PRELIMINARY SCREENING REPORT FORM

PRELIMINARY SCREENER REFERENCE / FILE NUMBER: Land Use Permit App# MV2000A0041, Water License App#MV2000L1-0009 TITLE: Oil and Gas Exploration, Cameron Hills Area ORGANIZATION: Paramount Resources Ltd.	EIRB REFERENCE NUMBER:
(CHECK ALL THAT APPLY) ☐ An ☐ Re ☐ Re	w Development nend, EIRB Ref. # new, EIRB Ref.# quires permit, license or authorization es not require permit, license or authorization
Principal Activities (related to scoping) (CHECK ALL THAT APPLY)	
 ☐ Construction ☐ Installation ☐ Maintenance (Potential for well re-entry, suspension, complet and abandonment) ☐ Expansion ☑ Operation 	☐ Municipal ☐ Harvesting
☐ Repair ☐ Research ☐ Water Intake ☐ Other:	Quarry
Principal Development Components (related to scoping)	
Access Road (Construction) construction abandonment/removal modification e.g., widening, straightening Automobile, Aircraft or Vessel Movement Blasting Burling Burning Burning Channeling Cut and Fill Cutting of Trees or Removal of Vegetation Dams and Impoundments	Waste Management disposal of hazardous waste waste generation Sewage disposal of sewage Geoscientific Sampling trenching diamond drill borehole core sampling bulk soil sampling Gravel Hydrological Testing Site Restoration

NTS Topographic Map She 85C	eet Numbers				
NTS Map Sheet #s: 85C					
Latitude / Longitude and U 60° 00' N - 60° 20' N 117°	TM System: 15' W - 117° 50' W				
Nearest Community and W Hay River, Kakisa, Enterprise Cameron River, Tathlina Lak	e e				
Land Status (consultation i	information)				
☐ Free Hold / Private	☐ Commissioners Land	☐ Federal Crown Land		Municipal	Land
Transboundary Implicatio	ns			• "	
☐ British Columbia ☐ Nunavut	☐ Alberta ☐ Saskatchewan ☐ Wood Buffalo National Park	☐ Manitoba ☐ Yuk ☐ Inuvialuit Settlement Region	on		
Type of Transboundary Imp	lication: Impact / Effect	☐ Development			
☐ Public Concern(DESCRIBE)					
PHYSICAL - CHEMICAL EFF	FECTS				
IMPACT	MITIGATION				
1. Ground Water					
water table alteration					
mater quality changes					
☐ infiltration changes					
□ other ☑ N/A					

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IMPACT		MITIGATION
2. Surface Water		
☐ flow or level changes		
☑ water quality changes		All stream crossings will be either ice bridges constructed from snow or ice and bridges will also be built for summer quad travel over streams and creeks. Ice bridges will be constructed over the following drainages not frozen to the bottom using only clean snow and ice: - Two Cameron River Crossings. - Tributary of Cameron River near A-73 Wellsite No fueling activities will be allowed within 100 meters of any watercourse crossings. Comprehensive Spill and Emergency Response Plan in place
water quantity changes		
☐ Drainage pattern changes		
☐ temperature		
wetland changes / loss		
other:		
□ N/A		
IMPACT		MITIGATION
3. Noise		
noise in/near water		
☑ other: noise increase		- No permanent residents in project area, wildlife effects minimal since noise will be temporary and confined to access and wellsites.
□ N/A		
IMPACT		MITIGATION
4. Land		
geologic structure changes		
⊠ soil contamination		Spill contingency plan in place, all contaminated soil will be disposed at an approved landfill facility. All wellsites will have fuel areas bermed and contained. Drilling muds will be ton-toxic gel muds and stored within above ground storage tanks.
☐ buffer zone loss		
		Equipment and machinery will only be used in winter when ground is frozen.
☐ Destabilization / erosion		
permafrost regime alteration		
other: explosives/scarring	Air	
□ N/A	,	

3.			
	IMPACT		MITIGATION
	Non Renewable Natural Resources		
	resource depletion		
	other:		
	⊠ N/A		1
	IMPACT		MITIGATION
	6. Air/Climate/ Atmosphere		
	Other		All equipment will conform to Federal and Territorial emissions standards.
	□ N/A		
	BIOLOGICAL ENVIRONMENT		
	IMPACT		MITIGATION
	1. Vegetation		
	species composition		
			Only areas that are susceptible to erosion will be reclaimed with seed mixes, minimizing introduction of non-native species. Other areas will be reclaimed by natura regeneration. Monitoring will assess success of natural growth.
	toxin / heavy accumulation		·
	other:		
	□ N/A		
	 IMPACT		MITIGATION
	1. Wildlife & Fish		
	effects on rare, threatened or endangered species		
	☐ fish population changes		
	☐ waterfowl population changes		
	☐ breeding disturbance		
	□ population reduction	pire .	Maximum use of existing campsites, corridors, seismic lines and winter access routes will minimize the damage to undisturbed habitats. 11.81 Hectares of native habitat will be disturbed by development activities resulting in temporary disturbance of wildlife in the adjacent area. However, disturbances from activities will be confined to project sites and access routes and will avoid sensitive areas (waterbodies, steep slopes) keeping species displacement to a minimum. Potential road conflicts with wildlife using access routes as transportation corridors could occur. These will be mitigated by low speeds and driver training to respond and allow wildlife to pass on access routes.
	species diversity change		
	☐ health changes		

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(Identify)	
behavioral changes	Displacement of species from project sites will be minimized by using existing corridor to maximum extent through good wildlife habitats. Buffer zones between waterbodies and project areas also will protect wildlife habitats. Winter operations will mitigate potential impacts to bird and raptor populations.
(Identify)	potential impacto to bird and raptor populations.
☐ habitat changes / effects	
☑ game species effects	 Moose that use the Cameron Hills area generally move to low-lying winter areas near Tathlina Lake, Cameron River and the Hay River Valleys. Caribou use area but localized noise and activity will minimize disturbance, winter operations will minimize damage to vegetation communities used for feeding. Bears not present in winter, summer bear conflicts will be reported to RWED. Conflicts between caribou using access routes for travel corridors will be minimized through low vehicle\equipment speeds on routes and driver awareness and training.
toxins / heavy metals	
forestry changes	
agricultural changes	
other:	
□ N/A	
INTERACTING ENVIRONMENT	
IMPACT	MITIGATION
1. Habitat and Communities	
predator-prey	
☐ wildlife habitat / ecosystem Composition changes	<u>.</u>
☐ reduction / removal of keystone or endangered species	
removal of wildlife corridor or buffer zone	
other:	
⊠ N/A	

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3.			
	IMPACT		MITIGATION
	Non Renewable Natural Resources		
	resource depletion		
	other:		
	⊠ N/A		1
	IMPACT		MITIGATION
	6. Air/Climate/ Atmosphere		
	Other		All equipment will conform to Federal and Territorial emissions standards.
	□ N/A		
	BIOLOGICAL ENVIRONMENT		
	IMPACT		MITIGATION
	1. Vegetation		
	species composition		
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	other:		
	□ N/A		
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IMPACT	MITIGATION
1. Habitat and Communities	
predator-prey	
☐ wildlife habitat / ecosystem Composition changes	<u>.</u>
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removal of wildlife corridor or buffer zone	
other:	
⊠ N/A	

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IMPACT MITIGATION 2. Social and Economic planning / zoning changes or conflicts increase in urban facilities or services use rental house airport operations / capacity changes ☐ human health hazard impair the recreational use of water or aesthetic quality affect water use for other purposes affect other land use operations □ quality of life changes Employment of local\first nations people. public concern other: ☐ N/A **IMPACT MITIGATION** 3. Cultural and Heritage affects to historic property ☐ increased economic pressure on historic properties change to or loss of historic resources ☐ change to or loss of archaeological resources increased pressure on archaeological sites change to or loss of aesthetically important site □ affects to aboriginal lifestyle Trapline conflict/disturbance will be negligible due to localized project activities and low trapping use in the project area. other: lin ☐ N/A

NOTES:

PRELIMINARY SCREENER / REFERRING BODY INFORMATION (CHECK ALL THAT APPLY)

	RA or DRA	ADVICE	PERMIT REQUIRED
<u>Federal</u>			
ENVIRONMENT CANADA		, ⊠	
FISHERIES & OCEANS	\boxtimes		
INDIAN AFFAIRS & NORTHERN DEVELOPMENT		\boxtimes	
NATIONAL ENERGY BOARD		\boxtimes	
NATURAL RESOURCES		\boxtimes	
<u>Territorial</u>			
RESOURCES, WILDLIFE AND ECONOMIC DEVELOPMENT			
MUNICIPAL AND COMMUNITY AFFIARS		\boxtimes	
STANTON REGIONAL HEALTH BOARD		\boxtimes	
TERRITORIAL HEALTH BOARD			
PRINCE OF WALES HERITAGE			
MVEIRB	. 🗆		
Aboriginal / First Nation			
DEH GAH GOT'IE DENE COUNCIL	. 🗖		
KA'A'GEE FIRST NATION			
HAY RIVER DENE RESERVE		, 🛛	
WEST POINT FIRST NATION			
SAMBAA KE DENE BAND		\boxtimes	
DENE NATION		\boxtimes	
HAY RIVER METIS NATION		\boxtimes	
FORT PROVIDENCE METIS COUNCIL		\boxtimes	
DEH CHO FIRST NATION		\boxtimes	
DENINU KUE ENVIRONMENTAL WORKING COMMITTEE		\boxtimes	
METIS NATION		\boxtimes	
HAY RIVER METIS GOVERNMENT		\boxtimes	
Local Government			
TOWN OF HAY RIVER		\boxtimes	
FORT PROVIDENCE RESOURCE MANAGEMENT BOARD		\boxtimes	
HAMLET OF FORT PROVIDENCE			

REASONS FOR DECISION (LIST ALL REASONS AND SUPPORTING RATIONALES FOR PRELIMINARY SCREENING DECISION)

PROJECT:

The scope of this project consists of:

- Drilling of 9 new wells.
- Complete and test 7 existing wells.
- Future potential drilling of up to 10 additional wells.
- · Construction and operation of camp(s).
- Construction and operation of winter access, ice bridges and lease sites.

11:

Period of work consists of November to April, depending on frozen ground conditions.

Total permit time frame applied for is from November 2000 to November 2007. (Five year permit and two year extension)

Extensive public consultation was carried out for first nations and government. First Nations and government groups are listed on the previous page. No significant concern was submitted to the MVLWB in relation to the project. Extensive follow up was done to ensure that first nations groups were aware that comments needed to be submitted to the MVLWB for consideration, even if comments were submitted past the deadline date. Requests were received from First Nations for extensions to the review period at which point First Nations were informed that late comments would be accepted up to three weeks after the deadline date. With the exception of the K'atlodeeche First Nation in Hay River, no first nations groups submitted comments/concerns to the MVLWB relating to the Cameron Hills project. Government Departments submitted comments which are summarized in the MVLWB staff report. Overall no significant public concern was submitted to the MVLWB.

PRELIMINARY SCREENING DECISION
Outside Local Government Boundaries
The development proposal might have a significant adverse impact on the environment, refer it to the EIRB.
Proceed with regulatory process and/or implementation.
The development proposal might have public concern, refer it to the EIRB.
Proceed with regulatory process and/or implementation.
Wholly within Local Government Boundaries
The development proposal is likely to have a significant adverse impact on air, water or renewable resources, refer it to the EIRB.
Proceed with regulatory process and/or implementation.
The development proposal might have public concern, refer it to the EIRB.
Proceed with regulatory process and/or implementation.

Preliminary Screening Organization Mackenzie Valley Land and Water Board	_	Signatures ()
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