

UNITED STATES GOVERNMENT
MEMORANDUM

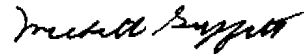
March 8, 2001

To: Public Information (MS 5034)
From: Plan Coordinator, FO, Plans Section (MS 5231)

Subject: Public Information copy of plan
Control # - S-05581
Type - Supplemental Exploration Plan
Lease(s) - OCS-G02271 Block - 348 Vermilion Area
Operator - Hall-Houston Oil Company
Description - Wells E, F, and G
Rig Type - JACKUP

Attached is a copy of the subject plan.

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



Michelle Griffitt
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/E	G02271/VR/348	3310 FSL, 1920 FWL	G02271/VR/348
WELL/F	G02271/VR/348	3310 FSL, 1920 FWL	G02271/VR/348
WELL/G	G02271/VR/348	3310 FSL, 1920 FWL	G02271/VR/348

NOTED - SCHEXNAILDRE

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HALL-HOUSTON OIL COMPANY

700 Louisiana, Suite 2100/Houston, Texas 77002

March 6, 2001

Telephone
(713) 228-0711
Fax
(713) 225-7600
(713) 225-7601

Mr. Donald C. Howard
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, LA 70123-2394



Attention: MS 5231

RE: Supplemental Exploration Plan
Lease OCS-G 2271, Vermilion Block 348
OCS Federal Waters, Gulf of Mexico, Offshore Louisiana

Gentlemen:

In accordance with the provisions of 30 CFR 250.203, Hall-Houston Oil Company (Hall-Houston) hereby submits for your review and approval eight (8) copies of a Supplemental Exploration Plan for Lease OCS-G 2271, Vermilion Area, Block 348, Offshore Louisiana. Five (5) copies are "Proprietary Information" and three (3) copies are "Public Information".

Excluded from the Public Information copies are certain geologic descriptions, depth of wells and structure map.

Hall-Houston Oil Company anticipates activities described in this plan to commence April 1, 2001 pending approval of the necessary permits.

Should additional information be required, please contact the undersigned.

Sincerely,

HALL-HOUSTON OIL COMPANY

A handwritten signature in cursive script that reads "Beth Atwood".

Beth Atwood
Regulatory Manager

Enclosures

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"Public Information"

CONTROL No. <u>S-5581</u>
REVIEWER: Michelle Griffitt
PHONE: (504) 736-2975

HALL-HOUSTON OIL COMPANY
SUPPLEMENTAL EXPLORATION PLAN
LEASE OCS-G 2271
VERMILION BLOCK 348

SECTION A	Contents of Plan
SECTION B	General Information
SECTION C	Geological, Geophysical & H2S Information
SECTION D	Biological Information
SECTION E	Wastes and Discharge Information
SECTION F	Oil Spill Response and Chemical Information
SECTION G	Air Emissions Information
SECTION H	Environmental Report
SECTION I	CZM Consistency
SECTION J	OCS Plan Information Form

SECTION A

CONTENTS OF PLAN

LEASE DESCRIPTION/ACTIVITY

Hall-Houston Oil Company is in the process of becoming designated operator of the SW/4 of Lease OCS-G 2271, Vermilion Block 348. Designation will be obtained from Pioneer Natural Resources and Louis Dreyfus Corporation. The lease is held by production through April 10, 2001.

Hall-Houston Oil Company has filed the designated applicant paperwork for under Oil Spill Financial Responsibility regulations.

OBJECTIVE

This Supplemental Exploration Plan provides for the drilling, completion and/or temporary abandonment of three (3) exploratory wells from a common surface location in Vermilion Block 348 to test the target sands as detailed in Section C of this plan.

SCHEDULE

The following schedule details the proposed drilling and completion of the locations provided for in this plan:

Activity	Estimated Start Date	Estimated Completion Date
Drill, Complete and/or Temporarily Abandon Well Location E	04/1/01	4/30/01
Drill, Complete and/or Temporarily Abandon Well Location F	5/5/01	6/5/01
Drill, Complete and/or Temporarily Abandon Well Location G	6/6/01	7/5/01

This schedule is tentative in the meaning of 30 CFR 250.203-1. Additional exploratory drilling must be predicated upon the need to further define the structures and/or reservoir limitations. In addition to the drilling of this well(s), other activities which may be conducted under this Plan would be the setting of a well protector structure, a seafloor template, a velocity survey in a wellbore, and soil boring.

WELL LOCATION(S)

The approximate location(s) of the subject well(s) in this Supplemental Exploration Plan is shown on the well location plat/table and bathymetry map included in Section J of this Plan.

DESCRIPTION OF DRILLING UNIT

Offshore exploratory activities are carried out with mobile drilling rigs. The five most common types of mobile rigs employed for exploratory drilling offshore are submersible drilling rigs, semi-submersible drilling rigs, jack-up drilling rigs, drillships, and drill barges.

The proposed well(s) in this Exploration Plan will be drilled and completed with a typical jackup rig. Rig specifications will be made a part of the appropriate Applications for Permit to Drill.

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

In accordance with 30 CFR 250, Subpart O, an operator is to ensure that Well Control Training is provided for lessee and contractor personnel engaged in oil and gas operations in the OCS Gulf of Mexico.

Supervisory and certain designated personnel on-board the facility are to be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in the NPDES General Permit GMG290000.

The operator is charged with the responsibility to not create conditions that will pose unreasonable risk to the public health, life, property, aquatic life, wildlife, recreation, navigation, commercial fishing, or other uses of the ocean. Some of these measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

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The MMS is required to conduct onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections. The MMS also inspects the stockpiles of equipment listed in the operator's approved Oil Spill Response Plan that would be used for the containment and cleanup of hydrocarbon spills.

SECTION B

GENERAL

CONTACT

Inquiries may be made to the following authorized representative:

Beth Atwood
Hall-Houston Oil Company
700 Louisiana, Suite 2100
Houston, Texas 77002
713-228-0711
batwood@hhoc.com

NEW OR UNUSUAL TECHNOLOGY

Hall-Houston does not propose to utilize any new or unusual technology during the proposed drilling and potential completion operations.

BONDING

In accordance with Notice to Lessees (NTL) 99-G04 which implements the requirements for general lease surety bonds contained in 30 CFR 256, Subpart I, Hall-Houston has a \$3,000,000 Areawide Bond on file with the Minerals Management Service.

Additionally, NTL 98-18N addresses how MMS has the authority to require additional security to cover full plugging, site clearance and other associated lease liabilities which may be in excess of the general lease surety bonds. These activities are reviewed on a case-by-case basis and, if deemed warranted, Minerals Management Service will provide such notification to Hall-Houston.

Oil Spill Financial Responsibility is in place for this lease in the amount of \$35,000,000 as required by OPA 90 regulations.

ONSHORE SUPPORT BASE

Vermilion Block 348 is located approximately 93 nautical miles south-southwest of Intracoastal City, Louisiana; approximately 120 miles from the onshore support base located in Intracoastal City, Louisiana, or 140 miles from the onshore support base located in Cameron, Louisiana. A Vicinity Plat showing the location of Vermilion Block 348 relative to the shoreline and onshore bases is included as **Attachment B-1**.

Hall-Houston will utilize onshore facilities located in either Intracoastal City, Louisiana or Cameron, Louisiana, which will serve as a port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to the proposed activities.

These bases are capable of providing the services necessary for the proposed activities. They have 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage base, drinking and drill water, etc. These bases will also serve as a loading point for tools, equipment and machinery to be delivered to the MODU, crew change and transportation base, and temporary storage for materials and equipment. These facilities typically include outdoor storage, forklift and crane service, dock, trailer facilities and parking, as well as 24-hour service.

Support vessels and travel frequency during drilling and completion activities are as follows:

Support Vessel	Drilling and Completion Trips Per Week
Crew Boat	4
Supply Boat	7
Helicopter	2

Personal vehicles will be the main means of transportation to carry rig personnel from various locations to the staging areas. They will then be transported to the MODU by the crew boat. A helicopter will be used to transport small supplies and, on occasion, personnel. The most practical, direct route permitted by the weather and traffic conditions will be utilized.

NEW ONSHORE CONSTRUCTION OR EXPANSION OF SUPPORT FACILITIES

The proposed operations do not mandate any immediate measures for land acquisition or expansion of the existing onshore base facilities.

Dredging and filling operations will not be required for the operations, nor will any new construction or expansion of onshore facilities be involved for the operations proposed in this Supplemental Exploration Plan.

LEASE STIPULATIONS

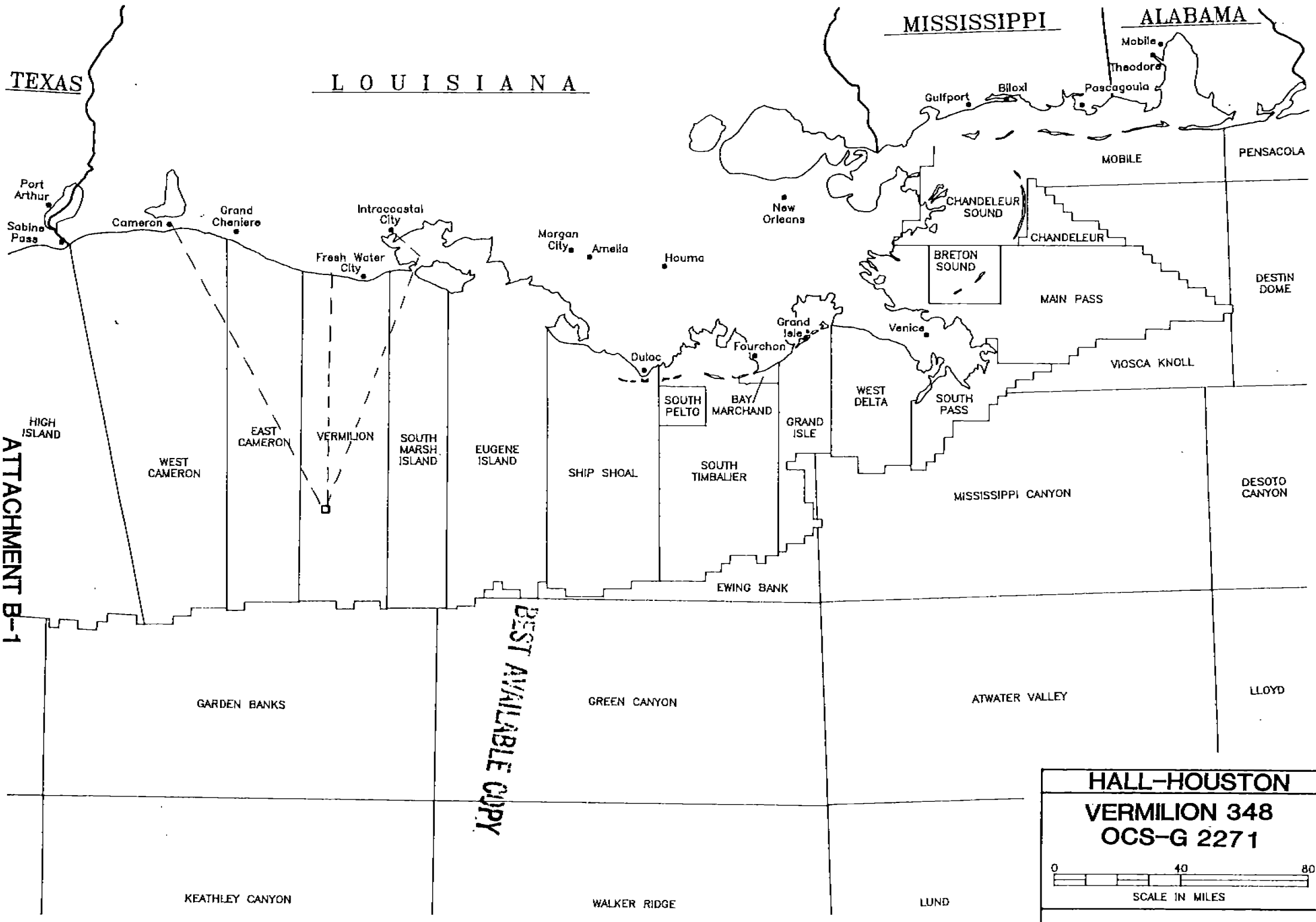
Oil and gas exploration activities on the OCS are subject to stipulations developed before the lease sale; these are attached to the lease instrument, as necessary, in the form of mitigating measures. The MMS is responsible for ensuring full compliance with stipulations.

Lease Stipulation 1 – Archaeological Resources is attached to the lease instrument.

Lease Stipulation 3 – Military Warning Area

This stipulation requires the lessee to enter into an agreement with the commander of the warning area, when the lessee operates or causes to be operated on its behalf, boat, ship or aircraft traffic in the individual designated warning areas. This agreement allows the commander to plan military missions and maneuvers that will avoid the areas where oil and gas activities are taking place or to schedule around these activities.

Vermilion Area, Block 348, OCS-G 2271 lies within Warning Area-W-147. All activities conducted on this block will adhere to the warning area requirements attached to this lease



SECTION C

G & G INFORMATION

STRUCTURE CONTOUR MAPS

A current structure map drawn to the top of the prospective hydrocarbon accumulation showing the surface and bottom hole location of the subject well with both vertical and measured depths indicated in feet, is included in this section as **Attachment C-1 and C-2 and C-3**.

INTERPRETED SEISMIC LINES

Included as **Attachment C-4** is a copy of the letter being submitted under separate cover this date depicting the migrated and annotated deep seismic lines within 500 feet of the surface locations being proposed in this plan.

GEOLOGICAL STRUCTURE CROSS SECTION

Interpreted geological cross sections corresponding to each seismic line submitted depicting the location and depth of each proposed well locations with a key horizon and objective sand labeled are included as **Attachments C-5 and C-6**.

SHALLOW HAZARDS REPORT

A high resolution geophysical survey report and cultural resource assessment was conducted by Gulf Ocean Services on the west half of Block 348 in February 2001. The purpose of the survey was to evaluate the geologic conditions and inspect for potential hazards or constraints to lease exploration or development.

Three (3) copies of the report are being submitted to Minerals Management Service under separate cover with this Supplemental Exploration Plan for review.

ARCHAEOLOGICAL RESOURCES

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Lease OCS-G 2271, Vermilion Block 348 falls outside the high probability area for either prehistoric or historic shipwreck. A cultural resource report was prepared in conjunction with the shallow hazards report and submitted with the Supplemental Exploration Plan. The report indicates no shipwreck or prehistoric findings on the lease. However, Hall-Houston as a prudent operator, agrees that if any archaeological resource is discovered while conducting operations that they will immediately halt operations

within the area of the discovery and report the discovery to the Regional Director. If investigations determine that the resource is significant, the Regional Director will inform the lessee how to protect it.

SHALLOW HAZARDS ANALYSIS

A shallow hazards analysis has been prepared for the proposed surface location, evaluating seafloor and subsurface geologic and manmade features and conditions, and is included as **Attachment C-7**. A statement of hydrocarbon trapping is included as **Attachment C-8**.

HIGH RESOLUTION SEISMIC LINES

Included as **Attachment C-4** is a copy of the letter being submitted under separate cover this date depicting the annotated shallow hazard lines within 500 feet of the surface location being proposed in this Plan.

STRATIGRAPHIC COLUMN

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the proposed wells is included as **Attachment C-9**.

TIME VERSUS DEPTH TABLES

Included as **Attachment C-10** is the appropriate table providing seismic time versus depth for the proposed well locations.

HYDROGEN SULFIDE

Classification

Based on available geological and geophysical data from wells drilled in the surrounding Vermilion Area, Hall-Houston considers Block 348 to be in an area where the absence of hydrogen sulfide has been confirmed and does not require a contingency plan.

Pioneer did not encounter any hydrogen sulfide while drilling Well No. 10, Vermilion Block 348 and to the best of Hall-Houston's knowledge there are no production records to indicate hydrogen sulfide has been produced from similar stratigraphic zones in this area.

In accordance with 30 CFR 250.417(c), Hall-Houston requests a determination be made by your office that we will be drilling in an "H₂S absent" zone.

Contingency Plan

Should MMS determine the area is not "H₂S absent" a contingency plan will be prepared in accordance with 30 CFR 250.417(f).

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HALL-HOUSTON OIL COMPANY

700 Louisiana, Suite 2100/Houston, Texas 77002

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March 6, 2001

Mr. Donald C. Howard
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123-2394

Attention: MS 5231

RE: Supplemental Plan of Exploration
OCS-G 2271, Block 348
Vermilion Area
Offshore Louisiana

Gentlemen:

Enclosed are the following items:

1. One copy of the two lines closest to the common surface location proposed in the Supplemental Plan of Exploration for Vermilion Area, Block 348 OCS-G 2271.
2. Two 3-D seismic lines for the proposed surface location in Vermilion Area, Block 348, OCS-G 2271.
3. Base Map for Vermilion Block 348, OCS-G 2271.

If you have any questions, please contact David Shomette at 713-228-0711.

Sincerely,



Beth Atwood
Regulatory Manager

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enclosures

Vermilion Block 348

On February, 2001 a high resolution geophysical survey was conducted over the western half of Vermilion Block 348 by Gulf Ocean Services, Inc. Instrumentation included a Klein Model 531-T dual channel side scan sonar, geometrics 801/3 magnetometer, Edo Western Model 248-465A subbottom profiler, Innerspace Model 440/441 fathometer and a 14,500 joule multi-tip sparker system.

Recently Hall-Houston Oil Co. reviewed these data. The data indicate that the proposed surface location is clear of channels, sea floor irregularities, faults and shallow gas. However, conventional seismic indicates possible shallow gas at -400'ss and -900'ss. Hall-Houston Oil Company will take precautions to prevent near surface gas flow while drilling these zones.

A 20" Stingray pipeline recognized to exist approximately 950' NE of the surface location. Hall-Houston will be mindful of its presence during rig placement.

Hall-Houston Oil Company does not anticipate shallow drilling problems and will drill the wells in a safe and workmanlike manner.



David Shomette
Sr. Geologist

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Vermilion Block 348
Statement of Hydrocarbon Trap

The hydrocarbon trapping mechanism for well #11 and #13 is an upthrown 3-way fault closure against an east-west trending fault that plunges to the south. The well is expected to be drilled into abnormal pressure near TD of the well at 3800'tvd. The nearest analogy is the VR 348, Shell #4, which encountered 13.1# mud at 4100'tvd.

The hydrocarbon trapping mechanism for the well #12 is a sand trapped against a fault on the north side of the reservoir and stratigraphically pinched out to the west and south. The target sand is abnormally pressured, as seen in the VR 348, Shell #5, which drilled the sand in an adjacent fault block with approximately 13.3# mud at 4570'tvd.

Biostratigraphic/Lithostratigraphic Column
Vermilion Block 348

<i>Depth (in feet) (Water Depth: 248')</i>	<i>Biostratigraphic (Paleo) Zones with Ecozones</i>	<i>Lithographic Description</i>	<i>Objective Section(s)</i>
1000'		Sand/Shale	
2000'		Sand/Shale	1430' Sand 1700' Sand
3000'	Trimosina A	Sand/Shale	
4000'		Sand/Shale	
5000'	Angulogerina B	Sand/Shale	Ang B-2
6000'		Sand/Shale	

MESA VR364 2

G0227	2	177064018600	1-Jan-47	54	108	270
G0227	2	177064018600	1-Jan-47	332	664	1916
G0227	2	177064018600	1-Jan-47	377	754	2207
G0227	2	177064018600	1-Jan-47	391	782	2315
G0227	2	177064018600	1-Jan-47	415	830	2479
G0227	2	177064018600	1-Jan-47	426	852	2556
G0227	2	177064018600	1-Jan-47	445	890	2674
G0227	2	177064018600	1-Jan-47	475	950	2858
G0227	2	177064018600	1-Jan-47	505	1010	3086
G0227	2	177064018600	1-Jan-47	595	1190	3736
G0227	2	177064018600	1-Jan-47	606	1212	3824
G0227	2	177064018600	1-Jan-47	623	1246	3966
G0227	2	177064018600	1-Jan-47	664	1328	4250
G0227	2	177064018600	1-Jan-47	676	1352	4356
G0227	2	177064018600	1-Jan-47	687	1374	4447
G0227	2	177064018600	1-Jan-47	754	1508	4966
G0227	2	177064018600	1-Jan-47	774	1548	5116
G0227	2	177064018600	1-Jan-47	792	1584	5266
G0227	2	177064018600	1-Jan-47	812	1624	5416
G0227	2	177064018600	1-Jan-47	832	1664	5566
G0227	2	177064018600	1-Jan-47	849	1698	5716
G0227	2	177064018600	1-Jan-47	868	1736	5866
G0227	2	177064018600	1-Jan-47	963	1926	6719
G0227	2	177064018600	1-Jan-47	992	1984	6928
G0227	2	177064018600	1-Jan-47	1004	2008	7028
G0227	2	177064018600	1-Jan-47	1027	2054	7188
G0227	2	177064018600	1-Jan-47	1038	2076	7261
G0227	2	177064018600	1-Jan-47	1057	2114	7416
G0227	2	177064018600	1-Jan-47	1075	2150	7566
G0227	2	177064018600	1-Jan-47	1097	2194	7716

SECTION D

BIOLOGICAL (not applicable)

SECTION E

WASTES AND DISCHARGES

DISCHARGES

The disposal of oil and gas operational wastes is managed by USEPA through regulations established under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) provides a framework for the safe disposal of discarded materials, regulating the management of solid and hazardous wastes. The direct disposal of operational wastes into offshore waters is limited by USEPA under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by USEPA's third program, the Underground Injection Control Program. If any wastes are classified as hazardous, they are to be properly transported using a uniform hazardous waste manifest, documented, and disposed at an approved hazardous waste facility.

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. The major discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and uncontaminated seawater. Minor discharges from the offshore oil and gas industry include drilling-waste chemicals, fracturing and acidizing fluids, and well completion and workover fluids; from production operations - deck drainage and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges.

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All offshore discharges associated with Hall-Houston's proposed operations will be conducted in accordance with the NPDES permit covering the Lease OCS-G 2271.

Hall-Houston has requested coverage under EPA Region VI NPDES General Permit GMG290000 for discharges associated with drilling and production activities.

Wastes not discharged overboard will be transported to an appropriate treatment or disposal site, in accordance with all Federal, State and Local rules and regulations.

All discharges associated with drilling and completing the subject wells 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).

Annex V of the International Convention for the Prevention of Pollution from ships, also known as MARPOL Protocol, prohibits the dumping of all plastic wastes, including plastic packaging materials and fishing gear.

EPA's NPDES General Permit No. GMG290000 regulates overboard discharges, restrictions and limitations of waste generated from oil and gas operations in the Western

Gulf of Mexico. Included as **Attachment E-1** is the estimated quantity and rates of discharges applicable to the drilling fluids/cuttings based on hole size interval and washout.

Discharges will contain no free oil and will be in compliance with and monitored as required by the permit. Any drilling fluid contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

Solid domestic wastes will be transported to shore for proper disposal at an authorized disposal site, and sewage will be treated on location by U.S. Coast Guard approved marine sanitation devices.

Mud may be discharged for purposes of dilution or at end of well. Surveillance of the fluid is accomplished through daily inventory of mud and chemicals added to the system, in addition to monthly and end-of-well LC50 toxicity tests required by EPA. Typical mud components are included as **Attachment E-2**.

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

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

DRILLING MUD COMPONENTS

<u>COMMON CHEMICAL OR CHEMICAL TRADE NAME</u>	<u>DESCRIPTION OF MATERIAL</u>
Aluminum Stearate	Aluminum Stearate
Am-Spot	Coastal Spot, surfactant blend
"AXTAFLO-S"	Nonionic Surfactant
Barite	Barium Sulfate (BaSO ₄)
Bio-Base	Internal Olefin
Calcium Carbonate	Aragonite (CaCO ₃)
Calcium Chloride	Hydrophilite (CaCl ₂)
Calcium Oxide	Lime (Quick)
Calcium Sulfate	Anhydrite (CaSO ₄)
Carboxymethyl Cellulose	Carboxymethyl Cellulose
Caustic Potash	Potassium Hydrate
Caustic Soda	Sodium Hydroxide (NaOH)
Chrome Lignite	Chrome Lignite
Chrome Lignosulfonate	Chrome Lignosulfonate
Drilling Detergent	Soap
"E-Pal"	Non-toxic, biodegradable defoamer
Ferrochrome Lignosulfonate	Derived from wood pulp
Gel	Sodium montmorillonite, bentonite, attapulgite CaSo4.2H20
Gypsum	Lignite
Lignite	Lignosulfonate
Lignosulfonate	Cement Pre-Flush
"Mud Sweep"	Hydroloyzed Cereal solid
"MOR-REX"	Organo-aluminum complex
"Shale-Trol"	Sodium Acid Pyrophosphate
Sapp	Sodium Carbonate
Soda Ash	NaHCO ₃
Sodium Bicarbonate	Sodium Carboxymethyl Cellulose
Sodium Carboxymethyl Cellulose	NaCl
Sodium Chloride	NaCrO4.10H2O
Sodium Chromate	Corn Starch
Starch	Biodegradable drilling lubricant
"TX-9010"	Biodegradable drilling lubricant
"TORQ-Trim"	Oil Base mud conc.
"Black Magic"	Sacked concentrated oil base mud
"Black Magic Supermix"	Used to mix certain loss-circulation pills
Diesel	Plastic foil, shredded cellophane
"Jelflake"	Loss-circulation material
MICA	Surfactant mixed with diesel
"Pipe-Lax"	Ground walnut shells
"Wall-Nut"	Loss-circulation material
Wood Fiber	
Xanvis	Bio-polymer

SECTION F

OIL SPILL RESPONSE AND CHEMICAL

Hall-Houston Oil Company has an approved Oil Spill Contingency Plan in place with MMS. Hall-Houston submitted an Oil Spill Response Plan in June 1999 for review and approval by MMS and has prepared and submitted an update of this plan for calendar year 2000. Pending approval of the Oil Spill Response Plan by MMS, Hall-Houston has also submitted a worst case certification statement for approval. Hall-Houston Oil Company is the only company currently covered under the approved Oil Spill Contingency Plan and Oil Spill Response Plan pending approval. Activities proposed in this Supplemental EP will be covered by Hall-Houston's Regional OSRP.

Hall-Houston's designated Oil Spill Team, and Spill Management Team consisting of Hall-Houston personnel and contract personnel, has been trained and is capable of responding to a spill incident. This team's duties are to eliminate the source of any spill, remove all sources of possible ignition, deploy the most reliable means of available transportation to monitor the movement of a slick, and contain and remove the slick, if possible.

Hall-Houston is a member of Clean Gulf Associates which has an equipment agreement with the Marine Spill Response Organization. CGA equipment is maintained by MSRC at two permanent equipment bases in Texas, at Ingleside and Galveston, and three bases in Louisiana, at Lake Charles, Houma, and Ft. Jackson and one base in Pascagoula, Mississippi. Each base is equipped with fast response skimmers and there is a barge mounted high volume open sea skimmer based at Grand Isle, Louisiana. In addition to providing CGA equipment, the MSRC can also supply personnel and advisors through their "Star Contractors" for clean-up operations.

Worst Case Discharge < 1000 barrels

The volume of the WCD scenario (calculated according to 30 CFR 254.47 (a) or (b); as appropriate is less than 1000 barrels over a 30-day period. The product anticipated to be transported is gas/condensate. Therefore, the following information applies:

Company Name:	Hall-Houston Oil Company
OSRP Approval:	pending
Worst Case Certification:	pending

Name of OSRO (Equipment)	CGA/MSRC
Name of OSRO (Personnel)	US Environmental Phillips Services Garner Environmental

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Location of Primary Spill Eqpt:	Houma, Louisiana (CGA/MSRC)
Location of Pre-Planned Staging:	Intracoastal City, Louisiana or Cameron, Louisiana (shorebase)

Comparison of WCD in OSRP to Proposed Operations

CATEGORY	REGIONAL OSRP	EP
Type of Activity	Pipeline/Blowout	Well blowout
Spill Location (Area/Block)	PL 15	VR 348
Facility Designation	Caisson 4	JU
Distance to Nearest Shoreline (Miles)	10.7 nautical miles	93 nautical miles
Volume	1842 bbls	NA
Type of Oil(s) (Crude/Condensate/Diesel)	Condensate	Gas/Condensate
API Gravity	35.0°	Unknown

Worst Case Discharge > 1000 Barrels (not applicable)

Spill Response Certification Statement

“Since Hall-Houston Oil Company has the capability to respond to the worst-case spill scenario included in its regional OSRP pending approved, and since the worst-case scenario determined for our SPOE, does not replace the worst-case scenario in our regional OSRP, I hereby certify that Hall-Houston Oil Company has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in this SPOE.”

SECTION G

AIR EMISSIONS INFORMATION

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

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

Included as **Attachment G-1** is MMS-138 Projected Air Quality Emissions Report prepared in accordance with Appendix H of the Notice to Lessees NTL 2000-G10 addressing drilling and completion operations.

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**EXPLORATION PLAN (EP)
AIR QUALITY SCREENING CHECKLIST**

OMB Control No. XXX-XXX
Expiration Date: Pending

COMPANY	Hall-Houston Oil Company
AREA	Vermilion
BLOCK	348
LEASE	OCS-G 2271
PLATFORM	
WELL	E, F, G
COMPANY CONTACT	Beth Atwood
TELEPHONE NO.	713-228-0711
REMARKS	Drill, complete and/or temporarily abandon three wells from the same surface in Vermilion 348.

"Yes"	"No"	Air Quality Screening Questions
	X	1. Are the proposed activities east of 87.5° W latitude?
	X	2. Are H ₂ S concentrations greater than 20 ppm expected?
	X	3. Is gas flaring proposed for greater than 48 continuous hours per well?
	X	4. Is produced liquid burning proposed?
	X	5. Is the exploratory activity within 25 miles of shore?
	X	6. Are semi-submersible activities involved and is the facility within 50 miles of shore?
	X	7. Are drillship operations involved and is the facility within 120 miles of shore?
	X	8. Will the exploratory activity be collocated (same surface location) on a production facility?

If ALL questions are answered "No":
Submit only this coversheet with your plan; a full set of spreadsheets is not needed.

If ANY of questions 1 through 7 is answered "Yes":
Prepare and submit a full set of EP spreadsheets with your plan.

If question number 8 is answered "Yes":
Prepare and submit a full set of DOCD spreadsheets showing the cumulative emissions from both the proposed activities and the existing production platform.

SECTION H

ENVIRONMENTAL (not applicable)

ENVIRONMENTAL REPORT

An Environmental report is not required for a Supplemental Exploration Plan.

SECTION I

COASTAL ZONE CONSISTENCY (not applicable)

Activities proposed in this Supplemental Exploration Plan do not require Coastal Zone Consistency Certification or Public Notice.

SECTION J

PLAN INFORMATION FORM

Included in this section as **Attachment J-1** is MMS-137 Plan Information Form prepared in accordance with Appendix J of the Notice of Lessees NTL 2000-G10.

Included as **Attachments J-2** is the Well Location Plat/Table depicting the surface and bottomhole location of each well proposed and **Attachment J-3**, Bathymetry Map.

OCS PLAN INFORMATION FORM
(USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN	<input checked="" type="checkbox"/>	DEVELOPMENT OPERATIONS COORDINATION DOCUMENT	DEVELOPMENT & PRODUCTION PLAN
OPERATOR: Hall-Houston Oil Company		ADDRESS: 700 Louisiana, Suite 2100	
MMS OPERATOR NO.: 00846		Houston, Texas 77002	
CONTACT PERSON: BETH ATWOOD		PHONE NO. 713-228-0711	
PROPOSED START DATE: 040601	RIG TYPE: JU SS PF DS OTHER	DISTANCE TO CLOSEST LAND (IN MILES): 93 NM	
NEW OR UNUSUAL TECHNOLOGY	YES	NO <input checked="" type="checkbox"/>	ONSHORE SUPPORT BASE(S): Cameron, Louisiana
NARRATIVE DESCRIPTION OF PROPOSED ACTIVITIES: Drill, complete and/or temporarily abandon three wells from a common surface location in Vermilion 348, OCS-G 2271			
PROJECT NAME, IF APPLICABLE: NA			

PROPOSED WELL/STRUCTURE LOCATIONS

WELL/STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
Platform ___ or Well <u>X</u> Name: <u>E (#11)</u>	CALLS: <u>3310'</u> <u>FS</u> L and <u>1920'</u> <u>F W</u> L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X <u>1,619,786.08</u> Y <u>-180,880.82</u> LAT: <u>28°09'50.225"</u> LONG: <u>92°30'46.098"</u> TVD (IN FEET): <u>3800'</u> MD (IN FEET): <u>4463'</u>	CALLS: ___ F ___ L and ___ F ___ L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X _____ Y _____ LAT: _____ LONG: _____ WATER DEPTH (IN FEET): <u>247'</u>
Platform ___ or Well <u>X</u> Name: <u>F (#12)</u>	CALLS: <u>3310'</u> <u>FS</u> L and <u>1920'</u> <u>F W</u> L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X <u>1,619,786.08</u> Y <u>-180,880.82</u> LAT: <u>28°09'50.225"</u> LONG: <u>92°30'46.098"</u> TVD (IN FEET): <u>4700'</u> MD (IN FEET): <u>7253</u>	CALLS: ___ F ___ L and ___ F ___ L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X _____ Y _____ LAT: _____ LONG: _____ WATER DEPTH (IN FEET): <u>247'</u>
Platform ___ or Well <u>X</u> Name: <u>G (#13)</u>	CALLS: <u>3310'</u> <u>FS</u> L and <u>1920'</u> <u>F W</u> L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X <u>1,619,786.08</u> Y <u>-180,880.82</u> LAT: <u>28°09'50.225"</u> LONG: <u>92°30'46.098"</u> TVD (IN FEET): <u>3000</u> MD (IN FEET): <u>3000</u>	CALLS: ___ F ___ L and ___ F ___ L OF LEASE OCS <u>2271</u> , <u>VERMILION</u> AREA, BLOCK <u>348</u> X _____ Y _____ LAT: _____ LONG: _____ WATER DEPTH (IN FEET): <u>247'</u>
Platform ___ or Well ___ Name: _____	CALLS: ___ F ___ L and ___ F ___ L OF LEASE OCS _____, _____ AREA, BLOCK _____ X _____ Y _____ LAT: _____ LONG: _____ TVD (IN FEET): _____ MD (IN FEET): _____	CALLS: ___ F ___ L and ___ F ___ L OF LEASE OCS _____, _____ AREA, BLOCK _____ X _____ Y _____ LAT: _____ LONG: _____ WATER DEPTH (IN FEET): _____

BEST AVAILABLE COPY

"Public Information"

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

341
(OPEN)

Y = -169,432.767

348

OCS-G2271
PIONEER NATURAL RESOURCES USA INC

VERMILION AREA SOUTH ADDITION



3¹⁰

VR 348-A

1
2

9

7

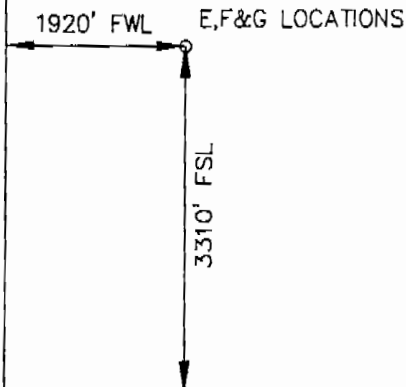
SURFACE LOCATION

WELL No.	LATITUDE	LONGITUDE	FSL	FWL	X-COORD	Y-COORD
E LOCATION SL	28°09'50.225"N	92°30'46.098"W	3310'	1920'	1,619,786.08	-180,880.82
F LOCATION SL	28°09'50.225"N	92°30'46.098"W	3310'	1920'	1,619,786.08	-180,880.82
G LOCATION SL	28°09'50.225"N	92°30'46.098"W	3310'	1920'	1,619,786.08	-180,880.82

X = 1,617,866.076

X = 1,632,624.124

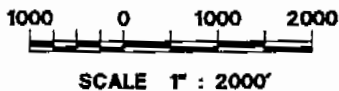
4
5



Y = -184,190.815

363

PUBLIC



ATTACHMENT J-2

DATUM: NAD 27

HALL HOUSTON OIL COMPANY

SPHEROID: CLARKE 1866

PROJECTION: LAMBERT

ZONE: LOUISIANA SOUTH

Racal NCS, Inc.
3624 Westchase Drive
Houston, Texas 77042
Tel: 713-784-4482 Fax: 713-784-8182



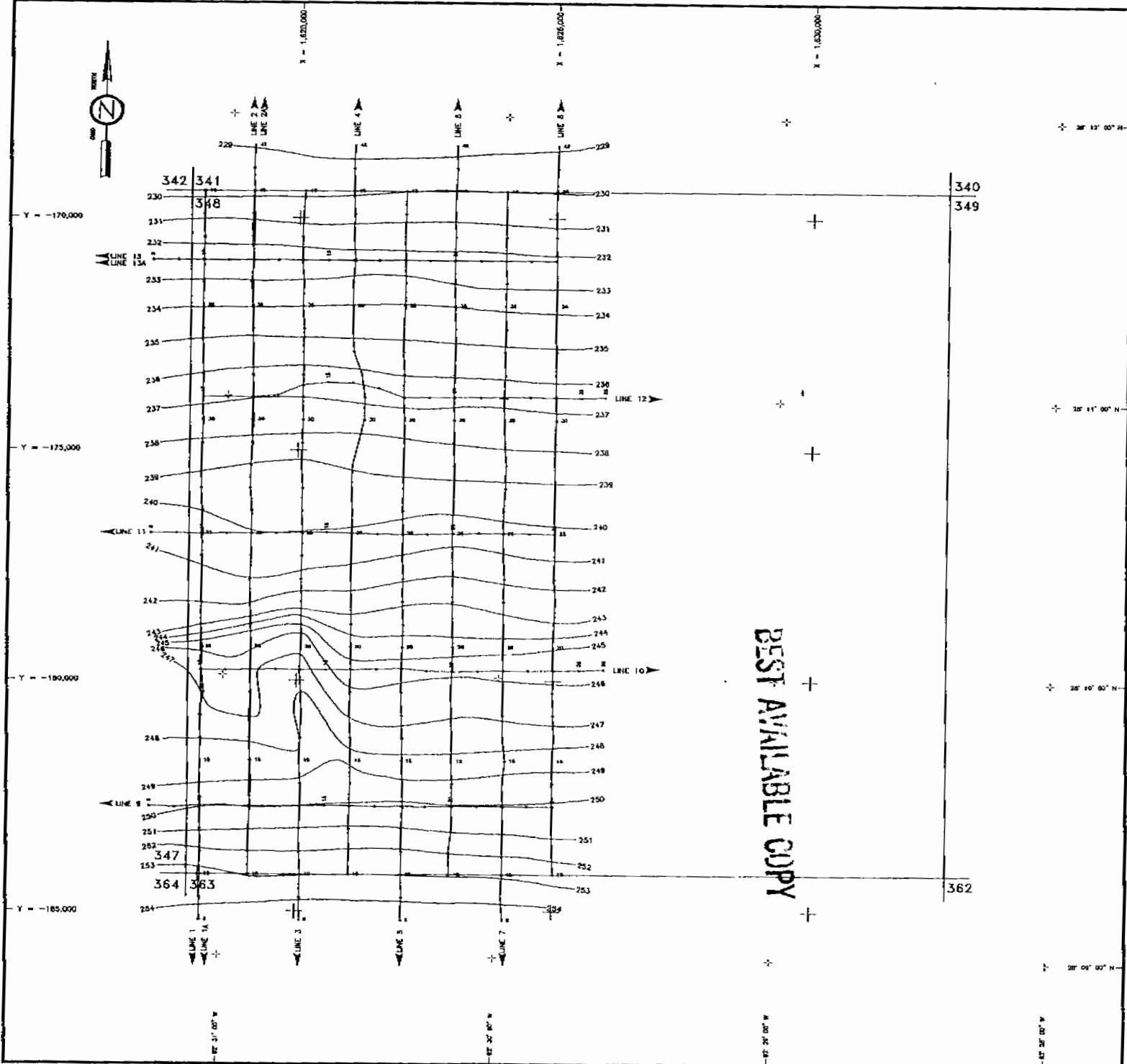
"Public Information"

BLOCK 348

VERMILION AREA - SOUTH ADDITION

DATE 03/03/01	DRAWN BY: VJA	CHECKED BY:	DRAWING No. VR348_4153
REV. DATE	REV. No.: 00	SCALE: 1" = 2000'	JOB No. 2550-0268 DP No. 4153

ATTACHMENT J-3



LEGEND

240 ——— BATHYMETRIC CONTOUR, DEPTHS, IN FEET,
 BASED ON ACOUSTIC VELOCITY OF 4980
 FEET/SECOND IN THE WATER COLUMN.
 CONTOUR INTERVAL = 1 FOOT

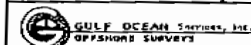
HALL-HOUSTON OIL COMPANY

HIGH-RESOLUTION GEOPHYSICAL SURVEY

**VERMILION AREA
BLOCK 348**

Louisiana (Lambert) Coordinate System, South Zone
Grid Units in Feet

INTERPRETATION BY: J.W. Antoine | GEOTEK COMPANY
 GOS JOB NO: 13-1-038 | PROJECT No: 912 FEB. 2001



BATHYMETRY MAP