UNITED STATES GOVERNMENT MEMORANDUM

March 29, 2004

To:

Public Information (MS 5034)

From:

Plan Coordinator, FO, Plans Section (MS

5231)

Subject:

Public Information copy of plan

Control #

S-06374

Type

Supplemental Development Operations Coordinations Document

Lease(s)

OCS-G02428 Block - A 350 High Island Area

Operator -

Apache Corporation

Description -

Wells A, B, C, D, and E

Rig Type

JACKUP

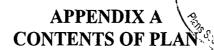
Attached is a copy of the subject plan.

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

Karen Dunlap Plan Coordinator

Laren Durles

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G02428/HI/A 350	6850 FSL, 10800 FWL	G02428/HI/A 350
WELL/B	G02428/HI/A 350	6867 FSL, 10833 FWL	G02428/HI/A 350
WELL/C	G02428/HI/A 350	6850 FSL, 10825 FWL	G02428/HI/A 350
WELL/D	G02428/HI/A 350	6845 FSL, 10819 FWL	G02428/HI/A 350
WELL/E	G02428/HI/A 350	6860 FSL, 10810 FWL	G02428/HI/A 350



Apache Corporation (Apache) is the designated operator of the subject oil and gas lease.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for the drilling and completion of five (5) wells from the existing A platform and commencement of production from the target sands as detailed in Appendix C of this DOCD.

Appendix J contains a Plan Information Form, which provides a description of proposed activities and a tentative schedule.

(B) LOCATION

Included as *Attachment A-1* is a map showing the proposed locations of the wells. A bathymetry map has been previously submitted. Additional well information is included in Appendix J, on the Plan Information Form.

(C) DRILLING UNIT

A description of the drilling unit is included in Appendix J, on the Plan Information Form. The rig specifications will be made a part of the Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, welding procedures, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, and G; and as further clarified by MMS Notices to Lessees, and current policy making invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times.

Operator will ensure employees and contractor personnel engaged in well control or production safety operations understand and can properly perform their duties.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

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

(D) PRODUCTION FACILITIES

The subject wells will be protected by the existing A platform in High Island Block A-350. The A platform is an 8 pile fixed production platform.

Produced hydrocarbons will flow via the existing lease term pipeline from the A platform to a 24" subsea tie-in to the HIOS pipeline system, all located in High Island Block A-350. No new nearshore or onshore pipelines or facilities will be constructed.

Apache Corporation Supplemental DOCD High Island Block A-350 (OCS-G 2428) Page A-1 March 6, 2004 discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our DOCD.

5. FACILITY TANKS, PRODUCTION VESSELS All facility tanks of 25 barrels or more.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil (Marine Diesel)	Rig	5289	1	5289	_
Production	N/A				-

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Given the distance from shore (115 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

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

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

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

4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (115 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

PLAN INFORMATION FORM

and the second		GE	NERAI	LINE	ORM	ΙAΊ	TION							
Type of OCS Plan:		Exploration (EP)	Plan	X	Deve	lopi	ment Operation	ons C	Coordi	nation	Docu	ment (DOC	CD)
Company Name:	Apache Co	rporation			MMS	S Op	perator Numb	er:	00	105				
Address:	2000 Post (Oak Blvd.	Contac	t Perso	on: C	her	yl Powell						,	
	Suite 100	:	Phone 1	Numb	er: 2	81-	578-3388							
	Houston, T	x 77056	Email A	Addre	ss: c	hery	yl.powell@jc	ctean	n.com					
Lease: G02428	Area: Hig	gh Island	Blo	ck:	A-350		Project Nat	ne (I	f App	licable): N	I/A		
Objective(s): Oil	Gas □Sı	ılphur 🔲 S		nshore ase:	Can	ieroi	n, LA		Distar (Miles	ice to C s): 116	losest	Land		
	Desc	ription of I	roposed	d Acti	vities (Ma	rk all that a	pply))	-				
Exploration drilling					D D	evel	opment drilli	ng						
					In	stall	lation of prod	uctio	n plat	form				
Well test flaring				1	In	stall	lation of prod	uctio	n faci	lities				
Installation of well pro	tection stru	icture			In	stall	lation of satel	lite s	tructu	re				
Installation of subseav	wellheads a	nd/or manif	olds		In	stall	lation of lease	e tern	n pipe	lines				
Temporary well aband	onment				⊠ Co	omn	nence produc	tion						
Other (specify and des	cribe)													
Do you propose to use new	or unusual	technology	to cond	uct yo	ur acti	vitie	es?					Yes	X	No
Do you propose any facility	y that will s	erve as a ho	st facilit	y for (deepwa	ater	subsea devel	opme	ent?			Yes	X	No
Do you propose any activit	ies that may	y disturb an	MMS-d	esigna	ated hig	gh-p	probability are	chaec	ologica	al		Yes	X	No
area?						-				-				
				uie oi	Propo	sea	Activities ,							
	Prop	osed Activ	ity						tart Date	En	d Dat	e	No. Day	
Drill and complete propose								5/15	5/04	06/	16/04	33		
Drill and complete propose	d well B			-				06/1	17/04	07/	19/04	33		
Drill and complete propose	d well C		-					07/2	20/04	08/2	23/04	35		
Drill and complete propose								08/2	24/04	09/2	28/04	36)	
Drill and complete propose								09/2	29/04	11/0	01/04	34		
Commencement of product	tion							11/0	02/04	12/3	31/07	3	Year	s
Descrip	tion of Dril	ling Rig	40.0				Descript	ion o	f Pro	ductio	n Plat	form	*	
		Drillship				C	aisson			Tension			m	
Gorilla Jackup		Platform ri	g			W	ell protector			Compli	ant to	wer		
Semisubmersible		Submersib	le		\boxtimes	Fi	ixed platform			Guyed				
DP Semisubmersible	Desc	Other (Atta cription)	ach			Sı	ubsea manifo	ld		Floatin	g prod	luction	ı sys	tem
Drilling Rig Name (If						Sı	par			Other (Attacl	ı desc	riptic	on)
		Descr	iption o	f Leas	se Ter	m P	ipelines							
From (Facility/High Isla	nd Block	T0 (Facil	ity/High	Islan	nd Bloc	ek	Diamete	r	Lei	ngth		Proc	luct	<u> </u>
A-350)		,	A-35				(inches)		(F	eet)				
Existing														

COMPANY	′	APACHE CORPORATION
AREA		HIGH ISLAND
BLOCK		A-350
LEASE		G 2428
PLATFOR	M	A
WELL		A THRU E
COMPANY	CONTACT	CHERYL POWELL
TELEPHO	NE NO.	(281) 578-3388
REMARKS	3	DRILL, COMPLETE & PRODUCE WELL LOCATIONS A THRU E.
		COMPLEX TOTAL EMISSIONS
"Yes"	"No"	Air Quality Screening Questions
	x	 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 = 3400²³ for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)? Do your emission calculations include any emission reduction measures or modified emission factors?
x	×	3. Does or will the facility complex associated with your proposed developmer and production activities process production from eight or more wells? 4. Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million?
	×	5. Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?
	×	6. Do you propose to burn produced hydrocarbon liquids?
	×	7. Are your proposed development and production activities located within 25 miles from shore?
	×	8. Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

If ALL questions are answered "No":

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.

EAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2022	T	

OMB Control No. xxxx-xxxx **Expiration Date: Pending**

Fuel Usage Conversion Factors	Natural Gas 1	urbines	Natural Gas E	ngines	Diesel Reci	p. Engine	REF.	DATE
L	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	NOv	I voc I	СО	REF.	DATE
Equipment/Emission Factors	uriits	PIVI	30x	NOx	000	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					
APACHE CORPORATIO	HIGH ISLAND	A-350	G 2428	A	A THRU E			CHERYL POW	ELL	(281) 578-3388	#REF!					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	TIME		MAXIMUI	M POUNDS F	ER 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	co	PM	SOx	NOx	voc	co
DRILLING	PRIME MOVER>600hp diesel	16975	819.8925	19677.42	24	171	11.96	54.89	411.29	12.34	89.74	24.55	112.63	843.96	25.32	184.14
	VESSELS>600hp diesel(crew)	2265	109.3995	2625.59	6	73	1.60	7.32	54.88	1.65	11.97	0.35	1.61	12.07	0.36	2.63
	VESSELS>600hp diesel(supply)	2265	109.3995	2625,59	10	73	1.60	7.32	54.88	1.65	11.97	0.58	2.68	20.11	0.60	4.39
	VESSELS>600hp diesel(tugs)	8400	405.72	9737.28	18	2	5.92	27.16	203.52	6.11	44.41	0.11	0.49	3.66	0.11	0.80
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0.00	Ó	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	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	0.1
FACILITY	DERRICK BARGE 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
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 - CRANE	100	4.83	115.92	1	52	0.22	0.32	3.08	0.25	0.67	0.01	0.01	0.08	0.01	0.02
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	7.32	54.88	1.65	11.97	0.42	1.91	14.31	0.43	3.12
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	365	1	0.02	12.12	0.09	7.74	i '	0,10	53.08	0.41	33.89
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	365		0.01	2.86	0.02	1.83		0.02	12.54	0.10	8.01
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0	l .	0.00	0.00	0.00	0.00	Ì	0.00	0.00	0.00	0.00
	RECIP 4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas + GLYCOL REBOILER	1.25	1190.48	28571.43	24	365	0.01	0.00	0.12	0.01	0.10	0.04	0.00	0.52	0.03	0.44
	MISC.	BPD	SCF/HR	COUNT				· · · · · · · · · · · · · · · · · · ·	···							
	TANK-	0			0	0				0.00		•			0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		O		0	0			1	0.00					0.00	
	FUGITIVES-		1.04166667	2200.0		365 365	1	1	1	1.10			l '	1	4.82	İ
	GLYCOL STILL VENT-	-	1.04166667		24		L			0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	U		0.00	0.00	0.00	0.00		00,00	0.00	0.00	0.00
2004	YEAR TOTAL		•				22.90	104.37	797.63	24.85	180.39	26.06	119.46	960.33	32.18	237.4
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES		L	ا ال			L	L	I	J		3862.80	3862.80	3862.80	3862.80	80869,40
	116.0													L		

AIR EMISSIONS CALCULATIONS - SECOND YEAR

PIPELINE PINSTALLATION SI	EQUIPMENT Diesel Engines Nat. Gas Engines Burners PRIME MOVER>600hp diesel PURSELS>600hp diesel(supply) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(supply) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel SUPPORT VESSEL diesel	A-350 RATING HP HP MMBTU/HR 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	A ACT. FUEL GAL/D SCF/D 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	HR/D 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	DAYS 0.00 0.00 0.00 0.00 0.00 0.00	PM 0.00 0.00 0.00 0.00 0.00	SOx 0.00 0.00 0.00 0.00	NOX 0.00 0.00 0.00 0.00	(281) 578-3388 ER HOUR VOC 0.00 0.00 0.00 0.00	CO 0.00 0.00 0.00	PM 0.00 0.00 0.00 0.00	SOx 0.00 0.00 0.00	NOx 0.00 0.00 0.00	VOC 0.00 0.00 0.00	0.00 0.00
OPERATIONS ORILLING PI	EQUIPMENT Diesel Engines Nat. Gas Engines Burners PRIME MOVER>600hp diesel BURNER diesel BURNER diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel PIPELINE BURY BARGE diesel	HP HP MMBTU/HR 0 0 0 0 0 0 0 0	GAL/HR SCF/HR SCF/HR 0 0 0 0 0	GAL/D SCF/D SCF/D 0.00 0.00 0.00 0.00 0.00 0.00 0.00	HR/D 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	SOx 0.00 0.00 0.00 0.00	NOx 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	SOx 0.00 0.00 0.00	NOx 0.00 0.00	VOC 0.00 0.00	0.00 0,00
PIPELINE PINSTALLATION SI	Diesel Engines Nat. Gas Engines Burners PRIME MOVER>600hp diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel PIPELINE BURY BARGE diesel	HP HP MMBTU/HR 0 0 0 0 0 0 0 0	SCF/HR SCF/HR 0 0 0 0 0 0	SCF/D SCF/D 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0 0	0.00 0.00 0.00 0.00 0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00	0.00 0.00	0.00 0,00
PIPELINE PINSTALLATION SI	Nat. Gas Engines Burners PRIME MOVER>600hp diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	MMBTU/HR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SCF/HR 0 0 0 0 0	SCF/D 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0 0	0.00 0.00 0.00 0.00 0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00	0.00 0.00	0.00 0,00
PIPELINE PINSTALLATION SI	PUTTER PRIME MOVER>600hp diesel BURNER diesel BURNER diesel BUKLIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0 0 0 0 0 0 0	0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0 0	0.00 0.00 0.00 0.00 0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00	0.00 0.00	0.00 0,00
PIPELINE PINSTALLATION SI	PRIME MOVER>600hp diesel BURNER diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(supply) PIPELINE LAY BARGE diesel PIPELINE BURY BARGE diesel	0 0 0 0 0 0 0	0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0 0 0.00	0.00 0.00 0.00 0	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00	0,00
PIPELINE PINSTALLATION SI	PRIME MOVER>600hp diesel PRIME MOVER>600hp diesel PRIME MOVER>600hp diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel BUPPORT VESSEL diesel	0 0 0 0 0 0	0 0 0 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0 0.00 0.00	0.00 0.00 0 0.00	0.00 0.00 0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	0.00	0.00 0.00			
PIPELINE PINSTALLATION SISTALLATION SISTALLA	PRIME MOVER>600hp diesel PRIME MOVER>600hp diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel PIPELINE BURY BARGE diesel	0 0 0 0	0 0 0 0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0 0.00 0.00	0.00 0.00 0 0.00	0.00 0.00 0.00	0.00			0.00			0.00	0.00	1 000
PIPELINE PINSTALLATION SI SI VI	PRIME MOVER>600hp diesel BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0 0 0 0	0 0 0 0	0.00 0.00 0.00 0.00	0.00 0 0.00 0.00	0.00 0 0.00	0.00 0.00	0.00								0.00
PIPELINE PINSTALLATION SI	BURNER diesel AUXILIARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0 0	0 0 0	0.00 0.00 0.00	0 0.00 0.00	0.00	1	1		1 0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE PI NSTALLATION SI PI SI	AUXIUARY EQUIP<600hp diesel VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0 0	0 0 0	0.00 0.00	0.00		1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE PI NSTALLATION SI PI SI	VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0	0 0 0	0.00 0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE PI NSTALLATION SI PI SI VI	VESSELS>600hp diesel(supply) VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0	o	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE PI NSTALLATION SI PI SI VI	VESSELS>600hp diesel(tugs) PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	0				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE PI NSTALLATION SI PI SI	PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	_		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NSTALLATION SI PI SI VI	SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	_		I		1	1		1	1	5.00		1	3.55		1
NSTALLATION SI PI SI VI	SUPPORT VESSEL diesel PIPELINE BURY BARGE diesel	_	0	0.00	0	0	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.
PI SI VI	PIPELINE BURY BARGE diesel		١٥	0.00	Ĭŏ	l ŏ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
SI VI		0	Ìò	0.00	lõ	Ò	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
vi		ō	Ò	0.00	0	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)	ō	Ō	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	VESSELS>600hp diesel(supply)	ň	Ö	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Legales descrip dissertables,				,			3.55		1	3,00					1
ACILITY D	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
	MATERIAL TUG diesel	ō	o	0.00	l o	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)	Ō	0	0.00	0.00	0.00	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	o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
["		_	_													
PRODUCTION R	RECIP.<600hp diesel - CRANE	100	4.83	115.92	1	52	0.22	0.32	3.08	0.25	0.67	0.01	0.01	0.08	0.01	0.02
	RECIP >600hp diesel	0	0	0.00	O	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
s	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	7.32	54.88	1.65	11.97	0.42	1.91	14.31	0.43	3.12
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	365	l l	0.02	12.12	0.09	7.74		0.10	53.08	0.41	33.89
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	365	1	0.01	2.86	0.02	1.83		0.02	12.54	0.10	8.01
R	RECIP.2 cycle lean nat gas	0	0	0.00	0	0))	0.00	0.00	0.00	0.00	1	0.00	0.00	0.00	0.00
R	RECIP 4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
R	RECIP.4 cycle rich nat gas	0	0	0.00	l 0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	SURNER hat gas - GLYCOL REBOILER	1.25	1190.48	28571.43	24	365	0.01	0.00	0.12	0.01	0.10	0.04	0.00	0.52	0.03	0.44
M	MISC.	BPD	SCF/HR	COUNT	-											
T7	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Pi	PROCESS VENT-		0		0	0	 	\ \ \ \ \		0.00	!		1		0.00	1
F	FUGITIVES-			2200.0		365				1.10					4.82	[
lg	GLYCOL STILL VENT-		1.04166667		24	365				0.00					0.00	L
ORILLING O	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 G	GAS FLARE		0		0	0	il	0.00	0.00	0.00	0.00		0.00	0.00	0.00	_0.00
i i																
2005 THRU 2007 Y	YEAR TOTAL					1	1.83	7.68	73.06	3.11	22.31	0.46	2.05	80.53	5.79	45.47
		l			L				L						Ĺ '	1_
EXEMPTION	DISTANCE FROM LAND IN MU SO															
CALCULATION	DISTANCE FROM LAND IN MILES												l agenge l		3862.80	80869.40
	116.0										1	3862.80	3862.80	3862.80	3002.00	

AIR EMISSION CALCULATIONS

OMB Control No. xxxx-xxxx Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
APACHE COR	HIGH ISLAND	A-350	G 2428	А	A THRU E
Year		Emitted		Substance	1
	PM	SOx	NOx	VOC	СО
2004	26.06	119.46	960.33	32.18	237.43
2005	0.46	2.05	80.53	5.79	45.47
2006	0.46	2.05	80.53	5.79	45.47
2007	0.46	2.05	80.53	5.79	45.47
Allowable	3862.80	3862.80	3862.80	3862.80	80869.40

COMPANY		APACHE CORPORATION
AREA		HIGH ISLAND
BLOCK		A-350
LEASE		G 2428
PLATFORM		A
WELL		A THRU E
COMPANY	CONTACT	CHERYL POWELL
TELEPHON	E NO.	(281) 578-3388
REMARKS		DRILL, COMPLETE & PRODUCE WELL LOCATIONS A THRUE.
		PLAN EMISSIONS
"Yes"	"No"	Air Quality Screening Questions
	x x	 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 = 3400²³ for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)? Do your emission calculations include any emission reduction measures or modified emission factors?
×	×	3. Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells? 4. Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million?
	×	Do you propose to flare or vent natural gas in excess of the criteria set forti under 250.1105(a)(2) and (3)?
	×	Do you propose to burn produced hydrocarbon liquids?
	x	7. Are your proposed development and production activities located within 25 miles from shore?
	x	8. Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

If ALL questions are answered "No":

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.

YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2022	1	

AIR EMISSION CUMPUTATION FACTORS

OMB Control No. xxxx-xxxx Expiration Date: Pending

Fuel Usage Conversion Factors	Natural Gas	Furbines	Natural Gas I	Engines	Diesel Rec	ip. Engine	REF.	DATE
<u>L</u>	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					
APACHE CORPORATIO	HIGH ISLAND	A-350	G 2428	A	A THRUE			CHERYL POW	ELL	(281) 578-3388	#REF!					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	TIME		MAXIMU	M POUNDS P	ER 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	CO	P M	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	16975	819.8925	19677.42	24	171	11.96	54.89	411.29	12.34	89.74	24.55	112.63	843.96	25.32	184.14
	VESSELS>600hp diesel(crew)	2265	109.3995	2625.59	6	73	1.60	7.32	54.88	1.65	11.97	0.35	1.61	12.07	0.36	2.63
	VESSELS>600hp diesel(supply)	2265	109.3995	2625.59	10	73	1.60	7.32	54.88	1.65	11.97	0.58	2.67	20.03	0.60	4.37
	VESSELS>600hp diesel(tugs)	8400	405.72	9737.28	18	2	5.92	27.16	203.52	6.11	44.41	0.11	0.49	3.66	0.11	0.80
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0.00	ō	0	0.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00
INSTALLATION		0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	0	0.00	n	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	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	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0		o i	0	ll .				1	1			0.00	
	VESSELS>600hp diesel(supply)	U	U	0.00	U		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.
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
1	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	C.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 - CRANE	100	4.83	115.92	1	9	0.22	0.32	3.08	0.25	0.67	0.00	0.00	0.01	0.00	0.00
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	9	1.60	7.32	54.88	1.65	11.97	0.07	0.33	2.47	0.07	0.54
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	60		0.02	12.12	0.09	7.74		0.02	8.73	0.07	5.57
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	60	l	0.01	2.86	0.02	1.83	Ĭ	0.00	2.06	0.02	1.32
<u>}</u>	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Ì	RECIP 4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0,00	0.00	0.00
1	RECIP 4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER natigas - CLYCOL REBOILER	1.25	1190.48	28571.43	24	60	0.01	0.00	0.12	0.01	0.10	0.01	0.00	0.09	0.00	0.07
ŀ	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0 00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0	1)	ì	0.00		l)	0.00	
	FUGITIVES-			2200.0		60		1	•	1.10					0.79	
	GLYCOL STILL VENT-		1.04166667		24	60			i	0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2004	YEAR TOTAL				j		22.90	104.37	797.63	24.85	180.39	25.67	117.76	893.08	27.35	199.4
				L			L	L	<u> </u>	L	<u> </u>					
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											3862.80	3862.80	3862.80	3862.80	80869.40
	116.0											L				

AIR EMISSIONS CALCULATIONS - SECOND YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	T	1	CONTACT		PHONE	REMARKS					
APACHE CORPORATION		A-350	G 2428	A	A THRU E			CHERYL POW	ELL.	(281) 578-3388	#REF!					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL	RUN	TIME			A POUNDS P	ER HOUR	` 	T	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	CO	PM	SOx	NOx	VOC	co
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	Ö	٥	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	ō	o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	Ö	o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	o			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	ا	0	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	ĺ	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	ō	Ō	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		1	-		1	}	1	1		1	1	1			}	1
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	7
NSTALLATION	SUPPORT VESSEL diesel	Ö	Ŏ	0.00	0	l o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	lo	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		İ	,		1	}	H	1	1	1		Ä	'		1	i
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
	MATERIAL TUG diesel	0	l 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
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	l				ł						<u> </u>				
PRODUCTION	RECIP.<600hp diesel - CRANE	100	4.83	115.92	1	52	0.22	0.32	3.08	0.25	0.67	0.01	0.01	0.08	0.01	0.02
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	7.32	54.88	1.65	11.97	0.42	1.91	14.31	0.43	3.12
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	365	H	0.02	12.12	0.09	7.74		0.10	53.08	0.41	33.89
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	365		0.01	2.86	0.02	1.83	1	0.02	12.54	0.10	8.01
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP 4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00	ŀ	0.00	0.00	0.00	0.00
	RECIP 4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER hat gas - GLYCOL REBOILER	1.25	1190.48	28571.43	24	365	0.01	0.00	0.12	0.01	0.10	0.04	0.00	0.52	0.03	0.44
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0	,		0	0	ŀ	1 .		0.00		<u> </u>			0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00	1	0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0) 0	H	1	1	0.00	ì	1			0.00	
	FUGITIVES-			2200.0	,8888888888	365	J.		I	1.10				1	4.82	
	GLYCOL STILL VENT-		1.04166667		24	365		<u></u>		0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE				0	0	 	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2005 THRU 2007	YEAR TOTAL						1.83	7.68	73.06	3.11	22.31	0.46	2.05	80.53	5.79	45.47
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES		L		L	<u> </u>	И	ı	L	1	1	3862.80	3862.80	3862.80	3862.80	80869.40
	116.0	l										1				

AIR EMISSION CALCULATIONS

OMB Control No. xxxx-xxxx Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
APACHE CORFHIGH ISLAND		A-350	G 2428	A	A THRU E
Year		Emitted		Substance	
	PM	SOx	NOx	voc	co
2004	25.67	117.76	893.08	27.35	199.44
2005	0.46	2.05	80.53	5.79	45.47
2006	0.46	2.05	80.53	5.79	45.47
2007	0.46	2.05	80.53	5.79	45.47
Allowable	3862.80	3862.80	3862.80	3862.80	80869,40



PUBLIC COPY February 26, 2004

SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

OCS-G 2428

Lease Number (s):

cheryl.powell@jccteam.com

Area/Block:	High Island Block A-350
Prospect Name:	N/A
Offshore:	Texas
Submitted by:	Apache Corporation 2000 Post Oak Blvd. Suite 100 Houston, Texas 77056
	Gene Linscomb (713) 296-7027 gene.linscomb@apachecorp.com
Estimated start up	date: May 15, 2004
Authorized Representative:	No. Copies Being Submitted:
Cheryl Powell	Proprietary: 5
J. Connor Consulting, Inc. 16225 Park Ten Place, Suite 700	Public Info: 3
Houston, Texas 77084	For MMS:
(281) 578-3388	Plan No.

Assigned to:

APACHE CORPORATION

SUPPLEMENTAL

DEVELOPMENT OPERATIONS COORDINATON DOCUMENT

LEASE OCS-G 2428

HIGH ISLAND BLOCK A-350

Contents of Plan APPENDIX A General Information APPENDIX B Geological, Geophysical & H₂S Information APPENDIX C Biological and Physical Information APPENDIX D Wastes and Discharge Information APPENDIX E Oil Spill Information APPENDIX F APPENDIX G Air Emissions Information APPENDIX H Environmental Impact Analysis Coastal Zone Management Consistency Information APPENDIX I

Plan Information Form

APPENDIX J

APPENDIX A CONTENTS OF PLAN

Apache Corporation (Apache) is the designated operator of the subject oil and gas lease.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for the drilling and completion of five (5) wells from the existing A platform and commencement of production from the target sands as detailed in Appendix C of this DOCD.

Appendix J contains a Plan Information Form, which provides a description of proposed activities and a tentative schedule.

(B) LOCATION

Included as Attachment A-1 is a map showing the proposed locations of the wells. A bathymetry map has been previously submitted. Additional well information is included in Appendix J, on the Plan Information Form.

(C) DRILLING UNIT

A description of the drilling unit is included in Appendix J, on the Plan Information Form. The rig specifications will be made a part of the Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, welding procedures, and blowout prevention/equipment as described in Title 30 CFR Part 250, Subparts C, D, E, and G; and as further clarified by MMS Notices to Lessees, and current policy making invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times.

Operator will ensure employees and contractor personnel engaged in well control or production safety operations understand and can properly perform their duties.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

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

(D) PRODUCTION FACILITIES

The subject wells will be protected by the existing A platform in High Island Block A-350.

Produced hydrocarbons will flow via the existing lease term pipeline from the A platform to a 24" subsea tie-in to the HIOS pipeline system, all located in High Island Block A-350. No new nearshore or onshore pipelines or facilities will be constructed.

HIGH ISLAND E ADDN S EXT

350A

633

613

"A" PSL HI 350A X=3,787,555.8100° Y=109,810.0000' 10,800.00' FWL 6850.00' FSL Lat 28°01' 07.8068° Lng 93°27' 30.7368"

"B" PSL HI 350A X=3,787,588.7883* Y=109,826.9863 10,833.00' FWL 6867.00° FSL Lat 28°01' 07.9593° Lng 93°27' 30.3603"

"C" PSL HI 350A X=3,787,580.7883* Y=109,809.9863 10,825.00' FWL 6850.00 FSL Lat 28°01 07.7949" Lng 93°27 30.4585"

HI 350A X=3,787,574.7884' Y=109,804.9863* 10,819.00' FWL 6845.00' FSL Lat 28"01" 07.7483" Lng 93°27" 30.5280"

"D" PSL

"E" PSL HI 350A X=3,787,567.0000 Y=109,820.0000' 10,810.00' FWL 6860.00° FSL Lat 28°01' 07.9004° Lng 93°27" 30.6068"

Attachment A-1

5000, 4000



HIGH ISLAND A-350 OFFSHORE TEXAS DOCD Proposed Wells "A"/"B"/"C"/"D"/"E"

SURFACE

CONTOUR INTERVAL N/A	DATE: 01-28-04
INTERPRETATION BY: N/A	DRAFTED BY:EJ
ZCALE: 1,=5000,	APPROVED 3Y: N/A
AREA: High Island	FILE: his350docd_wtpabcde_psb.dwg

APPENDIX B GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

Cheryl Powell J. Connor Consulting, Inc. 16225 Park Ten Place, Suite 700 Houston, Texas 77084 (281) 578-3388

E-mail address: cheryl.powell@jccteam.com

(B) PROJECT NAME

Apache does not typically designate project names.

(C) PRODUCTION RATES AND LIFE OF RESERVOIR

Type of Production	Average Estimated Rates	Estimated Peak
1) Crude Oil	0	0
2) Gas		
3) Condensate		
Estimated Life of the	Reservoir =	

(D) NEW OR UNUSUAL TECHNOLOGY

Apache does not propose to use any new or unusual technology to carry out the proposed development/production activities. New or unusual technology is defined as equipment and/or procedures that:

- 1. Function in a manner that potentially causes different impacts to the environment than the equipment or procedures did in the past;
- 2. Have not been used previously or extensively in an MMS OCS Region;
- 3. Have not been used previously under the anticipated operating conditions; or
- 4. Have operating characteristics that are outside the performance parameters established by 30 CFR 250.

(E) BONDING INFORMATION

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by an area wide bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. N2000-G16, "Guidelines for General Lease Surety Bonds", dated September 7, 2000.

(F) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as *Attachment B-1* showing High Island Block A-350 located approximately 116 miles from the nearest shoreline and approximately 124 miles from the onshore support base in Cameron, Louisiana.

The existing onshore base provides 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage area, drinking and drill water, etc. The base serves as a loading point for tools, equipment, and machinery, and temporary storage for materials and equipment. The base also supports crew change activities. The proposed operations do not require expansion or major modifications to the base.

During the proposed activities, support vessels/helicopters and travel frequency are as follows:

Type	Weekly Estimate (No.) of Roundtrips				
Type	Drilling & Completion	Production Operations			
Crew Boat	3	N/A			
Supply Boat	3	1			
Helicopter	3	1			

The most practical, direct route from the shorebase as permitted by the weather and traffic conditions will be utilized.

(G) LEASE STIPULATIONS

The following lease stipulations are attached to OCS-G 2428, High Island Block A-350.

1. Military Warning Area (MWA)

High Island Block A-350 is located within designated MWA-147AB. The 147 OG/DOV will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

2. Topographic Features (NTL 98-12)

This Lease Stipulation minimizes the likelihood of damage to the biota of the designated banks from routine OCS oil and gas activities by establishing a "no activity zone", "1000-meter zone", "1-mile zone" or "3-mile zone".

The activities proposed in this DOCD are within the "3-mile zone", and provide for three (3) or more development wells to be drilled from the same surface location. All drill cuttings and drilling fluids will be shunted through a downpipe terminating at an appropriate distance, but no more than 10 meters (32 feet) from the bottom.

SPECIAL CONDITIONS

High Island Block A-350 is located within the boundary of a designated **Rigs-to-Reef** Area. Apache will take the necessary precautions to conduct safe operations and avoid potential hazards within this area.

High Island Block A-350 is located within the boundaries of the South Sabine Point lightering zone. Apache will exercise caution while conducting the proposed activities within this area.

ARCHAEOLOGY SURVEY BLOCKS

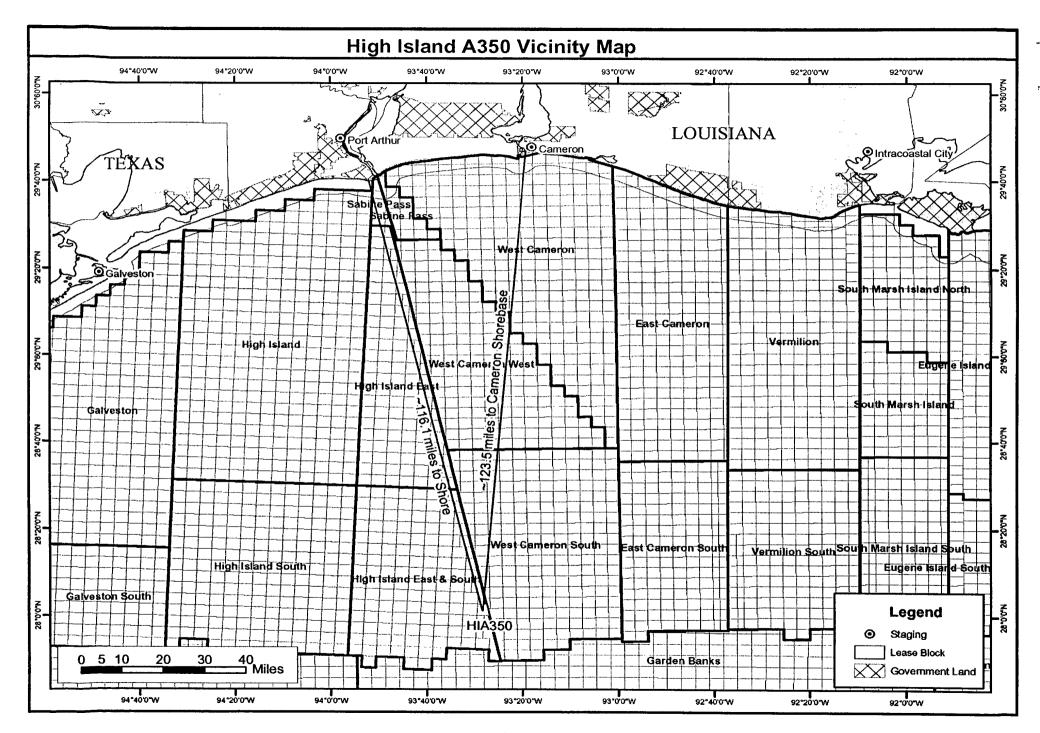
High Island Block A-350 is not in a high probability area for prehistoric or historic cultural resources.

(H) RELATED OCS FACILITIES AND OPERATIONS

The proposed wells will be drilled from and processed through the existing A platform in High Island Block A-350. Sales gas will then be exported through the existing 20" gas pipeline (segment no. 004679) to a 24" subsea tie-in to the HIOS pipeline system within High Island Block A-350. The shut-in for the pipeline shall not be in excess of 45 seconds.

(I) TRANSPORTATION INFORMATION

The gas will be transported via the Stingray Pipeline system to Johnson Bayou, Louisiana.



Attachment B-1

APPENDIX C GEOLOGICAL, GEOPHYSICAL, AND H₂S INFORMATION

(A) STRUCTURE CONTOUR MAPS PROPRIETARY DATA

(B) TRAPPING FEATURES PROPRIETARY DATA

(C) DEPTH OF GEOPRESSURE PROPRIETARY DATA

(D) INTERPRETED 2-D AND/OR 3-D SEISMIC LINES

MMS approved the surface location of the proposed wells in a previously submitted plan; therefore, this information is not being submitted.

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS PROPRIETARY DATA

(F) SHALLOW HAZARDS REPORT

A shallow hazards survey was conducted over High Island Block A-350.

A Shallow Hazards Report was previously submitted to MMS.

(G) SHALLOW HAZARDS ASSESSMENT

The proposed operations will be conducted from an MMS approved surface location; therefore, a shallow hazards assessment is not being provided.

(H) HIGH-RESOLUTION SEISMIC LINES

The proposed operations will be conducted from a previously approved surface location; therefore high-resolution seismic lines are not being submitted.

(I) STRATIGRAPHIC COLUMN

PROPRIETARY DATA

(J) HYDROGEN SULFIDE INFORMATION

In accordance with Title 30 CFR 250.417(c), Apache requests that High Island Block A-350 be classified by the MMS as H_2S absent.

APPENDIX D BIOLOGICAL AND PHYSICAL INFORMATION

CHEMOSYNTHETIC INFORMATION

This DOCD does not proposed activities that could disturb seafloor areas in water depths of 400 meters (1312 feet) or greater, therefore chemosynthetic information is not required.

COLL 5 TOPOGRAPHIC FEATURES INFORMATION

At least three (3) wells are proposed from a common surface location that is located within the 3-mile zone of the MacNeil Bank. Therefore, all drill cuttings and drilling fluids from the drilling operation will be shunted to the seafloor through a downpipe that terminates an appropriate distance, but no more than 10 meters from the bottom.

LIVE BOTTOM (PINNACLE TREND) INFORMATION

High Island Block A-350 is not located within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom information is not required.

APPENDIX E WASTES AND DISCHARGES INFORMATION

DISCHARGES

All discharges associated with operations proposed in this Development Operation Coordination Document will be in accordance with regulations implemented by Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA).

Discharge information is not required per NTL No. 2003-G17.

WASTES

For disposed wastes, the type and general characteristics of the wastes, the amount to be disposed of (volume, rate, or weight), the daily rate, the name and location of the disposal facility, a description of any treatment or storage, and the methods for transporting and final disposal are provided in tabular format in *Attachment E-1*. For purposes of this Appendix, disposed wastes describes those wastes generated by the proposed activities that are disposed of by means other than by releasing them in to the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

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

Type of Waste Approximate Composition	:Amount*	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Waste Oil	10.7 bbl/yr	2 bbl/ 30 days	Tesoro, Cameron LA	Drums on pallets to Tesoro for recycling
Trash and debris	14490 ft³/yr	90 ft ³ /day	BFI, Cameron, LA	Packed in compactor bags & shipped to landfill

^{*}can be expressed as a volume, weight, or rate

APPENDIX F OIL SPILL INFORMATION

1. SITE-SPECIFIC OSRP N/A

2. REGIONAL OSRP INFORMATION

Apache Corporation's Regional Oil Spill Response Plan (OSRP) was approved on November 5, 2003. Activities proposed in this DOCD will be covered by the Regional OSRP.

3. OSRO INFORMATION

Apache's primary equipment provider is Clean Gulf Associates (CGA). The Marine Spill Response Corporation's (MSRC) STARS network will provide closest available personnel, as well as an MSRC supervisor to operate the equipment.

4. WORST-CASE SCENARIO COMPARISON

Category	Regional OSRP WCD	DOCD WCD
Type of Activity	Production	Production
Facility Location (Area/Block)	Main Pass 140	High Island A-350
Facility Designation	B platform	A platform
Distance to Nearest Shoreline (miles)	12	116
Volume Storage tanks (total) and Flowlines (on facility) Lease pipelines Uncontrolled blowout Total Volume	5625 1325 1500 8450	4 15 400
Type of Oil(s) (crude, condensate, diesel)	Oil	419 Condensate
API Gravity	30°	50°

Apache has determined that the worst-case scenario from the activities proposed in this DOCD does not supercede the worst-case scenario from our approved regional OSRP for far-shore activities.

Since Apache has the capability to respond to the worst-case spill scenario included in its regional OSRP approved on November 5, 2003, and since the worst-case scenario determined for our DOCD does not replace the worst-case scenario in our regional OSRP, I hereby certify that Apache has the capability to respond, to the maximum extent practicable, to a worst-case

discharge, or a sub DOCD.	stantial threat of s	uch a discharge,	resulting from th	e activities pro	posed in ou
				•	•
Anache Corporatio	n		······································		Page F-2

APPENDIX G AIR EMISSIONS INFORMATION

AIR EMISSIONS INFORMATION (If any of these answers are "yes" – the spreadsheets need to be submitted)

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

Summary Information

Included as *Attachments G-1 and G-2* are Air Quality Reports for the complex total emissions and the plan emissions.

This information was calculated by: Cheryl Powell

(281) 578-3388

cheryl.powell@jccteam.com

Based on this data, emissions from the proposed activities will not cause any significant effect on onshore air quality.

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. xxxx-xxxx

Expiration Date: Pending

COMPANY		APACHE CORPORATION									
AREA		HIGH ISLAND									
BLOCK		A-350									
LEASE		G 2428									
PLATFORM		Α									
WELL		A THRU E									
COMPANY C	ONTACT	CHERYL POWELL									
TELEPHONE	NO.	(281) 578-3388									
REMARKS		DRILL, COMPLETE & PRODUCE WELL LOCATIONS A THRUE.									
		COMPLEX TOTAL EMISSIONS									
"Yes"	"No"	Air Quality Screening Questions									
		1. 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 other air pollutants (where D = distance to shore in miles)? 2. Do your emission calculations include any emission reduction measures or modified emission factors?									
x	×	3. Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells? 4. Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million?									
	×	5. Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?									
<u> </u>	X	6. Do you propose to burn produced hydrocarbon∗liquids?									
	x	7. Are your proposed development and production activities located within 25 miles from shore?									
	x	Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?									

If ALL questions are answered "No":

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.

EAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2022		

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	· · · · · · · · · · · · · · · · · · ·		CONTACT		PHONE	REMARKS					
APACHE CORPORATIO	HIGH ISLAND	A-350	G 2428	Α	A THRUE	 	 	CHERYL POW		(281) 578-3388						<u>`</u>
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL		TIME	·		A POUNDS P		WALL !	T	ES	IMATED TO	NS	
	Diesel Engines	HP	GAL/HR	GAL/D								l		morred to		
	Nat. Gas Engines	HP	SCF/HR	SCF/D			· · · · · · · · · · · · · · · · · · ·		·					· · · · · · · · · · · · · · · · · · ·	*******	
	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	16975	819.8925	19677.42	24	161	11.96	54.89	411.29	12.34	89.74	23.12	106.04	794.61	23.84	173.37
	VESSELS>600hp diesel(crew)	2265	109.3995	2625.59	6	69	1.60	7.32	54.88	1.65	11.97	0.33	1.52	11.36	0.34	2.48
	VESSELS>600hp diesel(supply)	2265	109.3995	2625.59	10	69	1.60	7.32	54.88	1.65	11.97	0.55	2.53	18.93	0.57	4.13
	VESSELS>600hp diesel(tugs)	8400	405.72	9737.28	18	2	5.92	27.16	203.52	6.11	44.41	0.11	0.49	3.66	0.11	0.80
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	Õ	- 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
l	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 - CRANE	100	4.83	115.92	1	52	0.22	0.32	3.08	0.25	0.67	0.01	0.01	0.08	0.01	0.02
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	7.32	54.88	1.65	11.97	0.42	1.91	14.31	0.43	3.12
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	365	The state of the state of	0.02	12.12	0.09	7.74		0.10	53.08	0.41	33.89
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	365	~	0.01	2.86	0.02	1.83		0.02	12.54	0.10	8.01
	RECIP.2 cycle lean nat gas RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich hat gas	0	0	0.00 0.00	0	0		0.00	0.00	0.00	0.00	l	0.00	0.00	0.00	0.00
	BURNER nat gas - GLYCOL REBOILER	1.25	1190.48	28571.43	0 24	0 365		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT		305	0.01	0.00	0.12	0.01	0.10	0.04	0.00	0.52	0.03	0.44
	TANK-	0	SCITIN	COUNT		0	ļ			0.00				 ,		
	FLARE-		0		ő	٥		0.00	0.00	0.00	0.00		0.00	0.00	0.00	
	PROCESS VENT-		ŏ	·	ő	ő		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	FUGITIVES-			2200.0		365	į .	1		1.10	2000			:	0.00 4.82	
	GLYCOL STILL VENT-		1.04166667		24	365				0.00	No and a second				0.00	
DRILLING	OIL BURN	0	and the second state of		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	<u></u>	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2004	YEAR TOTAL						22.90	104.37	797.63	24.85	180.39	24.57	112.62	909.09	30.64	226.25
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES		1	1	1	1	I	I	1	L	I	3862.80	3862.80	3862.80	3862.80	80869.40
	116.0	L														

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	Т				·						
VPACHE CORPORATION	HIGH ISLAND	A-350	G 2428	A	A THRU E	 	 	CONTACT		PHONE	REMARKS					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT, FUEL		TIME		CHERYL POW		(281) 578-3388						
	Diesel Engines	HP	GAL/HR		RUN	TIME	ß	MAXIMU	M POUNDS F	PER HOUR			ES	TIMATED TO)NS	
***	Nat. Gas Engines	HP	SCF/HR	GAL/D SCF/D			ļ									
	Burners					T	 									
ORILLING	PRIME MOVER>600hp diesel	MMBTU/HR		SCF/D	HR/D	DAYS	PM PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	co
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0	0	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00
	VESSELS>600hp diesel(crew) VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00	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		 		ļ	ļ	I		l	l	L		ŀ	I	l	
NSTALLATION	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TO THE PARTY OF	PIPELINE BURY BARGE dieset	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	· 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
	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)	ا ا	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TEODEED OUT Gresen(Supply)	1 "	("	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACILITY	DERRICK BARGE diesel	0	-	0.00		7.44		ļ <u>.</u>		ļ	L	<u> </u>		1	Ī	
NSTALLATION	MATERIAL TUG diesel	٥		0.00	0	00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	١،	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)	١،		0.00 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
\v'	villagilla odding didddi(diappiy)	ľ	"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel - CRANE	100	4.83	115.92	 ,	52	0.22	000	-			,				
	RECIP.>600hp diesel	0	0	0.00		0	0.22	0.32	3.08	0.25	0.67	0.01	0.01	0.08	0.01	0.02
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	0.00 7.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas - COMPRESSOR	4232	40305,568	967333.63	24	365	1.60	0.02	54.88 12.12	0.09	11.97	0.42	1.91	14.31	0.43	3.12
	TURBINE natigas - GENERATOR	1000	9524	228576.00	24	365	l	0.02	2.86	0.09	7.74		0.10	53.08	0.41	33.89
	RECIP 2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.02	1.83		0.02	12.54	0.10	8.01
	RECIP.4 bycle lean nat gas	Ö	o	0.00	ŏ	1 6	l	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 bycle rich nat gas	0	0	0.00	Ö	0		0.00	0.00	0.00		:a_	0.00	0.00	0.00	0.00
	BURNER net gas - GLYCOL RESOLER	1.25	1190.48	28571.43	24	365	0.01	0.00	0.12	0.00	0.00 0.10	0.04	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT				0.00	0.12	0.01	0.10	0.04	0.00	0.52	0.03	0.44
	TANK-	0		24 124	0	0		r		0.00			<u> </u>			
ļ	FLARE-		0		ō	ō		0.00	0.00	0.00	0.00		0.00	0.00	0.00	
	PROCESS VENT-		0		0	ō	ł	5.55	5.00	0.00	0.00		0.00	0.00	0.00	0.00
	FUGITIVES-			2200.0		365		1		1.10			""	*****	0.00	1
	GLYCOL STILL VENT-		1.04166667	*	24	365				0.00			i	700	4.82	l
	OIL BURN	0	A TOTAL STATE OF THE STATE OF T	products the second	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	l
WELL TEST	GAS FLARE		0		0	0	1	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
						I				 	0.00		0.00	0.00	0.00	0.00
2005 THRU 2007	YEAR TOTAL	ł	1		l		1.83	7.68	73.06	3,11	22.31	0.46	2.05	80.53	530	45.45
EVENDEROUS			L	L		L	I]		l		J. T.	2.03	60.53	5.79	45.47
EXEMPTION	DISTANCE FROM LAND IN MILES									•	*					
CALCULATION		l										3862.80	3862.80	3862.80	3862.80	90900 45
	116.0	L											3002.00	3002.60	3002.80	80869.40

COMPANY		APACHE CORPORATION									
AREA		HIGH ISLAND									
BLOCK		A-350									
LEASE		G 2428									
PLATFORM		Α									
WELL		A THRU E									
COMPANY C	ONTACT	CHERYL POWELL									
TELEPHONE	NO.	(281) 578-3388									
REMARKS		DRILL, COMPLETE & PRODUCE WELL LOCATIONS A THRUE.									
		PLAN EMISSIONS									
"Yes"	"No"	Air Quality Screening Questions									
	x x	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 other air pollutants (where D = distance to shore in miles)? Do your emission calculations include any emission reduction measures or modified emission factors?									
X	X X	3. Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells? 4. Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million? 5. Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)2. 6. Do you propose to burn produced hydrocarbon liquids? 7. Are your proposed development and production activities located within 25									
	x	7. Are your proposed development and production activities located within 25 miles from shore? 8. Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?									

If ALL questions are answered "No":

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.

'EAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		· · · · · · · · · · · · · · · · · · ·
2010		
2011		
2022		

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	· · · · ·		CONTACT	···	PHONE	REMARKS					
APACHE CORPORATION	HIGH ISLAND	A-350	G 2428	Α	A THRUE			CHERYL POW		(281) 578-3388						
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL		TIME	·		POUNDS P		WILL!		ES.	TIMATED TO	NS	
	Diesel Engines	HP	GAL/HR	GAL/D						<u> </u>		l		TIME TED TO	110	
	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	PRIME MOVER>600hp diesel	16975	819.8925	19677.42	24	161	11.96	54.89	411.29	12.34	89.74	23.12	106.04	794.61	23.84	173.37
	VESSELS>600hp diesel(crew)	2265	109.3995	2625.59	6	69	1.60	7.32	54.88	1.65	11.97	0.33	1.52	11.36	0.34	2.48
	VESSELS>600hp diesel(supply)	2265	109.3995	2625.59	10	69	1.60	7.32	54.88	1.65	11.97	0.55	2.53	18.93	0.57	4.13
	VESSELS>600hp diesel(tugs)	8400	405.72	9737.28	18	2	5.92	27.16	203.52	6.11	44.41	0.11	0.49	3.66	0.11	0.80
PIPELINE	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	SUPPORT VESSEL diesel	0	Ō	0.00	ا	Ö	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	Ō	O O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY	DERRICK BARGE diesel	ō	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSTALLATION	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	. 0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel - CRANE	100	4.83~	115.92	1	9	0.22	0.32	3.08	0.25	0.67	0.00	0.00	0.01	0.00	0.00
	RECIP.>600hp dieset	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	9	1.60	7.32	54.88	1.65	11.97	0.07	0.33	2.47	0.07	0.54
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	60	L	0.02	12.12	0.09	7.74		0.02	8.73	0.07	5.57
	TURBINE nat gas - GENERATOR	1000	9524	228576.00	24	60	Sales of the lates	0.01	2.86	0.02	1.83		0.00	2.06	0.02	1.32
	RECIP 2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00	i	0.00	0.00	0.00	0.00
	RECIP.4 cycle rich hat gas	0	0	0.00	[0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas - GLYCOL REBOILER	1.25	1190.48	28571.43	24	60	0.01	0.00	0.12	0.01	0.10	0.01	0.00	0.09	0.00	0.07
	MISC.	BPD	SCF/HR	COUNT						W. Committee						
	TANK-	0			0	0				0.00					0.00	1
	FLARE-		0		0	0	ł	0.00	0.00	0.00	0.00	ŀ	0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0	1	i		0.00	-				0.00	
	FUGITIVES-			2200.0		60	Ĭ			1.10	· •	-			0.79	ĺ
DRILLING	GLYCOL STILL VENT-		1.04166667	The state of the s	24	60				0.00					0.00	
DRILLING WELL TEST	OIL BURN GAS FLARE	0		(4) (1) (1)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL IEST	GAS FLARE		0		0	0	∄	0.00	0.00	0.00	0.00	ļ	0.00	0.00	0.00	0.00
2004	YEAR TOTAL						22.90	104.37	797.63	24.85	180.39	24.18	110.93	841.92	25.81	188.28
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES		J	1	I	I	<u> </u>	l	L	1	L	3862.80	2002.00	3862.80		
	116.0											3002.00	3862.80	3862.80	3862.80	80869.40
													<u> </u>	L		

		BLOCK															
APACHE CORPORATION	HIGH ISLAND	A-350	LEASE G 2428	PLATFORM A	WELL A THRUE	 		CONTACT		PHONE	REMARKS						
OPERATIONS	EQUIPMENT	RATING		ACT. FUEL		<u> </u>	<u> </u>	CHERYL POW		(281) 578-3388	#REF!						
	Diesel Engines	HP	GAL/HR	GAL/D	RUN	TIME	MAXIMUM POUNDS PER HOUR					ESTIMATED TONS					
	Nat. Gas Engines	HP	SCF/HR	SCF/D			j										
	Burners	MMBTU/HR	SCF/HR			·	J										
DRILLING	PRIME MOVER>600hp diesel			SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	Nox	Voc	Co	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
,	BURNER diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ŀ		0		<u> </u>	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ŀ	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0.00	0.00	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	0.00	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	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	
PIPELINE	DIDE! INT LAY DADOR !					L	X	1	1	1	1 5.55	0.00	0.00	V.00	0.00	0.00	
-	PIPELINE LAY BARGE diesel SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MOTALLATION	BIBELINE BUSY BARRET	0	0	00.0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	PIPELINE BURY BARGE diesel SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESCEL OF COOK A STATE OF COOK	0	0	0.00	0	0	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ŀ	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
FACILITY	DEDDICK DADGE	l				1			"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
INSTALLATION	DERRICK BARGE diesel	· · · O	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	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	
ļ	VESSELS>600hp diesel(crew)	0	0	- 0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PRODUCTION	DEOID COOL II I DE LIE				L	ļ.	l		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
KODOCTION	RECIP.<600hp diesel - CRANE	100	4.83	115.92	1	ુર, 52	0.22	0.32	3.08	0.25	0.67	0.01	0.04				
	RECIP.>600hp diesel	0	0	0.00	0	0	. 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.01	0.02	
	SUPPORT VESSEL diesel - SUPPLY	2265	109.3995	2625.59	10	52	1.60	7.32	54.88	1.65	11.97	0.42		0.00	0.00	0.00	
	TURBINE nat gas - COMPRESSOR	4232	40305.568	967333.63	24	365	- war	0.02	12.12	0.09	7.74	0.42	1.91 0.10	14.31	0.43	3.12	
ļ	TURBINE natigas - GENERATOR	1000	9524	228576.00	24	365		0.01	2.86	0.02	1.83	•		53.08	0.41	33.89	
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.02	12.54	0.10	8.01	
	RECIP 4 bycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
1	BURNER net gas - GLYCOL REBOILER	1.25	1190.48	28571.43	24	365	0.01	0.00	0.12	0.01	0.00		0.00	0.00	0.00	0.00	
	MISC.	BPD	SCF/HR	COUNT				5.55	0.12	0.04.	0.10	0.04	0.00	0.52	0.03	0.44	
	TANK-	0	*** **********************************	4	0	0				0.00							
	FLARE-		0		0	ŏ		0.00	0.00	0.00	0.00				0.00	l	
	PROCESS VENT-		0		0	ő	1	J.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
	FUGITIVES-			2200.0		365				1.10		· ·			0.00	l	
	GLYCOL STILL VENT-		1.04166667	Adding Sales	24	365				0.00					4.82	l .	
	OIL BURN	0		Service de dest un remondre de	0	0	0.00	0.00	0.00	0.00	0.00	0.00			0.00		
VELL TEST	GAS FLARE		0		0	l ŏ l		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
									0.00	0.00	0.00		0.00	0.00	0.00	0.00	
2005 THRU 2007	YEAR TOTAL] !					1.83	7.68	73.06	244	20.04						
		l				1		7.00	13.00	3.11	22.31	0.46	2.05	80.53	5.79	45.47	
EXEMPTION	DISTANCE FROM LAND IN MILES			·			L	L		L						ı	
CALCULATION		J															
	116.0	Ì							•			3862.80	3862.80	3862.80	3862.80	80869.40	

APPENDIX H ENVIRONMENTAL IMPACT ANALYSIS (EIA)

Apache Corporation (Apache)

Supplemental Development Operations Coordination Document High Island Block A-350 OCS-G 2428

(A) Impact Producing Factors

ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET

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

Apache Corporation Supplemental DOCD High Island Block A-350 (OCS-G 2428) Page H-1 February 27, 2004

Footnotes for Environmental Impact Analysis Matrix

- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
 - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
 - o 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;
 - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
 - o Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the 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 a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

(B) Analysis

Site-Specific at High Island Block A-350

Proposed operations consist of drilling, production and completion of five wells using a Jackup drilling rig.

1. Designated Topographic Features

Potential IPFs on topographic features are physical disturbances to the seafloor, effluents, and accidents. High Island Block A-350 is within a Topographic Features Stipulation Block of MacNeil Bank.

Physical disturbances to the seafloor: The Topographic Features Stipulation minimizes the likelihood of bottom-disturbing activities impacting the live-bottom communities of the banks by not allowing direct contact to the banks (No activity zone) from rig emplacements and anchoring activities.

Effluents: Drilling muds and cuttings discharges have a potential to impact the live bottom organisms of topographic features through increasing water-column turbidity, smothering sessile invertebrates on the surrounding seafloor, and sediment contamination by accumulations of low concentrations of toxic constituents.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water quality). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is expected to rise in the water column to the surface and become diluted by currents. Any oil remaining on the bottom is expected to be swept clear of the banks by currents moving around the banks. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities that could cause impacts to topographic features.

2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: High Island Block A-350 is over 300 miles from the closest live bottom (pinnacle trend) area, and therefore no adverse impacts are expected.

Effluents: High Island Block A-350 is over 300 miles from the closest live bottom (pinnacle trend) area, and therefore no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

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

3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: High Island Block A-350 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Effluents: High Island Block A-350 is not located in an area characterized by the existence of live bottoms; therefore, no adverse impacts are expected.

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

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

4. Chemosynthetic Communities

There are no IPFs (including emissions, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities that could cause impacts to chemosynthetic communities.

Operations proposed in this plan are in water depths of 305 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters), therefore Apache's proposed operations in High Island Block A-350 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in High Island Block A-350 include disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: Bottom area disturbances resulting from the emplacement of drill rigs, the drilling of wells and the installation of platforms and pipelines would increase water-column turbidity and re-suspension of any accumulated pollutants, such as trace metals and excess nutrients. This would cause short-lived impacts on water quality conditions in the immediate vicinity of the emplacement operations.

Effluents: Levels of contaminants in drilling muds and cuttings and produced water discharges, discharge-rate restrictions and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to water quality.

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

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

6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in High Island Block A-350 include physical disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: The emplacement of a structure or drilling rig results in minimal loss of bottom trawling area to commercial fishermen. Pipelines cause gear conflicts which result in losses of trawls and shrimp catch, business downtime and vessel damage. Most financial losses from gear conflicts are covered by the Fishermen's Contingency Fund (FCF). The emplacement and removal of facilities are not expected to cause significant adverse impacts to fisheries.

Effluents: Effluents such as drilling fluids and cuttings discharges contain components and properties which are detrimental to fishery resources. Moderate petroleum and metal contamination of sediments and the water column can occur out to several hundred meters down-current from the discharge point. Offshore discharges are expected to disperse and dilute to very near background levels in the water column or on the seafloor within 3,000 m of the discharge point, and are expected to have negligible effect on fisheries.

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

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

7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale, occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in High Island Block A-350 include emissions, effluents, discarded trash and debris, and accidents.

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

Effluents: Drilling fluids and cuttings discharges contain components which may be detrimental to marine mammals. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

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

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

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract

vessel, the MMS must be notified within 24 hours of the strike by email to <u>protectedspecies@mms.gov</u>. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

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

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

8. Sea Turtles

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

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

Effluents: Drilling fluids and cuttings discharges are not known to be lethal to sea turtles. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

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

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

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

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

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

9. Air Quality

The projected air emissions identified in Appendix G are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. High Island Block A-350 is beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and is 116 miles from the coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of High Island Block A-350 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which could impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in High Island Block A-350 include disturbances to the seafloor. High Island Block A-350 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. Company will report to MMS the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs which could impact prehistoric archaeological sites as a result of the proposed operations in High Island Block A-350 include disturbances to the seafloor (structure emplacement) and accidents (oil spill). High Island Block A-350 is located outside the Archaeological Prehistoric high probability line. Apache will report to MMS the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

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

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in High Island Block A-350 include physical disturbances to the seafloor, effluents and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

Physical disturbances to the seafloor: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from bottom disturbing activities (e.g., anchoring, structure emplacement and removal).

Effluents: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from operational waste discharges. Levels of contaminants in drilling muds and cuttings and produced-water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to EFH.

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

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

2. Marine and Pelagic Birds

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

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

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

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and

death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds, and therefore, the effects will be negligible.

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

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H2S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with 30 CFR 250.417(c) and 2002-G08, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by MMS as H2S absent.

Coastal and Onshore

1. Beaches

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

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (116 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

Discarded trash and debris: Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any,

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

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

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

2. Wetlands

Accidents: Oil spills could cause impacts to wetlands, however, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (115 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

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

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Given the distance from shore (116 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (116 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

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

5. Wilderness Areas

An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from the nearest designated wilderness area (> 100 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

6. Other Environmental Resources Identified

None

(C) Impacts on your proposed activities.

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

(D) Alternatives

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

(E) Mitigation Measures

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

(F) Consultation

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

(G) References

Authors:

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

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

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

APPENDIX I COASTAL MANAGEMENT CONSISTENCY INFORMATION

A certificate of Coastal Management Consistency for the State of Texas is not required for the proposed supplemental activities.

PLAN INFORMATION FORM

		GE	NERAI	LINE	ORM	IAT	ION .			13				
Type of OCS Plan:		Exploration (EP)	Plan	X	Deve	lopn	nent Operation	ons C	Coordin	ation I	Docum	nent (DO	CD)
Company Name:	Apache	Corporation			MMS	S Op	erator Numb	er:	001	05				
Address:	2000 Pos	st Oak Blvd.	Contac	t Perso	n: C	Chery	yl Powell							
	Suite 100	0	Phone	Numbe	er: 2	81-5	578-3388		7					
	Houston	, Tx 77056	Email A	Addres	s: c	hery	l.powell@jc	ctear	n.com		.,,,			
Lease: G02428	Area: I	High Island	Blo	ck:	A-350		Project Na	me (I	f Appli	icable):	: N	/A		
Objective(s): Oil	Gas	Sulphur [5		nshore ase:	Cam	eron	, LA	/	Distance (Miles)		osest I	and		
	De	scription of l			vities (Mai	rk all that a	pply						
Exploration drilling	(1911) K. (1914)				De	evelo	opment drilli	ng	18 1 San 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	309: 30 <u>9</u> 05:25 <u>8</u>		*****	<u> </u>
Well completion					Ins	stalla	ation of prod	uctio	n platfo	orm				
☐ Well test flaring					Ins	stalla	ation of prod	uctio	n facili	ties				
Installation of well pro					Ins	stalla	ation of satel	lite s	tructure	е				
Installation of subsea	wellheads	and/or manif	folds		Ins	stalla	ation of lease	e tern	n pipeli	nes				
Temporary well aband	donment				∑ Co	mm	ence produc	tion		.,				
Other (specify and de	•					,	,							
Do you propose to use new												Yes	X	No
Do you propose any facilit	-											Yes	X	No
Do you propose any activi	ties that m	nay disturb an	MMS-d	esigna	ted hig	gh-pr	obability are	chaec	ological			Yes	X	No
area?		Tontativ	a Schad	nle of	Propo	sad	Activities	and the second	٠	9 G (\$44.50°		9.867
	g. 1955 T	Sac S	्राप्तिक हैं	uic oi	1 1 OPO	3.Cu	Activities	<u></u>	<u> </u>	10-1	Data	%; <u>}</u> 1	No.	Q 6
	Pr	oposed Activ	щу		1				tart Jate	End	Date		Day	
Drill and complete propose	ed well A		-		<u> </u>			5/15		06/16	5/04	31	200)	, ,
Drill and complete propose					gi.	····		06/1	7/04	07/19	9/04	31		
Drill and complete propose				- j				07/2	20/04	08/23	3/04	33		
Drill and complete propose		·····		7	,			08/2	24/04	09/28	3/04	34		
Drill and complete propose	ed well E			, , , , , , , , , , , , , , , , , , ,				09/2	29/04	11/01	1/04	32		
Commencement of produc	tion		·	1				11/0)2/04	12/31	1/07	3 5	/ears	S
<u></u>		rilling Rig		1		XX	Descripti	on o	f Produ	uction	Platf	orm		
✓ Jackup		Drillship				Ca	isson		Те	ension	leg pl	atfori	n	
Gorilla Jackup		Platform ri	g /			We	ell protector		C	omplia	nt tow	er er		
Semisubmersible		Submersibl	le			Fix	ced platform		☐ Gı	uyed to	wer			
DP Semisubmersible	De	Other (Atta	ich ,			Su	bsea manifol	ld	☐ Fl	oating	produ	ction	syst	tem
Drilling Rig Name (If			İ			Spa	ar		Ot	ther (A	ttach	descr	iptio	n)
			iption of	Léas	e Tern	n Pi	pelines							
From (Facility/High Isla	nd Block	T0 (Facil	ity/High	Islan	d Bloc	k	Diameter		Leng	- 1		Prod	uct	
A-350)			A-350))			(inches)		(Fee	et)				
Existing				7		_	(/							

WELL INFORMATION FORM (USE SEPARATE FORM FOR EACH LEASE)

a relation

PROPOSED WELL/STRUCTURE LOCATIONS

	PROPOSED	WELL/STRUCTURE LOC	CATIONS		
WELL /	SURFACE LOCATION	1		BOTTOM-HOLE	
STRUCTURE				LOCATION (FOR WELLS)	
NAME		***************************************		· 	
	CALLS: 6850 F S Land	10800 F W LOF	CALLS:	F L and	F LOF
Platform _ or Well X	LEASE OCS G02428 , HIGH ISLA	AND AREA,	LEASE OCS GO	2428 , HIGH ISLAND	AREA,
	BLOCK A-350		BLOCK A-3	50	
Name: A	X: 3,787,555.81		X:		
	Y: 109,810		Y:		
	LAT: 28° 01′ 07.8068"		LAT:		
	LONG: 93° 27′ 30.7368″		LONG:		
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET):	305
	CALLS: 6867 F S L and	10833 F W LOF	CALLS:	F L and	F LOF
Platform _ or Well X	LEASE OCS G02428 , HIGH ISLA	AND AREA,	LEASE OCS G02	.428 , HIGH ISLAND	AREA,
	BLOCK A-350		BLOCK A-3	50	
Name: B	X: 3,787,588.7883		X;		
	Y: 109,826.9863		Y:		
	LAT: 28° 01′ 07.9593"		LAT:		
	LONG: 93° 27′ 30.3603″		LONG:		
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET):	305
	CALLS: 6850 F S L and	10825 F W L OF	CALLS:	F L and	F LOF
Platform _ or Well X	LEASE OCS G02428 , HIGH ISLA	AND AREA,	LEASE OCS G02	.428 , HIGH ISLAND	AREA,
	BLOCK A-350		BLOCK A-3.	50	
Name: C	X: 3,787,580.7883		X:		
	Y: 109,809.9863		Y:		
	LAT: 28° 01′ 07.7949″		LAT:		
	LONG: 93° 27″ 30.4585″		LONG:		
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET):	305
	CALLS: 6845 F S L and 1	0819 F W L OF	CALLS:	F Land	F LOF
Platform _ or Well X	LEASE OCS G02428 , HIGH ISLAI	ND AREA,	LEASE OCS G0242	28 , HIGH ISLAND	AREA,
	BLOCK A-350		BLOCK A-350)	
Name: D	X: 3,787,574.7884	*	X:		
	Y: 109,804.9863		Y:		
	LAT: 28° 01′ 07.7483″		LAT:		
	LONG: 93° 27′ 30.5280″		LONG:		
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET):	305
		1		L	

4 . .

Platform _ or Well X	CALLS: LEASE OCS BLOCK	G02428 , HIGH ISLA A-350	10810 F W L C		F L and G02428 , HIGH ISLAND A-350	F LOF AREA,
Name: E	X:	3,787,567.0000		X:		
	Y:	109,820.0000		Y:		_
	LAT:	28° 01′ 07.9004″		LAT:		
	LONG:	93° 27′ 30.6068″		LONG:		
	TVD (IN FEET)	:	MD (IN FEET):		WATER DEPTH (IN FEET):	305