UNITED STATES GOVERNMENT MEMORANDUM

April 23, 2004

To:

Public Information (MS 5034)

From:

Plan Coordinator, FO, Plans Section (MS

5231)

Subject:

Public Information copy of plan

Control # -

S-06400

Type

Supplemental Development Operations Coordinations Document

Lease(s)

OCS- 00680 Block - 20 West Cameron Area

Operator

Devon Energy Production Company, L.P.

Description -

Install Caisson A and Wells A, B, C, and E

Rig Type -

JACKUP

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
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
CAIS/A		1443 FSL, 7002 FEL	00680/WC/20
WELL/A	00680/WC/20	1443 FSL, 7002 FEL	00680/WC/20
WELL/B	00680/WC/20	1443 FSL, 7002 FEL	00680/WC/20
WELL/C	00680/WC/20	1443 FSL, 7002 FEL	00680/WC/20
WELL/E	00680/WC/20	1443 FSL, 7002 FEL	00680/WC/20

ISS APR26784pw12=14

NOTED-SCHEXNAILDRE



1200 Smith Street, Suite 3300 Houston, Texas 77002

Telephone: (713) 286-5861 Facsimile: (713) 286-5737

Patricia J. Bruce Regulatory Specialist

March 30, 2004

Mr. Donald C. Howard Regional Supervisor Office of Field Operations U.S. Department of the Interior Minerals Management Service 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

RE:

Supplemental DOCD

Lease OCS 00680, West Cameron Block 20 OCS Federal Waters, Offshore Louisiana



Gentlemen:

In accordance with the provisions of Title 30 CFR Part 250.204 and that certain Notice to Lessees (NTL 2000-G21), Devon Energy Production Company, L.P. hereby submits for your review and approval nine copies of a Supplemental Development Operations Coordination Document for Lease OCS 00680, West Cameron Block 20, Offshore Louisiana. Five (5) copies are "Proprietary Information" and four (4) copies are "Public Information".

Excluded from the Public Information copies are certain geologic discussions, depths of wells and structure maps.

Devon anticipates commencing activities under this proposed Supplemental Development Operations Coordination Document on or about April 15, 2004 June 5, 2004

Should additional information be required please contact the undersigned at 713-286-5861.

Sincerely,

Vaturia J. Bruce J. Buce

Enclosures

CONTROL NO. 5-6400

REVIEWER: Michaile Gnifitt

PHONE: (504) 736-2975



DEVON ENERGY PRODUCTION COMPANY, L.P.

SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

West Cameron Block 20 OCS 00680

March 25, 2004

PUBLIC INFORMATION

SECTION 1.0

CONTENTS OF PLAN

1.1 Description of Proposed Activities

In this Supplemental Development Operations Coordination Document (DOCD) Devon Energy Production Company, L.P. proposes to drill, complete and produce four (4) development wells. The surface facility will be a four well caisson test facility. Information pertaining to the geological targets, including a narrative of trapping features, is addressed in Section 3 "Geological and Geophysical Information" of this plan. No well testing is proposed.

1.2 Tentative Schedule

Drilling operations in West Cameron Block 20, OCS 00680, as proposed by this plan are scheduled to begin on or about June 5, 2004, subject to approval of this plan and subsequent Applications for a Permit to Drill. Devon proposes to conduct the proposed operations as outlined in the following activity schedule. The wells will be placed on production as they are completed beginning with Well "A" in August, 2004.

Activity	Start Date	Duration	Ending Date	
Drill Well Location "A"	06/05/2004	35 days	07/09/2004	
Install Caisson with Rig	07/10/2004	3 days	07/12/2004	
Complete Well "A"	07/13/2004	17 days	07/29/2004	
Complete Surface Facility	07/30/2004	4 days	08/02/2004	
Drill and complete Well Location "B"	08/03/2004	52 days	09/23/2004	
Drill and complete Well Location "C"	01/05/2005	52 days	02/25/2005	
Drill and complete Well Location "E"	02/26/2005	52 days	04/18/2005	

1.3 Location Information

Included as attachments to Section 1 are Form MMS-137 "OCS Plan Information Form", and a well location plat with bathymetry prepared in accordance with that certain Notice to Lessees NTL 2002-G08.

1.4 Drilling Unit

The proposed wells will be drilled using a typical jack up drilling rig such as the Ensco 99. When the actual rig is selected, copies of the appropriate specifications will be included with the individual Application for Permit to Drill. No anchors will be used.

Safety features on the MODU will include well control, pollution prevention, welding procedure, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, G and O and as further clarified by MMS Notices to Lessees and current policy making invoked by the MMS

The MMS is required to conduct onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions, as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections. The

MMS also inspects the stockpiles of equipment listed in the operator's approved Regional Oil Spill Response Plan that would be used for the containment and cleanup of hydrocarbon spills.

Appropriate life rafts, life jackets, rig buoys, etc. will be maintained on the facility at all times as mandated by the U.S. Coast Guard regulations contained in Title 33 CFR. The drilling rig and each of the marine vessels servicing these operations will be equipped with all U.S. Coast Guard required navigational safety aids to alert ships of its presence in all weather conditions.

Supervisory and certain designated personnel on-board the facility will be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in the NPDES General Permit GMG290091.

1.5 Production Facilities

A minimal structure with heliport will be set adjacent to Platform "A". No anchors will be used during the completion of the surface facility. Flow lines will carry production to Platform "A then onshore to the Sabine 13 facility at Johnson Bayou.

1.6 Attachments to Section 1.0

- OCS Plan Information Form
- Bathymetry Map with Surface Locations
- Well Location Map
- Well Location Table

OMB Control Number: 1010-0049 OMB Approval Expires: August 31, 2006

OCS PLAN INFORMATION FORM

					000	X 421 XI		ACTIVAL	<u> </u>	I OIGH						
						Ge	neral I	6-104-4 W. S. S.	Part - 6 (4) - 5		300 384					
Ту	oe of OCS P	lan:	E	xploration I	Plan (E	P)		1		nt Operation	s Coordin	ation Do	ocument	(DOC	D)	
Co	mpany Nam	e:	Devon Ene	rgy Product	ion Cor	mpany, L	Р.		Operator		02421					
Ad	dress: P.O.	. Box 461	6					Conta	ct Person:	Patricia Br	ruce					
			as 77210-4	616			į	Phone Number: (713) 286-5861								
								E-Mail Address: pat.bruce@dvn.com								
Lea	ise(s): OCS	-00680		Area:	vc		Block	k(s): 20 Project Name (If Applicable):								
Ob	jective(s):	Oil	x Gas	Sulph	ur	Salt	Onshore	Base:	Sabine	Pass, TX	Distanc	e to Clo	sest Lar	nd (Mi	les)	: 4
				Descript	ion o	f Prop	sed Ac	tivitie	s (Mark	call that a	apply)	eradia b Sur Yest			-	
	Exploratio	n drilling	3					X		ment drilling		·				
X	Well comp	letion						\top	Installati	on of produ	ction platf	form				
Well test flaring (for more than 48 hours)								1	Installati	on of produ	ction facil	ities				
×	Installation	n of caiss	on or platfo	orm as well	protect	ion struc	ture		Installati	ion of satelli	te structur	е				
	Installation	n of subse	ea wellhead	ls and/or ma	nifolds	3		X	Commer	nce production	on					
	Installation	of lease	term pipel	ines				1	Other (S	pecify and d	lescribe)			<u></u>		
Hav	ve you subm	itted or d	lo you plan	to submit a	Conse	rvation I	nformatio	n Docu	ment to ac	company th	is plan?		Yes		х	No
Do	you propose	to use n	ew or unus	ual technolo	gy to c	conduct y	our activi	ities?			Ye				x	No
Do	you propose	any faci	lity that wi	ll serve as a	host fa	cility for	deepwate	er subse	ea develop	ment?		-+	Yes		х	No
										aeological ar	rea?	\rightarrow	Yes	_	x	No
Hav	ve all of the	surface lo	ocations of	your propos	ed acti	vities be	en previou	usly rev	riewed and	l approved b	y MMS?	-+	Yes		X	No
EA 4	(17/18/a-gs)	e de la composition				1.2 day 12 . 2 mg/s	Association and service	a sw 116 - sw	N. Z. P. 1987. S. SS 11. 11.	ctivities :						
	- 1843 F. 24, 240			Proposed A			cuare	**** <u>*</u>	posca vy	Start I	Date	End	Date	TN	0. 0	of Days
Dril	I Well Loca	tion "A"								 			7-09-04 3		35	
	all Caisson									07-10-04		07-12-0				
-	nplete Well		···							07-13-04		7-29-04				
	nplete Surfac		·							07-30-04	(08-02-04	1	4		
Drill	and comple	te Well Lo	ocation "B"			•				08-03-04	(9-23-04		52		
Drill	and comple	te Well Lo	ocation "C"	· · · · · · · · · · · · · · · · · · ·			,			01-05-05	0	2-25-05	5	52		
Dril	and comp	lete Wel	I Location	"E"						02-26-05	(04-18-0)5	52		
		Descri	ption of	Drilling 1	Rig				Des	cription	of Produ	iction	Platfo	rm	بخثن	i wat
X	Jackup			Drillship				Cai	sson			Tensio	n leg pla	tform		
	Gorilla Jac	kup		Platform r	ig			We	Il protecto	r		Compli	iant tow	er		
	Semisubm	ersible		Submersil	ole			Fix	ed platforr	n		Guyed	tower			
	DP Semisu	ıbmersibl	le	Other (At	tach De	escription	1)	Sul	sea manif	old		Floatin	g produ	ction s	yste	m
Drilling Rig Name (If Known): Spar Other (Attach D							Descri	otio	n)							
			. · · · ·	J	Des	criptio	n of Le	ise T	rm Pipe	elines	ar 5 4			N. A. J		
From (Facility/Area/Block) To (Facil					cility/Area/Block) Diameter (I			er (Incl								
NA .																

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

			Proposed Wel	I/Struc	ture Location				
Well or Structur Location "A"	e Name/Nu	mber (If re	naming well or structure, r	eference _l	orevious name):	Si	ubsea Completion		
Anchor Radius	(if applicabl	e) in feet:					Yes X No		
	Surface L	ocation		. Pr 4 Wall 3 But-	Bottom-Hole Location	(For Wells)			
Lease No.	OCS 006	380		C	OCS				
Area Name	West Came	eron							
Block No.	20						•		
Blockline Departures (in feet)	N/S Depar	ture: 1442	F <u>S</u> L 2.78	1	N/S Departure: FL				
	E/W Depa		F <u>E</u> L 02.49	E	/W Departure:	F	L		
Lambert X-Y coordinates	X: 1,281			>	X:				
	Y: 380,	475		Y	7.				
Latitude/ Longitude	Latitude	29-41-3	6.305 N	L	atitude				
	Longitude	93-35-5	1.063 W	Longitude					
	TVD (Feet):		MD (Feet): Water			r Depth (Feet): 27		
Countries is well as in the second as the	ations for	Drillin	g Rig or Construction	n Barge	7 1 1 1 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	oplied above, not	necessary)		
Anchor Name or No.	Area	Block	X Coordinate		Y Coordinate		Length of Anchor Chain on Seafloor		
NA	T		X =		Y =				
			X =		Y =				
			X =		Y =				
			X =		Y =				
			X =		Y =				
			X =		Y =				
			X =		Y =				
			X =		Y =				
Panarwark De	duction A	ct of 100	5 Statement: The Pane	nuork P	eduction Act of 1995	MATISC Ch	anter 35) requires us		

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

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

			Proposed Well	1/Stru	ictu	re Location			(4) y 46 (5) y 7)	
Well or Structur Location "B"	e Name/Nur	mber (If re	enaming well or structure, re	eferenc	e pre	vious name):		Subsea	Con	npletion
Anchor Radius ((if applicable	e) in feet:						Yes	X	No
	Surface Lo	ocation			Bot	tom-Hole Location (For \	Wells)			
Lease No.	OCS 006	380			OC:	S				
Area Name	West Came	eron					· · · · · · · · ·			,
Block No.	20									
Blockline Departures (in feet)	N/S Depart	ture: 1442	F <u>S</u> L 2.78		N/S	Departure:		F	L	
	E/W Depar	E/W Departure: F E L 7002.49				V Departure:		F	L	
Lambert X-Y coordinates	X: 1,281,143									
	Y: 380,475				Y:					
Latitude/ Longitude	Latitude	29-41-36	6.305 N		Lati	itude				
	Longitude	93-35-5	1.063 W		Lon	gitude				
	TVD (Feet)):		MD (D (Feet): Water I			Depth (Feet): 27		
Anchor Loca	ations for	Drilling	g Rig or Construction	ı Barı	ge (1	7.73	above, n	ot nece	ssar	y)
Anchor Name or No.	Area	Block	X Coordinate			Y Coordinate				of Anchor on Seafloor
NA			X =			Υ =				
	<u> </u>		X =			Υ =				
			X =			Y =	·			
			X =			Y =				
			X =			Υ =				
			X =			Y =				
· · · · · · · · · · · · · · · · · · ·			X =			Y =				:
			X =			Υ =				
			5 Statement: The Paper nis information as part of			uction Act of 1995 (44 Unit's Exploration Plan or				

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure Proposed Well/Structure Location Well or Structure Name/Number (If renaming well or structure, reference previous name): Subsea Completion Anchor Radius (if applicable) in feet: Yes NA Surface Location Bottom-Hole Location (For Wells). Lease No. OCS **OCS** 00680 Area Name West Cameron Block No. 20 Blockline N/S Departure: FS L N/S Departure: Departures (in feet) 1442.78 FE L E/W Departure: E/W Departure: L Lambert X-Y X: 1,281,143 coordinates Y: 380,475 Latitude/ Latitude Latitude 29-41-36,305 N Longitude Longitude Longitude 93-35-51.063 W TVD (Feet): MD (Feet): Water Depth (Feet): Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary) Block X Coordinate Anchor Name Y Coordinate Area Length of Anchor Chain on Seafloor or No. NA X =Y = X = Y = X = Y = χ = Y = X = Y = X = Y = X = Y≃

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

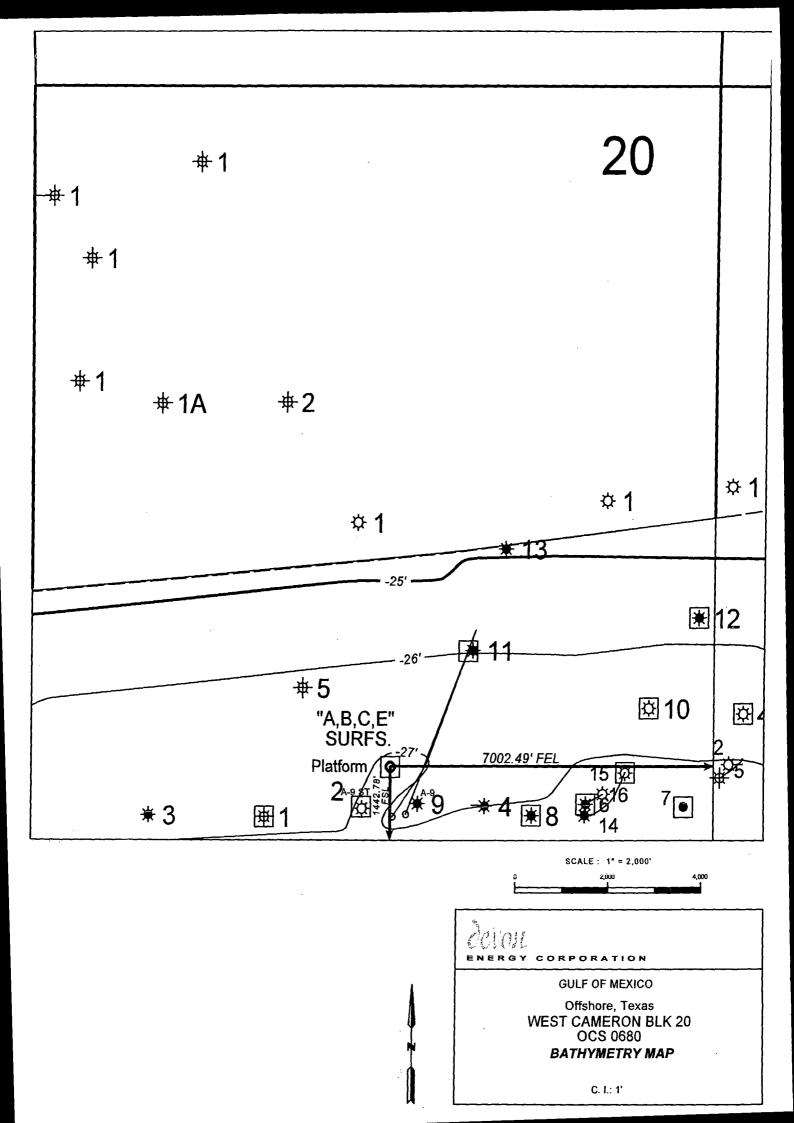
X ≈

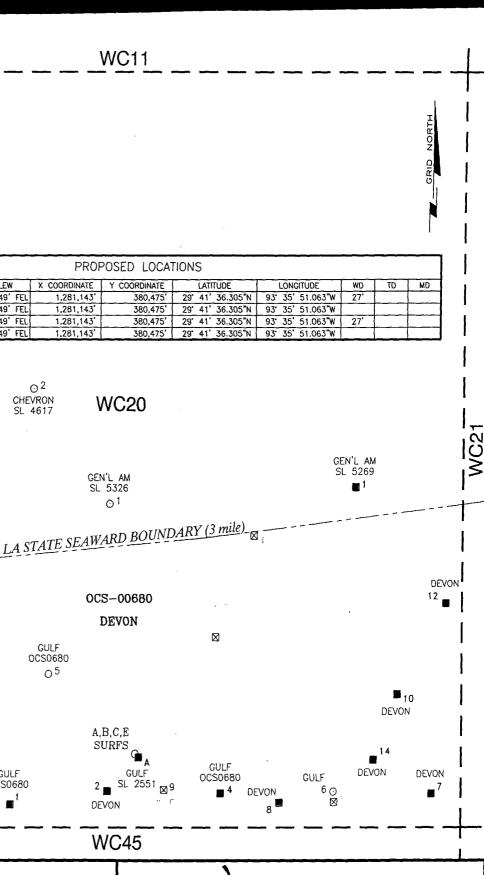
OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

			Proposed Wel	l/Struc	cture Location					
Location "E"			enaming well or structure, re	eference	previous name):		S	ubsea C	om	pletion
Anchor Radius NA	(if applicabl	e) in feet:						Yes	x	No
	Surface L	ocation			Bottom-Hole Location (For Wells)					
Lease No.	OCS 006	580			ocs					
Area Name	West Cam	eron								
Block No.	20									
Blockline Departures (in feet)	N/S Depar	ture: 1442	F_S_L 2.78		N/S Departure: FL					
	E/W Departure: F E L 7002.49				E/W Departure: FL					
Lambert X-Y coordinates	X: 1,281,143				X:					
	Y: 380,4	175			Y:					
Latitude/ Longitude	Latitude	29-41-3	6.305 N		Latitude					
	Longitude	93-35-5	1.063 W		Longitude		,			
	TVD (Feet):		MD (F	(Feet): Water Dep			pth (Fee	t):	27
C. 15 1 1 1 N. TAN 1875 SAN SAN	ations for	47 55 Gets Ca. 1	Rig or Construction	Barg		supplied a	bove, no	200, 204,000,00000	W- 55	1.36 A 2.56 TO 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Anchor Name or No.	Area	Block	X Coordinate		Y Coordinate					of Anchor n Seafloor
NA			X =		Y =					
	ļ		X =		Y =			ļ		
	ļ		X =		Y =			<u> </u>		
	 		X =		Y = Y =			ļ		
			X =		Y =			 		
	 		X =		Y =			}		
	 		X =		Y =			 		
	ــــــــــــــــــــــــــــــــــــــ	L								

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.





GULF SL 5325 01

CALLNS

CALLEW

GULF

OCS0680

1,442.78' FSL 7,002.49' FEL

1,442.78' FSL 7,002.49' FEL

1,442.78' FSL 7,002.49' FEL

1,442.78' FSL 7,002.49' FEL

CABOT SL 3622 O₁

LOCATION

A SURFACE

B SURFACE

C SURFACE

BLOCK

20

20

20

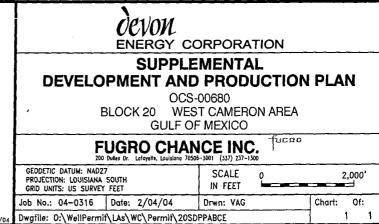
PUBLIC

INFORMATION

 \boxtimes

o 3 CABOT

SL 3622



WELL LOCATION TABLE West Cameron Block 20 OCS-00680

SURFACE LOCATION

Name of Well or Structure	Water Depth (Feet)	N/S Lease Line	E/W Lease Line	X Coordinate	Y Coordinate	Latitude	Longitude
"A"	27'	1443' S	7002' E	1,281,142.89	380,474.97	20 41 26 205 N	02 25 51 0 55 775
"B"	27'	1443' S	7002' E				93-35-51.063 W
"C"	27'	1443' S	7002' E		,		
"E"	27'	1443' S					
				1,201,142.09	380,474.97	29-41-36.305 N	93-35-51.063 W

BOTTOM-HOLE LOCATION

Name of Well or Structure	TVD	MD	N/S Lease Line	E/W Lease Line	X Coordinate	Y Coordinate	Latitude	Longitude

SECTION 2.0

GENERAL INFORMATION

2.1 Contact Information

The authorized representative of Devon Energy Production Company, L.P. to whom questions regarding this plan should be addressed is:

Patricia J. Bruce Office: (713) 286-5861
Devon Energy Production Company, L.P. Cellular (281) 635-3534
P.O. Box 4616 Fax: (713) 286-5737

Houston, Texas 77210-4616 Email: patricia.bruce@dyn.com

2.2 Project Name

This project has no name.

2.3 Production Rates and Life of Reserves

The proposed wells on West Cameron Block 20 have estimated average production rates of 1000 MMCF/D and 150 BOP/D. Estimated peak production rates are 2800 MMCF/D and 250 BOP/D. Estimated life of reserves is 5 years.

2.4 New or Unusual Technology

Devon Energy Production Company, L.P. does not propose utilizing any new or unusual technology during the proposed drilling operations.

2.5 Bonding Information

Devon Energy Production Company, L.P. is covered by a \$3,000,000 area-wide general lease surety bond in accordance with requirements of 30 CFR 256, Subpart I and Notice to Lessees NTL No. 2000-G16 dated September 7, 2000, concerning bond coverage requirements for Outer Continental Shelf (OCS) oil and gas leases and post lease operations.

2.6 Onshore Base and Support Vessels

West Cameron Block 20 is located approximately 4 miles from the nearest Louisiana shoreline and approximately 20 miles from the onshore support base located in Sabine Pass, Texas.

Devon will utilize existing onshore facilities located in Sabine Pass, Texas. This will serve as port of debarkation for supplies and crews. This base is capable of providing the services necessary for the proposed activities. It has 24-hour service, a radio tower with a phone patch, dock space, equipment and supply storage base, vehicle parking lot, crane, forklifts, water and fuel.

A small amount of vessel and helicopter traffic may originate from bases other those described above in order to address changes in weather, market, and operational conditions. It is expected

that this vessel traffic will originate from bases and locations that are in the near vicinity of the base previously described.

The proposed operations are temporary in nature and do not mandate any immediate measures for additional land acquisition or expansion of the existing onshore base facilities.

2.7 Support Vessels

Personnel involved in the proposed operations will typically use their own vehicles as transportation to and from the selected onshore base. The selected vendors will transport equipment by a combination of trucks, boats and/or helicopters to the onshore base. The personnel and equipment will then be transported to the drilling rig, taking the most direct route feasible as mandated by weather and traffic conditions. Boats are required when weather conditions restrict helicopter operations, for delivery of supplies and equipment, and for routine personnel change-outs.

Support vessels and travel frequency during the proposed activities are as follows:

	Drilling	Construction	Production
Support Vessel	Trips per Week	Trips per Week	Trips per Week
Crew Boat	4	1	0
Supply Boat	3	1	3
Helicopter	1	1 -	0

A vicinity map showing the surface locations in West Cameron Block 20 relative to the shoreline and onshore base is included as an attachment to this section of the plan.

2.8 Lease Stipulations

Oil and gas exploration activities on the OCS are subject to stipulations developed before the lease sale and would be attached to the lease instrument, as necessary, in the form of mitigating measures. The MMS is responsible for ensuring full compliance with stipulations.

This lease has no stipulations.

2.9 Related OCS Facilities and Operations

Well products from the proposed wells will flow to "A" platform then onshore to the Tank Battery 45 facility for processing.

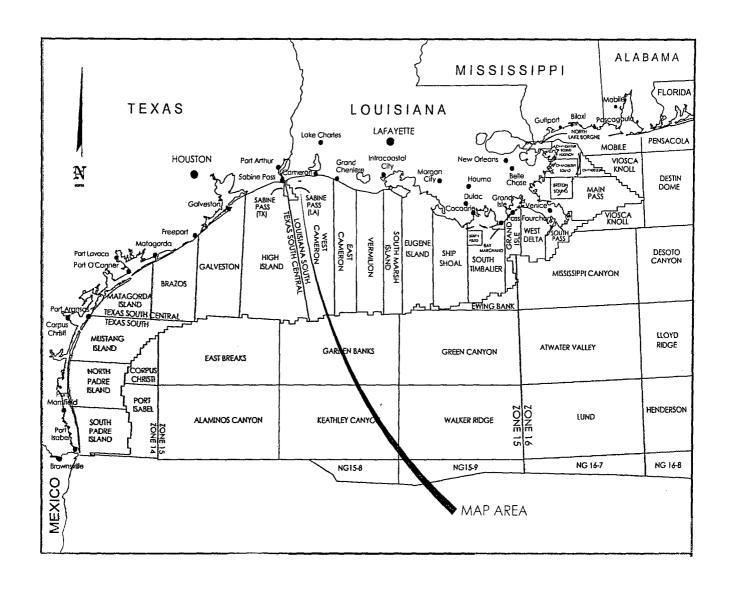
2.10 Transportation Information

Production flows to Platform "A" via a flow line. A 6" lease term pipeline carries production from platform "A" to Tank Battery 45 at Johnson Bayou.

2.11 Attachments

Vicinity Map

VICINITY MAP



SECTION 3.0

GEOLOGICAL, GEOPHYSICAL, AND H2S INFORMATION

3.1 Geological and Geophysical Information

The following subsections describe the various geological and geophysical data that has been included with this plan. Maps and cross-sections can be found at the end of this descriptive section or as attachments to the overall plan. Seismic lines have been included and separately identified with this submission.

- 3.1.1 Structure contour maps Current structure contour maps at a scale of 1 inch = 2,000 feet (depth-based, expressed in feet subsea) drawn on the top of each prospective hydrocarbon sand, showing the entire lease block and the location of each proposed well and the locations of geological cross-sections.
- 3.1.2 Interpreted two-dimensional (2-D) and/or three-dimensional (3-D) seismic lines Page-size copies of migrated and annotated (shot points, time lines, well paths) 2-D and/or 3-D seismic lines within 500 feet of the surface locations of the proposed wells (included with one proprietary copy of this plan).
- 3.1.3 Geological structure cross-sections Interpreted geological structure cross-sections showing the location and depth of each proposed well showing at least one key horizon and the objective sands.
- 3.1.4 Shallow hazards report The shallow hazard report for the south half of West Cameron Block 20, OCS 00680 done by Fugro GeoServices, Inc. has been submitted under separate cover.
- 3.1.5 Shallow hazards assessment A shallow hazards analysis prepared, in accordance with NTL No. 98-20, for the proposed surface locations evaluating seafloor and subsurface geologic and manmade features and conditions.
- 3.1.6 High resolution seismic lines Annotated copy of the high-resolution survey lines closest to the proposed well locations have been previously submitted for the platforms (included with one proprietary copy of this plan).
- 3.1.7 Geological objectives A discussion of the proposed geological objectives, including a brief description of the hydrocarbon trapping elements.

3.2 H₂S Information

Pursuant to 30 CFR 250.67, Devon Energy Production Company, Inc. hereby requests a determination that West Cameron Block 20 is located in a zone where the absence of H_2S has been confirmed based on the British-American No. 010 well drilled within the 500 foot radius of the proposed wells. No hydrogen sulfide was found in this well.

Attachments to Section 3.0 3.3

- Structure contour maps
- Interpreted seismic lines (one copy only)
- Geological structure cross sections
- Shallow hazards report (under separate cover)
- Shallow hazards assessment
- High resolution seismic lines (one copy only)
- Geological Objectives





February 5, 2004

Devon Energy Corporation 1200 Smith Street Suite 300 Houston, Texas 77002 200 Dulles Drive Lafayette, LA 70506 Main: 337-237-2636

Fax: 337-268-3221

Attention: Mr. John F. White

Re: Supplemental DOCD

Proposed Wells "A, B, C, & E" Surface Location Blocks 20, West Cameron Area (OCS-00680)

Job No. 2404-1001

Fugro GeoServices, Inc. was contracted by Devon Energy Corporation to assess seafloor and subbottom conditions at the proposed Well "A, B, C, & E" surface location in Block 20, West Cameron Area (WC). The survey area lies within the Louisiana South coordinate system. This letter is intended to address specific seafloor and subbottom conditions within 1,000 feet of the location. The proposed surface location has been projected on the Bathymetry Map and Archeological and Hazard Map from the original 2003 report.

Introduction

NTL-98-20 and NTL-2002-G01 stipulate that analysis of potential cultural resources and hazards for a Development Operations Coordination Document (DOCD) may be made from available geophysical and geological data. The proposed surface location is located within coverage provided by a previous survey. An Archeological and Hazard Survey of Block 20, West Cameron Area was conducted for Devon Energy Corporation by Fugro GeoServices, Inc. during April and May of 2003. However, Fugro GeoServices, Inc. cannot be responsible for any debris, which may have been discarded and exist within the survey area since the April-May 2003 survey. An updated infrastructure map (scale: 1"=1,000') showing man-made structures within the lease was created and has been included with this interpretive letter report.

The survey was conducted aboard the *M/V Universal Surveyor* during April 30 and May 21 - 24, 2003. Sea conditions during data acquisition were good with winds ranging from light to 5 to 10 knots and seas from 1 to 3 feet. Horizontal positioning of the survey vessel was accomplished with the FUGRO STARFIX® Differential Global Positioning System, which has a field accuracy of ±3 meters. Geophysical instruments used during the survey included an Odom DF3200 Echotrac system, EdgeTech 260TH Side Scan Sonar, ORE Model 140 Pinger Subbottom Profiler, SeaSPY GSM-19MD Proton Magnetometer, and a Seismic Systems GI Airgun with OYO Geospace DAS-1 recorder. The survey grid consisted of 39 east-west primary tracklines (Lines 1-39) spaced 50 meters (~164 feet) apart and six north-south tielines (Lines 40-45) spaced 900 meters (~2,953 feet) apart. To ensure record quality several of the tracklines were rerun and are designated with a letter suffix, therefore, Line 42A would be a rerun of line 42. All geophysical systems were run at a 50-meter trackline spacing and on all tielines with the exception of the analog airgun, which was run on a 300-meter grid and on all tielines. Navigational fixes (shot points) were recorded at 125-meter (410 feet) intervals along all survey lines. The final report was prepared in July of 2003 by Chris Cring, Staff GeoScientist and Laura A. Landry, Consulting Marine Archeologist.

All aspects of the survey and this Supplemental DOCD follow current Minerals Management Service Guidelines. The following hazard and cultural resources analysis was determined from the prior interpretations and related maps, tables, and figures. Devon Energy Corporation proposes to drill Proposed Wells "A, B, C & E" at the following surface location within the southern portion of WC20.

7,002.49' FEL, 1,442.78' FSL X = 1,281,142.89', Y = 380,474.97'

Latitude: 29° 41' 36.305"N, Longitude: 93° 35' 51.063"W





Geological Interpretation

- Harmonic mean velocities were calculated from the velocimeter readings acquired during the survey and were applied to each datum in order to convert record time to feet below sea level. Tidal variations projected for the Sabine Pass Jetties were also utilized to adjust the bathymetric reading to Mean Lower Low Water (MLLW). The water depth at the proposed location is -27 feet MLLW. Bathymetric contours indicate a smooth seafloor that slopes to the south at a gradient of approximately 2.7 feet per mile or 0.03°.
- The side scan sonar records exhibit a predominantly smooth seafloor of moderate reflectivity across the survey area.
- Bottom sediments were reported to consist of a mixture of sand, silt, and clay within the survey area. Regional studies suggest that the sediment shear strengths within WC20 range from 600 lbs./sq.ft. at the seafloor to greater than 2,000 lbs./sq.ft. at 100 feet below the seafloor. An area of granular soils, encompassing a portion of WC20, was noted at the seafloor to 10 feet below the seafloor. The reported sediment composition and shear strength values were derived from regional studies, and variations may exist within the specific study area.
- ◆ The proposed well locations are approximately 50 feet northwest of the existing "A" Structure. The location is situated between some existing Devon pipelines that extend from the structure. Due to the close proximity of numerous existing pipelines in the vicinity, it is recommended divers attempt to buoy the pipeline locations prior to moving a rig into position at the planned location. Therefore, this location should be approached with caution.
- The 2003 survey report did show numerous unidentified magnetic anomalies within 1,000 feet of the proposed surface location. These anomalies are too numerous to list and the locations are shown on the Archeological and Seafloor Features Map. Sources for these anomalies probably represent modern ferrous debris from previous construction activities. Caution should be exercised when working in the vicinities of these anomalies.
- Six side scan sonar contacts were observed within 1,000 feet of the proposed surface location. These sonar contacts (probable debris) have been plotted on the enclosed maps, listed in a table in the map legend, and listed in the table below. These contacts should be avoided.

Sonar Contact No.	Location	X Coordinate Y Coordinate	Dimensions (L x W x H)	
12	650' northeast of proposed location	1,281,653.46' 380,891.36'	11' x 5' x 0'	
13	575' northwest of proposed location	1,280,646.78 380,762.09'	78' x 1' x 0'	
14	600' northeast of proposed location	1,281,732.03' 380,613.80'	11' x 1' x 0'	
15	500' northeast of proposed location	1,281,637.86' 380,589.62'	49' x 3' x 7'	
23	150' southeast of proposed iocation	1,281,214.79' 380,327.38'	7-foot diameter	
24	150' south of proposed location	1,281,136.78' 380,323.06'	7-foot diameter	

- The subbottom profiler penetration ranged from 75 to 80 feet below the seafloor. The seafloor is underlain by a thin unit of amorphous reflectors topping high and low amplitude parallel and subparallel strata. Stratification within the near seafloor sediments is disrupted by gas accumulations, indicated by acoustically transparent windows of signal attenuation, which may represent relict channels.
- Pinger profiles displayed four generations of buried channels. The oldest generation downcuts from 40 to 45 feet below the seafloor (BSF) and are poorly resolved and have not been mapped. The other three generations of channels downcut from 20 to 25 feet BSF (1st), from 10 to 15 feet BSF



- (2nd), and from within a few feet of the seafloor (3rd). The proposed site is located within 125 feet of an area of Amorphous Sediments/Possible Channel 5 to 10 feet BSF with the closest channel margin about 125 feet to the north. Another buried channel one to five feet below the seafloor exists approximately 800 feet southwest of the proposed well location.
- A fault buried 875 feet below the seafloor exists approximately 850 feet southeast of the proposed location. The strike of this fault trends southwest-northeast with the downthrown side toward the southeast.

Archeological Assessment

- Several generations of fluvial channels are recorded in the data set. The proposed surface location is situated approximately 125 feet south of a possible buried channel that downcuts from 5 to 10 feet below the seafloor. No high probability areas for prehistoric archeological sites are recorded in association with the buried channels. In situ cultural resources are unlikely to be present at the proposed drilling location.
- Because of the proximity of this tract to the coast, the probability for shipwrecks in this area is considered to be high; preservation of a wreck would be moderate to good (Garrison, Giammona, Kelly, Tripp, and Wolff 1989). Reference to lists and charts published by the U.S. Department of Transportation (1984 to Present), the National Ocean Service (1990, 1994 and 2002), Berman (1972), the cultural resource baseline studies by CEI (1977) and Garrison, et al. (1989), as well as files maintained by the USDI MMS and FUGRO CHANCE, indicates that a number of shipwrecks have been reported in the area. Unidentified wrecks are shown on the Navigation Chart 1116A (1990) in Blocks 11, 12, 13, 17, and 18, with three wrecks in Block 20. One of these in Block 20 is reported to be the F/V Capt. Jack, sunk in 1969 at approximate position X=1,276,208.02, Y=384,786.00 (AWOIS 2002). Another is the F/V Mary M., sunk in 1978 about 12 miles east of the Sabine Jetty, at about X=1,277,757.05, Y=382,934.84 (AWOIS 2002). The third vessel reported in Block 20 remains unidentified. Berman (19720 notes that the oil steamer Silver Liner, a 225-ton vessel built in 1942, burnt in 1951 seven miles off of the east jetty at Sabine Pass in the vicinity of Block 47.
- There are several sonar contacts or seafloor features within 1,000 feet of the proposed location that are interpreted as probable modern debris. The numerous unidentified magnetic anomalies within 1,000 feet of the location are minor in size and probably represent modern ferrous debris from previous construction activities. It is possible that historic shipwreck materials may not be detected by the geophysical instruments. If wooden planking or other evidence of shipwreck remains are encountered, the work should be halted and the archeologists contacted at the USDI MMS in New Orleans to ascertain their possible historic significance.

Conclusions

Based on the previous interpretation, the proposed "A, B, C, & E" well location is situated in a very congested infrastructure area with numerous pipelines, unidentified magnetic anomalies, and sonar contacts. Due to the close proximity of numerous existing pipelines in the vicinity, it is recommended divers attempt to buoy the pipeline locations prior to moving a rig into the planned location. Extreme caution should be excised in the area. For additional information, please refer to the 2003 report.

Thank you, and please call if you have any questions or need additional information.

Sincerely,

Mark Savarino Senior Geologist Mark A. Melancon Marine Archeologist

Ted Hampton

Marine Archdologist

SECTION 4.0

BIOLOGICAL INFORMATION

4.1 Chemosynthetic Information

Since the proposed seafloor disturbing activities are in water depths greater than 400 meters, maps, analysis, and a statement prepared using the guidance in Attachment B of NTL No. 200-G20, "Deepwater Chemosynthetic Communities" are provided as attachments to this section.

The seafloor disturbing activities proposed in the Plan are in water depths less than 400 meters (1312 feet); therefore this section of the Plan is not applicable.

4.2 Topographic Features Information

MMS and the National Marine Fisheries Service (NMFS) have entered into a programmatic consultation agreement for Essential Fish Habitat, which requires that no bottom disturbing activities may occur within 500 feet of the no-activity zone of a topographic feature. If such bottom disturbing activities are proposed, the MMS is required to consult with the NMFS.

As specified in NTL No. 98-12, "Implementation of Consistent Biological Stipulation Measures in the Central and Western Gulf of Mexico", West Cameron Block 20 is not affected by a topographic feature.

4.3 Life Bottom (Pinnacle Trend) Information

MMS and the National Marine Fisheries Service (NMFS) have entered into a programmatic consultation agreement for Essential Fish Habitat that relates to bottom-disturbing activities occurring within 100 feet of any Pinnacle Trend feature with vertical relief greater than or equal to 8 feet. Any such proposed activities would require MMS to consult with the NMFS pursuant to the agreement.

West Cameron Block 20 is not located in the vicinity of a live bottom area.

4.4 Remotely Operated Vehicle (ROV) Surveys

Pursuant to NTL No. 2003-G03, operators may be required to conduct remotely operated vehicle (ROV) surveys during pre-spud and post-drilling operations for the purpose of biological and physical observations.

The water depths for the wells in this Plan are less than 400 meters (1312 feet); therefore this section of the Plan is not applicable.

SECTION 5.0

WASTES AND DISCHARGES INFORMATION

The Minerals Management Service (MMS), U.S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA) regulate the overboard discharge and/or disposal of operational waste associated with oil and gas exploration and production activities.

5.1 Discharges

The term discharges describes those wastes generated by the proposed activities that will be disposed of by releasing them into the waters of the Gulf of Mexico at the site where they are generated, usually after receiving some form of treatment before they are released, and in compliance with applicable NPDES permits or State requirements.

Devon has coverage under the EPA Region VI NPDES General Permit GMG290091 for discharges associated with development activities in West Cameron Block 20, and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

The following table details the estimated discharges expected from the proposed activities:

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location, and Discharge Method
Water-based drilling fluids	5500 bbl	30 bbl/hr	West Cameron 20 Discharge
Drill cuttings associated with water-based fluids	7500 bbl	15 bbl/hr	West Cameron 20 Discharge
Drill cuttings associated with synthetic drilling fluids	NA		
Muds, cuttings and cement at the seafloor	12000 ЬЫ	NA	West Cameron 20 Discharge
Produced water	1000 bbl/day	50 bbl/hr	West Cameron 20 Discharge
Sanitary wastes	20 gal/person/day	NA	West Cameron 20 Chlorinate and discharge
Domestic wastes	30 gal/person/day	NA	West Cameron 20 Remove floating solids and discharge
Deck drainage	0-400 bbl/day Dependent upon rainfall	15 bbl/hr	West Cameron 20 Discharge
Well treatment, workover or completion fluids	NA		
Uncontaminated fresh or seawater (non-contact cooling water)	NA		
Desalinization Unit water Uncontaminated bilge	NA NA		

Type of Waste Approximate	Amount to be Discharged (volume	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location, and
Composition	or rate)	 	Discharge Method
water		<u> </u>	
Uncontaminated ballast	NA		
water			
Misc discharges to which	NA .		
treatment chemicals have			
been added		,	
Other misc discharges	NA		

5.2 Disposed Wastes

The term disposed wastes describes those wastes generated by the proposed activities that are disposed of by means other than by releasing them into the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injections, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

The following table details the estimated disposed wastes expected from the proposed activities:

Type of Waste Approximate Composition	Amount	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method ⁴
Spent oil-based drilling fluids and cuttings	3000 bbl	150 bbl/day	Environmental Treatment Team Morgan City, LA	Transport to shore in barge tanks to a land farm
Spent synthetic-based drilling fluids	NA	·		
Oil-contaminated produced sand	NA			
Waste Oil	NA			
Norm-contaminated wastes	NA			
Trash and debris	1500 ft ³	3 ft³/day	Sabine Pass, TX	Transport in storage bins on crew boat to a landfill
Chemical product wastes	NA			
Completion fluids- Not Discharged	5000 bbl	NA	Ambar Intracoastal City, LA	Transport to shore in MV for reclamation

SECTION 6.0

OIL SPILL INFORMATION

- 6.1 Information to comply with the Oil Pollution Act of 1990 (OPA) and the Coastal Zone Management Act (CZMA)
 - 6.1.1 Regional OSRP information Devon Energy Production Company, L.P. is covered by a Regional Oil Spill Response Plan (OSRP) that was approved by the MMS on January 16, 2003. The companies covered by this plan are as follows:

Devon Energy Production Company, L.P. Devon SFS Operating, Inc.

The activities proposed in this Supplemental Development Operations Coordination Document will be covered by the Regional OSRP.

- 6.1.2 OSRO information Devon's spill reponse coordinator is O'Brien's Oil Pollution Service (OOPS, Inc.). Devon is a member of Clean Gulf Associates and has contracts in place with Ampol, ASCO Environmental and Oil Mop, Inc.
- 6.1.3 Worst-case scenario comparison The following table provides a worst-case scenario for the proposed activities in this plan as compared to the current OSRP:

Category	Current Regional OSRP WCD	Proposed Development Plan WCD
Type of Activity	Production	Production/Drilling
Facility Surface Location	Pipeline	WC 20
Facility Designation	Segment 5958	WC 20
Distance to Nearest Shoreline (in miles)	10	4
Volume:		
Storage Tanks and Flowlines		10 bbls (Flowlines)
Lease Term pipelines	,	0
Uncontrolled blowout (volume per day)		200 bbls
Total Volume	646 bbls	210 bbls
Type of Liquid Hydrocarbon	Crude Oil	Crude Oil / Condensate
API Gravity	30.9°	30.9°

This project is located approximately 4 miles from the nearest shore point. Therefore, since the project is less than 10 miles from shore, the project is defined as a "Near Shore" project.

Since Devon has the capability to respond to the worst-case spill scenario included in its Regional OSRP approved on January 16, 2003, and since the worst-case scenario

determined for this DOCD does not replace the worst-case scenario in our Regional OSRP, I hereby certify that Devon Energy Production Company, L.P. 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 our DOCD.

6.1.4 Facilities, tanks, production vessels chart

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil	Jack Up Rig	500	6	3000	No. 2 Diesel
Production	Caisson	0	0	0	0

6.1.5 Spill Response Sites

Primary Response Equipment Location	Preplanned Staging Locations	
Lake Charles, LA	Galveston, TX, Houma, LA	

6.1.5. Oil and Synthetic-based Drilling Fluids

Type of Drilling Fluid	Estimated volume of Mud Used per Well	Mud Disposal Method	Estimated Volume of Cuttings Generated per Well	Cuttings Disposal Method
Oil-based	1000 bbls	Onshore Disposal	300 bbls	Discharge

- 6.1.6 Spill Response Discussion Devon Energy will make every effort to respond to the Worst Case Discharge as effectively as possible. In the event of a spill the Devon ESH Coordinator and the Production/Drilling superintendent will be notified. The ESH Coordinator will notify affected agencies. The Production/Drilling Superintendent will assume the role of Incident Commander and call Oil Spill Response Organizations as needed. The ESH Coordinator will make regulatory notifications as appropriate and notify neighboring facilities if there is a potential to impact them. Written reports and responses will be sent to agencies after spill investigation is complete.
- 6.1.7 Pollution Prevention Measures **Devon Energy will comply with MMS, USCG** and EPA requirements for operating in the Gulf of Mexico.

SECTION 7.0

AIR EMISSIONS INFORMATION

Offshore air emissions related to the proposed activities result mainly from the drilling rig operations, helicopters and service vessels. These emissions occur mainly from combustion or burning of fuels and natural gas and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps or motors and from lighter fuel motors. Other air emissions can result from catastrophic events such as oil spills or blowouts.

Primary air pollutants associated with OCS activities are nitrogen oxides, carbon monoxide, sulphur oxides, volatile organic compound, and suspended particulate.

7.1 Calculating Emissions

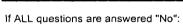
Plan emissions associated with the proposed drilling operations utilizing the Ensco Rig 99 were . calculated using the methodology, emission factors and worksheets in Form MMS-138.

7.2 Attachments to Section 7

• Form MMS-138 - Screening Questions

COMPANY	Devon Energy Production Company
AREA	West Cameron
BLOCK	20
LEASE	OC\$ 00680
PLATFORM	
WELL	A, B, C & E
COMPANY CONTACT	Patricia Bruce
TELEPHONE NO.	713/286-5861
REMARKS	

"Yes"	"No"	Air Quality Screening Questions
	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)?
Yes		Do your emission calculations include any emission reduction measures or modified emission factors?
	No	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?
Yes		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?



Fill in the information below about your lease term pipelines and submit only this coversheet with your plan.

If ANY question is answered "Yes":

Prepare and submit a full set of spreadsheets with your plan.

LEASE TER	RM PIPELINE CO	DISTRUCTION INFORMATION:
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2004	1	3
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		

AIR EMISSION CUMPUTATION FACTORS

Fuel Usage Conversion Factors	Natural Gas T	urbines	Natural Gas I	Engines	Diesel Reci	p. Engine	REF.	DATE	
	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	co	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	1.468	14	1.12	3.03	AP42 3.3-1	10/96	
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	1.468	11	0.33	2.4	AP42 3.4-1	10/96	
Diesel Boiler	lbs/bbl	0.084	2.42	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				

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.4	% weight
Produced Gas(Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

AIR EMISSION CALCULATIONS - FIRST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL			CONTACT		PHONE	REMARKS					
Devon Energy Production Company	West Cameron	20	OCS 00680	0	A, B, C & E			Patricia Bruce		713/286-5861	T					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL	RUN	TIME			A POUNDS P	ER HOUR			ES	TIMATED TO	ONS	
	Diesel Engines	HP	GAL/HR	GAL/D	1		ļ		· · · · · · · · · · · · · · · · · · ·]				
	Nat. Gas Engines	HP	SCF/HR	SCF/D	1							 				
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	Voc	CO	PM	SOx	NOx	VOC	CO
DRILLING	Ensco 99 - Jackup Rig				1,375											
	Total Rig>600hp diesel	7500	362.25	2043.15	24	104	5.29	24.25	181.72	5.45	39.65	1.55	7.11	53.30	1.60	11.63
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	6	59	1.41	6.47	48.46	1.45	10.57	0.25	1.14	8.58	0.26	1.87
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	45	1.76	8.08	60.57	1.82	13.22	0.32	1.46	10.90	0.33	2,38
	VESSELS>600hp diesel(tugs)	10800	521.64	12519.36	24	6	7.61	34.92	261.67	7.85	57.09	0.55	2.51	18.84	0.57	4.11
PIPELINE	PIPELINE LAY BARGE diesel	4200	202.86	4868.64	24	3	2.96	13.58	101.76	3.05	22.20	0.11	0.49	3.66	0.11	0.80
INSTALLATION	SUPPORT VESSEL diesel	3000	144.9	3477.60	24	3	2.11	9.70	72.69	2.18	15.86	0.08	0.35	2.62	80.0	0.57
	PIPELINE BURY BARGE diesel	4200	202.86	4868.64	24	3	2.96	13.58	101.76	3.05	22.20	0.11	0.49	3.66	0.11	0.80
	SUPPORT VESSEL diesel	3000	144.9	3477.60	24	3	2.11	9.70	72,69	2.18	15.86	0.08	0.35	2.62	0.08	0.57
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	6	1	1.41	6.47	48.46	1.45	10.57	0.00	0.02	0.15	0.00	0.03
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	1	1.76	8.08	60.57	1.82	13.22	0.00	0.02	0.13	0.00	0.05
FACILITY	DERRICK BARGE diesel	5600	270.48	6491.52	24	7	3.95	18.11	135.68	4.07	29.60	0.33	1.52	11.40	0.34	2.49
INSTALLATION	MATERIAL TUG diesel	4500	217.35	5216.40	24	7	3.95	14.55	109.03	3.27	29.60	0.33	1.52	9,16	0.34	2.49
OTALLATION	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	6		u.		l .	1				1		
		2500	120.75		-	1 1	1.41	6.47	48.46	1.45	10.57	0.00	0.02	0.15	0.00	0.03
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	1	1.76	8.08	60.57	1.82	13.22	0.01	0.03	0.24	0.01	0.05
PRODUCTION	SUPPORT VESSEL diesel	2000	96.6	2318.40	6	24	1.41	6.47	48.46	1.45	10.57	0.10	0.47	3.49	0.10	0.76
	MISC.	AND COMMENT OF STREET	and all manuals of managers and algorithm	COUNT		l	l				·					
1	FUGITIVES-			1000.0		170	1		(0.50	1	· ·	ì	1	1.02	
2004	YEAR TOTAL						41.09	188.51	1412.56	42.88	308.19	3.75	17.22	129.00	4.89	28.14
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES		<u> </u>	L	1	L,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	И		I		1	143.19	143.19	143.19	143.19	8990.65

AIR EMISSIONS CALCULATIONS - SECOND YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	r	Γ	CONTACT		PHONE	REMARKS					
Devon Energy Production Company	West Cameron	20	OCS 00680	0	A, B, C & E	 		Patricia Bruce		713/286-5861						
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	TIME			M POUNDS F	ER HOUR		W	ES	TIMATED TO	NS	
	Diesel Engines	HP	GAL/HR	GAL/D			ļ ————					(I				
	Nat. Gas Engines	HP	SCF/HR	SCF/D	l							l				
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	Voc	CO	PM	SOx	NOx	voc	CO
DRILLING	Ensco 99 - Jackup Rig												}			
	Total Rig>600hp diesel	7500	362.25	2043.15	24	104	5.29	24.25	181.72	5.45	39.65	1.55	7,11	53,30	1,60	11.63
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	6	59	1.41	6.47	48.46	1.45	10.57	0.25	1,14	8.58	0.26	1.87
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	45	1.76	8.08	60.57	1.82	13.22	0.32	1,46	10.90	0.33	2.38
	VESSELS>600hp diesel(tugs)	10800	521.64	12519.36	24	6	7.61	34.92	261.67	7.85	57.09	0.55	2.51	18.84	0.57	4.11
	Lecezzo- boomp diesen(togs)	10000	321.54	12313.50		, ,	,.01	34.52	201.07	7.03	37.03	0.55	2.31	10.04	0.57	} **.''
PRODUCTION	SUPPORT VESSEL diesel	2000	96.6	2318.40	6	52	1.41	6.47	48.46	1.45	10.57	0.22	1.01	7.56	0.23	1.65
	MISC.	2000	- 30.0	COUNT	<u>~</u>	- 52	1.41	0.47	40.40	1.45	10.57	0.22	1.01	7.50	0.23	1.05
	FUGITIVES-		Section 18	1000.0		365		r———		0.50		 	T		2.19	
	7 00111723-	1 3 3 42 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$1,000 per 10 pe	1000.0	50 00 10 00 00 00 00 00 00 00 00 00 00 00	303		}	i	0.50		11	i]	2.19	ł
			l	l	ļ	(1		1	}		ll	į	ļ	1	1
	ļ		ì	i	Į	ł ·		}	İ)		ii .	1	1	[ł
	()]				Į	(}		ii	1]	ŀ	i
			\	}	İ]			l			li .	}	ì	1	ì
			l	ļ	{	}	1	Ì		(<u>{</u>	}	i	}	ł
			l	į	{	\	ì		1	į l		[[ļ	(}	
	1				l	(l .		1	ì		jj		ł	Į	ļ
]			į į	ļ	1	}		1)	ì]	[Į.
	!		,	}	j	}	1		ł	}		Ŋ	ĺ	}	1	ĺ
			ļ	}	i)	l i		ļ			ll .	1	}	i	ì
			l	l		}	1]	1			Į.	ļ	}	{
				ĺ	Į	((1	i i			ļ	(}
	ļ		1	1	į	(1]]			Į	į
	Ļ		1)		ł	1		{	}		l)	1	Ì	ļ	ļ
			1	1)			ł	Į ,		ĮĮ.	1	ĺ	1)
			(1		1	i i	i	1			ļļ	{	ĺ	ĺ	Ì
	1			4	,	\	i]			il	ł	}	f	{
	1			l	ĺ				1	i i			1	ļ		ţ
	(Ì]			1	ļ	(i)		ł	[
				1	1)			(1))	1			i
			j		1	1		İ	1	Į į		1	1	ĺ		Ì
	1		į	<u> </u>	ł	1		}]	!	1	[[l		}	
	i .		i		Į.			}	1	i l	l	ii	l	Į.		ļ.
	\$	1		ĺ	[ļ		1	i	1			ł		Į	ļ
	\	ĺ	}	1	İ	į	!		(}		ii	}			
	1			}	1	1	 	ľ	l	Į !		! !	ļ	i '	Ì]
	1		į.	1	}	}	ì]	1	(<u> </u>	1	·	ĺ	1
	1		į	Į.	}	}	}]]	[]	ļ	li	Į.	1		i
		ļ	 		 	ļ		ļ		 		l	 			L
	VEAD TOTAL]	ł	i	[47.40						1			
2005	YEAR TOTAL		})	ì	[17.48	80.19	600.88	18.53	131.10	2.89	13.24	99,18	5.17	21.64
 	DISTANCE EDOM LAVE	ļ		<u> </u>	L	L	L		L	L		} -	 		ļ	ļ
EXEMPTION CALCULATION	DISTANCE FROM LAND IN	ļ)
	MILES											143.19	143.19	143.19	143,19	8990.65
'	4.3	}										li .	Į.		ŀ	I

AIR EMISSIONS CALCULATIONS - THIRD YEAR

OPERATIONS	West Cameron EQUIPMENT Diesel Engines	20 RATING	OCS 00680	0	A. B. C & E			Patricia Bruce		713/286-5861						
OPERATIONS	Diesel Engines	RATING						r atticia bioce		[/ / 3/200°300 (1					
RODUCTION	Diesel Engines		MAX. FUEL	ACT. FUEL	RUN	TIME	MAXIMUM POUNDS PER			PER HOUR	R HOUR		ESTIMATED TONS			
PRODUCTION		HP	GAL/HR	GAL/D								 -				
PRODUCTION	Nat. Gas Engines	HP	SCF/HR	SCF/D												
PRODUCTION	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	Voc	co	PM	SOx	NOx	VOC	CO
	SUPPORT VESSEL diesel	2000	96.6	2318.40	6	52	1.41	6.47	48.46	1.45	10.57	0.22	1.01	7.56	0.23	1.65
	MISC.		 	COUNT	 		}		10.70	I	1 10.07			1		1
וֹן	FUGITIVES-	41.44.4.4.4		1000.0		365	l	r	1	0.50		 		T	2.19	T
	YEAR TOTAL DISTANCE FROM LAND IN						1.41	6.47	48.46	1.95	10.57	0.22	1.01	7.56	2.42	1.65
EXEMPTION CALCULATION	MILES 4.3											143.19	143.19	143.19	143.19	8990.65

AIR EMISSIONS CALCULATIONS - FOURTH YEAR

COMPANY	. AREA	BLOCK	LEASE	PLATFORM	WELL	1		CONTACT		PHONE	REMARKS					
Devon Energy Production Compar		20	OCS 00680	0	A. B. C & E			Patricia Bruce		713/286-5861	#REF!					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL			MAXIMUM POUNDS PER HOUR						E 0	TIMATED TO	NKS.	
OF ENAMEDING	Diesel Engines	HP	GAL/HR	GAL/D	- KON	INVIE	 	IVIAXIIVIOI	W POUNDS P	EKHOUK		ESTIMATED TONS				
	Nat. Gas Engines	HP	SCF/HR	SCF/D	 							 -				
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS		60.	NO	Voc	CO	PM	SOx	NOx	VOC	CO
DRILLING							PM	SOx	NOx							
DRILLING	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	o.	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	1920 (Magaza)		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)	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
	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	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	Ō	0	0.00	١٥	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	Ô	o	0.00	١٠	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	Ō	Ö	0.00	١٠٥	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)	n	0	0.00	1 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)	o	0	0.00	0	ŏ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						<u> </u>	L	<u> </u>	<u> </u>		<u> </u>		<u> </u>			L
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
ŀ	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	0.00	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	1 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	ìo	٥ ا	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ł	TURBINE nat gas	0	i o	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
1	RECIP.2 cycle lean nat gas	0	0	0.00	0	1 0	1	0.00	0.00	0.00	0.00	ii .	0.00	0.00	0.00	0.00
ł	RECIP.4 cycle lean nat gas	0	0	0.00	· 0	0	!	0.00	0.00	0.00	0.00	ll .	0.00	0.00	0.00	0.00
1	RECIP 4 cycle rich nat gas	0	1 0	0.00	\ o	0	11	0.00	0.00	0.00	0.00))	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	1 0) 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	MISC.	BPD	SCF/HR	COUNT	1	1	<u> </u>					 				
	TANK-	0	a print in high program		0	0		1	1	0.00	Υ	<u> </u>	Γ		0.00	Τ
	FLARE-	Same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same o	0		0	0		0.00	0.00	0.00	0.00	<u> </u>	0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0	li II	1	1	0.00			}]	0.00	1
	FUGITIVES-		196 TAC \$4.50	0.0	14.00 PH 2000	0	ii	1	l	0.00	1	{{	j	l	0.00	ł
	GLYCOL STILL VENT-		0	TO SOM (1976)	0	7 0))	l	(0.00	Í	ì			0.00	İ
DRILLING	OIL BURN	0	San Artist Farming		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
	VEAR TOTAL	1	1					1	1	}						
2007	YEAR TOTAL		}	1	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXEMPTION	DISTANCE FROM LAND IN	<u> </u>		·			·								 	
CALCULATION	MILES											0.00	0.00	0.00	0.00	0.00
	0.0												!		}]

AIR EMISSIONS CALCULATIONS - FIFTH YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	,	r	CONTACT		PHONE	REMARKS						
Devon Energy Production Compan		20	OCS 00680	a a	A, B, C & E	 		Patricia Bruce		713/286-5861	#REF!						
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL		TIME	MAXIMUM POUNDS PER HOUR					ESTIMATED TONS					
	Diesel Engines	HP	GAL/HR	GAL/D	1	THAL	 	MAXIMO	ii i Oolibo i	EKTIOOK		 		71111/2/12/2	,,,,,		
	Nat. Gas Engines	HP	SCF/HR	SCF/D	 		ļ					 					
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	Voc	CO	PM	SOx	NOx	VOC	CO	
DRILLING	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	} ŏ	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	١	0	0.00	}	1 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	Ĭ	Ö	0.00) 6	1 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	BURNER diesel	0	EXSES SE	0.00	ŏ	1 . 6	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	1 6	1 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)	1 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	Ö	0.00	1 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(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	
i	VESSEES/600hp diesei(tugs)	(1	0,00) "	١ '	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	0.00		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	1	
"NOTALESTION	PIPELINE BURY BARGE diesel) 0	Ö	0.00	0	0	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	11	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)) 0	0	0.00	0	0	11	0.00	0.00	0.00	0.00	0.00	4	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)	1 0	0	0.00		1 0	0.00	0.00				1)	0.00		0.00	0.00	
	VESSEES-600/Ib dieser(auppry)	1 "	U	0.00	1	1 "	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	1 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	1 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	o	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	O	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	lo	0.00	0	0	1	0.00	0.00	0.00	0.00	1	0.00	0.00	0.00	0.00	
	RECIP 2 cycle lean nat gas	lo	0	0.00	0	0	1	0.00	0.00	0.00	0.00	Ŋ	0.00	0.00	0.00	0.00	
	RECIP 4 cycle lean nat gas	0	0	0.00	0	0	ll .	0.00	0.00	0.00	0.00	1)	0.00	0.00	0.00	0.00	
	RECIP 4 cycle rich nat gas	1 0	0	0.00	0	0	l l	0.00	0.00	0.00	0.00	1)	0.00	0.00	0.00	0.00	
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	MISC.	BPD	SCF/HR	COUNT								1					
	TANK-	0			0	0		T		0.00	T		T	Ţ	0.00		
	FLARE-		0		0	0	Ų.	0.00	0.00	0.00	0.00	II.	0.00	0.00	0.00	0.00	
	PROCESS VENT-		0	Carrie Historia	0	0	1	1)	0.00	1	II.	1	1	0.00]	
	FUGITIVES-	Common tra		0.0		0	l)	ì	}	0.00	1	II.	1	1	0.00	ļ	
	GLYCOL STILL VENT-		0	Land Same	0	0	1 1	1	}	0.00	1	ï))	0.00	ļ	
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	Ada to the second			00	0	ļ	0.00	0.00	0.00	0.00	 -	0.00	0.00	0.00	0.00	
2008	YEAR TOTAL	}	į	Ì		1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		.	<u> </u>	<u> </u>	<u> </u>	1	L	<u> </u>	<u> </u>	<u> </u>	<u></u>	L					
EXEMPTION	DISTANCE FROM LAND IN	{										ll .		1	}	1	
CALCULATION	MILES	4										0.00	0.00	0.00	0.00	0.00	
	0.0	<u> </u>										1	l		ì	1	

OMB Control No. xxxx-xxxx Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL			
Devon Energy Production Company	West Cameron	20	OCS 00680	0	A, B, C & E			
Year		Emitted	Substance	Substance				
	PM	SOx	NOx	VOC	СО			
2004	3.75	17.22	129.00	4.89	28.14			
2005	2.89	13.24	99.18	5.17	21.64			
2006	0.22	1.01	7.56	2.42	1.65			
2007	0.22	1.01	7.56	2.42	1.65			
2008	0.22	1.01	7.56	2.42	1.65			
2009	0.22	1.01	7.56	2.42	1.65			
2010	0.22	1.01	7.56	2.42	1.65			
Allowable	143.19	143.19	143.19	143.19	8990.65			

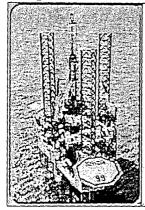
ENSCO 99

Last Updated:

3/19/2004 11:13:00 AM



Rig Status



Rig name ENSCO 99 Customer/Status

ExxonMobil

Jackup - 250'

Design MLT 82 SD-C

Region Gulf of Mexico

Water Depth

Location GOM

Estimated Availability / Comments Apr. 04, market rate, well to well

Rig Specifications

Yr. Built / Upgraded

1985

Leg Length

360

Drilling Variable Load Transit: 2,512 Kips

Drilling: 4,457 Kips Survival: 2,032 Kips

Cranes

3-MLT PCM-120 AS 45 Tons @ 25'

Heliport

S-61 or Equivalent 20,500 Gross Lbs.

Hull

L207' X W176' X D20'

Cantilever Reach

40' X 20'

Main Power Plant

3-EMD 12-645-E9 Engines (7,500 Hp) EMD

AB20-6 (1,860 Kw) Generators

Sewage Treatment Omni-Pure 12 MC

Quarters

72 P. O. B.

Drilling Equipment Specifications

Rated Drill Depth

30,000

BOP Equipment

1- Shaffer 21 1/4" X 2,000 psi 1- Shaffer Annular 13 5/8" X 5,000 psi 1- Shaffer U Single Ram Preventers 13 5/8" X 10,000 psi

10,000 psi

Pipe Handling

Derrick

Dreco 160' X 30' X 30' Gross Nominal Capacity:

Mud Pumps

2-National 12-P-160 Triplexes

Solid Controls

Mud Cleaner: 1- Derrick Hi-G

Desander:

Shale Shakers: 3- National Single Tandem

Rotary

National D-375 (37½") Independent Electric

Drive

Diverter:

1- Shaffer U Double Ram Preventer 13 S/8" X

Drillpipe

Drawworks

National 1625-DE (3,000 Hp) Baylor Model

7838K Brake

Top Drive Varco TDS-5

Choke Manifold

3 1/16" X 10,000 psi with 2 Swaco Super Chokes

Storage Capacities

Liquid Mud 1,473 bbls

Sack Storage 2,500 Sacks

FUEL LOG FOR ENSCO 99

	AUGUST			SEPTEMBER	
DATE	FUEL USED	OPERATION	DATE	FUEL USED	OPERATION
8/1/2003	1089	RIG MOVE	9/1/2003	1145	COMPLETION
8/2/2003	1633	RIG UP	9/2/2003	1249	COMPLETION
8/3/2003	1361	DRILLING	9/3/2003	1977	RIG MOVE
8/4/2003	2994	DRILLING	9/4/2003	2105	RIG MOVE
8/5/2003	2232	DRILLING	9/5/2003	2450	RIG MOVE
8/6/2003	3018	RUN CSGING	9/6/2003	1498	RIG MOVE
8/7/2003	1249	RUN CSGING/CEMENT	9/7/2003	1340	RIG MOVE
8/8/2003	1945	DRILLING	9/8/2003	1089	RIG MOVE
8/9/2003	3267	DRILLING	9/9/2003	2007	WORKOVER
8/10/2003	4082	DRILLING	9/10/2003	1232	WORKOVER
8/11/2003	2450	DRILLING/TRIP	9/11/2003	612	WORKOVER
8/12/2003	3017	DRILLING	9/12/2003	1710	TRIP/WORKOVER
8/13/2003	3538	DRILLING	9/13/2003	1873	TRIP/FISH
8/14/2003	2975	DRILLING	9/14/2003	1535	TRIP/FISH
8/15/2003	3918	DRILLING	9/15/2003	1982	TRIP/CIRCULATE
8/16/2003	2722	DRILLING/TRIP	9/16/2003	1873	TRIP/CIRCULATE
8/17/2003	3270	DRILLING	9/17/2003	1978	WORKOVER
8/18/2003	1636	DRILL/LOG/TRIP	9/18/2003	1974	RUN TUBING
8/19/2003	2356	TRIP/WASH	9/19/2003	1822	RUN TUBING/TEST
8/20/2003	1739	RUN CSGING/CEMENT	9/20/2003	1109	PERFORATE
8/21/2003	1437	NIPPLE BOP'S	9/21/2003	1227	PERFORATE/FLOW
8/22/2003	2028	DRILLING	9/22/2003	1499	NIPPLE UP/DOWN
8/23/2003	2083	DOWNTIME/REPAIR	9/23/2003	1907	CIRCULATE/TRIP
8/24/2003	2558	DRILLING	9/24/2003	1499	L/D TUBING/TRIP
8/25/2003	2453	DRILL/TRIP	9/25/2003	2177	TRIP/CIRCULATE
8/26/2003	2176	TRIP/CIRCULATE	9/26/2003	1361	FLOW WELL/SKID FLR
8/27/2003	1365	TRIP/CIRCULATE	9/27/2003	1089	NIPPLE BOP/TEST
8/28/2003	3260	TRIP/COMPLETION	9/28/2003	1728	TRIP/CIRCULATE
8/29/2003	2233	TRIP/COMPLETION	9/29/2003	2081	RUN TUBING
8/30/2003	1145	RUN TUBING	9/30/2003	1769	NIPPLE BOP/TEST
8/31/2003	2080	COMPLETION			
Total	73309		Total	48897	

^{***}Note: Daily fuel consumption is in gallons.

FUEL LOG FOR ENSCO 99

OCTOBER NOVEMBER

	OCTOE	DEK .	INOVENIDER		
DATE	FUEL USED	OPERATION	DATE	FUEL USED	OPERATION
10/1/2003	1352	SLICKLINE/TEST	11/1/2003	1633	PREVENTIVE MAINT.
10/2/2003	1249	SECURE RIG/CANT	11/2/2003	1361	PREVENTIVE MAINT.
10/3/2003	1145	SECURE RIG/W.O.W.	11/3/2003	1225	PREVENTIVE MAINT.
10/4/2003	1456	RIG MOVE	11/4/2003	1497	RIG MOVE
10/5/2003	1249	RIG MOVE	11/5/2003	1089	RIG MOVE
10/6/2003	1457	PRELOAD/RIG UP	11/6/2003	1632	PRELOAD
10/7/2003	936	TEST BOP/WIRELINE	11/7/2003	1634	RUN DRIVE PIPE
10/8/2003	1457	WIRELINE/TRIP	11/8/2003	1365	NIPPLE UP/DRILL
10/9/2003	2081	TRIP/CIRCULATE	11/9/2003	2448	DRILLING
10/10/2003	1917	TRIP/CIRCULATE	11/10/2003	1802	RUN CSGING
10/11/2003	2336	TRIP/TEST BOPS	11/11/2003	1672	CEMENT/TRIP
10/12/2003	1906	TEST BOP/TRIP	11/12/2003	2083	DRILLING
10/13/2003	1907	TRIP/ROTATE	11/13/2003	3125	DRILLING
10/14/2003	2453	TRIP/WIRELINE	11/14/2003	3124	DRILLING
10/15/2003	1361	TRIP/WIRELINE	11/15/2003	3117	DRILLING
10/16/2003	2045	TRIP/WIRELINE	11/16/2003	3540	DRILL/TRIP
10/17/2003	1439	TRIP/NIPPLE BOPS	11/17/2003	1634	RUN CSGING/CEMENT
10/18/2003	1874	L/D DRILL PIPE	11/18/2003	2344	NIPPLE BOPS
10/19/2003	1772	RUN TBG/NIPPLE TREE	11/19/2003	1197	TEST BOPS/TRIP
10/20/2003	1873	SECURE RIG	11/20/2003	2488	DRILLING
10/21/2003	1630	SECURE RIG/MAINT.	11/21/2003	2497	CIRCULATE/DRILL
10/22/2003	958	PREVENTIVE MAINT.	11/22/2003	3538	DRILLING
10/23/2003	831	PREVENTIVE MAINT.	11/23/2003	3954	DRILLING/TRIP
10/24/2003	1694	PREVENTIVE MAINT.	11/24/2003	2061	CIRCULATE/DRILL
10/25/2003	1196	CHANGE OUT BLOCK	11/25/2003	3403	CIRCULATE/DRILL
10/26/2003	1041	INSTALL HOOK & T.D.	11/26/2003	3718	CIRCULATE/DRILL
10/27/2003	1145	PREVENTIVE MAINT.	11/27/2003	3017	CIRCULATE/TRIP
10/28/2003	1144	PREVENTIVE MAINT.	11/28/2003	2394	DRILLING/TRIP
10/29/2003	1145	T.D. MOTOR CHANGE	11/29/2003	3433	DRILLING/TRIP
10/30/2003	937	R/UP TOP DRIVE	11/30/2003	2450	TEST BOPS/TRIP
10/31/2003	1023	R/UP TOP DRIVE			
Total	44657		Total	68842	

^{***}Note: Daily fuel consumption is in gallons.

FUEL LOG FOR ENSCO 99

DECEMBER

JANUARY

DATE	FUEL USED	OPERATION	DATE	FUEL USED	OPERATION
12/1/2003	3267	TRIP/DRILLING	1/1/2004	1357	DRILLING/CIRC
12/2/2003	3265	DRILLING	1/2/2004	3233	DRILLING/CIRC
12/3/2003	3539	DRILLING/CIRC	1/3/2004	2042	CIRC/TRIP
12/4/2003	2468	CIRC/TRIP	1/4/2004	2048	DRILLING/TRIP
12/5/2003	2499	DRILLING/CIRC	1/5/2004	2394	DRILLING
12/6/2003	2608	DRILLING/CIRC	1/6/2004	2188	DRILLING/CIRC/TRIP
12/7/2003	3541	DRILLING/CIRC	1/7/2004	1978	CIRC/TRIP
12/8/2003	2725	DRILLING/CIRC	1/8/2004	1928	CIRC/TRIP
12/9/2003	2860	TRIP/DRILLING	1/9/2004	1802	TRIP/LAY DOWN PIPE
12/10/2003	2722	CIRC/TRIP	1/10/2004	2449	TEST BOPS/TRIP
12/11/2003	2032	RUN CSG	1/11/2004	1772	TRIP/CIRC/DRILL
12/12/2003	2041	RUN CSG/CEMENT	1/12/2004	2453	DRILL/TRIP
12/13/2003	1873	NIPPLE BOP'S	1/13/2004	1907	TRIP/CIRC/DRILL
12/14/2003	1773	DRILLING	1/14/2004	2179	TRIP/CIRC/DRILL
12/15/2003	3330	DRILLING	1/15/2004	2447	TRIP/CIRC/DRILL
12/16/2003	2924	DRILLING/CIRC	1/16/2004	2994	DRILLING/CIRC
12/17/2003	3271	CIRC/TRIP	1/17/2004	1051	MONITER WELL/TRIP
12/18/2003	2766	TRIP/DRILLING/CIRC	1/18/2004	1665	LOG/TRIP
12/19/2003	3121	TRIP/DRILLING/CIRC	1/19/2004	2185	LOG/TRIP
12/20/2003	1997	CIRC/TRIP	1/20/2004	1768	LOG/TRIP
12/21/2003	2445	CIRC/TRIP	1/21/2004	1457	CIRC/TRIP
12/22/2003	2133	TRIP/DRILLING/CIRC	1/22/2004	2185	TRIP/CIRC/DRILL
12/23/2003	1869	TRIP/LOG/RUN CSG	1/23/2004	2154	DRILLING/CIRC
12/24/2003	1089	RUN CSG/TRIP	1/24/2004	2449	DRILLING/TRIP
12/25/2003	1905	TRIP/NIPPLE BOPS	1/25/2004	2013	CIRC/TRIP
12/26/2003	2145	NIPPLE BOP'S	1/26/2004	1925	DRILLING/CIRC
12/27/2003	1561	CIRC/TRIP	1/27/2004	2653	TRIP/CIRC/DRILL
12/28/2003	2081	TRIP/DRILL/CIRC	1/28/2004	2237	CIRC/TRIP
12/29/2003	1977	TRIP/DRILL/CIRC	1/29/2004	1282	LOG/TRIP
12/30/2003	2289	TRIP/DRILL/CIRC	1/30/2004	2466	LOG/TRIP
12/31/2003	2077	DRILLING/CIRC	1/31/2004	1381	TRIP/CIRC/DRILL
TOTAL	76193		TOTAL	64042	

^{***}Note: Daily fuel consumption is in gallons.

SECTION 8.0

ENVIRONMENTAL IMPACT ANALYSIS

8.1 Impact Producing Factors (IPF's)

Environmental Resources	Impact Producing Ractors (IPFs) Categories and examples Refer to a recent GOM OCS Lease Sale EIS for a more complete list of IPFs						
	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, other- discharges to the water column or seafloor)	Physical disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for		Other IPFs you identify	
0.5		2346,000				X-10 V (2) (4)	
Site-specific at Offshore Location							
Designated topographic features		(1)	(1)		(1)		
Pinnacle Trend area live bottoms		(2)	(1)	}	(1)		
Eastern Gulf live bottoms		(3)	(3)	 	(2)		
Chemosynthetic communities		(3)	(4)	 	(2)		
Water quality			· · · · · · · · · · · · · · · · · · ·		 		
Water quality Fisheries Marine mammals		<u> </u>					
Marine mammals	(8)				(8)		
Sea turtles	(8)				(8)		
Air quality	(9)				(J)		
Shipwreck sites (known or			(7)				
potential)			(7)				
Prehistoric archaeological sites			(7)			CHICAGNARION CONGLESS	
Vicinity of Offshore Location							
Essential fish habitat					(6)		
Marine and pelagic birds					(0)		
Public health and safety					(5)		
Catalana Salety	252A.96-40.525A.74		PARAMETER PROGRESSION		(3)	A CARROLLAND A	
Coastal and Oushore							
Beaches	######################################		Serve Del con Ello Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colodo Colo	Values and the Section of Section 1	(6)	<u> (887 - 1946) 1 1945, a an 1</u>	
Wetfands					(6)		
Shore birds and coastal nesting					(6)		
birds							
Coastal wildlife refuges					(6)		
Wilderness areas	NELLIK BERGE FOR STORE			50.0 Valley 1816 ya 18 V 18 4 18 4 18 4 18 4 18 4 18 4 18 4	(6)		
Other Resources You Identify				MARCHAE STATES		Market St. Charles	
77700000000000000000000000000000000000			L		<u></u>		

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:
 - a. 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
 - b. 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;
 - c. Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
 - d. 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 Activities (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 MMS as being in water depths 400 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 MMS 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 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

8.2 Analysis

8.2.1 Site Specific at Offshore Location

- 8.2.1.1 Designated Topographic Features There are no IPF's (including effluents, physical disturbances to the seafloor, and accidents) from the proposed activities that could cause impacts to topographic features. The site-specific offshore location of the proposed activities is outside the 3-mile zone of any identified topographic feature.
- 8.2.1.2 Pinnacle Trend Area Live Bottoms There are no IPF's (including effluents, physical disturbances to the seafloor, and accidents) from the proposed activities that could cause impacts to pinnacle trend area live bottoms. The site-specific offshore location of the proposed activities is not in a pinnacle trend live bottom stipulated block.
- 8.2.1.3 Eastern Gulf Live Bottoms The eastern gulf live bottoms are not in the vicinity of Devon's proposed operations.
- 8.2.1.4 Chemosynthetic communities The proposed activities would occur in a water depth of 27 feet. No chemosynthetic communities will be affected.

8.2.1.5 Water Quality – Effluents and accidents from the proposed activities could potentially cause impacts to water quality. However, since all discharges will be made in accordance with a general National Pollutant Discharge Elimination System (NPDES) permit issued by the U.S. Environmental Protection Agency, operational discharges are not expected to cause significant adverse impacts to water quality. It is unlikely that an accidental oil spill release would occur from the proposed activities. In the event of such an accidental release, the water quality would be temporarily affected by the dissolved components and small droplets. Currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels.

8.2.1.6 Fisheries - An accidental oil spill that might occur as a result of the proposed action has the potential to cause some detrimental effects to fisheries. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. If such a spill were to occur in open waters of the OCS proximate to mobile adult finfish or shellfish, the effects would likely be sub-lethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. No adverse activities to fisheries are anticipated as a result of the proposed activities.

8.2.1.7 Marine Mammals – Marine mammals may be adversely impacted by several IPF's, including vessel traffic, noise, accidental oil spills, and loss of trash and debris, all of which could occur due to the proposed action. Chronic and sporadic sub-lethal effects could occur that may stress and/or weaken individuals of a local group or population and make them more susceptible to infection from natural or anthropogenic sources. Few lethal effects are expected from oil spills, chance collisions with service vessels and ingestion of plastic material. Oil spills of any size are estimated to be aperdiodic events that may contact cetaceans. Disturbance (e.g., noise) may stress animals, weaken their immune systems, and make them more vulnerable to parasites and diseases that normally would not be fatal.

The net result of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin, et al., 2001). Sperm whales are one of 11 whale species that are hit commonly by ships (Laist et al., 2001). Collisions between OCS vessels and cetaceans within the project area are expected to be unusual events. No adverse impacts to endangered or threatened marine mammals are anticipated as a result of the proposed activities.

8.2.1.8 Sea Turtles - IPF's that could impact sea turtles include vessel traffic, noise, trash and debris, and accidental oil spills. Small numbers of turtles could be killed or injured by chance collision with service vessels or by eating indigestible trash, particularly plastic items, accidentally lost from drill rigs, production facilities and service vessels. Drilling rigs and project vessels produce noise that could disrupt normal behavior patterns and create some stress potentially making sea turtles more susceptible to disease. Oil spills and oil spill

response activities are potential threats that could have lethal effects on turtles. Contact with oil, consumption of oil particles, and oil-contaminated prey could seriously affect individual sea turtles. Oil-spill-response planning and the habitat protection requirements of the Oil Pollution Act of 1990 should mitigate the threats.

Most OCS related impacts on sea turtles are expected to be sub-lethal. Chronic sub-lethal effects (e.g., stress) resulting in persistent physiological or behavioral changes and/or avoidance of effected areas could cause declines in survival or productivity, resulting in gradual population declines

No adverse impacts to endangered or threatened sea turtles are anticipated as a result of the proposed activities.

8.2.1.9 Air Quality – The proposed activities are located approximately 4 miles offshore. There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Air quality analysis (included in Section 7 of this plan) is below the MMS exemption level.

8.2.1.10 Shipwreck Sites (known or potential) – There are no known IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to known or potential shipwreck sites. The proposed activities are located in, or adjacent to, an OCS block designated by MMS as having high-probability for the occurrence of shipwrecks. Review of the Shallow Hazards Report (submitted with this plan in accordance with NTL 2002-G08, Appendix C, and NTL 98-20) indicates there are three shipwreck sites located in Block 20. Extreme caution will be exercised during all operations. If a shipwreck is found, all operations will cease until the Minerals Management Service in New Orleans has been notified to ascertain the possible cultural significance.

8.2.1.11 Prehistoric Archaeological Sites - There are no IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to prehistoric archaeological sites, as the proposed activities are not located in, or adjacent to, an OCS block designated by MMS as having high-probability for the occurrence of prehistoric archaeological sites.

8.2.2 Vicinity of Offshore Location

8.2.2.1 Essential Fish Habitat - An accidental oil spill that might occur as a result of the proposed action has the potential to cause come detrimental effects on essential fish habitat. However, it is unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities. If such a spill were to occur in open waters of the OCS proximate to mobile adult finfish or shellfish, the effects would likely be sub-lethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. No adverse impacts to essential fish habitat are anticipated as a result of the proposed activities.

- 8.2.2.2 Marine and Pelagic Birds An accidental oil spill that might occur as a result of the proposed action has the potential to impact marine and pelagic birds birds could become oiled. However, it is unlikely that an accidental oil spill would occur from the proposed activities. No adverse impacts to marine and pelagic birds are anticipated as a result of the proposed activities.
- 8.2.2.3 Public Health and Safety There are no anticipated IPF's (including any accidental H_2S releases) from the proposed activities that could impact public health and safety. In accordance with 30 CFR 250.417(c), Devon has requested the area of proposed activities be classified as " H_2S absent".

8.2.3 Coastal and Onshore

- 8.2.3.1 Beaches An accidental oil spill from the proposed activities could cause impacts to beaches. However, due to the distance from shore (approximately 4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in the plan will be covered by our regional OSRP (refer to information submitted in Section 6 of this plan).
- 8.2.3.2 Wetlands An accidental oil spill from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (approximately 4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in the plan will be covered by our regional OSRP (refer to information submitted in Section 6 of this plan).
- 8.2.3.3 Shore Birds and Coastal Nesting Birds An accidental oil spill from the proposed activities could cause impacts to shore birds and coastal nesting birds. However, due to the distance from shore (approximately 4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in the plan will be covered by our regional OSRP (refer to information submitted in Section 6 of this plan).
- 8.2.3.4 Coastal Wildlife Refuges An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (approximately 4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The

activities proposed in the plan will be covered by our regional OSRP (refer to information submitted in Section 6 of this plan).

- 8.2.3.5 Wilderness Areas An accidental oil spill from the proposed activities could cause impacts to coastal wilderness areas. However, due to the distance from shore (approximately 4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both the historical spill data and the combined trajectory/risk calculations referenced in the publication OCS EIS/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources. The activities proposed in the plan will be covered by our regional OSRP (refer to information submitted in Section 6 of this plan).
- 8.2.3.6 Other Environmental Resources Identified Devon has not identified any other environmental resources other than those addressed above.
- 8.3 Impacts on Proposed Activities The site-specific environmental conditions have been taken into account for the proposed activities and no impacts are expected as a result of these conditions.

A shallow hazards survey and a shallow hazards assessment of any seafloor and subsurface geological or manmade features and conditions that may adversely affect operations has been submitted in accordance with NTL 2002-G08, Appendix C and NTL 98-20. Based on the above report and analysis, Devon has concluded there are no surface or subsurface geological or manmade features or conditions that may adversely affect the proposed activities.

- 8.4 Alternatives No alternatives to the proposed activities were considered to reduce environmental impacts.
- 8.5 Mitigation Measures No mitigation measures other than those required by regulation and Devon policy will be employed to avoid, diminish or eliminate potential impacts on environmental resources.
- 8.6 Consultation No agencies or persons were consulted regarding potential impacts associated with the proposed activities.
- 8.7 References: Although not always cited, the following were utilized in preparing the EIA:
 - Hazard Survey prepared by Fugro GeoServices, Inc.
 - OCS EIS/EA MMS 2002-052
 - NPDES Permit GMG290091
 - Air Quality Review
 - Regional Oil Spill Response Plan

SECTION 9.0

COASTAL ZONE CONSISTENCY

Under direction of the Coastal Zone Management Act (CZMA), the states of Alabama, Florida, Louisiana, Mississippi and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

Issues identified in the Louisiana CZMP include the following: general coastal use guidelines, levees, linear facilities (pipelines); dredges soil deposition; shoreline modifications, surface alterations, hydrologic and sediment transport modifications; waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas or other mineral activities; and air and water quality.

9.1 Applicable Guidelines - The following Louisiana guidelines are applicable to the proposed operations:

TOPIC	GUIDELINE NO.	CROSS REFERENCE
Air Quality	1.2	Section 7.0
Water Quality	1.2	Section 5.0
Permitting Authority	1.6	Sections 4.0 thru 8.0
Adverse Effects	1.7	Section 8.0
Multiple Use	1.9	Section 2.0
Waste Storage, Treatment and Disposal Facilities	8.1	Section 5.0
Hazardous Waste Storage, Treatment and Disposal	8.2	Section 5.0
Approved Disposal Sites	8.8	Section 5.0
Radioactive Waste	8.9	Section 5.0
Siting of Exploration, Production Activities	10.3	Sections 2.0 and 8.0
Access to Site	10.5	Section 2.0
Best Practical Techniques for Drilling/Production Sites	10.6	Sections 2.0 and 5.0
Drilling and Production Equipment Guidelines for Preventing Adverse Environmental Effects	10.10	Section 1.0
Effective Environmental Protection and Emergency or Contingency Plans	10.11	Sections 1.0 and 6.0

9.2 Attachments to Section 9.0

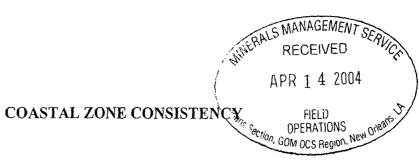
• Certificate of Coastal Zone Management Consistency for the State of Louisiana

COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION

Supplemental Development Operations Coordination
Document
Type of OCS Plan
West Cameron Block 20
Area and Block
OCS 00680
Lease Number

The proposed activities described in detail in this OCS Plan comply with Louisiana's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s).

Devon Energy Production Company, L.P.
Lessee or Operator
Patricia (Buce)
Certifying Official
March 25, 2004
Date



Under direction of the Coastal Zone Management Act (CZMA), the states of Alabama, Florida, Louisiana, Mississippi and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

Issues identified in the Texas CMP include the following: general coastal use guidelines, levees, linear facilities (pipelines); dredges soil deposition; shoreline modifications, surface alterations, hydrologic and sediment transport modifications; waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas or other mineral activities; and air and water quality.

Devon will obtain approval of all applicable permits from both Federal and State agencies before beginning this project and will adhere to all required conditions of approved permits.

9.1 Applicable Guidelines - The following Texas guidelines are applicable to the proposed operations:

TOPIC	CATEGORY NO.	CROSS REFERENCE
Construction, Operation and Maintenance of Oil and Gas	2	Section 1.0
Exploration and Production Facilities		
Discharges of Wastewater and Disposal of Waste from Oil	3	Section 5.0
and Gas Exploration and Production Activities		
Construction and Operation of Solid Waste Treatment,	4	NA
Storage, and Disposal Facilities		
Prevention, Response, and Remediation of Oil Spills	5	Section 6.0
Discharge of Municipal and Industrial Waste Water to	6	Section 5.0
Coastal Waters		
Development in Critical Areas	8	NA
Construction of Waterfront Facilities and Other Structures	9	NA
on Submerged lands		
Dredging and Dredged Material Disposal and Placement	10	NA
Construction in the Beach / Dune System	11	NA
Alteration of Coastal Historic Areas	15	Section 8.0
Transportation	16	Section 2.0
Emission of Air Pollutants	17	Sections 7.0
		and 8.0
Appropriations of Water	18	NA
Marine Fishery Management	20	Section 8.0
Administrative Policies	22	Section 9.0

9.2 Attachments to Section 9.0

• Certificate of Coastal Zone Management Consistency for the State of Texas

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

Supplemental Development Operations Coordination		
Document		
Type of OCS Plan		
West Cameron 20		
Area and Block		
OCS 00620		
Lease Number		

The proposed activities described in detail in this OCS Plan comply with Texas' approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s).

Devon Energy Production Company, L.P.
Lessee or Operator
Patricia & Buce
Certifying Official
March 25, 2004
Date