DATE 11-16-92

TO: MS 5034

FROM: MS 5231

t Develop nt Operations Coordination Document (DOCD) and Environmental Information
eases OCS- 2, 063, 066 and 067,
Control No. 2862

PUBLIC INFORMATION

ODECO OIL & GAS COMPANY

UNIT PLAN OF DEVELOPMENT

NO. 14-08-001-2931

SHIP SHOAL BLOCK 113 UNIT

YEAR 1993

SUBMITTED BY: _____

Alberto S. Moradel
Supervisor
Oil & Gas Administration

DATE: NOV 6 1992

ODECO OIL & GAS COMPANY
UNIT PLAN OF DEVELOPMENT NO. 14-08-001-2931
YEAR 1993

I. SUMMARY OF PREVIOUS YEAR'S ACTIVITIES

A. Recap of wells drilled in 1992.

Lease	Well	Well Re-named as	Block	Plan Year	Status
OCS 063	#58	03	93	1991	Single Comp. Oil
OCS 063	#59	P2	93	1991	P & A
OCS 063	#60	--	93	1992	P & A
OCS 063	#62	--	93	1992	Drlg-Single Comp. Oil
OCS 066	#10	Q2	112	1988	Dual Comp. Oil
OCS 067	#51	--	113	1990	Dual Comp. Oil

B. Wells with approved locations from previous year plan, but not yet drilled.

Lease	Well	Block	Plan Year	Status
OCS 038	# 2	120	1981	?
OCS 038	# 9	120	1981	?
OCS 038	#11	120	1979	?
OCS 042	#21	94	1991	To be drld in 1993
OCS 063	#55	93	1990	?
OCS 063	#57	93	199	?
OCS 063	#61	93	1992	To be drld in 1993
OCS 063	#62	93	1992	?
OCS 064	#58	114	1985	?
OCS 064	#64	114	1986	?
OCS 064	#66	114	1986	?
OCS 065	#A	117	1989	?
OCS 065	#8	117	1992	To be drld in 1993
OCS 065	#9	117	1992	?
OCS 066	#11	112	1992	?
OCS 067	#53	113	1990	To be drld in 1993
OCS 067	#54	113	1991	?
OCS 068	#7	118	1987	?
OCS 068	#8	118	1989	?
OCS 069	#19	119	1986	?
OCS 069	#22	119	1986	?

II. PLAN FOR YEAR 1993

Odeco proposes to drill eight additional locations for the year. They are as follows:

A. **OCS 042 #24, Ship Shoal Block 94 (Single Well Structure)**

Surface Location:	330' FSL and 500' FEL of Ship Shoal Block 94.
BHL:	
Proposed TD:	
Objective:	R-15, R-18 and C-1/3 Sands - see geological program.
Water Depth:	33'.
Date:	Commence - 4/15/93; Complete - 5/15/93.

B. **OCS 042 #25, Ship Shoal Block 94 (Single Well Structure)**

Surface Location:	580' FSL and 4400' FEL of Ship Shoal Block 94.
BHL:	
Proposed TD:	
Objective:	M-1 and M-3 Sands - see geological program.
Water Depth:	33'.
Date:	Commence - 2/15/94; Complete - 4/1/94.

C. **OCS 063 #63, Ship Shoal Block 93 (Single Well Structure)**

Surface Location:	3050' FNL and 5170' FWL of Ship Shoal Block 93.
BHL:	
Proposed TD:	
Objective:	M-8 Sand - see geological program.
Water Depth:	20'.
Date:	Commence - 3/1/93; Complete - 4/15/93.

D. **OCS 063 #64, Ship Shoal Block 93 (Single Well Structure)**

Surface Location:	3870' FNL and 8250' FWL of Ship Shoal Block 93.
BHL:	
Proposed TD:	
Objective:	M-8 Sand - see geological program.
Water Depth:	20'.
Date:	Commence - 1/1/94; Complete - 2/15/94.

E. **OCS 066 #12, Ship Shoal Block 112 (Single Well Structure)**

Surface Location:	300' FSL and 2900' FEL of Ship Shoal Block 112.
BHL:	[redacted]
Proposed TD:	
Objective:	R-3 and R-5A Sands - see geological program.
Water Depth:	46'.
Date:	Commence - 5/15/93; Complete - 6/15/93.

F. **OCS 066 #13, Ship Shoal Block 112 (Single Well Structure)**

Surface Location:	2300' FSL and 3600' FEL of Ship Shoal Block 112.
BHL:	[redacted]
Proposed TD:	
Objective:	R-11 and R-11A Sands - see geological program.
Water Depth:	45'.
Date:	Commence - 4/1/94; Complete - 5/1/94.

G. **OCS 067 #55, Ship Shoal Block 113 (Single Well Structure)**

Surface Location:	5500' FSL and 7600' FEL of Ship Shoal Block 113.
BHL:	[redacted]
Proposed TD:	
Objective:	R-18 Sand - see geological program.
Water Depth:	46'.
Date:	Commence - 6/15/93; Complete - 8/1/93.

H. **OCS 067 #56, Ship Shoal Block 113 (Single Well Structure)**

Surface Location:	4900' FSL and 3700' FEL of Ship Shoal Block 113.
BHL:	[redacted]
Proposed TD:	
Objective:	L-13 Sand - see geological program.
Water Depth:	48'.
Date:	Commence - 5/1/94; Complete - 6/15/94.

III. ESTIMATED PRODUCTION RATES AND DEPLETION SCHEDULE

A. Rates - Type well, type of completion, and initial flow rates.

Block Lease/Well	Type of Completion	Oil Rate BOPD	Gas Rate MCF/D
93 063 #63	Single Oil	300	300
93 063 #64	Single Oil	300	300
94 042 #24	Dual Oil	500	500
94 042 #25	Single Oil	400	400
112 06 4	Single Oil	350	350
112 06 3	Single Oil	350	350
113 0 5	Sirgle gas	50	5,000
113 0 56	Single oil	500	500

B. Depletion Schedule -

1. OCS 063 #63

Year	Oil - 1000 Bbls.	Gas MMCF
1994	55.0	55.0
1995	100.0	100.0
1996	91.0	91.0
1997	73.0	73.0
1998	64.0	64.0
1999	55.0	55.0
2000	46.0	46.0

2. OCS 063 #64

Year	Oil - 1000 Bbls.	Gas MMCF
1994	55.0	55.0
1995	100.0	100.0
1996	91.0	91.0
1997	73.0	73.0
1998	64.0	64.0
1999	55.0	55.0
2000	46.0	46.0

3. OCS 042 #24

Year	Oil - 1000 Bbls.	Gas MMCF
1993	91.0	91.0
1994	164.0	164.0
1995	73.0	73.0
1996	109.5	109.5
1997	91.0	91.0
1998	73.0	73.0
1999	23.0	23.0

4. OCS 042 #25

Year	Oil - 1000 Bbls.	Gas MMCF
1993	36.5	36.5
1994	146.0	146.0
1995	146.0	146.0
1996	137.0	137.0
1997	137.0	137.0
1998	109.5	109.5
1999	182.5	182.5
2000	146.0	146.0

5. OCS 066 #12

Year	Oil - 1000 Bbls.	Gas MMCF
1993	64.0	64.0
1994	128.0	128.0
1995	55.0	55.0
1996	109.5	109.5
1997	73.0	73.0
1998	27.0	27.0

6. OCS 066 #13

Year	Oil - 1000 Bbls.	Gas MMCF
1993	64.0	64.0
1994	109.5	109.5
1995	91.0	91.0
1996	73.0	73.0
1997	109.5	109.5
1998	55.0	55.0
1999	27.0	27.0

7. OCS 067 #55

Year	Oil - 1000 Bbls.	Gas MMCF
1993	9.0	912.5
1994	15.0	1460.0
1995	11.0	1095.0
1996	9.0	912.5
1997	5.5	547.5
1998	3.5	365.0

8. OCS 067 #56

Year	Oil - 1000 Bbls.	Gas MMCF
1993	91.0	91.0
1994	173.0	173.0
1995	155.0	155.0
1996	109.5	109.5
1997	73.0	73.0
1998	55.0	55.0
1999	36.5	36.5

IV. WELL CONNECTION AND TIE-IN DATA

A. OCS 042 #24 - Lay and subsea tie-in a 3" flowline to an existing 3" flowline coming from OCS 042 #17, an approximate distance of 250'. Well #17 flowline routes production to the L platform in Ship Shoal Block 114. Commence laying flowline on 5/16/93. Complete tie-in on 5/17/93. Commence production 5/18/93.

B. OCS 042 #25 - Lay a 4" flowline to OCS 042 #17, a distance of 1,125'. Well #17 flowline routes production to the L platform in Ship Shoal Block 114. Commence laying flowline 4/2/94. Complete 4/5/94. Commence production 4/6/94.

C. OCS 063 #63 - Lay a 4" flowline to OCS 063 #43, an approximate distance of 250'. Well #43 flowline routes production to the L platform in Ship Shoal Block 114. Commence laying flowline 4/16/93. Complete 4/17/93. Commence production 4/18/93.

D. OCS 063 #64 - Lay a 4" flowline to OCS 063 #13, an approximate distance of 1,625'. Well #13 flowline will be utilized to route production to our L platform in Ship Shoal Block 114. Commence laying flowline 2/16/94. Complete 2/20/94. Commence production 2/21/94.

E. OCS 066 #12 and OCS 066 #13 - Lay a 4" flowline to OCS 066 #4 & 7 structure, an approximate distance of 750' for Well #12 and 1500' for Well #13. Wells #4 & 7 flowline routes production to our E platform in Ship Shoal Block 118. The E platform was lost during Hurricane Andrew, however, it will be temporarily replaced by the Ocean Liberty until a permanent production facility is installed during the summer of 1993. For OCS 066 #12, commence laying flowline 6/16/93. Complete 6/18/93. Commence production 6/19/93. For OCS 066 #13, commence laying flowline 5/2/94. Complete 5/7/94. Commence production 5/8/94.

F. OCS 067 #55 - Lay a 4" flowline to OCS 067 #34, an approximate distance of 4000'. Well #34 flowline will be utilized to route production to the E platform (Ocean Liberty) in the Ship Shoal Block 118. Commence laying flowline 8/2/93. Complete 8/14/93. Commence production 8/15/93.

G. OCS 067 #56 - Subsea tie-in to the 4" flowline from OCS 067 #55 which routes production to the OCS 067 #34 and to the E platform (Ocean Liberty) in the Ship Shoal Block 118. Commence subsea tie-in 6/16/94. Complete 6/16/94. Commence production 6/17/94.

V. DRILLING RIGS AND PRODUCTION FACILITIES

A. Drill Barge - Plans are to utilize the drill barge "Ocean Conquest" or similar drill barge, see attachments for rig detail. No additional personnel will be added offshore or onshore as a result of drilling activities.

B. Production facilities serving the Ship Shoal Unit consists of the L.J. Platform in Block 114, and the K structure in Block 120. Separation of liquids from gas takes place at each platform. The Header and S.O.B. Platforms in Block 114 and E Platform in Block 118 which served the Ship Shoal Unit were lost during Hurricane Andrew and will be replaced in the near future with the "A" Platform (a permanent structure) in Block 114 and the Ocean Liberty (as a temporary facility) in Block 118.

Oil/Condensate is metered at each structure and routed via pipeline to our onshore terminal at Cocodrie, LA. Gas is metered at each structure and is being sold to Transcontinental Gas Pipeline Corporation. Gas from the entire unit is transported to North Terrebonne Gas Processing Plant. No additional personnel offshore or onshore are anticipated to handle production.

VI. **OIL SPILL CONTINGENCY PLAN** - Refer to ODECO's plan filed with MMS and updated November, 1991. Approval pending.

ODECO Oil & Gas Company fulfills its oil spill contingency plan by being a member of Clean Gulf Associates, P. O. 51239, New Orleans, LA 70151, an agency which handles clean up operations in the event of an oil spill. Fast REsponse Service can be obtained by calling Halliburton Services in Lafayette, La. (318) 837-7400. Mr. Cairo Loviere is in charge of administering the equipment for Clean Gulf Associates.

A. Description of clean up equipment.

1. Fast Response System Model I consists of:

   a. Primary & auxiliary skid with 181 bbl. tank on each skid
   b. One "Don Wilson" skimmer
   c. One basket & one lot of Bennet oil boom section
   d. Fire extinguisher skid

2. Fast Response Model II consits of:

   a. Section of floating oil boom
   b. Skimmer
   c. Outrigger
   d. Pump
   e. Two skid mounted storage tanks of 180 bbls. each

3. Fast Response Model III - High volume open sea skimmer system (HOSS Barge).

4. Shallow water skimmer system.

5. Auxiliary shallow water skimmer and boom.

6. Helicopter spray system (HUSS Units).

7. Waterfowl rehabilitation units and bird scarers.

8. Bird scarers.

9. Miscellaneous material.

10. Radio systems.

B. Estimated deployment time - see "Oil Spill Trajectory Simulation Section".

VII. OIL SPILL TRAJECTORY SIMULATION:

Taken from Final Environmental Impact Statement Gulf of Mexico Sales 139 and 141, Central and Western Planning Area. The below listed are percent chance that an oil spill starting in any areas within Ship Shoal Block 1[illegible] Unit will contact certain land segments within 3, 10 or 30 days. Potential launch sites are identified in Figure IV-1 of Final EIS are within the Central Planning Area of C2.

A. Percent chance of spill reaching land. Taken from IV-22.

1. Hypothetical spill location C3[illegible]

Percent Chance	Land Segment I.D.	County
3%	16	Terrebonne, LA

B. Probabilities (expressed as percent chance) that one or more spills and number of probable spills occurring and contacting Central Gulf archeological sites within 10 days of a spill Taken from Table IV-23.

Land Segment ID	M Scenario	H Scenario	Average M Scenario	Average H Scenario
16	1%	2%	0.0%	0.0

C. Probabilities (expressed as percent chance) that one or more spills and number of probable spills occurring and contacting Western Gulf archeological sites within 10 days of a spill over the expected production life of the lease. Taken from Table IV-23.

Archeological Sites	Percent Chance M Scenario	H Scenario	Average Percent Chance M Scenario	H Scenario
Timbalier Bay	1	2	0.0	
Barataria Bay	0	1	0.0	0.0
Caminada Headlands Terre C. Barrier	0	1	0.0	0.0
W. Plaquemines C. Barrier	1	1	0.0	0.1
East Deltic Plain Marshes	1	2	0.0	0.0
W. Winter Menhaden Spawning Grounds	1	1	0.0	0.0

D. Identification of Biologically Sensitive Areas: These are set forth in Clean Gulf Associates Operations Manual, Volume II, Section V.

Louisiana Map #6, V-103.0a

E. The Protection Response Modes for Biologically Sensitive Areas: These are set forth in Clean Gulf Associates Operation Manual, Volume II, Section V.

Louisiana Map #6, V-109.0a to V-112.2

VIII. EQUIPMENT LOCATION AND RESPONSE TIME:

A. Location:

1. Grand Isle, LA - all equipment listed in Section VI A, 1 thru 10 of this plan.

2. Venice, LA

   a. Fast Response Model I (item .1)
   b. Fast Response Model III (item .3)
   c. Items 4, 5, 8, and 9

3. Intracoastal City, LA

   a. Fast Response Model I (item .1)
   b. Items 4, 5, 8, and 9

4. Cameron, LA

   a. Fast Response Model II (item .2)
   b. Fire extinguishers, storage boxes

5 Houma, LA

   a. Fast Response Model II (item .2) trailer loaded
   b. Item 4
   c. Boat spray system
   d. Dispersants
   e. Sorbents
   f. Drums, collectant

B. Response Time: It takes approximately an hour to load Fast Response Model I onto vessel and approximately 1-1/2 hours to load Model II, and approximately 3 hours to load Model III.

Vessels are to be provided by ODECO. Workboats under contract to work in Ship Shoal Blk 113 Unit will be used. In the event of a spill, the fast response unit that is in a preloaded state in Houma, LA will be transported by truck to our marine dock at Cocodrie. This would take approximately 1-1/2 hrs to accomplish (locate tractor truck and transport equipment - approximately 25 miles). Vessel travel time from Ship Shoal Block 113 Unit to Cocodrie is 2.3 hours (28 miles @ 12 mph). Truck move and routing of marine vessel would be done simultaneously. It will take approximately three hours to round up crew from various areas and transport to Cocodrie.

Initial Response - Fast Response Model I from Houma via Cocodrie dock.

Travel from Ship Shoal 113 Unit to Cocodrie	2.3 hrs.
Waiting on crew	1.5 hrs.
Loading time	1.0 hr.
Travel to Ship Shoal area	2.3 hrs.
Total Response Time	7.1 hrs.

IX. TRANSPORTATION ROUTES (WATER)

The most direct routes from Ship Shoal Unit operations area are Dulac and Cocodrie shore bases for supplies and personnel. See outline on vicinity map.

X. FUEL CONSUMPTION

A. Drilling Operations:

The drilling rig uses an average of 50 bbls. of diesel fuel per day during drilling operations. Each supply boat uses approximately 25 bbls. (42 gal/bbls) of diesel per day. Two boats service each drilling rig daily.

	Boats	Rig
Approx. Rig Days	40	40
Bbls/day consumption	x 50	x 50
Total Fuel Consumption	2,000 bbls	2,000 bbls

B. Production Operations:

1. Two production boats routinely service facilities in Ship Shoal 113 Unit. Each boat consumes approximately 30 bbls. diesel per day.

Operating Days per year	365
(2 boats x 30 bbls.)	x 60
Consumption for Year	21,900 bbls.

2. Gas consumption to entire unit 1900 MCF/D.

Operating Days per day	365
	x 1900
Gas consumption per year	69,300 MCF

XI. SAFETY STANDARDS AND PROGRAMS

A. Production Facilities:

All production facilities are constructed and installed to meet MMS and Coast Guard Standards for safety and protection of the environment.

A Safety and Training Department is maintained to continually monitor and train personnel in the conduct of safe operations. Our training program emphasizes the adherence to existing MMS and environment regulations.

Safety engineers monitor the operation for compliance with all safety standards. Safety meetings are held with the operating personnel to review these safety standards. Operational personnel attend schools for firefighting, first aid, and operation of special equipment, such as, cranes and safety devices used in the production of oil and gas.

B. Drilling Operations:

ODECO believes the safety of its employees is directly proportional to each employee's skills and knowledge, a "Rig Crew Training Program" has been instituted. This program provides the necessary on the-job training to enable each employee to make a planned progression from roustabout to driller. It consists of on-site video cassette programs, International Association Drilling Contractors approved "Home Study Courses". Minerals Management Service required Crane Operating and Blow Out Prevention training and United States Coast Guard's seamen's training. All employees must pass required testing in each of these courses. A pay incentive is included to encourage employee participation. In addition, this program is supported by generally accepted methods of rig inspections, drills and safety meetings which are in compliance with the U.S.C.G. and MMS standards which, we believe, will ultimately enhance the safe work performance of our employees.

XII. BASE OF OPERATIONS

A. Marine service to service drilling operations is provided from Dulac, LA. A limited amount of marine service is provided from Cocodrie, LA to service our Cocodrie Terminal which receives crude from the Ship Shoal Block 113 Unit.

B. Air Service (helicopter) will be provided from Houma, LA.

XIII. TYPE DRILL MUD USED AND CHEMICAL COMPONENTS

A. Bariod

B. Chemical Components:

Aktaflo-Stearate	Mixes oxyenthylated phenois
Aluminum	$(CH_3(CH_2COO)_3AL$
Aquagel	Sodium montmorillonite
Bariod	Barium Sulfate
Bicarbonate of Soda	$Na\ NCO_3$
Carbonox	Lignitic Humic Acid Powder
Caustic Soda	Sodium Hydroxide
CC-16	Caustized Carbonox
Cellex	Sodium Carboxymethycellulose
Destrid	Dextrinized Polysaccharide Powder
HME	Selective, nonionic surfactant- Chemco product
Impermex	Starch
Lime	Calcium Hydroxide
Micatex	Mica Flakes
Q-Broxin	Ferrochrome Ligosulfonate
Sapp	Sodium Acid Pyrophosphate
Sodium Ash	Sodium Chromate
Soltex	Hydrocarbon Powder
Superdrill	Gilsonte
Torq-Trim	Biodegradable, Non-Toxic lubricant
Wall-Nut	Nut Hulls

XIV. NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology will be employed while drilling these wells.

XV. DISCHARGE OF POLLUTANTS

The eight wells will be drilled using a water based non-dispersed unweighted mud system to total depth.

Drill cuttings with a small amount of drilling fluid adhering to the shale and sand particles will be discharged at the well site during drilling operations. The maximum discharge rate of drill cuttings for this well will be while drilling from the cemented conductor casing to the surface casing setting depth and should not exceed 500 bbls/day in any one day. This discharge rate of cuttings is based on drilling this section of the hole at a rate of 1800 feet per 24 hour period and allowing for two (2) inches of hole enlargement due to erosion. The discharge rate of cuttings for the remainder of the well should average less than 100 bbls/ day based on an average drilling rate of 550 feet to 600 feet per day from surface casing to total depth and a two (2") hole enlargement due to erosion. The total discharge of cuttings for this well is estimated allowing for a 2" hole enlargement from the mud line to total depth as shown in Table A below.

Total discharge of drilling fluids for this well is estimated to be 35,100 bbls. Data from wells drilled in this area indicate that an average of 140 bbls/day of drilling fluid is discharged from the time a rig moves on location until drilling ceases. Upon setting casing and befofe moving the drilling rig, an additional 1500 bbls of mud can be expected to be discharged. The total drilling fluid discharged on an individual well basis is shown in Table A below.

TABLE A

SHIP SHOAL AREA

Material Discharged	Blk 93 063 #63	Blk 93 063 #64	Blk 94 042 #24	Blk 94 042 #25
Cuttings	2500	2500	2100	2800
Drlg Fluids	5000	4600	3900	5400

Material Discharged	Blk 112 066 #12	Blk 112 066 #13	Blk 113 067 #55	Blk 113 067 #56
Cuttings	2100	2300	2200	2000
Drlg Fluids	3600	4300	4300	4000

No oil will be added to the drilling mud or discharged at any time. In the event it becomes necessary to add oil to the drilling mud or "spot" an oil base lubricate around a stuck drill string, all mud and cuttings will be transported to shore for proper disposal. All mud discharged will be tested for toxicity as required by EPA's NPDES discharge permit.

Sanitary waste is treated by a waste treatment facility and discharged overboard in compliance with EPA's NPDES discharge permit. Treated waste discharged normally averages 25 gallons per day per man on the rig. A rig will discharge 750 to 1000 gallons per day depending the number of personnel on the rig.

All metal, steel, cables, etc. are stored on the rig until sufficient quantity accumulates. This material is then transported to our shore base for recycling. Paper, bags, plastics, etc. are compacted in a container by an onboard compactor then transported to shore for disposal.

All vessels used in our operations are equipped with Marine Sanitation Devices or holding tanks in compli ance with DOT regulations.

XVI. HYDROGEN SULFIDE CONTINGENCY PLAN

These wells will be drilled in areas which are known to be free of hydrogen sulfide. In the unlikely event hydrogen sulfide would be encountered, all operations would cease until the rig could be equipped and the personnel trained for operations in a hydrogen sulfide environment. See attached letters requesting determination of H_2S status dated as follows:

Lease/Well	Letter dated
OCS 042 #24	10/16/92
#25	10/16/92
OCS 063 #63	10/8/92
#64	10/8/92
OCS 066 #12	10/14/92
#13	10/15/92
OCS 067 #55	10/13/92
#56	10/13/92

XVII. GASEOUS EMISSION DATA

A. Emissions

1. Rig: Drill barge "Ocean Conquest" will be used. Emissions are calculated on 135 day basis. Stated in (lbs/day) tons/40 days. See attachment for basis of calculations.

a.	CO	(110.79)	17.45
b.	Hydrocarbon	(20.49)	3.23
c.	NO_x	(1453.86)	228.98
d.	SO_2	(204.33)	32.18
e.	Particules	(19.62)	3.09

2. Helicopters - see attachment for emission/hr use.

   a. Drilling use: Estimate 90 round trips in 315 days, 1 hour per round trip = 90 hours operating time. Stated in (lbs/hr) tons per 315 days, based on average hours used.

1.	CO	(.50)	.02
2.	Hydrocarbon	(.10)	.00
3.	NO_x	(2.20)	.10
4.	SO_2	(14.20)	.64
5.	Particules	(.20)	.01

   b. Production use: Estimate 100 round trips in 365 days, one hour per trip. 100 hours operating time. Stated in (lbs/hr) tons/yr, based on average hours used.

1.	CO	(.50)	.11
2.	Hydrocarbon	(.10)	.02
3.	NO_x	(2.20)	.50
4.	SO_2	(14.20)	3.23
5.	Particules	(.20)	.05

3. Boats - see attachment for emission/hr used.

a. Drilling use (crew): 315 round trips in 90 days at 4 hours per round trip = 1260 hours.

(Supply): 135 round trips in 315 days at 8 hours per round trip = 320 hrs. 1260 + 1080 = 2340 operating hours. Stated in (lbs/hr) tons/315 days, based on avg hrs used.

1.	CO	(6.80)	7.96
2.	Hydrocarbon	(2.50)	2.93
3.	NO_x	(31.40)	36.74
4.	SO_2	(2.10)	2.46
5.	Particules	(2.30)	2.69

b. Production use: 2 boats in use. Each is estimated to average 4 hrs running per day. 8 hrs per day x 365 = 2920 operating hours. Stated in (lbs/hr) tons/year based on avg hrs used.

1.	CO	(6.80)	9.93
2.	Hydrocarbon	(2.50)	3.65
3.	NO_x	(31.40)	45.84
4.	SO_2	(2.10)	3.07
5.	Particules	(2.30)	3.36

4. Supply Base: 30 ton crane. Estimated in 315 days = 976 hours. Stated in (lbs/hr) 315 days. Averaged to 315 days. See attached for emission per hours.

a.	CO	(3.77)	1.84
b.	Hydrocarbon	(.35)	.17
c.	NO_x	(9.18)	4.48
d.	SO_2	(.47)	.23
e.	Particules	(.50)	.24

B. <u>Exemptions</u>: Distance from shore 17 statue miles.

1. Hydrocarbons, NO_x, SO_2, Particules 33.3 x 17 = 566.10 tons/365 days for each, or 566.10 x 4 = 2264.40 tons/365 days.

2. CO (3400 x 17) 2/3 or 1389 tons/365 days.

XVIII. ATTACHMENTS

A. General vicinity map - depicting transportation routes.

B. Vicinity plat - depicting well location.

C. Pipeline map.

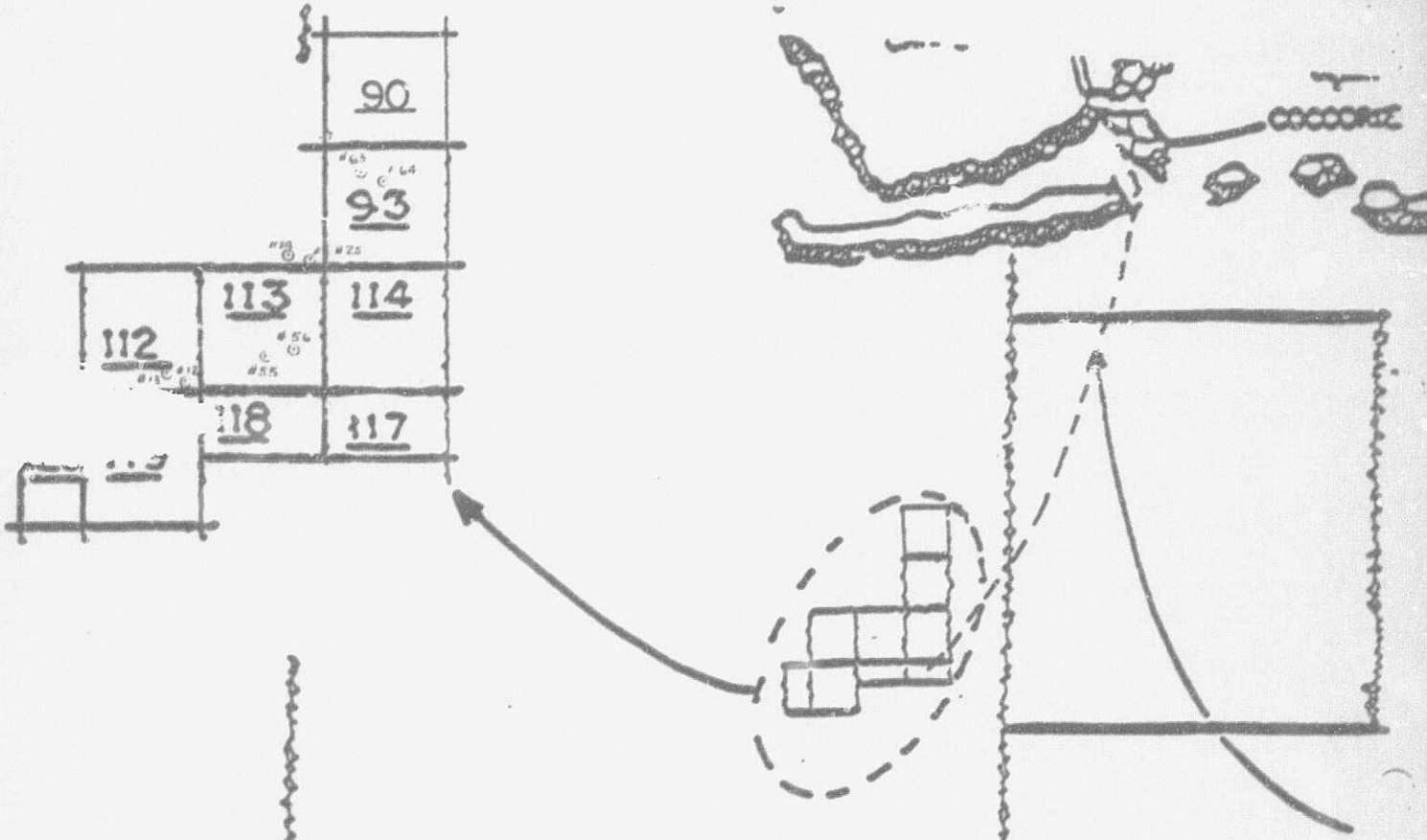
D. Geological Programs with Structure map, Bathymetry map, Top of Salt map (three wells), Top of Pressure map (one well), letter requesting H_2S determination, and shallow hazards letter with seismic plot for these wells.

E. Schematic of drill barge, schematic of diverter.

F. Summary of gaseous emissions for drill barge "Ocean Conquest" with basis of calculations.

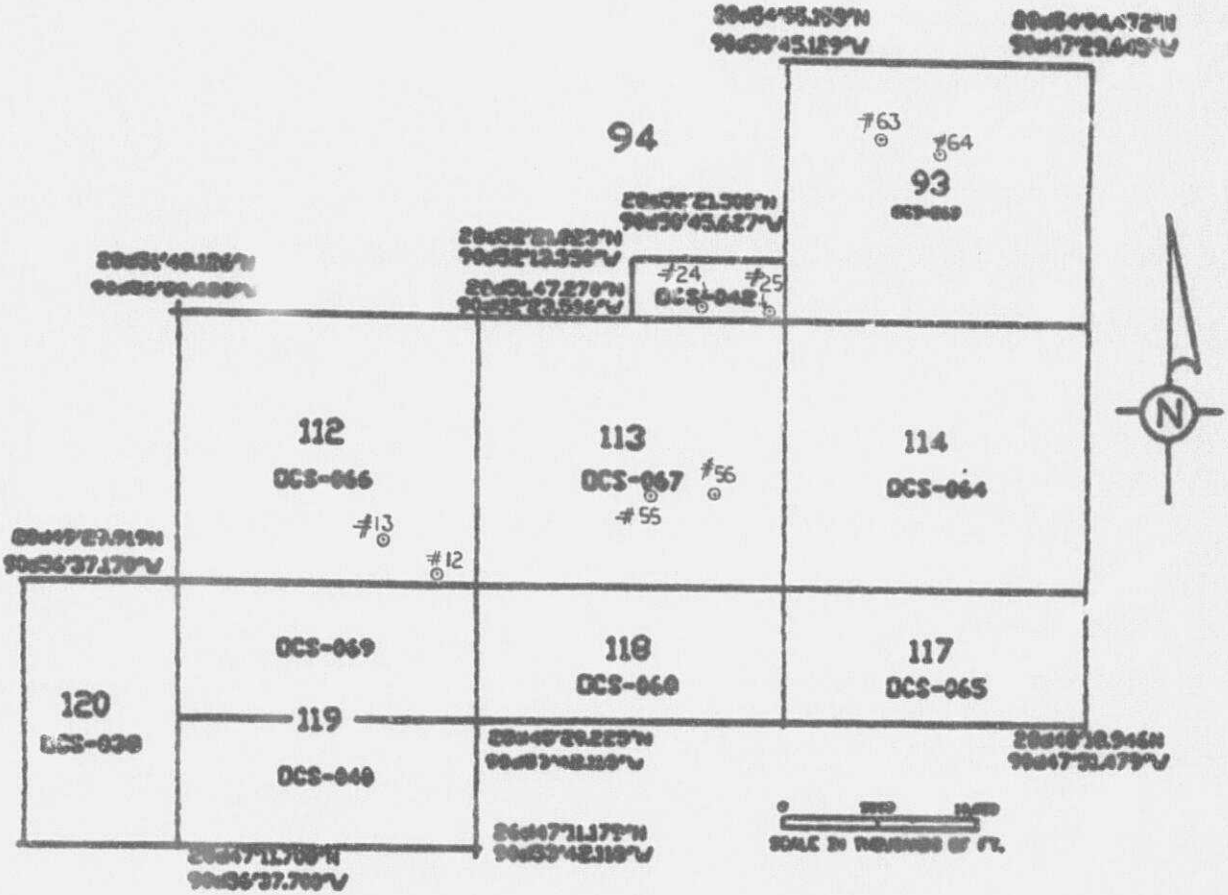
G. Basis of calculations of gaseous emissions for boats, helicopters, and supply base.

H. Schematic of drill barge showing emission stock heights.



SHIP SHOAL AREA

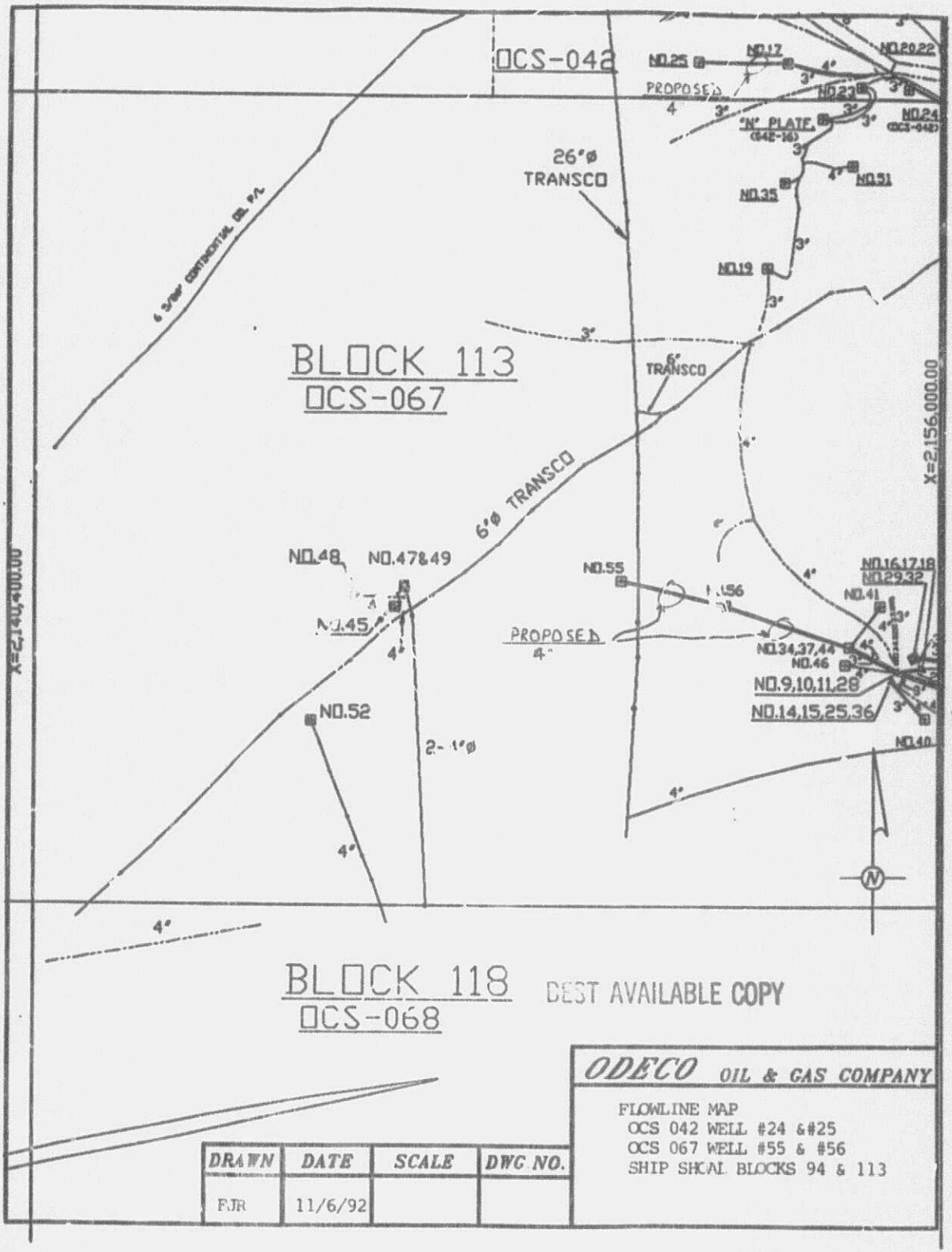
VICINITY MAP



SHIP SHOAL AREA

ODECO OIL & GAS COMPANY

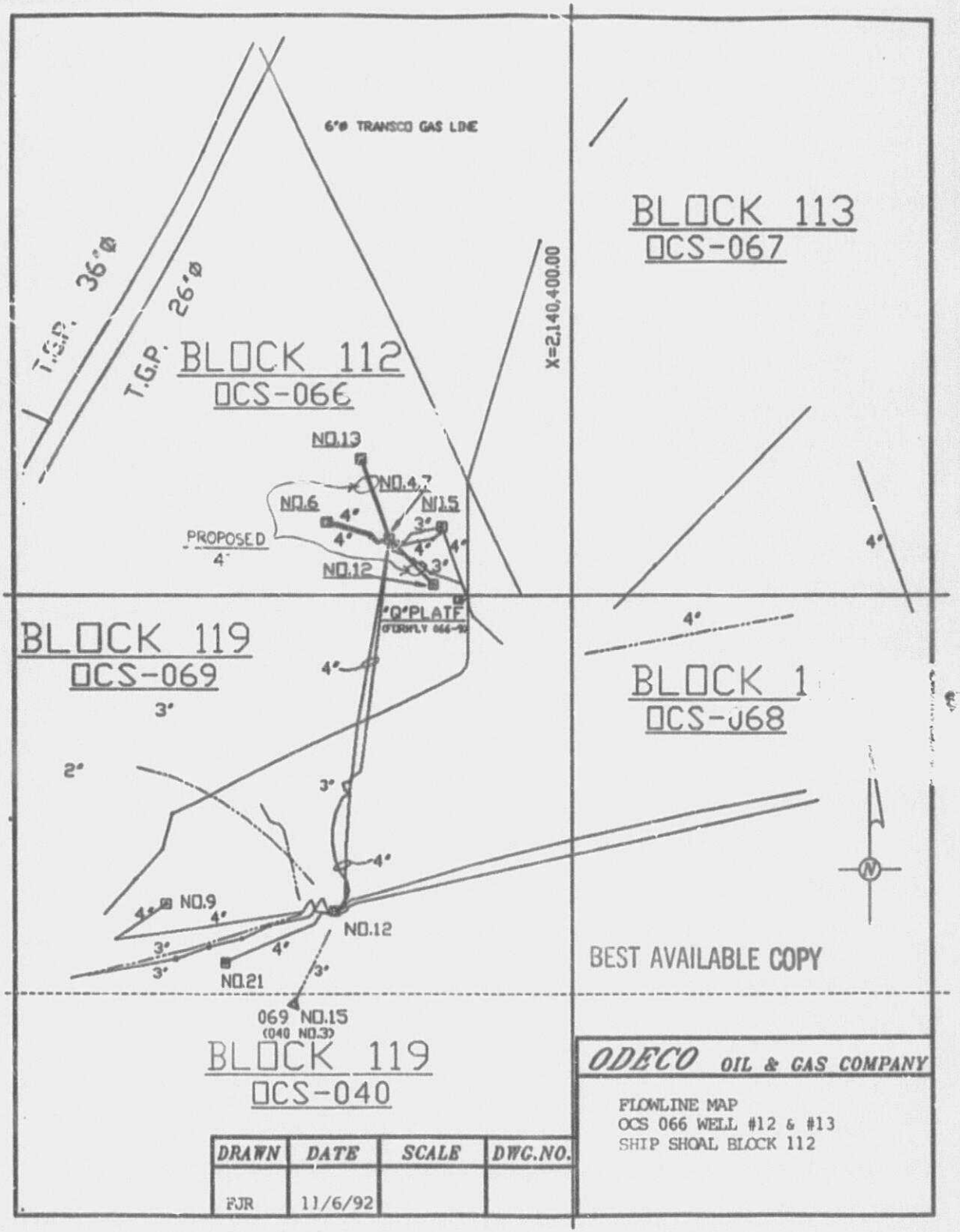
OFF TERREBONNE PARISH, LA.



ODECO OIL & GAS COMPANY

FLOWLINE MAP
OCS 042 WELL #24 &#25
OCS 067 WELL #55 & #56
SHIP SHOAL BLOCKS 94 & 113

DRAWN	DATE	SCALE	DWG NO.
FJR	11/6/92		

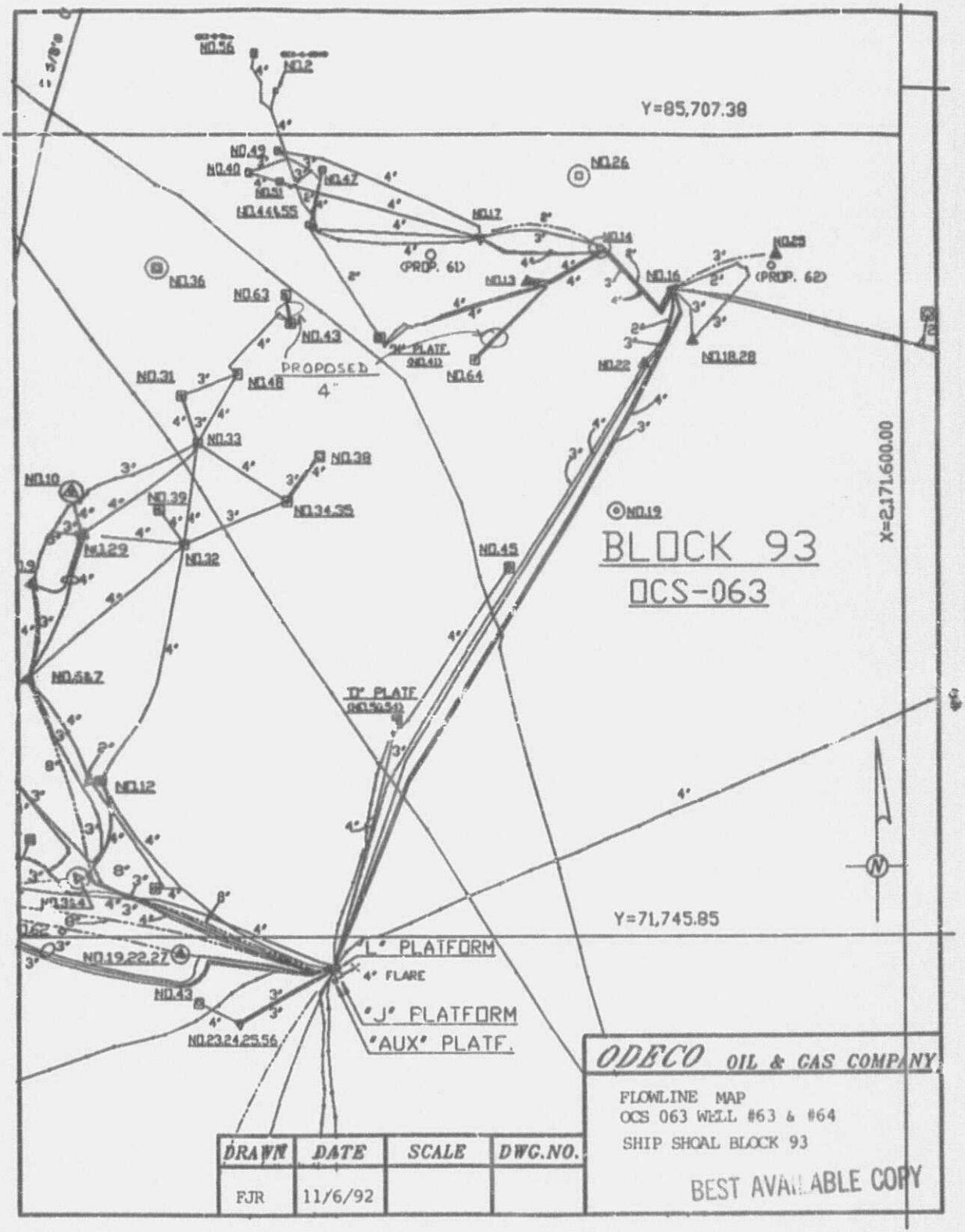


BEST AVAILABLE COPY

DRAWN	DATE	SCALE	DWG.NO.
FJR	11/6/92		

ODECO OIL & GAS COMPANY

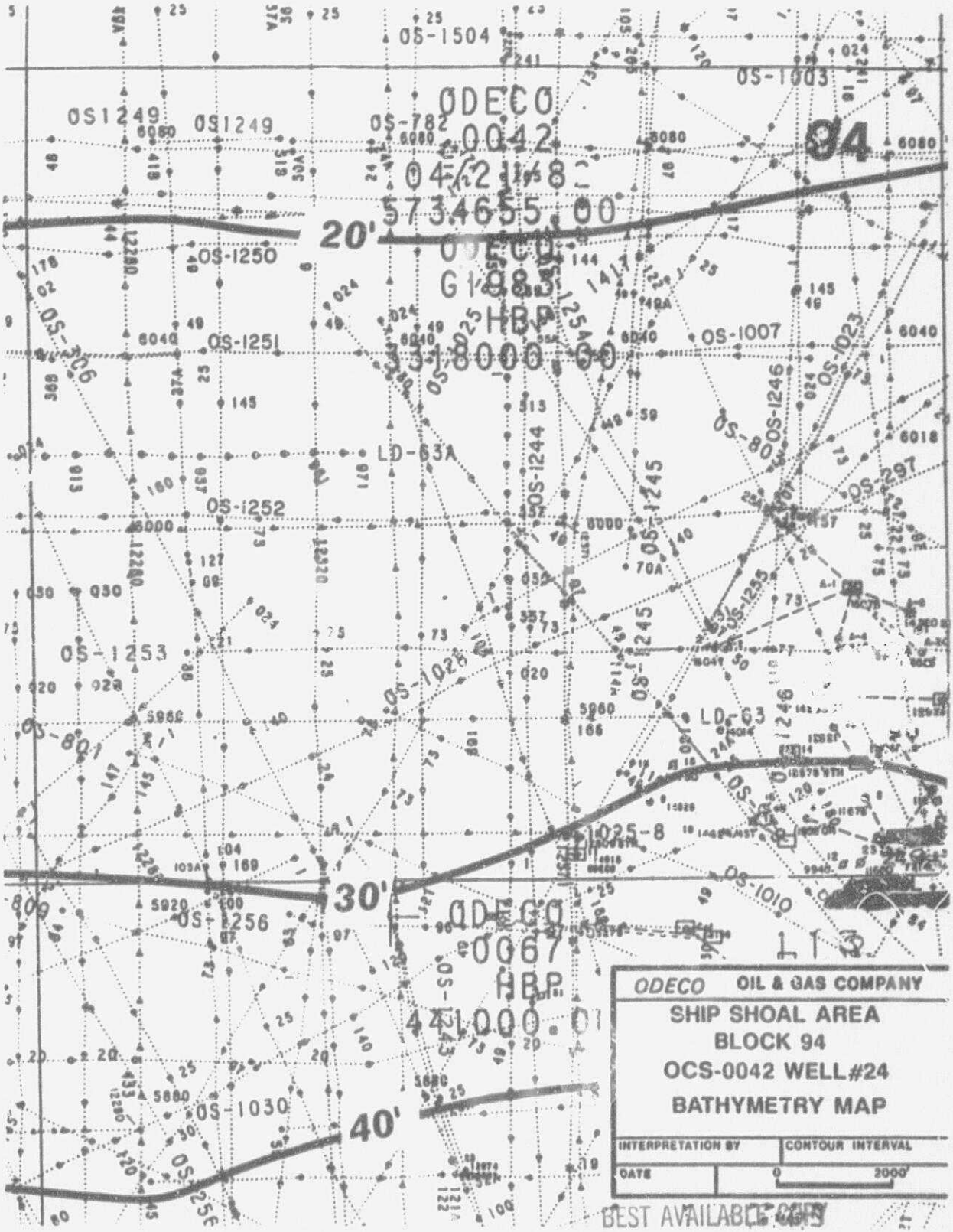
FLOWLINE MAP
OCS 066 WELL #12 & #13
SHIP SHOAL BLOCK 112

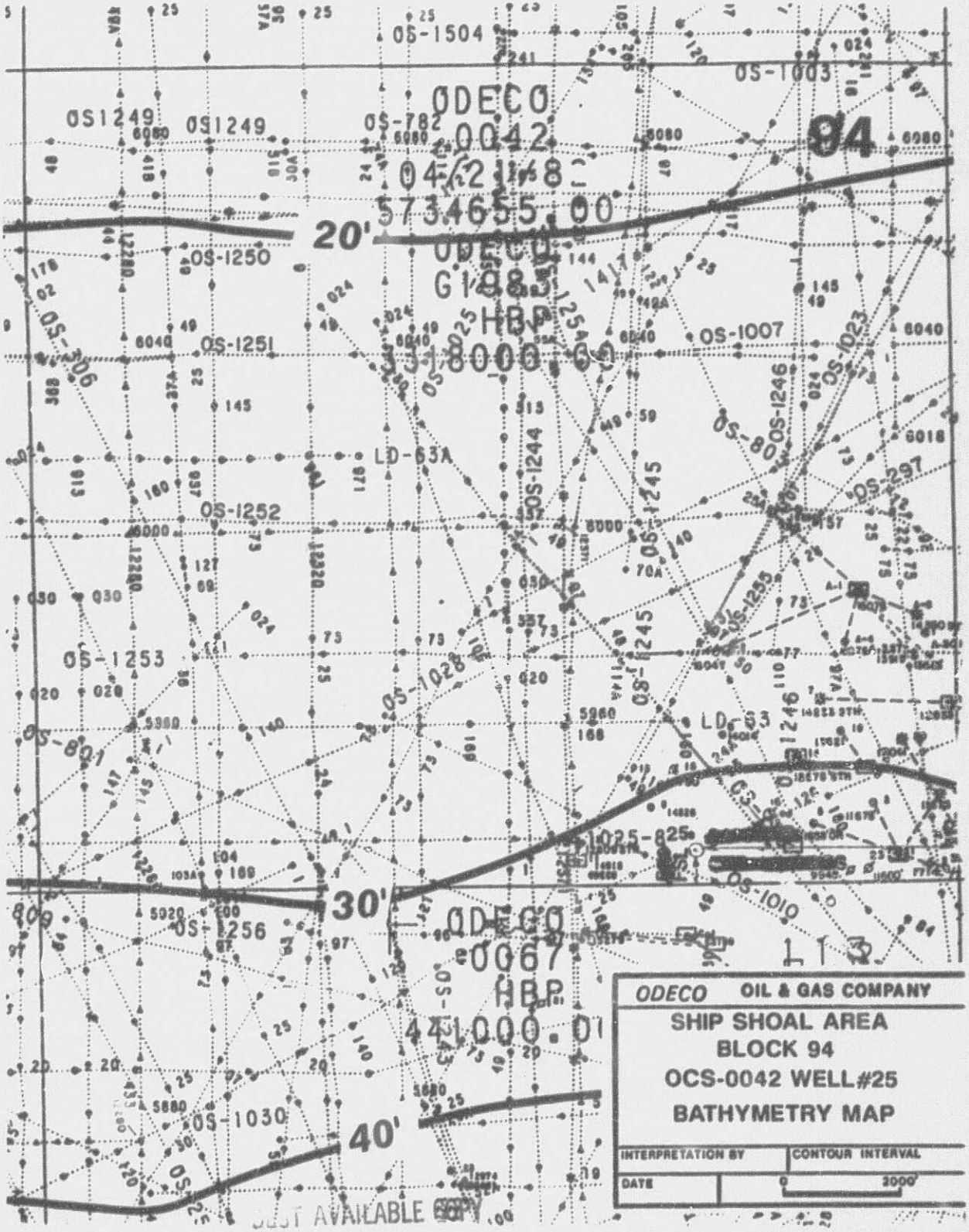


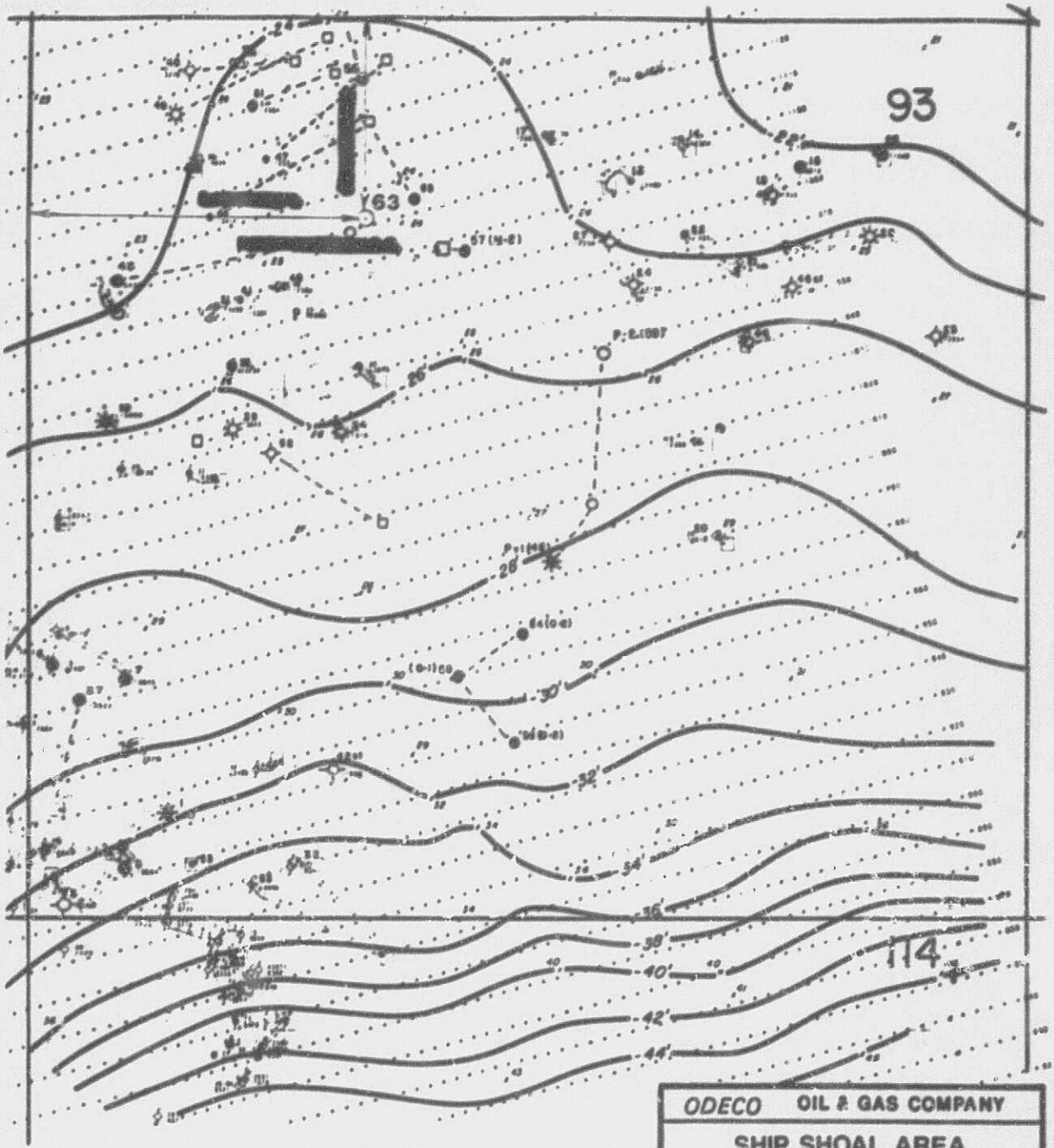
DRAWN	DATE	SCALE	DWG.NO.
FJR	11/6/92		

ODECO OIL & GAS COMPANY

FLOWLINE MAP
OCS 063 WELL #63 & #64
SHIP SHOAL BLOCK 93



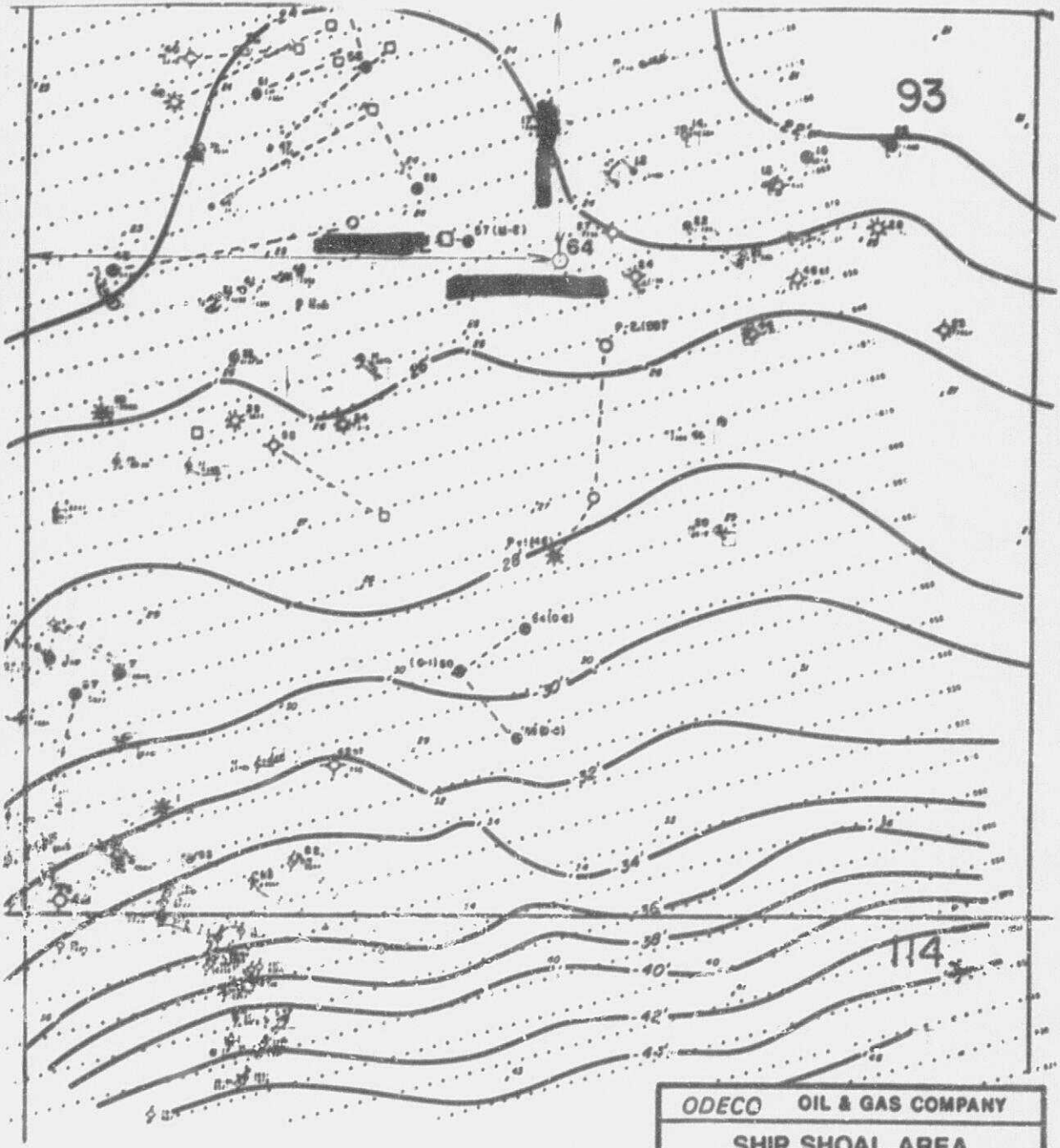




ODECO OIL & GAS COMPANY

SHIP SHOAL AREA
BLOCK 93
OCS-G-0063 WELL #63
BATHYMETRY MAP

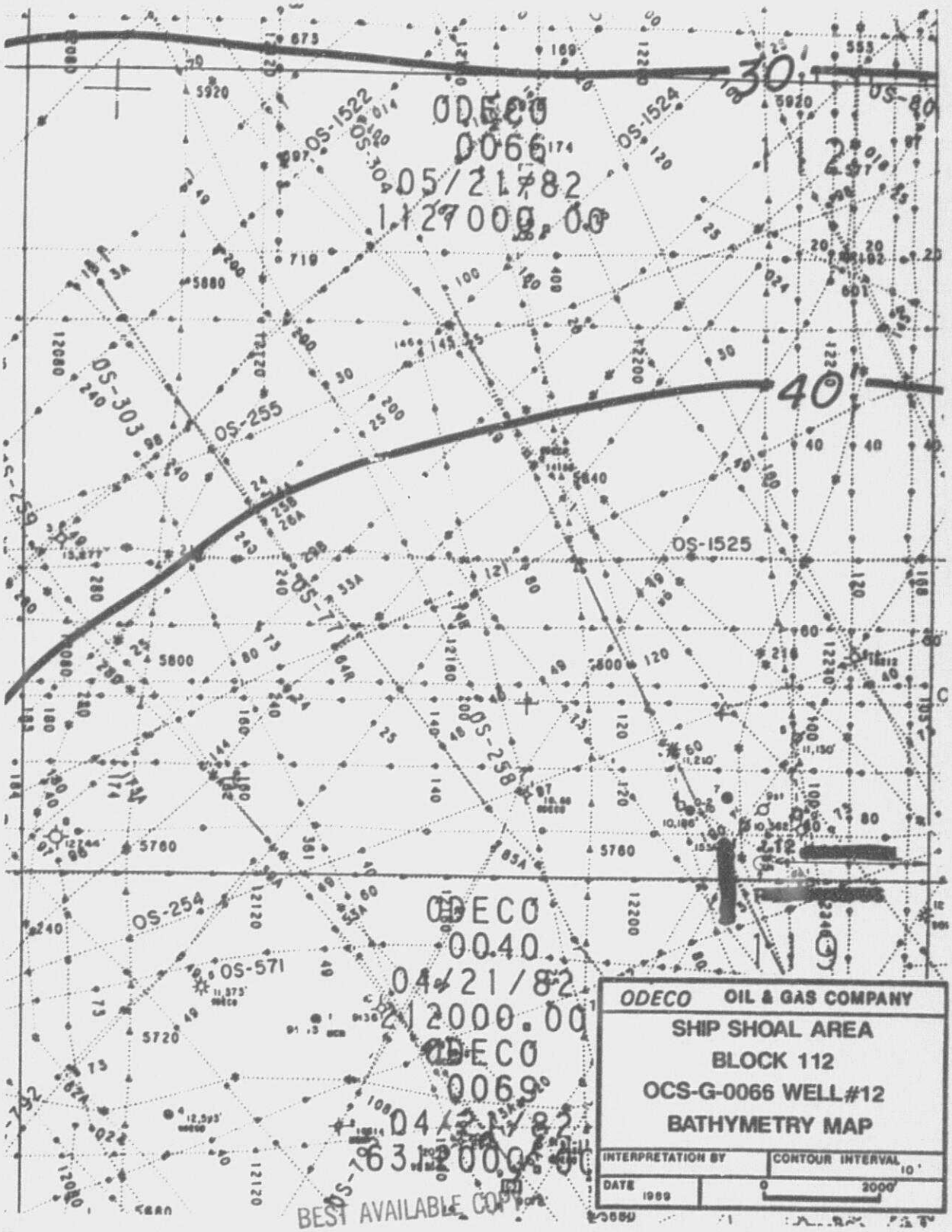
INTERPRETATION BY TRH/JRB	CONTOUR INTERVAL 2'
DATE 11/91	0 2000'

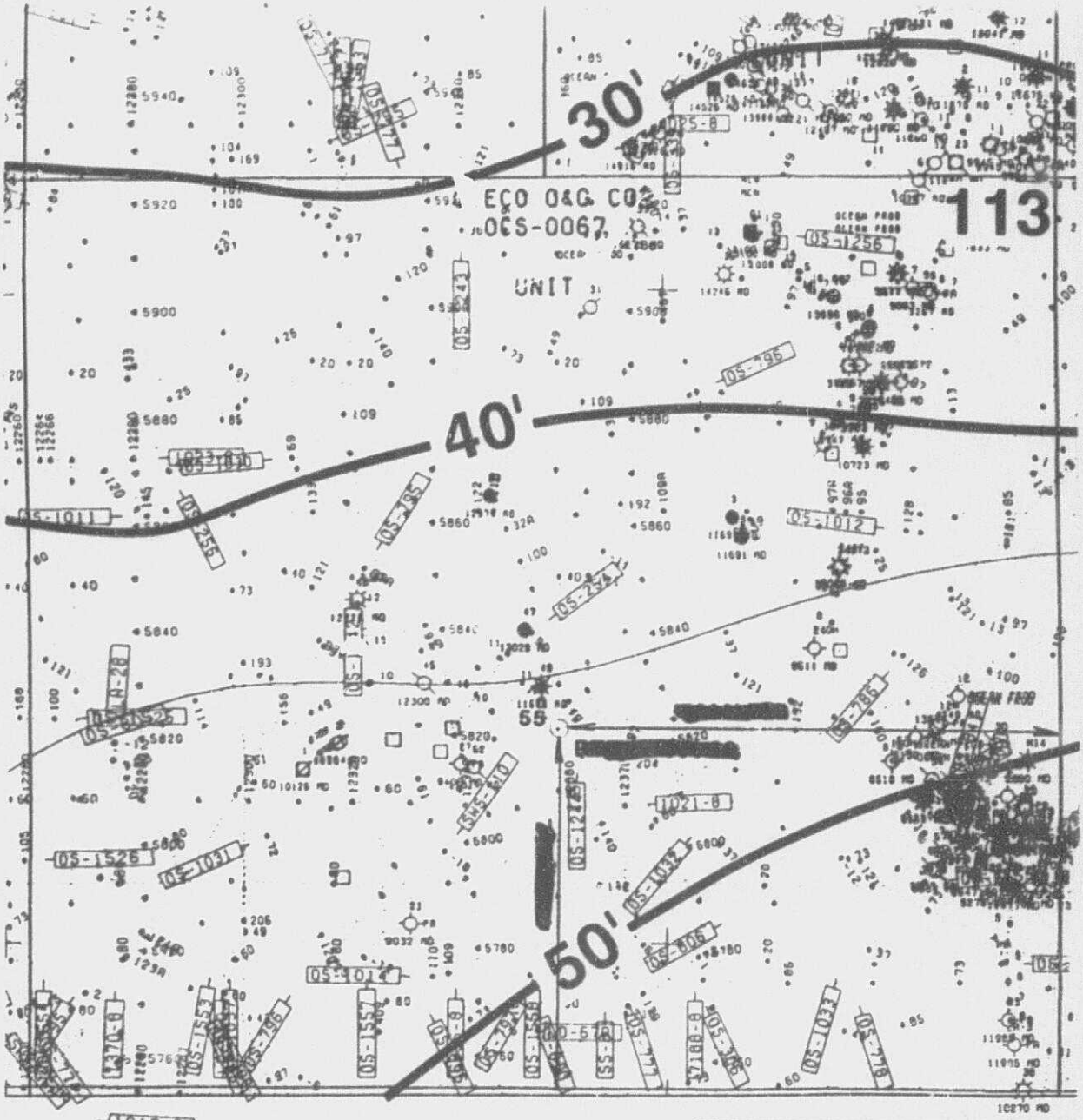


ODECO OIL & GAS COMPANY

SHIP SHOAL AREA
BLOCK 93
OCS-G-0063 WELL#64
BATHYMETRY MAP

INTERPRETATION BY TRH/JRB	CONTOUR INTERVAL 2'
DATE 11/91	0 2000'





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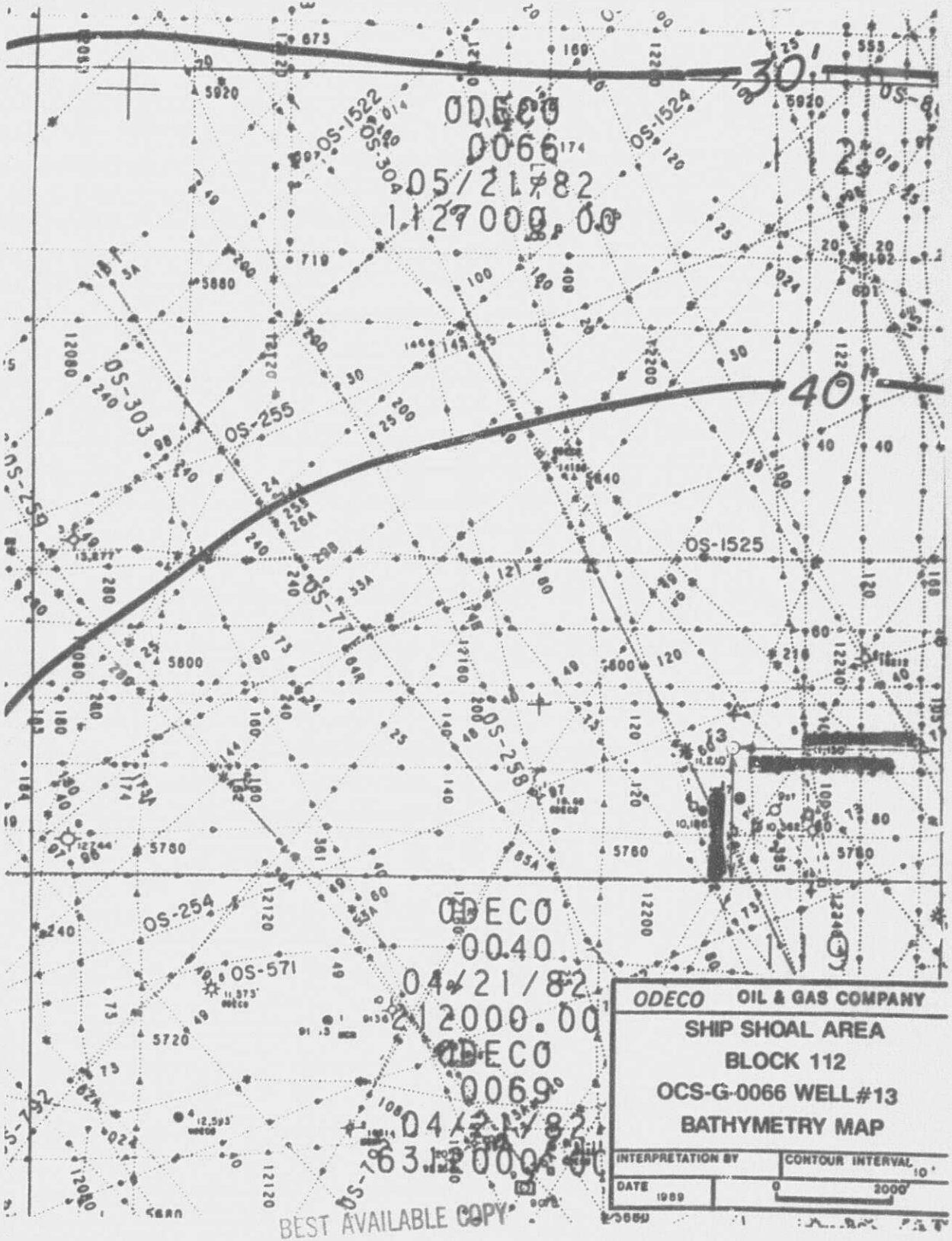
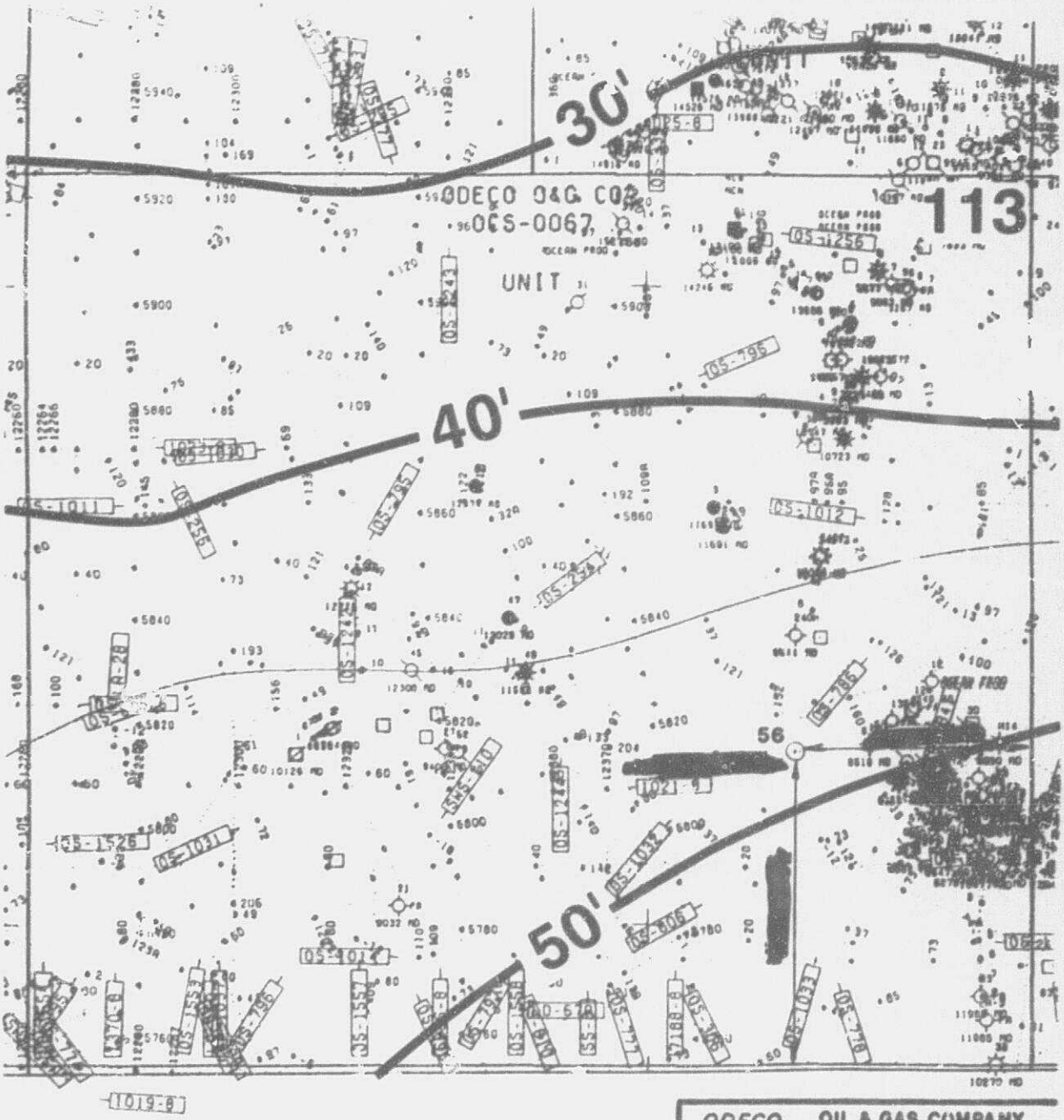
ODECO OIL & GAS COMPANY	
SHIP SHOAL AREA BLOCK 113 OCS-G-0067 WELL#55 BATHYMETRY MAP	
INTERPRETATION BY JHB	CONTOUR INTERVAL 10'
DATE 3/89	0 2000'





ODECO OIL & GAS COMPANY

SHIP SHOAL AREA
BLOCK 113
OCS-G-0067 WELL#56
BATHYMETRY MAP

INTERPRETATION BY JHB	CONTOUR INTERVAL 10'
DATE 3/89	0 2000'