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DATE Sept. 11, 1981

TO: OMS-2-2

FROM: OS-7-1

[redacted]

Supplemental Plan of ~~Exploration~~ Development/Production, Lease OCS-G 0548 J0297

Control No. U-0 4. 14-08-0001-12...

VR 35 J26

UNION OIL Co. of CALIF.

NOTED - PATZ

VERMILION BLOCK 14 FIELD UNIT
PLAN OF DEVELOPMENT AND PRODUCTION
SUPPLEMENT TO SUPPLEMENTAL PLAN DATED 7/10/81
8/17/81

GENERAL

In accordance with amended oil and gas operating regulations 30 CFR 250.34 and with the Outer Continental Shelf Lands Act Amendment of 1978 Publication Law 95-372 and Federal Register Notice (44 FR 53695), Union Oil Company of California respectfully submits the following revisions to the submitted Supplement dated 7/10/81.

SECTION (2) (a) (1) (i)

New drilling activity planned in the Vermilion Block 14 Field Unit for the last quarter of 1981 and the first half of 1982 includes 4 wells planned for the Cib. op. 11 reservoir (approximately 12,000' TVD). The wells are intended to maximize production from this reservoir. OCS-G 0548 No. 9 is to be drilled in the northwestern portion of Vermilion Block No. 35. OCS 0297 Nos. 45, 46 and 47 are to be drilled in Vermilion Block 26. These wells will be completed in the unitized portion of the Cib. op. 11 Sand.

SECTION (2) (a) (1) (ii)

The wells are to be drilled with either the submersible barge rig Movible 3 or submersible barge rig Bluewater 2. The rigs are presently in use at Vermilion Block 14 Field and the progress of the current drilling program will determine which rig will be used.

The proposed wells will be drilled from locations adjacent to existent remote platforms. After completion of the wells, 4-pile well protector platforms will be set over the wells. Attachment 1 provides general design features of the platforms. The two structures will be connected by 100' bridges and plans are to utilize the existing flow lines to transport the production to various process facilities in the field. These locations and flow lines can be seen on Attachment 2.

Safety and pollution precaution and control features consistent with applicable federal regulations and, in particular, OCS Orders No. 2, No. 5, No. 7 and No. 8 will be complied with. All other safety and pollution prevention and control features, including oil spill containment and cleanup plans, are as stated in the 1981 Approved Plan of Development and the Supplemental Plan of Development dated 7/10/81.

SECTION (2) (a) (1) (iii)

Attachment 2 is a base map showing the surface/bottom-hole locations of the proposed wells. The existing wells and production system layout are also shown.

NOTED - PATA

Projected locations of the proposed wells are as follows:

OCS 0546 Well No. 9

Surface Location:	1,100' FWL, Vermilion Block 35 1,000' FNL, Vermilion Block 35
Bottom-hole Location:	1,550' FWL, Vermilion Block 35 350' FNL, Vermilion Block 35

OCS 0297 Well No. 45

Surface Location:	6,300' FWL, Vermilion Block 26 1,900' FSL, Vermilion Block 26
Bottom-hole Location:	6,580' FWL, Vermilion Block 26 1,100' FSL, Vermilion Block 26

OCS 0297 Well No. 46

Surface Location:	5,700' FEL, Vermilion Block 26 1,650' FSL, Vermilion Block 26
Bottom-hole Location:	6,610' FEL, Vermilion Block 26 200' FSL, Vermilion Block 26

OCS 0297 Well No. 47

Surface Location:	1,000' FEL, Vermilion Block 26 3,500' FSL, Vermilion Block 26
Bottom-hole Location:	1,550' FEL, Vermilion Block 26 4,500' FSL, Vermilion Block 26

SECTION (2) (a) (1) (iv)

See Attachment 11 for the structure map of the Cib. op. 11 Sand showing the locations of the proposed wells.

SECTION (2) (a) (1) (v and vi)

There are no changes from the 1981 approved Development Plan.

SECTION (2) (a) (1) (vii)

See Attachment 12 for a schedule of the activities to commencement of production.

SECTION (2) (a) (1) (viii)

The location of the lease blocks relative to the shoreline is as shown on Attachment V of the original approved 1981 submittal. The mud components and additives will follow the detailed list provided in Attachment VII of the 1981 approved Plan. Air Quality Statements (Attachments 13 through 16) are included as are Shallow Drilling Hazard Statements (Attachments 17 through 20).

SECTION (2) (a) (3)

Consistency Certification is included as Attachment 6.

SECTION (2) (a) (5)

Under the Freedom of Information Act (5 U.S.C. 552) and the implementing regulations (43 CFR, Part 2), the following attachment(s) will not be disclosed for public information:

Attachment 11

VERMILION BLOCK 14 FIELD
NON-UNITIZED ZONES
PLAN OF DEVELOPMENT AND PRODUCTION
SUPPLEMENT TO SUPPLEMENTAL PLAN DATED 7/10/81
8/17/81

SECTION (2) (a) (1) (i)

This submittal serves to update the production schedule and drilling schedule presented in the Supplemental Plan of Development dated 7/10/81. It also proposes to drill two new wells to develop deeper horizons on the upthrown and downthrown sides of the major "B" fault in VE Block 35, Vermilion Block 14 Field.

The OCS 0297 No. 40 is completed in the Rob. (L)-16 RA and was turned on production on July 29, 1981. The OCS-G 1357 No. 2, completed in the Rot. (E)-1 RA, was turned on production on July 22, 1981. The OCS 0297 No. 43 was spudded on July 15, 1981. Drilling and completion of the No. 43 should end in mid September. Installation of a well protector platform, production facilities, and a flow line should take ± 30 days, with initial production start-up in mid to late October.

The OCS 0548 No. 7 in the northwestern portion of Vermilion Block 35 is now being proposed to a TD of 20,000'. This well is to evaluate the Rot. (E) series in the upthrown portion of the "B" fault. The OCS 0548 No. 8 in the central portion of Vermilion Block 35 is proposed to a depth of 20,000' to evaluate the Rot. (E) series and deeper on the downthrown portion of the "B" fault.

The remainder of the development well program will be as stated in the 1981 approved Plan of Development and the Supplemental Plan of Development dated 7/10/81.

SECTION (2) (a) (1) (ii)

The proposed wells will be drilled from remote locations. After completion of the wells, 4-pile well protector platforms will be set over the wells. Attachment 1 shows the general design features of these platforms. The wells will be tied to existing production facilities by 6" buried line pipe flow lines. The well and pipe line locations can be noted on Attachment 2.

The two wells will probably be drilled with either the submersible barge rig Movible 3 or submersible barge rig Bluewater 2. These rigs are presently in use at Vermilion Block 14 Field and the progress of the current drilling program will determine which rig will be used.

Safety and pollution precaution and control features consistent with applicable federal regulations and, in particular, OCS Orders No. 2, No. 5, No. 7 and No. 8 will be complied with. All other safety and pollution prevention and control features including oil spill containment and cleanup plans are as stated in the 1981 approved Plan of Development and the Supplemental Plan of Development dated 7/10/81.

SECTION (2) (a) (1) (iii)

Attachment 2 is a base map showing the surface/bottom-hole locations of the proposed wells. The existing wells and production system layout are also shown.

Projected locations of the proposed wells are as follows:

OCS 0548 Well No. 7

Surface Location:	1,100' FNL and 3,500' FWL of Vermilion Block 35
Bottom-hole Location:	Same as surface.
Proposed TVD:	20,000'

OCS 0548 Well No. 8

Surface Location:	5,750' FNL and 7,300' FWL of Vermilion Block 35
Bottom-hole Location:	Same as surface
Proposed TVD:	20,000'

SECTION (2) (a) (1) (iv)

See Attachment 3 for structure map of the Rot. (E)-5 Sand with proposed wells.

SECTION (2) (a) (1) (v and vi)

There are no changes from the 1981 approved Development Plan.

SECTION (2) (a) (1) (vii)

See Attachment 5 for a schedule of the activities to commencement of production.

SECTION (2) (a) (1) (viii)

The location of the lease blocks relative to the shoreline is as shown on Attachment VI of the original approved 1981 submittal. The mud components and additions will follow the detailed list provided in Attachment VII of the 1981 approved Plan. Air Quality Statements (Attachments 7 and 8) are included, as are Shallow Drilling Hazard Statements (Attachments 9 and 10).

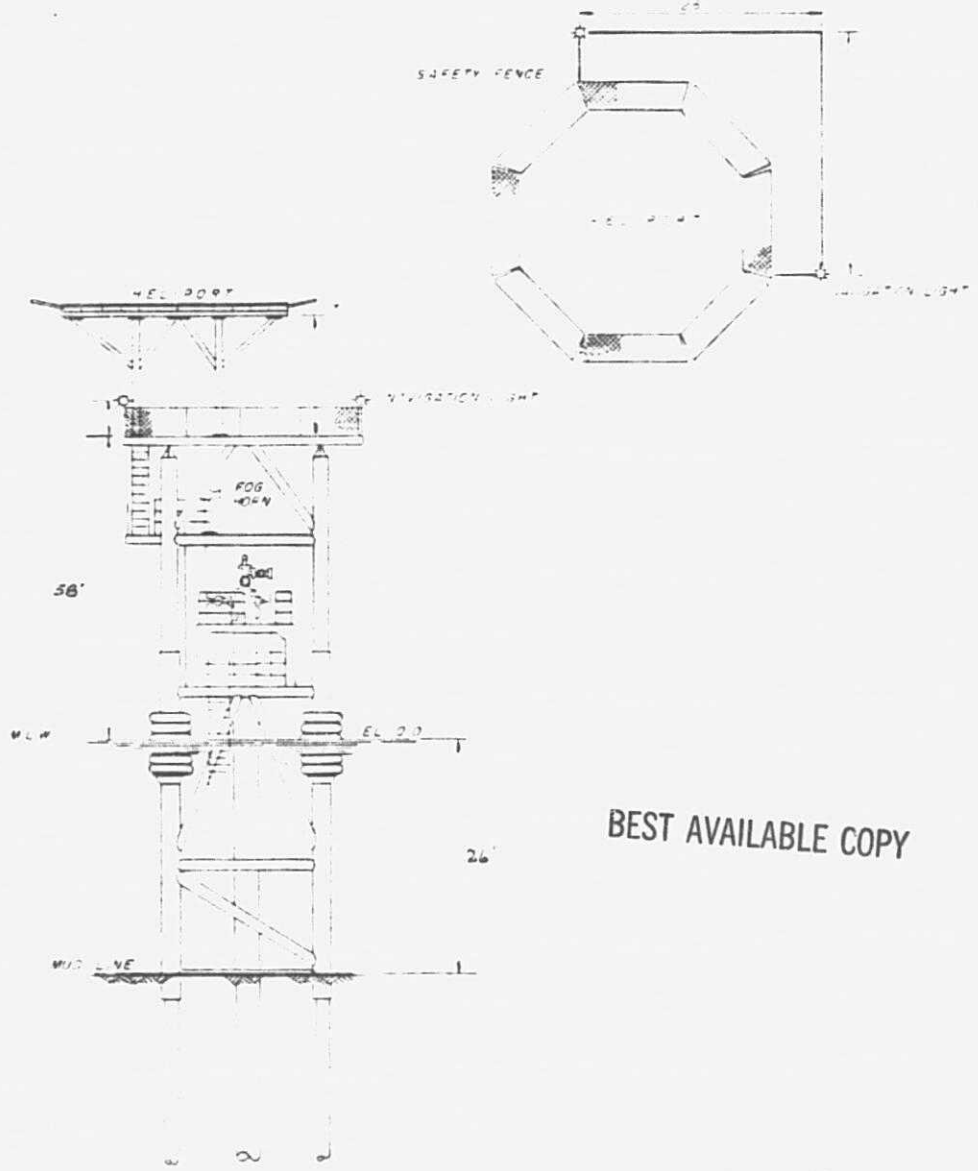
SECTION (2) (a) (3)

Consistency Certification is included as Attachment 6.

SECTION (2) (a) (5)

Under the Freedom of Information Act (5 U.S.C. 552) and the implementing regulations (43 CFR, Part 2), the following attachment will not be disclosed for public information:

Attachment 3



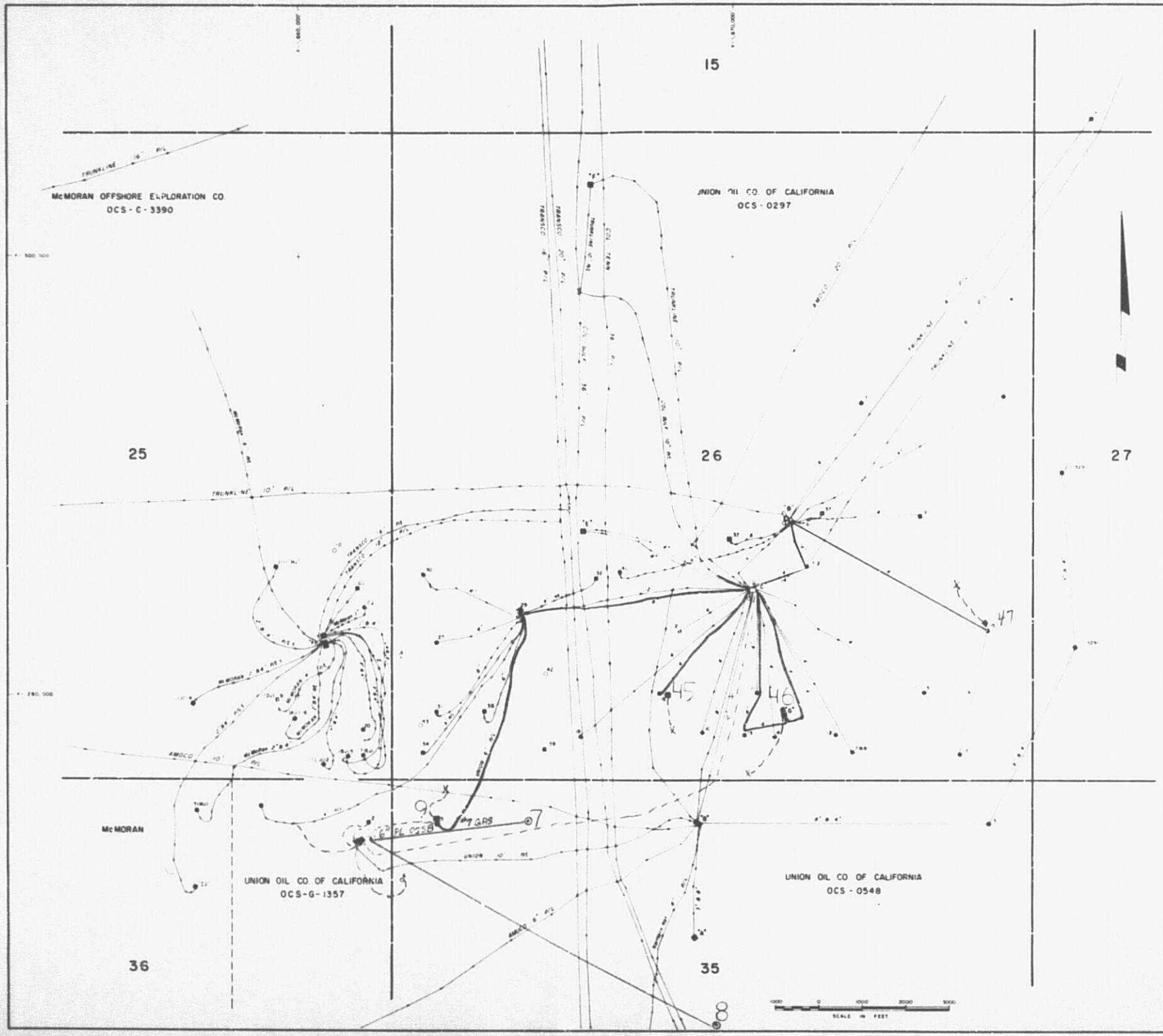
BEST AVAILABLE COPY

UNION OIL CO. OF CALIFORNIA
WELL PROTECTOR PLATFORM
OCS LEASE _____ WELL NO. ____
BLOCK ____ VERMILION BLOCK ____ FIELD
LOUISIANA OFFSHORE

REV.	DATE

ATTACHMENT 1

2/7/78



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ATTACHMENT 2

REVISED	
DATE	BY

UNION OIL CO. OF CALIFORNIA
UNION OIL & GAS DIVISION LAFAYETTE, LOUISIANA

BASE MAP

BLOCK 26 - VERMILION AREA

DRAWN FOR	DRAWN BY	DATE	FILE NUMBER
	J.E.C.	9-12-79	

THIS SUPPLEMENTAL PLAN OF DEVELOPMENT HAS NO ATTACHMENT NO. 4.

SCHEDULE OF ACTIVITIES
NON-UNITIZED ZONES
VERMILION BLOCK 14 FIELD

WELL	DRILLING		COMPLETION	
	START	FINISH	START	FINISH
0548 #7	10/1/81	4/1/82	4/1/82	5/1/82
0548 #8	5/1/82	11/1/82	11/1/82	12/1/82

The above wells should commence production approximately one month after completion. This allows sufficient time to lay flow lines, install risers, and make tie-ins to existing facilities.

ATTACHMENT 5

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

SUPPLEMENTAL PLAN OF DEVELOPMENT 8/17/81
Type of Plan

VERMILION BLOCKS 26 & 35, VERMILION BLOCK 14 FIELD
Area and Block

OCS 0297 AND OCS 0548
Lease Numbers

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

UNION OIL COMPANY OF CALIFORNIA
Lessee or Operator

J. E. Fisher
Certifying Official

AUGUST 17, 1981
Date

ATTACHMENT 6

AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0548 Well No. 7 at Vermilion Block 35 is as follows:

It is expected to take 210 days to drill and complete the well. The rig being used to drill this well will be Bluewater 2 or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A 5-ton crane will be installed to be used for routine wireline work. Production from this gas-condensate well will be transported about 4,100' by pipe line to Vermilion Block 36 "A" facilities for separation, dehydration, and metering.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take 2 days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

ATTACHMENT 7

PROJECTED AIR EMISSION FOR VERMILION BLOCK 35, OCS 0548 No. 7

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 212-DAY PROJECTION IN OCS 0548 No. 7 SO_2	NOx	CO	TSP	VOC
CALCULATION FOR 210-DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						14,9[illegible]	224,596	48,877	16,052	17,969
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						26	389	84	27	31
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						26	389	84	27	31
Helicopter Takeoff & Landings		4							.18	.57	.57	.25	.52	1[illegible]	473	47[illegible]	208	433
CALCULATION FOR 2 DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	428
Cargo Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
Crew Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
														SO_2	NOx	CO	TSP	VOC
														15,[illegible]12	231,240	50,69[illegible]	15,700	18,896

(TOTALS IN POUNDS)

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP-42, EPA, 1977, Table 3.3.1 and Table 3.2.1-3.

8/81

AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0548 Well No. 9 at Vermilion Block 35 is as follows:

It is expected to take 210 days to drill and complete the well. The rig being used to drill this well will be Bluewater 2 or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A five-ton crane will be installed to be used for routine wireline work. Production from this gas-condensate will be transported about 9,000' by pipe line to Vermilion Block 36 "A" facilities for separation, dehydration, and metering.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take two days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

ATTACHMENT 8

PROJECTED AIR EMISSION FOR VERMILION BLOCK 35, OCS 0548 No. 8

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 212-DAY PROJECTION IN OCS 0548 No. 8 SO_2	NOx	CO	TSP	VOC
CALCULATION FOR 210-DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						14,950	224,596	48,877	16,052	17,969
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						26	389	84	27	31
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						26	389	84	27	31
Helicopter Takeoff & Landings		4							.18	.57	.57	.25	.52	150	473	473	208	433
CALCULATION FOR 2-DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	428
Cargo Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
Crew Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
														SO_2	NOx	CO	TSP	VOC
														15,512	231,240	50,691	16,700	18,896

(TOTALS IN POUNDS)

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

3/81

Union Oil and Gas Division: Gulf Region

Union Oil Company of California
P.O. Box 51388, O.C.S., Lafayette, Louisiana 70505
Telephone (318) 232-9724

August 17, 1981

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0548 WELL NO. 7
VERMILION BLOCK 35
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 3,500' FWL and 1,100' FNL.

The proposed drilling location is 250' east of a north-south trending, 1200% 1972-vintage Union proprietary line, 400' northwest of a northeast-southwest trending 2400% 1979 vintage Superior Oil Company proprietary line and 500' south of a east-west trending 4800% 1979 vintage Union proprietary line. All of the above data have Relative Amplitude displays. None of the lines indicate any shallow drilling hazards.

For the above reason we do not anticipate any shallow drilling hazard with well No. 7.

BY: Michael R Cornyn
Michael Cornyn
Area Geophysicist

MC/cw

ATTACHMENT 9

Union Oil and Gas Division: Gulf Region

Union Oil Company of California
P.O. Box 51388, O.C.S., Lafayette, Louisiana 70505
Telephone (318) 232-9724

August 17, 1981

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0548 WELL NO. 8
VERMILION BLOCK 35
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 5,750' FNL and 7,300' FWL.

The proposed drilling location is approximately 350' northeast of a northwest-southeast trending 4800% 1981 vintage Union proprietary line and 450' east of a north-south trending 4800% 1979 vintage Union proprietary line. Both lines have Relative Amplitude displays. There is an event with amplitudes a little higher than normal on the north-south line just south of the location, but we anticipate no drilling problems, although our drilling people have been notified of this possibility.

Because of the above-mentioned reasons, we do not expect to encounter any shallow drilling hazards.

BY: Michael C Cornyn
Michael Cornyn
Area Geophysicist

MC/cw

SCHEDULE OF ACTIVITIES
VERMILION BLOCK 14 FIELD UNIT

WELL	DRILLING		COMPLETION	
	START	FINISH	START	FINISH
0548 #9	10/15/81	12/1/81	12/1/82	12/15/82
0297 #45	12/15/82	2/1/82	2/1/82	2/15/82
0207 #46	2/15/82	4/1/82	4/1/82	4/15/82
0297 #47	4/15/82	6/1/82	6/1/82	6/15/82

The above wells should commence production approximately one month after completion. This allows sufficient time to lay flow lines, install risers, and make tie-ins to existing flow lines.

ATTACHMENT 12

AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0548 Well No. 9 at Vermilion Block 35 is as follows:

It is expected to take sixty (60) days to drill and complete the well. The rig being used to drill this well will be Movible III or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A 4-pile well protector platform will be installed adjacent to the OCS 0548 Well No. 5 platform and connected by a 100' bridge. An existing flow line from the 0548 No. 5 platform to the OCS 0297 Well No. 29 platform (± 5,300') will be used to transport the production. The well will be tested on the 0297 No. 29 platform then transported to the VE 26 "C" central production facilities for separation dehydration and metering. A 5-ton crane will be installed on 0548 #9 platform for utilization in routine wireline work.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take two (2) days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

PROJECTED AIR EMISSION FOR VERMILION BLOCK 35 OCS 0548 NO. 9

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 62-DAY PROJECTION IN OCS 0548 NO. 9 SO_2	NOx	CO	TSP	VOC
CALCULATION FOR 60 DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						4,372	65,684	14,294	4,694	5,255
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Helicopter Takeoff & Landings		4							.18	.57	.57	.25	.52	44	138	138	61	127
CALCULATION FOR 2 DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	429
Cargo Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
Crew Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
														SO_2	NOx	CO	TSP	VOC
														4,790	71,443	15,655	5,157	5,832
														(TOTALS IN POUNDS)				

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP-42, EPA, 1977, Table 4.3.1 and Table 3.2.1-3.

8/81

AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0297 Well No. 45 at Vermilion Block 26 is as follows:

It is expected to take sixty (60) days to drill and complete the well. The rig being used to drill this well will be Movible III or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A 4-pile well protector platform will be installed adjacent to the 0297 No. 16 platform and connected by a 100' bridge. An existing flow line from the 0297 No. 16 platform to the VE 26 "C" central production facilities (± 3,200') will be used to transport the gas stream. The gas will be separated, dehydrated, and metered on the VE 26 "C" platform. A 5-ton crane will be installed on the No. 45 platform for utilization in routine wireline work.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take two (2) days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

ATTACHMENT 14

PROJECTED AIR EMISSION FOR VERMILION BLOCK 26 OCS 0297 NO. 45

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 60-DAY PROJECTION IN OCS 0297 NO. 45 SO_2	NOx	CO	TSP	VOC
CALCULATION FOR 60-DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						4,372	65,684	14,294	4,694	5,255
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Helicopter Takeoff & Landing		4							.18	.57	.57	.25	.52	44	138	138	61	127
CALCULATION FOR 2-DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	428
Cargo Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
Crew Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2
														SO_2	NOx	CO	TSP	VOC
														4,790	71,443	15,655	5,157	5,832
														(TOTALS IN POUNDS)				

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP-42, EPA, 1977, Table 3.3.1 and Table 3.2.1-3.

8/81

AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0297 Well No. 46 at Vermilion Block 26 is as follows:

It is expected to take sixty (60) days to drill and complete the well. The rig being used to drill this well will be Movible III or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A 4-pile well protector platform will be installed adjacent to the VE 26 "G" platform and connected by a 100' bridge. An existing flow line from the "G" platform to the VE 26 "C" central production facilities (± 3,100') will be used to transport the gas stream. The gas will be separated, dehydrated, and metered on the VE 26 "C" platform. A 5-ton crane will be installed on the No. 46 platform for utilization in routine wireline work.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take two (2) days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

ATTACHMENT 15

PROJECTED AIR EMISSION FOR VERMILION BLOCK 26 OCS 0297 NO. 46

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 62 -DAY PROJECTION IN OCS 0297 NO. 46 SO_2	NOx	CO	TSP	VOC
CALCULATION FOR 60-DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						4,372	65,684	14,294	4,694	5,255
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Helicopter Takeoff & Landings		4							.18	.57	.57	.25	.52	44	138	138	61	127
CALCULATION FOR 2-DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	428
Cargo Boat (In Berth)	12 Hrs.		24	[illegible]		102	33.5	37.5						2	23	5	2	2
Crew Boat (In Berth)	12 Hrs.		24	[illegible]		[illegible]	5	37.5						2	23	5	2	2

SO_2	NOx	CO	TSP	VOC
4,790	71,443	15,655	5,157	5,832

(TOTALS IN POUNDS)

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP-42, EPA, 1977, Table 3.3.1 and Table 3.2.1-3.

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AIR QUALITY STATEMENT

The Plan of Operations for the drilling and production of OCS 0297 Well No. 47 at Vermilion Block 26 is as follows:

It is expected to take sixty (60) days to drill and complete the well. The rig being used to drill this well will be Mobile III or a comparable rig. The normal fuel consumption per day for this rig is approximately 2,300 gallons of diesel. The onshore support base for this activity will be the Union Oil Shore Base located at Intracoastal City, Louisiana. All transportation, boats and helicopters will be handled from this Base.

This location will consist of one single completion well which will be provided with minimum surface equipment. A 4-pile well protector platform will be installed adjacent to the OCS 0297 No. 15 platform and connected by a 100' bridge. An existing flow line from the No. 15 platform to the VE 26 "B" production facilities (+ 5,100') will be used to transport the gas stream. The gas will be separated, dehydrated, and metered on the VE 26 "B" platform. A 5-ton crane will be installed on the No. 47 platform for utilization in routine wireline work.

The installation of the platform will require a 500-ton derrick barge. The normal fuel consumption per day for this barge is approximately 5,700 gallons of diesel. The transportation for this phase of the operation will also be handled out of the Union Oil Company Shore Base located in Intracoastal City, Louisiana. It is expected to take two (2) days to complete the setting of the platform.

Air emission calculations are based on the aforementioned drilling and installation time frame. Any additional service work required during this well's productive life will be minimal and will result in air emissions which will be well below the exemption level.

The projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," third edition AP-42, EPA, 1977, Table 3.3.3-1 and Table 3.2.1-3.

ATTACHMENT 16

PROJECTED AIR EMISSION FOR VERMILION BLOCK 26 OCS 0297 NO. 47

EMISSION SOURCE	RUNNING TIME/DAY	TAKEOFF & LANDINGS/DAY	FUEL CONSUMPTION GALLONS/DAY	EMISSION FACTORS POUND/1,000 GALS. SO_2	NOx	CO	TSP	VOC	EMISSION FACTORS AIRCRAFT TAKEOFF & LANDINGS SO_2	NOx	CO	TSP	VOC	PROJECTED EMISSION, 62 DAY PROJECTION IN OF SO_2	NOx	CO	297 Nr. TSP	VOC
CALCULATION FOR 60 DAY DRILLING PHASE:																		
Drilling Rig	24 Hrs.			31.2	469	102	33.5	37.5						4,372	65,684	14,291	694	5,255
Cargo Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Crew Boat (In Berth)	2 Hrs.		4	31.2	469	102	33.5	37.5						7	114	25	8	9
Helicopter Takeoff & Landings		4							.18	.57	.57	.25	.52	44	138	138	61	127
CALCULATION FOR 2 DAYS PLATFORM INSTALLATION PHASE:																		
Derrick Barge	24 Hrs.		5,700	31.2	469	102	33.5	37.5						356	5,347	1,163	382	428
Cargo Boat (In Berth)	12 Hrs.		[illegible]	31.2	469	102	33.5	37.5						2	23	5	2	3
Crew Boat (In Berth)	12 Hrs.		24	31.2	469	102	33.5	37.5						2	23	5	2	2

Projected emissions are based on data from "Compilation of Air Pollutant Emission Factors," 3rd Edition AP 42, EPA, 1977, Table 3.3.1 and Table 3.2.1-3.

SO_2	NOx	CO	TSP	VOC
4,790	71,443	15,655	5,157	5,932

(TOTALS IN POUNDS)

9/80

Union Oil Company of California
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August 17, 1981

UNION

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0548 WELL NO. 9
VERMILION BLOCK 35
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 1,100' FWL and 1,000' FNL.

The Block 35 well No 5 shares the same surface location with the proposed well. The No. 5 did not encounter any shallow hazards.

For the above reason we do not anticipate any shallow drilling hazards with the No. 9 well.

BY: Michael Cornyn
Michael Cornyn
Area Geophysicist

MC/cw

ATTACHMENT 17

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August 17, 1981

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0297 WELL NO. 45
VERMILION BLOCK 26
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 6,300' FWL and 1,900' FSL.

The Block 26 well No. 16 is 100' north of the proposed location. Well No. 16 did not encounter any shallow drilling hazards.

For the above reason we do not anticipate any shallow drilling hazards with well No. 45.

BY: Michael R Cornyn
Michael Cornyn
Area Geophysicist

MC/cw

ATTACHMENT 18

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August 17, 1981

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0297 WELL NO. 46
VERMILION BLOCK 26
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 5,700' FEL and 1,650' FSL.

The Block 26 well No. G-1 shares the same surface location with the proposed well. The G-1 well did not encounter any shallow drilling hazards.

For the above reason we do not anticipate any shallow drilling hazards with well No. 46.

BY: Michael R Cornyn
Michael Cornyn
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ATTACHMENT 19

Union Oil and Gas Division: Gulf Region

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August 17, 1981

UNION OIL COMPANY OF CALIFORNIA
OCS-G-0297 WELL NO. 47
VERMILION BLOCK 26
OFFSHORE, LOUISIANA

SHALLOW HAZARD REPORT

LOCATION: 1,000' FEL and 3,500' FSL.

The Block 26 well No. 15 is approximately 100' southeast of the proposed location of well No. 54. Well No. 15 did not encounter any shallow drilling hazards.

For the above reason we do not anticipate any shallow drilling hazard with well No. 47.

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MC/cw

ATTACHMENT 20