# UNITED STATES GOVERNMENT MEMORANDUM

February 25, 2005

To:

Public Information (MS 5034)

From:

Plan Coordinator, FO, Plans Section (MS

5231)

Subject:

Public Information copy of plan

Control #

S-06619

Туре

Supplemental Exploration Plan

Lease(s)

OCS-G14205 Block - 602 East Breaks Area

Operator

Kerr-McGee Oil & Gas Corporation

Description -

Wells L, M, N, and O

Rig Type

SEMISUBMERSIBLE

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
WELL/L	G14205/EB/602	3002 FNL, 5152 FWL	G14205/EB/602
WELL/M	G14205/EB/602	3002 FNL, 5152 FWL	G14205/EB/602
WELL/N	G14205/EB/602	3002 FNL, 5152 FWL	G14205/EB/602
WELL/O	G14205/EB/602	3986 FNL, 4660 FWL	G14205/EB/602

16666 Northchase · Houston, Texas 77060

Cary V. Bradford Manager of Regulatory Affairs GOM and North America Region Phone: 281/618-6338 Fax: 281/673-4338

February 2, 2005

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U.S. Department of the Interior Minerals Management Service 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

Attention:

Mr. Nick Wetzel

Plans Unit

RE: Supplemental Exploration Plan for Lease OCS-G 14205, East Breaks Block 602, OCS

Federal Waters, Gulf of Mexico, Offshore, Texas



In accordance with the provisions of Title 30 CFR 250.203 and that certain Notice to Lessees (NTL 2003-G17), Kerr-McGee Oil & Gas Corporation (Kerr-McGee) hereby submits for your review and approval a Supplemental Exploration Plan (Plan) for Lease OCS-G 14205, East Breaks Block 602, Offshore, Texas. Excluded from the Public Information copies are certain geologic and geophysical discussions and attachments.

Enclosed are two Proprietary Information copies (one hard copy and one CD) and two Public Information copies (one hard copy and one CD) of the Plan.

Contingent upon receiving regulatory approvals and based on equipment and personnel availability, Kerr-McGee anticipates operations under this Plan commencing as early as March 10, 2005.

Should additional information be required, please contact the undersigned, or our regulatory consultant, Christine Groth, R.E.M. Solutions, Inc., at 281.492.8562

Sincerely,

REVIEWER: Michelle Griffitt

CONTROL No. 5-6619

PHONE: (504) 736-2975

**Public Information** 

CVB:CAG Attachments

### KERR-MCGEE OIL & GAS CORPORATION

16666 Northchase Houston, Texas 77060

Cary V. Bradford cbradford@kmg.com

### SUPPLEMENTAL EXPLORATION PLAN

LEASE OCS-G 14205

**EAST BREAKS BLOCK 602** 

#### PREPARED BY:

Christine Groth
R.E.M. Solutions, Inc.
17171 Park Row, Suite 390
Houston, Texas 77084
281.492.8562 (Phone)
281.492.6117 (Fax)
christine@remsolutionsinc.com

DATED:

February 2, 2005

# SECTION A Plan Contents

# A. <u>Description</u>, Objectives and Schedule

Lease OCS-G 14205, East Breaks Block 602 was acquired by BP Exploration & Oil Inc. at the Western Gulf of Mexico Lease Sale No. 143 held on September 15, 1993. The lease was issued with an effective date of November 1, 1993 and a primary term ending date of October 31, 2003. The subject oil and gas lease is being held by ongoing production operations.

The current lease operatorship and ownership are as follows:

Area/Block Lease No.	Operator	Ownership
East Breaks Block 602 Lease OCS-G 14205	Kerr-McGee Oil & Gas Corporation	Devon Louisiana Corporation Kerr-McGee Oil & Gas Corporation

Kerr-McGee proposes to drill, complete, and potentially test Well Locations L, M, N and O in East Breaks Block 602. Information pertaining to the geological targets, including a narrative of trapping features, is included as *Attachment A-1*.

### B. Location

Included as Attachments A-2 through A-4 are Form MMS-137 "OCS Plan Information Form", Well Location Plats and the bathymetry map with proposed anchor radius of semi-submersible drilling unit.

# C. Drilling Unit

Kerr-McGee will utilize a typical semi-submersible drilling rig for the proposed drilling, completion and potential testing operations provided for in this Plan. Actual rig specifications will be included with the Applications for Permit to Drill.

Safety of personnel and protection of the environment during the proposed operations is of primary concern with Kerr-McGee, and mandates regulatory compliance with the contractors and vendors associated with the proposed operations as follows:

Minerals Management Service regulations contained in Title 30 CFR Part 250, Subparts C, D, E, and O mandate the operations comply with well control, pollution prevention, construction and welding procedures as described in Title 30 CFR Part 250, Subparts C, D, E, and O; and as further clarified by MMS Notices to Lessees.

Minerals Management Service conducts periodic announced and unannounced 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.

# SECTION A Plan Contents - Continued

- U. S. Coast Guard regulations contained in Title 33 CFR mandate the appropriate life rafts, life jackets, ring buoys, etc., be maintained on the facility at all times.
- U. S. Environmental Protection Agency regulations contained in the NPDES General Permit GMG290000 mandate that supervisory and certain designated personnel on-board the facility be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters.

# Geological Targets and Trapping Features

Attachment A-1 (Proprietary Information)

# OCS Plan Information Form

Attachment A-2 (Public Information)

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

#### **OCS PLAN INFORMATION FORM**

	• .						Ger	ieral Inf	iorma	ion		3		74	¥:		may.	:	
Тур	e of OCS Plan		X	Ex	plorat	tion Plan (	EP)		I	Deve	lopm	nent O	perations	Cooi	dinatio	on Do	cumen	t (DO	CD)
Coı	npany Name:	Kerr-	McGe	e Oil	l & Ga	as Corpor	ation		MMS	Ор	eratio	on Nu	mber:	0221	9				
Add	dress:	16666	o Nort	hcha	se				Cont	act P	erso	n:	Christine	Gro	th, R.	E.M.	Solutio	ons, I	nc.
		Hous	ton, T	`exas	77060	)			Phon	e Nu	ımbe	r:	281.492.8	562					
									E-Ma	il A	ddres	ss:	christine@	<u>)rem</u>	solutio	nsin	c.com		
Lea	se(s): OCS-G	14205			Area:	EB		Block(s):	602		Pro	ject N	ame (If A	pplic	able):	NA			
Obj	ective(s):	Oil	$\mathbf{x} \mid \mathbf{c}$	Gas	S	Sulphur	Salt	Onsho	re Base	: Ga	alves	ton, T	X Dis	stanc	e to Cl	oses	Land (N	Ailes)	: 145
				D	escrip	otion of I	ropo	sed Acti	vities	(Ma	rk a	ll tha	t apply)					19. 1. – 2	
X	Exploration di	rilling								De	evelo	pmen	t drilling						
X	Well completi	on								In	stalla	ation c	f producti	on p	latform	1			
X	Well test flaring	ng (for	more t	han 4	8 hou	rs)				In	stalla	ation o	f producti	on fa	cilities	8			,
	Installation of	caissor	or pla	atforn	n as w	ell protect	ion str	ucture		In	stalla	ation o	of satellite	struc	ture				
X	X Installation of subsea wellheads and/or manifolds Commence production																		
	Installation of lease term pipelines Other (Specify and describe)																		
Hav	Have you submitted or do you plan to submit a Conservation Information Document to accompany this plan?  Yes X No																		
Do	Do you propose to use new or unusual technology to conduct your activities?  Yes X No											No							
Do	20 year proposed any manny man will be a second and a need rationally for all proposed any manny man will be a second and the											No							
Do	2 c y c a proposo and work made and mad											No							
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS? Yes X No																			
	Tentative Schedule of Proposed Activities																		
			P	ropo	sed A	ctivity						Star	t Date	]	End Da	ate	No	. of D	ays
Dri	ll, Complete, a	nd Tes	t Well	Loca	ation I	<u> </u>						03/10	0/2005	0	4/13/20	005		35	
	ll, Complete, a								_			04/14	4/2005	0	5/18/20	005		35	
	ll, Complete, a									-		05/19	9/2005	0	6/22/20	005		35	
Dri	ll, Complete, a	nd Tes	t Well	Loca	ation (	<u> </u>						06/23	3/2005	0	7/27/20	005		35	
		Descri	ption	of D	rillin	g Rig	- July		•		De	escrip	tion of P	rod	uction	Pla	tform		
	Jackup	<u>-</u> .			D	Drillship			C	aiss	on				Tens	ion L	eg Plat	form	
	Gorilla Jacku	ıp			P	latform rig	3		v	Vell	prote	ector			Com	plian	t tower		
X	Semi-submer	sible			S	ubmersibl	e		F	ixed	Plat	form			Guye	ed tov	wer		
	DP Semi-sub	mersib	le			Other (Atta escription)			S	ubse	ea ma	nifold	l		Float	ing p	roducti	on sy	stem
Dril	ling Rig Name	(if kno	wn):	Unkı	nown				S	par		,			Other	r (Atı	tach De	script	ion)
						Descri	ption	of Leas	e Terr	n Pi	peli	nes							
From (Facility/Area/Block)  To (Facility/Area/							ty/Area/l	Block)			Diar	meter (Fe	et)		Le	ength (l	Feet)		
NA																			
																			-

7

8

EB

EB

558

602

X=1,169,412

X=1,168,252

41 32 OMB Control Number: 1010-0049 OMB Approval Expires: August 31, 2006

3,409

3,055

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

Proposed Well/Structure Location

Well or Structure	Name/N	umber (If r	enaming well or struct  Well Location L	previous name):	Sul	osea Com	pletion					
Anchor Radius (if	fapplicat	ole) in feet:				X	Yes	No				
	Surf	ace Locati	on		Bottom-Hole Locati	cation (For Wells)						
Lease No.	ocs	-G 14205			OCS-G 14205							
Area Name	East	Breaks			East Breaks							
Block No.	602				602		- **					
Blockline Departures	N/S I	Departure	3002' FNL		N/S Departure:							
(in feet)	E/W	Departure	5152' FWL		E/W Departure:							
Lambert		,161,472			X:							
X-Y coordinates	Y: 9	,944,518			Y:							
Latitude / Longitude	Latit	ude	27°23'48.896"		Latitude							
٨'.	Long	itude	94°28'35.295"		Longitude							
	TVD	(Feet):		MD (Feet):	<u> </u>	Water Depth (Feet): 3,500'						
Anchor Location	ons for I	Orilling R	ig or Construction	Barge (If an	chor radius supplie	d above	, not ne	cessary)				
Anchor Name or No.	Area	Block	X Coordinate		Y Coordinate			Length of Anchor Chain on Seafloor				
1	EB	602	X=1,164, 030		Y=9,938,202			3,141'				
2	EB	602	X=1,160,287		Y=9,936,077			3,443'				
3	EB	601	X=1,153,426	···	Y=9,941,278			3,178'				
4	EB	601	X=1,152,829		Y=9,945,750			3,372'				
5	EB	558	X=1,158,224		Y=9,952,570 3,139°							
6	EB	558	X=1,162,669		Y=9,953,028 3,453'							

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.

Y=9,947,736

Y=9,943,583

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

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

actifica-			Proposed V	Well/Structu	re Location								
Well or Structure 1	Name/N	umber (If r	enaming well or struct Well Location M	•	previous name):	Sul	osea Comp	oletion					
Anchor Radius (if	applical	ole) in feet:				X	Yes	No					
	Surf	ace Locati	on		Bottom-Hole Location	n (For Wells)							
Lease No.	ocs	-G 14205			OCS-G 14205								
Area Name	East	Breaks			East Breaks								
Block No.	602				602								
Blockline Departures	N/S	Departure	3002' FNL		N/S Departure:								
(in feet)	E/W	Departure	5152' FWL		E/W Departure:								
Lambert	X: 1	,161,472			X:								
X-Y coordinates	Y: 9	,944,518			Y:								
Latitude / Longitude	Latit	ude	27°23'48.896"		Latitude								
	Long	gitude	94°28'35.295"		Longitude								
	TVD	(Feet):	74 E0 33.E/3	MD (Feet):		Wa	ter Denth	(Feet): 3,500'					
Anchor Location		` ′	ig or Construction		chor radius supplied								
Anchor Name or No.	Area	Block	X Coordinate	201 gc (11 <u>22</u>	Y Coordinate		I	essary) Length of Anchor Chain on Seafloor					
1	EB	602	X=1,164,030		Y=9,938,202			3,141'					
2	EB	602	X=1,160,287	· · · · · · · · · · · · · · · · · · ·	Y=9,936,077	····		3,443'					
3	EB	601	X=1,153,426		Y=9,941,278			3,178'					
4	EB	601	X=1,152,829		Y=9,945,750			3,372'					
5	EB	558	X=1,158,224		Y=9,952,570			3,139'					
6	EB	558	X=1,162,669		Y=9,953,028			3,453'					
7	EB	558	X=1,169,412		Y=9,947,736		3,409'						
8	EB	602	X=1,168,252		Y=9,943,583		3,055'						

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

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

est est		# •	Proposed V	Vell/Structu	re Location		. *			
Well or Structure	Name/Ni	ımber (If r	enaming well or structon Well Location N	ure, reference	previous name):	Su	bsea Com	pletion		
Anchor Radius (if	applicab	le) in feet:				X	Yes		No	
	Surfa	ce Location	on		Bottom-Hole Location	(For	Wells)			
Lease No.	ocs	-G 14205		··	OCS-G 14205					
Area Name	East	Breaks		East Breaks						
Block No.	602									
Blockline Departures	N/S I	Departure	3002' FNL	N/S Departure:						
(in feet)	E/W	Departure	5152' FWL		E/W Departure:					
Lambert	X: 1	161,472			X:					
X-Y coordinates	Y: 9	944,518			Y:					
Latitude / Longitude	Latit	ıde	27°23'48.896"		Latitude	_				
	Long	itude	94°28'35.295"		Longitude					
	TVD	(Feet):		MD (Feet):		W	ater Deptl	r (Feet):	3,500'	
Anchor Location	ns for I	Prilling R	ig or Construction	Barge (If an	chor radius supplied	abov	e, not në	cessary		
Anchor Name or No.	Area	Block	X Coordinate		Y Coordinate			_	of Anchor n Seafloor	
1	ED	602	V-1 164 020	V-0.029.202			2	1/12		

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
1	EB	602	X=1,164,030	Y=9,938,202	3,141'
2	EB	602	X=1,160,287	Y=9,936,077	3,443'
3	EB	601	X=1,153,426	Y=9,941,278	3,178'
4	EB	601	X=1,152,829	Y=9,945,750	3,372'
5	EB	558	X=1,158,224	Y=9,952,570	3,139'
6	EB	558	X=1,162,669	Y=9,953,028	3,453'
7	EB	558	X=1,169,412	Y=9,947,736	3409'
8	EB	602	X=1,168,252	Y=9,943,583	3,055'

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

OMB Control Number: 1010-0049

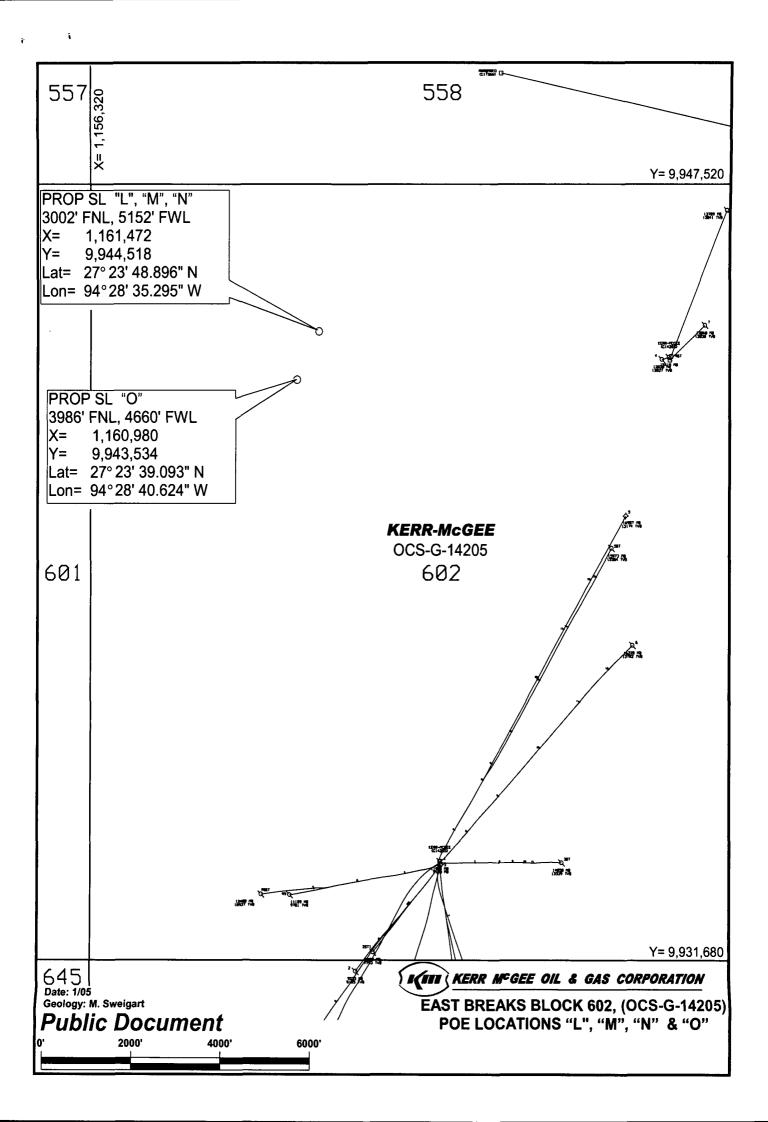
OMB Approval Expires: August 31, 2006

Well or Structure N	ame/Number (If renaming well or structu  Well Location O	re, reference	previous name):	Sub	osea Compi	letion				
Anchor Radius (if a	pplicable) in feet:			X	Yes		No			
	Surface Location	Bottom-Hole Locati	on (For	Wells)						
Lease No.	OCS-G 14205		OCS-G 14205							
Area Name	East Breaks		East Breaks							
Block No.	602		602							
Blockline Departures	N/S Departure 3986' FNL		N/S Departure:							
(in feet)	E/W Departure 4660' FWL		E/W Departure:							
Lambert	X: 1,160,980		X:							
X-Y coordinates	Y: 9,943,534		Y:							
Latitude / Longitude	Latitude 27°23'39.093"		Latitude							
	Longitude 94°28'40.624"	Longitude								
	TVD (Feet):	): Water Depth (Feet): 3517'								

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
1	EB	602	X=1,163,629	Y=9,937,048	3,141'
2	EB	602	X=1,159,788	Y=9,935,727	3,443'
3	EB	601	X=1,152,926	Y=9,940,340	3178'
4	EB	601	X=1,152,335	Y=9,944,806	3,372'
5	EB	558	X=1,157,731	Y=9,951,625	3,139'
6	EB	558	X=1,162,176	Y=9,952,083	3,453'
7	EB	602	X=1,168,919	Y=9,946,792	3,409'
8	EB	602	X=1,167,568	Y=9,942,660	3,055'

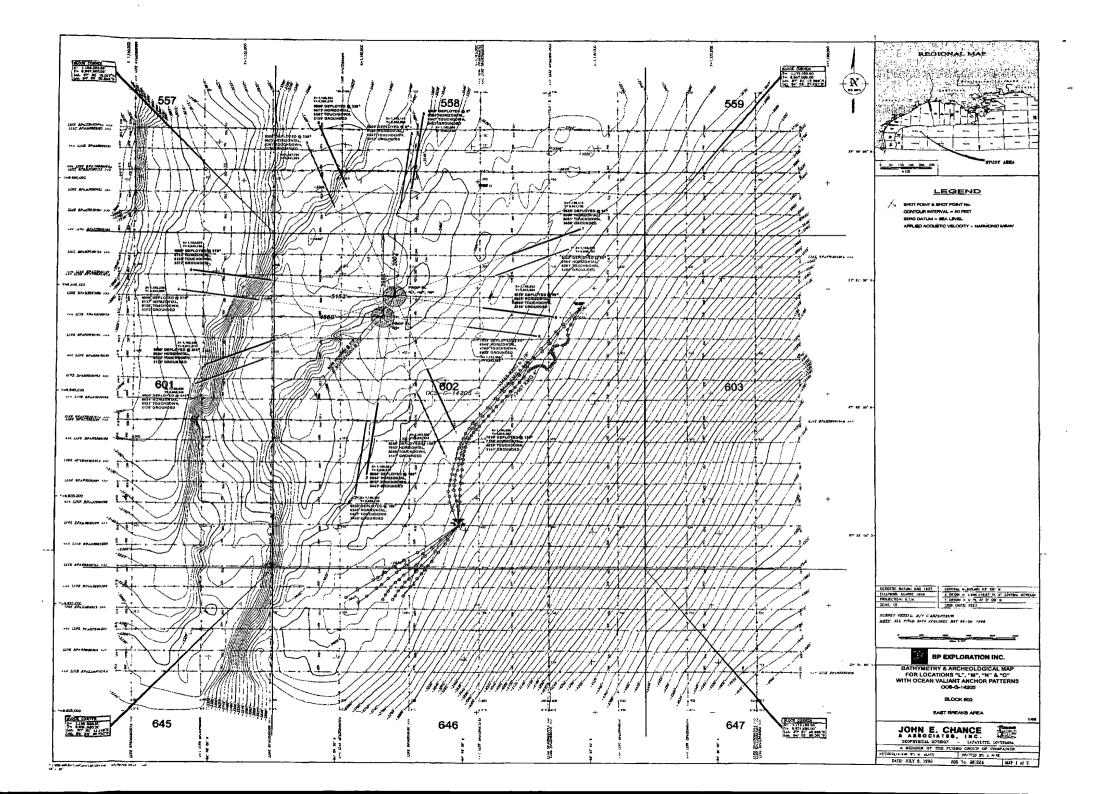
Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information 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.

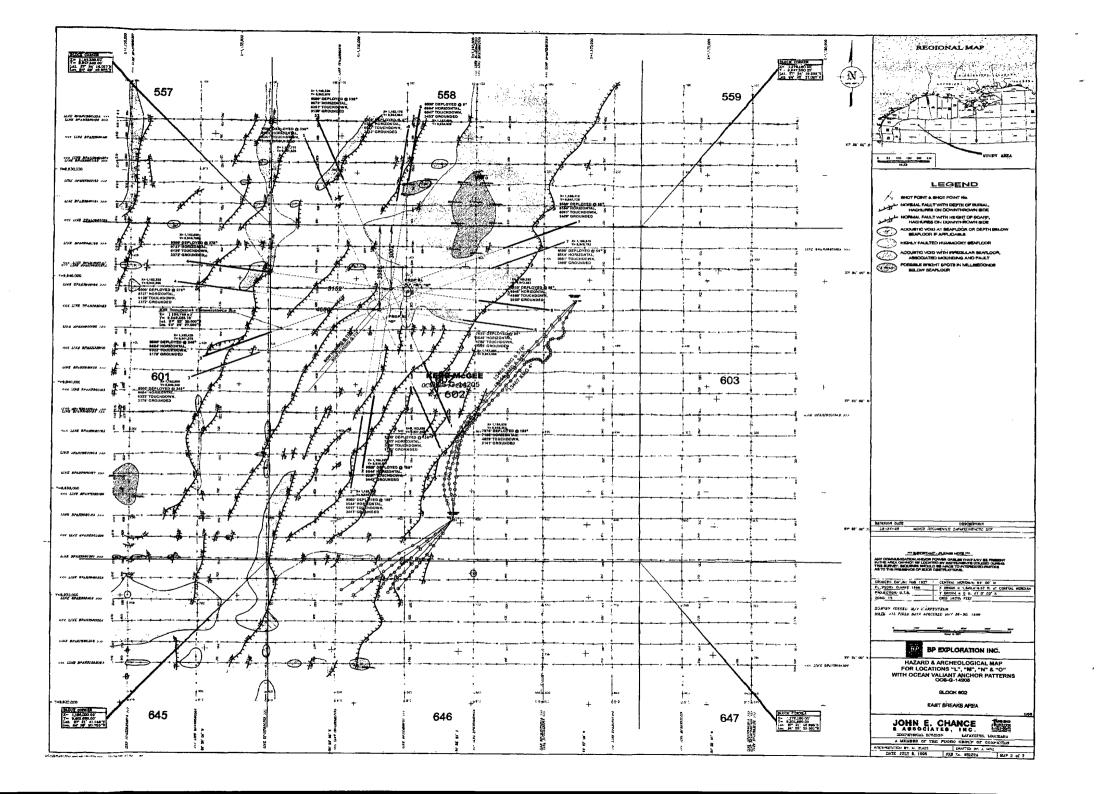
Well Location Plats Attachment A-3 (Public Information)



# Bathymetry Maps with Proposed Surface Disturbance and Anchor Pattern

Attachment A-4 (Public Information)





# SECTION B General Information

#### A. Contact

Questions or requests for additional information should be made to Kerr-McGee's authorized representative for this project:

Christine Groth R.E.M. Solutions, Inc. 17171 Park Row, Suite 390 Houston, Texas 77084 281.492.8562 (Phone) 281.492.6117 (Fax) christine@remsolutionsinc.com

# B. Prospect Name

Kerr-McGee does not refer to prospect names for their exploratory activities.

### C. New or Unusual Technology

Kerr-McGee does not propose using any new and/or unusual technology for the operations proposed in this Plan.

# D. Bonding Information

In accordance with Title 30 CFR Part 256, Subpart I, Kerr-McGee elected and has on file with the Minerals Management Service Gulf of Mexico Regional Office a \$3,000,000 Areawide Development Bond.

As deemed warranted, Minerals Management Service will contact the designated operator in the event a supplemental bond is required for the proposed operations, as outlined in Notice to Lessees (NTL) 2003-N06 to cover plugging liability of the wellbores, removal of associated well protector structures and site clearance.

Kerr-McGee is on the exempt list with the Minerals Management Service for supplemental bonding.

## E. Onshore Base and Support Vessels

The proposed surface disturbances in East Breaks Block 602 will be located approximately 145 miles from the nearest Texas shoreline, and approximately 160 miles from the onshore support base to be located in Galveston, Texas.

# SECTION B General Information - Continued

Kerr-McGee will use an existing onshore base to accomplish the following routine operations:

- Loading/Offloading point for equipment supporting the offshore operations,
- Dispatching personnel and equipment, and does not anticipate the need for any expansion of the selected facilities as a result of the activities proposed in this Plan,
- Temporary storage for materials and equipment
- 24-Hour Dispatcher

Personnel involved in the proposed operations will typically use their own vehicles as transportation to and from the selected onshore base; whereas the selected vendors will transport the 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 via the transportation methods and frequencies shown below, taking the most direct route feasible as mandated by weather and traffic conditions:

Support Vessel	Drilling and Completion Trips Per Week
Crew Boat	7
Supply Boat	3
Helicopter	3

The proposed operations are temporary in nature and do not require any immediate action to acquire additional land, expand existing base facilities.

A Vicinity Plat showing the location of East Breaks Block 602 relative to the shoreline and onshore base is included as *Attachment B-1*.

# F. Lease Stipulations

Under the Outer Continental Shelf Lands Act, the Minerals Management Service is charged with the responsibility of managing and regulating the exploration and development on the OCS.

As part of the regulatory process, an Environmental Impact Statement (EIS) is prepared for each lease sale, at which time mitigation measures are addressed in the form of lease stipulations, which then become part of the oil and gas lease terms and are therefore enforceable as part of that lease.

As part of this process, the designated operator proposing to conduct related exploratory and development activities, must review the applicable lease stipulations, as well as other special conditions, which may be imposed by the Minerals Management Service, and other governing agencies.

# SECTION B General Information - Continued

Lease OCS-G 14205, East Breaks Block 602 is subject to the following such stipulation and conditions:

#### Military Warning Area

The hold and save harmless section of the Military Areas Stipulation serves to protect the U.S. Government from liability in the event of an accident involving the designated oil and gas lease operator and military activities.

The electromagnetic emissions section of the stipulation requires the operator and its agents to reduce and curtail the use of radio or other equipment emitting electromagnetic energy within some areas.

This serves to reduce the impact of oil and gas activity on the communications of military missions and reduces the possible effects of electromagnetic energy transmissions on missile testing, tracking, and detonation.

The operational section requires notification to the military of oil and gas activity to take place within a military use area. This allows the base commander to plan military missions and maneuvers that may avoid the areas where oil and gas activities are taking place or to schedule around these activities. Prior notification helps reduce the potential impacts associated with vessels and helicopters traveling unannounced through areas where military activities are underway.

The Military Areas Stipulation reduces potential impacts, particularly in regards to safety, but does not reduce or eliminate the actual physical presence of oil and gas operations in areas where military operations are conducted.

The reduction in potential impacts resulting from this stipulation makes multiple-use conflicts most unlikely. Without the stipulation, some potential conflict is likely. The best indicator of the overall effectiveness of the stipulation may be that there has never been an accident involving a conflict between military operations and oil and gas activities.

The proposed surface disturbances in East Breaks Block 602 are located within Military Warning Area W-602. Therefore, in accordance with the requirements of the referenced stipulation, Kerr-McGee will contact the VQ-4 in order to coordinate and control the electromagnetic emissions during the proposed operations.

# SECTION B General Information - Continued

# **Special Conditions**

MMS has issued Notice to Lessees NTL 2004-G01 "Implementation of Seismic Mitigation Measures and Protected Species Observer Program", NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting" and NTL 2003-G11 "Marine Trash and Debris Awareness and Elimination".

Kerr-McGee may potentially complete Well Locations L, M, N and O as subsea completions. In this event, Kerr-McGee will follow the guidelines of the applicable Notice to Lessees (NTL's) 2000-N05 and 2000-N06, which mandates the submittal and approval of separate regulatory filings entitled as a "Conservation Information Document" and a "Deepwater Operations Plan", respectively.

Vicinity Plat Attachment B-1 (Public Information)

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KERR MCGEE OIL & GAS CORPORATION
16666 Northchase Dr. Houston, Texas 77060

EAST BREAKS BLOCK 602 (OCS-G-14205) POE LOCATIONS "L", "M", "N" & "O" MMS AREA MAP

Date: 1/05 Geology: M. Sweigart

# SECTION C Geological, Geophysical & H2S Information

### A. Structure Contour Maps

Included as *Attachment C-1* is a current structure map (depth base and expressed in feet subsea) depicting the entire lease coverage area; drawn on the top of each prospective hydrocarbon sand. The map depicts each proposed bottom hole location and applicable geological cross section.

### B. Interpreted Deep Seismic Lines

Included as Attachment C-2 are page size copies of the migrated and annotated (shot point, time lines, well paths) of the deep seismic line within 500 feet of each surface location.

## C. Geological Structure Cross Sections

Interpreted geological cross sections depicting the proposed well locations and depth of the proposed wells are included as *Attachment C-3*. Such cross section corresponds to each seismic line being submitted.

### D. Shallow Hazards Report

John E. Chance conducted a survey across East Breaks Block 602 during July 1998 on behalf of BP Exploration. The purpose of the survey was to evaluate geologic conditions and inspect for potential hazards or constraints to lease development.

Copies of these reports have been previously submitted to the Minerals Management Service under separate cover.

# E. Shallow Hazards Assessment

Utilizing the 3D deep seismic exploration data a shallow hazards analysis was prepared for the proposed surface locations, evaluating seafloor and subsurface geologic and manmade features and conditions, and is included as *Attachment C-4*.

### F. High Resolution Seismic Lines

Included as Attachment C-5 (original copy only) are copies of the migrated and annotated deep seismic and shallow hazard lines for each surface location disturbance proposed in this Plan.

# G. Stratigraphic Column

Generalized biostratigraphic/lithostratigraphic columns from the seafloor to the total depth of the proposed wells are included as *Attachment C-6*.

# SECTION C Geological, Geophysical & H2S Information-Continued

# H. Time Vs. Depth Tables

Kerr-McGee has determined that there is existing sufficient well control data for the target areas proposed in this plan; therefore, tables providing seismic time versus depth for the proposed well locations are not required.

# I. Hydrogen Sulfide Classification

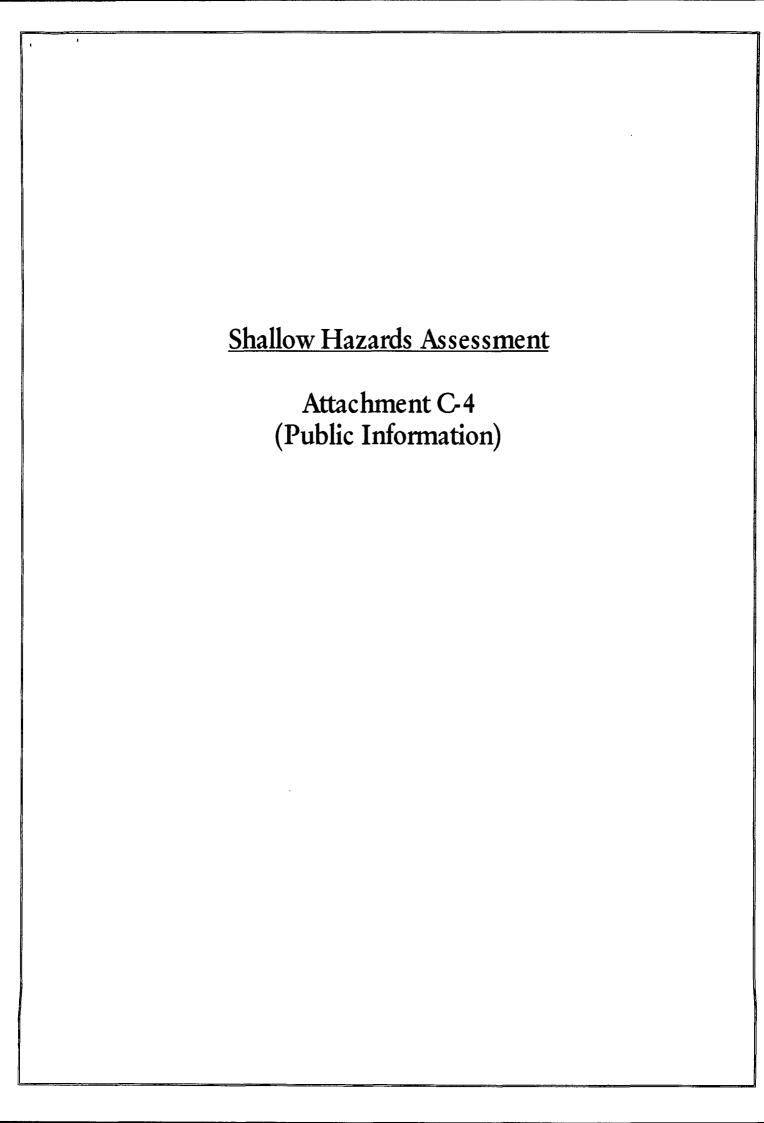
In accordance with Title 30 CFR 250.417, Kerr McGee requests that East Breaks Block 602 be classified by the Minerals Management Service as an area where the absence of hydrogen sulfide has been confirmed as addressed in *Attachment C-7*.



Attachment C-1 (Proprietary Information)

<u>Deep Seismic Lines</u> Attachment C-2 (Proprietary Information) Cross Section Maps

Attachment C-3 (Proprietary Information)



# **INTERNAL CORRESPONDENCE**

Kim	то	C.V. Bradford	DATE	January 17, 2005
Gulf of Mexico Deepwater Exploration	FROM	Michael Sweigart	SUBJECT	POE Submittal East Breaks 602 OCS-G-14205

Kerr-McGee Oil and Gas Corporation proposes to drill directionally 3 well locations "L","M" and "N". along with a straight hole "O" location OCS-G-14205. The respective well locations and are as follows:

<u>Block</u>	Well	<u>SL</u>
EB 602	Loc. "L"	3002' FNL
		5152' FWL
EB 602	Loc."M"	3002' FNL
		5152' FWL
EB 602	Loc. "N"	3002' FNL
		5152' FWL
EB 602	Loc. "O"	3986' FNL

#### **Hazard Studies**

A high resolution 2D geophysical survey was acquired by Fugro in May of 1998 over the Gulf of Mexico OCS area East Breaks Block 602 (OCS-G-14205). This data is of excellent quality for a shallow hazard assessment and Fugro subsequently completed a detailed shallow hazard study and report. The shallow hazard report and selected data from the shallow hazard survey for East Breaks 602 including the Bathymetry, Hazard, Structure, and Amplitude Anomaly Maps, were reviewed and are included with this POE submittal.

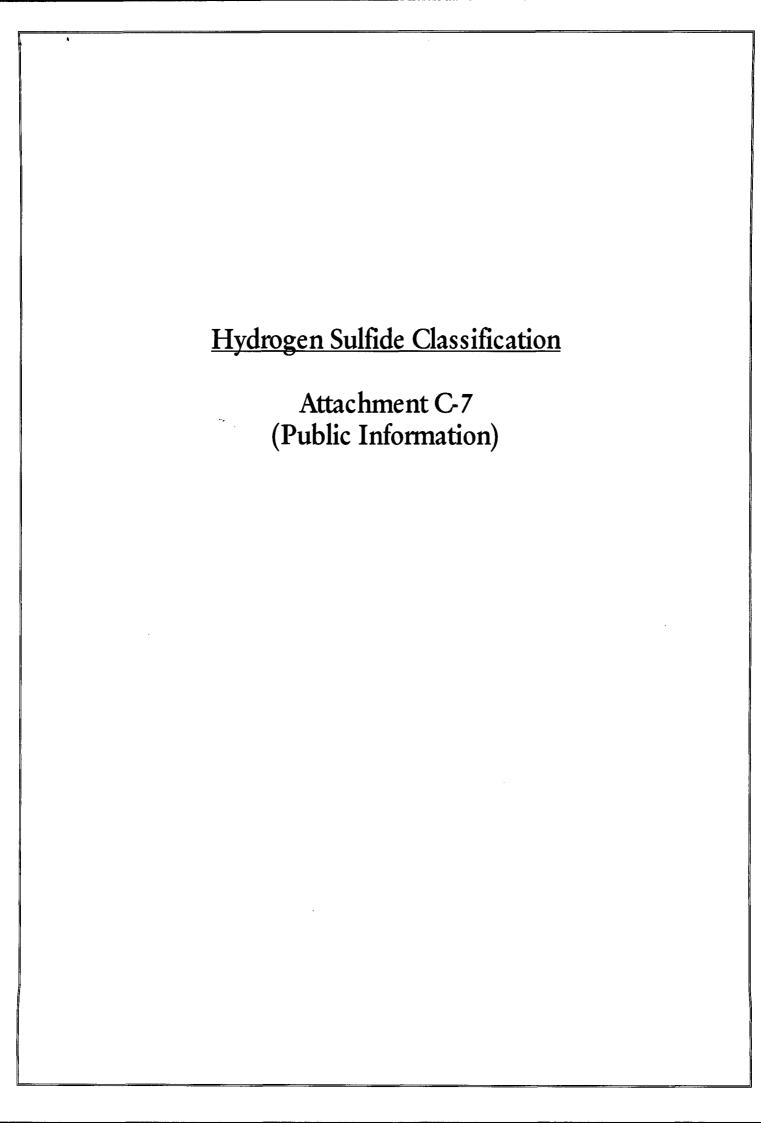
We have reviewed the data and the report and found the contract interpretation of the shallow hazards to be sound. Based on this data and their interpretation, it is our opinion that there are no near-surface hazards which will have any significant impact on Kerr-McGee drilling operations at this proposed location.

# Seismic and Hazard Lines

Attachment C-5 (Proprietary Information)

Stratigraphic Column

Attachment C-6 (Proprietary Information



Hydrogen Sulfide
Kerr-McGee has successfully operated and produced from biostratigraphic depths deeper than without the presence of H2S. Therefore, we ask the MMS that this area be designated as an area without the presence of H2S.

# SECTION D Biological and Physical Information

### A. Chemosynthetic Information

The proposed seafloor disturbing activities vary in water depths from 3500 feet to 3517 feet.

#### **MAPS**

Submitted under separate cover are the maps prepared using high resolution seismic information and/or 3-D seismic data to depict bathymetry, seafloor and shallow geological features, surface location of each proposed well positions of anchors and chains relative to the proposed operations, and a radius circle of 500 feet around each such location.

#### **ANALYSIS**

Submitted under separate cover is the analysis of seafloor features and areas that could be disturbed by the activities proposed in this Plan.

Features or areas that could support high-density chemosynthetic communities are not located within 1500 feet of each proposed muds and cuttings discharge location.

Features or areas that could support high-density chemosynthetic communities are not located within 1500 feet of any seafloor disturbances resulting from our use of anchors (including those caused by anchors, anchor chains, and wire ropes).

# B. Topographic Features Information

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

The activities proposed in this Plan are not affected by a topographic feature.

## C. Live Bottom (Pinnacle Trend) Information

Certain leases are located in areas characterized by the existence of live bottoms. Live bottom areas are defined as seagrass communities; those areas that contain biological assemblages consisting of sessile invertebrates living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; and areas where the lithotope favors the accumulation of turtles, fishes, or other fauna. These leases contain a Live Bottom Stipulation to ensure that impacts from nearby oil and gas activities on these live bottom areas are mitigated to the greatest extent possible.

## SECTION D <u>Biological and Physical Information-Continued</u>

For each affected lease, the Live Bottom Stipulation requires that you prepare a live bottom survey report containing a bathymetry map prepared by using remote sensing techniques. This report must be submitted to the Gulf of Mexico OCS Region (GOMR) before you may conduct any drilling activities or install any structure, including lease term pipelines in accordance with NTL 99-G16.

East Breaks Block 602 is not located within the vicinity of a proposed live bottom area.

### D. Remotely Operated Vehicle (ROV Surveys)

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

East Breaks Block 602 is not located within an area where ROV Surveys are required.

### E. Archaeological Reports

MMS has issued NTL 2002-G01, this requirement provides protection of prehistoric and historic archaeological resources by requiring remote sensing surveys in areas designated to have a high probability for archaeological resources.

East Breaks Block 602 is classified by MMS as a low probability area for archaeological resources; therefore, an archaeological survey is not required.

# SECTION E Wastes and Discharge/Disposal 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 drilling, completing, testing and/or production operations from oil and gas exploration and production activities.

Minerals Management Service regulations contained in Title 30 CFR 250.300 require operators to "prevent the unauthorized discharge of pollutants into offshore waters". These same regulations prohibit the intentional disposal of "equipment, cables, chains, containers, or other materials" offshore. Small items must be stored and transported in clearly marked containers and large objects must be individually marked. Additionally, items lost overboard must be recorded in the facility's daily log and reported to MMS as appropriate.

- U. S. Coast Guard regulations implement the Marine Pollution Research and Control Act (MARPOL) of 1987 requiring manned offshore rigs, platforms and associated vessels prohibit the dumping of all forms of solid waste at sea with the single exception of ground food wastes, which can be discharged if the facility is beyond 12 nautical miles from the nearest shore. This disposal ban covers all forms of solid waste including plastics, packing material, paper, glass, metal, and other refuse. These regulations also require preparation, monitoring and record keeping requirements for garbage generated on board these facilities. The drilling contractor must maintain a Waste Management Plan, in addition to preparation of a Daily Garbage Log for the handling of these types of waste. MODU's are equipped with bins for temporary storage of certain garbage. Other types of waste, such as food, may be discharged overboard if the discharge can pass through 25-millimeter type mesh screen. Prior to off loading and/or overboard disposal, an entry will be made in the Daily Garbage Log stating the approximate volume, the date of action, name of the vessel, and destination point.
- U. S. Environmental Protection Agency regulations address the disposal of oil and gas operational wastes under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) which provides a framework for the safe disposal of discarded materials, regulating the management of solid and hazardous wastes. The direct disposal of operational wastes into offshore waters is limited under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by the Underground Injection Control program. If any wastes are classified as hazardous, they are to be properly transported using a uniform hazardous waste manifest, documented, and disposed at an approved hazardous waste facility.

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. Kerr-McGee has requested coverage under the Region VI NPDES General Permit GMG290000 for discharges associated with exploration and development activities in East Breaks Block 602 and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

## SECTION E Wastes and Discharge/Disposal Information-Continued

### A. Composition of Solid and Liquid Wastes

The major operational solid waste in the largest quantities generated from the proposed operations will be the drill cuttings, drilling and/or completion fluids. Other associated wastes include waste chemicals, cement wastes, sanitary and domestic waste, trash and debris, ballast water, storage displacement water, rig wash and deck drainage, hydraulic fluids, used oil, oily water and filters, and other miscellaneous minor discharges.

These wastes are generated into categories, being solid waste (trash and debris), nonhazardous oilfield waste (drilling fluids, nonhazardous waste including cement and oil filters), and hazardous wastes (waste paint or thinners).

The type of discharges included in this permit application allow for the following effluents to be discharged overboard, subject to certain limitations, prohibitions and recordkeeping requirements.

#### Overboard Discharges

In accordance with NTL 2003-G17, overboard discharges generated by the activities are not required for submittal in this Plan.

#### Disposed Wastes

The wastes detailed in *Attachment E-1* are those wastes generated by our proposed activities that are disposed of by means of offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Kerr-McGee will manifest these wastes prior to being offloaded from the MODU, and transported to shore for disposal at approved sites regulated by the applicable State. Additionally, Kerr-McGee will comply with any approvals or reporting and recordkeeping requirements imposed by the State where ultimate disposal will occur.

## Waste & Discharge Tables

Attachment E-1 (Public Information)

# Kerr-McGee Oil & Gas Corporation East Breaks Block 206 Examples of Wastes and Discharges Information

Table 1. Disposal Table (Wastes to be disposed of, not discharged)

		T	tes to be disposed of, in	<del>,                                      </del>
Type of Waste	Amount*	Rate per day	Name/Location of	Treatment and/or
Approximate			Disposal Facility	Storage, Transport and
Composition				Disposal Method
Spent oil-based	1,000	200 bbl/day	Newpark Environmental	Transport to shore in barge
drilling fluids and cuttings	bbl/well		Galveston, TX	tanks to a land farm
Spent synthetic- based drilling fluids and cuttings	1,000 bbl/well	200 bbl/day	Newpark Environmental Galveston, TX	Transport to shore base in cuttings boxes on crew boat then inject down hole at offshore waste disposal facility
Norm – contaminated wastes	1 ton	Not applicable	Newpark Environmental Galveston, TX	Transport to a transfer station via dedicated barge
Trash and debris	1,000 ft <sup>3</sup>	3 ft <sup>3</sup> /day	Newpark Environmental Galveston, TX	Transport in storage bins on crew boat to disposal facility
Chemical product wastes	50 bbl/yr	2 bbl/day	Newpark Environmental Galveston, TX	Transport in containers to shore location
Chemical product wastes	100 bbl	2 bbl/day	Newpark Environmental Galveston, TX	Transport in barrels on crew boat to shore location

<sup>\*</sup>can be expressed as a volume, weight, or rate

# SECTION F Oil Spill Response and Chemical Information

### A. Regional Oil Spill Response Plan (OSRP) Information

Effective May 4, 2004, Minerals Management Service approved Kerr-McGee Oil & Gas Corporation (Kerr-McGee's) Regional Oil Spill Response Plan (OSRP). A modification to the Regional Oil Spill Response Plan was submitted on November 2, 2004. Kerr-McGee Oil & Gas Corporation and Westport Resources Corporation are the entities covered under this OSRP. Activities proposed in this Supplemental Exploration Plan will be covered by the Regional OSRP.

### B. Oil Spill Removal Organizations (OSRO)

Kerr-McGee utilizes Clean Gulf Associates (CGA) as its primary provider for equipment, which is an industry cooperative owning an inventory of oil spill clean-up equipment. CGA is supported by the Marine Spill Response Corporation's (MSRC), which is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. The MSRC STARS network provides for the closest available personnel, as well as an MSRC supervisor to operate the equipment.

### C. Worst-Case Scenario Comparison (WCD)

Category	Current Regional OSRP WCD	Proposed Exploration Plan WCD
Type of Activity	Drilling/Completion/Testing	Drilling/Completion/Testing
Facility Surface Location	Grand Isle Block 106	East Breaks Block 602
Facility Description	Semi-Submersible	MODU
Distance to Nearest Shoreline (Miles)	50 miles	145 miles
Volume: Storage Tanks (total) Facility Piping (total) Lease Term Pipeline		
Uncontrolled Blowout (day) Potential 24 Hour Volume (Bbls.)	10,000	2,500
Type of Liquid Hydrocarbon	Oil	Crude
API Gravity	43°	46°

# SECTION F Oil Spill Response and Chemical Information-Continued

Due to the estimated flow rates from an exploratory well blowout are speculative and temporary in nature, Kerr-McGee will not modify their Regional OSRP to change the WCD.

Since Kerr-McGee has the capability to respond to the worst-case discharge (WCD) spill scenario included in its Regional OSRP modified on November 2, 2004, and since the worst-case scenario determined for our EP does not replace the worst-case scenario in our Regional OSRP, I hereby certify that Kerr-McGee 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 SEP.

### D. Facility Tanks, Production Vessels

The following table details the *tanks* (capacity greater than 25 bbls. or more) to be used to support the proposed activities (MODU and barges):

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil	MODU	250	2	500	38° (Diesel)

### E. Spill Response Sites

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

### F. Diesel Oil Supply Vessels

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

### G. Support Vessel Fuel Tanks

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

## H. Produced Liquid Hydrocarbon Transportation Vessels

Kerr-McGee is proposing to conduct well testing operations on the proposed well locations. This process will include flaring the produced gas hydrocarbons and burning the liquid hydrocarbons.

### I. Oil and Synthetic-Based Drilling Fluids

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

# SECTION F Oil Spill Response and Chemical Information (Continued)

### J. Oil Characteristics

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

#### I. Blowout Scenario

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

### L. Spill Discussion for NEPA Analysis

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

## M. Pollution Prevention Measures

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

### N. FGBNMS Monitoring Plans

According to NTL 2003-G17, this section of the Plan is not applicable to the proposed operations.

## SECTION G Air Emissions Information

The primary air pollutants associated with OCS exploration activities are:

- Carbon Monoxide
- Particulate Matter
- Sulphur Oxides
- Nitrogen Oxides
- Volatile Organic Compounds

These offshore air emissions result mainly from the drilling rig operations, helicopters, and support 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.

#### A. Calculating Emissions

Included as Attachment G-1 is the Projected Air Quality Emissions Report (Form MMS-138) for Plan Emissions, Complex addressing drilling, completion and potential testing operations utilizing a typical semi-submersible type drilling unit, with related support vessels and construction barge information.

### B. Screening Questions

As evidenced by Attachment G-1, the worksheets were completed based on flaring and burning operations.

#### C. Emission Reduction Measures

The projected air emissions are within the exemption level; therefore, no emission reduction measures are being proposed.

#### D. Verification of Non-Default Emissions Factors

Kerr-McGee has elected to use the default emission factors as provided in Attachment G-1.

## E. Non-Exempt Activities

The proposed activities are within the exemption amount as provided in Attachment G-1.

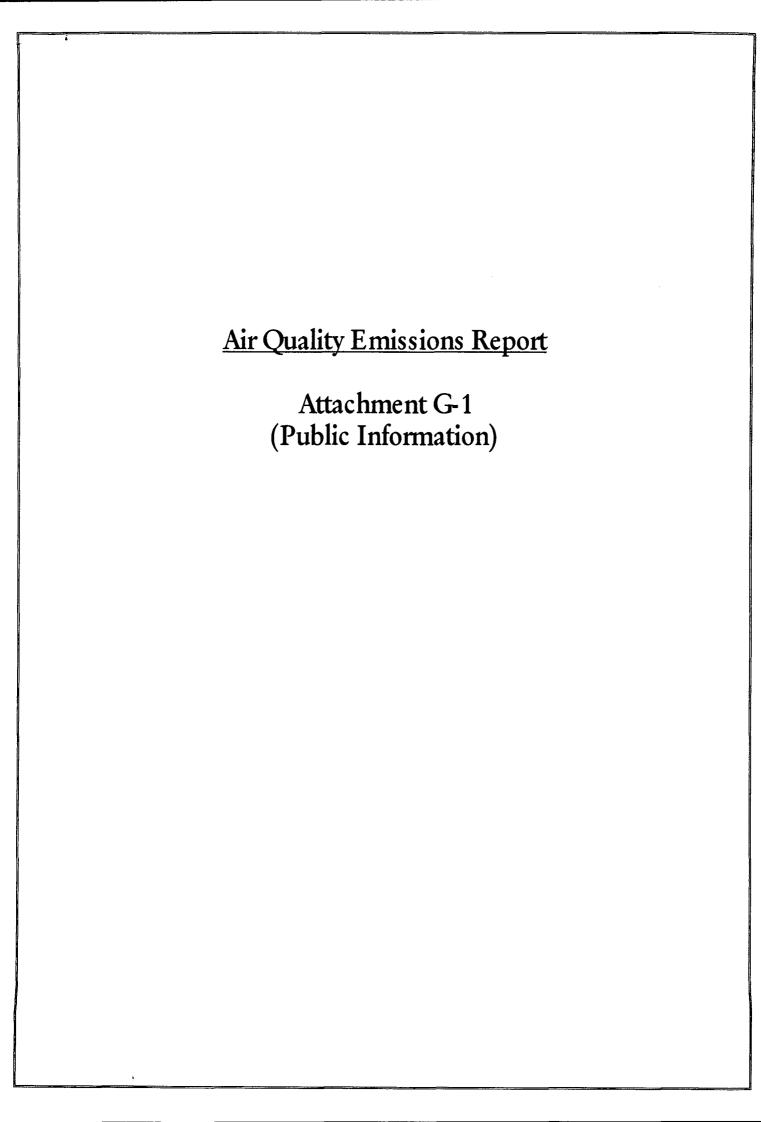
# SECTION G Air Emissions Information-Continued

## F. Review of Activities with Emissions Below the Exemption Level

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area, as provided in *Attachment G-1*.

### G. Modeling Report

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area.



**EXPLORATION PLAN (EP)** 

	EXPLORATION PLAN (EP)	OMB Control No. 1010-0049
COMPANY	AIR QUALITY SCREENING CHECKLIST  Kerr-McGee Oil & Gas Corporation	OMB Approval Expires: September 30, 2003
AREA	East Breaks	

COMPANY	Kerr-McGee Oil & Gas Corporation
AREA	East Breaks
BLOCK	602
LEASE	OCS-G 14205
RIG	Sem-Submersible
WELL	L, M, N and O
COMPANY CONTACT	Christine Groth, R.E.M. Solutions, Inc.
TELEPHONE NO.	28.492.8562
REMARKS	Drill, complete and test four wells.

Screening Questions for EP's	Yes	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: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the		X
other air pollutants (where D = distance to shore in miles)?		
Does your emission calculations include any emission reduction measures or modified emission factors?		Х
Are your proposed exploration activities located east of 87.5° W longitude?		Χ
Do you expect to encounter H <sub>2</sub> S at concentrations greater than 20 parts per million (ppm)?		Х
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?	х	
Do you propose to burn produced hydrocarbon liquids?	Х	

Air Pollutant	Plan Emission Amounts <sup>1</sup> (tons)	Calculated Exemption Amounts <sup>2</sup> (tons)	Calculated Complex Total Emission Amounts <sup>3</sup> (tons)
Carbon monoxide (CO)	253.96	93840.63	NA
Particulate matter (PM)	33.22	4828.50	NA
Sulphur dioxide (SO <sub>2</sub> )	157.30	4828.50	NA
Nitrogen oxides (NOx)	1130.83	4828.50	NA
Volatile organic compounds (VOC)	35.03	4828.50	NA

For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.

List the exemption amounts in your proposed activities calculated using the formulas in 30 CFR 250.303(d).

List the complex total emissions associated with your proposed activities calculated from the worksheets.

#### **EMISSIONS CALCULATIONS 1ST YEAR**

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	I i		CONTACT		PHONE	REMARKS					-
	East Breaks	602	OCS-G 14205	em-Submersibl	L, M, N and	5			, R.E.M. Solution							
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	TIME		MAXIMU	M POUNDS P	R HOUR			ES	TIMATED TO	NS	
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	СО	PM	SOx	NOx	voc	CO
DRILLING	PRIME MOVER>600hp diesel	26400	1275.12	30602.88	24	140	18.61	85.36	639.65	19.19	139.56	31,26	143.41	1074.61	32.24	234.46
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	2065	99.7395	2393.75	8	140	1.46	6.68	50.03	1.50	10.92	0.82	3.74	28.02	0.84	6.11
	VESSELS>600hp diesel(supply)	2065	99.7395	2393.75	10	60	1.46	6.68	50.03	1.50	10.92	0.44	2.00	15.01	0.45	3.27
	VESSELS>600hp diesel(tugs)	4200	202.86	4868.64	12	16	2.96	13.58	101.76	3.05	22.20	0.28	1.30	9.77	0.29	2.13
	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0 '	0	0.00	0	) 0 )	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT		<del>  </del>		<u> </u>			<u> </u>	<del></del>		<u> </u>	<u> </u>	
	TANK-	0	AND THE RESERVE OF THE PARTY OF	(	0	0				0.00					0.00	
	OIL BURN	250			24	8	4.38	71.15	20.83	0.10	2.19	0.42	6.83	2.00	0.00	0.21
WELL TEST	GAS FLARE	. "ä	208333.33		24	8		0.12	14.87	12.56	80.94		0.01	1.43	1.21	7.77
2005	YEAR TOTAL						28.85	183.57	877.18	37.91	266.72	33.22	157.30	1130.83	35.03	253.96
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES			L	<u> </u>	L!	L	<u> </u>	<u> </u>			4828.50	4828.50	4828.50	4828.50	93840.63
	145.0											1		1		1

#### SUMMARY

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Kerr-McGee Oil & Gas Corporation	East Breaks	602 OCS-G 14205		Sem-Submersible	L, M, N and O
Year		Emitted		Substance	
	РМ	SOx	NOx	voc	со
2005	33.22	157.30	1130.83	35.03	253.96
Allowable	4828.50	4828.50	4828.50	4828.50	93840.63

## SECTION H Environmental Impact Analysis

#### A. IMPACT PRODUCING FACTORS (IPF'S)

The following matrix is utilized to identify the environmental resources that could be impacted by these IPF's. An "x" has been marked for each IPF category that Kerr-McGee has determined may impact a particular environmental resource as a result of the proposed activities. For those cells which are footnoted, a statement is provided as to the applicability of the proposed activities, and where there may be an effect, an analysis of the effect is provided.

Environmental Resources	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, other discharges	Physical Disturbances To the seafloor	Wastes Sent to Shore for	Accidents (e.g. oil spills, chemical spills,	Other IPF's identified
	light, etc.)	to the water column or seafloor	(rig or anchor emplacement, etc.)	Treatment Or disposal	H2S releases)	identified
Site Specific at Offshore						
Location				-		
Designated topographic				-		T
feature						
Pinnacle Trend area live						
bottoms			,		}	
Eastern Gulf live bottoms						<del> </del>
Chemosynthetic						
communities					1	
Water quality		X			X	
Fisheries		X			X	
Marine mammals	X	X			X	
Sea turtles	X	X	,		X	
Air quality						
Shipwreck sites (known or						
potential)				1	1	ł
Prehistoric archaeological						
sites						
Vicinity of Offshore						
Location						
Essential fish habitat					X	
Marine and pelagic birds					X	
Public health and safety						
Coastal and Onshore						
Beaches					X	
Wetlands					X	1
Shorebirds and coastal						1
nesting birds					X	
Coastal wildlife refuges					X	
Wilderness areas					X	
Other Resources						

#### B. VICINITY OF OFFSHORE LOCATION ANALYSES

#### 1. Designated Topographic Features

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to topographic features. The proposed surface disturbances within East Breaks Block 602 are located approximately 27 miles away from the closest designated topographic feature (West Flower Garden Bank). The crests of designated topographic features in the northern Gulf are found below 10 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by the currents moving around the bank; thereby avoiding the sessile biota.

#### 2. Pinnacle Trend Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to a pinnacle trend area. The proposed surface disturbances within East Breaks Block 602 are located a significant distance (>100 miles) from the closest pinnacle trend live bottom stipulated block. The crests of the pinnacle trend area are much deeper than 20 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and thus not impacting the pinnacles.

#### 3. Eastern Gulf Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to Eastern Gulf live bottoms. The proposed surface disturbances within East Breaks Block 602 are located a significant distance (>100 miles) from the closest pinnacle Eastern Gulf live bottom stipulated block. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and would not be expected to cause adverse impacts to Eastern Gulf live bottoms because of the depth of the features and dilutions of spills.

### 4. Chemosynthetic Communities

Water depths in East Breaks Block 602 range from 3500 feet to 3517 feet. The proposed activities are not located within the vicinity of any known chemosynthetic communities.

#### 5. Water Quality

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity could potentially cause impacts to water quality. It is unlikely that an accidental oil spill release would occur from the proposed activities. In the event of such a 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.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Kerr-McGee will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

#### 6. Fisheries

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity may potentially cause some detrimental effects on fisheries. It is unlikely a spill would occur; however, such a release in open waters closed to mobile adult finfish or shellfish would likely be sublethal 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.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Kerr-McGee will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

#### 7. Marine Mammals

As a result of the proposed activities, marine mammals may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharge activity, and loss of trash and debris. Chronic and sporadic sublethal 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 accidental oil spill, chance collisions with service vessels and ingestion of plastic material.

The net results 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, 1980). Collisions between cetaceans and ship could cause serious injury or death (Laist 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.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Kerr-McGee will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Kerr-McGee and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

#### 8. Sea Turtles

As a result of the proposed activities, sea turtles may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharges, and loss of trash and debris. 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 drilling rigs, production facilities and service vessels. Drilling rigs and project vessels (construction barges) produce noise that could disrupt normal behavior patterns and crease some stress to sea turtles, making them more susceptible to disease. Accidental oil spill releases are potential threats which could have lethal effects on turtles. Contact and/or consumption of this released material could seriously affect individual sea turtles. Most OCS related impacts on sea turtles are expected to be sublethal. Chronic and/or avoidance of effected areas could cause declines in survival or productivity, resulting in gradual population declines.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Kerr-McGee will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements.

As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Kerr-McGee and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

#### 9. Air Quality

The proposed activities are located approximately 145 miles to the nearest shoreline. There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Air quality analyses of the proposed activities are below the MMS exemption level.

#### 10. Shipwreck Site (Known or Potential)

There are no physical disturbances to the seafloor which could impact known or potential shipwreck sites, as the review of high resolution shallow hazards data indicate there are no known or potential shipwreck sites located within the surveyed area.

### 11. Prehistoric Archaeological Sites

There are no physical disturbances to the seafloor which could cause impacts to prehistoric archaeological sites, as the review of high resolution shallow hazards data and supporting studies did not reflect the occurrence of prehistoric archaeological sites.

### Site Specific Offshore Location Analyses

#### 1. Essential Fish Habitat

An accidental oil spill that may occur as a result of the proposed activities has potential to cause some detrimental effects on essential fish habitat. It is unlikely that an accidental oil spill release would occur; however, if a spill were to occur in close proximity to finfish or shellfish, the effects would likely be sublethal 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.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

#### 2. Marine and Pelagic Birds

An accidental oil spill that may occur as a result of the proposed activities has potential to impact marine and pelagic birds, by the birds coming into contact with the released oil. It is unlikely that an accidental oil spill release would occur.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

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

There are no anticipated IPF's from the proposed activities that could impact the public health and safety. Kerr-McGee has requested MMS approval to classify the proposed objective area as absent of hydrogen sulfide.

### Coastal and Onshore Analyses

#### 1. Beaches

An accidental oil spill release from the proposed activities could cause impacts to beaches. However, due to the distance from shore (approximately 145 miles), and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

#### 2. Wetlands

An accidental oil spill release from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (approximately 145 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA/EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

#### 3. Shore Birds and Coastal Nesting Birds

An accidental oil spill release from the proposed activities could cause impacts to shore birds and coastal nesting birds. However, due to the distance from shore (approximately 145 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

### 4. Coastal Wildlife Refuges

An accidental oil spill release from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (approximately 145 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

#### 5. Wilderness Areas

An accidental oil spill release from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (approximately 145 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2002-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Kerr-McGee's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

#### Other Identified Environmental Resources

Kerr-McGee has not identified any other environmental resources other than those addressed above.

#### **Impacts on Proposed Activities**

No impacts are expected on the proposed activities as a result of taking into consideration the site specific environmental conditions.

A High Resolution Shallow Hazards Survey was conducted, a report prepared in accordance with NTL 2002-G01 and NTL 98-20.

Based on the analysis of the referenced data, there are no surface or subsurface geological and manmade features and conditions that may adversely affect the proposed activities. Kerr-McGee will institute procedures to avoid pipelines and abandoned wells within the vicinity of the proposed operations.

#### <u>Alternatives</u>

Kerr-McGee did not consider any alternatives to reduce environmental impacts as a result of the proposed activities.

## Mitigation Measures

Kerr-McGee will not implement any mitigation measures to avoid, diminish, or eliminate potential environmental resources, other than those required by regulation and policy.

## Consultation

Kerr-McGee has not contacted any agencies or persons for consultation regarding potential impacts associated with the proposed activities. Therefore, a list of such entities is not being provided.

#### **References**

The following documents were utilized in preparing the Environmental Impact Assessment:

Document	Author	Dated
Shallow Hazards Survey	John E. Chance	1998
MMS Environmental Impact Statement Report No. 2002-15	Minerals Management Service	2002
NTL 2003-N06 "Supplemental Bond Procedures	Minerals Management Service	2003
NTL 2004-G01 "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program"	Minerals Management Service	2004
NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species"	Minerals Management Service	2003
NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination"	Minerals Management Service	2003
NTL 2002-G09 "Regional and Subregional Oil Spill Response Plans"	Minerals Management Service	2002
NTL 2003-G17 "Guidance for Submitting Exploration Plans and Development Operations Coordination Documents"	Minerals Management Service	2003
NTL 2002-G01 "Archaeological Resource Surveys and Reports"	Minerals Management Service	2002
NTL 2000-G16 "Guidelines for General Lease Surety Bonds"	Minerals Management Service	2000
NTL 98-20 "Shallow Hazards Survey Requirements"	Minerals Management Service	1998
NTL 98-16 "Hydrogen Sulfide Requirements"	Minerals Management Service	1998
NPDES General Permit GMG290000	EPA - Region VI	1998
Regional Oil Spill Response Plan	Kerr-McGee Energy, Inc.	2004

# SECTION I CZM Consistency

Under direction of the Coastal Zone Management Act (CMZA), 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.

Coastal Zone Management Consistency is not required for the proposed supplemental operations.