### UNITED STATES GOVERNMENT MEMORANDUM

April 10, 2019

To: Public Information

From: Plan Coordinator, OLP, Plans Section

(GM235D)

Subject: Public Information copy of plan

Control # - S-07939

Type - Supplemental Development Operations Coordinations Document

Lease(s) - OCS-G17015 Block - 758 Walker Ridge Area OCS-G17016 Block - 759 Walker Ridge Area

RUE OCS-G 30350 Block - 718 Walker Ridge Area

Operator - Chevron U.S.A. Inc.

Description - PS003, PS006, PS001, PS002, PS004, PS005, PS007, PS008,

Rig Type - update air emissions Platform A-Jack St. Malo

Not Found

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.

Michelle Griffitt Evans Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
FPSO/A-JACK		3464 FSL, 8525 FWL	/WR/718
WELL/PS001	G17015/WR/758	7106 FNL, 3397 FEL	G17015/WR/758
WELL/PS001	G17015/WR/758	7157 FNL, 3495 FEL	G17015/WR/758
WELL/PS002	G17015/WR/758	7157 FNL, 3495 FEL	G17015/WR/758
WELL/PS003	G17015/WR/758	7260 FNL, 3640 FEL	G17015/WR/758
WELL/PS004	G17015/WR/758	7157 FNL, 3495 FEL	G17015/WR/758
WELL/PS004	G17015/WR/758	7356 FNL, 3403 FEL	G17015/WR/758
WELL/PS005	G17015/WR/758	7157 FNL, 3495 FEL	G17015/WR/758
WELL/PS005	G17015/WR/758	7333 FNL, 3322 FEL	G17015/WR/758
WELL/PS006	G17016/WR/759	7097 FNL, 3632 FEL	G17015/WR/758
WELL/PS007	G17015/WR/758	7431 FNL, 3565 FEL	G17015/WR/758
WELL/PS008	G17015/WR/758	7417 FNL, 3475 FEL	G17015/WR/758

# SUPPLEMENTAL UNIT DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

Walker Ridge Blocks 758 / 759 Leases OCS-G 17015 / 17016 Unit Agreement #754306007

A – Jack St. Malo Located in Walker Ridge Block 718

> Jack St. Malo Field Affected States: Louisiana

### **SUBMITTED BY:**

Chevron U.S.A. Inc.
114 Northpark Boulevard
Room 137D
Covington, LA 70433
Carly Moss
(985) 773-1734
Carly Moss@chevron.com

### **AUTHORIZED REPRESENTATIVE:**

Kelley Pisciola
J. Connor Consulting, Inc.
19219 Katy Freeway, Suite 200
Houston, Texas 77094
(281) 698-8519
kelley.pisciola@jccteam.com



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### **SECTION ATTACHMENTS**

Section 1	Plan Contents
1-A	OCS Plan Information Form
1-B	Well Location Plat
1-C	Pay.gov Receipt
Section 8	Air Emissions Information
8-A	Emissions Worksheets
Section 14	Support Vessels and Aircraft Information
14-A	Waste You Will Transport and/or Dispose Onshore Table
14-B	Vicinity Map
Section 17	Environmental Impact Analysis (EIA)
17-A	Environmental Impact Analysis (EIA)

## SECTION 1 PLAN CONTENTS

#### 1.1 PLAN INFORMATION

Chevron U.S.A. Inc. (Chevron) is the designated operator of Lease OCS-G 17015, Walker Ridge Block 758 and Lease OCS-G 17016, Walker Ridge Block 759. Under this Supplemental Development Operations Coordination Document (DOCD), Chevron proposes to install one wellhead, one lease term jumper pipeline and commence production of Well No. PS003 (to be drilled and completed under Supplemental Exploration Plan S-7800). The lease term jumper will be installed using a dynamically positioned lay barge.

Chevron is also updating the bottomhole location of the PS006 well that will be produced (as approved for production under Supplemental DOCD S-7857 and Revised DOCD R-6756). Chevron will utilize the "L" bottomhole location in Walker Ridge block 759 for Well No. PS006 (to be drilled and completed under Supplemental Exploration Plan S-7897).

Further, Chevron is updating the air emissions to include miscellaneous well intervention activities for all the subsea wells. No drilling operations are proposed in this plan.

The OCS Plan Information Form BOEM-137 is included as Attachment 1-A.

### 1.2 LOCATION

Well Location Plats depicting the surface location and bottomhole location of the proposed wells, measured depths/true vertical depths and water depths are included as **Attachment 1-B**.

#### 1.3 SAFETY AND POLLUTION PREVENTION FEATURES

**No drilling operations are proposed in this plan**. Safety of personnel and protection of the environment during the proposed operations is one of the primary concerns of Chevron. Chevron mandates regulatory compliance with the contractors and vendors associated with the proposed operations as follows:

The Bureau of Ocean Energy Management (BOEM) mandates that the operations described in this Supplemental DOCD comply with well control, pollution prevention, construction, welding procedures, and training described in the Bureau of Safety and Environmental Enforcement (BSEE) regulations 30 CFR 250 C, D, E, O and S; and as further clarified by BSEE Notices to Lessees.

BSEE conducted periodic announced and unannounced onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, regulatory requirements, approved plans, and other conditions, and complying with pollution prevention requirements. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections.

United States Coast Guard (USCG) regulations contained in Title 33 CFR Part 144 mandate that appropriate life rafts, life jackets, ring buoys, etc. be maintained on the facilities at all times. U.S. Environmental Protection Agency (EPA) regulations contained in the NPDES General Permit for

Region VI mandate that supervisory and certain designated personnel on board the facility be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters.

### 1. STORA E TAN S AND PRODUCTION VESSELS

The table below provides storage tanks with capacity of 25 barrels or more that will store fuels, oil and lubricants.

T e St ra e Tan	T e Fac t	Tan Ca ac t	N m er Tan	T ta Ca ac t	F d ra t API
Fuel oil (marine diesel)	Light Construction Vessel	942.86	7	6600	30
Production	Light Construction Vessel	36.25	8	290	22

### 1. POLLUTION PREVENTION MEASURES

These operations do not propose activities for which the State of Florida is an affected state.

### 1. ADDITIONAL MEASURES

Chevron does not propose any additional safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR Part 250.

### 1. COST RECOVERY FEE

Documentation of the 4,238.00 cost recovery fee payment is included as **Attachment 1-C**.

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

### Attachment 1-A

OMB Control Number: 1010-0151 OMB Approval Expires: 6/30/2021

### OCS PLAN INFORMATION FORM

	Type of OCS Plan: Exploration Plan (EP) Development Operations Coordination Document (DOCD)													
Type of OCS I		•	ration Plan (EP	) Dev					nent (D	OCD	)			
Company Nan	ne: Chevron U.S.A	. Inc.			BOEM Op									
Address:					Contact Pe	rson: k	Kelley	Pisciola						
	100 Northpa	rk Blv	d		Phone Nur	nber: 2	281-69	98-8519						
	Covington, L	A 704	33		E-Mail Ad	E-Mail Address: kelley.pisciola@jccteam.com								
If a service fee	is required under	30 CFI	R 550.125(a), p	rovide 1		e Amount paid \$4238.00 Receipt No.							2 <b>56D05G</b> d F5	
			Project and	l Wor	st Case Di	schar	ge (V	VCD) Inform	atior	1				
Lease(s): OCS	-G 17015		Area: WR	Block				pplicable): Jack						
	x Oil x Gas	- 1	Sulphur	Salt	Onshore S	Support	Base(	(s): Port Fourch	on, Lo	uisian	a			
Platform/Well	Name: A-Jack St I	/lalo	Total Volume	of WCI	D: 1000,52	ealdeda 🕅	i i		API G	ravity	:30°			
Distance to Closest Land (Miles): 196 Volume from uncontrolled blowout: 440084 660bbbs/dayy  Have you previously provided information to verify the calculations and assumptions for your WCD?  Yes No														
Have you prev	iously provided in	format	ion to verify th	e calcul	ations and as	sumptio	ons for	r your WCD?		2002	Yes	X	No	
If so, provide t	he Control Number	r of the	e EP or DOCD	with wl	hich this info	rmation	was p	provided		S	-7800	17	E-	
Do you propos	se to use new or ur	usual t	echnology to c	onduct	your activitie	s?					Yes	Х	No	
Do you propos	se to use a vessel w	ith and	chors to install	or modi	fy a structure	?					Yes	x	No	
Do you propos	e any facility that	will se	rve as a host fa	cility fo	r deepwater s	subsea d	develo	pment?			Yes	X	No	
Description of Proposed Activities and Tentative Schedule (Mark all that apply)														
	Proposed A	ctivity	y		Start	Date		End D	ate			N	lo. of Days	
Exploration dr	illing													
Development of	drilling													
Well completion	on													
Well test flarin	g (for more than 4	8 hour	s)											
Installation or	modification of str	ucture	0											
Installation of	production facilities	es												
Installation of	subsea wellheads	nd/or	manifolds		08/15/201	19		08/16/2019					1	
Installation of	lease term pipeline	s			08/23/201	19		08/29/2019					6	
Commence pro	oduction				08/30/201			08/30/2049					30 years	
Other (Specify	and attach descrip	tion)												
	Description	n of I	Orilling Rig		•			Desc	ripti	on of	Struct	ure		
Jackup		x	Drillship				Caiss	son			Tension	- 5		
Gorilla	Jackup		Platform ri	g			Fixed	d platform			Complia	nt tow	ver er	
Semisu	bmersible	1	Submersib	le	·		Spar	88000			Guyed to	ower		
100000 AGESTS	nisubmersible		Other (Atta	ich Des	cription)			ting production		1	Other (A	ttach	Description)	
Drilling Rig N	ame (If Known):						syste	3111						
			I	escrip	ption of Le	ease To	erm :	Pipelines						
From (Facil	ity/Area/Block)		To (Facility	Area/B	lock)		Dia	ameter (Inches)				Len	igth (Feet)	
JK	PS003		JK Manifold	(50-MT	MTS-01) 7.69" OD bulk oil jumper					110'				
					6	×								

Proposed Well/Structure Location												
Well or Structu structure, refere				Previ		under an approve	d EP or	X	Yes		No	
Is this an existing or structure?	ng well	Ye			n existing well or D or API No.	r structure, list the	2	2440				
Do you plan to	use a subsea	BOP or a	surface BOP on a floa	ating fac	cility to conduct	your proposed act	tivities?		Ye	s	Х	No
WCD info	For wells, ve blowout (Bb				etures, volume or s (Bbls):	f all storage and		API Gravity of fluid				
	Surface Loc	cation		Botto	m-Hole Locatio	on (For Wells)		Completion (For multiple completions, enter separate lines)				
Lease No.	RUE	E OCS	S-G 30350					OCS OCS				
Area Name		W	3									
Block No.		71	8									
Blockline Departures	N/S Departu	ıre:	Fs_L	N/S I	Departure:	F <sub>N</sub>	L		Departu Departu			FL F L
(in feet)	3464 E/W Depart		Tw. T	EAN	D	T <sub>0</sub>		N/S I	Departu	re:		FL
	8525	ure:	F <u>w</u> L	- E/W	Departure:	F	L	E/W	Depart Departi	ıre:		FL
Lambert X-	X:			X:			8	E/W	Departu	ıre:		FL
Y coordinates	2,210	,285					X: X:					
	Y:			Y:			Y:					
	9,523	,304		2				Y: Y:				
Latitude/ Longitude	Latitude			Latitu	de	-	Latit Latitu					
Longitude	26°14	· 5.93	382"					Latitude				
	Longitude		004011	Longi	tude			Longitude				
	-91°1	5' 39.	9846"					Longitude Longitude				
Water Depth (F 6,950'	eet):			MD (Feet): TVD (Feet):					MD (Feet): MD (Feet):			(Feet): (Feet):
Anchor Radius	(if applicable	e) in feet:		į.	<u> </u>	5		Constitution .	Feet):			(Feet):
Anchoulou	ations for	Duilling	Dia on Construe	tion D	awaa (If							
Anchor Name			Rig or Construct X Coordinate	HOH B	Y Coordinate						on Sea	afloor
or No.	12200	2.00										
			X =		Y =		120					
			X =		Y =							
			X =		Y =							
7			X =		Y =							
			X =		Y =							
			X = X =	Y = Y =								
			X =		Y =							
			Λ-		1 =							

Proposed Well/Structure Location															
Well or Structure, refere				ell or	Prev		viewed	under an approved	d EP or	х	Yes		No		
Is this an existi or structure?	ng well	Ye	es			n existing		r structure, list the		N/A (	will be	drille	d under	S-7800)	
Do you plan to	use a subsea	BOP or a	surface B	OP on a fl	oating fa	cility to c	onduct	your proposed act	ivities?	Yes X			Х	No	
WCD info	For wells, ve blowout (Bb		ncontroll	ed		ctures, vo s (Bbls):		f all storage and		API Gravity of fluid					
	Surface Lo	cation			Botte	om-Hole	Locatio	on (For Wells)		Completion (For multiple completions, enter separate lines)					
Lease No.	OCS G 17015									OCS OCS					
Area Name	Wa	alker Ric	dge (W	/R)											
Block No.		75	8												
Blockline	N/S Departu	ıre:	į.	F <u>n</u> L							Depart Departi			FL FL	
Departures (in feet)	7,260'										Departi			FL	
	E/W Depart	ure:		F <u>E</u> L							Depar Depart			F L F L	
	3,640'								9	E/W	Depart			FL	
Lambert X- Y	X:	0001								X: X:					
coordinates	2,150	,600								X:					
	Y:	E00'								Y: Y:					
T T .	9,512	,560								Y:	1				
Latitude/ Longitude	Latitude 26°12	י סס ים	מאס״	N						Latit Latit					
	Longitude	2 21.	240	IN	4	-				Latitu	28/8/20180				
_	91°26	3' 36 !	834"	۱۸/						Longitude Longitude					
Water Depth (F		30.0	JJ4	YY	MD	Feet):		TVD (Feet):		Longitude  MD (Feet): TVD (Feet)				(Feet):	
7,059'	cci).				IVID	T cct).		TVD (Feet).		MD	(Feet):		TVD	(Feet):	
Anchor Radius	(if applicable	e) in feet:								MD (	Feet):		TVD	(Feet):	
Anchor Loc	ations for	Drilling	Rig or	Constru	iction I	Barge (I	f ancho	or radius supplied	above,	not n	ecessa	ry)			
Anchor Name or No.	Area	Block	X Coor	dinate		Y Coo	rdinate	2	Lengt	h of A	nchor	Chai	n on Sea	afloor	
		9.	X =			Y =									
			X =			Y =									
			X =			Y =									
7			X =			Y = Y =									
	-		X =			Y = Y =									
·			X =		Y =										
	+		X =			Y =									
			L:						1						

Proposed Well/Structure Location														
			enaming well or S006 (Location L in EP	S7897)			ved	under an approve	ed EP or	х	Yes		No DOCE	D S7857
Is this an existi or structure?	ng well	Y	es No			n existing we D or API No		structure, list th	e	60-8	12-401	25-0	)	
	use a subs	sea BOP or a	surface BOP on				your proposed ac	ctivities?		Ye	s	Х	No	
WCD info		, volume of Bbls/day):	uncontrolled 40,816			etures, volum s (Bbls): N	ne of	fall storage and	API Gravity of fluid					
	Surface I	Location			Botto	m-Hole Loc	atio	n (For Wells)	Completion (For multiple completions, enter separate lines)					
Lease No.	OCS G 17015				OCS					OCS OCS				
Area Name	٧	Valker R	idge (WR)											
Block No.		75	58											
Blockline Departures (in feet)	N/S Depa 7,096		F <u></u> N _ ]	L	N/S I	Departure:		F	L	N/S	Departu Departu Departu	re:		F L F L F L
	E/W Department 3,631		F_E]	L	E/W l	Departure:		F	L	E/W E/W	Depart Departi	ure: ire:		F L F L F L
Lambert X-	X:	.00			X:					E/W	Departi	ire:		FL
Y coordinates		0,608.	32'						X: X:					
	Y: 0.51'	2,743.	10'		Y:					Y: Y:				
Latitude/	Latitude	2,745.	19	_	Latitu	da				Y: Lati	tuda			
Latitude		2' 28.	8551" N		Latitu	uc		Latit Latit	ude					
	Longitude		7215" W	- 1	Longi	tude		Longitude Longitude						
Water Depth (F		20 30.	1213 VV		MD (I	Foot):		TVD (Feet):		Longitude				(Feet):
7,065'	cci).				ו) עוויו	rect).		TVD (rect).		MD	(Feet):		TVD	(Feet):
Anchor Radius	(if applica	ble) in feet:								MD	(Feet):		TVD	(Feet):
Anchor Loc	cations fo	or Drillin	g Rig or Const	tructi	ion B				ed above	, not n	iecessar	y)		
Anchor Name or No.	Area	Block	X Coordinate			Y Coordin	1ate		Leng	th of A	Anchor	Chai	n on Sea	afloor
			X =			Y =			5					
			X =			Y =								
			X =			Y =								
			X = X =			Y = Y =								
			X = X =											
			X =		Y = Y =									
			X =		Y =									
						1								

Proposed Well/Structure Location																
Well or Structure structure, reference	Name/Num	nber (If ren	aming wel	l or	Previous	sly reviewed ur	nder a	an approved EP or D	OCD?	х	Yes	T	No			
Is this an existing structure?		X	Yes	No	If this is or APIN	an existing we	ell or	structure, list the Co	mplex ID	60-81	1	3				
Do you plan to us	se a subsea	BOP or a st	urface BO	P on a float	ing facility	cility to conduct your proposed activities?				x	Yes		No			
WCD Info	For wells, blowout (	volume of Bbls/Day):	uncontro 40,816	led For	structures	, volume of all	stora	age and pipelines	API Grav	API Gravity of fluid						
	Surface I	ocation			Bottom-Hole Location (For Wells)  Compleseparate						pletion (For multiple completions, enter cate lines)					
Lease No.	OCS-G -1	7015	V. 30 a.						OCS OCS							
Area Name	WR											24				
Block No.	758															
Blockline Departures	N/S Depa	urture: 71	06' FNL				200		N/S Dep N/S Dep N/S Dep	arture			F_L F_L F_L			
(in feet)	E/W Dep	arture: 33	97' FEL		E/W De						Departure					
Lambert X-Y	X: 2,150	,745.00'					X: X: X:									
coordinates	Y: 9,512	2,683.00'						Y: Y: Y:								
Latitude/	Latitude:	26° 12' 2	8.2427" N					Latitude Latitude Latitude								
Longitude	Longitud	e: 91° 26'	35.2288"	W					Longitud Longitud Longitud	ie						
Water Depth (Fe	eet): 6959'				MD (F	eet):	T	VD (Feet):	MD (Fee				(Feet):			
Anchor Radius (	(if applicab)	le) in feet:				N/A			MD (Fee	et):		TVD	(Feet):			
	Ancho	r Locatio	ons for	Drilling	Rig or C	Construction	n Ba	arge (If anchor r	adius suppl	ied abo	ve, not no	ecessary	)			
Anchor Name	or No.	Area	I	llock		Coordinate		Y Coordin	ate	Len	gth of An	chor Cha	ain on Seafloor			
N/A					X:			Y:			-					
					X:			Y:								
	- 10-TY				X:	-		Y:								
		_		X:			Y: Y:									
				X: X:			Y: Y:									
							-	Y:		-						
					X:											
					X: Y:											

Well or Structure Name/Number (If renaming well or																
Well or Structure structure, referen				g well or		Previous	sly reviewed u	nder ar	approved EP o	r DOCD?	X	Yes		No		
Is this an existing structure?	g well or	Х	Yes		No	If this is or API N		ell or s	tructure, list the	Complex ID	6081	2400170	1			
Do you plan to us	se a subsea	BOP or a	surface	BOP on	a floatir	ng facility	to conduct ye	our pro	posed activities	,	x	Yes		No		
WCD Info		, volume ( Bbls/Day)		ntrolled	For s	structures s):	, volume of al	1 storaş	ge and pipelines	API Gra	vity of f	luid				
	Surface I	_ocation				Bottom	-Hole Locatio	Wells)	Complete	Completion (For multiple completions, enter separate lines)						
Lease No.	OCS-G 1	7015								ocs ocs						
Area Name	WR															
Block No.	758											1.70				
Blockline Departures	N/S Depa	arture: 71	57' FN	NL						N/S Dep N/S Dep N/S Dep	arture			F	_L _L _L	
(in feet)	E/W Depa	arture:	3495	FEL			E/W De	E/W Departure F L E/W Departure F L E/W Departure F L								
Lambert X-Y	X: 2,150	),745.00'					- 60		X: X: X:							
Coordinates	Y: 9,512	2,683.00°									Y: Y: Y:					
Latitude/ Longitude	Latitude:	26° 12' 2	8.2427	" N			Latitude	Latitude Latitude Latitude								
Longitude	Longitud	e: 91° 26'	35.22	88" W						Longitud Longitud Longitud	le					
Water Depth (Fe	eet): 6959'					MD (Fe	eet):	TV	D (Feet):	MD (Fee				TVD (Feet)		
Anchor Radius (	if applicabl	le) in feet:					N/A			MD (Fee				TVD (Feet) TVD (Feet)		
			ons f					n Ba	rge (If ancho		-					
Anchor Name	or No.	Area		Block	_		Coordinate	_	Y Coord	linate	Lei	igth of A	ncho	r Chain on	Seafloor	
N/A			+	-		X: X:	<u> </u>		Y: Y:							
		_	7000	-	X:		-	Y:	-							
			-		_	X:			Y:				1111		- all missi	
	101		X:			Y:			-							
						X: X:			Y:							
					_	X:			Y:			_				
	- 14200					X:			Y:							

					Pı	roposed Well/St	ruct	ture Location						
Well or Structure structure, referen				well or		Previously reviewed	under	an approved EP or I	OCD?	х	Yes	No		
Is this an existing structure?		x	Yes	1	No	If this is an existing v or API No.	vell or	structure, list the Co	omplex ID	6081	24005103			
Do you plan to u	se a subsea B	OP or a	surface l	BOP on a	floatii	ng facility to conduct y	our p	roposed activities?			Yes	No		
WCD Info	For wells, v blowout (B	olume obls/Day)	funcon : 40,8	trolled 316	For s	structures, volume of a	ill stor	rage and pipelines	API Grav	vity of f	luid			
	Surface Lo	cation				Bottom-Hole Location (For Wells)			Complet	Completion (For multiple completions, enter separate lines)				
Lease No.	OCS-G 170	)15							OCS OCS		2			
Area Name	WR													
Block No.	758													
Blockline Departures	N/S Departure: 7356' FNL							N/S Dep	N/S Departure F N/S Departure F N/S Departure F					
(in feet)	E/W Departure: 3403' FEL							E/W Departure F			F_L F_L F_L			
Lambert X-Y	X: 2,150,745.00°							X: X: X:						
coordinates	Y: 9,512,	683.00'					Y: Y: Y:							
Latitude/	Latitude: 2	26° 12' 2	8.2427	'N	-	Latitu Latitu Latitu				itude				
Longitude	Longitude	: 91° 26	35.228	8" W	240.00				Longitud Longitud Longitud	ude				
Water Depth (Fe	eet): 6955'					MD (Feet):	Т	VD (Feet):	MD (Fee	'eet):		TVD (Feet):		
Anchor Radius	(if applicable	) in feet:				N/A			MD (Fee	et): et):		TVD (Feet): TVD (Feet):		
	Anchor	Locati	ions fo	or Drill	ling F	Rig or Construction	on B	arge (If anchor i	adius suppl	lied ab	ove, not ne	cessary)		
Anchor Name	e or No.	Area		Block		X Coordinate		Y Coordin	ate	Le	ngth of And	chor Chain on Seafloor		
N/A					-	X:		Y:						
			_					+	-					
			-		-									
			_											
					_	70								
		-	-	_	-									
			_		_					-				
N/A						X: X: X: X: X: X: X: X:		Y:						

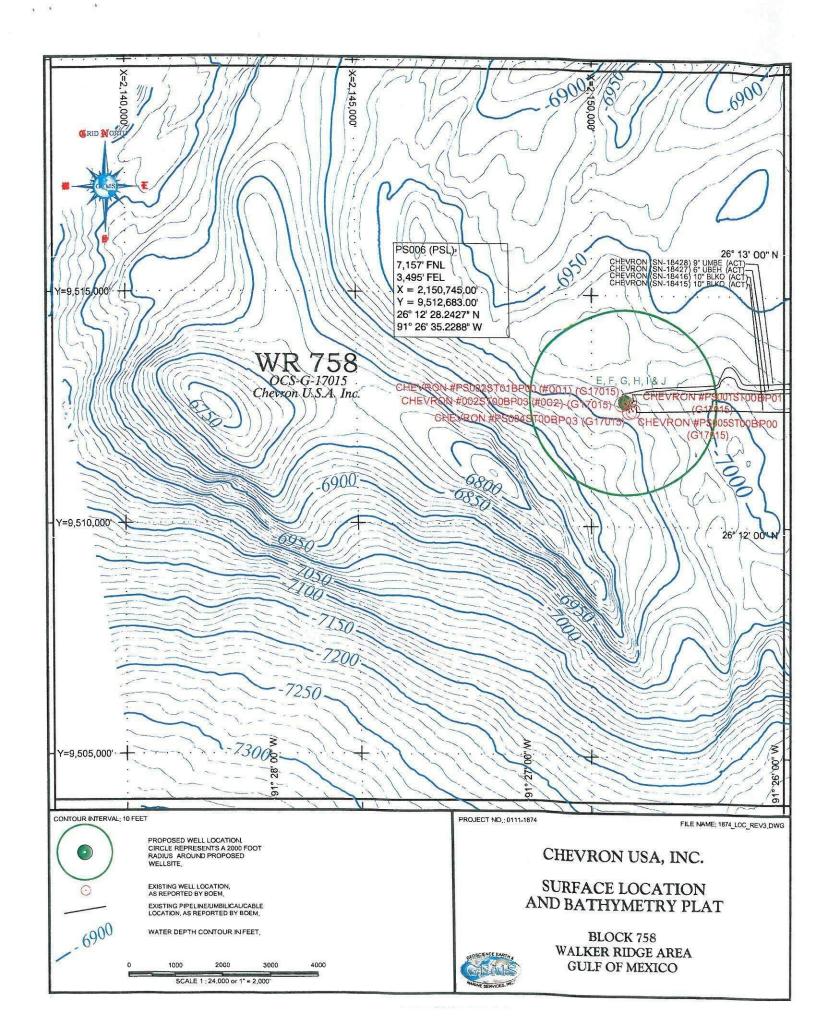
		757			Г	roposea well/Str	ucture Location							
Well or Structure structure, referen	ce previous na	er (If re me):	naming PS005	well or		Previously reviewed ur	17.84		х	Yes	No			
Is this an existing structure?	g well or	х	Yes		No	If this is an existing we or API No.	ell or structure, list the	Complex ID	60812	400500				
Do you plan to u	se a subsea BC	OP or a	surface l	BOP on	a float	ing facility to conduct yo	ur proposed activities?		х	Yes	No			
WCD Info					structures, volume of all	storage and pipelines	API Grav	rity of fl	uid					
	Surface Location				Bottom-Hole Locatio	Bottom-Hole Location (For Wells)				completions, enter				
Lease No.	OCS-G 17015						ocs ocs							
Area Name	WR													
Block No.	758													
Blockline Departures	N/S Departure: 7333' FNL						N/S Dep N/S Dep N/S Dep	arture		F_L F_L F_L				
(in feet)	E/W Departure: 3322' FEL						E/W Dep E/W Dep E/W Dep	parture		FL FL FL				
Lambert X-Y	X: 2,150,745.00'						X: X: X:							
coordinates	Y: 9,512,6	83.00'						Y: Y: Y:						
Latitude/	Latitude: 20	6° 12' 2	28,2427°	, N				Latitude Latitude Latitude			le			
Longitude	Longitude:	91° 26	35.228	8" W				Longitud Longitud Longitud	le					
Water Depth (F	eet): 6965'					MD (Feet):	TVD (Feet):	MD (Fee			TVD (Feet): TVD (Feet):			
Anchor Radius	(if applicable)	in feet:				N/A		MD (Fee			TVD (Feet):			
	Anchor	Locat	ions fo	or Dri	lling	Rig or Construction	n Barge (If anchor	radius suppl	ied abo	ve, not ne	cessary)			
Anchor Name	e or No.	Area		Bloc	k	X Coordinate	Y Coord	inate	Len	gth of And	chor Chain on Seafloor			
N/A						X:	Y:							
						X:	Y:							
						X:	Y:							
						X:	Y:							
				***		X:	Y:							
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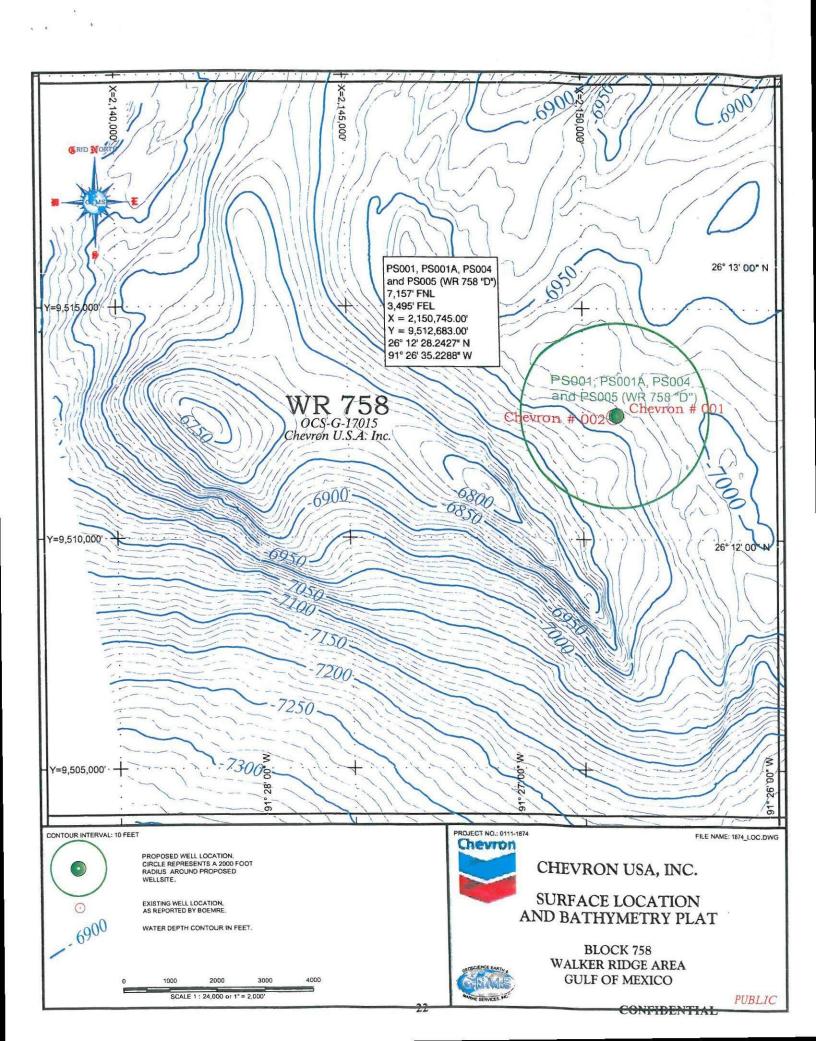
			Pı	opo	sed W	ell/Structu	re Locat	ion					
Well or Structu structure, refere					Previou	usly reviewed )?	under an a	pproved I	EP or	х	Yes		No
Is this an existi or structure?	ng well	X Ye	s No			existing well o	r structure.	list the	60	812	4011	504	
	use a subse	a BOP or a	surface BOP on a				your prop	osed activ	ities?	X	Ye	s	No
WCD info	For wells, v	olume of use bls/day):	ncontrolled			ures, volume o (Bbls): ١''^	f all storag	e and		API Gravity of fluid			
	Surface Location					-Hole Locati	on (For W	(ells)			pletion separ		multiple completions, nes)
Lease No.	OCS - G 17015				OCS -	G				OCS OCS			
Area Name		Walker	Ridge										
Block No.		75	8										
Blockline Departures (in feet)	N/S Departure: F_N_L 7431					eparture:		F		N/S I	Depart Departi Departi	ire:	FL FL FL
	E/W Departure: F = L				E/W D	Departure:		F		E/W Departure:         FL           E/W Departure:         FL           E/W Departure:         FL			
Lambert X- Y coordinates	z: 2,150,675.38'				X:					X: X: X:			
	9,512,409.01'				Y:					Y: Y: Y:			
Latitude/ Longitude	Latitude 26°12	2' 25.5	537" N		Latitude				100	Latitude Latitude Latitude			
	Longitude -91°2	6' 36.	029" N		Longitude					Longitude Longitude Longitude			
Water Depth ( 6,955	Feet):				MD (Feet): TVD (Feet):					(Feet):		TVD (Feet): TVD (Feet):	
Anchor Radius	s (if applicab	ole) in feet:				NA					(Feet):		TVD (Feet):
Anchor Lo	cations fo	r Drilling	Rig or Cons	truc	tion B	arge (If ancl	nor radius	supplied	above,	not n	ecessa	ry)	
Anchor Nam or No.	e Area	Block	X Coordinate			Y Coordina	te		Lengt	h of A	Anchor	Chai	in on Seafloor
N/A			X =			Y =							
			X =			Y =							
			X =			Y =							
			X = X =		Y=								
			X =			Y = Y =	-						
		-	X =			Y =							
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L													

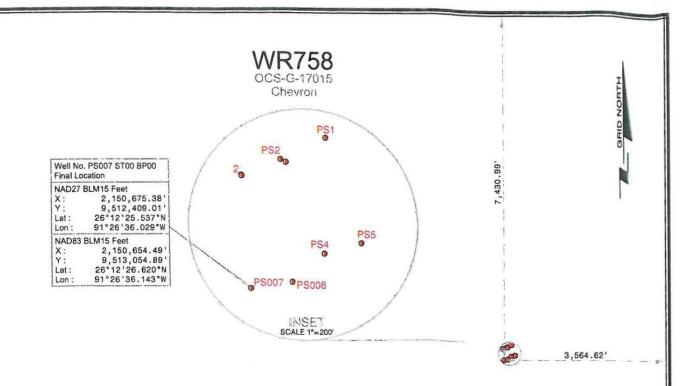
Proposed Well/Structure Location												
Well or Structu structure, refere					Previo DOCE	Leaving the second seco	under an approved	EP or	x	Yes		No
Is this an existing	ng well	Ye	5 Ar 14 April 20 Apri				r structure, list the	60	0812	4011	605	
or structure?  Do you plan to	use a subsea	BOP or a				or API No.	your proposed acti					No
WCD info	For wells, ve						f all storage and			Gravity		
WED IIIIO	blowout (Bb				ipelines (Bbls): 1				fluid	navity	O1	
	Surface Lo	cation					on (For Wells)			pletion separa		multiple completions, nes)
Lease No.	OCS - G 17015				OCS-	G			OCS OCS			
Area Name		Walker	Ridge									
Block No.		75	8									
Blockline Departures (in feet)	N/S Departure: F_N_L 7417			L	N/S D	eparture:	F_	L	N/S I	Departu Departu Departu	ire:	FL FL FL
	E/W Departure: F_E_ L 3475			L	E/W Departure: FL					E/W Departure:         FL           E/W Departure:         FL           E/W Departure:         FL		
Lambert X- Y coordinates	x: 2,150,764'				X:					X: X: X:		
	y: 9,512,422'			10000	Y:				Y: Y: Y:			
Latitude/ Longitude	Latitude 26°12	25.6	65"N		Latitude				Latitude Latitude Latitude			
	Longitude -91° 2	26' 35	.044"W		Longitude				Longitude Longitude Longitude			
Water Depth (	Feet):				MD (I	Feet):	TVD (Feet):			(Feet):		TVD (Feet):
6956' Anchor Radius	s (if applicabl	le) in feet:				N/A				(Feet): (Feet):		TVD (Feet): TVD (Feet):
Anchor Lo	cations for	r Drilling	Rig or Con	struct	tion B	arge (If ancl	or radius supplie	d above	, not r	necessa	ry)	
Anchor Name or No.	e Area	Block	X Coordinate	)		Y Coordina	te	Leng	th of A	Anchor	Chai	n on Seafloor
N/A			X =			Y =		+				( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
			X =		18 278	Y =						
10.00			X =			Y =						
			X =			Y =						
			X =		Y =							
	-		X =			Y=	7 2/2 10 2 /8	1	-			
			X =			Y=		+				
			X=			Y=				15		

DWG File: 1801524101\_WR758\_P\_PS3\_G17015

STATE OF TEXAS FIRM REGISTRATION NO. 10051201







I HEREBY CERTIFY THAT THE ABOVE FINAL WELL MUDLINE LOCATION IS CORRECT.

#### NOTES

- WELL NO. PS007 CASING WAS STABBED INSIDE BUOY PATTERN SET BY A R.O.V. USING LBL ACOUSTIC POSITIONING RELATIVE TO AN EXISTING SEAFLOOR ARRAY.
- SURVEYED COORDINATES TRANSFORMED FROM NAD83 (GPS DATUM) TO NAD27 (CHART DATUM) USING NADCON (VER. 2.1).
- THIS DRAWING IS NOT FOR NAVIGATION.
  ONLY WELLS IN THE IMMEDIATE VICINITY OF THE SURVEYED WELL ARE SHOWN.
- REFERENCE FCIH DRAWING 16123703 WR758 BY PS007 FOR AS-BUILT
- 5. SPUD DATE: 15 JANUARY 2017



Chevron U.S.A. Inc.

FINAL LOCATION OCS-G-17015 WELL No. PS007 ST00 BP00

> BLOCK 758 WALKER RIDGE AREA GULF OF MEXICO

DIGITAL COPY Original plat signed 02/10/17

MARK KEITH BUHRKE RPLS #5092 STATE OF TEXAS FIRM REGISTRATION NO. 10051201

SCALE 1:24000

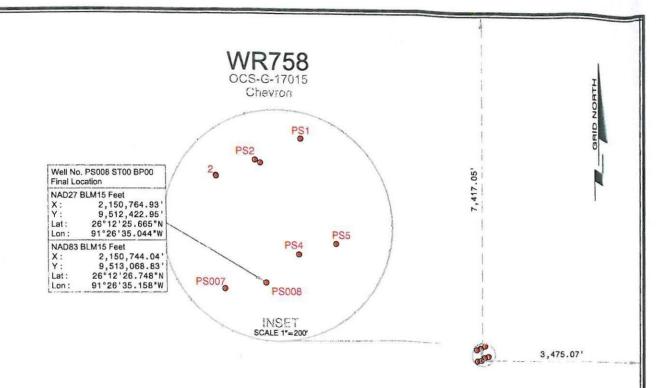
2000 FEET

Geodetic Datum: NAD27 Projection: BLM 15 (NORTH) Grid Units: US SURVEY FEET UGRO

FUGRO USA MARINE, INC. 6671 Southwest Freeway #700 Houston, Texas 77074 (713) 346-3700

Job No.: 17-1202 Date: 2/8/2017 Drwn: MM DWG File: Q:\2017\171202\CAD\17120203\_WR758\_F\_PS007\_PI

Charl: Of:



I HEREBY CERTIFY THAT THE ABOVE FINAL WELL MUDLINE LOCATION IS CORRECT.

### NOTES

- WELL NO.PS008 CASING WAS STABBED INSIDE BUOY PATTERN SET BY A R.O.V. USING LBL ACOUSTIC POSITIONING RELATIVE TO AN EXISTING SEAFLOOR
- SURVEYED COORDINATES TRANSFORMED FROM NAD83 (GPS DATUM) TO NAD27 (CHART DATUM) USING NADCON (VER. 2.1).
  THIS DRAWING IS NOT FOR NAVIGATION.
- ONLY WELLS IN THE IMMEDIATE VICINITY OF THE SURVEYED WELL ARE SHOWN.
- REFERENCE FCIH DRAWING 16123702 WR758 BY SLOT23 FOR AS-BUILT
- BUOYS. 5. SPUD DATE: 15 JANUARY 2017



Chevron U.S.A. Inc.

FINAL LOCATION OCS-G-17015 WELL No. PS008 ST00 BP00

20,00

BLOCK 758 WALKER RIDGE AREA **GULF OF MEXICO** 

DIGITAL COPY Original plat signed 02/09/17

MARK KEITH BUHRKE RPLS #5092 STATE OF TEXAS FIRM REGISTRATION NO. 10051201

SCALE 1:24000

FEET

Projection: BLM 15 (NORTH)
Grid Units: US SURVEY FEET

Job No.: 17-1202

UGRO

FUGRO USA MARINE, INC. 6671 Southwest Freeway #700 Houston, Texas 77074 (713) 346-3700

Date: 2/8/2017 DWG File: Q:\2017\171202\CAD\17120202\_WR758\_F\_PS008\_PI

### Attachment 1-C

### Richard, Kirk (KRichard)

From:

notification@pay.gov

Sent:

Tuesday, November 27, 2018 9:35 AM

To:

Richard, Kirk (KRichard)

Subject:

[\*\*EXTERNAL\*\*] Pay.gov Payment Confirmation: BOEM Development/DOCD Plan - BD



An official email of the United States government



Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact Brenda Dickerson at (703) 787-1617 or BseeFinanceAccountsReceivable@bsee.gov.

Application Name: BOEM Development/DOCD Plan - BD

Pay.gov Tracking ID: 26DOGGI5 Agency Tracking ID: 75623897035

Transaction Type: Sale

Transaction Date: 11/27/2018 10:34:42 AM EST

Account Holder Name: Kirk Rihard Transaction Amount: \$4,238.00 Card Type: AmericanExpress Card Number: \*\*\*\*\*\*\*\*\*1009

Region: Gulf of Mexico

Contact: Kirk Richard 985-773-6327

Company Name/No: Chevron U.S.A. Inc, 00078

Lease Number(s): 17015, , , ,

Area-Block: Walker Ridge WR, 758: , : , : , : ,

Type-Wells: Supplemental Plan, 1

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.



Pay.gov is a program of the U.S. Department of the Treasury, Bureau of the Fiscal Service

## SECTION 2 GENERAL INFORMATION

#### 2.1 APPLICATIONS AND PERMITS

The table below provides the additional applications to be filed covering operations proposed in this DOCD.

Application/Permit	Issuing Agency	Status
Modification to Surface Commingling Application	BSEE	To be submitted
Downhole Commingling Application	BSEE	To be submitted
Supplemental Deepwater Operations Plan	BSEE	To be submitted
Lease Term Pipeline Application	BSEE	To be submitted
Modification to Production Surface Safety System	BSEE	To be submitted

#### 2.2 DRILLING FLUIDS

No drilling operations are proposed in this DOCD.

#### 2.3 PRODUCTION

Proprietary Information.

#### 2.4 OIL CHARACTERISTICS

Proprietary Information.

#### 2.5 NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology is proposed in this DOCD as defined by 30 CFR 550.200.

### 2.6 BONDING STATEMENT

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by a an area-wide bond, furnished and maintained according to 30 CFR 556.900 (a) and 30 CFR 556.901 (a) and (b) and NTL No. 2015-BOEM-N04, "General Financial Assurance"; and a current BOEM-approved deferment from providing additional security under 30 CFR 556.53(d) and National NTL No. 2008-N07, "Supplemental Bond Procedures." If, at any point, Chevron no longer qualifies for a supplemental bond deferment, Chevron will either provide the required additional security or a third party guarantee with 60 days after such disqualification.

### 2.7 OIL SPILL FINANCIAL RESPONSIBILITY (OSFR)

Chevron U.S.A. Inc. (Company No. 00078) has demonstrated oil spill financial responsibility for the facilities proposed in this DOCD according to 30 CFR Part 553.15 (a); and NTL No. 2008-N05, "Guidelines for Oil Spill Financial Responsibility for Covered Facilities".

### 2.8 DEEPWATER WELL CONTROL STATEMENT

Chevron U.S.A. Inc. (Company No. 00078) has the financial capability to drill a relief well and conduct other emergency well control operations.

### 2.9 SUSPENSION OF PRODUCTION

The Walker Ridge block 759 Unit is currently held by ongoing production.

### 2.10 BLOWOUT SCENARIO AND WORST CASE DISCHARGE CALCULATIONS

No drilling or completion operations are proposed in this plan.

# SECTION 3 GEOLOGICAL AND GEOPHYSICAL INFORMATION

### 3.1 GEOLOGICAL DESCRIPTION

Proprietary Information.

### 3.2 STRUCTURE CONTOUR MAPS

Proprietary Information.

### 3.3 INTERPRETED SEISMIC LINES

Proprietary Information.

### 3.4 GEOLOGICAL STRUCTURE CROSS-SECTIONS

Proprietary Information.

### 3.5 SHALLOW HAZARDS REPORT

Proprietary Information.

### 3.6 SHALLOW HAZARDS ASSESSMENT

Proprietary Information.

### 3.7 HIGH-RESOLUTION SEISMIC LINES

Proprietary Information.

### 3.8 STRATIGRAPHIC COLUMN

Proprietary Information.

### 3.9 TIME VS DEPTH TABLES

Proprietary Information.

# SECTION 4 HYDROGEN SULFIDE INFORMATION

### 4.1 CONCENTRATION

Chevron anticipates encountering zero ppm H<sub>2</sub>S during the proposed operations.

### 4.2 CLASSIFICATION

By letter dated June 1, 2016, BOEM determined the area of the proposed operations as  $H_2S$  absent.

### 4.3 H<sub>2</sub>S CONTINGENCY PLAN

An H<sub>2</sub>S Contingency Plan is not required for the activities proposed in this plan.

### **4.4 MODELING REPORT**

Modeling reports are not required for the activities proposed in this plan.

# SECTION 5 MINERAL RESOURCE CONSERVATION INFORMATION

**5.1 TECHNOLOGY & RESERVOIR ENGINEERING PRACTICES AND PROCEDURES** *Proprietary Information.* 

**5.2 TECHNOLOGY AND RECOVERY PRACTICES AND PROCEDURES** *Proprietary Information.* 

**5.3 RESERVOIR DEVELOPMENT** *Proprietary Information.* 

### **SECTION 6** BIOLOGICAL, PHYSICAL AND SOCIOECONOMIC INFORMATION

### **6.1 DEEPWATER BENTHIC COMMUNITIES**

The proposed operations will be conducted within 500 feet of a previously approved surface location as provided for in EP (Control No. S-7800); approved on June 1, 2016.

### 6.2 TOPOGRAPHIC FEATURES (BANKS)

Activities proposed in this DOCD do not fall within 305 meters (1000 feet) of a topographic "No Activity Zone;" therefore, no map is required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

### 6.3 TOPOGRAPHIC FEATURES STATEMENT (SHUNTING)

Activities proposed under this DOCD will be conducted outside all Topographic Feature Protective Zones; therefore, shunting of drill cuttings and drilling fluids is not required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

### 6.4 LIVE-BOTTOMS (PINNACLE TREND FEATURES)

Walker Ridge Block 758 is not located within 61 meters (200 feet) of any pinnacle trend feature; therefore, a separate bathymetric map is not required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

### 6.5 LIVE BOTTOMS (LOW RELIEF)

Walker Ridge Block 758 is not located within 30 meters (100 feet) of any live bottom (low relief) feature with vertical relief equal to or greater than 8 feet; therefore, live bottom (low relief) maps are not required per NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas."

### 6.6 POTENTIALLY SENSITIVE BIOLOGICAL FEATURES

Walker Ridge Block 758 is not located within 30 meters (100 feet) of potentially sensitive biological features. In accordance with NTL No. 2009-G39, "Biologically Sensitive Underwater Features and Areas," biologically sensitive area maps are not required.

### 6.7 THREATENED AND ENDANGERED SPECIES, CRITICAL HABITAT AND MARINE MAMMAL INFORMATION

The federally listed endangered and threatened species potentially occurring in the lease area and along the Gulf Coast are provided in the table below.

Species	Scientific Name	Status	Potentia	l Presence	Critical Habitat Designated in the Gulf of Mexico	
			Lease Area	Coastal		
<b>Marine Mammals</b>	5					
Manatee, West Indian	Trichechus manatus latirostris	Е		Х	Florida (peninsular)	
Whale, Blue	Balaenoptera masculus	Е	X*	::	None	

Whale, Finback	Balaenoptera physalus	E	X*	S <del>-10</del> 7	None
Whale,	Megaptera novaeangliae	E	X*	-	None
Humpback Whale, North	Eubalaena glacialis	E	X*		None
Atlantic Right	Eubalaeria giacialis	2007-001	3000000	<del></del>	None
Whale, Sei	Balaenopiera borealis	E	X*	( <u>1-11/1-1</u> )	None
Whale, Sperm	Physeter catodon (=macrocephalus)	E	Х	i <del>na</del>	None
<b>Terrestrial Mamm</b>	36. Charles and the professional and the second and	N/			
Mouse, Beach (Alabama, Choctawatchee, Perdido Key, St. Andrew)	Peromyscus polionotus	E	Ξ	X	Alabama, Florida (panhandle) beaches
Birds					
Plover, Piping	Charadrius melodus	Т	15	Х	Coastal Texas, Louisiana, Mississippi, Alabama and Florida (panhandle)
Crane, Whooping	Grus Americana	E	:=	Х	Coastal Texas
Reptiles		*			•
Sea Turtle, Green	Chelonia mydas	Т	Х	Х	None
Sea Turtle, Hawksbill	Eretmochelys imbricata	Е	Х	Х	None
Sea Turtle, Kemp's Ridley	Lepidochelys kempli	Е	Х	Х	None
Sea Turtle, Leatherback	Dermochelys coriacea	Е	Х	Х	None
Sea Turtle, Loggerhead	Caretta caretta	Т	Х	Х	Texas, Louisiana, Mississippi, Alabama, Florida
Fish					
Sturgeon, Gulf	Acipenser oxyrinchus (=oxyrhynchus) desotoi	T	Х	Х	Coastal Louisiana, Mississippi, Alabama and Florida (panhandle)
Corals					
Coral, Elkhorn	Acopora palmate	T		Х	Florida Keys and Dry Tortugas
Coral, Staghorn	Acopora cervicornis	Т	12.5	Х	Florida

Abbreviations: E = Endangered; T = Threatened

### **6.8 ARCHAEOLOGICAL REPORT**

The proposed operations will be conducted from a previously approved surface location as provided for in EP (Control No. S-7800); therefore, in accordance with NTL No. 2005-G07, "Archaeological Resource Surveys and Reports," and NTL No. 2011-JOINT-G01, "Revisions to the List of OCS Lease Blocks Requiring Archaeological Resource Surveys and Reports," an archaeological resource survey report is not provided.

<sup>\*</sup> The Blue Fin, Humpback, North Atlantic Right, and Sei Whales are rare or extralimital in the Gulf of Mexico and are unlikely to be present in the lease area.

### **6.9 AIR AND WATER QUALITY INFORMATION**

Air and water quality information is not required to be included in this plan per NTL No. 2008-G04, "Information Requirements for Exploration Plans and Development Operations Coordination Documents."

### **6.10 SOCIOECONOMIC INFORMATION**

Socioeconomic information is not required to be included in this plan per NTL No. 2008-G04, "Information Requirements for Exploration Plans and Development Operations Coordination Documents."

# SECTION ASTES AND DISCHAR ES INFORMATION

### .1 PRO ECTED ENERATED ASTES

"Wastes You Will Generate, Treat and Downhole Dispose or Discharge to the Gulf of Mexico" is included as **Attachment** -A.

### .2 MODELIN REPORT

Modeling reports are not required for the activities proposed in this plan.

# TABLE 1. ASTE ESTIMATED TO BE ENERATED TREATED AND OR DO NHOLE DISPOSED OR DISCHAR ED TO THE OM

Please specify if the amount reported is a total or per well amount and be sure to include appropriate units.

					Pr ected
Pr ected enerated a te			Pr ected ceand	char e	D nhe D a
T e a te	Cm tn	Pr ected Am nt		D char e Meth d	An er es r
drn ccrle h d tm d and c	NEW (603 AUG) 0(5)	55154.7411			
Water-based drilling fluid	N/A	N/A	NA	NA	N/A
Cuttings wetted with water-based fluid	N/A	N/A	N/A	N/A	N/A
Cuttings wetted with synthetic-based fluid	N/A	N/A	N/A	N/A	N/A
h man ethere I e e ect c n ent na a	te				-
	Gray water from living			remove floating solids and	
Domestic waste	quarters	100 gal/person/day	100 gal/person/day	discharge overboard	No
	Sanitary waste from living			chlorinate and discharge	
Sanitary waste	quarters	2040 gals/day	2040 gals/day	overboard	No
I there a dec I e there e Dec Dra na e					
Proprie del Marie del		0-4000 bbl/day (dependent	2000 WWW.200211	remove oil and grease and	N/4
Deck Drainage	Deck drainage	on rainfall)	15 bbl/hr	discharge overboard	No
c nd ct e treatment c m et n r r	er				
Well treatment fluids		200 5514	200 hhlddti	discharge overboard when rig	Ne
well treatment liuids		300 bbl/well/operation	300 bbl/day/operation	operations occur discharge overboard when rig	No
Well completion fluids		300 bbl/well/operation	300 bbl/day/operation	operations occur	No
				discharge overboard when rig	10.0
Workover fluids		300 bbl/well/operation	300 bbl/day/operation	operations occur	No
3200 · 32					
Mice ane dichare.le ninthea	cated th ract t.				
Desalinization unit discharge	Rejected water from watermaker	6480 gals/day	6480 gals/day	discharge overboard	No
Blowout prevent fluid	Watermaker	0400 gais/day	0400 gais/day	discharge overboard	INO
Blowout prevent hulu		794,000 gals (empty one			
Ballast water		quadrant for tank inspection)	620 gal/min (pump capacity)	discharge overboard	No
Bilge water		Combined with deck drainage	Combined with deck drainage		No
Miscellaneous discharges to which chemicals have		Communication desired	Temperature of the second seco	and and a standard	1,10
been added		Varied	Varied	discharge overboard	No
Other miscellaneous discharges	7	Varied	Varied	discharge overboard	No
Cooling water					
rd cehdr car n le nrrd	ced ater.				
				treat for oil grease and	
Produced water	Reservoir Formation Water	40,000 bbl/day	40,000 bbl/day	discharge overboard	No
Pea e enter indi id al r general t nd cate h ch t	e NPDES erm t	e c ered	NOTE: All discharged and	a beautiful	
NOTE: If you will not have a type of waste for the activity.	hoing applied for optor NA for	r all columns in the row	NOTE: All discharged wastes comply with the requirements		
NOTE: If you will not have a type of waste for the activity	being applied for, efficit NA 10	an columns in the row.	Comply with the requirements	or the NEDES permit.	

# SECTION 8 AIR EMISSIONS INFORMATION

### 8.1 EMISSIONS WORKSHEETS AND SCREENING QUESTIONS

Screen Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (tons) associated with your proposed development activities more than 90% of the amounts calculated using the following formulas: CT = 3400D <sup>2/3</sup> for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)?		х
Do your emission calculations include any emission reduction measures or modified emission factors?		Х
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?	Х	
Do you expect to encounter H <sub>2</sub> S at concentrations greater than 20 parts per million (ppm)?		Х
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?		Х
Do you propose to burn produced hydrocarbon liquids?		Х
Are your proposed development and production activities located within 25 miles (40 kilometers) from shore?		Х
Are your proposed development and production activities located within 124 miles (200 kilometers) of the Breton Wilderness Area?		Х

### **8.2 SUMMARY INFORMATION**

Included as **Attachment 8-A** are Air Emission Worksheets which show the emissions calculations for the Plan Emissions and if different, a set of worksheets showing the emissions calculations for the Complex Total Emissions.

This information was calculated by: Meghan Gallinaro (985) 773-6085

OMB Control No. 1010-0151 OMB Approval Expires: 06/30/2021

COMPANY	Chevron U.S.A., Inc.
AREA	Walker Ridge
BLOCK	758
LEASE	OCS-G17015
PLATFORM	JSM FPU (WR 718)
WELL	PS001, PS001A, PS003, PS004, PS005, PS006, PS007, and PS008
COMPANY CONTACT	Meghan Gallinaro
TELEPHONE NO.	985-773-6085
REMARKS	Supplemental DOCD to include well PS003 with wells previously approved under R-6756.

LEASE TERI	LEASE TERM PIPELINE CONSTRUCTION INFORMATION:								
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS							
2018									
2019	1	7							
2020									
2021									
2022									
2023									
2024									
2025									
2026									
2027									
2028									

"Yes"	"No"	Screening Questions for DOCD's
	No No	Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT = 3400D2/3 for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)?  Do your emission calculations include any emission reduction measures or modified emission factors?
Yes		Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?
	No	Do you expect to encounter H2S at concentrations greater than 20 parts per million (ppm)?
	No	Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?
	No	Do you propose to burn produced hydrocarbon liquids?
	No	Are your proposed development and production activities located within 25 miles from shore?
	No	Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

### **AIR EMISSIONS CUMPUTATION FACTORS**

Fuel Usage Conversion Factors	Natural Gas	Furbines	Natural Gas I	Engines	Diesel Rec	ip. Engine	REF.	DATE
1900	SCF/hp-hr	9.524	SCF/hp-hr	7.143	GAL/hp-hr	0.0483	AP42 3.2-1	4/76 & 8/84
Equipment/Emission Factors	units	PM	SOx	NOx	VOC	СО	REF.	DATE
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-1& 3.1-1	10/96
NG 2-cycle lean	gms/hp-hr		0.00185	10.9	0.43	1.5	AP42 3.2-1	10/96
NG 4-cycle lean	gms/hp-hr		0.00185	11.8	0.72	1.6	AP42 3.2-1	10/96
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-1	10/96
Diesel Recip. < 600 hp.	gms/hp-hr	1	0.1835	14	1.12	3.03	AP42 3.3-1	10/96
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	0.1835	11	0.33	2.4	AP42 3.4-1	10/96
Diesel Boiler	lbs/bbl	0.084	0.3025	0.84	0.008	0.21	AP42 1.3-12,14	9/98
NG Heaters/Boilers/Burners	lbs/mmscf	7.6	0.593	100	5.5	84	P42 1.4-1, 14-2, & 14	7/98
NG Flares	lbs/mmscf		0.593	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.83	2	0.01	0.21	AP42 1.3-1 & 1.3-3	9/98
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.0005		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Sulphur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.05	% weight
Produced Gas( Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

#### AIR EMISSIONS CALCULATIONS - FIRST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM		WELL		CON	TACT	PHONE	REMARKS					
Chevron U.S.A., Inc	Walker Ridge	758	OCS-G17015	JSM FPU (WR 718)		01A, PS003, P 07, and PS008		Meghan Gallina	aro	985-773-6085	Supplemental E	OCD to include	well PS003 with	wells previously	approved unde	R-6756
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL		TIME		MAXIMUN	1 POUNDS P	ER HOUR			FS	TIMATED TO	NS	
0. 2.0 (1.0.1.0	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	D/YR	РМ	SOx	NOx	VOC	co	PM	SOx	NOx	VOC	co
DRILLING	PRIME MOVER>600hp diesel*	61800	2984 94	71638 56	24	300	43 56	24 98	1497 36	44 92	326 70	156 81	89 92	5390 48	161 71	1176 11
	PRIME MOVER>600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	PRIME MOVER>600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	PRIME MOVER>600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	BURNER diesel	0			0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	AUXILIARY EQUIP<600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	10800	521 64	12519 36	7	100	7 61	4 37	261 67	7 85	57 09	2 66	1 53	91 59	2 75	19 98
	VESSELS>600hp diesel(supply)	6600	318 78	7650 72	19	150	4 65	2 67	159 91	4 80	34 89	6 63	3 80	227 87	6 84	4972
	VESSELS>600hp diesel(tugs)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
INSTALLATION	JUMPER INSTALLATION VESSEL diesel	12069	582 9327	13990 38	24	7	8 51	4 88	292 42	8 77	63 80	0 71	0 41	24 56	0 74	5 36
	PIPELINE BURY BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	SUPPORT VESSEL diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(supply)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
FACILITY	DERRICK BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
INSTALLATION	MATERIAL TUG diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(supply)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PRODUCTION	RECIP <600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	RECIP >600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	SUPPORT VESSEL diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	TURBINE nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP 2 cycle lean nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP 4 cycle lean nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP 4 cycle rich nat gas	0	0	0 00	0	0	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
	BURNER nat gas : : : : : : : : : : : : : : : : : : :	0 BPD	0 00 SCF/HR	0 00 COUNT	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
}	TANK-	0	**********************		0	0		I	1	0 00				1	0 00	
	FLARE-		0		0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	PROCESS VENT-	0.000	0		0	0		0 00	0 00	0 00	0 00		0 00	0 00	0.00	0 00
	FUGITIVES-		U	0.0	U	0				0 00					0 00	
	GLYCOL STILL VENT-		0		0	0				0 00					0 00	
DRILLING	OIL BURN	0	0		0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
WELL TEST	GAS FLARE		0		0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2019	YEAR TOTAL	ł					64.33	36.89	2211.36	66.34	482.48	166.82	95.66	5734.51	172.04	1251.17
													==			
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											6526.80	6526.80	6526.80	6526.80	114722.77
	196 0	1										3020.00	3020.00	5525.50	3020.00	

<sup>\*</sup> This AQR includes contingency drilling days each year for recompletions, workovers, interventions, abandonment activities, and inspections/maintenance of subsea wells, equipment and pipelines. Note, the number of days for "drilling activity" in the AQR will not match the Form 137

#### AIR EMISSIONS CALCULATIONS - FIRST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM		WELL		CON	ITACT	PHONE	REMARKS					
Chevron U.S.A., Inc	Walker Ridge	758	OCS-G17015	JSM FPU (WR 718)	PS001, PS00 PS006, PS00		S004, PS005,	Meghan Gallina	aro	985-773-6085	Supplemental [	OCD to include	well PS003 with	wells previously	/ approved unde	r R-6756
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN			MAXIMUN	I POUNDS P	ER HOUR		ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	D/YR	PM	SOx	NOx	voc	co	PM	SOx	NOx	voc	CO
DRILLING	PRIME MOVER>600hp diesel*	61800	2984 94	71638 56	24	300	43 56	24 98	1497 36	44 92	326 70	156 81	89 92	5390 48	161 71	1176 11
	PRIME MOVER>600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	PRIME MOVER>600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	BURNER diesel	0		****************	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	AUXILIARY EQUIP<600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	10800	521 64	12519 36	7	100	7 61	4 37	261 67	7 85	57 09	2 66	1 53	91 59	2 75	19 98
	VESSELS>600hp diesel(supply)	6600	318 78	7650 72	19	150	4 65	2 67	159 91	4 80	34 89	6 63	3 80	227 87	6 84	49 72
	VESSELS>600hp diesel(tugs)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
INSTALLATION	SUPPORT VESSEL diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	PIPELINE BURY BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	SUPPORT VESSEL diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(supply)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
FACILITY	DERRICK BARGE diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
INSTALLATION	MATERIAL TUG diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(crew)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	VESSELS>600hp diesel(supply)	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
PRODUCTION	RECIP <600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	RECIP >600hp diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	SUPPORT VESSEL diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	TURBINE nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP 2 cycle lean nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP 4 cycle lean nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	RECIP.4 cycle rich nat gas	0	0	0 00	0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	BURNER:natigas:::::::: MISC.	0 BPD	0 00 SCF/HR	0 00 COUNT	0	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	TANK-	0		<del> </del>	0	0		1	1	0 00		<b>.</b>	1	ı	0 00	
	FLARE-		0		0	0		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
	PROCESS VENT-		0		0	0		""	""	0 00	0 00		""	000	0 00	0 00
	FUGITIVES-		Ü	0.0		0				0 00					0 00	
	GLYCOL STILL VENT-		0		0	0				0 00					0 00	
DRILLING	OIL BURN	0			0	0	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
WELL TEST	GAS FLARE		0		ő	Ő		0 00	0 00	0 00	0 00		0 00	0 00	0 00	0 00
2020-2027	YEAR TOTAL						55.82	32.01	1918.94	57.57	418.68	166.11	95.25	5709.94	171.30	1245.81
EXEMPTION	DISTANCE FROM LAND IN			l	ı								<del>                                     </del>			
CALCULATION	MILES											6526.80	6526.80	6526.80	6526.80	114722.77
	196 0	<u> </u>														

<sup>\*</sup> This AQR includes contingency drilling days each year for recompletions, workovers, interventions, abandonment activities, and inspections/maintenance of subsea wells, equipment and pipelines. Note, the number of days for "drilling activity" in the AQR will not match the Form 137

### **AIR EMISSIONS CALCULATIONS**

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Chevron U.S.A., Inc.	Walker Ridge 758		OCS-G17015	JSM FPU (WR 718)	PS001, PS001A, PS003, PS004, PS005, PS006, PS007, and PS008
V		Emitted		Substance	
Year		<u> </u>		1	T
	PM	SOx	NOx	voc	со
2019	166.82	95.66	5734.51	172.04	1251.17
2020-2027	166.11	95.25	5709.94	171.30	#REF!
Allowable	6526.80	6526.80	6526.80	6526.80	114722.77

# SECTION OIL SPILL INFORMATION

### .1 OIL SPILL RESPONSE PLANNIN

All the proposed activities and facilities in this DOCD will be covered by Chevron's Oil Spill Response Plan (OSRP) filed by Chevron Corporation (Operator Number 02335) and last approved on October 25, 2018 (OSRP O-421). The following operators are covered under this OSRP:

Chevron U.S.A. Inc. (00078)

Chevron Pipe Line Company (00400)

Sabine Pipe Line LLC (00835)

Union Oil Company of California (00003)

PRS Offshore, L.P. (01767)

### .2 SPILL RESPONSE SITES

Prmar Re n e E ment L cat n	Pre anned Sta n L cat n
Leeville, LA	Leeville, LA

### .3 OSRO INFORMATION

Clean Gulf Associates (CGA) and Marine Spill Response Corp. (MSRC) are the primary surface response equipment providers for Chevron in the Gulf of Mexico Region, and maintain a dedicated fleet of vessels and other equipment permanently located at designated ports. CGA and MSRC have the capability to plan the mobilization and rapid deployment of spill response resources on a 24-hour, 7 day a week basis. The CGA and MSRC equipment is strategically positioned across the Gulf of Mexico from Ingleside, TX to Tampa, FL and is available on a 24-hour, 7 day a week basis. Trained Oil Spill Removal Organizations (OSROs) operate all CGA and MSRC equipment.

Marine Well Containment Company (MWCC) is the primary subsea containment service provider for Chevron. MWCC equipment is available on a 24-hour basis year-round.

Chevron's primary staging areas, marine transportation facilities and helicopter bases are located in Port Fourchon, Galliano and Venice, LA. Chevron also can contract for additional staging areas throughout Gulf of Mexico ports.

Chevron's primary command post for an oil spill is located in Covington, LA; however, Chevron has the ability to set up and effectively manage spills at Chevron facilities located in Houma and Lafayette, LA and Houston, TX.

Offshore recovery equipment is primarily staged at the following locations: Ingleside, Houston, Galveston and Port Arthur, TX, Lake Charles, Morgan City, Houma, Port Fourchon, Leeville, Fort

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Jackson, Harvey, Belle Chase and Baton Rouge, LA, Pascagoula, MS, Tampa, Miami and Jacksonville, FL.

### ORST-CASE DISCHAR E SCENARIO DETERMINATION

Cate r	Pr d	ct n			
	Re na OSRP CD	DOCD			
		CD			
Type of Activity	10 Miles Production	10 Miles Production			
Facility location (Area/Block)	GC 641	WR 718			
Facility designation	A (Tahiti Spar)	Jack St. Malo Project			
Distance to nearest shoreline (miles)	118	196			
Storage tanks flowlines (bbl)	4,914	51,770			
Lease term pipelines (bbl)	4,044	7,940			
Uncontrolled blowout (bbl)	186,452	40,816			
T ta V me	1 1	1 2			
Type of oil(s) (crude, condensate,	Crude	Crude			
diesel)					
API gravity	29.5	30			

Chevron has determined that the worst-case scenario from the activities proposed in this DOCD does not supersede the worst-case scenario from our approved Regional OSRP.

Since Chevron has the capability to respond to the worst-case spill scenario included in our Regional OSRP approved on October 25, 2018 (OSRP O-421), and since the worst-case scenario determined for our DOCD does not replace the worst-case scenario in our Regional OSRP, Chevron hereby certifies that Chevron has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in this DOCD.

### . OIL SPILL RESPONSE DISCUSSION

A discussion of the response to an oil spill resulting from the activities proposed in this plan. Included is all the applicable information described in 30 CFR 254.26(b),(c),(d), and (e).

Oil spill response related activities for facilities included in this document are governed by the Chevron regional Gulf of Mexico Oil Spill Response Plan (OSRP). The OSRP meets all requirements contained in 30 CFR 254. The Chevron regional Gulf of Mexico OSRP was approved by BSEE on October 25, 2018. The Chevron regional Gulf of Mexico OSRP encompasses all facilities operated by Chevron U.S.A. Inc. and, herein the jurisdiction of the BOEM and BSEE.

Upon notification of a major oil release from a Chevron facility or operation in the Gulf of Mexico, Chevron response personnel will make the initial notifications to all involved government agencies, Oil Spill Response Organizations (OSROs), and associated support services.

Chevron has a contract in effect with MWCC, MSRC and CGA, as well as other OSROs, to ensure availability of personnel, services, and equipment on a 24-hour-per-day basis. The OSROs can provide personnel, equipment, and material in sufficient quantities and recovery capacity to respond effectively to oil spills from the facilities and leases covered by this plan, including the Worst Case Discharge scenarios. OSROs under contract with Chevron have oil spill response equipment located throughout the Gulf Coast area. Much of the equipment is in road ready condition and available to be transported on short notice to the nearest predetermined staging area(s). The "road-ready condition" provides the shortest reasonable response times for transporting equipment to the staging areas.

Based on the anticipated worst case discharge scenario, Chevron can be onsite with the contracted oil spill recovery equipment with adequate response capacity to contain and recover surface hydrocarbons and prevent land impact, to the maximum extent practicable within an estimated 24 hours.

These assets are listed in the Chevron Oil Spill Response Plan.

The following paragraphs provide information required by 30 CFR 254.26.

### Tra ect r Ana

Land areas that could be potentially impacted by an oil spill were determined using the BOEM Oil Spill Risk Analysis Model (OSRAM) trajectory results. The OSRAM estimates the probability that oil spills from designated locations would contact shoreline and offshore natural resources. These probabilities indicate, in terms of percentage, the chance that an oil spill occurring in a particular launch area will contact a certain county or parish within 3, 10, and 30 days. OCS Launch Area 46 was used as the point of origin for the blocks in this plan. Land segments identified by the model are listed below:

Land Se ment	Chance c ntact n th n 3 da	Chance c ntact n th n 1 da	Chance c ntact n th n 3 da
C08, Matagorda County, TX	0	0	2
C09, Brazoria County, TX	0	0	1
C10, Galveston County, TX	0	0	*1
C12, Jefferson County, TX	0	0	1
C13, Cameron Parish, LA	0	0	2
C14, Vermilion Parish, LA	0	0	1
C17, Terrebonne Parish, LA	0	0	*1
C18, Lafourche Parish, LA	0	0	1
C20, Plaquemines Parish, LA	0	0	3

### Re rce Ident cat n

Resources of special economic or environmental importance found in land segments identified in the above paragraph can be found in the NOAA ESI Coastal Sensitivity Atlas (Maps). These maps can be accessed through NOAA and will be used during any spill occurring from the locations listed in this document.

Additionally, information on environmental sensitivities is contained in the below Coast Guard Area Contingency Plans which will be accessed and followed during an oil spill that threatens the Gulf of Mexico shoreline.

- Corpus Christi, TX Area Contingency Plan
- Port Arthur, TX Area Contingency Plan
- Houston-Galveston, TX Area Contingency Plan
- Southeast Louisiana Area Contingency Plan
- · Sector New Orleans, LA Area Contingency Plan
- Mobile, AL Area Contingency Plan
- St. Petersburg, FL Area Contingency Plan

### Re neD c n

Chevron maintains numerous resources, equipment and expertise to respond to an oil spill in the Gulf of Mexico. Chevron has oil spill response service contracts with both local and international companies and cooperatives, and has a large corps of dedicated Chevron emergency responders that can work in the Gulf of Mexico. Chevron has contracts with the following oil spill response service organizations (OSRO).

Oil Spill Removal Organizations (OSRO). These companies have on-hand shoreline protection and cleanup equipment to respond to a spill in the Gulf of Mexico.

- Clean Gulf Associates Services (CGAS)
- Clean Gulf Associates (CGA)
- Marine Spill Response Corporation (MSRC)
- U.S. Environmental Services LLC (USES)
- American Pollution Control Corporation (AmPol)
- OMI Environmental Solutions (OMIES)
- ES H Environmental Consulting (ES H)
- Clean Harbors Inc.
- Horizon Environmental
- Oil Spill Response Limited (OSR)
- Marine Well Containment Company (MWCC)
- T T Marine

<u>Oil Spill Cooperatives (OSC)</u>. OSCs have equipment pre-staged in the Gulf of Mexico including Lake Charles, Intracoastal City, Houma, Fort Jackson and Venice, Louisiana; Galveston, Texas; and Pascagoula, Mississippi.

OSCs provide resources to respond to offshore incidents including areas identified in this plan.

 Clean Gulf Associates (CGA) – This major cooperative strictly dedicated to Gulf of Mexico oil and gas developers and producers. • Marine Spill Response Corporation (MSRC) – This national not-for-profit organization has extensive dedicated offshore resources located in the Gulf of Mexico.

### Well Control Emergency Response Companies

- Wild Well Control Inc.
- Boots Coots
- IWC Services, Inc.

### Oil Spill Management and Response Consultants

• The Response Group (TRG)

Chemical Dispersant Companies (capable of delivering air and/or vessel dispersants)

- Airborne Support, Inc.
- Marine Spill Response Corporation (MSRC)
- Clean Gulf Associates (CGA)
- Oil Spill Response Limited (OSR)

Chevron will use a layered approach to respond to a worst case discharge from the area by conducting simultaneous response operations at the **e** te, in the **h** re en r nment and in near h re and h re ne area. Plans will be implemented, resources deployed and response operations established within these environmental areas to accomplish the following objectives:

- Provide for the safety of responders and the general public
- Intervene at the well site to stop the flow of oil
- Minimize the spread of oil at the surface
- Minimize encroachment to the coastline environment
- Protect coastal and natural resources

Upon notification of a worst case discharge oil spill at the locations listed in this plan, Chevron will mobilize resources similar to those listed in the attached enclosures. This information comes directly from the Chevron regional gulf of Mexico Oil Spill Response Plans and applies to a worst case discharge volume of 465,709 barrels per day that could occur at the Chevron facility located in Mississippi Canyon Block 122. Resources will be mobilized to sites as relevant to the situation and/or directed by unified command.

- Aerial Surveillance Equipment
- Offshore Recovery Equipment
- Nearshore Recovery Equipment
- In-Situ Burn Equipment
- Aerial Dispersant Equipment
- Shoreline Protection Equipment

• Offshore Storage Equipment

Chevron will also take the following general actions to mobilize and coordinate response operations as appropriate:

- Set up and staff its incident command post in Covington, LA
- Set up a source control group in Houston, TX, or Covington, LA
- Mobilize well site resources to cap, contain and disperse oil at the well head
- Mobilize assets to drill relief wells
- Mobilize assets to contain and collect surface oil at the well site and in the offshore environment
- Mobilize assets to disperse and burn surface oil at the well site and in the offshore environment
- Establish a deepwater staging area from a LA port or location
- Deploy assets to track the movement of oil on the surface

Follow up actions will include the following as appropriate:

- Locate, monitor, track and project the movement of the oil spill
- Mobilize nearshore skimming and booming vessels, barges and systems to shorebase locations for rapid deployment in the nearshore environment
- Mobilize oil spill removal organization (OSRO) resources and assets to staging areas for rapid deployment of shoreline protection resources
- Mobilize wildlife protection and rehabilitation resources to staging areas for rapid deployment of resources to protect and rehabilitate wildlife
- Determine Incident Command Post (ICP) locations based on intervention operations and results and surface oil spill trajectories
- Determine ICP Operations Branch locations based on intervention operations and results and surface oil spill trajectories
- Determine additional staging areas based on the spill trajectory

### S Re n e Re rce and De ment T me

Offshore Response: Offshore response operations will integrate simultaneous containment booming, mechanical recovery, surface dispersants and in-situ burning. Response objectives within the offshore layer are to:

- Provide for the safety of responders and the general public
- Minimize wide-scale spread of oil
- Minimize encroachment to coastline environment
- Maximize containment and recovery of free oil

The strategy for offshore response will be to:

 Station mechanical recovery vessels and barges that are outfitted with ocean boom systems closest to the source to contain and collect as much oil as possible.

- Station mechanical recovery vessels and barges that deploy skimming systems on vessels of opportunity close to the source to rapidly contain and collect oil that strays from the main oil slick.
- Station in-situ burn assets closest to the source to burn as much oil as possible.
- Apply Dispersants to oil that cannot be mechanically recovered.

Simultaneous implementation of these strategies is designed to effectively contain and recover an oil spill offshore to minimize the potential impacts to public health, wildlife and the environment. Separate and distinct resources will be assigned for each operations. Based on the anticipated worst case discharge scenario, Chevron can be onsite with contracted oil spill recovery equipment with adequate response capacity to contain and recover surface hydrocarbons, and minimize land impact, to the maximum extent practicable, within an estimated 24 hours.

The following sections of Chevron's OSRP provide more information on each operations to respond to and contain a worst case discharge to the maximum extent possible.

(1) Mechanical Recovery and Slick Containment. Offshore skimming and booming vessels, barges and systems will be deployed to the source of the spill and stationed in the thickest parts of the spill to enhance the encounter rate, collect and contain the oil. Radio communications will be established between skimming vessels and barges and spotter aircraft and surveillance systems to direct vessels to coordinates of thickest oil to maximize the effectiveness and efficiency of on water recovery resources. Vessels operating in oil will relay spill characteristics (thickness, trajectory) to the Forward Operating Branch and Incident Command Post to station additional vessels and barges that are equipped with night sensing systems in areas of recoverable oil prior to nightfall. This will again maximize the oil recovery encounter rate. MSRC Responder Class vessels, the CGA HOSS barge, Production Support Vessels, Dual Purpose Vessels and vessels of opportunity outfitted with KOSEQ skimming systems will deploy various boom configurations that will maximize containment of oil to collect using skimmers. These vessels will work in coordinated ways to cover as large of a geographic area as possible at the location of the surface spill where oil is the thickest.

Vessels deployed with MSRC and CGA Fast Response Units and CGA Fast Response Vessels will be stationed to collect oil that moves past the front line mechanical assets. These units will deploy a J-boom configuration because it only requires one support vessel. Oil that escapes the above assets and moves shoreward will be collected by vessels of opportunity that deploy sorbent boom, collection nets or other types of equipment that absorbs surface oil. These assets will be deployed as task forces that can rapidly respond to light oil.

(2) In-Situ Burning. Offshore in-situ burn assets will be deployed as primary response resources for all locations within federal waters. Vessels of opportunity that can operate near the spill site will be used to deploy fire boom and trained in-situ burn responders. Fire boom will be configured in a "U" shape or similar to the NOFI Ocean Buster design. In-situ burn and surface dispersant use require FOSC and/or EPA approval

(3) Aerial Dispersants. Aerial dispersants will be deployed as primary response resources for all locations that fall within the FOSC pre-approval process. Dispersant aircraft that arrive on-scene before mechanical recovery or in-situ burn resources will apply dispersants to areas until relieved by a different asset.

In-situ burn and surface dispersant use require FOSC and/or EPA approval

Vessel radar systems and infrared cameras will be used to detect and mechanically collect oil. This will allow surveillance operations to continue both day and night and through inclement weather. These systems also will be used to track the movement of oil which will assist with shoreline response planning.

Louisiana and Texas resources potentially at risk may include but are not limited to the following:

Marine sensitivities, Beaches, Waterfowl, Shoreline resources, Marshes, Marinas/Piers, Populated areas, and Environmental sensitivities.

The BOEM oil spill trajectory model indicates that LA parishes and Texas counties could be impacted by an oil spill from areas listed in this plan. These areas are dominated by find sand beaches, coarse sand beaches, swamps and salt water marshes. The below summarizes potential concerns with each environment. This information is taken from various Coast Guard Area Contingency Plans.

### Fine Sand Beach Environment

- Sensitivity: Fine sand beaches have a low sensitivity to oil spill impacts and cleanup methods.
- Oil Behavior: Oil typically stains and covers the beach sands with low permeability.
- Cleanup: The penetration is low to moderate depending on the water table and the position of the oiling on the shoreline. A potential environmental issue during beach cleanup is the protection of the dune habitat from the cleanup operations. Fine sand beaches typically have poor access, but good transportation ability. Find sand beaches are relatively easier to clean in contrast to marshes. Large volumes of stained sand and debris can be generated by beach cleanup.

### Coarse Sand Beach Environment

- Sensitivity: The environmental sensitivity of coarse sand beaches is low due to the limited animal and vegetation population.
- Oil Behavior: Spilled oil typically stains and coats coarse grain beach sands with moderate to high permeability.

Cleanup: Sediment penetration on coarse grain beaches is moderate/high
depending on the water table and the location of oil deposition. A potential
environmental issue is the protection of the dune habitat from cleanup
operations. The transit ability of this shoreline type is less than fine sand
beaches because the bearing strength is lower and this type of sand builds
steep beach faces. Access is typically poor.

### Swamp Environment

- Sensitivity: The environmental sensitivity is high for swamps because of the presence of wetland habitat.
- Oil Behavior: Oil usually coats and covers the sediment and vegetation with low sediment penetration.
- Cleanup: The sediment penetration potential is low due to the high water table and water content of the sediments. A potential environmental issue is that the cleanup may be more damaging than the oil itself. Access to swamps is poor due to the soft sediment and presence of dense tree growth.

### Salt Marsh Environment

- Sensitivity: The environmental sensitivity is high for salt marsh because of the presence of wetland habitat.
- Oil Behavior: Oil usually coats and covers the sediment and vegetation with low sediment penetration.
- Cleanup: The sediment penetration potential is low/moderate due to the high water table and water content of the sediment. A potential environmental issue is that the cleanup may be more damaging than the oil itself. Access is typically poor in Louisiana.

The protection of waterfowl and wildlife during the course of an oil release is an essential element in every spill response operation. Federal and state natural resource trustees will be notified in the event that a wildlife habitat may be affected by a spill event. Information concerning methods to protect waterfowl and wildlife are contained in the Chevron OSRP. For fish and wildlife resources, the emphasis in on habitats where:

- Large numbers of animals are concentrated in small areas, such as bays where waterfowl concentrate during migration or over wintering
- Early life stages are present in somewhat restricted areas or in shallow water, such as anadromous fish streams and turtle nesting beaches
- Habitats are very important to specific life stages or migration patterns such as foraging or overwintering
- Specific areas are known to be vital sources for seed or propagation
- The species are on Federal or state threatened or endangered lists
- A significant percentage of the pollution is likely to be exposed to oil

Human-use resources of concern are listed in the Chevron OSRP. Areas of economic important, like waterfront hotels, should also be considered when establishing resource protection priorities. Human-use resources are most sensitive when:

- Archaeological and cultural sites are located in the intertidal zones
- Oiling can result in potential significant commercial losses through fouling, tainting, or avoidance because of public perception of a problem
- The resource is unique, such as a historical site
- Oiling can result in potential human health concerns, such as tainting of water intakes and/or subsistence fisheries

### S ta t Re rce

All response equipment, materials, support vessels and strategies listed in this document and the Chevron regional Gulf of Mexico Oil Spill Response Plan have proven suitable for the many environmental conditions existing at the locations listed in this plan. Chevron additionally conducts annual oil spill response training, drills and exercises and validates the content of the Oil Spill Response Plan. The Chevron regional Gulf of Mexico Oil Spill Response Plan is maintained by the Chevron Greater Gulf of Mexico Emergency Management Coordinator located in Covington, LA.

### . MODELIN REPORT

Modeling reports are not required for the activities proposed in this plan.

# SECTION 10 ENVIRONMENTAL MONITORING INFORMATION

### 10.1 MONITORING SYSTEMS

There are no environmental monitoring systems currently in place or planned for the proposed activities.

### **10.2 INCIDENTAL TAKES**

There is no reason to believe that any of the endangered species or marine mammals as listed in the Endangered Species Act (ESA) will be "taken" as a result of the operations proposed under this plan.

It has been documented that the use of explosives and/or seismic devices can affect marine life. Operations proposed in this plan will not be utilizing either of these devices.

Chevron will adhere to the requirements as set forth in the following documents, as applicable, to avoid or minimize impacts to any of the species listed in the ESA as a result of the operations conducted herein:

- NTL No. 2015-BSEE-G03, "Marine Trash and Debris Awareness and Elimination"
- NTL No. 2016-BOEM-G01, "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting"
- NTL No. 2016-BOEM-G02, "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program"

### 10.3 FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY

Walker Ridge Block 758 is not located in the Flower Garden Banks National Marine Sanctuary; therefore, relevant information is not required in this DOCD.

# SECTION 11 LEASE STIPULATIONS INFORMATION

Development activities are subject to the following stipulations attached to Leases OCS-G 17015 / 17016, Walker Ridge Blocks 758 / 759.

### 11.1 MARINE PROTECTED SPECIES

In accordance with the Federal Endangered Species Act and the Marine Mammal Protection Act, Chevron will:

- (a) Collect and remove flotsam resulting from activities related to exploration, development, and production of this lease;
- (b) Post signs in prominent places on all vessels and platforms used as a result of activities related to exploration, development, and production of this lease detailing the reasons (legal and ecological) why release of debris must be eliminated;
- (c) Observe for marine mammals and sea turtles while on vessels, reduce vessel speed to 10 knots or less when assemblages of cetaceans are observed, and maintain a distance of 90 meters or greater from whales, and a distance of 45 meters or greater from small cetaceans and sea turtles;
- (d) Employ mitigation measures prescribed by BOEM/BSEE or the National Marine Fisheries Service (NMFS) for all seismic surveys, including the use of an "exclusion zone" based upon the appropriate water depth, ramp-up and shutdown procedures, visual monitoring, and reporting;
- (e) Identify important habitats, including designated critical habitat, used by listed species (e.g., sea turtle nesting beaches, piping plover critical habitat), in oil spill contingency planning and require the strategic placement of spill cleanup equipment to be used only by personnel trained in less-intrusive cleanup techniques on beaches and bay shores; and
- (f) Immediately report all sightings and locations of injured or dead protected species (e.g., marine mammals and sea turtles) to the appropriate stranding network. If oil and gas industry activity is responsible for the injured or dead animal (e.g., because of a vessel strike), the responsible parties should remain available to assist the stranding network. If the injury or death was caused by a collision with the lessee's vessel, the lessee must notify BOEM within 24 hours of the strike.

BOEM and BSEE issue Notices to Lessees (NTLs), which more fully describe measures implemented in support of the above-mentioned implementing statutes and regulations, as well as measures identified by the U.S. Fish and Wildlife Service and NMFS arising from, among others, conservation recommendations, rulemakings pursuant to the MMPA, or consultation. The lessee and its operators, personnel, and subcontractors, while undertaking activities authorized under this lease, must implement and comply with the specific mitigation measures outlined in NTL No. 2016-BOEM-G01, "Vessel Strike Avoidance and Injured/Dead Protected Species

Reporting;" NTL No. 2016-BOEM-G02, "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program;" and NTL No. 2015-BSEE-G03, "Marine Trash and Debris Awareness and Elimination." At the lessee's option, the lessee, its operators, personnel, and contractors may comply with the most current measures to protect species in place at the time an activity is undertaken under this lease, including but not limited to new or updated versions of the NTLs identified in this paragraph. The lessee and its operators, personnel, and subcontractors will be required to comply with the mitigation measures, identified in the above referenced NTLs, and additional measures in the conditions of approvals for their plans or permits.

# SECTION 12 ENVIRONMENTAL MITIGATION MEASURES INFORMATION

### 12.1 MEASURES TAKEN TO AVOID, MINIMIZE, AND MITIGATE IMPACTS

This plan does not propose activities for which the state of Florida is an affected state; therefore, mitigation information is not required for the activities proposed in this plan.

### 12.2 INCIDENTAL TAKES

Chevron will adhere to the requirements set forth in the following documents, as applicable, to avoid or minimize impacts to any of the species listed in the Endangered Species Act (ESA) as a result of the operations conducted herein:

- NTL No. 2015-BSEE-G03, "Marine Trash and Debris Awareness and Elimination"
- NTL No. 2016-BOEM-G01, "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting"
- NTL No. 2016-BOEM-G02, "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program"

## SECTION 13 RELATED FACILITIES AND OPERATIONS INFORMATION

### 13.1 RELATED OCS FACILITIES AND OPERATIONS

The host platform for the activities proposed in this DOCD is the previously installed JSM FPU installed in WR 718 which supports subsea production from wells located in WR 758 and WR 759. Production departs the JSM FPU through export pipelines owned and operated by third parties. No new export pipelines are proposed as part of this DOCD.

One lease term jumper pipeline (application to be submitted), approximately 110' in length, will be installed as part of this DOCD.

### 13.2 TRANSPORTATION SYSTEM

The oil and gas will depart the JSM FPU via export pipelines operated by a third party. The oil will be transported in a 20-24-inch pipeline (PSN 16329) operated by Chevron Pipeline Company. PSN 16329 is approximately 138 miles long between the JSM FPU in Walker Ridge Block 718 and the Green Canyon Block 19 A Platform. From the Green Canyon Block 19 A Platform, it will tie into the existing infrastructure going to shore. The gas will be transported in a 10.75-inch pipeline (PSN 16327) operated by Enbridge Offshore Facilities, LLC. PSN 16327 is approximately 152 miles long between the JSM FPU in Walker Ridge Block 718 and the Ship Shoal Block 332 A Platform. From the Ship Shoal Block 332 A Platform, it will tie into the existing infrastructure going to shore.

### 13.3 PRODUCED LIQUID HYDROCARBONS TRANSPORTATION VESSELS

There will not be any transfers of liquid hydrocarbons other than via pipeline.

# SECTION 14 SUPPORT VESSELS AND AIRCRAFT INFORMATION

### 14.1 GENERAL

The most practical, direct route from the shorebase as permitted by weather and traffic conditions will be utilized. Information regarding the vessels and aircraft to be used to support the proposed activities is provided in the table below.

Туре	Maximum Fuel Tank Capacity	Maximum Number in Area at Any Time	Trip Frequency or Duration
Light Construction Vessel (LCV)	6600 bbls	1	7 days
Crew boat	47,382 gals	1	60 days
Supply boat	303,093 gals	1	90 days
Helicopter	430 gals	1	As Needed

### 14.2 DIESEL OIL SUPPLY VESSELS

Diesel oil supply vessel information is not required to be submitted with this plan.

### 14.3 DRILLING FLUID TRANSPORTATION

Drilling fluid transportation information is not required to be submitted with this plan.

### 14.4 SOLID AND LIQUID WASTE TRANSPORTATION

A table, "Wastes You Will Transport and/or Dispose of Onshore," is included as **Attachment 14-A**.

### 14.5 VICINITY MAP

A vicinity map showing the location of the activities proposed herein relative to the shoreline with the distance of the proposed activities from the shoreline and the primary routes of the support vessels and aircraft that will be used when traveling between the onshore support facilities and the well is included as **Attachment 14-B**.

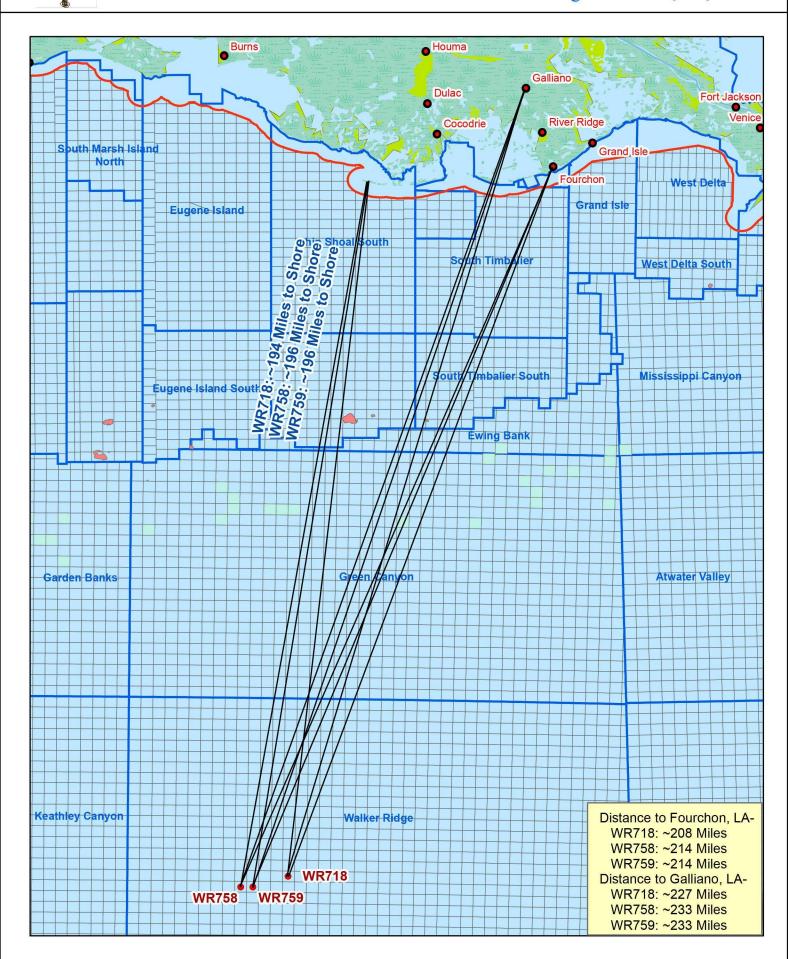
### Attachment 14-A

# TABLE 2. WASTE AND SURPLUS ESTIMATED TO BE TRANSPORTED AND/OR DISPOSED OF ONSHORE

please s	specify whether the amount repo	orted is a total or per well				
		Projected	Solid and Liquid Wastes			
		generated waste	transportation	Wa	ste Dispos	al
				Name/Location of		
Type of V	Vaste	Composition	Transport Method	Facility	Amount	Disposal Method
Will drilling o	occur ? If yes, fill in the muds and o	cuttings.				
	drilling fluid or mud	No drilling activity	N/A	N/A	N/A	N/A
Synthetic-	-based drilling fluid or mud	No drilling activity	N/A	N/A	N/A	N/A
Cuttings v	vetted with Water-based fluid	No drilling activity	N/A	N/A	N/A	N/A
Cuttings v	vetted with Synthetic-based fluid	No drilling activity	N/A	N/A	N/A	N/A
Cuttings v	wetted with oil-based fluids	No drilling activity	N/A	N/A	N/A	N/A
Vill you prod	luce hydrocarbons? If yes fill in for	produced sand.				
Produced	sand	Oil contaminated produced sand	Transport to shorebase by marine vessel in cutting boxes	Newpark, Fourchon,	100 bbls	Liquids are injected into a disposal well and the solids are landfilled
Vill you have	additional wastes that are not per	mitted for discharge? If yes,				
ill in the app	ropriate rows.					
			Transport to shorebase by marine		AND DESCRIPTION OF THE PARTY OF	
Trash and	d debris	Plastic, paper, aluminum	vessel in trash bins	IESSI, Houma, LA	1500 cu/ft	Local Landfill
Used oil		Waste oil, i.e., refined oil, cooking oil and oily rags	Transport to shorebase by marine vessel in drums, cutting boxes	Aaron Oil, Berwick, LA	400 bbls	Recycled
Chemical	product wastes, hazardous waste	Contaminated glycol, paint waste and various production chemicals	Transport to shorebase by marine vessel in MPT tanks or drums	Waste Management Inc., Lake Charles/Sulfur, LA	100 bbls (during installation, up to 200 metric tonnes)	Incineration, depending on product
Non haza	rdous waste	Sandblast media and other maintenance waste, nonhazardous chemicals	Transport to shorebase by marine vessel in MPT tanks or drums	Waste Management Inc., Woodside Landfill, Walker, LA	Up to 200 metric tonnes during startup	Landfill
NORM co	ontaminated waste	Sands and scale	Transport to shorebase by marine vessel in drums or seal equipment	>30 MR - Newpark, Fourchon, LA <30 MR - Newpark, Big Hill, TX	1 ton	Slurred and injected into a disposal well

	TABLE 2. WASTE AND SURPLUS ESTIMATED TO BE TRANSPORTED AND/OR DISPOSED OF								
	ONSHORE								
	please specify whether the amount reported is a total or per well								
		Projected		Solid and Liquid Wastes					
		generated waste		transportation		W	aste Dispos	al	
						Name/Location of			
╙	Type of Waste	Composition		Transport Method		Facility	Amount	Disposal Method	
	RCRA-exempt E&P waste	Workover fluids, sludges from production equipment, wash water		Transport to shorebase by marine vessel in MPT tanks, cutting boxes or drums		Newpark, Fourchon, LA	150 bbls	Liquids are injected into a disposal well and the solids are landfilled	
	NOTE: If you will not have a type of waste, enter NA in the row.								

### Vicinity Map Walker Ridge Block 718,758,759



# SECTION 15 ONSHORE SUPPORT FACILITIES INFORMATION

### 15.1 GENERAL

The onshore facilities to be used to provide supply and service support for the proposed activities are provided in the table below.

Name	Location	Existing/New/Modified		
C-Port Shorebase	Port Fourchon, Louisiana	Existing		
Chevron Galliano Airbase	Galliano, Louisiana	Existing		

### 15.2 SUPPORT BASE CONSTRUCTION OR EXPANSION

There will be no new construction of an onshore support base, nor will Chevron expand the existing shorebase as a result of the operations proposed in this DOCD.

### 15.3 SUPPORT BASE CONSTRUCTION OR EXPANSION TIMETABLE

A support base construction or expansion timetable is not required for the activities proposed in this plan.

### 15.4 WASTE DISPOSAL

A table, "Wastes You Will Transport and/or Dispose of Onshore," is included as **Attachment 14-A**.

# SECTION 16 COASTAL ZONE MANAGEMENT (CZM) INFORMATION

A certificate for Coastal Zone Management Consistency for the state of Louisiana (Control Number N-9580) was submitted with the Initial DOCD for Walker Ridge Blocks 758 and 759.

# SECTION 17 ENVIRONMENTAL IMPACT ANALYSIS (EIA)

The Environmental Impact Analysis is included as Attachment 17-A.							

## Chevron U.S.A. Inc. (Chevron)

### Supplemental Development Operations Coordination Document Walker Ridge Blocks 758 and 759 OCS-G 17015 / 17016

### (A) IMPACT PRODUCING FACTORS

### **ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET**

Environment Resources	Impact Producing Factors (IPFs) Categories and Examples Refer to recent GOM OCS Lease Sale EIS for a more complete list of IPFs					
	Emissions (air, noise, light, etc.)	Effluents (muds, cutting, other discharges to the water column or seafloor)	Physical disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for treatment or disposal	Accidents (e.g., oil spills, chemical spills, H <sub>2</sub> S releases)	Discarded Trash & Debris
Site-specific at Offshore Location						
Designated topographic features		(1)	(1)		(1)	
Pinnacle Trend area live bottoms		(2)	(2)		(2)	
Eastern Gulf live bottoms		(3)	(3)		(3)	
Benthic communities			(4)			
Water quality			X		X	
Fisheries			X		X	
Marine Mammals	X(8)				X(8)	X
Sea Turtles	X(8)				X(8)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			(7)		X	
Vicinity of Offshore Location						i.
Essential fish habitat			X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
Coastal and Onshore						
Beaches					X(6)	Х
Wetlands					X(6)	
Shore birds and coastal nesting birds					X(6)	X
Coastal wildlife refuges	c.				X	
Wilderness areas					X	

### **Footnotes for Environmental Impact Analysis Matrix**

- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
  - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
  - 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
  - Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
  - o Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the BOEM as being in water depths 300 meters or greater.
- 5) Exploration or production activities where H2S concentrations greater than 500 ppm might be encountered.
- 6) All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7) All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the BOEM as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

### (B) ANALYSIS

### Site-Specific at Walker Ridge Blocks 758 and 759

Proposed operations consist of the installation of one wellhead, dual jumper pipelines, and commencement of production from the PS003 well.

Operations will be conducted with a dynamically-positioned lay barge.

### 1. Designated Topographic Features

Potential IPFs on topographic features include accidents.

Walker Ridge Blocks 758 and 759 are approximately 115 miles from the closest designated Topographic Features Stipulation Block (Sweet Bank); therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

There are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities, which could impact topographic features.

### 2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include accidents.

Walker Ridge Blocks 758 and 759 are approximately 275 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several

orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in **Section 9**).

There are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities which could impact a live bottom (pinnacle trend) area.

### 3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include accidents.

Walker Ridge Blocks 758 and 759 are not located in an area characterized by the existence of live bottoms, and these leases do not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills cause damage to live bottom organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine invertebrates. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom area. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in **Section 9**).

There are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities which could impact an Eastern Gulf live bottom area.

### 4. Benthic Communities

There are no IPFs (including emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities which could impact benthic communities.

Walker Ridge Blocks 758 and 759 are located in water depths 984 feet (300 meters) or greater. However, a dynamically-positioned lay barge is being used for the proposed activities; therefore, only an insignificant amount of seafloor will be disturbed. Additionally, Walker Ridge Blocks 758 and 759 are approximately 99 miles from the nearest known benthic community site (BenthicGreen Canyon Block 310), listed in NTL 2009-G40. Due to physical disturbances to the seafloor being minimized by the use of a dynamically-positioned lay barge and the distance from

identified benthic communities, Chevron's proposed operations in Walker Ridge Blocks 758 and 759 would not cause impacts to benthic communities.

### 5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Walker Ridge Blocks 758 and 759 include accidents.

Accidents: Oil spills have the potential to alter offshore water quality; however, it is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. Between 1980 and 2000, OCS operations produced 4.7 billion barrels of oil and spilled only 0.001 percent of this oil, or 1 bbl for every 81,000 bbl produced. The spill risk related to a diesel spill from drilling operations is even less. Between 1976 and 1985, (years for which data were collected), there were 80 reported diesel spills greater than one barrel associated with drilling activities. Considering that there were 11,944 wells drilled, this is a 0.7 percent probability of an occurrence. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved components and small oil droplets. Dispersion by currents and microbial degradation would remove the oil from the water column and dilute the constituents to background levels. Historically, changes in offshore water quality from oil spills have only been detected during the life of the spill and up to several months afterwards. Most of the components of oil are insoluble in water and therefore float. The activities proposed in this plan will be covered by Chevron's Regional Oil Spill Response Plan (refer to information submitted in Section 9).

There are no other IPFs (including emissions, physical disturbances to the seafloor, effluents and wastes sent to shore for disposal) from the proposed activities which could cause impacts to water quality.

### 6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in Walker Ridge Blocks 758 and 759 include accidents.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on fisheries; however, it is unlikely that such an event would occur from the proposed activities (refer to Item 5, Water Quality). The effects of oil on mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capacity of adult fish and shellfish to avoid the spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

There are no IPFs from emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for disposal from the proposed activities which could cause impacts to fisheries.

### 7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale, occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in Walker Ridge Blocks 758 and 759 include emissions, discarded trash and debris, and accidents.

Emissions: Noises from drilling activities, support vessels and helicopters may elicit a startle reaction from marine mammals. This reaction may lead to disruption of marine mammals' normal activities. Stress may make them more vulnerable to parasites, disease, environmental contaminants, and/or predation (Majors and Myrick, 1990). There is little conclusive evidence for long-term displacements and population trends for marine mammals relative to noise.

**Discarded trash and debris:** Both entanglement in, and ingestion of debris have caused the death or serious injury of marine mammals (Laist, 1997; MMC, 1999). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm marine mammals. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA).

Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

**Accidents:** Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel personnel should use a

Gulf of Mexico reference guide to help identify the twenty-one species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel personnel must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the NMFS Marine Stranding Southeast Mammal Hotline at 1-877-433-8299 (http://www.nmfs.noaa.gov/pr/health/report.htm#southeast). Any injured or dead protected species should also be reported to takereport.nmfsser@noaa.gov. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to protected species@bsee.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in Chevron's OSRP is considered to be low when compared with the constituents and fractions of crude oils and diesel products. The activities proposed in this plan will be covered by Chevron's OSRP (refer to information submitted in accordance with **Section 9**).

There are no other IPFs (including physical disturbances to the seafloor and effluents) from the proposed activities which could impact marine mammals.

### 8. Sea Turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations include emissions, discarded trash and debris, and accidents. GulfCet II studies sighted most loggerhead, Kemp's ridley and leatherback sea turtles over shelf waters. Historically these species have been sighted up to the shelf's edge. They appear to be more abundant east of the Mississippi River than they are west of the river (Fritts et al., 1983b; Lohoefener et al., 1990). Deep waters may be used by all species as a transitory habitat.

**Emissions:** Noise from drilling activities, support vessels, and helicopters may elicit a startle reaction from sea turtles, but this is a temporary disturbance.

**Discarded trash and debris:** Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of

solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the State Coordinators for the Sea Turtle Stranding and Salvage Network (STSSN) at <a href="http://www.sefsc.noaa.gov/species/turtles/stranding\_coordinators.htm">http://www.sefsc.noaa.gov/species/turtles/stranding\_coordinators.htm</a> (phone numbers vary by state). Any injured or dead protected species should also be reported to <a href="mailto-takereport.nmfsser@noaa.gov">takereport.nmfsser@noaa.gov</a>. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to <a href="mailto-protected-species@bsee.gov">protected-species@bsee.gov</a>. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

All sea turtle species and their life stages are vulnerable to the harmful effects of oil through direct contact or by fouling of their food. Exposure to oil can be fatal, particularly to juveniles and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to the possibility of collisions with sea turtles. The activities proposed in this plan will be covered by Chevron's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Section 9**).

There are no other IPFs (including physical disturbances to the seafloor and effluents) from the proposed activities which could impact sea turtles.

### 9. Air Quality

The projected air emissions identified in **Section 8** are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. Walker Ridge Blocks 758 and 759 are beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and are approximately 194 miles from the coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of Walker Ridge Blocks 758 and 759 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which could impact air quality.

### 10. Shipwreck Sites (known or potential)

Potential IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in Walker Ridge Blocks 758 and 759 include disturbances to the seafloor.

**Physical disturbances to the seafloor:** A dynamically-positioned lay barge is being used for the proposed activities; therefore, only an insignificant amount of seafloor will be disturbed. Because physical disturbances to the seafloor will be minimized by the use of a dynamically-positioned lay barge, Chevron's proposed operations in Walker Ridge Blocks 758 and 759 would not cause impacts to shipwreck sites.

Additionally, Walker Ridge Blocks 758 and 759 are not located in or adjacent to an OCS block designated by BOEM as having a high probability for occurrence of shipwrecks, therefore, no adverse impacts are expected.

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities that could cause impacts to shipwreck sites.

### 11. Prehistoric Archaeological Sites

Potential IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Walker Ridge Blocks 758 and 759 include disturbances to the seafloor.

**Physical disturbances to the seafloor:** A dynamically-positioned lay barge is being used for the proposed activities; therefore, only an insignificant amount of seafloor will be disturbed. Because physical disturbances to the seafloor will be minimized by the use of a dynamically-positioned lay barge, Chevron's proposed operations in Walker Ridge Blocks 758 and 759 would not cause impacts to prehistoric archaeological sites.

Additionally, Walker Ridge Blocks 758 and 759 are located outside the Archaeological Prehistoric high probability line, therefore, no adverse impacts are expected.

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact prehistoric archeological sites.

### **Vicinity of Offshore Location**

### 1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in Walker Ridge Blocks 758 and 759 include accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on EFH. Oil spills that contact coastal bays and estuaries, as well as OCS waters when pelagic eggs and larvae are present, have the greatest potential to affect fisheries. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

There are no other IPFs (including emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact essential fish habitat.

### 2. Marine and Pelagic Birds

IPFs that could impact marine birds as a result of the proposed activities include air emissions, accidental oil spills, and discarded trash and debris from vessels and the facilities.

**Emissions:** Emissions of pollutants into the atmosphere from the proposed activities are far below concentrations which could harm coastal and marine birds.

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Marine and pelagic birds feeding at the spill location may experience chronic, nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

There are no other IPFs (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact marine and pelagic birds.

### 3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H<sub>2</sub>S release) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No.'s 2008-G04, 2009-G27, and 2009-G31, sufficient information is included in **Section 4** to justify our request that our proposed activities be classified by BSEE as H<sub>2</sub>S absent.

### **Coastal and Onshore**

### 1. Beaches

IPFs from the proposed activities that could cause impacts to beaches include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (194 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The

activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

Discarded trash and debris: Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact beaches.

### 2. Wetlands

IPFs from the proposed activities that could cause impacts to wetlands include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills could cause impacts to wetlands, however, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Due to the distance from shore (194 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in **Section 9**).

**Discarded trash and debris:** There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and

Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact wetlands.

### 3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Given the distance from shore (194 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in **Section 9**).

Discarded trash and debris: Coastal and marine birds are highly susceptible to entanglement in floating, submerged, and beached marine debris: specifically plastics. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support

services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shore birds and coastal nesting birds.

### 4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (194 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

**Discarded trash and debris:** Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V, the Marine Plastic Pollution Research and Control Act and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to coastal wildlife refuges.

### 5. Wilderness Areas

Accidents: An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from the nearest designated Wilderness Area (261 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Chevron's Regional OSRP (refer to information submitted in Section 9).

**Discarded trash and debris:** Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V, the Marine Plastic Pollution Research and Control Act and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Chevron will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from Chevron management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to wilderness areas.

### 6. Other Environmental Resources Identified

There are no other environmental resources identified for this impact assessment.

### (C) IMPACTS ON PROPOSED ACTIVITIES

The site-specific environmental conditions have been taken into account for the proposed activities. No impacts are expected on the proposed activities from site-specific environmental conditions.

### (D) ENVIRONMENTAL HAZARDS

During the hurricane season, June through November, the Gulf of Mexico is impacted by an average of ten tropical storms (39-73 mph winds), of which six become hurricanes ( > 74 mph winds). Due to their location in the gulf, Walker Ridge Blocks 758 and 759 may experience hurricane and tropical storm force winds, and related sea currents. These factors can adversely impact the integrity of the operations covered by this plan. A significant storm may present physical hazards to operators and vessels, damage exploration or production equipment, or result in the release of hazardous materials (including hydrocarbons). Additionally, the displacement of equipment may disrupt the local benthic habitat and pose a threat to local species.

The following preventative measures included in this plan may be implemented to mitigate these impacts:

- Platform / structure Installation
   Operator will not conduct platform / structure installation operations during Tropical
   Storm or Hurricane threat.
- Pipeline Installation
   Operator will not conduct pipeline installation operations during Tropical Storm or
   Hurricane threat.

### (E) ALTERNATIVES

No alternatives to the proposed activities were considered to reduce environmental impacts.

### (F) MITIGATION MEASURES

No mitigation measures other than those required by regulation will be employed to avoid, diminish, or eliminate potential impacts on environmental resources.

### (G) CONSULTATION

No agencies or persons were consulted regarding potential impacts associated with the proposed activities. Therefore, a list of such entities has not been provided.

### (H) PREPARER(S)

Matt Harlan
J. Connor Consulting, Inc.
19219 Katy Freeway, Suite 200
Houston, Texas 77094
(281) 578-3388
matt.harlan@jccteam.com

### (I) References

Authors:

- American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.
- Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.
- Burke, C.J. and J.A. Veil. 1995. Potential benefits from regulatory consideration of synthetic drilling muds. Environmental Assessment Division, Argonne National Laboratory, ANL/EAD/TM-43.
- Daly, J.M. 1997. Controlling the discharge of synthetic-based drilling fluid contaminated cuttings in waters of the United States. U.S. Environmental Protection Agency, Office of Water. Work Plan, June 24, 1997.
- Hansen, D.J. 1981. The relative sensitivity of seabird populations in Alaska to oil pollution. U.S. Dept. of the Interior, Bureau of Land Management, Alaska OCS Region, Anchorage. BLM-YK-ES-81-006-1792.
- Laist, D.W. 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In: Coe, J.M. and D.B. Rogers, eds. Marine debris: sources, impacts, and solutions. New York, NY: Springer-Verlag. Pp. 99-139.
- Majors, A.P. and A.C. Myrick, Jr. 1990. Effects of noise on animals: implications for dolphins exposed to seal bombs in the eastern tropical Pacific purse-seine fishery—an annotated bibliography. NOAA Administrative Report LJ-90-06.
- Marine Mammal Commission. 1999. Annual report to Congress 1998.
- Piatt, J.F., C.J. Lensink, W. Butler, M. Kendziorek, and D.R. Nysewander. 1990. Immediate impact of the Exxon Valdez oil spill on marine birds. The Auk. 107 (2): 387-397.
- Vauk, G., E. Hartwig, B. Reineking, and E. Vauk-Hentzelt. 1989. Losses of seabirds by oil pollution at the German North Sea coast. Topics in Marine Biology. Ros, J.D, ed. Scient. Mar. 53 (2-3): 749-754.
- Vermeer, K. and R. Vermeer, 1975 Oil threat to birds on the Canadian west coast. The Canadian Field-Naturalist. 89:278-298.

Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- BOEM EIS's:
  - $\circ$  GOM Deepwater Operations and Activities. Environmental Assessment. BOEM 2000-001
  - o GOM Central and Western Planning Areas Sales 166 and 168 Final Environmental Impact Statement. BOEM 96-0058.

# SECTION 18 ADMINISTRATIVE INFORMATION

### 18.1 EXEMPTED INFORMATION DESCRIPTION

The proposed bottomhole locations of the planned wells have been removed from the Public Information copy of the DOCD as well as any discussions of the target objectives, geologic or geophysical data, and interpreted geology.

### **18.2 BIBLIOGRAPHY**

- 1. Supplemental Exploration Plan (Control No. S-7800).
- 2. Initial Development Operations Coordination Document (Control No. N-9580).
- 3. Supplemental Development Operations Coordination Document (Control No. S-7857).