PETRO - TECH
PERUANA S.A.

FINAL GEOLOGICAL REPORT

WELL: Z-2B- 24-079-D-LO6
LO6- 25 & LO6-25ST

1. **Summary:**

The original well **LO6-25**, spudded on March 14, 2001, reached the Upper Basal Salina at 9210' MD (-7307' VSS) with good oil shows C1 thru C5 469 feet lower than the expected top by prognosis. On April 14, during a trip for new bit at 9780', while running in hole at 340', the pressure increased to 1800 psi, bled off well and flowed to tank 140 barrels of crude oil. Shut in well with 2000 psi. WHP. The well was left on production with an **IPR of 1878 BO x 1740 psi x 3/8"**. Current plan was to continue drilling when the production decreases.

In order to conditioned hole to run production casing in well LO6- 25, kill the well with heavy mud weight (14.0 ppg), then began to RIH, while reaming at 6189' stuck pipe, working without success, make back off at 6156', top of fish at 6162', left in hole 22.84' of fish (bit, 2 stabilizer, pony monel). It was decided to drill a Sidetrack from 6000'. Set cement plug at 6140' with 300 sacks of cement.

Cumulative oil production before killing the well was 62 MBO.

On July 17 begun the drilling of **LO6-25 ST** well, the Upper Basal Salina was reached at 9210' MD (-7369' VSS) with poor and no oil shows in ditch cuttings very low gas readings. Because the Drilling Department considered too risky to continue drilling, the well was stopped at 9494' without penetrating the main sand, which was drilled in LO6- 25 original hole.

Between Aug. 13 to 24 set and cemented 5 ½" casing at 9474', ran CBL- VDL- GR, top of cement was detected at 8100' made squeeze job at 6257' to continue drilling Slim hole through the Basal Salina sands with 4 ¾" bit.

On August 29, the well was stopped at final total depth of 9803' MD (-7938' VSS) in Lower Basal Salina. Ran 2 7/8" tubing with 3 ½" slotted liner, shoe at 9787', set packer RTTS at 9460'. Displaced mud by treated water.

Well came in and flowed to rig tank with an **IPR of 675 BO x 371 BW x 900 psi x 976 GOR**

The Mogollon Formation was reached at 7095 ft. MD. (-5370(ft. S.S) with 199 feet of vertical net sand thickness and fair oil shows and will be perforated as a future workover.

2. - Stratigraphy:

According ditch samples and electrical logs, the formational tops are as follows:

	Prognosed		**Final Tops**		**relate to prognosis**
	MD	**VSS.**	**MD**	**VSS.**	
Talara	At sea	Bottom	At sea	Bottom	
Chacra	3050	-2200	2197	-1769	431 ft. lower
Rio Bravo	4550	-3100	4465	-3192	92 ft. lower
Palegreda	6250	-4400	6160	-4503	103 ft. lower
Mogollón	6850	-4900	7095	-5370	470 ft. lower
San Cristobal	7800	-5800	7780	-6018	218 ft. lower
Upper Basal Salina	8900	-6900	9210	-7369	469 ft. lower
Lower BasalSalina	------	-------	9504	-7649	----------
Balcones	9700	-7850	------	-------	Not reached
TD.	9900	-8050	9803	-7938	138 ft. lower

Based on Power Log, the Petrophysical parameters are:

Formation	GrossSect MD (VD)	Net Sand MD (VD)	Net Pay MD (VD)	Average porosity	Average Sw	Average Vclay
Mogollón	690 (644)	213 (199)	129 (120)	11.5	45.0	21.9
Upper Basal Salina	294 (284)	95 (90)	72 (68)	8.0	41.0	21.6
Lower Basal Salina	299 (289)	120 (116)	8 (7)	8.3	42.8	30.6

3. - Structure

Upper Basal Salina formation

The Upper Basal Salina formation was encountered 469 feet lower than prognosis, in a different faulted reservoir block of well LO6-22R, in the downthrown of a NE-SW dipping towards Northwest fault, however the Lower Basal Salina was encountered in the up thrown side in an isolated reservoir block of approximately 135 acres

4. - Production data

The Power Log the Lower Basal Salina calculates 7 feet of vertical net oil sands and a WOC at 9630' MD (-7778' VSS). However, the production response indicates secondary porosity due to faulting.

A summary of production is as follows:

Bbls. Oil	Bbls. Water	Choke	Pressure	Date
795	288	3/8"	1020	09/03/01
675	371	3/8"	900	09/04/01
781	266	3/8"	980	09/05/01
837	283	3/8"	940	09/06/01

Hugo Cornejo/ Mario Chavez September 2001

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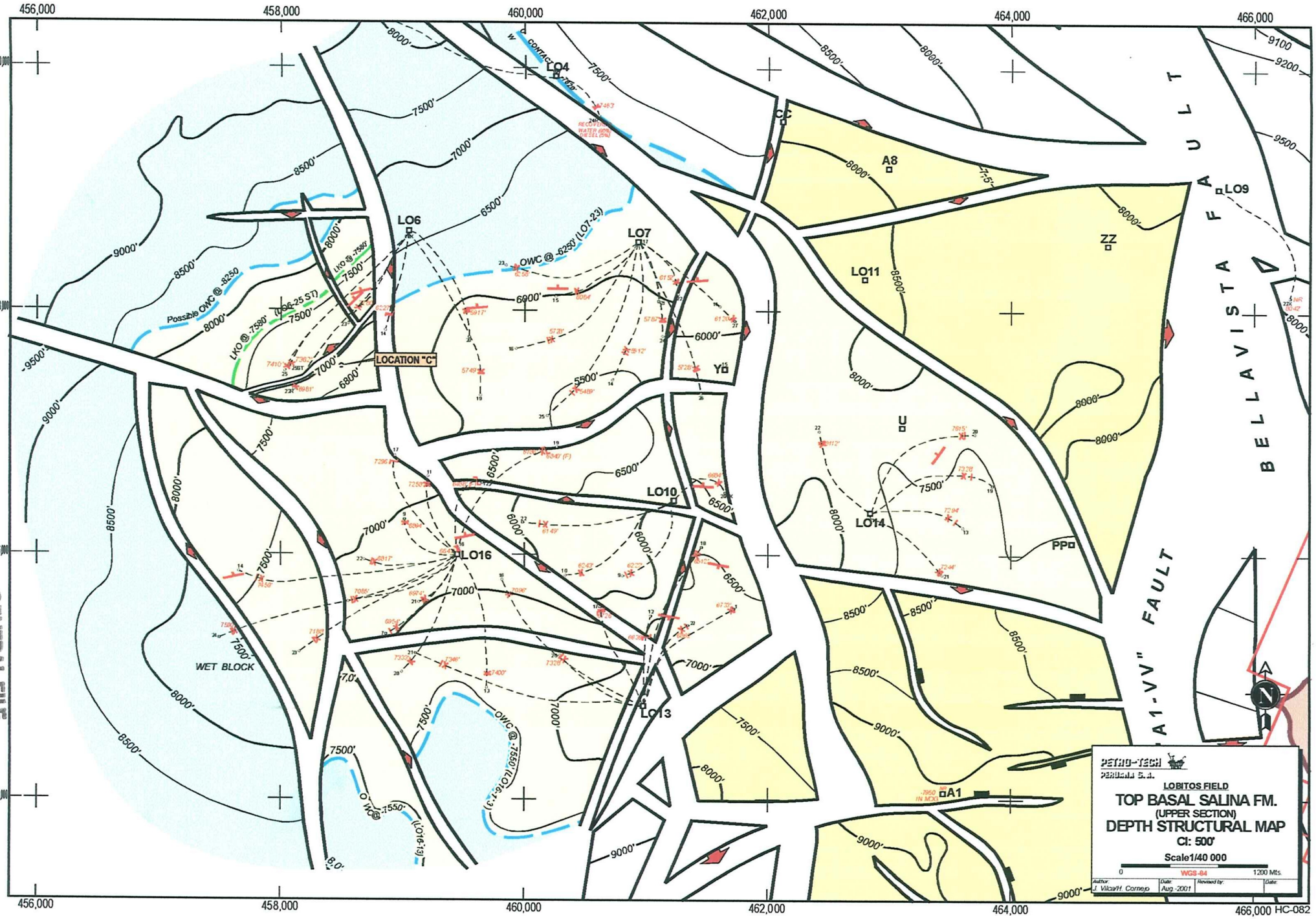
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LO4
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LO14
LO16
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A8
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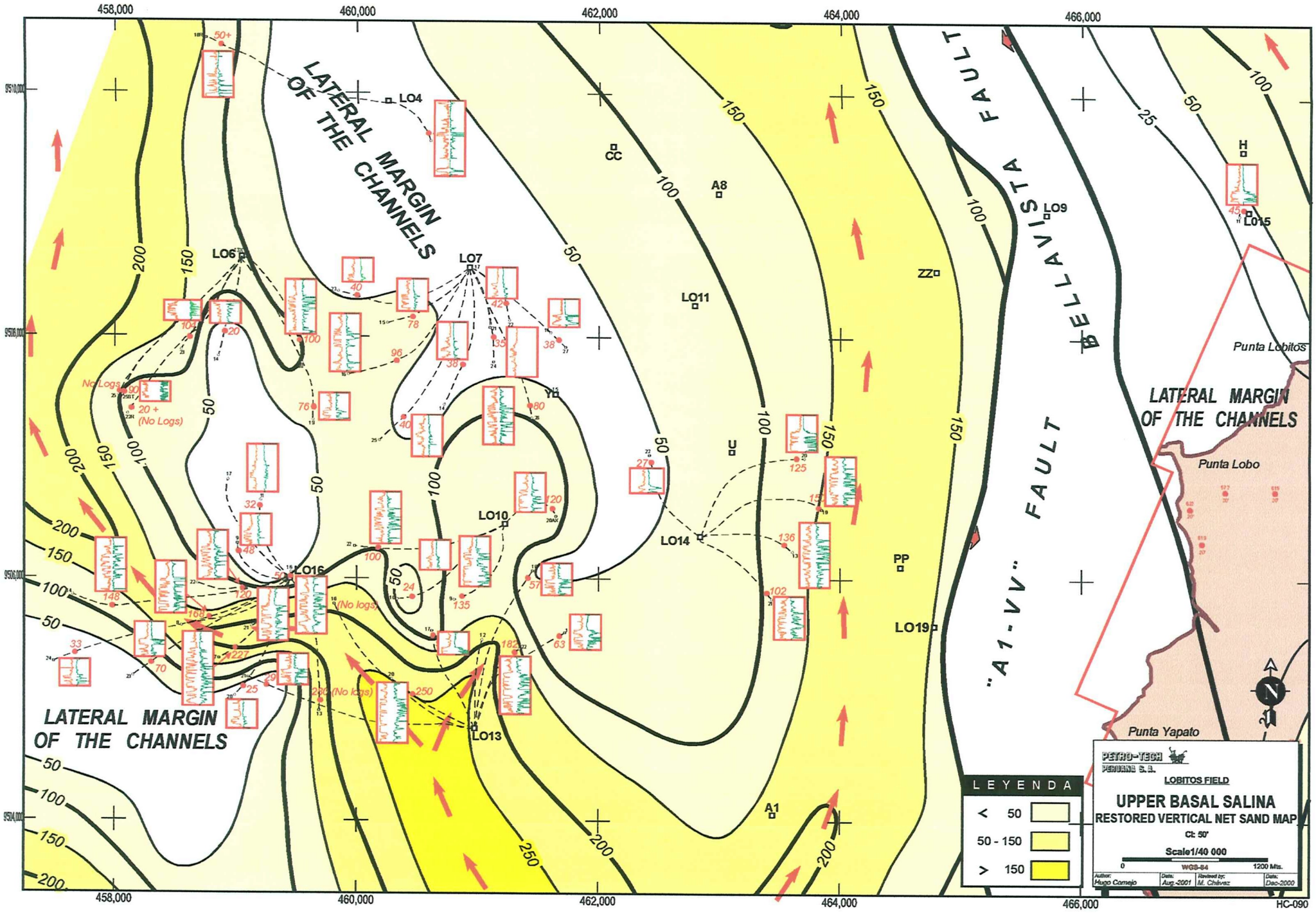
U
PP
LOCATION "C"
WET BLOCK
Possible OWC @ -8250
OWC @ -6250' (LO7-23)
OWC @ -7560' (LO16-13)
LKO @ -7580'
(LO6-25 ST)
W CONTACT @ -7575'
BELLAVISTA FAULT
"A1-VV" FAULT
PETRO-TECH PERUANA S.A.
LOBITOS FIELD
TOP BASAL SALINA FM.
(UPPER SECTION)
DEPTH STRUCTURAL MAP
CI: 500'
Scale1/40 000
0
1200 Mts.
WGS-84
Author: J. Vilca/H. Cornejo
Date: Aug.-2001
Revised by:
Date:
CENTRAL FILE
Geosciences
HC-082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LATERAL MARGIN OF THE CHANNELS
LO4
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LO7
LO10
LO11
LO13
LO14
LO15
LO16
LO19
CC
A8
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PP
A1
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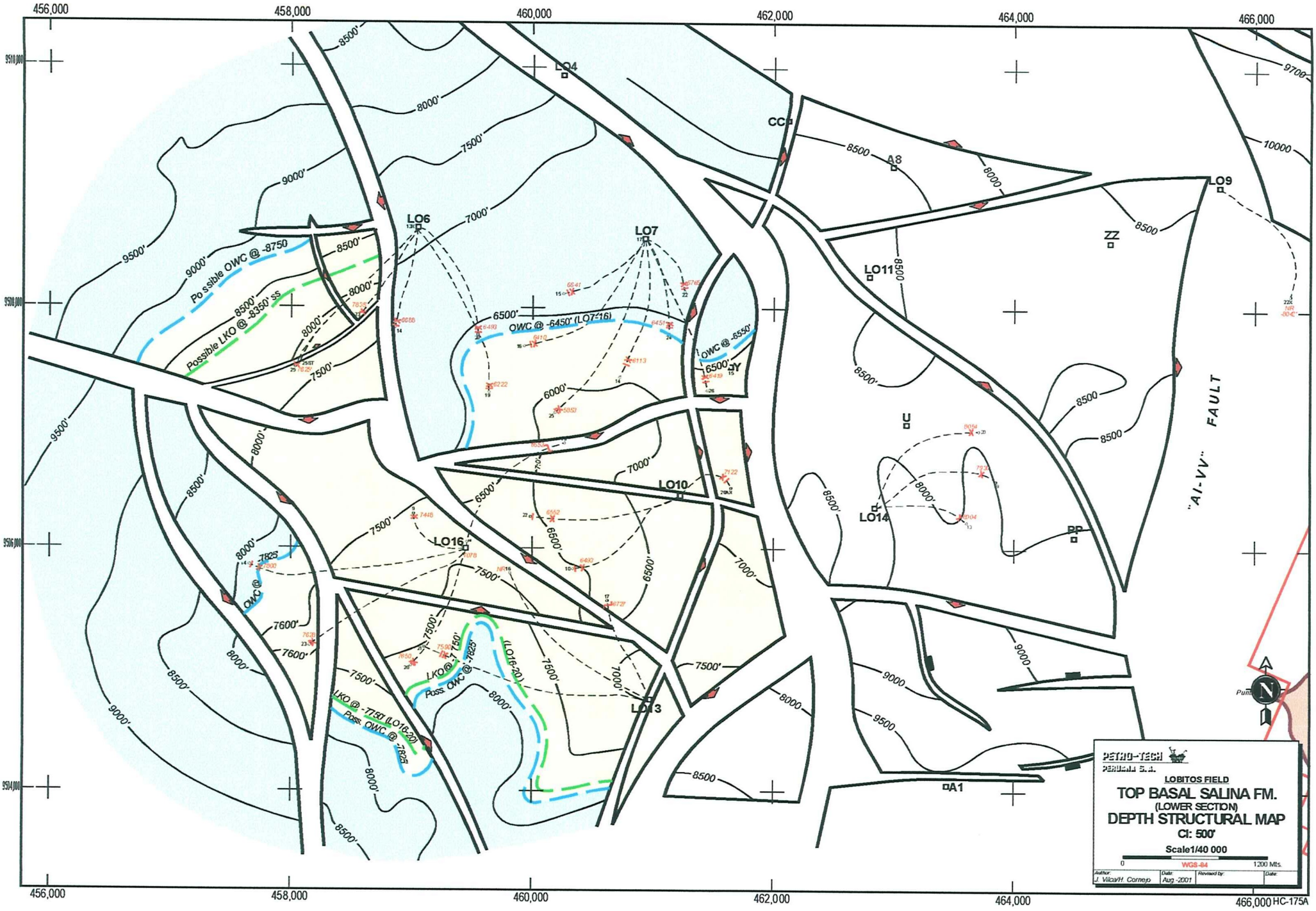
"A1-VV" FAULT
BELLAVISTA FAULT
Punta Lobitos
Punta Lobo
Punta Yapato
No Logs
20 +
(No Logs)
(No logs)
LEYENDA
< 50
50 - 150
> 150
PETRO-TECH PERUANA S.A.
LOBITOS FIELD
UPPER BASAL SALINA
RESTORED VERTICAL NET SAND MAP
Ct: 50'
Scale1/40 000
0
WGS-84
1200 Mts.
Author: Hugo Cornejo
Date: Aug.-2001
Reviewed by: M. Chávez
Date: Dec-2000
HC-090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LO4
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LO6
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LO11
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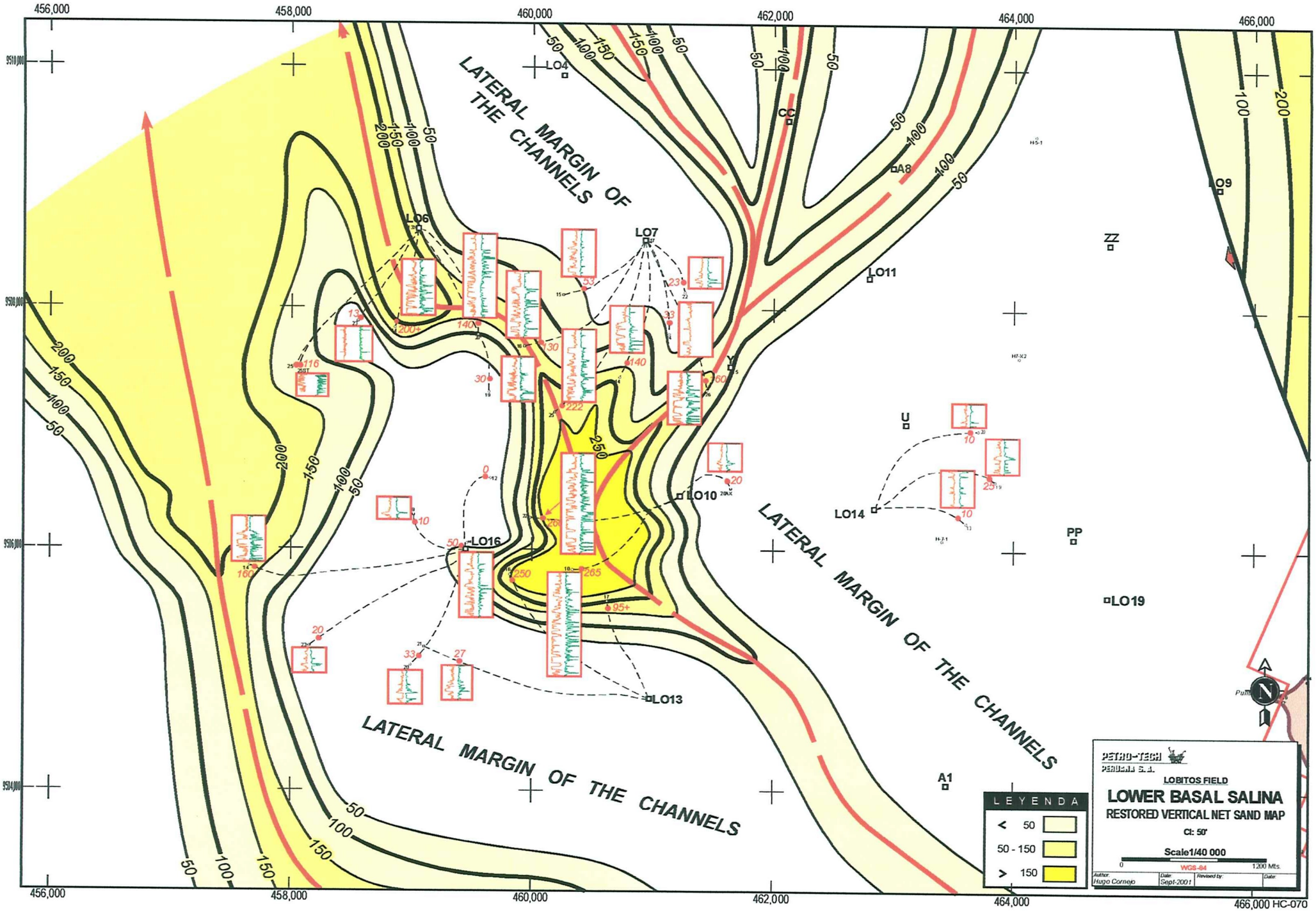
LO10
LO14
PP
LO16
LO13
A1
"AI-VV" FAULT
Possible OWC @ -8750
Possible LKO @ -8350' ss
OWC @ -6450' (LO7-16)
OWC @ -6550'
OWC @ -7825
LKO @ -7750' (LO16-20)
Poss. OWC @ -7825
(LO16-20)
PETRO-TECH PERUANA S.A.
LOBITOS FIELD
TOP BASAL SALINA FM.
(LOWER SECTION)
DEPTH STRUCTURAL MAP
CI: 500'
Scale1/40 000
0
1200 Mts.
WGS-84
Author: J. Vilca/H. Cornejo
Date: Aug.-2001
Revised by:
Date:
HC-175A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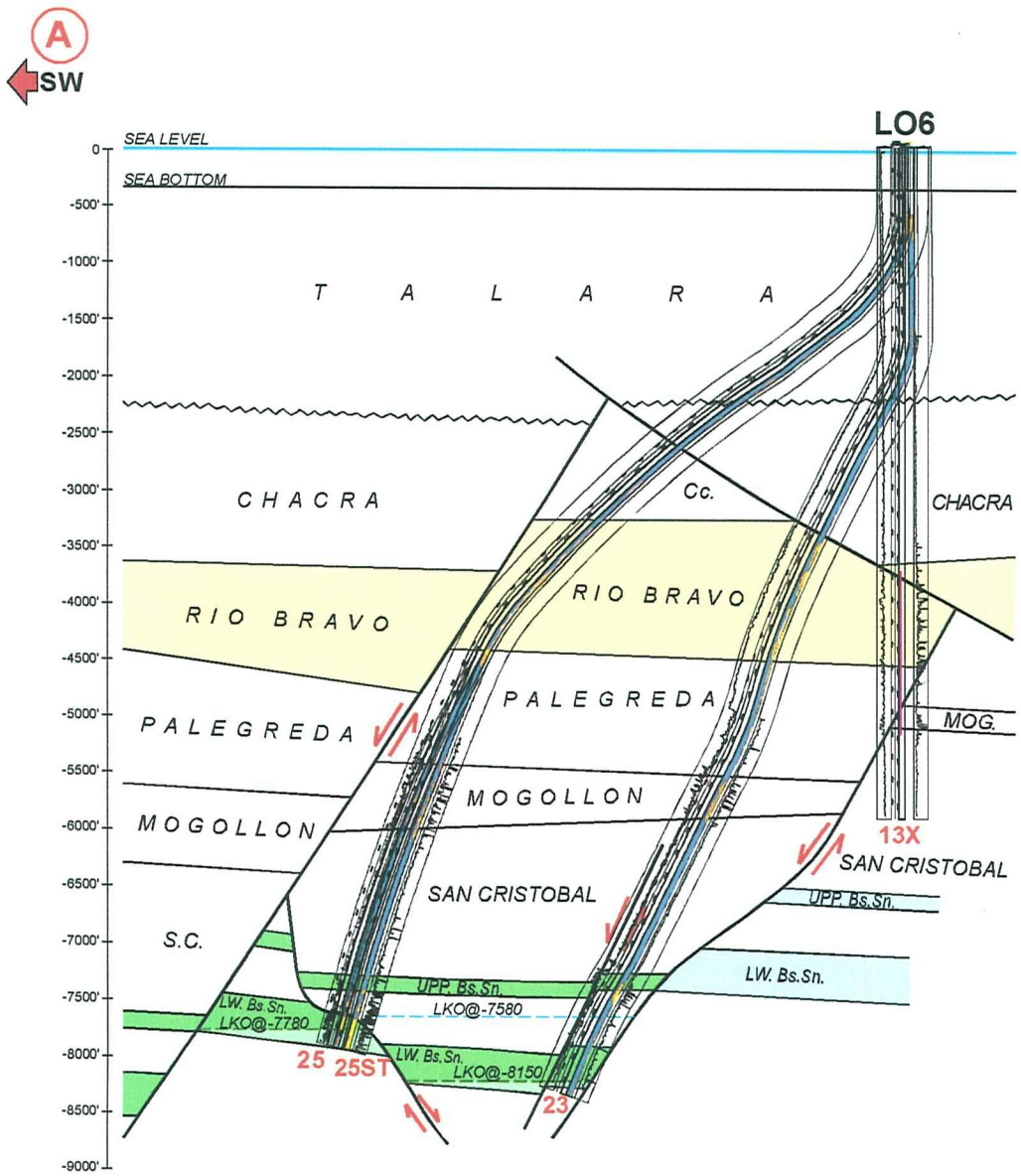
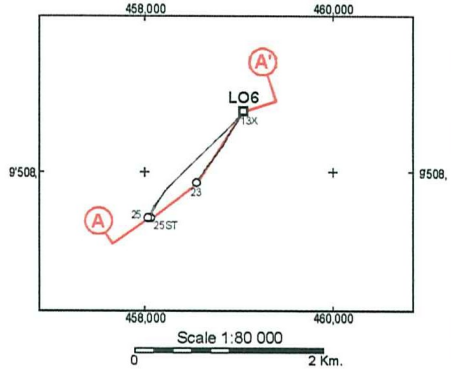
O9
PP
ZZ
U
LEYENDA
< 50
50 - 150
> 150
PETRO-TECH PERUANA S.A.
LOBITOS FIELD
LOWER BASAL SALINA
RESTORED VERTICAL NET SAND MAP
CI: 50'
Scale1/40 000
0
1200 Mts.
WGS-84
Author: Hugo Cornejo
Date: Sept-2001
Revised by:
Date:
HC-070



INDEX MAP



PETRO-TECH PERUANA S. A.

LOBITOS FIELD

SW - NE STRUCTURAL CROSS SECTION
A - A'
WELL LO6-23 , LO6-25 , LO6-25ST

Scale1/20 000
0 600 Mts.

Author	Date	Revised by	Date
H. Cornejo	Sept -2001		