hills County Crystal Dei, Deputy Director of Emergency Management	Admin: Cell:	780-685-3925 780-835-9527
erta Health Services (AHS) - Z5 North		844-755-1788
erta Emergency Management Agency (AEMA) Jorthwest - Ian Fox, EMFO	Cell:	866-618-2362 780-646-0180
erta Boilers Safety Association (ABSA)		780-437-9100
erta Safety Services - Electrical Branch	Admin:	866-421-6929
erta Ministry of Transportation		780-638-1128
erta Environmental and Dangerous Goods Emergencies (I	EDGE)	800-272-9600
rkers' Compensation Board (WCB)		866-922-9221
NUTEC (Call collect)		888-226-8832
Traffic Control IAV Canada* 'ransport Canada** If light information or a NOTAM advisory is required, contact the NAV Canada Avi 'If a NOTAM is required for airspace closure, contact the Transport Canada Avi AVOPS)	Flight Informa iation Operat	866-541-4102 877-992-6853 ation Centre (FIC) ions Centre
partment of Fisheries and Oceans Canada (DFO)		780-422-4505
vironment and Climate Change Canada Aeteorological Services		780-951-8907

GOVERNM	MENT AGENCIES	_	SUPPORT SERVICES	
Note: All numbers, unle	ss otherwise indicated, are 24 hours.		Note: All numbers, unless otherwise indicated, are 24 hours.	
Alberta Energy Regulator (AER)		800-222-6514*	Mobile Air Monitoring*	
	ling and Alborta Environment & Darlin (	310-FIRE(3473)	Firemaster Oilfield Services - Grande Prairie	877-342-347
<ul> <li>One call number for regulatory agency, spill report</li> </ul>	ing and Alberta Environment & Parks (lands,	fish, forest, wildlife).	HSE Integrated - Red Deer	888-346-826
Clear Hills County	Admin:	780-685-3925	I rojan Satety Services - Grande Prairie	811-185-955
Crystal Dei, Deputy Director of Eme	rgency Management Cell:	/80-835-952/	Oilfield Fire Fighting / Safety Contractors*	
Alberta Health Services (AHS) - Z5 N	lorth	844-755-1788	Firemaster Oilfield Services - Grande Prairie	877-342-347
Alberta Emergency Management Ag	ency (AEMA)	866-618-2362	HSE Integrated - Grande Prairie	888-346-826
Northwest - Ian Fox, EMFO	Cell:	780-646-0180	United Safety - Grande Prairie	800-432-180
Alberta Boilers Safety Association (	ABSA)	780-437-9100	I rojan Safety Services - Grande Prairie	8//-/85-955
		100-431-3100	Well Control Specialists*	
Alberta Safety Services - Electrical E	Branch Admin:	866-421-6929	Capstone Oilfield Services - Prov-Wide	866-347-391
Alberta Ministry of Transportation		780-638-1128	Firemaster Oilfield Services - Grande Prairie	877-342-347
Alberta Environmental and Dangerou	s Goods Emergencies (EDGE)	800-272-9600	United Safety - Grande Prairie	800-432-180
Workers' Compensation Board (WC	B)	866-922-9221	Ignition Services*	
	-,	000 000 0000	HSE Integrated - Grande Prairie	888-346-826
CANUTEC (Call collect)		888-226-8832	Firemaster Oilfield Services - Grande Prairie	877-342-347
Air Traffic Control			Superior Fire Control - Grande Prairie	877-882-003
NAV Canada*		866-541-4102	Roadblock Services (kits/personnel)*	
I ransport Canada** * If flight information or a NOTAM advisory is rea	wired contact the NAV Canada Elight Inform	877-992-6853	HSE Integrated - Grande Prairie	888-346-826
** If a NOTAM is required for airspace closure, c	ontact the Transport Canada Aviation Opera	tions Centre	Trojan Safety Services - Grande Prairie	877-785-95
(AVOPS)			Firemaster Oilfield Services - Grande Prairie (kits only)	877-342-347
Department of Fisheries and Oceans	s Canada (DFO)	780-422-4505	Bus Transportation*	
Environment and Climate Change C	anada		Northern Express - Peace River	780-926-080
Meteorological Services		780-951-8907	Diversified Transportation - Fort McMurrav	780-743-224
			* Due to response time, dispatch support services at Level 1 Emergency. Response times	vary (1 - 8 hou
			depending on location where support is coming from.	
			Helicopter Companies*	
AREA USE	RS / TRANSIENTS		Heli Source Ltd Grande Prairie	855-876-57
Note: All numbers, unle	ss otherwise indicated, are 24 hours.		Canadian Helicopters - Grande Prairie	780-532-204
			Bailey Helicopters - Fort St. John (will respond to Alberta)	250-785-251
Dil and Gas		000 740 0550	<ul> <li>If required, a helicopter with a loud haller should be requested.</li> </ul>	
AICO Gas And Pipelines Ltd.		866-716-8550	Emergency Response Assistance Canada (ERAC)	800-265-02
Canadian Natural Resources Ltd		888-878-3700	(ERAP 2-0010-448)	
Canex Energy Inc		866-710-3723	Fmergency Response Management	
Crescent Point Energy Corp.		888-799-0043	H <sub>2</sub> Safety Services Inc Calgary	403-212-233
Direct Oil & Gas Inc.		403-278-0489	Toll Free	888-216-233
North Peace Gas Co-Operative Ltd.		780-835-4138		
TC Energy		888-982-7222	Spill Response / Environmental Services	700 025 270
Frappers			Brian's Pressure Service Ltd Fairview	780-835-838
Trapper ID	Name	Number	Dig Rite - Fairview	780-835-396
1457	Garry Wasylciw	780-685-2492	Drive Logistics Inc Peace River	780-624-409
2005	Herb Bean Kovin Noudorf	780 834 8012	HD Services Ltd Charlie Lake	250-263-437
2035	Kurt Lund	780-685-3036	Ridgeline Canada Inc Grande Prairie	866-574-792
2226	Pat Lund	780-685-2501	Tempest Energy Services Ltd Goodlow	250-781-35
2460	Daniel Rossworm	780-685-2512	X-cel Energy Services Ltd High Prairie	780-536-655
2485	Glen Wasylciw	780-685-3946	Western Canadian Spill Services (WCSS) - COOP 8* 866-541-888	3
Guides and Outfitters - Wildlife Mana	agement Units (WMU) #525 & #5	26	*See WCSS's website (http://www.wcss.ab.ca) for more information, equipment details, locations	, and directions.
Company	Name	Number	Percention Contrac	
101294388 Saskatchewan Ltd.	Kelly Udell	780-722-0243	Worsley Gateway Inn	780-685-80
Alberta Racks N Tracks Outfitting	Ken Steinbru	780-882-6664	355 Highway 726, Worsley, AB	100-000-002
Alberta Wilderness Adventures	Russell Moore	936-225-3330	Hillview Inn	780-835 24
Bear Canyon Outfitters	Herb Bean	100-005-2509	10704 - 113 Street, Fairview AB	100-033-240
CIS	Trevor Manteufel	780-625-6736		
Field Quarter	Sean Snider	780-203-0909		
Gerard Van Den Boogaard	Russell Moore	936-225-3330		
Green Island Outfitters Ltd.	Devin Aherne	905-572-0262	SURFACE DEVELOPMENT INFORMAT	ON
Heavy Horn Holdings Ltd.	Adam Luka	780-834-0152		
JZS Enterprise Ltd.	Justin Redlick	412-999-8792	There is a total of 0 surface douglasments within the field. These issue	
Lock N Load Outtitting Ltd.	William Klyne	/80-219-2694	residences 1 vacant resident 2 businesses 2 tranner cabins and 1 sources	sonally mann
wustang Kanch & Guides		100-000-2009	fire lookout tower	Jonany mailin
Trophy North Outfitters	Larry Smith	780-685-2443	Note: the detailed Resident Information List can be found habind the white "Confide	ential Informatic
Udell'S Guiding And Outfitting	Justin Redlick	306-580-4868	tab.	maar mionnalit
Wild Alberta High Country Outfitters	Trevor Manteufel	780-625-6736		
Xcalibrr Hunts	Gerard Van Den Boogaard	226-622-0464	Bus Transportation	
Grazing Lease			Whispering Pines Ski Hill may require bus transportation in the event of	of an incident.
Grazing ID	Name	Number	Refer to "Bus Transportation" under Support Services.	
GRL800549	Sheldon Schmaltz	780-685-3336	The Whispering Pines Ski Hill is typically open to the public s	easonally fro
GRL37871, GRP788108	No Contact Required	Unavailable	November to April, (0800-1700 daily). There can be up to 450 user	s (including 2
Forestry Management Units / Agreen	nents		employees), during peak times/weekends.	
P19 - Mercer Peace River Pulp Ltd.	Admin:	780-624-7000	For more information, refer to #OJ523-A in the detailed Resident Information I	ist, found behi
P02 - See Alberta Energy Regulator	(AER)	800-222-6514	the white "Confidential Information" tab.	

WORSLEY

June 2023

www.h2safetv.c



### Worsley Field - Facilities

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA OPER	ATING						
ENERCAPITA ENERGY LTD.	ENERCAPITA 01-01-088-10W6	F34267	01-01-088-10W6	56.5970441	-119.4418585	56° 35' 49.358"	-119° 26' 30.690"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 01-01-088-10W6	F34267	01-01-088-10W6	56.5970441	-119.4418585	56° 35' 49.358"	-119° 26' 30.690"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 01-21-088-10W6	F44771	01-21-088-10W6	56.6405129	-119.5187280	56° 38' 25.846"	-119° 31' 7.420"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 02-02-088-07W6	F44311	02-02-088-07W6	56.5976789	-118.9935119	56° 35' 51.644"	-118° 59' 36.642"	SA	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 02-06-088-09W6	F26996	02-06-088-09W6	56.5970300	-119.4216766	56° 35' 49.308"	-119° 25' 18.035"	SA	UN	0.10
ENERCAPITA ENERGY LTD.	ENERCAPITA 02-07-088-09W6	F44354	02-07-088-09W6	56.6134000	-119.4240000	56° 36' 48.240"	-119° 25' 26.4"	SA	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 03-01-088-10W6	F39503	03-01-088-10W6	56.5969000	-119.4520000	56° 35' 48.840"	-119° 27' 7.199"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 03-01-088-10W6	F39503	03-01-088-10W6	56.5969000	-119.4520000	56° 35' 48.840"	-119° 27' 7.199"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 03-29-087-09W6	F40344	03-29-087-09W6	56.5701602	-119.3992085	56° 34' 12.576"	-119° 23' 57.150"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 03-36-087-07W6	F35543	03-36-087-07W6	56.5837156	-118.9785424	56° 35' 1.376"	-118° 58' 42.752"	SA	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-12-087-09W6	F37456	04-12-087-09W6	56.5248947	-119.3037400	56° 31' 29.620"	-119° 18' 13.464"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-13-088-10W6	F34060	04-13-088-10W6	56.6254060	-119.4594645	56° 37' 31.461"	-119° 27' 34.072"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-18-088-09W6	F45428	04-18-088-09W6	56.6249249	-119.4372440	56° 37' 29.729"	-119° 26' 14.078"	SA	UN	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 04-18-088-09W6	F45428	04-18-088-09W6	56.6249249	-119.4372440	56° 37' 29.729"	-119° 26' 14.078"	SA	UN	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 05-08-088-10W6	F47654	05-08-088-10W6	56.6145607	-119.5701115	56° 36' 52.418"	-119° 34' 12.401"	SA	UN	0.22
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-04-088-09W6	F46400	06-04-088-09W6	56.6007836	-119.3754266	56° 36' 2.820"	-119° 22' 31.535"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	WORSLEY 06-13-88-10 W6	W 0333572	06-13-088-10W6	56.6300900	-119.4546130	56° 37' 48.324"	-119° 27' 16.606"	BT	AC	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-25-087-07W6	F31001	06-25-087-07W6	56.5720070	-118.9753339	56° 34' 19.225"	-118° 58' 31.202"	SA	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-30-087-09W6	F34746	06-30-087-09W6	56.5729129	-119.4249235	56° 34' 22.486"	-119° 25' 29.724"	BT	UN	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 06-30-087-09W6	F34746	06-30-087-09W6	56.5729129	-119.4249235	56° 34' 22.486"	-119° 25' 29.724"	BT	UN	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 07-06-088-09W6	F33876	07-06-088-09W6	56.6027721	-119.4242945	56° 36' 9.979"	-119° 25' 27.460"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 07-06-088-09W6	F33876	07-06-088-09W6	56.6027721	-119.4242945	56° 36' 9.979"	-119° 25' 27.460"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 07-12-088-10W6	F34061	07-12-088-10W6	56.6152269	-119.4484744	56° 36' 54.816"	-119° 26' 54.507"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	WORSLEY 7-22	F17261	07-22-087-07W6	56.5573929	-119.0220481	56° 33' 26.614"	-119° 1' 19.373"	IP	AC	0.10
ENERCAPITA ENERGY LTD.	WORSLEY 7-22	F17261	07-22-087-07W6	56.5573929	-119.0220481	56° 33' 26.614"	-119° 1' 19.373"	IP	AC	0.10
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-03-088-09W6	F36959	08-03-088-09W6	56.6013679	-119.3340670	56° 36' 4.924"	-119° 20' 2.641"	BT	UN	0.01
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-09-088-10W6	F46507	08-09-088-10W6	56.6145739	-119.5188492	56° 36' 52.466"	-119° 31' 7.857"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-12-087-09W6	F36646	08-12-087-09W6	56.5295764	-119.2793467	56° 31' 46.475"	-119° 16' 45.648"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-12-087-09W6	F36646	08-12-087-09W6	56.5295764	-119.2793467	56° 31' 46.475"	-119° 16' 45.648"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-14-088-10W6	F45423	08-14-088-10W6	56.6276044	-119.4664344	56° 37' 39.375"	-119° 27' 59.163"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 08-16-087-09W6	F36162	08-16-087-09W6	56.5433488	-119.3637369	56° 32' 36.055"	-119° 21' 49.452"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	WORSLEY 08-21-087-09W6 IF	F17302	08-21-087-09W6	56.5573796	-119.3614891	56° 33' 26.566"	-119° 21' 41.360"	IP	AC	0.26
ENERCAPITA ENERGY LTD.	WORSLEY 08-21-087-09W6 IF	F17302	08-21-087-09W6	56.5573796	-119.3614891	56° 33' 26.566"	-119° 21' 41.360"	IP	AC	0.26

### Worsley Field - Facilities

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
ENERCAPITA ENERGY LTD.	WORSLEY 8-21-87-9W6 IF	F17303	08-21-087-09W6	56.5573796	-119.3614891	56° 33' 26.566"	-119° 21' 41.360"	IP	AC	0.26
ENERCAPITA ENERGY LTD.	NEWPORT WORSLEY GGS 8-21	NA	08-21-087-09W6	56.5586255	-119.3630668	56° 33' 31.051"	-119° 21' 47.040"	GS	AC	0.26
ENERCAPITA ENERGY LTD.	COMPTON PETROLEUM CORPORATION	F35092	08-31-087-09W6	56.5877332	-119.4137176	56° 35' 15.839"	-119° 24' 49.383"	CS	AC	0.26
ENERCAPITA ENERGY LTD.	MILLARVILLE WORSLEY 8-35	F17297	08-35-087-07W6	56.5862702	-118.9878030	56° 35' 10.572"	-118° 59' 16.090"	BT	AC	0.10
ENERCAPITA ENERGY LTD.	WORSLEY EAST 8-35 TO 16-12-87-9W6	F17297	08-35-087-07W6	56.5862702	-118.9878030	56° 35' 10.572"	-118° 59' 16.090"	GS	AC	0.10
ENERCAPITA ENERGY LTD.	MILLARVILLE WORSLEY 8-35	F17297	08-35-087-07W6	56.5862702	-118.9878030	56° 35' 10.572"	-118° 59' 16.090"	BT	AC	0.10
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-22-088-10W6	F39713	09-22-088-10W6	56.6502697	-119.4933303	56° 39' 0.970"	-119° 29' 35.989"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-22-088-10W6	F39713	09-22-088-10W6	56.6502697	-119.4933303	56° 39' 0.970"	-119° 29' 35.989"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 09-36-087-10W6	F40020	09-36-087-10W6	56.5904120	-119.4413687	56° 35' 25.483"	-119° 26' 28.927"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-17-087-09W6	F35025	10-17-087-09W6	56.5452572	-119.3971479	56° 32' 42.925"	-119° 23' 49.732"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-29-087-09W6	F33852	10-29-087-09W6	56.5764892	-119.3961567	56° 34' 35.361"	-119° 23' 46.164"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-29-087-09W6	F33852	10-29-087-09W6	56.5764892	-119.3961567	56° 34' 35.361"	-119° 23' 46.164"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-30-087-09W6	F35231	10-30-087-09W6	56.5756968	-119.4221060	56° 34' 32.508"	-119° 25' 19.581"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 10-30-087-09W6	F35231	10-30-087-09W6	56.5756968	-119.4221060	56° 34' 32.508"	-119° 25' 19.581"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 11-11-087-09W6	F33797	11-11-087-09W6	56.5306539	-119.3189950	56° 31' 50.354"	-119° 19' 8.382"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 11-11-087-09W6	F33797	11-11-087-09W6	56.5306539	-119.3189950	56° 31' 50.354"	-119° 19' 8.382"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 11-16-087-09W6	F35360	11-16-087-09W6	56.5464692	-119.3727338	56° 32' 47.289"	-119° 22' 21.841"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 11-33-087-09W6	F36419	11-33-087-09W6	56.5890469	-119.3721426	56° 35' 20.568"	-119° 22' 19.713"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-16-088-10W6	F44403	12-16-088-10W6	56.6337629	-119.5398115	56° 38' 1.546"	-119° 32' 23.321"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-16-088-10W6	F44403	12-16-088-10W6	56.6337629	-119.5398115	56° 38' 1.546"	-119° 32' 23.321"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-17-086-09W6	F36981	12-17-086-09W6	56.4578669	-119.3965690	56° 27' 28.320"	-119° 23' 47.648"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-17-086-09W6	F36981	12-17-086-09W6	56.4578669	-119.3965690	56° 27' 28.320"	-119° 23' 47.648"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-25-086-09W6	F47231	12-25-086-09W6	56.4878509	-119.2916380	56° 29' 16.263"	-119° 17' 29.896"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 12-25-086-09W6	F47231	12-25-086-09W6	56.4878509	-119.2916380	56° 29' 16.263"	-119° 17' 29.896"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-04-088-09W6	F35475	13-04-088-09W6	56.6097962	-119.3806085	56° 36' 35.266"	-119° 22' 50.190"	SA	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-10-088-10W6	F44772	13-10-088-10W6	56.6216055	-119.5167315	56° 37' 17.779"	-119° 31' 0.233"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-10-088-10W6	F44772	13-10-088-10W6	56.6216055	-119.5167315	56° 37' 17.779"	-119° 31' 0.233"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-12-088-10W6	F45416	13-12-088-10W6	56.6217686	-119.4590746	56° 37' 18.366"	-119° 27' 32.668"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 13-17-087-09W6	F41640	13-17-087-09W6	56.5508788	-119.4090789	56° 33' 3.163"	-119° 24' 32.684"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	BIRCHCLIFF ENERGY LTD.	F45938	13-19-088-09W6	56.6508000	-119.4360000	56° 39' 2.880"	-119° 26' 9.600"	CS	AC	0.26
ENERCAPITA ENERGY LTD.	BIRCHCLIFF ENERGY LTD.	F45938	13-19-088-09W6	56.6508000	-119.4360000	56° 39' 2.880"	-119° 26' 9.600"	CS	AC	0.26
ENERCAPITA ENERGY LTD.	ENERCAPITA 14-10-088-10W6	F42544	14-10-088-10W6	56.6225404	-119.5084281	56° 37' 21.145"	-119° 30' 30.341"	SA	0	0.26
ENERCAPITA ENERGY LTD.	ENERCAPITA 14-10-088-10W6	F42544	14-10-088-10W6	56.6225404	-119.5084281	56° 37' 21.145"	-119° 30' 30.341"	SA	0	0.26
ENERCAPITA ENERGY LTD.	COMPTON PETROLEUM CORPORATION	F26507	14-29-087-09W6	56.5804523	-119.4000165	56° 34' 49.628"	-119° 24' 0.059"	CS	AC	0.26
ENERCAPITA ENERGY LTD.	ENERCAPITA 14-29-087-09W6	F17310	14-29-087-09W6	56.5806705	-119.3995197	56° 34' 50.413"	-119° 23' 58.270"	SA	UN	0.26
ENERCAPITA ENERGY LTD.	ENERCAPITA 14-32-087-09W6	F35058	14-32-087-09W6	56.5922445	-119.4012795	56° 35' 32.080"	-119° 24' 4.606"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 15-01-088-10W6	F30835	15-01-088-10W6	56.6089731	-119.4490252	56° 36' 32.303"	-119° 26' 56.490"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 15-16-087-09W6	F33884	15-16-087-09W6	56.5502744	-119.3686567	56° 33' 0.987"	-119° 22' 7.164"	SA	UN	0.22
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-02-087-09W6	F40287	16-02-087-09W6	56.5221891	-119.3059358	56° 31' 19.880"	-119° 18' 21.368"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-07-088-09W6	F45414	16-07-088-09W6	56.6224839	-119.4180803	56° 37' 20.942"	-119° 25' 5.089"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-12-087-09W6	F34316	16-12-087-09W6	56.5366928	-119.2794259	56° 32' 12.094"	-119° 16' 45.933"	BT	UN	0.09
ENERCAPITA ENERGY LTD.	BIRCHCLIFF ENERGY LTD.	F38025	16-15-088-10W6	56.6384781	-119.4946020	56° 38' 18.521"	-119° 29' 40.567"	CS	AC	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-15-088-10W6	F48415	16-15-088-10W6	56.6383385	-119.4945922	56° 38' 18.018"	-119° 29' 40.531"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-15-088-10W6	F48415	16-15-088-10W6	56.6383385	-119.4945922	56° 38' 18.018"	-119° 29' 40.531"	SA	UN	0.35
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-16-088-10W6	F44399	16-16-088-10W6	56.6369389	-119.5197120	56° 38' 12.980"	-119° 31' 10.963"	SA	UN	0.14
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-16-088-10W6	F44399	16-16-088-10W6	56.6369389	-119.5197120	56° 38' 12.980"	-119° 31' 10.963"	SA	UN	0.14

### **Worsley Field - Facilities**

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-18-086-09W6	F36465	16-18-086-09W6	56.4622870	-119.4005628	56° 27' 44.233"	-119° 24' 2.026"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-18-086-09W6	F36465	16-18-086-09W6	56.4622870	-119.4005628	56° 27' 44.233"	-119° 24' 2.026"	BT	UN	-
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-20-087-09W6	F34708	16-20-087-09W6	56.5649009	-119.3898244	56° 33' 53.643"	-119° 23' 23.367"	SA	UN	0.09
ENERCAPITA ENERGY LTD.	ENERCAPITA 16-32-087-09W6	F34325	16-32-087-09W6	56.5924063	-119.3895493	56° 35' 32.662"	-119° 23' 22.377"	BT	UN	0.14
ENERCAPITA ENERGY LTD.	WORSLEY 16-36 GAS PLANT	F31781	16-36-086-10W6	56.5063844	-119.4296440	56° 30' 22.983"	-119° 25' 46.718"	GP	AC	-
ENERCAPITA ENERGY LTD.	WORSLEY 16-36-086-10W6 GGS	F31781	16-36-086-10W6	56.5063844	-119.4296440	56° 30' 22.983"	-119° 25' 46.718"	GS	AC	-
ENERCAPITA ENERGY LTD.	WORSLEY 16-36 GAS PLANT	F31781	16-36-086-10W6	56.5063844	-119.4296440	56° 30' 22.983"	-119° 25' 46.718"	GP	AC	-
ENERCAPITA ENERGY LTD.	WORSLEY 16-36-086-10W602 OIL BATTERY	W 0299131	16-36-086-10W6	56.5056530	-119.4298240	56° 30' 20.350"	-119° 25' 47.366"	BT	AC	-
			ENERCAPITA SUSPE	ENDED						
ENERCAPITA ENERGY LTD.	COACHWOOD WORSLEY 2-2	NA	02-02-088-07W6	56.5976789	-118.9935119	56° 35' 51.644"	-118° 59' 36.642"	BT	S	
ENERCAPITA ENERGY LTD.	CANEX ET AL WORSLEY 2-13-088-10W6	W 0337906	02-13-088-10W6	56.6269350	-119.4467260	56° 37' 36.965"	-119° 26' 48.213"	BT	s	
ENERCAPITA ENERGY LTD.	MISSION WORSLEY 2-35-87-7W6	W 0343506	02-35-087-07W6	56.5840440	-118.9957380	56° 35' 2.558"	-118° 59' 44.656"	BT	s	
ENERCAPITA ENERGY LTD.	CANEX WORSLEY 5-7-88-9 W6 SWD	F32965	05-07-088-09W6	56.6140339	-119.4365963	56° 36' 50.522"	-119° 26' 11.746"	IP	S	
ENERCAPITA ENERGY LTD.	TALISMAN WORSLEY 5-24-88-10W6	F38313	05-24-088-10W6	56.6437000	-119.4600000	56° 38' 37.320"	-119° 27' 36.0"	BT	s	
ENERCAPITA ENERGY LTD.	WORSLEY 6-22-87-9	W 0160274	06-22-087-09W6	56.5586980	-119.3504020	56° 33' 31.312"	-119° 21' 1.447"	BT	s	
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 06-30-087-09W6	W 0329813	06-30-087-09W6	56.5729520	-119.4248560	56° 34' 22.627"	-119° 25' 29.481"	BT	S	
ENERCAPITA ENERGY LTD.	TERRA WORSLEY 00/08-27-086-09 W6/00	W 0333879	08-27-086-09W6	56.4850640	-119.3243250	56° 29' 6.230"	-119° 19' 27.57"	BT	S	
ENERCAPITA ENERGY LTD.	TERRA WORSLEY 00/08-27-086-09 W6/00	W 0333879	08-27-086-09W6	56.4850640	-119.3243250	56° 29' 6.230"	-119° 19' 27.57"	BT	s	
ENERCAPITA ENERGY LTD.	CLEARHILLS 11-13-88-10	W 0326353	11-13-088-10W6	56.6326970	-119.4520010	56° 37' 57.709"	-119° 27' 7.203"	BT	S	
ENERCAPITA ENERGY LTD.	CANEX FT CAL CLEARHILLS 11-13-88-10	W 0326353	11-13-088-10W6	56.6326970	-119.4520010	56° 37' 57.709"	-119° 27' 7.203"	BT	S	
ENERCAPITA ENERGY LTD.	CLEARHILLS 11-13-88-10	W 0326353	11-13-088-10W6	56.6326970	-119.4520010	56° 37' 57.709"	-119° 27' 7.203"	BT	s	
ENERCAPITA ENERGY LTD.	SYDCO INJECTION 11-22-87-7W6	F17263	11-22-087-07W6	56.5610046	-119.0286216	56° 33' 39.616"	-119° 1' 43.037"	IP	S	
ENERCAPITA ENERGY LTD.	WORSLEY E 11-22-087-7W600	F17263	11-22-087-07W6	56.5605252	-119.0255448	56° 33' 37.890"	-119° 1' 31.961"	BT	s	
ENERCAPITA ENERGY LTD.	INTRNTL COLIN WORSLEY	NA	11-22-087-07W6	56.5605252	-119.0255448	56° 33' 37.890"	-119° 1' 31.961"	GS	S	
ENERCAPITA ENERGY LTD.	AO & G WORSLEY 14-14	W 0165718	14-14-087-09W6	56.5487260	-119.3239590	56° 32' 55.413"	-119° 19' 26.252"	BT	s	
ENERCAPITA ENERGY LTD.	PCC WORSLEY 15-35-087	W 0060478	15-35-087-07W6	56.5930580	-118.9942590	56° 35' 35.008"	-118° 59' 39.332"	BT	S	
ENERCAPITA ENERGY LTD.	KETCH RES 102 WORSLEY 16-18-86-9W6/0	W 0350630	16-18-086-09W6	56.4614660	-119.4001710	56° 27' 41.277"	-119° 24' 0.615"	BT	S	
ENERCAPITA ENERGY LTD.	WORSLEY 103-16-36-86-10W6	W 0359289	16-36-086-10W6	56.5067610	-119.4306490	56° 30' 24.339"	-119° 25' 50.336"	BT	S	
ENERCAPITA ENERGY LTD.	WORSLEY 103-16-36-86-10W6	W 0359289	16-36-086-10W6	56.5067610	-119.4306490	56° 30' 24.339"	-119° 25' 50.336"	BT	S	

Facility EPZ's are assigned based on the largest EPZ of a sour pipeline entering or leaving the facility or an on-site sour well. For Environment Canada regulated storage EPZ's, please refer to the Tanks and Bullets page at the end of this section.

#### LEGEND

Facility: BT=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant

LH=Line Heater MS=Meter Station PS=Pump Station SA=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants

RS=Regulator Station MR=Meter and Regulator Station WP=Waste Plant TF=Tank Farm

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active

UN=Unknown NW=New RT=Retired PE=Permitted RC=Reclaimation Certified

Other: EPZ=Emergency Planning Zone



						H₂S					
LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.		LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	
				ERATING		(m3/s)					
		2107/0	100010109910W/600		0.04	0.0000	0.01	0.00	0.00	l aval na	
ENERCAPITA ENERGI LID.		226767	100010108810W000	01-01-000-10000	0.04	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		307/08	1000114088100000	01-14-000-10000	0.04	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		33/255	100031708709W000	01-17-007-0900	0.01	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD	BIRCHCLIEF HZ WORSLEY 4-21-88-10	1/2173	100012108810\/600	01-21-088-10//6	0.03	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD	BIRCHCLIEF 1-21H7 WORSLEY 4-21-00-10	116007	100042100010W000	01-21-088-10W6	0.64	0.0000	0.01	0.00	0.00		
	EEL WORSLEY 8-26-88-10	416604	100042000010W000	01-27-088-10W6	0.04	0.0004	0.01	0.00	0.00	Level na	
	BIRCHCLIEF 1-27 WORSLEY 8-28-88-10	444077	102082808810W600	01-27-088-10W6	0.42	0.0002	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIFF WORSLEY 11-32-87-9	216203	100113208709W600	01-31-087-09W6	0.04	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY I TD	BIRCHCLIFF WORSLEY 8-32-87-9	335118	100083208709W600	01-32-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-6-88-9	266571	102020608809W600	02-06-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-8-88-9	438629	100060808809W600	02-07-088-09W6	0.40	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-12-88-10	305612	100021208810W600	02-12-088-10W6	0.30	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-16-87-9	342351	100021608709W600	02-16-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 11-21-87-9	462183	100112108709W600	02-21-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	ENERCAPITA ENE 06-25-087-07-6	259175	100030608809W600	03-06-088-09W6	0.16	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 103 WORSLEY 4-6-88-9	395799	103040608809W600	03-06-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 3-29-87-9	424243	102032908709W600	03-29-087-09W6	0.04	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-32-87-9	331406	100133208709W600	04-05-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	COMPTON HZ WORSLEY 1-12-87-9	362497	100011208709W600	04-12-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-12-88-10	312118	100041208810W600	04-12-088-10W6	0.50	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-16-87-9	341618	100041608709W600	04-16-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-18-88-9	331369	100041808809W600	04-18-088-09W6	0.46	0.0004	0.01	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON ET AL WORSELY 4-21-87-9	171780	100042108709W600	04-21-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 4-23HZ WORSLEY 1-21-88-10	422988	100012108810W600	04-23-088-10W6	0.70	0.0006	0.02	0.00	0.01	Level na	FLOWING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-23-88-10	367747	100012308810W600	04-23-088-10W6	0.51	0.0011	0.03	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-28-87-9	275188	100042808709W600	04-28-087-09W6	0.14	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-29-87-9	397541	100042908709W600	04-29-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-6-88-9	266585	100050608809W600	05-06-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL WORSLEY 5-7-88-9	318927	100050708809W600	05-07-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-8 HZ CLEARH 1-8-88-10	464700	100010808810W600	05-08-088-10W6	0.33	0.0003	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ CLEARH 5-7-88-10	468364	100050708810W600	05-08-088-10W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-8 HZ CLEARH 8-8-88-10	465002	100080808810W600	05-08-088-10W6	0.34	0.0005	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-15HZ WORSLEY 1-15-88-10	435255	100011508810W600	05-15-088-10W6	0.34	0.0005	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-16-88-10	443826	100041608810W600	05-15-088-10W6	0.45	0.0005	0.02	0.00	0.01	Level na	PUMPING OIL

						H₂S					
LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.		LOCATION	(%)	RATE (m3/s)	(km)	(km)	(km)	LEVEL	
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-17-88-10	435516	100081708810W600	05-15-088-10W6	0.45	0.0004	0.01	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-16-87-9	339699	100051608709W600	05-16-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-19 HZ WORSLEY 1-19-88-9	454296	100011908809W600	05-19-088-09W6	0.34	0.0003	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-19 HZ WORSLEY 8-19-88-9	453613	100081908809W600	05-19-088-09W6	0.34	0.0007	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-20-87-9	374994	102082008709W600	05-20-087-09W6	0.06	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-24HZ WORSLEY 3-19-88-9	433397	100031908809W600	05-24-088-10W6	0.34	0.0008	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-24-88-10	352445	100042408810W600	05-24-088-10W6	0.47	0.0003	0.01	0.00	0.00	Level na	FLOWING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-28-87-9	169099	100122808709W600	05-28-087-09W6	0.21	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-29-87-9	169304	102082908709W600	05-28-087-09W6	0.20	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-29-87-9	320540	100052908709W600	05-29-087-09W6	0.08	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 5-29-87-9	434804	102052908709W600	05-29-087-09W6	0.04	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-6-88-9	282933	100060608809W600	06-06-088-09W6	0.11	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-11-88-10	322274	100061108810W600	06-11-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-28-87-9	169780	100032808709W600	06-28-087-09W6	0.09	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-28-87-9	162791	100062808709W600	06-28-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-29-87-9	179450	100062908709W600	06-29-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-32-87-9	333310	100063208709W600	06-32-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-32-87-9	333274	100073208709W600	06-32-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-6-88-9	361494	100070508809W602	07-06-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-6-88-9	326806	100080608809W600	07-06-088-09W6	0.19	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 7-12-88-10	312223	100071208810W600	07-12-088-10W6	0.50	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	MISSION O & G WORSLEY 7-22-87-7	25892	100072208707W600	07-22-087-07W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER DISPOSAL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ 102 WORSLEY 8-23-88-10	422642	102082308810W600	07-22-088-10W6	0.63	0.0009	0.03	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-28-87-9	319584	100072808709W600	07-28-087-09W6	0.18	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 7-29-87-9	319283	100072908709W600	07-29-087-09W6	0.08	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 7-30HZ WORSLEY 7-25-88-10	457859	100072508810W600	07-30-088-09W6	0.34	0.0008	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-1-88-10	250933	100080108810W600	08-01-088-10W6	0.06	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-9 HZ WORSLEY 1-10-88-10	457288	100011008810W600	08-09-088-10W6	0.30	0.0007	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-9 HZ WORSLEY 4-9-88-10	457216	100040908810W600	08-09-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-9 HZ WORSLEY 5-9-88-10	446912	100050908810W602	08-09-088-10W6	0.34	0.0005	0.02	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-9 HZ WORSLEY 8-10-88-10	446854	100081008810W600	08-09-088-10W6	0.36	0.0008	0.02	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	CANEX WORSLEY 8-11-88-10	311639	100081108810W602	08-11-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-12-87-9	358302	100051208709W602	08-12-087-09W6	0.01	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-21HZ WORSLEY 5-21-88-10	433445	100052108810W600	08-21-088-10W6	0.14	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 8-21-88-10	398310	100082108810W602	08-21-088-10W6	0.05	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 12-21-88-10	440733	100122108810W600	08-21-088-10W6	0.12	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL

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LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.	•	LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	0111100
ENERCAPITA ENERGY LTD	BIRCHCLIEF WORSLEY 5-19-88-9	421328	100051908809W600	08-23-088-10W6	0 40	(m3/s) 0.0009	0.03	0.00	0.02	l evel na	
ENERCAPITA ENERGY LTD	BIRCHCLIEF WORSLEY 8-23-88-10	344041	100082308810W602	08-23-088-10W6	0.42	0.0005	0.02	0.00	0.02	Level na	FLOWING OIL
ENERCAPITA ENERGY I TD	EFL WORSLEY 12-25-88-10	473043	100122508810W600	08-27-088-10W6	0.34	0.0002	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-30-87-9	400789	100083008709W600	08-30-087-09W6	0.01	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-30-87-9	400735	100093008709W600	08-30-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-31-87-9	190193	100083108709W600	08-31-087-09W6	0.13	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-31-87-9	255608	102083108709W600	08-31-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	ENERCAPITA WORSLEY 16-18-87-8	502218	100161808708W600	09-14-087-09W6	0.44	0.0010	0.03	0.00	0.02	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-15-88-10	400354	100091508810W603	09-15-088-10W6	0.33	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-15-88-10	411549	102121508810W600	09-15-088-10W6	0.60	0.0005	0.01	0.00	0.01	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-16-87-9	324907	100091608709W600	09-16-087-09W6	0.04	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-17-88-9	442348	100081708809W600	09-18-088-09W6	0.45	0.0002	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-20-87-9	172082	100092008709W600	09-20-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-32-87-9	332661	100123208709W600	09-31-087-09W6	0.13	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-1-88-10	297986	100100108810W600	10-01-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-5-88-9	359915	100100508809W600	10-06-088-09W6	0.15	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-6-88-9	326704	100100608809W600	10-06-088-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	ENERCAPITA HZ WORSLEY 11-11-88-10	500423	100111108810W600	10-14-088-10W6	0.90	0.0033	0.05	0.02	0.04	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-20-87-9	342411	100102008709W600	10-20-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-29-87-9	319400	100102908709W600	10-29-087-09W6	0.10	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-31-87-9	259176	102103108709W600	10-31-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 11-11-87-9	327336	100111108709W600	11-11-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-12-87-9	349026	102121208709W600	11-11-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-16-87-9	343213	100101608709W600	11-16-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	COMPTON 11-29 WORSLEY 1-29-87-9	211050	100012908709W602	11-29-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 11-29-87-9	189884	100112908709W600	11-29-087-09W6	0.13	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 11-31-87-9	320955	100113108709W600	11-31-087-09W6	0.03	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-33-87-9	351075	100053308709W600	11-33-087-09W6	0.13	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-6-88-9	266600	100120608809W600	12-06-088-09W6	0.43	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-21-87-9	275068	100122108709W600	12-21-087-09W6	0.05	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 5-20-88-10	441614	100052008810W600	12-21-088-10W6	0.45	0.0001	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-22-87-9	139951	100122208709W602	12-22-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER DISPOSAL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-22-87-9	342639	102122208709W600	12-22-087-09W6	0.01	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-6-88-9	270735	100130608809W600	13-06-088-09W6	0.15	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 9-10-88-10	435647	100091008810W600	13-10-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER DISPOSAL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 13-10 WORSLEY 12-9-88-10	445194	100120908810W600	13-10-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER DISPOSAL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ CLEARH 13-9-88-10	435619	100130908810W600	13-10-088-10W6	0.31	0.0007	0.02	0.00	0.02	Level na	FLOWING OIL

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LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.		LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	
	EEL WORSLEY 12 12 89 10	206157	100121200010\//600	12 12 099 101/6	0.20	(m3/s)	0.01	0.00	0.00		
ENERCAPITA ENERGI LTD.		300137	1001312000100000	13-12-000-10000	0.30	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		443107	1001019088090002	12 10 099 00106	0.34	0.0002	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		261204	1021019088090000	12 27 097 001/6	0.32	0.0003	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		220014	1001320007090000	12 20 097 001/6	0.10	0.0001	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		20014	1021329087090000	14 01 099 101/06	0.10	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.		290000	102140508800W600	14-01-088-10000	0.00	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY LTD.	BIRCHCLIEF WORSLEV 12 15 88 10	300854	100121508810W602	14-00-000-09000	0.30	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		326037	10012150001000002	14-15-000-10000	0.70	0.0000	0.01	0.00	0.01	Level na	
ENERCAPITA ENERGY LTD.		324300	100142008709W000	14-10-007-09000	2.02	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD.		125480	100152008709W000	14-20-007-09000	2.93	0.0110	0.10	0.04	0.09		
ENERCAPITA ENERGY LTD.		423400	100132008709W000	14-20-007-09000	2.03	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD.		304000	100033208709W600	14-21-007-09000	2.95	0.0110	0.10	0.04	0.09		
ENERCAPITA ENERGY LTD.		176831	100033208709W000	14-29-007-09000	2.03	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD.	COMPTON 103 14 20 WORSLEY 0 20 87 0	207330	103002008700W/600	14-29-007-09000	2.95	0.0110	0.10	0.04	0.09		
ENERCAPITA ENERGY LTD.	COMPTON WORSI EV 14 31 87 9	207339	100143108709W600	14-29-007-09000	0.13	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD		352315	100020508809\//600	14-32-087-09/06	0.07	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY LTD.		332013	100020508809W000	14-32-007-09000	0.00	0.0001	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		332913	100143208709W600	14-32-007-09000	0.00	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		332912	102113208709W000	14-32-007-09000	0.52	0.0001	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		207000	100150108810W600	15 01 088 10///6	0.11	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		450708	100021008800\/600	15-01-000-10000	0.10	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD.		318306	100150608809W600	15 06 088 00/0/6	0.00	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD		326830	100160608809W000	15-00-000-09000	0.11	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY LTD		274368	100151608709W600	15 16 087 000/06	0.04	0.0000	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	COMPTON WORSLEY 15-36-87-10	326026	100153608710W603	15-36-087-10/0/6	2.02	0.0000	0.01	0.00	0.00		WATER DISPOSAL
ENERCAPITA ENERGY I TD	BIRCHCLIEF 102 HZ WORSLEY 3-1-88-10	163307	102030108810W600	15-36-087-10/06	0.07	0.0000	0.10	0.04	0.03		
ENERCAPITA ENERGY I TD	BIRCHCLIFE 102 HZ WORSLEY 12-6-88-9	436623	102120608809\//600	16-01-088-10W6	0.07	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY I TD	BIRCHCLIEF 16-5 HZ CLEARH 0-4-88-10	453383	100090/08810\/600	16-05-088-10W6	0.01	0.0001	0.01	0.00	0.00		
ENERCAPITA ENERGY I TD	BIRCHCLIEF 16-5 HZ CLEARH 9-6-88-10	460512	1000904000100000	16-05-088-10W6	0.42	0.0002	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIEF 16-5HZ CLEARH 16-4-88-10	452559	100160408810W602	16-05-088-10W6	0.30	0.0003	0.01	0.00	0.01	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIFE 16-5 HZ CLEARH 16-6-88-10	460465	100160608810W600	16-05-088-10W6	0.50	0.0003	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	EEL WORSLEY 16-7-88-9	343879	100160708809W600	16-07-088-09W6	0.00	0.0004	0.01	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIEF HZ WORSLEY 4-15-88-10	422414	100041508810W600	16-10-088-10W6	0.80	0.0001	0.02	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIEF 16-10HZ CLEARH 16-9-88-10	433865	100160908810W600	16-10-088-10W6	0.59	0.0011	0.03	0.01	0.02	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIEF WORSLEY 16-10-88-10	347386	100161008810W602	16-10-088-10W6	0.35	0.0000	0.00	0.00	0.00	Level na	
ENERCAPITA ENERGY I TD	BIRCHCLIEF 16-11 H WORSLEY 4-18-87-8	425816	100041808708W600	16-11-087-09W6	0.00	0.0000	0.01	0.00	0.00	Levelna	
ENERCAPITA ENERGY I TD	BIRCHCLIEF WORSLEY 16-15-88-10	344264	100161508810W600	16-15-088-10W6	0.40	0.0005	0.02	0.00	0.01	Level na	FLOWING OIL
ENERCAPITA ENERGY I TD	BIRCHCLIEF 102 WORSI FY 13-15-88-10	395850	102131508810W600	16-15-088-10W6	0.49	0.0006	0.01	0.00	0.01	Levelna	PUMPING OIL
ENERCAPITA ENERGY I TD	EL WORSLEY 16-14-88-10	473087	102161408810W600	16-15-088-10W6	0.34	0.0005	0.02	0.00	0.01	Level na	
ENERCAPITA ENERGY I TD	CPEC WORSLEY 8-16-88-10	428449	100081608810W600	16-16-088-10W6	0.05	0.0000	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY I TD	EFL WORSLEY 1-20-88-10	435137	102012008810W600	16-16-088-10W6	0.45	0.0003	0.01	0.00	0.00	Level na	PUMPING OIL
ENERCAPITA ENERGY I TD	COMPTON ET AL WORSI EY 16-17-87-9	160277	100161708709W600	16-17-087-09W6	2.93	0.0110	0.10	0.04	0.09	Level 1	WATER INJECTOR
ENERCAPITA ENERGY I TD	COMPTON ET AL WORSELY 16-20-87-9	168675	100162008709W600	16-20-087-09W6	0.06	0.0000	0.01	0.00	0.00	Level na	COMMINGLED
ENERCAPITA ENERGY I TD	COMPTON ET AL WORSELY 16-20-87-9	168675	100162008709W602	16-20-087-09W6	0.06	0.0000	0.01	0.00	0.00	Level na	PUMPING OII
ENERCAPITA ENERGY I TD	BIRCHCI IFF 16-22 WORSI FY 16-23-88-10	393698	100162308810W600	16-22-088-10W6	0.50	0.0005	0.01	0.00	0.01	Level na	PUMPING OIL
		1 2 2 2 0 0 0 0			2.20	0.0000	0.01	0.00	5.01	u	

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LICENSEE / OPERATOR	WELLNAME	LICENSE	LIWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
	<b>MEEENAME</b>	NO.	om	LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	CIAIGO
		120060	100111008800\//600	16 22 099 10/06	0.65	(m3/s)	0.02	0.01	0.02		
ENERCAPITA ENERCY LTD		420300	1001119000090000	16 22 099 10106	0.00	0.0013	0.00	0.01	0.03	Levelna	
ENERCAPITA ENERGY LTD		430399	1001419088091000	16 20 087 001/6	2.03	0.0004	0.01	0.00	0.01		
ENERCAPITA ENERGY LTD		103650	1000929087090000	16 30 087 09//6	2.93	0.0110	0.10	0.04	0.09		
ENERCAPITA ENERGY LTD	BIRCHCLIEF WORSLEY 15-32-87-9	336015	1001030007090000	16-32-087-0900	0.14	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY I TD	BIRCHCLIEF WORSLEY 16-32-87-9	326058	100163208709W600	16-32-007-09000	2 03	0.0000	0.01	0.00	0.00		
ENERCAPITA ENERGY I TD	BIRCHCLIEF HZ WORSLEV 13-34-87-10	166966	100103200709W000	16-32-007-03000	0.02	0.0000	0.10	0.04	0.03		
ENERCAPITA ENERGY I TD	BIRCHCLIFE HZ CLEARH 16-31-87-10	466976	100163108710W602	16-32-007-10W6	0.02	0.0000	0.01	0.00	0.00	Levelna	
ENERGY INTERECOTETE:		400010	ENERCAPITA SOUR SUS	PENDED	0.41	0.0000	0.01	0.00	0.00	Leverna	
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-14-88-10	339465	100021408810W600	01-14-088-10W6	0.29	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-29-87-9	320035	102012908709W600	01-29-087-09W6	0.10	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-13-88-10	337906	100021308810W600	02-13-088-10W6	0.43	0.0012	0.03	0.00	0.02	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-18-88-9	372562	100021808809W600	02-18-088-09W6	0.57	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-31-87-9	333273	100023108709W600	02-31-087-09W6	0.05	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-13-88-10	319754	100041308810W600	04-13-088-10W6	0.42	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-13-88-10	319754	100041308810W602	04-13-088-10W6	0.55	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-20-87-9	360701	100012008709W602	04-20-087-09W6	0.01	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-22-87-9	355094	100042208709W600	04-22-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	COMPTON PETROL CLEARH 5-24-87-10	181202	100052408710W603	05-24-087-10W6	0.02	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 6-4 HZ WORSLEY 7-3-88-9	464059	100070308809W600	06-04-088-09W6	0.27	0.0003	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-14-88-10	321095	100061408810W600	06-14-088-10W6	0.49	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-27-88-10	353709	100062708810W600	06-27-088-10W6	0.34	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-30-87-9	329813	100063008709W600	06-30-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-6-88-9	225312	100020608809W604	07-06-088-09W6	0.10	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-8-88-9	374243	100020808809W600	07-08-088-09W6	0.43	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-23-88-10	361872	100072308810W603	07-22-088-10W6	0.60	0.0002	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-30-88-9	437723	100073008809W603	07-30-088-09W6	0.61	0.0009	0.03	0.00	0.02	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-3-88-9	352599	100080308809W600	08-03-088-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-23-88-10	344041	100082308810W600	08-23-088-10W6	0.66	0.0041	0.06	0.01	0.05	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 8-33-88-10	353753	100083308810W600	08-33-088-10W6	0.35	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 9-11-88-10	319786	100091108810W600	09-11-088-10W6	0.50	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 9-11-88-10	319786	100091108810W602	09-11-088-10W6	0.19	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL

						H₂S					
LICENSEE / OPERATOR	WELLNAME	LICENSE	UWI	SURFACE	H2S	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
		NO.		LOCATION	(%)	RATE	(km)	(km)	(km)	LEVEL	
ENERCAPITA ENERGY LTD	BIRCHCLIEF WORSLEY 10-23-88-10	367700	100092308810W603	09-22-088-10W6	1 70	0.0010	0.02	0.00	0.02	l evel na	SUSPENDED OII
ENERCAPITA ENERGY LTD.	COMPTON 9-31 HZ WORSLEY 15-31-87-9	216277	100153108709W600	09-31-087-09W6	0.09	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-21-87-9	329590	100102108709W600	10-21-087-09W6	0.02	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-30-87-9	328582	100103008709W600	10-30-087-09W6	0.03	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 11-13-88-10	326353	100111308810W602	11-13-088-10W6	0.25	0.0006	0.02	0.00	0.01	Level na	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 11-28-87-9	320818	100112808709W600	11-28-087-09W6	0.31	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-33-87-9	349020	100063308709W600	11-33-087-09W6	0.03	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-8-88-9	371613	100120808809W600	12-08-088-09W6	0.49	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-31-87-9	333358	100123108709W600	12-31-087-09W6	0.46	0.0002	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-31-87-9	333358	100123108709W602	12-31-087-09W6	0.46	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-5-88-9	349322	100090508809W600	13-04-088-09W6	0.17	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-4-88-9	341543	100140408809W602	13-04-088-09W6	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-5-88-9	333107	100160508809W600	13-04-088-09W6	0.09	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 2-31-87-9	446375	102023108709W600	13-31-087-09W6	0.11	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-6-88-9	308277	102140608809W600	14-06-088-09W6	0.21	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-15-88-10	390854	100121508810W600	14-15-088-10W6	0.81	0.0001	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 14-12-88-10	334361	100141208810W600	15-12-088-10W6	2.93	0.0110	0.10	0.04	0.09	Level 1	SUSPENDED WATER INJECTOR
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-2-88-10	333396	100160208810W600	16-02-088-10W6	0.04	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-10-88-10	347386	100161008810W600	16-10-088-10W6	0.20	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-5-88-9	335970	100010508809W600	16-32-087-09W6	0.40	0.0000	0.01	0.00	0.00	Level na	SUSPENDED OIL

#### LEGEND

Other: UWI=Unique Well Identifier EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone



### Worsley Field - Sour Gas Pipelines

	WATER				START	END	LICENSE	LINE	LINE	UNIQUE	INCLUDES		OD	SEGMENT	WALL	LICENSED	EXPECTED	LICENSED	EXPECTED	ТЕМР		DIR 56 RELEASE	EPZ	IIZ PAZ	SETBACK	
LICENSEE / OPERATOR	CROSS	FROM	T	0	VALVE	VALVE	NO.	NO.		LINE #	UNIQUE #	SUB	mm)		(mm)	PRESSURE	PRESSURE	H2S (%)	H2S (%)	(°C)	Z	VOLUME	(km)	(km) (km)	LEVEL	STATUS
								=						(KIII)		(Ki u)	(Ki u)					(m3)				
ENERCAPITA ENERGY LTD.	-	07-02-088-07W6	PT 12-24-087-	-07W6  PT	-	-	21182		-	1 1	1 to 10	NG	88.9	4.75	3.2	2.900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	С	13-18-087-08W6	PL 16-12-087-	-09W6 PL	-	-	61343		-	2	1 to 10	NG 1	14.3	1.88	4.0	2.900	2.900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	12-24-087-07W6	WE 10-22-087-	-07W6 PL	-	-	61646	1	-	3	1 to 10	NG 1	68.3	2.20	5.6	2.900	2.900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	07-22-087-07W6	PL 15-19-087-	-07W6 PL	-	-	61646	2	-	4	1 to 10	NG 1	68.3	4.72	5.6	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	С	03-28-087-08W6	PL 04-28-087-	-08W6 PL	-	-	61646	3	-	5	1 to 10	NG 1	68.3	0.81	4.8	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	15-19-087-07W6	PL 16-21-087-	-08W6 PL	-	-	61646	4	-	6	1 to 10	NG 1	68.3	6.73	4.8	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	04-28-087-08W6	PL 12-21-087-	-08W6 PL	-	-	61646	5	-	7	1 to 10	NG 1	14.3	0.95	4.0	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	01-28-087-08W6	PL 02-28-087-	-08W6 PL	-	-	61646	6	-	8	1 to 10	NG 1	68.3	0.67	4.8	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	12-21-087-08W6	WE 13-16-087-	-08W6 PL	-	-	61646	7	-	9	1 to 10	NG 1	14.3	1.00	4.0	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	13-16-087-08W6	PL 13-18-087-	-08W6 PL	-	-	61646	8	-	10	1 to 10	NG 1	14.3	3.50	4.0	2,900	2,900	0.01	0.01	5	na	na	0.01	0.00 0.00	na	0
ENERCAPITA ENERGY LTD.	-	15-16-087-09W6	BT 08-21-087-	-09W6 BT	-	-	37565	3	-	11	11 to 31	NG 1	14.3	1.07	4.0	8,270	8,270	0.44	0.44	5	na	na	0.22	0.05 0.18	na	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6	PL 14-29-087-	-09W6 SA	-	-	37734	1	-	12	11 to 31	NG 1	14.3	1.66	4.0	4,970	4,970	0.99	0.99	5	na	na	0.26	0.07 0.22	na	0
ENERCAPITA ENERGY LTD.	С	16-15-088-10W6	CS 08-15-088-	-10W6 PL	-	-	37734	4	-	13	11 to 31	NG 1	14.3	0.74	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	С	08-15-088-10W6	PL 15-01-088-	-10W6 PL	-	-	37734	5	-	14	11 to 31	NG 1	14.3	6.60	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	С	15-01-088-10W6	PL 04-06-088-	-09W6 PL	-	-	37734	6	-	15	11 to 31	NG 1	14.3	1.82	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6	CSA 08-21-087-	-09W6 GP	-	-	37734	7	-	16	11 to 31	NG 1	14.3	4.30	4.0	4,960	4,960	0.99	0.99	5	na	na	0.26	0.07 0.22	na	0
ENERCAPITA ENERGY LTD.	-	04-06-088-09W6	SA 08-31-087-	-09W6 PL	-	-	37734	8	-	17	11 to 31	NG 1	14.3	2.04	4.0	4,960	4,960	0.99	0.99	5	na	na	0.26	0.07 0.22	na	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6	PL 08-31-087-	-09W6 SA	-	-	37734	9	-	18	11 to 31	NG 1	14.3	0.38	4.0	4,960	4,960	0.99	0.99	5	na	na	0.26	0.07 0.22	na	0
ENERCAPITA ENERGY LTD.	-	09-22-088-10W6	SA 07-22-088-	-10W6 PL	-	-	37734	11	-	19	11 to 31	NG 1	14.3	1.40	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	-	07-22-088-10W6	WE 16-15-088-	-10W6 CS	-	-	37734	12	-	20	11 to 31	NG 1	14.3	0.70	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	-	08-09-088-10W6	PL 13-10-088-	-10W6 PL	-	-	37734	17	-	21	11 to 31	NG 1	14.3	0.99	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	-	13-10-088-10W6	PL 14-10-088-	-10W6 SA	-	-	37734	18	-	22	11 to 31	NG	88.9	0.93	4.0	8,270	8,270	0.99	0.99	5	na	na	0.26	0.08 0.22	na	0
ENERCAPITA ENERGY LTD.	-	05-08-088-10W6	SA 16-05-088-	-10W6 PL	-	-	37734	19	-	23	11 to 31	NG 1	21.0	2.23	13.0	4,960	4,960	0.99	0.99	5	na	na	0.22	0.07 0.19	na	0
ENERCAPITA ENERGY LTD.	-	16-23-088-10W6	PL 09-22-088-	-10W6 SA	-	-	37734	20	-	24	11 to 31	NG	88.9	1.99	4.0	8,270	8,270	0.99	0.99	5	na	na	0.26	0.08 0.22	na	0
ENERCAPITA ENERGY LTD.	-	13-19-088-09W6	CS 16-23-088-	-10W6 PL	-	-	37734	21	-	25	11 to 31	NG	38.9	2.13	4.0	8,270	8,270	0.99	0.99	5	na	na	0.26	0.08 0.22	na	0
ENERCAPITA ENERGY LTD.	С	16-05-088-10W6	SA 08-09-088-	-10W6 SA	-	-	37734	22	-	26	11 to 31	NG 1	14.3	2.00	4.0	8,270	8,270	0.99	0.99	5	na	na	0.35	0.10 0.30	na	0
ENERCAPITA ENERGY LTD.	С	14-10-088-10W6	SA 13-08-088-	-10W6 PL	ESD	-	37734	23	-	27	11 to 31	NG 1	14.3	3.80	4.0	4,960	4,960	0.99	0.99	5	na	na	0.26	0.07 0.22	na	0
ENERCAPITA ENERGY LTD.	-	16-32-087-09W6	BT 08-31-087-	-09W6 SA	-	-	41270	3	-	28	11 to 31	NG 1	14.3	1.79	4.0	4,960	4,960	0.44	0.44	5	na	na	0.16	0.04 0.13	na	0
ENERCAPITA ENERGY LTD.	-	14-32-087-09W6	SA 11-32-087-	-09W6 PL	-	-	41270	4	-	29	11 to 31	NG 1	14.3	0.36	4.0	4,960	4,960	0.44	0.44	5	na	na	0.16	0.04 0.13	na	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6	BT 14-10-088-	-10W6 SA	-	-	44164	4	-	30	11 to 31	NG 1	14.3	3.12	4.0	4,960	4,960	0.70	0.70	5	na	na	0.21	0.06 0.18	na	0
CANADIAN NATURAL RESOURCES LIMITED	-	11-08-088-10W6	PL 11-18-088-	-10W6 PL	-	-	58302	11	-	31	11 to 31	NG 1	14.3	2.19	3.2	4,960	4,960	0.99	0.99	5						0
								EN	ERCAPITA	SOUR DIS	SCONTINUE	D														
ENERCAPITA ENERGY LTD.	-	06-22-087-09W6	BE 12-22-087-	-09W6 BE	-	-	34518	1	-	32	32	NG	88.9	0.62	3.2	0	0	0.44	0.44							D
ENERCAPITA ENERGY LTD.	С	06-26-087-09W6	BE 08-21-087-	-09W6 BE	-	-	37565	2	-	33	33	NG 1	14.3	3.62	3.2	0	0	0.44	0.44							D
ENERCAPITA ENERGY LTD.	С	06-04-088-09W6	BE 16-32-087-	-09W6 BE	-	-	41270	6	-	34	34	NG 1	14.3	2.17	4.0	0	0	0.44	0.44							D
ENERCAPITA ENERGY LTD.	-	14-10-088-10W6	BE 13-08-088-	-10W6 BE	-	-	44164	2	-	35	35	NG 1	14.3	4.13	4.0	0	0	0.70	0.70							D
ENERCAPITA ENERGY LTD.	С	15-12-088-10W6	BE 14-12-088-	-10W6 BE	-	-	47207	2	-	36	36	NG	88.9	0.49	4.0	0	0	0.90	0.90							D
ENERCAPITA ENERGY LTD.	С	02-13-088-10W6	BE 15-12-088-	-10W6 BE	-	-	47207	3	-	37	37	NG	88.9	0.33	4.0	0	0	0.90	0.90							D
ENERCAPITA ENERGY LTD.	-	06-13-088-10W6	BE 03-13-088-	-10W6 BE	-	-	47207	4	-	38	38	NG	88.9	0.51	4.0	0	0	0.90	0.90							D
ENERCAPITA ENERGY LTD.	С	11-13-088-10W6	BE 06-13-088-	-10W6 BE	-	-	49108	1	-	39	39	NG	88.9	0.72	4.0	0	0	0.90	0.90							D
						-																				

#### LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir UG=Underground Cap or Tie-in

Valve: CV=Check Valve ESD=Emergency Shutdown Valve MBV=Manual Block Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water

MP=Multiphase NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated

Other: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature

H<sub>2</sub>Safety
												SEGMENT			EXPECTED			GAS ELOW					DIR 56					
LICENSEE / OPERATOR	WATER	FROM	то	START	END	LICENSE	LINE SEGMEN		INCLUDE	SUB	OD	LENGTH	WALL	PRESSURE	PRESSURE	LICENSED	EXPECTED	RATE (1000	FLOW RATE	GLR	TEMP	z	RELEASE	EPZ	IIZ	PAZ	SETBACK	STATUS
	CROSS			VALVE	VALVE	NO.	NO. MODIFIE	R LINE #	UNIQUE	#	(mm)	(km)	(mm)	(kPa)	(kPa)	H2S (%)	H2S (%)	m3/d)	(m3/d)		(°C)		VOLUME	(km)	(km)	(km)	LEVEL	
									EN	RCAPIT		OPERATING											(1115)					
		16 17 087 00/06				27583	1	1	1 to 21				40	4 060	4 960	0.44	0.44	220.00	2500.00	88 00	5	0 83	274	0.00	0.03	0.08	lovolna	
ENERCAPITA ENERGY LTD.	- (	10-17-007-09W0	WE 06-21-087-09W0 S			27583	1 -	2	1 to 21		88.0	0.04	4.0	4,900	4,900	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.09	0.03	0.08		
ENERCAPITA ENERGY LTD		00-21-007-09W0	SA 08-21-087-09W6 F			27583	5 -	3	1 to 21		114 3	0.04	4.0	4,900	4,300	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.03	0.03	0.00	Level na	
		16-20-087-09W6	WE 06-21-087-09W6 S		+ -	27583	10 -		1 to 21	8 OF	88.9	1 50	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.00	0.03	0.08	l evel na	0
ENERCAPITA ENERGY I TD	- (	19-20-087-09W6	WE 06-21-087-09W6 S	A -	<u> </u>	27583	11 -	5	1 to 21	8 OF	88.9	1.00	4.0	4,000	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	1 0
ENERCAPITA ENERGY I TD	- (	09-20-087-09W6	PI 06-21-087-09W6 S	A -	<u> </u>	27583	12 -	6	1 to 21	8 OF	88.9	0.94	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	0
ENERCAPITA ENERGY I TD		12-21-087-09W6	WE 09-20-087-09W6 E	까지 이 -	- 1	27583	13 -	7	1 to 21	8 OF	88.9	0.01	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	0
ENERCAPITA ENERGY I TD	- (	02-21-087-09W6	WE 15-16-087-09W6 S	A -	-	27583	14 -	8	1 to 21	8 OF	88.9	0.58	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	Ō
ENERCAPITA ENERGY I TD	- (	01-16-087-09W6	WE 07-16-087-09W6 F	기 -	-	27583	15 -	9	1 to 21	8 OF	88.9	0.67	40	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	Ō
ENERCAPITA ENERGY LTD.	- (	03-16-087-09W6	WE 11-16-087-09W6 S	A -	- 1	27583	16 -	10	1 to 21	8 OE	88.9	0.70	4.0	4.960	4.960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ō
ENERCAPITA ENERGY LTD.	-	14-16-087-09W6	WE 15-16-087-09W6 S	A -	- 1	27583	17 -	11	1 to 21	8 OE	88.9	0.37	4.0	4.960	4.960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ō
ENERCAPITA ENERGY LTD.		14-20-087-09W6	WE 16-20-087-09W6 S	A -	- 1	27583	19 -	12	1 to 21	8 OE	88.9	0.66	4.0	4.960	4.960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	01-21-087-09W6	WE 15-16-087-09W6 S	A -	-	27583	20 -	13	1 to 21	8 OE	88.9	0.70	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	02-29-087-09W6	WE 16-20-087-09W6 S	A -	-	27583	21 -	14	1 to 21	8 OE	88.9	0.79	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	C	04-16-087-09W6	WE 11-16-087-09W6 S	A -	-	27583	23 -	15	1 to 21	8 OE	88.9	1.20	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	06-16-087-09W6	WE 11-16-087-09W6 S	A -	-	27583	25 -	16	1 to 21	8 OE	88.9	0.53	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.		11-16-087-09W6	SA 15-16-087-09W6 S	A -	-	27583	26 -	17	1 to 21	8 OE	88.9	0.48	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	03-21-087-09W6	WE 06-21-087-09W6 S	6A -	-	27583	27 -	18	1 to 21	8 OE	88.9	0.61	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	02-16-087-09W6	WE 03-16-087-09W6 F	YL -	-	27583	28 -	19	1 to 21	8 OE	88.9	0.55	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	03-16-087-09W6	PL 11-16-087-09W6 S	6A -	-	27583	29 -	20	1 to 21	8 OE	88.9	0.83	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	12-22-087-09W6	WE 08-21-087-09W6 E	BT -	-	27583	30 -	21	1 to 21	8 OE	88.9	0.44	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	07-16-087-09W6	PL 08-16-087-09W6 S	A -	-	27583	31 -	22	1 to 21	8 OE	88.9	0.15	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	08-16-087-09W6	WE 15-16-087-09W6 S	5A -	-	27583	32 -	23	1 to 21	8 OE	88.9	0.85	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	15-16-087-09W6	SA 08-21-087-09W6 E	BT -	-	27583	33 -	24	1 to 21	8 OE	114.3	1.07	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	16-11-087-09W6	PL 15-16-087-09W6 S	6A -	-	27583	35 -	25	1 to 21	8 OE	114.3	5.07	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	16-11-087-09W6	PL 15-16-087-09W6 S	A -	-	27583	36 -	26	1 to 21	8 OE	88.9	5.07	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	08-12-087-09W6	WE 16-11-087-09W6 F	YL -	-	27583	37 -	27	1 to 21	8 OE	114.3	2.27	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	04-12-087-09W6	SA 09-11-087-09W6 F	<u>'L -</u>	-	27583	39 -	28	1 to 21	8 OE	114.3	1.01	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	05-11-087-09W6	WE 11-11-087-09W6 F	<u>'L -</u>	-	27583	40 -	29	1 to 21	8 OE	88.9	0.93	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	11-11-087-09W6	PL 09-11-087-09W6 F	<u>'L -</u>	-	27583	41 -	30	1 to 21	8 OE	114.3	0.65	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	16-02-087-09W6	WE 04-12-087-09W6 S	6A -	-	27583	42 -	31	1 to 21	8 OE	114.3	0.43	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	01-17-087-09W6	WE 10-17-087-09W6 S	A -	-	27583	43 -	32	1 to 21	8 OE	114.3	1.04	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	01-17-087-09W6	WE 10-17-087-09W6 S	A -	-	27583	44 -	33	1 to 21	8 OE	114.3	1.04	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.		10-17-087-09W6	SA 16-17-087-09W6 F	<u>²L -</u>	-	27583	45 -	34	1 to 21	8 OE	114.3	1.41	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- '	16-17-087-09W6	WE 10-17-087-09W6 S	5A -	-	27583	47 -	35	1 to 21	8 OE	114.3	1.41	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	2/4	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	06-17-087-09W6	WE 10-17-087-09W6 S	A -	-	27583	48 -	36	1 to 21	8 OE	114.3	0.51	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	- (	06-17-087-09996	WE 10-17-087-09W6 S	<u>A</u> -	-	27583	49 -	37	1 to 21	8 <u>OE</u>	114.3	0.51	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	
ENERCAPITA ENERGY LTD.	-	16-01-087-09996	WE 08-12-087-09W6 F	<u>-</u>		27583	50 -	38	1 to 21		114.3	0.84	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00		0.82	274	0.09	0.03	0.08	Level na	
ENERGAPITA ENERGY LTD.	- (	12 17 097 00W6	PL 13-17-087-09000 S	A -	-	27583	51 -	39	1 to 21		114.3	0.57	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	
ENERGAPITA ENERGY LTD.	-	13-17-067-09W0	SA 10-17-067-09006 3			27503	53 -	40	1 to 21		114.3	1.10	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	00.00	5	0.02	274	0.09	0.03	0.00	Levelna	
ENERGAPITA ENERGY LTD.	- (	10 20 097 00//6	VVE 04-20-067-09VV6 F			27503	54 -	41	1 to 21		114.3	0.59	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	00.00	5	0.02	274	0.09	0.03	0.08		
ENERCAPITA ENERGY LTD.		10-20-067-09006	SA 09-20-067-09006 F			27583	57 -	42	1 to 21		99.0	0.31	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.09	0.03	0.08		
ENERCAPITA ENERGY LTD.		16-12-087-09//6	WE 08-12-087-09W0 S			27583	58 -	43	1 to 21		11/ 3	0.37	4.0	4,900	4,900	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.09	0.03	0.08		
ENERCAPITA ENERGY I TO		16-12-087-09//0	PL 08-12-087-09W0 C			27583	50 -	44	1 to 21		88.0	0.79	4.0	2 000	2,900	0.44	0.44	220.00	2500.00	88.00	5	0.02	186	0.03	0.03	0.00		
ENERCAPITA ENERGY I TD		10-12-007-09000	WE 16-11-087-09W6 E			27583	60 -	45	1 to 21		11/ 3	0.75	4.0	2,300	2,900	0.44	0.44	220.00	2500.00	88.00	5	0.00	274	0.03	0.03	0.00		
		01-14-087-09W6	PI 16-11-087-09W6 S			27583	61 -	40	1 to 21		88.9	0.46	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.00	0.03	0.08	Level na	
		12-12-087-09W6	WE 12-12-087-09W6 E	אין אן -	+ -	27583	62 -	48	1 to 21	8 OF	114.3	0.40	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.00	0.03	0.08	l evel na	1 0
ENERCAPITA ENERGY LTD	- 10	09-14-087-09W6	WF 01-14-087-09W6 F	- 1 -	1 -	27583	63 -	49	1 to 21	8 OF	121 0	0.50	13.0	4 960	4,960	0 44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	l õ
ENERCAPITA ENERGY I TD	- 10	08-20-087-09W6	WE 06-21-087-09W6	- A	1 -	27583	65 -	50	1 to 21	8 OF	88.9	0.73	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ő
ENERCAPITA ENERGY I TD	- 10	05-28-087-09W6	WE 06-28-087-09W6 S	A -	- 1	27644	4 -	51	1 to 21	8 OF	88.9	0.52	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ő
ENERCAPITA ENERGY LTD.	- 10	05-28-087-09W6	WE 06-28-087-09W6 S	A -	- 1	27644	5 -	52	1 to 21	8 OE	88.9	0.52	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ō
ENERCAPITA ENERGY LTD	- (	06-28-087-09W6	WE 06-28-087-09W6 S	A -	-	27644	6 -	53	1 to 21	8 OE	88.9	0.10	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	Ō
ENERCAPITA ENERGY LTD.	- 10	01-31-087-09W6	WE 16-30-087-09W6 F	YL -	- 1	27644	9 -	54	1 to 21	8 OE	54.6	0.41	2.5	4,970	4,970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	0
ENERCAPITA ENERGY LTD.	_	10-29-087-09W6	WE 14-29-087-09W6 S	A -	- 1	27644	13 -	55	1 to 21	8 OE	54.6	0.90	2.5	4,970	4,970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	0
ENERCAPITA ENERGY LTD.		14-29-087-09W6	WE 14-29-087-09W6 S	A -	- 1	27644	15 -	56	1 to 21	8 OE	54.6	0.05	2.5	4,970	4,970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	0
ENERCAPITA ENERGY LTD.		14-29-087-09W6	WE 14-29-087-09W6 S	A -	-	27644	16 -	57	1 to 21	8 OE	54.6	0.15	2.5	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.02	0.08	Level na	0
ENERCAPITA ENERGY LTD.		16-29-087-09W6	WE 05-28-087-09W6 F	YL -	-	27644	17 -	58	1 to 21	8 OE	54.6	1.78	2.5	4,970	4,970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	0
ENERCAPITA ENERGY LTD.	·	16-29-087-09W6	WE 05-28-087-09W6 F	YL -	-	27644	18 -	59	1 to 21	8 OE	54.6	1.78	2.5	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.02	0.08	Level na	0



						LIN	=				SEGMENT		LICENSED	EXPECTED			GAS FLOW					DIR 56					
LICENSEE / OPERATOR	WATER	FROM	то	STAR		LICENSE LINE SEGMI		INCLUDES	SUB	OD	LENGTH	WALL (mm)	PRESSURE	PRESSURE			RATE (1000	FLOW RATE	GLR	TEMP	Z	RELEASE	EPZ	IIZ (km)	PAZ	SETBACK	STATUS
	CRUSS			VALVI	E VALVE	NO. NO. MODIF	IER LINE #	UNIQUE #	(	mm)	(km)	(mm)	(kPa)	(kPa)	H25 (%)	H25 (%)	m3/d)	(m3/d)		(-C)		(m3)	(KM)	(KM)	(KM)	LEVEL	
ENERCAPITA ENERGY I TD	-	05-28-087-09W6 PI	06-28-087-09\//6	BT -		27644 24 -	60	1 to 218	OF 5	54.6	0.52	25	4 960	4 960	0 44	0 44	220.00	2500.00	88.00	5	0.82	274	0.09	0.02	0.08	l evel na	0
ENERCAPITA ENERGY LTD	-	05-28-087-09W6 PL	06-28-087-09W6	SISA -	<u> </u>	27644 25 -	61	1 to 218	OF 5	54.6	0.52	2.5	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.02	0.08	Level na	
ENERCAPITA ENERGY LTD	-	08-01-088-10W6 WE	= 04-06-088-09W6	SISA -	+ -	27644 27 -	62	1 to 218	OF	38.9	0.61	4.0	4 970	4 970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	
	· · ·	08-31-087-09/06 54	08-31-087-09///6			27644 29 -	63	1 to 218		14 3	0.01	4.0	4,070	4,070	0.44	0.44	220.00	2500.00	88.00	5	0.02	275	0.00	0.00	0.00	Level na	
	· · ·	00-01-007-00700 07				27644 20 -	64	1 to 218		88.0	0.35	4.0	4,070	4,070	0.44	0.44	220.00	2500.00	88.00	5	0.02	275	0.00	0.00	0.00		
		15 21 097 00MG ME			+ -	27044 31 -	65	1 to 210		20.9	1.00	4.0	4,970	4,970	0.44	0.44	220.00	2500.00	00.00	5	0.02	215	0.09	0.03	0.00		
	· -	15-31-067-09006 VVE				27044 32 -	60	1 to 210		20.9	1.09	4.0	4,970	4,970	0.44	0.44	220.00	2500.00	00.00	5	0.02	273	0.09	0.03	0.00	Level na	
		05-06-088-09VV6 VVE		SA -		27644 36 -	60	1 to 218		58.9	0.39	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	2/4	0.09	0.03	0.08	Level na	
		12-06-088-09VV6 VVE	= 05-06-088-09W6			27644 38 -	67	1 to 218		88.9	0.33	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	80.0	Level na	
ENERCAPITA ENERGY LTD		12-06-088-09W6 PL	. 04-06-088-09W6	5 BI -	-	27644 39 -	68	1 to 218	OE 8	38.9	0.75	4.8	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	13-06-088-09W6 SA	04-06-088-09W6	6 SA -	-	27644 40 -	69	1 to 218	OE 8	38.9	1.16	4.8	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	16-01-088-10W6 WE	E 13-06-088-09W6	SISA -	-	27644 41 -	70	1 to 218	OE 8	38.9	0.44	4.8	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		04-28-087-09W6 WE	E 05-28-087-09W6	6 PL -	-	27644 42 -	71	1 to 218	OE 8	38.9	0.26	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	06-06-088-09W6 WE	E 04-06-088-09W6	SA -	-	27644 43 -	72	1 to 218	OE 8	38.9	0.31	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		14-31-087-09W6 WE	E 02-06-088-09W6	6 SA -	-	27644 44 -	73	1 to 218	OE 8	38.9	0.44	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	09-01-088-10W6 WE	E 12-06-088-09W6	3 PL -	-	27644 46 -	74	1 to 218	OE 8	38.9	0.22	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	15-01-088-10W6 SA	13-06-088-09W6	6 SA -	-	27644 49 -	75	1 to 218	OE 1	14.3	0.90	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	14-01-088-10W6 WE	E 15-01-088-10W6	SISA -	<b>-</b>	27644 51 -	76	1 to 218	OE 8	38.9	0.45	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	14-06-088-09W6 WF	13-06-088-09W6	SISA -	-	27644 53 -	77	1 to 218	OF 8	38.9	0.62	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Levelna	Ō
	·	13-01-088-10W6 WE	= 15-01-088-10W6		+	27644 54 -	78	1 to 218		88 G	0.02	4.0	4,000	4,000	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.00	0.00	0.08	Level na	
	·	15 06 088 00\//6 \//				27644 55	70	1 to 210			0.70	4.0	4,000	4,000	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.00	0.00	0.00		
		01 01 08 10MG ME			+ -	27044 55 -	- 19	1 to 210		14 2	1.02	4.0	4,900	4,900	0.44	0.44	220.00	2500.00	00.00	5	0.02	274	0.09	0.03	0.00		
		01-01-000-10000 VVE				2/044 5/ -	00	1 10 2 10		14.3	1.03	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	00.00	5	0.02	2/4	0.09	0.03	0.00	Levelna	
ENERCAPITA ENERGY LTD		10-29-087-09VV6 VVE	14-29-087-09006	SA -		27644 58 -	81	1 to 218		14.3	0.61	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	
ENERCAPITA ENERGY LTD		07-31-087-09W6 WE	= 08-31-087-09W6	SA -	-	27644 59 -	82	1 to 218	OE 8	38.9	0.70	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		13-29-087-09W6 WE	<u>= 14-29-087-09W6</u>	6 SA -	-	27644 60 -	83	1 to 218	OE 8	38.9	0.63	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		05-32-087-09W6 WE	E 08-31-087-09W6	SISA -	-	27644 61 -	84	1 to 218	OE 8	38.9	0.25	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		07-28-087-09W6 WE	E 06-28-087-09W6	3 PL -	-	27644 62 -	85	1 to 218	OE 8	38.9	0.31	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		11-31-087-09W6 WE	E 08-31-087-09W6	SA -	-	27644 63 -	86	1 to 218	OE 8	38.9	1.40	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	15-06-088-09W6 WE	E 07-06-088-09W6	SISA -	-	27644 64 -	87	1 to 218	OE 8	38.9	0.70	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	10-06-088-09W6 WE	E 07-06-088-09W6	SA -	-	27644 65 -	88	1 to 218	OE 8	38.9	0.50	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		09-16-087-09W6 WE	E 15-16-087-09W6	SA -	-	27644 67 -	89	1 to 218	OE 8	38.9	0.56	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	16-31-087-09W6 WE	E 08-31-087-09W6	SA -	-	27644 69 -	90	1 to 218	OE 8	38.9	1.03	4.0	4.960	4.960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	16-31-087-09W6 WE	E 08-31-087-09W6	SA -	-	27644 70 -	91	1 to 218	OE 8	38.9	1.06	4.0	4.960	4.960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	05-29-087-09W6 WF	10-29-087-09W6	SISA -	<u> </u>	27644 71 -	92	1 to 218	OF 8	38.9	0.87	40	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	Ō
ENERCAPITA ENERGY LTD	· -	03-29-087-09W6 WF	10-29-087-09W6	SISA -	-	27644 72 -	93	1 to 218	OF 8	38.9	0.88	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Levelna	0
		02-01-088-10W6 WE			-	27644 72	00	1 to 218		88.0	0.00	4.0	4,000	4,000	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.00	0.00	0.08		
	· · ·	15 36 087 10W6 DI				27644 74 -	05	1 to 210		20.5	0.70	4.0	4,900	4,300	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.03	0.03	0.00	Lovelna	
		16 22 097 00M/6 SA			+ -	27044 75 -	95	1 to 210		14 2	1 70	4.0	4,900	4,900	0.44	0.44	220.00	2500.00	00.00	5	0.02	274	0.09	0.03	0.00		
		10-32-007-09000 SA				27044 70 -	90	1 10 2 10		14.3	1.70	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	00.00	5	0.02	274	0.09	0.03	0.00	Levelna	
		07-01-000-10000 00				27044 77 -	97	1 10 2 10		50.9	1.09	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	00.00	5	0.02	2/4	0.09	0.03	0.00	Levelna	
ENERCAPITA ENERGY LTD	. C	07-06-088-09W6 WE	<u>= 07-06-088-09W6</u>	SA -	-	27644 78 -	98	1 to 218	OE 8	38.9	0.60	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	2/4	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	<u> </u>	04-05-088-09W6 WE	= 02-06-088-09W6	SA -	-	27644 79 -	99	1 to 218	OE 8	38.9	0.76	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	04-05-088-09W6   WE	<u>= 02-06-088-09W6</u>	SISA -	-	27644 80 -	100	1 to 218	OE 8	38.9	0.76	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	07-06-088-09W6   WE	E 07-06-088-09W6	6 SA -	-	27644 82 -	101	1 to 218	OE 8	38.9	0.60	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		09-31-087-09W6 WE	E 08-31-087-09W6	6 SA -	-	27644 83 -	102	1 to 218	OE 8	38.9	0.18	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	06-32-087-09W6 WE	E 08-31-087-09W6	SA -	-	27644 85 -	103	1 to 218	OE 8	38.9	0.79	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	06-01-088-10W6 WE	E 01-01-088-10W6	6 SA -	-	27644 86 -	104	1 to 218	OE 8	38.9	0.88	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		01-32-087-09W6 WE	E 14-29-087-09W6	SA -	-	27644 89 -	105	1 to 218	OE 8	38.9	0.89	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		14-32-087-09W6 WE	E 11-32-087-09W6	6 PL -	-	27644 91 -	106	1 to 218	OE 1	14.3	0.43	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	16-36-087-10W6 WE	E 01-01-088-10W6	6 SA -	-	27644 93 -	107	1 to 218	OE 8	38.9	0.49	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	-	02-06-088-09W6 SA	04-06-088-09W6	SISA -	- 1	27644 95 -	108	1 to 218	OE 1	14.3	0.85	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	C	11-33-087-09W6 SA	06-28-087-09W6	SPI -	-	27644 102 -	109	1 to 218	0F 1	14.3	1.95	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	l evel na	Ō
	. 0	09-36-087-10W6 BT	15-36-087-10W6		+ -	27644 108 -	110	1 to 218		14.3	0.50	4.0	4 960	4 960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.00	0.03	0.08	Level na	0
		03-06-088-00\// BT	10-00-007-10000			27644 100 -	111	1 to 218		14 2	0.00	4.0	4 060	4,000	0.44	0.44	220.00	2500.00	88.00	5	0.02	274	0.00	0.03	0.00		
		04_20_027 00\A/6 \A/F			+ -	27644 109 -	110	1 to 210		1/ 2	0.20	4.0	4,900	4,300	0.44	0.44	220.00	2500.00	88 00	5	0.02	274	0.00	0.00	0.00		<del>ار</del>
		04-23-001-03000 VVE	10.20.007.0000			27644 110 -	112	$1 t_0 210$		14.3	0.01	4.0	4,900	4,900	0.44	0.44	220.00	2500.00	00.00	5 F	0.02	214	0.09	0.03	0.00	Levelna	
		00-30-087-09996 WE				2/044 111 -	113			14.3	0.38	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	214	0.09	0.03	0.08	Level na	
ENERGAPITA ENERGY LTD	. –	10-30-087-09W6 PL	16-30-087-09W6			2/644 112 -	114	1 to 218		14.3	0.82	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	
ENERCAPITA ENERGY LTD		16-30-087-09W6 PL	14-29-087-09W6	SA -		2/644 115 -	115	1 to 218		54.6	1.09	2.5	4,970	4,970	0.44	0.44	220.00	2500.00	88.00	5	0.82	275	0.09	0.02	0.08	Level na	
ENERCAPITA ENERGY LTD		13-27-087-09W6  SA	14-28-087-09W6	PL -		2/644 116 -	116	1 to 218		14.3	1.33	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	. C	08-36-087-10W6 WE	<u>= 09-36-087-10W6</u>	SA -	-	27644 118 -	117	1 to 218	OE 8	38.9	0.87	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD		14-30-087-09W6 WE	E 10-30-087-09W6	3 PL -	-	27644 119 -	118	1 to 218	OE 1	14.3	0.79	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD	C	04-29-087-09W6 BT	03-29-087-09W6	6 PL -	-	27644 121 -	119	1 to 218	OE 1	14.3	0.61	4.8	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0



									LINE					SEGMEN		LICENS		)		GAS FLOW	LIQUID				DIR 56					
LICENSEE / OPERATOR	WATER CROSS	FROM		то					SEGMENT	UNIQUE	INCLUDES	su		LENGTH	WAL (mm	PRESSU	RE PRESSUR	E LICENSED	EXPECTED	RATE (1000	FLOW RATE	GLR	TEMP (°C)	Z	RELEASE	EPZ (km)	IIZ (km)	PAZ (km)	SETBACK	STATUS
	011000				VALVE	VALVL	110.	NO.	MODIFIER				(11111)	(km)	()	'' (kPa)	(kPa)	1120 (70)	1120 (70)	m3/d)	(m3/d)		( 0)		(m3)	(KIII)	(KIII)	(KIII)		
ENERCAPITA ENERGY LTD.	-	16-36-087-10W6	WE	01-01-088-10W6	SA -	-	27644	123	-	120	1 to 218	0	E 88.9	0.36	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	С	06-04-088-09W6	WE	16-32-087-09W6	BT -	-	27644	124	-	121	1 to 218	0	E 114.3	2.17	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	С	15-04-088-09W6	WE	06-04-088-09W6	SA -	-	27644	125	-	122	1 to 218	0	E 114.3	1.27	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	С	07-29-087-09W6	WE	10-29-087-09W6	SA -	-	27644	127	-	123	1 to 218	0	E 92.3	0.55	10.3	3 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	15-36-087-10W6	WE	04-06-088-09W6	SA -	-	27644	129	-	124	1 to 218	0	E 121.0	1.53	13.0	0 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	13-31-087-09W6	PL	04-06-088-09W6	SA -	-	27644	130	-	125	1 to 218	0	E 88.9	0.90	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	11-29-087-09W6	WE	10-29-087-09W6	SA -	-	27644	131	-	126	1 to 218	0	E 92.0	0.34	10.0	0 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	05-28-087-09W6	PL	06-28-087-09W6	SA -	-	27644	137	-	127	1 to 218	0	E 83.1	0.46	3.7	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	01-31-087-09W6	PL	14-29-087-09W6	SA -	-	27644	142	-	128	1 to 218	0	E 83.1	0.85	3.7	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	07-06-088-09W6	SA	04-06-088-09W6	CS -	-	42277	1	-	129	1 to 218	0	E 88.9	0.68	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	02-12-088-10W6	WE	07-12-088-10W6	SA -	-	44039	1	-	130	1 to 218	0	E 88.9	0.34	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	07-12-088-10W6	SA	09-11-088-10W6	BT -	-	44039	2	-	131	1 to 218	0	E 114.3	1.46	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	04-12-088-10W6	WE	09-11-088-10W6	BT -	-	44039	3	-	132	1 to 218	0	E 88.9	1.32	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	08-11-088-10W6	PL	09-11-088-10W6	BT -	-	44039	4	-	133	1 to 218	0	E 88.9	0.42	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	12-12-088-10W6	WE	09-11-088-10W6	BT -	-	44039	5	-	134	1 to 218	0	E 88.9	0.70	4.0	4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-07-088-09W6	PL	07-12-088-10W6	SA -	-	44039	10	-	135	1 to 218	0	E 88.9	0.93	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	14-12-088-10W6	PL	09-11-088-10W6	PL -	-	44039	11	-	136	1 to 218	0	E 114.3	1.03	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	08-11-088-10W6	PL	09-11-088-10W6	BT -	-	44039	13	-	137	1 to 218	0	E 114.3	0.39	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	12-07-088-09W6	WE	05-07-088-09W6	SA -	-	44039	14	-	138	1 to 218	0	E 88.9	0.79	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	06-12-088-10W6	WE	07-12-088-10W6	SA -	-	44039	16	-	139	1 to 218	0	E 88.9	0.53	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	01-12-088-10W6	WE	07-12-088-10W6	SA -	-	44039	17	-	140	1 to 218	0	E 88.9	0.78	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	08-12-088-10W6	WE	07-12-088-10W6	SA -	-	44039	18	-	141	1 to 218	0	E 88.9	0.45	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	10-12-088-10W6	WE	07-12-088-10W6	SA -	-	44039	19	-	142	1 to 218	0	E 88.9	0.42	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-12-088-10W6	WE	08-11-088-10W6	PL -	-	44039	20	-	143	1 to 218	0	E 88.9	0.45	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	16-02-088-10W6	WE	08-11-088-10W6	PL ESD	-	44039	21	-	144	1 to 218	0	E 88.9	1.14	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-07-088-09W6	PL	07-12-088-10W6	SA -	-	44039	23	-	145	1 to 218	0	E 114.3	0.93	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	02-07-088-09W6	WE	05-07-088-09W6	PL -	-	44039	27	-	146	1 to 218	0	E 88.9	1.01	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	02-07-088-09W6	WE	05-07-088-09W6	PL -	-	44039	28	-	147	1 to 218	0	E 88.9	1.01	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	04-07-088-09W6	WE	05-07-088-09W6	PL -	-	44039	29	-	148	1 to 218	0	E 88.9	0.34	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	01-14-088-10W6	WE	03-13-088-10W6	PL -	-	44039	30	-	149	1 to 218	0	E 88.9	0.67	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	01-14-088-10W6	WE	04-13-088-10W6	SA -	-	44039	31	-	150	1 to 218	0	E 88.9	1.01	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	10-11-088-10W6	WE	08-11-088-10W6	PL -	-	44039	34	-	151	1 to 218	0	E 88.9	0.39	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	06-13-088-10W6	WE	04-13-088-10W6	SA -	-	44039	35	-	152	1 to 218	0	E 88.9	1.18	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	08-14-088-10W6	WE	04-13-088-10W6	SA -	-	44039	37	-	153	1 to 218	0	E 114.3	1.17	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	01-14-088-10W6	PL	03-13-088-10W6	PL -	-	44039	38	-	154	1 to 218	0	E 88.9	0.76	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	16-07-088-09W6	PL	16-07-088-09W6	SA -	-	44039	40	-	155	1 to 218	0	E 88.9	0.35	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	16-07-088-09W6	SA	05-07-088-09W6	PL -	-	44039	41	-	156	1 to 218	0	E 114.3	3.52	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	02-18-088-09W6	WE	16-07-088-09W6	SA -	-	44039	42	-	157	1 to 218	0	E 88.9	0.77	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	10-14-088-10W6	WE	08-14-088-10W6	PL ESD	-	44039	43	-	158	1 to 218	0	E 88.9	0.46	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	06-14-088-10W6	WE	08-14-088-10W6	PL -	-	44039	44	-	159	1 to 218	0	E 88.9	0.72	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	13-12-088-10W6	WE	13-12-088-10W6	PL -	-	44039	45	-	160	1 to 218	0	E 114.3	0.11	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	12-21-088-10W6	WE	12-16-088-10W6	SA ESD	-	44039	47	-	161	1 to 218	0	E 88.9	2.01	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	12-21-088-10W6	WE	12-16-088-10W6	SA -	-	44039	48	-	162	1 to 218	0	E 88.9	2.01	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	01-22-088-10W6	PL	08-14-088-10W6	PL -	-	44039	49	-	163	1 to 218	0	E 168.3	2.70	4.8	3 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	12-16-088-10W6	SA	16-16-088-10W6	PL -	-	44039	50	-	164	1 to 218	0	E 114.3	2.80	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	08-19-088-09W6	WE	09-18-088-09W6	SA -	-	44039	51	-	165	1 to 218	0	E 88.9	1.68	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	09-18-088-09W6	SA	09-18-088-09W6	PL -	-	44039	53	-	166	1 to 218	0	E 114.3	0.20	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	09-18-088-09W6	SA	02-18-088-09W6	PL -	-	44039	54	-	167	1 to 218	0	E 114.3	0.72	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	08-14-088-10W6	PL	01-14-088-10W6	PL -	-	44039	55	-	168	1 to 218	0	E 88.9	0.41	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	03-13-088-10W6	PL	04-13-088-10W6	SA -	-	44039	57	-	169	1 to 218	0	E 88.9	0.09	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	03-13-088-10W6	PL	14-12-088-10W6	PL -	-	44039	58	-	170	1 to 218	0	E 88.9	0.13	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	14-12-088-10W6	PL	09-11-088-10W6	BT -	-	44039	59	-	171	1 to 218	0	E 88.9	1.22	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	04-13-088-10W6	SA	14-12-088-10W6	PL -	-	44039	60	-	172	1 to 218	0	E 114.3	0.20	4.0	) 4,960	4,960	0.90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-24-088-10W6	WE	08-23-088-10W6	PL -	-	49206	1	-	173	1 to 218	0	E 114.3	0.49	4.0	8,270	8,270	0.99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	С	03-22-088-10W6	PL	16-15-088-10W6	BT -	-	50058	5	-	174	1 to 218	0	E 114.3	0.85	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	08-21-088-10W6	WE	03-22-088-10W6	PL -	-	50058	6	-	175	1 to 218	0	E 114.3	1.20	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	01-27-088-10W6	WE	09-22-088-10W6	SA -	-	50058	10	-	176	1 to 218	0	E 114.3	0.84	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	01-21-088-10W6	SA	03-22-088-10W6	PL -	-	50058	11	-	177	1 to 218	0	E 114.3	0.90	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	-	05-19-088-09W6	WE	13-19-088-09W6	PL -	-	50058	16	-	178	1 to 218	0	E 114.3	0.74	4.0	4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0
ENERCAPITA ENERGY LTD.	С	03-22-088-10W6	PL	16-15-088-10W6	BT -	-	50058	17	-	179	1 to 218	0	E 114.3	0.92	4.0	) 4,960	4,960	0.44	0.44	220.00	2500.00	88.00	5	0.82	274	0.09	0.03	0.08	Level na	0



									LINE					SEGMENT		LICENS	ED EXPE	CTED			GAS FLOW	LIQUID				DIR 56					
LICENSEE / OPERATOR	WATER	FROM		то	START		LICENSE		SEGMENT		INCLUDES	SUB	OD (mm)	LENGTH	WAL	PRESSL	RE PRES	SURE LICEN		EXPECTED	RATE (1000	FLOW RATE	GLR	TEMP	z	RELEASE	EPZ	IIZ (km)	PAZ	SETBACK	STATUS
	CRUSS				VALVE	VALVE	NO.	NU.	MODIFIER	LINE #	UNIQUE #		(mm)	(km)	(mm	) (kPa)	(kP	Ра) Н25	(%)	п23 (%)	m3/d)	(m3/d)		(0)		(m3)	(КП)	(KIII)	(KIII)	LEVEL	
ENERCAPITA ENERGY LTD	-	09-22-088-10W6	SA	16-15-088-10W6 SA	A -	-	50462	1	-	180	1 to 218	OF	114 3	1 72	4 0	8 270	) 82	70 09	99	0 99	220.00	2500.00	88 00	5	0 74	843	0 15	0.06	0 13	l evel na	0
ENERCAPITA ENERGY LTD.	-	07-22-088-10W6	WE	16-15-088-10W6 SA	<u> </u>	-	50462	2	-	181	1 to 218	OE	114.3	0.64	4.0	4.96	$\frac{0,1}{4.9}$	60 0.9	39	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	Ō
ENERCAPITA ENERGY LTD.	С	16-15-088-10W6	SA	08-15-088-10W6 PI	· -	-	50462	3	-	182	1 to 218	OE	114.3	0.74	4.0	8.27	) 8.2	270 0.9	39	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	Ō
ENERCAPITA ENERGY LTD	C C	08-15-088-10W6	PI	14-10-088-10W6 PI		-	50462	4	-	183	1 to 218	OF	114.3	1 65	4.0	8 270	$\frac{0,-1}{100}$	70 0.9	39	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	<del>0</del>
ENERCAPITA ENERGY LTD	C C	15-01-088-10W6	SA	04-06-088-09W6 CS	- S -	-	50462	5	_	184	1 to 218	OF	114.3	1.82	4.0	4 960	$\frac{3}{2}$ 4.9	060 0.9	39	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD	-	08-31-087-09W6	PI	08-31-087-09W6 SA	Δ _	-	50462	7	_	185	1 to 218	OF	114.3	0.38	4.0	4 960	$\frac{1,0}{1,0}$	60 0.9	39	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	
	C	08-31-087-09W6	PI	14-29-087-09W6 SA	<u> </u>		50462	8	-	186	1 to 218	OF	168.3	1 51	4.0	4,000	$\frac{1}{2}$		39	0.00	220.00	2500.00	88.00	5	0.82	618	0.10	0.06	0.10	Level na	
	<u> </u>	14-29-087-09W6	CS	06-28-087-09W6 PI	` <u> </u>	<u> </u>	50462	G G	-	187	1 to 218	OF	114.3	2 50	4.0	4,000	$\frac{1}{2}$		39	0.00	220.00	2500.00	88.00	5	0.82	618	0.14	0.00	0.12	Level na	
		06-28-087-09W6	SA	08-21-087-09W6 B		_	50462	10	_	188	1 to 218	OF	114.3	1 90	4.0	4,000	) 49			0.00	220.00	2500.00	88.00	5	0.02	618	0.10	0.00	0.10	Level na	
		00-20-007-0070	WE	16-15-088-10W6 S/	Δ _	_	50462	11	_	180	1 to 218		114.3	0.55	4.0	1 06	$\frac{1}{10}$		20	0.00	220.00	2500.00	88.00	5	0.02	618	0.15	0.00	0.13		
ENERCAPITA ENERGY LTD		16-10-088-10///6		14-10-088-10/06 5/	<u> </u>	-	50462	16	-	103	1 to 218		114.3	1.40	4.0	4,300	$\frac{1}{1}$		20	0.33	220.00	2500.00	88.00	5	0.02	618	0.15	0.00	0.13		
		16 10 088 10\//6			^ -	-	50462	17	-	101	1 to 210		99.0	1.40	4.0	4,300	$\frac{1}{1}$		20	0.99	220.00	2500.00	88.00	5	0.02	618	0.15	0.00	0.13	Lovelna	
ENERCAPITA ENERGY LTD.		13 10 088 10/06		14-10-088-10000-37	- ∧   -	-	50402	10	-	102	1 to 218		11/ 2	0.03	4.0	4,900	$\frac{1}{4,9}$		20	0.99	220.00	2500.00	88.00	5	0.02	619	0.15	0.05	0.13		
ENERCAPITA ENERGY LTD.		05 15 089 10/06		14-10-000-10000 37	~ - ^ -	-	50402	21	-	192	1 to 210		00 0	1.00	4.0	4,900	4,9		20	0.99	220.00	2500.00	00.00	5	0.02	610	0.15	0.00	0.13		
ENERCAPITA ENERGI LID.	-	09-10-089-10/06		12 10 089 10W0 37	-	-	50402	21	-	193	1 to 210		00.9	0.00	4.0	4,900	$\frac{1}{2}$ $\frac{4,9}{4,9}$		39	0.99	220.00	2500.00	00.00	5	0.02	610	0.15	0.05	0.13	Levelna	
ENERCAPITA ENERGI LID.	-	16 05 089 10/06	SVE SV	13-10-066-10000 FL		-	50402	23	-	194	1 to 210		160.2	2.00	4.0	4,90	$\frac{1}{2}$ $\frac{4,9}{4,9}$		39	0.99	220.00	2500.00	00.00	5	0.02	610	0.15	0.00	0.13	Levelna	
ENERCAPITA ENERGI LID.		16-03-088-10W0	SA SA	12 10 088 00W6 DI		-	50402	24	-	195	1 to 210		100.3	2.00	4.0		4,9		39	0.99	220.00	2500.00	00.00	5	0.02	010	0.15	0.00	0.13	Levelna	
ENERCAPITA ENERGY LTD.	-	10-23-000-10000	SA	13-19-066-09006 PL		-	50462	20	-	190	1 10 2 10		114.3	2.13	4.0	0,270			99	0.99	220.00	2500.00	00.00	5	0.74	043	0.15	0.00	0.13	Levelna	
ENERCAPITA ENERGY LTD.	-	09-22-088-10006	SA	10-15-088-10006 SA	4 -	-	50462	28	-	197	1 10 2 18		114.3	2.10	4.0	0 0,270	0 8,2		99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Levelna	
ENERCAPITA ENERGY LTD.		07-30-088-09006	WE	13-19-088-09006 PL		-	50462	29	-	198	1 10 2 18		121.0	1./1	13.0		0 8,2		99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	C	07-30-088-09W6	WE	13-19-088-09006 SA	<u> </u>	-	50462	30	-	199	1 to 218		121.0	1.71	13.0	0 8,270	8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	-	05-08-088-10006	VVE	16-05-088-10W6 SA	4 -	-	50462	31	-	200	1 to 218	OE	143.0	2.23	14.0	4,960	4,9	00 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	-	13-10-088-10W6	SA	13-10-088-10W6 PL		-	50462	33	-	201	1 to 218	OE	121.0	0.21	12.8	8 4,960	) 4,9	60 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	-	13-10-088-10W6	PL	14-10-088-10W6 SA	<u>-</u>	-	50462	34	-	202	1 to 218	OE	114.3	0.59	4.0	4,960	) 4,9	060 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Levelna	
ENERCAPITA ENERGY LTD.	C	14-10-088-10W6	SA	04-06-088-09W6 B	-	-	50462	35	-	203	1 to 218	OE	219.1	6.56	6.4	8,270	8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Levelna	
ENERCAPITA ENERGY LTD.	C	16-32-087-10W6	WE	16-05-088-10W6 SA	<u>م</u> -	-	50462	36	-	204	1 to 218	OE	121.0	2.17	13.0	4,960	) 4,9	60 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	C	16-32-087-10W6	WE	16-05-088-10W6 SA	<u> </u>	-	50462	37	-	205	1 to 218	OE	143.0	2.1/	14.0	4,960	) 4,9	60 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	C	04-23-088-10W6	WE	16-15-088-10W6 SA	<u> </u>	-	50462	42	-	206	1 to 218	OE	114.3	0.65	4.0	8,270	) 8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	C	13-19-088-09W6	CS	09-22-088-10W6 PL		-	50462	49	-	207	1 to 218	OE	118.0	4.07	11.1	1 8,270	) 8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	
ENERCAPITA ENERGY LTD.	C	04-06-088-09W6	BI	08-31-087-09W6 PL	LESD	-	50462	50	-	208	1 to 218	OE	141.0	2.20	10.0	4,960	) 4,9	60 0.9	99	0.99	220.00	2500.00	88.00	5	0.82	618	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	-	08-11-088-10W6	PL	07-10-088-10W6 PL		-	50462	55	-	209	1 to 218	OE	124.0	1.78	14.5	5 8,270	) 8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6	BT	08-11-088-10W6 PL		-	50462	56	-	210	1 to 218	OE	124.0	0.48	14.5	5 8,270	) 8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	-	01-27-088-10W6	SA	16-22-088-10W6 PL		-	52224	1	-	211	1 to 218	OE	114.3	0.80	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	16-22-088-10W6	PL	01-22-088-10W6 PL		-	52224	2	-	212	1 to 218	OE	114.3	1.30	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	08-27-088-10W6	WE	01-27-088-10W6 SA	<u>م</u> -	-	52224	5	-	213	1 to 218	OE	114.3	0.49	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	16-16-088-10W6	SA	01-22-088-10W6 PI		-	53030	1	-	214	1 to 218	OE	114.3	1.62	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	01-22-088-10W6	PL	16-15-088-10W6 SA	<u>م</u> -	-	53030	2	-	215	1 to 218	OE	114.3	0.32	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-15-088-10W6	WE	16-16-088-10W6 SA	A -	-	53918	1	-	216	1 to 218	OE	88.9	0.80	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	-	05-15-088-10W6	WE	16-16-088-10W6 SA	<u>م</u> -	-	53918	2	-	217	1 to 218	OE	88.9	0.80	4.0	4,960	) 4,9	60 0.9	90	0.90	220.00	2500.00	88.00	5	0.82	562	0.14	0.05	0.12	Level na	0
ENERCAPITA ENERGY LTD.	С	08-23-088-10W6	WE	16-23-088-10W6 SA	<u>م</u> -	-	59699	1	-	218	1 to 218	OE	118.0	0.83	11.1	1 8,270	) 8,2	270 0.9	99	0.99	220.00	2500.00	88.00	5	0.74	843	0.15	0.06	0.13	Level na	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6	SA	08-21-087-09W6 GF	P -	-	37567	1	-	219	219 to 230	SW	88.9	3.88	5.5	5 17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	С	08-31-087-09W6	PL	14-29-087-09W6 SA	<u>م</u> -	-	37567	2	-	220	219 to 230	SW	114.3	1.56	4.8	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	10-31-087-09W6	PL	10-31-087-09W6 W	E -	-	37567	5	-	221	219 to 230	SW	88.9	0.19	4.0	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	02-06-088-09W6	PL	02-06-088-09W6 W	E -	-	37567	6	-	222	219 to 230	SW	88.9	0.12	4.0	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	04-06-088-09W6	SA	03-06-088-09W6 B	Т -	-	37567	8	-	223	219 to 230	SW	114.3	0.20	4.8	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	С	02-06-088-09W6	PL	04-05-088-09W6 W	E -	-	37567	9	-	224	219 to 230	SW	88.9	0.76	4.0	15,00	0   15,0	000 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6	PL	08-31-087-09W6 W	E -	-	37567	10	-	225	219 to 230	SW	88.9	0.44	4.0	15,00	0 15,0	000 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	С	04-06-088-09W6	PL	08-31-087-09W6 PI		-	37567	14	-	226	219 to 230	SW	114.3	2.19	4.8	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6	BT	12-22-087-09W6 W	E -	-	37567	15	-	227	219 to 230	SW	114.3	0.50	4.8	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6	PL	11-29-087-09W6 W	E -	-	37567	16	-	228	219 to 230	SW	88.9	0.90	5.5	17,24	0 17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	11-29-087-09W6	PL	06-29-087-09W6 W	E -	-	37567	17	-	229	219 to 230	SW	88.9	0.12	5.5	17,24	0   17,2	240 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	С	06-29-087-09W6	PL	08-30-087-09W6 W	E -	-	37567	18	-	230	219 to 230	SW	95.5	1.78	11.9	9 14,89	0 14,8	890 0.4	44	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	08-35-087-07W6	SAT	10-22-087-07W6 PI		-	25322	1	-	231	231 to 233	SW	88.9	4.13	9.5	5 1,030	) 1,0	30 0.0	06	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	10-22-087-07W6	PL	07-22-087-07W6 W	E -	-	25322	5	-	232	231 to 233	SW	88.9	0.26	9.5	5 1,030	) 1,0	0.0	06	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0
ENERCAPITA ENERGY LTD.	-	11-22-087-07W6	GP	10-22-087-07W6 W	E -	-	53035	1	-	233	231 to 233	SW	88.9	0.27	4.8	14,50	0   14,5	500 0.9	00	2.93	N/A	4650.00	7.00	5	na	na	0.10	0.04	0.09	na	0

												SEGMENT			EVDECTED								DIR 56				
LICENSEE / OPERATOR	WATER	FROM	то	START	END	LICENSE		UNIQUE	INCLUDES	SUB	OD	LENGTH	WALL	PRESSURE		LICENSED	EXPECTED	RATE (1000	FLOW RATE	GLR	TEMP	z	RELEASE	EPZ	IIZ	PAZ SETBAC	K STATUS
	CROSS			VALVE	VALVE	NO.	NO. MODIFIER	LINE #	UNIQUE #		(mm)	(km)	(mm)	(kPa)	(kPa)	H2S (%)	H2S (%)	m3/d)	(m3/d)		(°C)		VOLUME	(km)	(km) (	(km) LEVEL	
l .									ENERCA			SCONTINU	=D										(m3)				
		14 21 087 00W/6 BE	06 21 087 00/0/6 8			27582	3	224	234				40	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD.		01 20 087 00W/6 BE				27593	19	234	234		88.0	0.37	4.0		0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD.		12 16 087 00W6 BE				27593	22	235	235		88.0	0.42	4.0		0	0.44	0.44				+ +						
ENERCADITA ENERCY I TO	-	05 16 087 00W6 BE	11 16 087 00\/6		-	27583	22 -	230	230		88.0	0.43	4.0	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD	-	04-22-087-09W0 BE	01-21-087-09//6		-	27583	34 -	238	238		88.0	0.02	4.0	0	0	0.44	0.44										
ENERCAPITA ENERCY LTD		04-22-007-09W0 BE	13-17-087-09W0 E		-	27583	52 -	230	230		11/ 3	0.73	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD	-	04-20-087-09W6 BE	10-20-087-09W/6 B			27583	56 -	240	233		88.0	0.57	4.0	0	0	0.44	0.44				+ +						
	_	09-14-087-09W6 BE	01-14-087-09W6 P			27583	64 -	240	240	OF	121.0	0.50	13.0	0	0	0.44	0.44										
	-	06-28-087-09W6 BE	06-28-087-09W6 P	SE -	<u> </u>	27644	1 -	242	247	OF	88.9	0.00	4.0	0	0	0.44	0.44				+ +						
		05-28-087-09W6 BE	06-28-087-09W6 P		-	27644	3 -	243	243	OF	88.9	0.10	4.0		0	0.44	0.44				+ +						
	_	08-31-087-09W6 BE	16-30-087-09W6 P		-	27644	7 -	240	240	OF	54.6	1 72	2.5	0	0	0.44	0.44				+ +						
	+ <u>-</u>	01-31-087-09W6 BE	14-29-087-09W6 P	SE -	<u> </u>	27644	10 -	245	245	OF	54.6	1.72	2.5	0	0	0.44	0.44				+ +						
		06-29-087-09W6 BE	14-29-087-09W6 B		-	27644	11 -	246	246		54.6	0.01	2.5	0	0	0.44	0.44				+ +						
		00-25-007-05W0 BE	08-31-087-09W6 B			27644	22 -	247	240		83.1	2.04	3.7	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD	-	14-29-087-09W/6 BE	05-28-087-09W/6 B			27644	22 -	247	247		83.1	2.04	3.7	0	0	0.44	0.44				+ +						
		05-28-087-09W6 BE	05-28-087-09W6 B			27644	26 -	240	240		83.1	0.06	3.7	0	0	0.44	0.44										
		10-31-087-09W6 BE	08-31-087-09///6			27644	33 -	250	250		88.0	0.00	4.0	0	0	0.44	0.44										
ENERCAPITA ENERCY LTD		11-06-088-09W6 BE	13-06-088-09W/6 E		-	27644	45 -	251	251		88.0	0.75	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERCY LTD		07-31-087-09W6 BE	01-31-087-09//6			27644	43 -	252	257		83.1	1.22	3.7	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD	-	10-01-088-10W6 BE	15-01-088-10W/6 E			27644	50 -	252	252		88.0	0.47	4.0	0	0	0.44	0.44										
ENERCADITA ENERCY I TO	C	11 01 088 10W/6 BE	15 01 088 10W6 B		-	27644	52	255	253		88.0	0.47	4.0	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD		10-06-088-09W/6 BE	07-06-088-09/0/6		-	27644	66 -	255	255		88.0	0.00	4.0	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD.		11 28 087 00W/6 BE				27644	73	255	255		88.0	1 16	4.0		0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD.		06 32 087 00W6 BE				27644	94	250	250		88.0	0.70	4.0		0	0.44	0.44				+ +						
ENERCAPITA ENERCY LTD.	-	12 21 097 00W6 DE				27044	04 -	257	257		00.9	0.79	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD.		12-31-007-09W0 BE			-	27644	02 -	250	250		88.0	0.30	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD	0	03-01-088-10W/6 BE	04-00-088-0900		-	27644	92 -	209	259		88.0	0.00	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD.		04 01 088 10W6 BE				27644	107	200	200		11/ 2	0.01	4.0		0	0.44	0.44				+ +						
ENERCAPITA ENERCY LTD.		04-01-000-10W0 BE				27044	107 -	201	201		114.3	0.00	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD.	-	08-36-087-09W0 BE			-	27644	117 -	202	202		114.3	0.30	4.0	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD	0	14-30-087-09W/6 BE	10-30-087-00W6 E		-	27644	120 -	203	203		88.0	0.07	4.0	0	0	0.44	0.44										
ENERCAPITA ENERGY LTD		10-20-087-09W0 BE	14-20-087-09W0 E			27644	120 -	265	265		54.6	1.00	2.5	0	0	0.44	0.44										
	- C	15-04-088-09W6 BE	06-04-088-09W/6 B			27644	126 -	266	266		114 3	1.00	4.0	0	0	0.44	0.44										
	-	16-30-087-09W/6 BE	14-29-087-09W/6 B			27644	138 -	267	267		54.6	0.85	2.5	0	0	0.44	0.44				+ +						
		16-02-087-09W6 BE	04-12-087-09W6 B			37567	100 -	268	268	SW	114 3	0.00	4.8	0	0	0.44	0.44				+ +						
	+ - 1	15-16-087-09W6 BE	08-21-087-09W6 P	SE -	<u> </u>	37567	13 -	269	269	SW	114.3	1.04	4.8	0	0	0.44	0.44				+ +						
ENERCAPITA ENERGY LTD	-	09-11-088-10W6 BE	09-11-088-10W6 P	SF -	-	44039	8 -	270	270	OF	88.9	0.29	4.0	0	0	0.90	0.90				+ +						
		09-11-088-10W6 BE	09-11-088-10W6 P	SE -	-	44039	9 -	271	271	OF	88.9	0.20	4.0	0	0	0.00	0.00										
		06-11-088-10W6 BE	08-11-088-10W6 P	SE -	<u> </u>	44039	12 -	272	272	OF	88.9	0.20	4.0	0	0	0.00	0.00				+ +						
	C	03-12-088-10W6 BE	07-12-088-10W6 B	SE -	<u> </u>	44039	15 -	273	273	OF	88.9	0.40	4.0	0	0	0.00	0.00				+ +						
ENERCAPITA ENERGY LTD	C C	16-02-088-10W6 BE	08-11-088-10W6 P	SF -	-	44039	22 -	274	274	OF	88.9	1 14	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY LTD	C	15-12-088-10W6 BE	04-13-088-10W6 P	3F -	-	44039	25 -	275	275	OF	88.9	1 21	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY LTD	-	07-08-088-09W6 BE	16-07-088-09W6 P	3F -	-	44039	39 -	276	276	OF	114.3	1.89	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY LTD	С	14-12-088-10W6 BE	04-13-088-10W6 P	3F -	-	44039	46 -	277	277	OF	88.9	0.50	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY LTD	-	08-19-088-09W6 BE	09-18-088-09W6 P	SF -	-	44039	52 -	278	278	OF	114.3	1.68	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY LTD	-	12-08-088-09W6 BE	16-07-088-09W6 P	3F -	-	44039	56 -	279	279	OF	88.9	0.53	4.0	0	0	0.90	0.90										
ENERCAPITA ENERGY I TD	-	07-22-088-10W6 BF	16-15-088-10W6 P	BE -	- 1	50058	3 -	280	280	OF	114.3	0.70	4.0	0	0	0.44	0.44										
ENERCAPITA ENERGY I TD	-	14-15-088-10W6 BF	03-22-088-10W6 F	BE -	- 1	50058	4 -	281	281	OF	114.3	0.08	4.0	1 Õ	0	0.44	0.44										
ENERCAPITA ENERGY I TD	-	03-22-088-10W6 BF	01-21-088-10W6 F	BE -	- 1	50058	12 -	282	282	OF	114.3	0.90	4.0	1 Õ	0	0.44	0.44										
ENERCAPITA ENERGY LTD	-	04-06-088-09W6 BE	08-31-087-09W6 P	3F -	-	50462	6 -	283	283	OF	114.3	2.04	4.0	n n	n n	0.99	0.99										
ENERCAPITA ENERGY I TD	-	07-23-088-10W6 BF	16-15-088-10W6 P	BE -	- 1	50462	11 -	284	284	OF	114.3	1.99	4.0	0	0	0.99	0.99										
ENERCAPITA ENERGY I TD	- 1	08-23-088-10W6 BF	07-23-088-10W6 F	BE -	- 1	50462	12 -	285	285	OE	114.3	0.59	4.0	Ō	Ő	0.99	0.99										D
ENERCAPITA ENERGY I TD	-	09-15-088-10W6 BF	16-15-088-10W6 F	BE -	- 1	50462	13 -	286	286	OF	168.3	0.55	4.0	0	0	0.99	0.99										
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LICENSEE / OPERATOR	WATER CROSS	FROM	то	START VALVE	END VALVE	LICENSE NO.	LINE NO.	LINE SEGMENT MODIFIER	UNIQUE LINE #	INCLUDES UNIQUE #	SUB	OD (mm)	SEGMEN LENGTH (km)	WALL (mm)	LICE PRE	ENSED ESSURE kPa)	EXPECTED PRESSURE (kPa)	LICENSED H2S (%)	EXPECTED H2S (%)	GAS FLOW RATE (1000 m3/d)	LIQUID FLOW RATE (m3/d)	GLR	TEMP (°C)	z	DIR 56 RELEASE E VOLUME ( (m3)	:PZ IIZ km) (km)	PAZ (km)	SETBACK LEVEL	STATUS
ENERCAPITA ENERGY LTD.	-	05-15-088-10W6	BE 13-10-088-10W6 BE	-	-	50462	20	-	287	287	OE	114.3	0.63	4.0		0	0	0.99	0.99										D
ENERCAPITA ENERGY LTD.	С	14-10-088-10W6	BE 15-01-088-10W6 BE	- 1	-	50462	46	-	288	288	OE	114.3	4.95	4.0		0	0	0.99	0.99										D
ENERCAPITA ENERGY LTD.	-	08-27-088-10W6	BE 01-27-088-10W6 BE	-	-	52224	4	-	289	289	OE	88.9	0.49	4.0		0	0	0.90	0.90										D

#### LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir UG=Underground Cap or Tie-in

Valve: CV=Check Valve ESD=Emergency Shutdown Valve MBV=Manual Block Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water MP=Multiphase NL=NGL MG=Miscellaneous Gases

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated Other: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature



LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	uwi	SURFACE LOCATION	H2S (%)	STATUS
	ENERC	APITA SWEE	TOPERATING			
ENERCAPITA ENERGY LTD.	EEL WORSLEY 1-12-88-10	327498	100011208810W600	01-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 2HZ WORSLEY 5-18-87-8	429675	102051808708W600	01-14-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 2HZ WORSLEY 4-18-87-8	429675	103041808708W602	01-14-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-11-88-10	339462	100161108810W600	01-14-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-16-87-9	331403	100011608709W600	01-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-17-87-9	411726	102011708709W600	01-17-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-32-87-9	336033	100013208709W600	01-32-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-1-88-10	327925	100020108810W600	02-01-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	MISSION O & G WORSLEY 2-2-88-7	143430	100020208807W600	02-02-088-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-2-88-7	431490	102020208807W600	02-02-088-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 103 WORSLEY 11-6-88-9	360512	102110608809W600	02-06-088-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 103 WORSLEY 11-6-88-9	360512	103110608809W602	02-06-088-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 103 WORSLEY 11-6-88-9	360512	103140608809W603	02-06-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-8-88-9	431457	100030808809W600	02-07-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	ENERCAPITA ENE 06-25-087-07-6	325791	100022108709W600	02-21-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-29-87-9	320658	100022908709W600	02-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 104 WORSLEY 4-6-88-9	395800	104040608809W600	03-06-088-09W6	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-16-87-9	332691	100031608709W600	03-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-21-87-9	342946	100032108709W600	03-21-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-29-87-9	320531	100032908709W600	03-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 4-32-87-9	395000	102043208709W600	03-32-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-36-87-7	225762	100033608707W600	03-36-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-5-88-9	331407	100040508809W600	04-05-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-5-88-9	331512	102040508809W600	04-05-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-7-88-9	334918	100040708809W600	04-07-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON ET AL WORSELY 4-21-87-9	171780	100042108709W602	04-21-087-09W6	0	COMMINGLED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 4-29 WORSLEY 1-30-87-9	435540	100013008709W600	04-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-20-87-9	411767	100132008709W600	04-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 6-29-87-9	397538	102062908709W600	04-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 4-36-87-7	341938	100043608707W600	04-36-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ CLEARH 4-7-88-10	468366	100040708810W600	05-08-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-11-87-9	359635	102081108709W602	05-11-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 5-12-88-10	325819	100051208810W600	05-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-29-87-9	162790	102092908709W600	05-28-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-32-87-9	320961	103053208709W600	05-32-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 5-36-87-7	157239	100053608707W600	05-36-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-1-88-10	333891	100060108810W600	06-01-088-10W6	0	PUMPING OIL

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	uwi	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 5-5-88-9	457204	102050508809W600	06-04-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-12-88-10	329639	100061208810W600	06-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-13-88-10	333572	100061308810W602	06-13-088-10W6	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-16-87-9	339484	100061608709W600	06-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-17-87-9	411766	100031708709W600	06-17-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-17-87-9	400158	100061708709W600	06-17-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON ET AL WORSLEY 6-21-87-9	160275	100062108709W600	06-21-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-1-88-10	329467	100070108810W600	07-01-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-6-88-9	225312	100010608809W602	07-06-088-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 5-5-88-9	355505	100050508809W600	07-06-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-6-88-9	330889	102070608809W600	07-06-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-23-88-10	361872	100062308810W602	07-22-088-10W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-31-87-9	320745	100073108709W600	07-31-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 8-11 HZ WORSLEY 5-7-87-8	428183	100050708708W600	08-11-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-12-88-10	330505	100081208810W600	08-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 7-14-88-10	390736	100071408810W600	08-14-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-14-88-10	342189	100081408810W600	08-14-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-16-87-9	344666	100071608709W600	08-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-16-87-9	153027	100081608709W600	08-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 10-20-88-9	443277	100102008809W600	08-19-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-20-87-9	159391	100082008709W600	08-20-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON ET AL WORSLEY 8-22-87-9	162661	100082208709W600	08-22-087-09W6	0	OBSERVATION
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-35-87-7	62639	100083508707W600	08-35-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 9-1-88-10	289706	100090108810W600	09-01-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 9-14HZ WORSLEY 12-18-87-8	469157	100121808708W602	09-14-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 5-15-88-10	415418	100051508810W600	09-15-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON 102 WORSLEY 16-16-87-9	359395	102161608709W600	09-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-23-88-10	367700	100102308810W602	09-22-088-10W6	0	DRAIN
ENERCAPITA ENERGY LTD.	EEL WORSLEY 9-35-87-7	341158	100093508707W600	09-35-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-36-87-10	399636	100083608710W600	09-36-087-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-36-87-10	395278	100093608710W600	09-36-087-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-36-87-10	399635	100103608710W600	09-36-087-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 10-12-88-10	330498	100101208810W600	10-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-29-87-9	207495	100132908709W600	10-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 15-30-87-9	401176	100153008709W600	10-30-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 10-31-87-9	255919	100103108709W600	10-31-087-09W6	0	OBSERVATION
ENERCAPITA ENERGY LTD.	EEL WORSLEY 10-35-87-7	341239	100103508707W600	10-35-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	TIDEWATER 102 CLEARH 11-8-88-10	307631	102110808810W600	11-08-088-10W6	0	OBSERVATION

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	uwi	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 11-25-87-7	176726	100112508707W602	11-25-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	COMPTON 11-29 WORSLEY 1-29-87-9	211050	103082908709W600	11-29-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-33-87-9	352132	100123308709W600	11-33-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-7-88-9	325341	100120708809W600	12-07-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 12-11-87-9	416667	100121108709W600	12-12-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 13-11-87-9	454304	100131108709W600	12-12-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-12-88-10	311637	100121208810W600	12-12-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-16-87-9	337641	100121608709W600	12-16-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	CPEC WORSLEY 5-17-88-10	441545	100051708810W600	12-16-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 13-17-88-10	461100	100131708810W600	12-16-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	ENERCAPITA HZ WORSLEY 13-3-88-10	500422	100130308810W600	13-01-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 11-12-88-10	386158	100111208810W602	13-12-088-10W6	0	OBSERVATION
ENERCAPITA ENERGY LTD.	EEL WORSLEY 13-25-87-7	62695	100132508707W600	13-25-087-07W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-31-87-9	329450	100133108709W600	13-31-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102HZ WORSLEY 12-31-87-9	430224	102123108709W600	14-30-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 15-31-87-9	259224	102153108709W600	15-31-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-1 2HZ WORSLEY 1-7-87-8	423610	100010708708W600	16-01-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-1 2HZ WORSLEY 1-7-87-8	423610	100010708708W602	16-01-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-1 2HZ WORSLEY 9-6-87-8	418034	100090608708W602	16-01-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 16-6-87-8	397169	102160608708W600	16-01-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-1 2H WORSLEY 16-6-87-8	418034	103160608708W600	16-01-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-1-88-10	270734	100160108810W600	16-01-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-2 HZ WORSLEY 13-2-87-9	398709	100130208709W600	16-02-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 9-1-87-9	402007	102090108709W600	16-02-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 16-1-87-9	398701	102160108709W600	16-02-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-8-88-9	461221	100160808809W600	16-07-088-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-11HZ WORSLEY 13-7-87-8	421067	100120708708W600	16-11-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-11HZ WORSLEY 13-7-87-8	421067	100130708708W602	16-11-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 16-12-87-9	358437	102161208709W603	16-11-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 2HZ WORSLEY 1-18-87-8	429434	100011808708W600	16-12-087-09W6	0	DRAIN
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-16-87-9	339655	100131608709W600	16-17-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-18-86-9	350630	102161808609W602	16-18-086-09W6	0	COMMINGLED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-22 WORSLEY 13-22-88-10	394812	100132208810W600	16-22-088-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-32-87-9	171146	100023208709W602	16-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-29-87-9	165869	100162908709W600	16-29-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-31-87-9	320034	100163108709W600	16-31-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-6-88-9	320033	102010608809W600	16-31-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-32-87-9	336016	100093208709W600	16-32-087-09W6	0	PUMPING OIL

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-32-87-9	335968	100103208709W600	16-32-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 13-33-87-9	336369	100133308709W600	16-32-087-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 16-36-86-9	437859	100163608609W600	16-35-086-09W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	299131	100163608610W602	16-36-086-10W6	0	FLOWING OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	313251	102163608610W604	16-36-086-10W6	0	COMMINGLED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	313251	102163608610W605	16-36-086-10W6	0	FLOWING GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-36-87-10	329468	100163608710W600	16-36-087-10W6	0	PUMPING OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 HZ WORSLEY 7-1-88-10	455216	102070108810W600	16-36-087-10W6	0	PUMPING OIL
	ENERCA	APITA SWEE	T SUSPENDED			
ENERCAPITA ENERGY LTD.	MISSION O & G WORSLEY 2-2-88-7	143430	100020208807W602	02-02-088-07W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-7-88-9	334726	100020708809W600	02-07-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-7-88-9	336491	100030708809W600	02-07-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-35-87-7	343506	100023508707W600	02-35-087-07W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 3-1-88-10	339348	100030108810W600	03-01-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-12-88-10	328442	100031208810W600	03-12-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-12-88-10	328442	100031208810W602	03-12-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-7-88-9	371643	102030708809W600	03-12-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-25-87-7	246316	100032508707W600	03-25-087-07W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-1-88-10	393693	100040108810W600	04-01-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 4-6-88-9	199479	100040608809W600	04-06-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-11-87-9	362493	100041108709W600	04-12-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-19-87-9	421776	100011908709W600	04-20-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 1-35-87-7	341940	100013508707W600	04-36-087-07W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 5-15HZ CECIL 5-16-86-8	436451	100051608608W602	05-15-086-08W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 5-23-87-8	197736	100052308708W600	05-23-087-08W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	COMPTON PETROL CLEARH 5-24-87-10	181202	100052408710W602	05-24-087-10W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 7-7-88-9	337632	100070708809W600	06-07-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-22-87-9	160274	100062208709W600	06-22-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-22-87-9	160274	100062208709W602	06-22-087-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-26-87-9	340786	100062608709W600	06-26-087-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIR 7-30 HZ WORSLEY 8-29-88-9	477978	102082908809W600	07-30-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-11-87-9	332693	100081108709W600	08-11-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	CANEX WORSLEY 8-11-88-10	311639	100081108810W600	08-11-088-10W6	0	SUSPENDED WATER INJECTOR
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 8-23-87-10	186766	100082308710W600	08-23-087-10W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 8-23-87-10	186766	100082308710W603	08-23-087-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-27-86-9	333879	100082708609W600	08-27-086-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-27-86-9	333879	100082708609W603	08-27-086-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 1-36-87-10	425520	100013608710W600	08-36-087-10W6	0	SUSPENDED OIL



LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-36-87-10	425521	100073608710W600	08-36-087-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-6-88-9	327923	100090608809W600	10-06-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 10-11-88-10	342137	100101108810W600	10-11-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 10-17-87-9	334923	100101708709W600	10-17-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 102 WORSLEY 12-20-87-9	420459	102122008709W600	10-20-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 11-1-88-10	308255	100110108810W600	11-01-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-1-88-10	346033	100120108810W600	11-01-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 11-6-88-9	289883	100110608809W600	11-06-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 11-16-87-9	151639	100111608709W600	11-16-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-7-88-9	325341	100120708809W602	12-07-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-17-86-9	359285	100121708609W600	12-17-086-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-17-86-9	359285	100121708609W602	12-17-086-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-20-87-9	338946	100122008709W600	12-20-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 12-26-86-9	464265	100122608609W602	12-25-086-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-17-87-9	373048	102161708709W600	13-17-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 14-2-88-10	381298	100140208810W600	14-02-088-10W6	0	SUSPENDED WATER SOURCE
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-14-87-9	165718	100141408709W600	14-14-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 14-15-87-10	190045	100141508710W604	14-15-087-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-22-87-9	162523	100142208709W600	14-22-087-09W6	0	SUSPENDED WATER DISPOSAL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-30-87-9	343100	100143008709W600	14-30-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-36-87-10	339243	100143608710W600	14-36-087-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 14-5-88-9	360402	100140508809W600	15-06-088-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 15-12-88-10	334254	100151208810W600	15-12-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 15-35-87-7	60478	100153508707W602	15-35-087-07W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 15-35-87-7	341349	102153508707W600	15-35-087-07W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 15-36-87-10	326926	100153608710W600	15-36-087-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-1-87-9	331385	100160108709W600	16-01-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-1-88-10	270734	100160108810W602	16-01-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF HZ WORSLEY 12-2-87-9	402006	100120208709W600	16-02-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 1-11-88-10	333402	100011108810W600	16-02-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 2HZ WORSLEY 1-18-87-8	429434	100011808708W602	16-12-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-12-87-9	332232	100161208709W600	16-12-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-18-86-9	334637	100161808609W602	16-18-086-09W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-18-86-9	350630	102161808609W600	16-18-086-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 16-21-88-10	390852	100162108810W600	16-21-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 16-22 WORSLEY 12-22-88-10	394813	100122208810W600	16-22-088-10W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 2-32-87-9	171146	100023208709W600	16-29-087-09W6	0	SUSPENDED OIL
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-35-87-7	144408	100163508707W602	16-35-087-07W6	0	SUSPENDED OIL

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	EEL 103 WORSLEY 16-36-86-10	359289	103163608610W600	16-36-086-10W6	0	SUSPENDED GAS
ENERCAPITA ENERGY LTD.	EEL 103 WORSLEY 16-36-86-10	359289	103163608610W602	16-36-086-10W6	0	SUSPENDED GAS



LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
	ENER	CAPITA SWE				
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-20-88-10	352510	100082008810W600	01-20-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 2-19-86-9	352307	100021908609W602	02-19-086-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF 103 WORSLEY 4-6-88-9	395799	103040608809W602	03-06-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-10-88-9	367522	100071008809W600	03-10-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 3-36-87-7	225762	100033608707W602	03-36-087-07W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 1-35-87-7	341940	100013508707W602	04-36-087-07W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-6-88-9	266585	100050608809W602	05-06-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 6-4-88-9	350128	100060408809W600	06-04-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-13-88-10	333572	100061308810W600	06-13-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 6-14-88-10	321095	100061408810W602	06-14-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-30-88-9	437723	100073008809W600	07-30-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 7-30-88-9	437723	100073008809W602	07-30-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-15-88-9	373392	100051508809W602	08-15-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-16-88-9	367232	100081608809W600	08-16-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-20-87-9	159391	100082008709W602	08-20-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-21-88-9	367032	100082108809W600	08-21-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 8-23-87-10	186766	100082308710W602	08-23-087-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 8-27-86-9	333879	100082708609W602	08-27-086-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 8-34-88-10	391285	100083408810W602	08-34-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-2-88-9	371822	100050208809W602	09-02-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-15-88-10	400354	100091508810W600	09-15-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-15-88-10	400354	100091508810W602	09-15-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	ENERCAPITA HZ WORSLEY 11-16-88-9	505539	100111608809W600	09-18-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	COMPTON 9-31 HZ WORSLEY 15-31-87-9	216277	100153108709W602	09-31-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 9-36-87-10	395278	100093608710W602	09-36-087-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 5-28-88-10	391747	100052808810W600	11-28-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 5-33-87-9	351075	100053308709W602	11-33-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-33-87-9	352132	100123308709W602	11-33-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 12-12-87-9	328175	100121208709W602	12-12-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 12-13-88-10	333574	100121308810W600	12-13-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 4-9-88-9	351763	100040908809W600	13-04-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-15-87-9	164291	100141508709W600	14-15-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 14-15-87-9	164291	100141508709W602	14-15-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 14-28-87-9	166514	100142808709W600	14-28-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 15-6-88-9	318306	100150608809W602	15-06-088-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	COMPTON WORSLEY 15-36-87-10	326926	100153608710W602	15-36-087-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-1-87-9	331385	100160108709W602	16-01-087-09W6	0	DRILLED AND CASED

LICENSEE / OPERATOR	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	BIRCHCLIFF WORSLEY 16-2-87-9	398311	100160208709W600	16-02-087-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	ENERCAPITA HZ WORSLEY 12-3-88-10	505540	100120308810W600	16-02-088-10W6	0	FINISHED DRILLING
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-18-86-9	334637	100161808609W603	16-18-086-09W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 16-21-88-10	390852	100162108810W602	16-21-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	BIRCHCLIFF CLEARH 16-21-88-10	390852	100162108810W603	16-21-088-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	299131	100163608610W600	16-36-086-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	299131	100163608610W603	16-36-086-10W6	0	DRILLED AND CASED
ENERCAPITA ENERGY LTD.	EEL WORSLEY 16-36-86-10	313251	102163608610W603	16-36-086-10W6	0	DRILLED AND CASED

#### LEGEND

Other: UWI=Unique Well Identifier



LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
				ENERCAPITA SWE	ET O	PERATING								
ENERCAPITA ENERGY LTD.	-	15-35-087-07W6 V	VE	08-35-087-07W6	BT	13174	1	OE	88.9	0.86	4.8	9,930	0.006	0
ENERCAPITA ENERGY LTD.	-	08-35-087-07W6 V	٧E	08-35-087-07W6	BT	13174	2	OE	88.9	0.21	4.8	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	06-25-087-07W6 V	٧E	14-25-087-07W6	SA	13174	3	OE	88.9	1.44	4.8	9,930	0.006	0
ENERCAPITA ENERGY LTD.	-	05-36-087-07W6 V	٧E	08-35-087-07W6	BT	13174	7	OE	88.9	0.25	3.2	4,900	0.006	0
ENERCAPITA ENERGY LTD.	-	11-25-087-07W6 V	٧E	13-25-087-07W6	SA	13174	8	OE	88.9	0.50	3.2	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	03-36-087-07W6 V	٧E	08-35-087-07W6	BT	13174	9	OE	88.9	0.64	3.2	4,900	0.006	0
ENERCAPITA ENERGY LTD.	-	02-02-088-07W6 V	٧E	15-35-087-07W6	SA	13174	11	OE	90.7	0.60	7.8	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	04-36-087-07W6 V	٧E	03-36-087-07W6	SA	13174	13	OE	90.7	0.46	7.8	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	09-35-087-07W6 V	٧E	08-35-087-07W6	SA	13174	14	OE	90.7	0.42	7.8	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	10-35-087-07W6 V	٧E	08-35-087-07W6	SA	13174	15	OE	90.7	0.66	7.8	4,490	0.006	0
ENERCAPITA ENERGY LTD.	-	14-25-087-07W6 S	SA	08-35-087-07W6	BT	13174	16	OE	88.9	0.80	4.8	9,930	0.006	0
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6	GΡ	05-22-087-09W6	MS	33261	1	NG	88.9	0.58	3.2	8,620	0	0
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6	GΡ	14-29-087-09W6	CS	37568	1	FG	60.3	4.30	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6 S	SA	04-06-088-09W6	SA	41269	1	FG	60.3	2.04	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6 S	SA	08-31-087-09W6	SA	41269	2	FG	54.6	2.57	2.5	1,970	0	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6 S	SA	10-29-087-09W6	SA	41269	3	FG	73.0	0.61	10.0	1,750	0	0
ENERCAPITA ENERGY LTD.	-	04-06-088-09W6 S	SA	07-06-088-09W6	SA	41269	4	FG	88.9	0.66	4.0	1,970	0	0
ENERCAPITA ENERGY LTD.	С	15-01-088-10W6 S	SA	08-15-088-10W6	PL	41269	5	FG	60.3	6.60	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6 S	SA	16-32-087-09W6	BT	41269	6	FG	60.3	1.79	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	11-32-087-09W6 F	PL	14-32-087-09W6	SA	41269	7	FG	60.3	0.36	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	C	04-06-088-09W6 C	CS	15-01-088-10W6	SA	41269	8	FG	60.3	1.82	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	15-16-087-09W6 F	PL	16-11-087-09W6	PL	41269	9	FG	88.9	5.07	14.1	1,970	0	0
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6	GΡ	15-16-087-09W6	SA	41269	11	FG	88.9	1.14	4.0	1,970	0	0
ENERCAPITA ENERGY LTD.	C	08-15-088-10W6 F	PL	16-15-088-10W6	CS	41269	12	FG	60.3	0.74	9.6	1,970	0	0
ENERCAPITA ENERGY LTD.	-	16-15-088-10W6 C	CS	09-22-088-10W6	SA	41269	13	FG	60.3	2.10	3.2	1,970	0	0
ENERCAPITA ENERGY LTD.	-	16-15-088-10W6 C	CS	09-15-088-10W6	ΒT	41269	14	FG	60.3	0.55	3.2	1,970	0	0
ENERCAPITA ENERGY LTD.	С	04-06-088-09W6 E	ΒT	14-10-088-10W6	SA	41269	18	FG	65.0	6.56	7.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	07-10-088-10W6 F	PL	08-09-088-10W6	SA	41269	19	FG	88.0	1.32	8.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	04-06-088-09W6 C	CS	05-06-088-09W6	WE	43774	1	SW	88.9	0.36	4.0	10,340	0	0
ENERCAPITA ENERGY LTD.	-	06-11-088-10W6 E	BT	09-11-088-10W6	WE	45448	4	SW	92.7	0.89	7.7	9,930	0	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6 E	BT	05-12-088-10W6	PL	45448	6	SW	88.9	0.55	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	С	05-12-088-10W6 F	PL	07-12-088-10W6	SA	45448	7	SW	88.9	0.99	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	-	07-12-088-10W6 S	SA	05-07-088-09W6	BT	45448	8	SW	88.9	0.93	4.0	9,930	0	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6 E	ВТ	06-11-088-10W6	WE	45448	12	SW	124.0	0.90	14.5	14,890	0	Р

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	03-06-088-09W6	PL	10-06-088-09W6	ΒT	51220	1	SW	114.3	1.02	4.8	17,240	0	0
ENERCAPITA ENERGY LTD.	-	08-31-087-09W6	PL	16-32-087-09W6	ΒT	51220	2	SW	114.3	1.60	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	С	14-29-087-09W6	PL	01-32-087-09W6	ΒT	51220	3	SW	114.3	0.87	4.8	17,240	0	0
ENERCAPITA ENERGY LTD.	-	14-29-087-09W6	SA	16-29-087-09W6	WE	51220	4	SW	114.3	0.62	4.8	17,240	0	0
ENERCAPITA ENERGY LTD.	-	06-32-087-09W6	ΡL	06-32-087-09W6	WE	51220	5	SW	114.3	0.13	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	-	10-06-088-09W6	ΡL	07-06-088-09W6	WE	51220	6	SW	114.3	0.33	4.8	17,240	0	0
ENERCAPITA ENERGY LTD.	С	09-11-088-10W6	ΒT	07-12-088-10W6	SA	51638	1	MG	60.3	1.46	6.7	1,380	0	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6	ΒT	04-13-088-10W6	SA	51638	2	MG	60.3	1.42	6.7	1,380	0	0
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6	ΒT	08-11-088-10W6	WE	51638	3	MG	60.3	0.39	6.7	1,380	0	0
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6	GΡ	06-21-087-09W6	ΡL	54455	1	SW	114.3	0.70	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	-	06-21-087-09W6	PL	14-21-087-09W6	WE	54455	2	SW	114.3	0.60	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	-	06-21-087-09W6	PL	04-21-087-09W6	WE	54455	3	SW	114.3	0.48	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	-	06-21-087-09W6	PL	09-20-087-09W6	WE	54455	4	SW	114.3	1.03	4.8	15,000	0	0
ENERCAPITA ENERGY LTD.	-	04-21-087-09W6	WE	13-16-087-09W6	ΡL	54455	5	SW	183.2	0.40	20.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	13-16-087-09W6	PL	12-16-087-09W6	WE	54455	6	SW	183.2	0.53	20.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	12-16-087-09W6	WE	11-16-087-09W6	WE	54455	7	SW	121.0	0.51	13.9	14,890	0	0
ENERCAPITA ENERGY LTD.	-	12-16-087-09W6	WE	05-16-087-09W6	WE	54455	8	SW	183.2	0.41	20.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	04-06-088-09W6	SA	15-36-087-10W6	WE	54455	10	SW	122.0	1.69	15.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	13-16-087-09W6	PL	16-17-087-09W6	WE	54455	11	SW	121.0	0.24	13.9	14,890	0	0
ENERCAPITA ENERGY LTD.	-	09-20-087-09W6	PL	14-20-087-09W6	PL	54455	12	SW	91.0	1.12	9.5	14,890	0	0
ENERCAPITA ENERGY LTD.	C	14-20-087-09W6	PL	04-29-087-09W6	WE	54455	13	SW	91.0	0.74	9.5	14,890	0	0
ENERCAPITA ENERGY LTD.	C	04-06-088-09W6	SA	10-01-088-10W6	WE	54455	14	SW	114.3	1.28	4.8	15,500	0	0
ENERCAPITA ENERGY LTD.	-	10-01-088-10W6	PL	08-09-088-10W6	SA	54455	15	SW	124.0	5.58	14.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	08-09-088-10W6	SA	13-10-088-10W6	SA	54455	16	SW	124.0	1.01	14.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	13-10-088-10W6	PL	16-10-088-10W6	WE	54455	17	SW	124.0	1.89	14.5	14,890	0	Р
ENERCAPITA ENERGY LTD.	-	16-36-086-10W6	WE	08-36-086-10W6	MS	57649	1	NG	114.3	1.02	3.2	9,930	0	0
ENERCAPITA ENERGY LTD.	-	15-19-087-07W6	WE	15-19-087-07W6	PL	59495	4	OE	88.9	0.33	3.2	9,310	0	0
ENERCAPITA ENERGY LTD.	-	10-22-087-07W6	PL	11-22-087-07W6	CS	59495	7	OE	88.9	0.10	3.2	8,620	0	0
ENERCAPITA ENERGY LTD.	С	04-32-087-08W6	WE	01-29-087-08W6	PL	59495	12	OE	168.3	3.41	4.8	9,310	0	0
ENERCAPITA ENERGY LTD.	-	03-29-087-08W6	WE	03-29-087-08W6	PL	59495	14	OE	114.3	0.06	4.0	9,310	0	0
ENERCAPITA ENERGY LTD.	-	12-24-087-08W6	WE	13-24-087-08W6	PL	59495	15	OE	114.3	0.45	4.0	9,310	0	0
ENERCAPITA ENERGY LTD.	-	13-16-087-08W6	WE	11-16-087-08W6	PL	59495	23	OE	114.3	0.80	4.0	9,310	0	0
ENERCAPITA ENERGY LTD.	-	09-22-088-10W6	PL	16-23-088-10W6	PL	60047	1	FG	114.3	1.99	4.0	1,970	0	0
ENERCAPITA ENERGY LTD.	-	16-23-088-10W6	PL	13-19-088-09W6	PL	60047	2	FG	114.3	2.13	4.0	1,970	0	0
ENERCAPITA ENERGY LTD.	C	13-19-088-09W6	PL	07-30-088-09W6	WE	60048	1	FG	122.0	1.71	15.5	1,970	0	0

LICENSEE / OPERATOR	WATER CROSS	FROM	то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	13-19-088-09W6 P	_ 05-19-088-09W6	WE	60049	1	FG	114.3	0.74	4.0	1,970	0	0
ENERCAPITA ENERGY LTD.	-	05-16-087-09W6 P	_ 16-11-087-09W6	WE	60513	1	SW	124.0	5.43	14.5	14,890	0	0
ENERCAPITA ENERGY LTD.	-	16-11-087-09W6 W	E 11-11-087-09W6	WE	60514	1	SW	124.0	1.47	14.5	14,890	0	0
			ENERCAPITA SWE	ET DIS	CONTINUE	D							
ENERCAPITA ENERGY LTD.	-	13-25-087-07W6 BI	E 08-35-087-07W6	BE	13174	5	OE	73.0	1.40	5.5	0	0.006	D
ENERCAPITA ENERGY LTD.	-	03-25-087-07W6 BI	E 06-25-087-07W6	BE	13174	10	OE	88.9	0.36	3.2	0	0.006	D
ENERCAPITA ENERGY LTD.	-	04-36-087-07W6 BI	E 03-36-087-07W6	BE	13174	12	OE	90.7	0.46	7.8	0	0.006	D
ENERCAPITA ENERGY LTD.	-	12-22-087-09W6 BI	E 14-22-087-09W6	BE	28116	1	SW	60.3	0.61	5.6	0	0	D
ENERCAPITA ENERGY LTD.	-	12-22-087-09W6 BI	E 12-22-087-09W6	BE	28116	2	SW	60.3	0.10	5.6	0	0	D
ENERCAPITA ENERGY LTD.	-	08-21-087-09W6 BI	E 12-22-087-09W6	BE	28116	3	SW	60.3	0.62	5.6	0	0	D
ENERCAPITA ENERGY LTD.	-	16-35-087-07W6 BI	E 16-35-087-07W6	BE	29158	1	OE	88.9	0.08	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	07-21-087-10W6 BI	E 14-15-087-10W6	BE	30067	1	NG	88.9	1.45	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	14-15-087-10W6 BI	E 05-22-087-10W6	BE	30067	2	NG	114.3	0.73	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	04-12-087-09W6 BI	E 16-02-087-09W6	BE	41269	15	FG	88.9	0.43	4.0	0	0	D
ENERCAPITA ENERGY LTD.	C	03-13-088-10W6 BI	E 06-13-088-10W6	BE	44038	4	FG	60.3	0.83	6.7	0	0	D
ENERCAPITA ENERGY LTD.	C	14-12-088-10W6 BI	E 15-12-088-10W6	BE	45448	9	SW	88.9	0.71	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	09-11-088-10W6 BI	E 14-12-088-10W6	BE	45448	10	SW	88.9	1.03	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	14-02-088-10W6 BI	E 09-11-088-10W6	BE	45448	11	SW	114.3	2.08	12.7	0	0	D
ENERCAPITA ENERGY LTD.	-	10-20-087-09W6 BI	E 07-20-087-09W6	BE	52553	1	NG	114.3	0.41	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	15-29-086-09W6 BI	E 16-36-086-10W6	BE	57649	2	NG	114.3	3.50	3.2	0	0	D
ENERCAPITA ENERGY LTD.	C	08-27-086-09W6 BI	E 02-32-086-09W6	PL	57649	3	NG	114.3	4.00	3.2	0	0	D
ENERCAPITA ENERGY LTD.	C	16-18-086-09W6 BI	E 01-31-086-09W6	BE	57649	4	NG	114.3	3.56	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	12-31-086-09W6 BI	E 16-36-086-10W6	BE	57649	5	NG	114.3	0.80	3.2	0	0	D
ENERCAPITA ENERGY LTD.	C	06-17-086-10W6 BI	E 12-31-086-09W6	BE	57649	6	NG	114.3	9.47	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	12-17-086-09W6 BI	E 16-18-086-09W6	BE	57649	8	NG	114.3	0.67	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	13-15-087-07W6 BI	E 16-21-087-07W6	BE	59495	21	OE	114.3	1.58	4.0	0	0	D
ENERCAPITA ENERGY LTD.	-	13-05-087-08W6 BI	13-17-087-08W6	BE	59495	22	OE	114.3	3.30	4.0	0	0	D
ENERCAPITA ENERGY LTD.	С	05-24-087-10W6 BI	09-21-087-09W6	PL	60701	1	NG	114.3	6.00	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	08-23-087-10W6 BI	05-24-087-10W6	BE	60701	2	NG	114.3	0.36	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	05-22-087-10W6 BI	07-19-087-0 <mark>9</mark> W6	BE	60701	3	NG	114.3	5.45	3.2	0	0	D

LICENSEE / OPERATOR	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA ENERGY LTD.	-	06-22-087-10W6	BE	05-22-087-10W6	BE	60701	4	NG	88.9	0.10	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	09-21-087-09W6	BE	12-22-087-09W6	ΒE	60701	5	NG	114.3	0.52	3.2	0	0	D
ENERCAPITA ENERGY LTD.	-	09-21-087-09W6	PL	08-21-087-09W6	ΒE	60701	6	NG	114.3	0.06	4.0	0	0	D

#### LEGEND

<u>Water Cross</u>: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing XA=Other Crossing S=Surface Crossing <u>Facility</u>: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals RE=Reservoir UG=Underground Cap or Tie-in <u>Substance</u>: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water NL=NGL MG=Miscellaneous Gases <u>Status</u>: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled

S=Suspended R=Removed X=Not AER Regulated

Other: Wall=Wall Thickness OD=Outside Diameter



FACILITY / LOCATION	SUBSTANCE	NO. OF TANKS	TANK VOLUME	ECCC REGISTRATION REQUIRED? <sup>(1)</sup>	ECCC ERP REQUIRED?	EPZ (km)
	Methanol	1	1000 Gal	No	No	
08-21-087-09W/6M	NGL	1	113.6 m <sup>3</sup>	No	No	0.20
Gas Plant	Produced Salt Water	3	2000 bbl	No	No	
Gas Fiant	Crude Oil	3	2000 bbl	No	No	
	Emulsion / Slop	2	1000 bbl	No	No	
08-35-087-07W6M	Methanol	1	500 Gal	No	No	
Gae Plant	Produced Salt Water	2	750 bbl	No	No	
Gas Flain	Oil Emulsion	2	750 bbl	No	No	
09-11-088-10W6M	Emulsion	2	2000 bbl	No	No	

# Worsley Field - Tanks / Bullets

<sup>(1)</sup> E2 Schedules 2 only.

<sup>(2)</sup> E2 Schedules 2, 3, 4 and 5.

#### LEGEND

Other: EPZ=Emergency Planning Zone



# **ENERCAPITA**

Page Redacted for Confidentiality

24 Hour Emergency Number: 1-866-556-7838

# E2 ID: 1016

# Environmental Emergency Plan

# Worsley 08-21-87-09 W6M Gas Plant



TO BE USED WITH THE CORPORATE ERP

DESIGNED TO MEET ENVIRONMENT AND CLIMATE CHANGE CANADA (ECCC) ENVIRONMENTAL EMERGENCY REGULATIONS, 2019: SOR/2019-51



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# **Revision History**



Date	Reason for Revision	Affected Pages
June 2023	Annual Update	All
June 2022	Annual Update	All
April 2020	New Regulations	All

0

# Location

Name: Worsley 08-21-87-09 W6M Gas Plant

**GPS** Coordinates

- Latitude: 56.55870
- Longitude: -119.36390
- **Directions and Access**

To access the Worsley 08-21-87-09 W6M Gas Plant from the intersection of 108th Avenue and Hwy 732 in Fairview, AB:

- Travel south on Hwy 732 for 900m
- Turn right (west) onto Hwy 64A and travel 6.6 km
- Turn right (north) onto Hwy 64 and travel 61.9 km
- Turn right (north) onto Hwy 726 and travel 16.1 km
- Turn left (west) onto Twp. Rd. 870 and travel 5.5 km
- Turn right (north) onto Clear Prairie Rd. and travel 3.2 km
- Turn left (west) to stay on Clear Prairie Rd. and travel 7.5 km (rd. will curve NW)
- Turn right (northeast) onto an access road and travel 1 km
- Turn left (west) onto the access road and travel 2.1 km (rd. will curve NW)
- Turn right (north) onto the access road and travel 0.3 km, to reach the Gas Plant



# Environment and Climate Change Canada (ECCC) Regulated Substances



Substances listed below meet the ECCC threshold for registration and an Environmental Emergency Plan under the Canadian Environmental Protection Act (CEPA). It is not a complete list of all storage at the facility.

	Name	Propane
	ECCC Regulated Substance	Propane
Substance Details	CAS #	74-98-6
	UN #	1978
	ECCC Hazard Category	Explosive
Quantity	Tank volumes	1 @ 113,600 L
	Maximum Expected Quantity (tonnes)	70.89
	Single Largest Container Capacity (tonnes)	70.89
	CEPA EPZ (m)	200

Notes:

- CEPA EPZ (Emergency Planning Zone): is the zone based on a more likely to occur scenario which includes a partial release of the substance. This is considered the alternate case scenario.
- The CEPA EPZ is the zone used to define where Public Communication should take place prior to an Environmental Emergency.
- Additional information regarding the scenarios and modelling methodology can be found on the back of the Substance Specific Properties & Emergency Management pages located in the attachments.

# **ENERCAPITA**

# Characteristics of the Facility and the Surrounding Area



ECCC Sensitive Receptors	Inside the EPZ	Notes
Child care and educational facilities	No	
Health care facilities	No	
Senior citizen's and long-term facilities	No	
Residential buildings	No	
Commercial buildings (e.g. shopping malls, restaurants)	No	
Fire stations	No	
Industrial buildings	No	
Highways	No	
Railway stations	No	
Bus stations	No	
Airports	No	
Groundwater wells or intakes to drinking water systems	No	
Water bodies (e.g. rivers, lakes, and oceans)	No	
Parks or forests	No	
Fish and wildlife habitat areas	No	
Other(s) (e.g. campgrounds, etc.)	No	

Response Considerations	Notes
Cities/Towns/Villages	<ul> <li>The hamlet of Worsley is approximately 19 km southeast of the field and has a population of +/- 28.</li> <li>The town of Fairview is approximately 81 km southeast of the field and has a population of +/- 2,817.</li> </ul>
First Nations Reserves	Clearhills No.152C First Nations is approximately 33 km away
Communication Considerations	<ul> <li>Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters.</li> </ul>
Access Considerations	<ul> <li>Personnel may have egress issues, depending on where the emergency is and location of roadblocks. There could be any one of 16 different operators depending on location.</li> <li>All roads are maintained including in winter.</li> </ul>
Other	• N/A
	10-

Please refer to the Facility Map for additional details.

# **Roles & Responsibilities**

For Position Titles and Roles & Responsibilities – please see Section 2: Roles & Responsibilities (Blue Tab) in the Corporate ERP.

# Training

Response personnel that could potentially fill the roles below should be involved in the training identified in the table.

Role	CEPA Required Simulation (Tabletop) Exercise (Annually)	CEPA Required Full-Scale Exercise (Every 5 years)				
Incident Commander	~	<b>~</b>				
Emergency Operations Centre Director	~	~				
Public Safety Staff	~	~				
On-Site Group Supervisor	~	~				

To meet CEPA requirements for a simulation exercise:

- One substance from each hazard category must be exercised.
- The environmental emergency scenarios must be cycled through (a different one each year).

For full training requirements, refer to Appendix A: ERP Scope, Training and Plan Maintenance information located behind the Appendices (Blue Tab) in the Corporate ERP.





# **Public Communication**

Enercapita Energy Ltd. has created a Public Information Pamphlet (PIP) to discuss the following:

- the possibility that the environmental emergency could occur,
- the potential effects of the environmental emergency on the environment and on human life or health, taking into account the substance, the activity the substance is used, and the facility and surrounding area features.
- the measures that will be taken to protect the environment and human life or health
- the means of communications in the event that the environmental emergency occurs

The PIP was provided to any surface developments within the CEPA EPZ as well as mailed out to Area Users (Oil and Gas Operators, Railways, Trapper, Guides & Outfitters, Grazing Leases, and Forestry Management Units). Emergency contact information was gathered for the surface developments within the CEPA EPZ and has been included within this plan.

Enercapita's Public Safety Group Supervisor (or delegate) would be responsible for communicating with members of the public who may be adversely affected by an environmental emergency, during and after the emergency, with

information and guidance concerning the actions that could be taken to reduce the potential harm to • the environment and danger to human life or health, including an explanation of how those actions may help to reduce the harm or danger.

Related information can be found in the Corporate ERP behind the following Blue Tabs:

- Section 2: Roles & Responsibilities
- Section 3: Communication & Media
  - **Local Authority Communication**

Enercapita consulted with the local authority in the development of the Emergency Response Plan (ERP) regarding their roles & responsibilities in the event of an emergency. A copy of this is included in Section 5: External Agencies (Blue Tab) of the Corporate ERP.

The local authority, RCMP and local fire departments were provided with a copy of:

- the Public Information Pamphlet (PIP).
- the Environmental Emergency Plan.

# **Substance Specific Properties** & Emergency Management

Page(s) specific to the substances stored at the facility are included as an attachment. These pages include:

- Properties and Characteristics of the substance •
- The identification of what environmental emergencies could occur and the potential harm
- Preventative, Preparedness, Response and Recovery actions that could potentially be taken





# **Facility Site Section**

Refer to the Facility Site Section for the following:

- Operations Summary the commercial, manufacturing, processing or other activity involving the substance that takes place at the facility.
- Safety Equipment List list of emergency response equipment available to prepare for and respond to an environmental emergency.
- Phone List

Facility Map

The Facility map is included as an attachment.





()

Physical Properties								
Chemical Formula	C3H8							
Flash Point	-104°C							
Boiling Point	-42.1°C							
Lower Explosive Limit (LEL)	2.1%							
Upper Explosive Limit (LEL)	9.5%							
Autoignition Temperature	450°C							
Vapor Density (Air = 1)	1.5							
Water Solubility	0.01%							
IDLH	2100 ppm							

#### **General Description**

A colorless gas with a faint petroleum-like odor. It is shipped as a liquefied gas under its vapor pressure. For transportation it may be ster Contact with the unconfined liquid can cause frostbite by evaporative cooling.

Easily ignited. The vapors are heavier than air and a flame can flash back to the source of leak very easily. The leak may be either a ligu The vapors can asphyxiate by the displacement of air.

Under prolonged exposure to fire or heat the containers may rupture violently and rocket.

NFPA Diamond		Hazard	Rating	Description						
	$\diamondsuit$	Health	Hazardous	Can cause temporary incapacitation or residual injury.						
4	$\blacklozenge$	Flammability	Flash Point below 73 °F	Burns readily. Rapidly or completely vaporizes at atmospheric pressuambient temperature.						
	$\diamond$	Instability	Stable	Normally stable, even under fire conditions.						
$\checkmark$	$\Diamond$	Special								

# Information on this page is from CAMEO Chemicals and the Transport Canada Emergency Response Guide

#### **POTENTIAL HAZARDS**

#### FIRE OR EXPLOSION

- EXTREMELY FLAMMABLE.
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Cylinders exposed to fire may vent and release flammable gas through pressure relief devices. Containers may explode when heated.
- Ruptured cylinders may rocket.

#### HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

#### PUBLIC SAFETY

- As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).

#### **PROTECTIVE CLOTHING**

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/ cryogenic liquids.

## **PUBLIC SAFETY**

#### **EVACUATION**

Large spill

Fire



- SPILL OR LEAK area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- areas
- Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

#### **FIRST AID**

- take precautions to protect themselves.
- Move victim to fresh air.
- Call 911 or emergency medical service.
- Administer oxygen if breathing is difficult.

- water.
- Keep victim calm and warm.



• DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE

Consider initial downwind evacuation for at least 800 meters (1/2 mile).

• If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters

(1 mile) in all directions; also, consider initial evacuation for 1600 meters (1

#### **Small Fire**

• Dry chemical or CO<sub>2</sub>.

#### Large Fire

• Water spray or fog.

#### Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.



mile) in all directions.

nched. d or vapor leak.	ECCC Hazard Catego
essure and normal	EXPLOSION
	UN # 1978
	TC ERG Guide # 115

## **EMERGENCY RESPONSE**



 $\mathbf{\Theta}$ 

• ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate

- Prevent spreading of vapors through sewers, ventilation systems and confined

• Ensure that medical personnel are aware of the material(s) involved and

- Give artificial respiration if victim is not breathing.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm

• In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.

PAN





- Emergency Shutdown Valves (ESD's)
- Pressure Safety Valve
   (PSV)
- Excess Flow Valve
- Breakaway Couplings
- Discharge to Flare
- Gas Detection
- Fire Eyes
- Maintenance Program
- Physical Barriers
- Site Security
- Driver Competency
   Program
- SOP's for loading and unloading
- Signage and Labels

and the second

#### Possible Preparedness Measures

- Emergency Response Plan (ERP)
- Training and Exercises
- Keeping Response equipment on-site and in good order
- Audits of the Incident Command Post (ICP)
- Incident Command System (ICS) Certification
- Response Software

#### Possible Harm to the Environment

- Wildfire / Forest Fire
- Air Emissions
- Permanent loss of plants and animals
- Permanent Disability
- Contaminating water and/or land
- Cascading effects leading to the release of a toxic substance

#### Possible Danger to Human Health

- Fatality
- Permanent Disability
- Lost Time Injury
- First Aid
- Cascading effects leading to the release of a toxic substance



#### Recovery

Response

Recovery

#### Possible Response Actions

- Evacuate
- Alarm
- Call 911 (if required)
- Assess
- Protect
- Rescue
- First Aid
- Medical Aid
- Initiate ERP

#### Possible Recovery Actions

- Incident Investigation
- Root Cause Analysis
- Environmental cleanup and remediation
- Facility repair and equipment replacement
- Review and revise equipment and processes at other locations
- Share learnings

H2Safety

## **ENERCAPITA EMERGENCY CONTACTS** 24 Hour Emergency Line 1-866-556-7838

#### Primary Incident Command Post

Will be determined at the time of incident but will typically be established at the nearest Battery location.

#### Staging Areas

**Field Personnel** 

Chris Wurz

Trevor Blake

additional contact information

Darin McLartv

Staging area (s) would be established at the nearest Plant or Battery at the time of the incident.

**KEY RESPONSE PERSONNEL** 

North Area Superintendent

Area Pipeline Integrity

Refer to the "Response Teams Phone List" yellow tab, behind the Section 2.0: Roles and Responsibilities blue tab for

Area Foreman

Enercapita Head Office (Emergency Operations Centre)	403-294-9199
600, 215 - 2nd Street SW,	
Calgary, AB T2P 1M4	

#### SAFETY EQUIPMENT

#### **Operator / Truck Safety Equipment**

Each field operator's truck contains the following: 20lb fire extinguisher, first aid kid, PPE, flashlight, portable H<sub>2</sub>S detector and a personal 4 head monitor. Nearby locations with additional safety equipment are:

Item	Quantity / Location
Fire Extinguishers - various sizes	Throughout field & company vehicles
First aid kit	1 @ 08-21-87-09 W6M Gas Plant
SCBA	4 @ 09-11-88-10 W6M Battery
Flare gun	1 @ 08-35-87-07 W6M Battery

#### Notification

There is no SCADA system in place for this Gas Plant. The pipelines are protected from over-pressure by ESD valves and by control and relief valves in the wellsite equipment packages. Operators monitor the wells and facilities on a daily basis. Process alarms, including high level tank alarms, go to a callout centre which alerts operators on their cellular phones.

#### Communications

Operators use cellular phones to communicate and cell coverage is generally good in the area, with the exception of a couple of spots. Company trucks have cell phone boosters

#### Roadblock Kits

Cell: 780-834-7004

Cell: 780-834-6006

Cell: 780-772-2555

There are 3 roadblock kits located at the 08-21-87-09 W6M Gas Plant. They contain safety vests, flashlights, road block signs, media / landowner statement cards, pen, clipboards, actual road blocks. Roadblock locations will be determined at the time of the incident.

\*\* If any of the above safety equipment is insufficient, Enercapita Energy Ltd. personnel will contact a local safety company who will be asked to provide additional equipment.

# **GOVERNMENT AGENCIES**

Alberta Energy Regulator (AER) Wildfire Reporting * One call number for regulatory agency, spill reporting and Alberta Environment & P	arks (lands,	800-222-6514* 310-FIRE(3473) fish, forest, wildlife).		
Clear Hills County Crystal Dei, Deputy Director of Emergency Management	Admin: Cell:	780-685-3925 780-835-9527		
Alberta Health Services (AHS) - Z5 North		844-755-1788		
Alberta Emergency Management Agency (AEMA) Northwest - Ian Fox, EMFO	Cell:	866-618-2362 780-646-0180		
Alberta Boilers Safety Association (ABSA)		780-437-9100		
Alberta Safety Services - Electrical Branch	866-421-6929			
Alberta Ministry of Transportation	780-638-1128			
Alberta Environmental and Dangerous Goods Emergencies (E	DGE)	800-272-9600		
Workers' Compensation Board (WCB)		866-922-9221		
CANUTEC (Call collect)		888-226-8832		
Air Traffic Control NAV Canada* Transport Canada <sup>**</sup> * If flight information or a NOTAM advisory is required, contact the NAV Canada F ** If a NOTAM is required for airspace closure, contact the Transport Canada Avia	866-541-4102 877-992-6853 ation Centre (FIC) ions Centre (AVOPS)			
Department of Fisheries and Oceans Canada (DFO)		780-422-4505		
Environment and Climate Change Canada Meteorological Services	780-951-8907			

#### **OPERATIONS SUMMARY**

Enercapita is the owner and operator of the Worsley 08-21-87-09 W6M Gas Plant that is an Environment and Climate Change Canada (ECCC), CEPA registered facility located in Clear Hills County, northwest of Worsley, Alberta. The registered substance of propane is stored onsite.

Gas is processed and sweetened at the plant, with sales gas pipelined to TC Energy's 05-22-87-09 W6M meter station.

#### **EPZ** Information

The maximum H<sub>2</sub>S concentration for the wells is 1%, with a maximum EPZ of 30 m. The maximum H<sub>2</sub>S concentration for the pipelines is 1%, with a maximum EPZ of 340 m.

#### **On-Site Storage**

Refer to the yellow 08-21-87-09 W6M Gas Plant tab for a list of on-site storage.

#### **Closest Major Urban Centre**

The town of Fairview is approximately 100 km southeast of the facility and has a population of +/- 2,817. The hamlet of Worsley is approximately 19 km southeast of the facility EPZ and has a population of +/- 28.

#### Hydrology

There are no waterbodies identified within the facility EPZ.

#### Highways / Rail

No Highways / Rail have been identified within the facility EPZ.

#### Site Access

Refer to the access map in this section for directions. Area and gravel roads are well maintained and in good condition.

AREA USEI Note: All numbers, unles	RS / TRANSIENTS ss otherwise indicated, are 24 hours.	
Oil and Gas Birchcliff Energy Ltd.		403-261-6401
Trappers Trapper ID 2224	<b>Name</b> Kurt Lund	<b>Number</b> 780-685-3036
Guides and Outfitters - Wildlife Mana Company 101294388 Saskatchewan Ltd.	<b>gement Units (WMU) # 526</b> Name Justin Redlick	<b>Number</b> 306-580-4868
Alberta Racks N Tracks Outfitting	Ken Steinbru	780-882-6664
Alberta Wilderness Adventures	Russell Moore	936-225-3330
Bear Canyon Outfitters	Herb Bean	780-685-2509
Bk Outfitters	Larry Smith	780-685-2159
CIS	Trevor Manteufel	780-625-6736
Field Quarter	Kelly Udell	780-722-0243
Gerard Van Den Boogaard	Russell Moore	936-225-3330
Green Island Outfitters Ltd.	Devin Aherne	905-572-0262
Heavy Horn Holdings Ltd.	Adam Luka	780-834-0152
Jzs Enterprise Ltd.	Justin Redlick	412-999-8792
Lock N Load Outfitting Ltd.	William Klyne	780-219-2694
Mustang Ranch & Guides	Herb Bean	780-685-2509
Top Of The Flyway Outfitters	Allen L. Trider	780-835-2443
Trophy North Outfitters	Larry Smith	780-685-2159
Udell'S Guiding And Outfitting	Kevin Giesbrecht	780-841-7643
Wild Alberta High Country Outfitters	Trevor Manteufel	780-625-6736
Xcalibrr Hunts	Gerard Van Den Boogaard	226-622-0464
Forestry Management Units / Agreem	nents	

P52 - See Alberta Energy Regulator (AER)

#### **EMERGENCY SERVICES** Note: All numbers, unless otherwise indicated, are 24 hours Ambulance / Fire / RCMP 911 888-888-4567 STARS Air Ambulance\* \*Worsley Gateway Inn has a helicopter landing pad on site that can be used by STARS. Refer to Reception Centres for location and contact information. Hospitals Central Peace Health Complex - Spirit River 780-864-3993 780-835-6100 Fairview Health Complex Worsley Community Health Centre 780-685-3752 Alberta Poison and Drug Information Service (PADIS) 800-332-1414 **Electrical Distribution** ATCO Electric - Alberta-wide 800-668-5506 **EPCOR** Utilities - Alberta-wide 780-412-4500 Fortis Alberta - Alberta-wide 866-717-3113 800-242-3447 **Utility Safety Partners** www.utilitysafety.ca



Sp

	SUPPORT SERVICES	
	Note: All numbers, unless otherwise indicated, are 24 hours.	
ľ	<b>Aobile Air Monitoring*</b> Firemaster Oilfield Services - Grande Prairie HSE Integrated - Red Deer Trojan Safety Services - Grande Prairie	877-342-3473 888-346-8260 877-785-9558
(	Dilfield Fire Fighting / Safety Contractors* Firemaster Oilfield Services - Grande Prairie HSE Integrated - Grande Prairie United Safety - Grande Prairie Trojan Safety Services - Grande Prairie	877-342-3473 888-346-8260 800-432-1809 877-785-9558
١	<b>Vell Control Specialists*</b> Capstone Oilfield Services - Prov-Wide Firemaster Oilfield Services - Grande Prairie United Safety - Grande Prairie	866-347-3911 877-342-3473 800-432-1809
I	gnition Services* HSE Integrated - Grande Prairie Firemaster Oilfield Services - Grande Prairie Superior Fire Control - Grande Prairie	888-346-8260 877-342-3473 877-882-0035
F	Roadblock Services (kits/personnel)* HSE Integrated - Grande Prairie Trojan Safety Services - Grande Prairie Firemaster Oilfield Services - Grande Prairie (kits only) * Due to response time, dispatch support services at Level 1 Emergency. Response times depending on location where support is coming from.	888-346-8260 877-785-9558 877-342-3473 vary (1.5 - 4 hours)
ł	Helicopter Companies*           Heli Source Ltd Grande Prairie           Canadian Helicopters - Grande Prairie           Bailey Helicopters - Fort St. John (will respond to Alberta)           * If required, a helicopter with a loud hailer should be requested.	855-876-5716 780-532-2047 250-785-2518
E	Sus Transportation* Northern Express - Peace River Diversified Transportation - Fort McMurray * Due to response time, dispatch transportation services at Level 1 Emergency. Response tim depending on location where support is coming from.	780-926-0808 780-743-2244 nes vary (2 - 6 hours)
E	Emergency Response Assistance Canada (ERAC) (ERAP 2-0010-448)	800-265-0212
E	E <b>mergency Response Management</b> H₂Safety Services Inc Calgary Toll Free	403-212-2332 888-216-2332
ę	Spill Response / Environmental Services Bad Bob's Vacuum Services Ltd Fairview Brian's Pressure Service Ltd Fairview Dig Rite - Fairview Drive Logistics Inc Peace River HD Services Ltd Charlie Lake Ridgeline Canada Inc Inc.Grande Prairie Tempest Energy Services Ltd Goodlow X-cel Energy Services Ltd High Prairie	780-835-3793 780-835-8382 780-835-3964 780-624-4090 250-263-4379 866-574-7928 250-781-3515 780-536-6556
ľ	Nestern Canadian Spill Services (WCSS) - COOP 8* See WCSS's website (http://www.wcss.ab.ca) for more information, equipment details, locations,	866-541-8888 and directions.
F	Reception Centres Worsley Gateway Inn 355 Highway 726, Worsley, AB	780-685-2080
	Hillview Inn 10704 - 113 Street, Fairview, AB	780-835-2466

# PLANT S Ц С С W6M 60 --64 -08-21 NORSLEY



## SURFACE DEVELOPMENT INFORMATION

There are no surface developments located within the CEPA facility EPZ.





# Alberta Operations Miscellaneous Assets - Facilities

LICENSEE	NAME	LICENSE NO.	LOCATION	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)	LATITUDE (DEGREES MIN SEC)	LONGITUDE (DEGREES MIN SEC)	FACILITY TYPE	STATUS	EPZ (km)
			ENERCAPITA OPER	ATING						
ENERCAPITA ENERGY LTD.	KAISER-FRANCIS OIL COMPANY OF	F22174	04-05-095-01W6	57.2081666	-118.1327160	57° 12' 29.400"	-118° 7' 57.778"	CS	AC	-
			ENERCAPITA SUSPE	ENDED						
ENERCAPITA ENERGY LTD.	SIGNALTA HOTCHKISS N	N/A	03-35-094-02W6	57.1928301	-118.2036648	57° 11' 34.188"	-118° 12' 13.193"	GS	S	
ENERCAPITA ENERGY LTD.	PEMBINA HOTCHKISS N. GAS GROUP 3-35	N/A	03-35-094-02W6	57.1928301	-118.2036648	57° 11' 34.188"	-118° 12' 13.193"	В	S	
ENERCAPITA ENERGY LTD.	PEMBINA ET AL HOTCHKISS	N/A	07-34-094-02W6	57.1968173	-118.2220947	57° 11' 48.542"	-118° 13' 19.541"	IP	S	
ENERCAPITA ENERGY LTD.	MITSUE 13-20-073-05W5	F31796	13-20-073-05W5	55.3430856	-114.7427216	55° 20' 35.108"	-114° 44' 33.798"	В	S	

#### LEGEND

Facility: B=Battery CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant

LH=Line Heater MS=Meter Station PS=Pump Station S=Satellite TL=Terminals LR=Loading Rack WS=Water Source CT=Central Treating Plants

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed S=Suspended AC=Active

UN=Unknown NW=New RT=Retired PE=Permitted

Other: EPZ=Emergency Planning Zone



# Alberta Operations Miscellaneous Assets - Sour Pipelines

LICENSEE	WATER CROSS	FROM	то	STA VAL	rt end /e valve	LICENSE NO.	LINE NO.	LINE SEGMENT MODIFIER	UNIQUE LINE #	INCLUDES UNIQUE #	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	EXPECTED PRESSURE (kPa)	LICENSE D H2S (%)	EXPECTED H2S (%)	D TEMP (°C)	DIR 56 RELEAS VOLUM (m3)	E EPZ E (km)	liZ P# (km) (ki	Z SETBACK 1) LEVEL	<sup>C</sup> STATUS
	ENERCAPITA SOUR DISCONTINUED																							
ENERCAPITA ENERGY LTD.	-	11-25-115-04W6 BE	02-02-116-04W6	BE -	-	20866	3	-	1	1	OE	88.9	2.71	4.8	0	0	2.00	2.00						D
ENERCAPITA ENERGY LTD.	С	11-25-115-04W6 BE	11-25-115-04W6	BE -	-	49335	1	-	2	2	OE	88.9	0.18	4.8	0	0	2.00	2.00						D

#### LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing X=Other Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater MS=Meter Station

PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals TF=Tank Farm RE=Reservoir

Valve: CV=Check Valve ESD=Emergency Shutdown Valve

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water MP=Multiphase NL=NGL

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled S=Suspended R=Removed X=Not AER Regulated Other: EPZ=Emergency Planning Zone IIZ=Initial Isolation Zone PAZ=Protective Action Zone Wall=Wall Thickness OD=Outside Diameter Z=Compressibility Factor

GLR=Gas-To-Liquid Ratio TEMP=Temperature



# Alberta Operations Miscellaneous Assets - Sweet Wells

LICENSEE	WELLNAME	LICENSE NO.	UWI	SURFACE LOCATION	H2S (%)	STATUS						
ENERCAPITA SWEET OPERATING												
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 4-4-95-1	171344	100040409501W600	04-04-095-01W6	0	PUMPING GAS						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 4-5-95-1	150708	100040509501W600	04-05-095-01W6	0	FLOWING GAS						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 7-29-76-7	394804	100072907607W600	05-28-076-07W6	0	PUMPING OIL						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 13-28-76-7	401392	100132807607W600	05-28-076-07W6	0	PUMPING OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM MITSUE 10-29-73-5	137917	100102907305W500	10-29-073-05W5	0	PUMPING OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM MITSUE 12-5-74-5	124959	100120507405W500	12-05-074-05W5	0	PUMPING OIL						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 14-28-76-7	366951	100142807607W600	14-28-076-07W6	0	PUMPING OIL						
	ENERCA	PITA SWEET SL	JSPENDED									
ENERCAPITA ENERGY LTD.	WHITE RAM MITSUE 1-29-73-5	130442	100012907305W500	01-29-073-05W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 5-5-94-1	156403	100050509401W600	05-05-094-01W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 5-28-76-7	368159	100052807607W600	05-28-076-07W6	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WRRL PINE CK 6-15-55-17	179738	100061505517W500	06-15-055-17W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 6-20-94-25	61871	100062009425W502	06-20-094-25W5	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	TALISMAN FIR 6-32-57-20	171637	100063205720W503	06-32-057-20W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 6-32-94-1	65042	100063209401W600	06-32-094-01W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 6-34-76-7	366952	102063407607W600	06-34-076-07W6	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 7-33-94-1	61959	100073309401W600	07-33-094-01W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	WHITE RAM NIPISI 10-5-79-7	94812	100100507907W500	10-05-079-07W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	NCE PET ET AL SWAN HILLS 10-24-69-10	82979	100102406910W500	10-24-069-10W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 11-17-94-1	48080	100111709401W600	11-17-094-01W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	EEL VALHALLA 12-34-76-7	366971	100123407607W600	12-34-076-07W6	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM HOTCHKIS 12-8-94-1	158359	100120809401W600	13-08-094-01W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	WHITE RAM MITSUE 4-29-73-5	143126	100042907305W500	13-20-073-05W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	WHITE RAM MITSUE 1-30-73-5	162496	100013007305W500	13-20-073-05W5	0	SUSPENDED OIL						
ENERCAPITA ENERGY LTD.	COMPTON CECIL 13-23-85-9	238559	100132308509W600	13-23-085-09W6	0	SUSPENDED GAS						
ENERCAPITA ENERGY LTD.	WHITE RAM PEMBINA 16-27-49-7	179126	102162704907W500	16-27-049-07W5	0	SUSPENDED OIL						
ENERCAPITA SWEET DRILLED AND CASED												
ENERCAPITA ENERGY LTD.	WRRL MCLEOD 1-29-55-15	345229	100012905515W500	01-29-055-15W5	0	DRILLED AND CASED						
ENERCAPITA ENERGY LTD.	WRRL MCLEOD 1-29-55-15	345229	100012905515W502	01-29-055-15W5	0	DRILLED AND CASED						
ENERCAPITA ENERGY LTD.	WRRL PINE CK 6-15-55-17	179738	100061505517W502	06-15-055-17W5	0	DRILLED AND CASED						
ENERCAPITA ENERGY LTD.	WHITE RAM DOE 7-17-81-12	148099	100071708112W602	07-17-081-12W6	0	DRILLED AND CASED						

#### LEGEND

Other: UWI=Unique Well Identifier
## **Alberta Operations Miscellaneous Assets - Sweet Pipelines**

LICENSEE	WATER CROSS	FROM		то		LICENSE NO.	LINE NO.	SUB	OD (mm)	SEGMENT LENGTH (km)	WALL (mm)	LICENSED PRESSURE (kPa)	H2S (%)	STATUS
ENERCAPITA SWEET OPERATING														
ENERCAPITA ENERGY LTD.	-	11-17-094-01W6	PL	06-19-094-01W6	PL	9981	1	NG	88.9	2.01	4.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	06-19-094-01W6	PL	06-25-094-02W6	WE	9981	2	NG	114.3	2.38	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	06-25-094-02W6	WE	03-35-094-02W6	CS	9981	3	NG	168.3	2.03	4.0	4,960	0	0
ENERCAPITA ENERGY LTD.	-	10-02-095-02W6	WE	15-35-094-02W6	PL	9981	5	NG	88.9	1.13	4.8	1,380	0	0
ENERCAPITA ENERGY LTD.	-	15-35-094-02W6	PL	03-35-094-02W6	CS	9981	6	NG	114.3	1.48	3.2	1,380	0	0
ENERCAPITA ENERGY LTD.	-	07-03-095-02W6	WE	15-35-094-02W6	PL	9981	8	NG	88.9	1.98	4.0	1,380	0	0
ENERCAPITA ENERGY LTD.	-	11-01-095-02W6	WE	10-02-095-02W6	PL	9981	9	NG	88.9	1.20	3.2	1,380	0	0
ENERCAPITA ENERGY LTD.	-	07-10-095-02W6	WE	03-35-094-02W6	PL	12986	2	NG	114.3	4.59	4.4	1,380	0	0
ENERCAPITA ENERGY LTD.	-	07-11-095-02W6	WE	04-11-095-02W6	PL	12986	6	NG	88.9	0.70	3.2	1,380	0	0
ENERCAPITA ENERGY LTD.	-	07-33-094-01W6	WE	06-32-094-01W6	PL	12987	2	NG	88.9	2.36	4.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	06-32-094-01W6	WE	12-29-094-01W6	PL	12987	4	NG	114.3	1.26	4.4	4,960	0	0
ENERCAPITA ENERGY LTD.	-	12-29-094-01W6	PL	06-25-094-02W6	PL	12987	7	NG	168.3	3.28	4.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	06-20-094-25W5	WE	11-29-094-25W5	CS	15318	3	NG	219.1	2.09	4.8	4,960	0	0
ENERCAPITA ENERGY LTD.	-	04-05-095-01W6	CS	11-29-094-25W5	MS	25807	1	NG	114.3	9.96	3.2	10,000	0	0
ENERCAPITA ENERGY LTD.	S	04-04-095-01W6	WE	04-05-095-01W6	CS	25807	2	NG	88.9	1.90	3.2	3,450	0	0
ENERCAPITA ENERGY LTD.	-	05-05-094-01W6	WE	10-34-093-01W6	CS	26377	1	NG	168.3	4.74	4.0	5,100	0	0
ENERCAPITA ENERGY LTD.	-	11-27-045-12W5	WE	11-27-045-12W5	PL	38925	1	NG	88.9	0.10	3.2	4,960	0	0
ENERCAPITA ENERGY LTD.	-	13-08-094-01W6	WE	11-17-094-01W6	PL	58559	1	NG	88.9	1.89	8.1	1,103	0	0
				ENERCAPITA SW	EET D	ISCONTIN	UED							
ENERCAPITA ENERGY LTD.	-	13-23-085-09W6	BE	04-26-085-09W6	BE	35196	1	NG	88.9	0.76	3.2	0	0	D

## LEGEND

Water Cross: C=Creek Crossing L=Lake Crossing O=Overhead Crossing R=River Crossing X=Other Crossing S=Surface Crossing

Facility: BT=Battery BE=Blind End CP=Chemical Plant CS=Compressor Station GP=Gas Plant GS=Gas Gathering System IP=Injection Plant LH=Line Heater

MS=Meter Station PL=Pipeline PS=Pump Station SA=Satellite WE=Well LR=Loading Rack TL=Terminals RE=Reservoir

Substance: CO=Crude Oil FG=Fuel Gas FW=Fresh Water HV=High Vapour Pressure LV=Low Vapour Pressure NG=Natural Gas OE=Oil Effluent SG=Sour Gas SW=Salt Water NL=NGL

Status: A=Abandoned D=Discontinued N=Not Constructed/Approved O=Operating P=To Be Constructed U=Unknown Q=Active C=Cancelled

S=Suspended R=Removed X=Not AER Regulated

Other: Wall=Wall Thickness OD=Outside Diameter

