APPENDIX I

FORMS BOEM-0137

U.S. Department of the Interior
Bureau of Ocean Energy Management

OMB Control Number: 1010-0151
OMB Approval Expires: 12/31/14

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)						
Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI
Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd								API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd								

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2040	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship		Caisson		Tension leg platform
	Gorilla Jackup		Platform rig		Fixed platform		Compliant tower
	Semisubmersible		Submersible		Spar		Guyed tower
	DP Semisubmersible	X	Other (Attach Description)		Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 1					Previously reviewed under an approved EP or DOCD?		Yes	X	No	
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A				
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No	

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544 bpd	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS Y1650	OCS Y1650	OCS Y1650 OCS
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6870	6870
Blockline Departures (in feet)	N/S Departure: F S L 4829 E/W Departure: F E L 9023	N/S Departure: F N L 734 E/W Departure: F E L 7807	N/S Departure: F N L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444783.741 Y: 5952626.53	X: 1445908.49 Y: 5947041.87	X: X: 1445802.34 X: Y: Y: 5947568.93 Y:
Latitude/ Longitude	Latitude 70.275228 Longitude -147.582719	Latitude 70.260055 Longitude -147.572457	Latitude Latitude 70.261487 Latitude Longitude Longitude -147.573425 Longitude

Water Depth (Feet): 19	MD (Feet): 11,456	TVD (Feet): 9,818	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

		Yes	X	No
Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2040	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 2					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S ___ L 4833 E/W Departure: F E ___ L 9037	N/S Departure: F S ___ L 934 E/W Departure: F E ___ L 11323	N/S Departure: F S ___ L N/S Departure: F ___ L N/S Departure: F ___ L E/W Departure: F E ___ L E/W Departure: F ___ L E/W Departure: F ___ L
Lambert X-Y coordinates	X: 1444769.24 Y: 5952630.41	X: 1442419.23 Y: 5948768.52	X: X: 1442651.19 X: Y: Y: 5949149.71 Y:
Latitude/ Longitude	Latitude 70.275238 Longitude -147.582838	Latitude 70.264522 Longitude -147.60102	Latitude Latitude 70.2655803 Latitude Longitude Longitude -147.5992254 Longitude

Water Depth (Feet): 19	MD (Feet): 10,921	TVD (Feet): 9,870	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	14.7 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 3					Previously reviewed under an approved EP or DOCD?		Yes	X	No	
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A				
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No	

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4837 E/W Departure: F E L 9052	N/S Departure: F N L 3778 E/W Departure: F E L 13809	N/S Departure: F N L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444754.74 Y: 5952634.34	X: 1440113.76 Y: 5959853.71	X: 1440460.83 X: X: Y: 595313.83 Y: Y:
Latitude/ Longitude	Latitude 70.275248 Longitude -147.582956	Latitude 70.294632 Longitude -147.622040	Latitude 70.2931826 Latitude Latitude Longitude -147.619114 Longitude Longitude
	Water Depth (Feet): 19	MD (Feet): 14,279 TVD (Feet): 11,207	MD (Feet): TVD (Feet): MD (Feet): TVD (Feet):
	Anchor Radius (if applicable) in feet: N/A		

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

		Yes	X	No
Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 4					Previously reviewed under an approved EP or DOCD?		Yes	X	No	
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A				
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No	

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4840 E/W Departure: F E L 9067	N/S Departure: F N L 6263 E/W Departure: F E L 8933	N/S Departure: F N L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444740.25 Y: 5952638.26	X: 1444950.78 Y: 5957286.86	X: 1444932.48 Y: 5956882.65
Latitude/ Longitude	Latitude 70.275258 Longitude -147.583074	Latitude 70.287969 Longitude -147.582349	Latitude 70.286863 Longitude -147.582412

Water Depth (Feet): 19	MD (Feet): 12,644	TVD (Feet): 11,669	MD (Feet):	TVD (Feet):
Anchor Radius (if applicable) in feet: N/A			MD (Feet):	TVD (Feet):
			MD (Feet):	TVD (Feet):

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	10,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	14.7 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	933				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

U.S. Department of the Interior
Bureau of Ocean Energy Management

OMB Control Number: 1010-0151
OMB Approval Expires: 12/31/14

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)								
Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI		
Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°									
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd										

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship		Caisson		Tension leg platform
	Gorilla Jackup		Platform rig		Fixed platform		Compliant tower
	Semisubmersible		Submersible		Spar		Guyed tower
	DP Semisubmersible	X	Other (Attach Description)		Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 5					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544		For structures, volume of all storage and pipelines (Bbls):			API Gravity of fluid	27°		

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4844 E/W Departure: F E L 9081	N/S Departure: F S L 6555 E/W Departure: F E L 4300	N/S Departure: F S L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444725.75 Y: 5952642.17	X: 1449536.60 Y: 5954274.76	X: 1449114.00 X: X: Y: 5954131.34 Y: Y:
Latitude/ Longitude	Latitude 70.275267 Longitude -147.583192	Latitude 70.280064 Longitude -147.544624	Latitude 70.279643 Latitude Latitude Longitude -147.5480127 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 12,809	TVD (Feet): 11,625	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

		Yes	X	No
Have you previously provided information to verify the calculations and assumptions for your WCD?				
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2040	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 6					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4848 E/W Departure: F E L 9096	N/S Departure: F S L 2342 E/W Departure: F W L 1103	N/S Departure: F S L N/S Departure: F L N/S Departure: F L E/W Departure: F W L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444711.25 Y: 5952646.09	X: 1454871.79 Y: 5949971.02	X: 1454155.79 X: X: Y: 5950159.53 Y: Y:
Latitude/ Longitude	Latitude 70.275277 Longitude -147.58331	Latitude 70.268673 Longitude -147.500611	Latitude 70.2691403 Latitude Latitude Longitude -147.506438 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 16,056	TVD (Feet): 11,482	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670	11,600

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	933				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

		Yes	X	No
Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 7					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544				For structures, volume of all storage and pipelines (Bbls):		API Gravity of fluid	27°	

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S ___ L 4851 E/W Departure: F E ___ L 9110	N/S Departure: F S ___ L 5671 E/W Departure: F E ___ L 2235	N/S Departure: F S ___ L N/S Departure: F ___ L N/S Departure: F ___ L E/W Departure: F E ___ L E/W Departure: F ___ L E/W Departure: F ___ L
Lambert X-Y coordinates	X: 1444696.75 Y: 5952650.01	X: 1451587.71 Y: 5953356.59	X: 1451044.74 X: X: Y: 5953300.92 Y: Y:
Latitude/ Longitude	Latitude 70.275287 Longitude -147.583428	Latitude 70.277698 Longitude -147.52784	Latitude 70.277508 Latitude Latitude Longitude -147.532227 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 13,600	TVD (Feet): 11,568	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	50-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	14.7 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship		Caisson		Tension leg platform
	Gorilla Jackup		Platform rig		Fixed platform		Compliant tower
	Semisubmersible		Submersible		Spar		Guyed tower
	DP Semisubmersible	X	Other (Attach Description)		Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 8					Previously reviewed under an approved EP or DOCD?		Yes	X	No	
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A				
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No	
WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544				For structures, volume of all storage and pipelines (Bbls): 12,136		API Gravity of fluid	27°		

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4855 E/W Departure: F E L 9125	N/S Departure: F N L 5674 E/W Departure: F E L 12012	N/S Departure: F N L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444682.25 Y: 5952653.92	X: 1441880.91 Y: 5957926.93	X: 144211.42 X: X: Y: 5957493.02 Y: Y:
Latitude/ Longitude	Latitude 70.275296 Longitude -147.583546	Latitude 70.289498 Longitude -147.607325	Latitude 70.288329 Latitude Latitude Longitude -147.605367 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 13,111	TVD (Feet): 11,561	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	933				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 9					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4859 E/W Departure: F E L 9139	N/S Departure: F N L 1559 E/W Departure: F W L 2880	N/S Departure: F N L N/S Departure: F L N/S Departure: F L E/W Departure: F W L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444667.75 Y: 5952657.84	X: 1456584.49 Y: 5946040.27	X: 1455886.29 X: X: Y: 5946427.99 Y: Y:
Latitude/ Longitude	Latitude 70.275306 Longitude -147.583664	Latitude 70.258052 Longitude -147.48599	Latitude 70.259065 Latitude Latitude Longitude -147.491708 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 18,178	TVD (Feet): 11,492	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship		Caisson		Tension leg platform
	Gorilla Jackup		Platform rig		Fixed platform		Compliant tower
	Semisubmersible		Submersible		Spar		Guyed tower
	DP Semisubmersible	X	Other (Attach Description)		Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 10					Previously reviewed under an approved EP or DOCD?		Yes	X	No	
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A				
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No	

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S L 4862 E/W Departure: F E L 9154	N/S Departure: F S L 5051 E/W Departure: F E L 3635	N/S Departure: F S L N/S Departure: F L N/S Departure: F L E/W Departure: F E L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X: 1444653.25 Y: 5952661.76	X: 1450176.68 Y: 5952759.28	X: 1449694.19 X: X: Y: 5952750.76 Y: Y:
Latitude/ Longitude	Latitude 70.275316 Longitude -147.583782	Latitude 70.27597 Longitude -147.539137	Latitude 70.275912 Latitude Latitude Longitude -147.543036 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 13,050	TVD (Feet): 11,645	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

		Yes	X	No
Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2039	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
	Semisubmersible		Submersible
	DP Semisubmersible	X	Other (Attach Description)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Structure

	Caisson		Tension leg platform
	Fixed platform		Compliant tower
	Spar		Guyed tower
	Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): Slot 11					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No
WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544		For structures, volume of all storage and pipelines (Bbls):			API Gravity of fluid	27°		

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650	OCS OCS-Y1650	OCS -Y1650 OCS -
Area Name	Beechey Point, NR 06-03	Beechey Point, NR 06-03	Beechey Point, NR 06-03
Block No.	6820	6820	6820
Blockline Departures (in feet)	N/S Departure: F S ___ L 4866	N/S Departure: F S ___ L 4296	N/S Departure: F S ___ L N/S Departure: F ___ L N/S Departure: F ___ L
	E/W Departure: F E ___ L 9269	E/W Departure: F W ___ L 1595	E/W Departure: F W ___ L E/W Departure: F ___ L E/W Departure: F ___ L
Lambert X-Y coordinates	X: 1444638.75	X: 1455395.75	X: 1454643.07 X: X:
	Y: 5952665.67	Y: 5951917.88	Y: 5951970.19 Y: Y:
Latitude/ Longitude	Latitude 70.275325	Latitude 70.274027	Latitude 70.274118 Latitude Latitude
	Longitude -147.58390	Longitude -147.496762	Longitude -147.502859 Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 16,263	TVD (Feet): 11,436	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	Development Operations Coordination Document (DOCD)	

Company Name: Hilcorp Alaska, LLC	BOEM Operator Number:
Address:	Contact Person: Kathryn Kaufman
3800 Centerpoint Drive, Suite 1400	Phone Number: 907-777-8329
Anchorage, AK 99503	E-Mail Address: kkaufman@hilcorp.com

If a service fee is required under 30 CFR 550.125(a), provide the ($4,238 x 10 wells) =	Amount paid	$42,380	Receipt No.	25J1B0AH

Project and Worst Case Discharge (WCD) Information

Lease(s): OCS-Y1585, OCS-Y1650	Area: NR 06-03	Block(s): 6220B	Project Name (If Applicable): Liberty Drilling Island (LDI)

Objective(s)	X	Oil		Gas		Sulphur		Salt	Onshore Support Base(s): Endicott SDI

Platform/Well Name: LDI	Total Volume of WCD: 91,219 bpd	API Gravity: 27°
Distance to Closest Land (Miles): ~ 5 miles	Volume from uncontrolled blowout: 91,219 bpd	

Have you previously provided information to verify the calculations and assumptions for your WCD?		Yes	X	No
If so, provide the Control Number of the EP or DOCD with which this information was provided				
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose to use a vessel with anchors to install or modify a structure?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No

Description of Proposed Activities and Tentative Schedule (Mark all that apply)

Proposed Activity	Start Date	End Date	No. of Days
Exploration drilling	N/A	N/A	N/A
Development drilling	January 2019	July 2021	~600
Well completion	January 2019	July 2021	~600
Well test flaring (for more than 48 hours)	N/A	N/A	N/A
Installation or modification of structure	January 2018	September 2018	~240
Installation of production facilities	July 2018	May 2020	~700
Installation of subsea wellheads and/or manifolds	N/A	N/A	N/A
Installation of lease term pipelines	January 2019	May 2019	N/A
Commence production	January 2020	January 2040	
Other (Specify and attach description)	See DPP		

Description of Drilling Rig

	Jackup		Drillship		Caisson		Tension leg platform
	Gorilla Jackup		Platform rig		Fixed platform		Compliant tower
	Semisubmersible		Submersible		Spar		Guyed tower
	DP Semisubmersible	X	Other (Attach Description)		Floating production system		Other (Attach Description) X - Gravel Island (See DPP)

Drilling Rig Name (If Known): Land Based Drill Rig

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
LDPI	Badami Pipeline	12"	37,805'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location

Well or Structure Name/Number (If renaming well or structure, reference previous name): WCD Well					Previously reviewed under an approved EP or DOCD?		Yes	X	No
Is this an existing well or structure?		Yes		No X	If this is an existing well or structure, list the Complex ID or API No.	N/A			
Do you plan to use a subsea BOP or a surface BOP on a floating facility to conduct your proposed activities?							Yes	X	No

WCD info	For wells, volume of uncontrolled blowout (Bbls/day): 90,544	For structures, volume of all storage and pipelines (Bbls):	API Gravity of fluid	27°

	Surface Location	**Bottom-Hole Location (For Wells)**	**Completion (For multiple completions, enter separate lines)**
Lease No.	OCS OCS-Y1650;	OCS OCS Y1650;	OCS OCS
Area Name	Liberty, NR 06-03	Liberty, NR 06-03	
Block No.	6820	6820	
Blockline Departures (in feet)	N/S Departure: F S L 4829	N/S Departure: F N L 4942	N/S Departure: F L N/S Departure: F L N/S Departure: F L
	E/W Departure: F E L 9023	E/W Departure: F E L 12776	E/W Departure: F L E/W Departure: F L E/W Departure: F L
Lambert X-Y coordinates	X:	X:	X: X: X:
	Y:	Y:	Y: Y: Y:
Latitude/ Longitude	Latitude 70.275229	Latitude 70.291473	Latitude Latitude Latitude
	Longitude -147.58272	Longitude -147.613568	Longitude Longitude Longitude

Water Depth (Feet): 19	MD (Feet): 13,763	TVD (Feet): 11,600	MD (Feet): MD (Feet): MD (Feet):	TVD (Feet): TVD (Feet): TVD (Feet):
Anchor Radius (if applicable) in feet:	N/A			

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
N/A	N/A	N/A	X = N/A	Y = N/A	N/A
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Provide the following information for the well with the highest Worst Case Discharge volume:

Worst Case Discharge (WCD) Well Information							
WCD Well Name	Surface Lease	Surface Area/Block	Bottom Lease	Bottom Area/Block	Product Type	MD	TVD
	OCS-Y1650	NR 06-03/6820B	OCS-Y1650	NR 06-03/6820B	Crude Oil	13,763	11,600

Analog Well(s)			
Area/Block	OCS Lease	Well No.	API No.
NR 06-03/6820B	OCS-Y1650	Liberty #1	55-201-00009-00

Geologic Data for WCD

Open Hole Interval for WCD	
Top (TVD in feet)	Base (TVD in feet)
10,670'	11,600'

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Estimated Top TVD	10,670 ft				
Estimated Base TVD	10,985 ft				
Estimated Net Sand Height MD (Net Pay if hydrocarbon)	314				
Estimated Net Sand Height TVT (Net Pay if hydrocarbon)	250				
Fluid Type	Oil				
Used in WCD? (Yes/No)	Yes				

Seismic Survey Used	

Engineering Data for WCD

WCD Engineering Items												
WCD (STB/Day)	91,219 bbl/day											
WCD Calculated at	Mudline		Yes		No		Atmosphere		Yes	x	No	
Flow Correlation	Beggs and Brill											
Outlet Pressure (Psia)	50 psia											
Gas Turbulence Factor												
Software Model Used	CMG Reservoir Simulator											

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Sand Name	Kekiktuk				
Permeability (mD)	500-1500				
Initial Pressure (PSIA)	5190				

	Sand 1	Sand 2	Sand 3	Sand 4	Sand 5
Formation Data					
Reservoir Temperature (F)	223				
Porosity (0.00)	18-20%				
Water Saturation (0.00)	5%				
Rock Compressibility (microsips)	5e-6				
Water Salinity (ppm)					
Drive Mechanism	Solution Gas Drive				
Drainage Area (acres)					
Oil Reservoir Data					
Bubble Point Pressure (PSIA)	4973				
Initial Bo (RB/STB)	1.47				
Bo (RB/STB) @ Bubble Point	1.474				
Rsi (SCF/STB)	941				
Initial Oil Viscosity (Cp)	.68				
Oil Viscosity (CP) @ Bubble Point	.68				
Oil Compressibility (1/PSIA)	1e-5				
Oil API Gravity (API)	27				
Specific Gas Gravity (0.00)	.789				
Gas Reservoir Data					
Condensate API Gravity (API)					
Specific Gas Gravity (0.00)					
Yield (STB/MMCF)					

Source of Permeability Used			
Permeability from MDT	x		
Permeability from Core Analysis	Percussion core	Rotary sidewall core	Conventional core X
Pressure Transient Analysis			
Permeability from CMR or NMR log analysis			
Permeability from other source			

Provide Model Input Values for Relative Permeability:	
Residual Oil to Gas fraction (=1-Slc-Swc)	.69
Residual Oil to Water fraction (=Soc)	.12
Critical Gas fraction (Sgc, Gas/Oil-Water Systems)	.07
Residual Gas to Water fraction (Sgc, Gas/Gas-Water Systems)	
Kro Oil Curve Endpoint (fraction of absolute permeability)	1
Krg Gas Curve Endpoint (fraction of absolute permeability)	.8
Krw Water Curve Endpoint (fraction of absolute permeability)	.77

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. 2501 et seq.) requires us to inform you that BOEM collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for BOEM approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 550.197. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory (43 U.S.C. 1334). The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 600 hours with an accompanying EP, or 700 hours with an accompanying DPP or DOCD, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the forms associated with subpart B. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 381 Elden Street, Herndon, VA 20170.