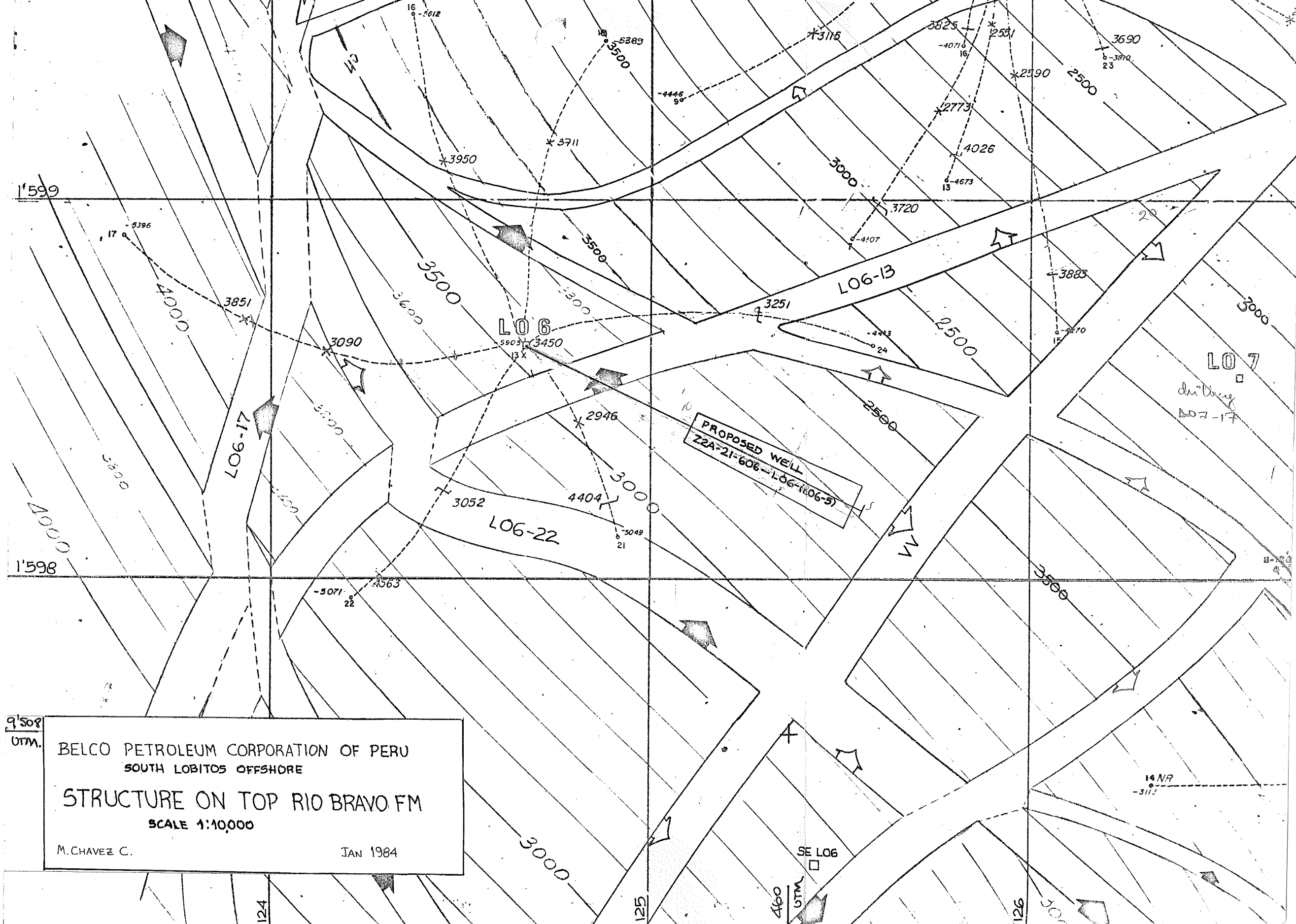
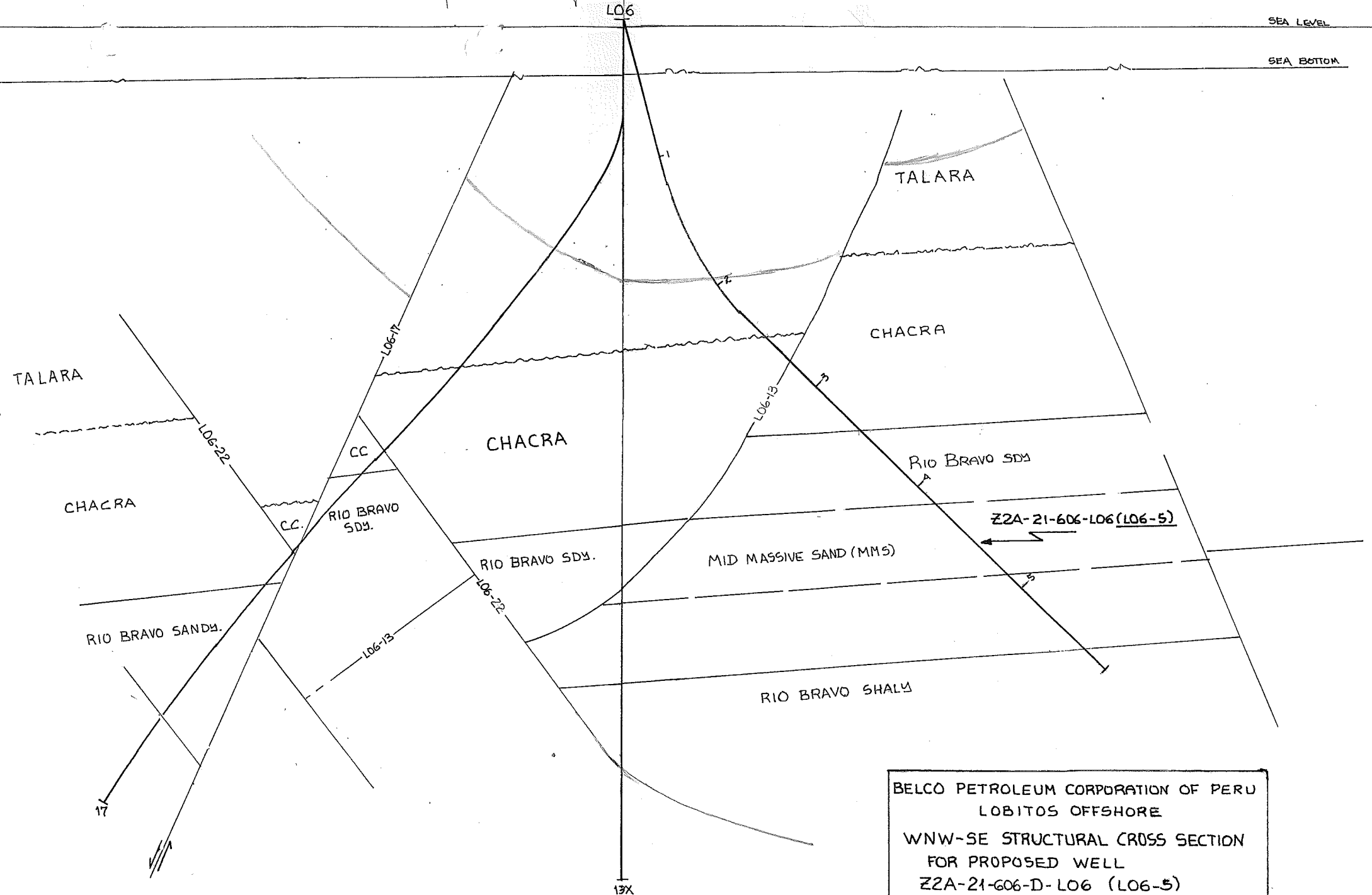


|   |  |  |  |   |  |            |
|---|--|--|--|---|--|------------|
| <div><div>BELCO</div><div>GEOLOGIC PROGNOSI</div></div>                   |  | DISTRIBUTION                             |  |   |  |            |
| Lobitos Offshore AREA   |  | Z2A-21-606-D-L06<br>OFFICIAL WELL NUMBER | L06-5<br>BELCONº                             | TYPE OF WELL  | Development                            | RIG Nº III |
| OBJECTIVE   |  | PRIMARY: Rio Bravo Sdy. SECONDARY: ----- |  |   |  |            |
| SURFACE COORDINATES   |  |  |  | TARGET COORDINATES  |  |            |
| N 1'598,633.30<br>9'509,028.20      m , E 124,652.63<br>459,301.83      m |  |  |  | N 1'598,400<br>9'508,830      m , E 125,100<br>459,730      m |  |            |
| ELEVATIONS  | K. B. 50 FT.   |  | DIRECTION OF DEVIATED WELL S 65 ° E          |   | DRILLED DEPTH TO TARGET 3450 FT.       |            |
|   | <input checked="" type="checkbox"/> WATER DEPTH      |  | (INITIAL) CONDUCTOR ANGLE FROM VERTICAL 15 ° |   | TRUE VERTICAL DEPTH TO TARGET 2850 FT. |            |
|   | <input type="checkbox"/> GROUND LEVEL 335 FT.        |  | RECOMMENDED DEPTH OF K.O.P. 1200 FT.         |   | EST. DEVIATION (MAX. ANGLE) 46 °       |            |
| ESTIMATED FINAL DRILLED DEPTH 5800 FT.                                    |  | BUILD UP ANGLE AT. 3 ° PER 100 FT.       |  | HORIZONTAL DRIFT TO TARGET 1650 FT.                           |  |            |
| EST. DRILLING TIME TO T.D. 17 DAYS  |  |  |  | HORIZONTAL DRIFT TO TOTAL DEPTH 3350 FT.                      |  |            |
| EXPECTED STRATIGRAPHIC SEQUENCE   | FORMATION / MEMBER                                   |  | DRILLED TOP                                  | SUBSEA TOP  | OBSERVATIONS / POSSIBLE PROBLEMS       |            |
|   | TALARA GROUP   |  | AT SURFACE                                   |   |  |            |
|   | CHACRA   |  | 2500   | 2150  |  |            |
|   | RIO BRAVO SDY.                                       |  | 3450   | 2800  | PAY ZONE                               |            |
|   | MID MASSIVE SAND (MMS)                               |  | 4150   | 3300  |  |            |
|   | RIO BRAVO SHLY                                       |  | 5600   | 4300  |  |            |
|   | TD.  |  | 5800   | 4450  |  |            |
|   |  |  |  |   |  |            |
|   |  |  |  |   |  |            |
|   |  |  |  |   |  |            |
|   |  |  |  |   |  |            |
|   |  |  |  |   |  |            |
| CONTROL   | TARGET LIMITS  | TOP 150<br>BASE 200                      | LEFT 150<br>RIGHT 200                        | OBSERVATIONS  |  |            |
|   | BIT SAMPLES TO BE TAKEN:                             | EVERY 30 FT.FROM SURF TO 2000            | AND  |   |  |            |
|   |  | EVERY 10 FT.FROM 2000 TO TOTAL DEPTH     |  |   |  |            |
| RECOMMEND.FOR PALEO-PALYNOLOGY From 2000 to TD.                           |  |  |  |   |  |            |
| LOGGING   | RECOMMENDED OPEN HOLE IEL-GR                         |  |  |   |  |            |
|   | RECOMMENDED AFTER CASING GR-CCL                      |  |  |   |  |            |
|   | NEARBY WELLS FOR CORRELATION L06-21, L06-13X, L06-24 |  |  |   |  |            |
| EVALUATION  | SIDEWALL CORES None                                  |  |  |   |  |            |
|   | CONVENTIONAL OR ◇ CORES None                         |  |  |   |  |            |
|   | GAS LOGGER None                                      |  |  |   |  |            |
|   | FORMATION TESTING None                               |  |  |   |  |            |
| PREPARED BY: C. Naupari/M. Chávez<br>Jan. 3rd. 1985      DATE             |  |  | LIMA PERU                                    | APPROVED<br>H.H.<br>JAN 10/85<br>DATE                         |  |            |





BELCO PETROLEUM CORPORATION OF PERU  
LOBITOS OFFSHORE  
WNW-SE STRUCTURAL CROSS SECTION  
FOR PROPOSED WELL  
Z2A-21-606-D-LO6 (LO6-5)  
SCALE 1:10,000  
C. NAUPARI V. JAN 1985

# BELCO PETROLEUM CORPORATION OF PERU

## M E M O R A N D U M

A: GEOLOGY MANAGER

Fecha January 8th, 1985

DE: CHIEF RESERVOIR ENGINEER

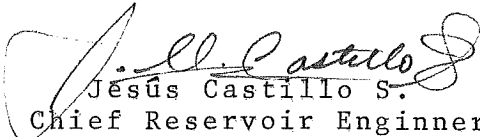
Asunto WELL L06-5

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This is a normal spacing well offsetting L06-24, which has a well developed sandy Rio Bravo section that may have faulted in L06-21 (the other well being offset by this well), explaining the difference in production performance.

Target size and logging program comply with the guidelines.

Reservoir concurs with the proposed location.

  
Jesús Castillo S.  
Chief Reservoir Enginner

JCS/rmr.

# BELCO PETROLEUM CORPORATION OF PERU

## M E M O R A N D U M

A: \_\_\_\_\_ Geology Manager \_\_\_\_\_ Fecha \_\_\_\_\_ January 3rd, 1984 \_\_\_\_\_  
DE: \_\_\_\_\_ Mario Chávez \_\_\_\_\_ Asunto \_\_\_\_\_ GEOLOGICAL COMMENTS FOR WELL \_\_\_\_\_  
L06-5.-

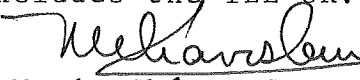
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Reference well is recommended in order to drill the mid massive sands which was faulted out in well L06-21 and for this reason it is bad producer (it has accumulated 11028 B0 in 83 days, last test indicates the well is producing at a rate of 91 BOPD on GL. )

Proposed well should be located in a block of approx. 150 acres.

The sand qualities and production performance expected should be similar to well L06-22.

The logging program only includes the IEL-GR.

  
Mario Chávez C.  
Area Geologist

MCH/ghp.