

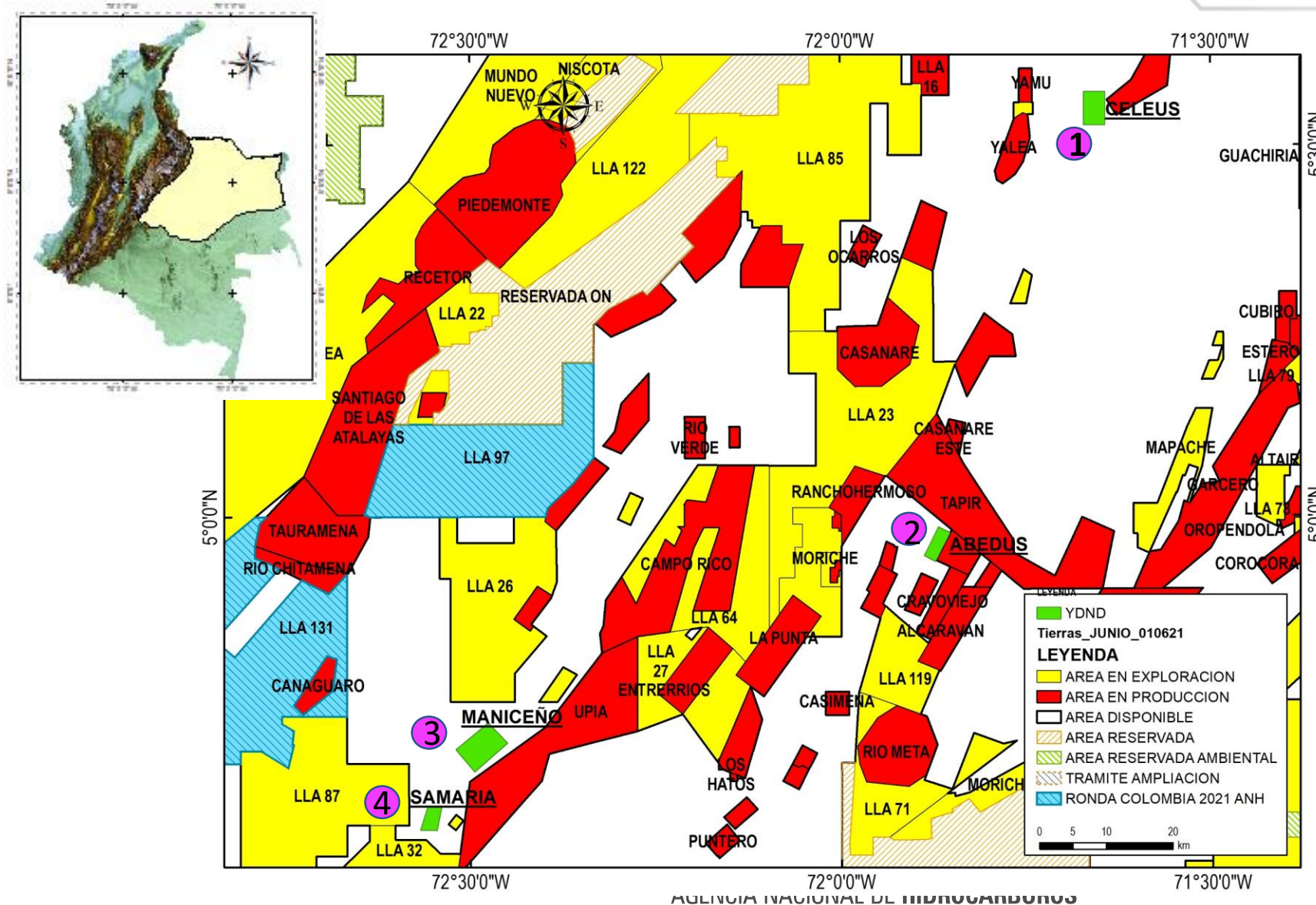
# RONDA

## COLOMBIA 2021

**LLANOS BASIN**

September 3<sup>rd</sup> 2021

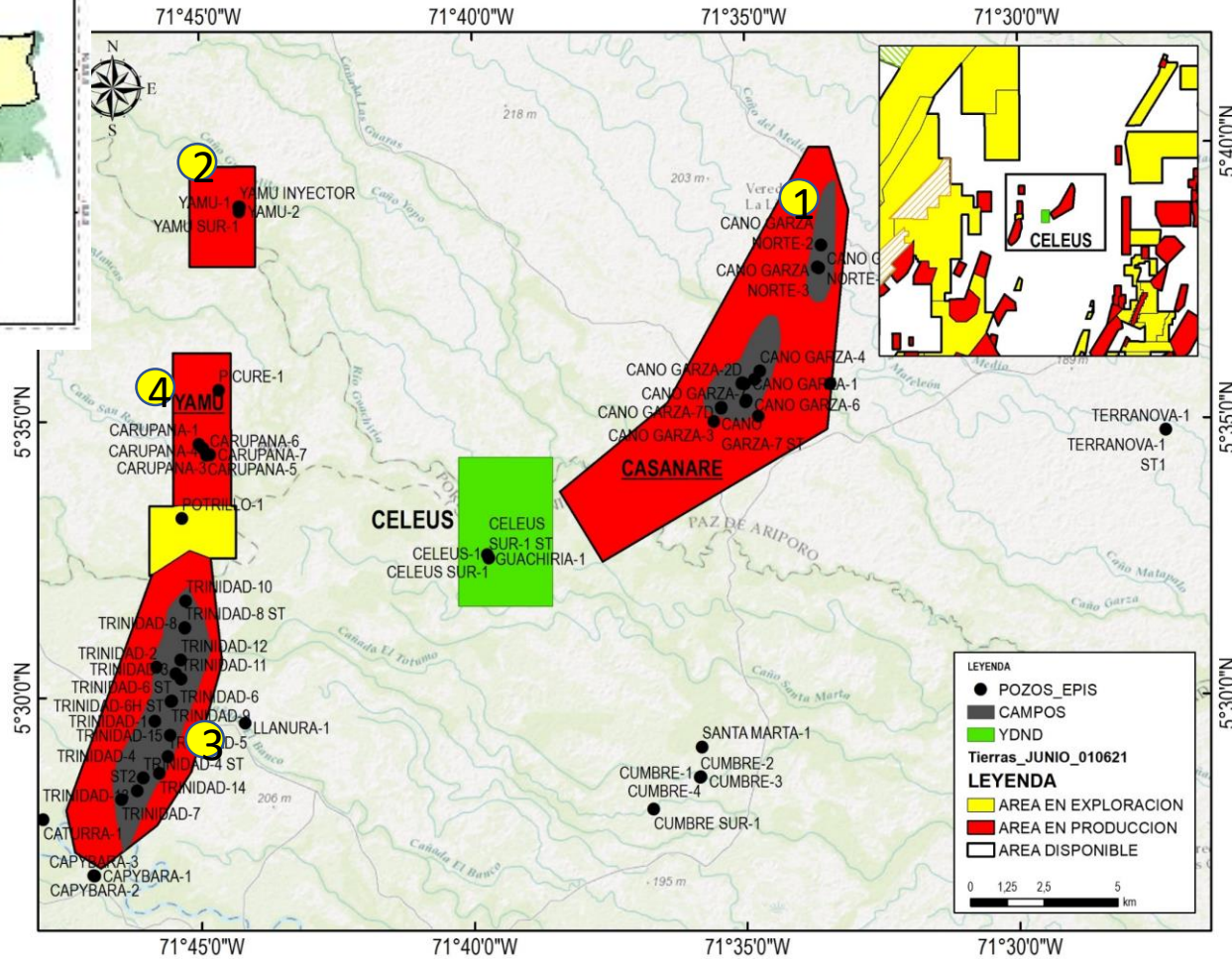
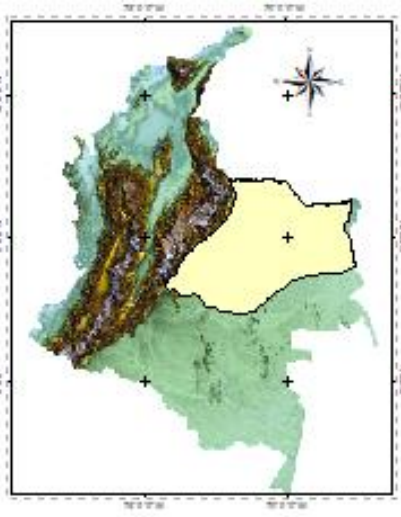
# UNDEVELOPED DISCOVERED ALREADY RESERVOIR



## Available Areas

- 1 Celeus Area
- 2 Abedus Area
- 3 Maniceño Area
- 4 Samaria Area

# CELEUS AREA



■ Celeus Area: 1581,73Ha

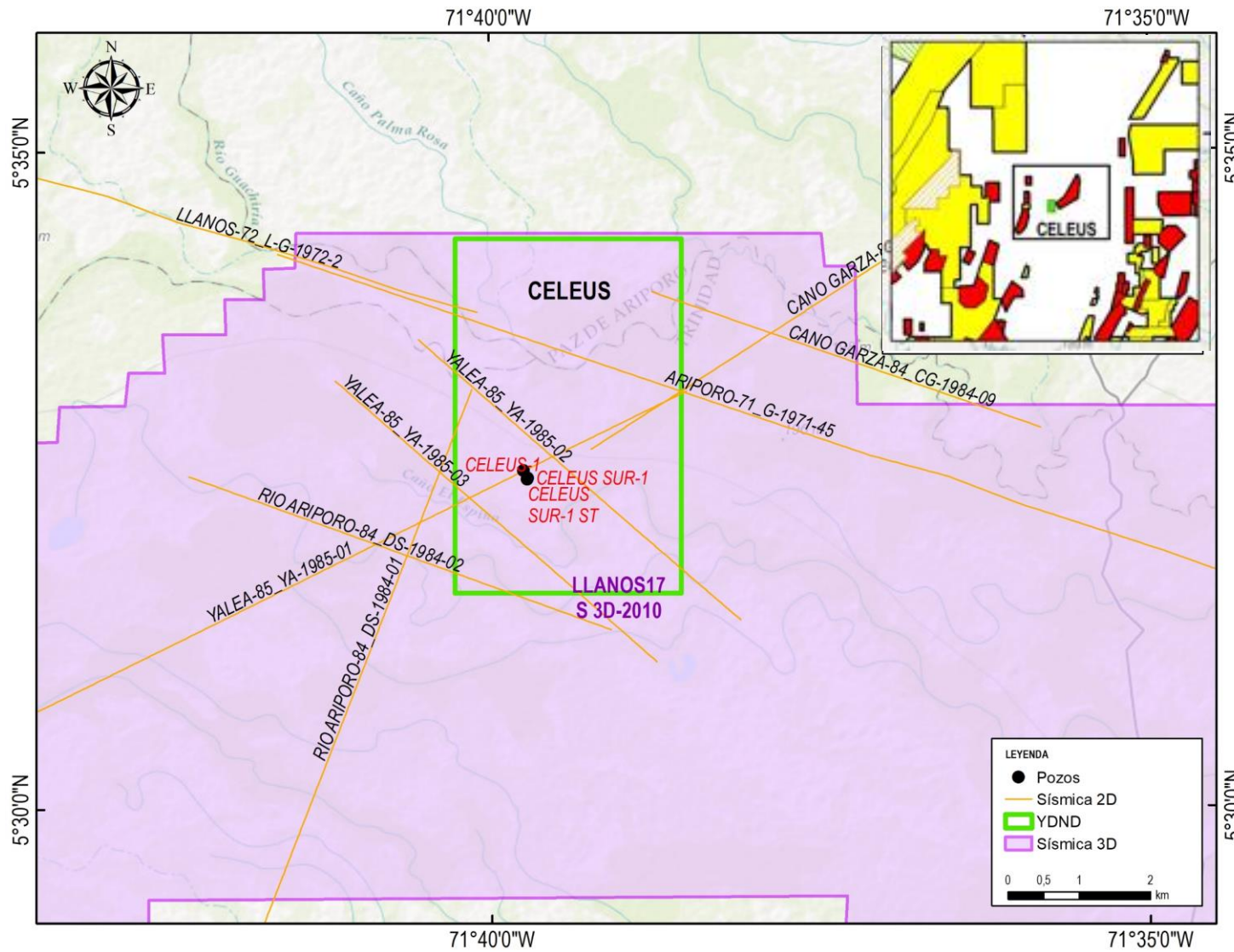
## Production Areas

### Field

- ① Caño Garza
- ② Yamu
- ③ Trinidad
- ④ Carupana



# SEISMIC AND WELLS



## Available data

### SEISMIC

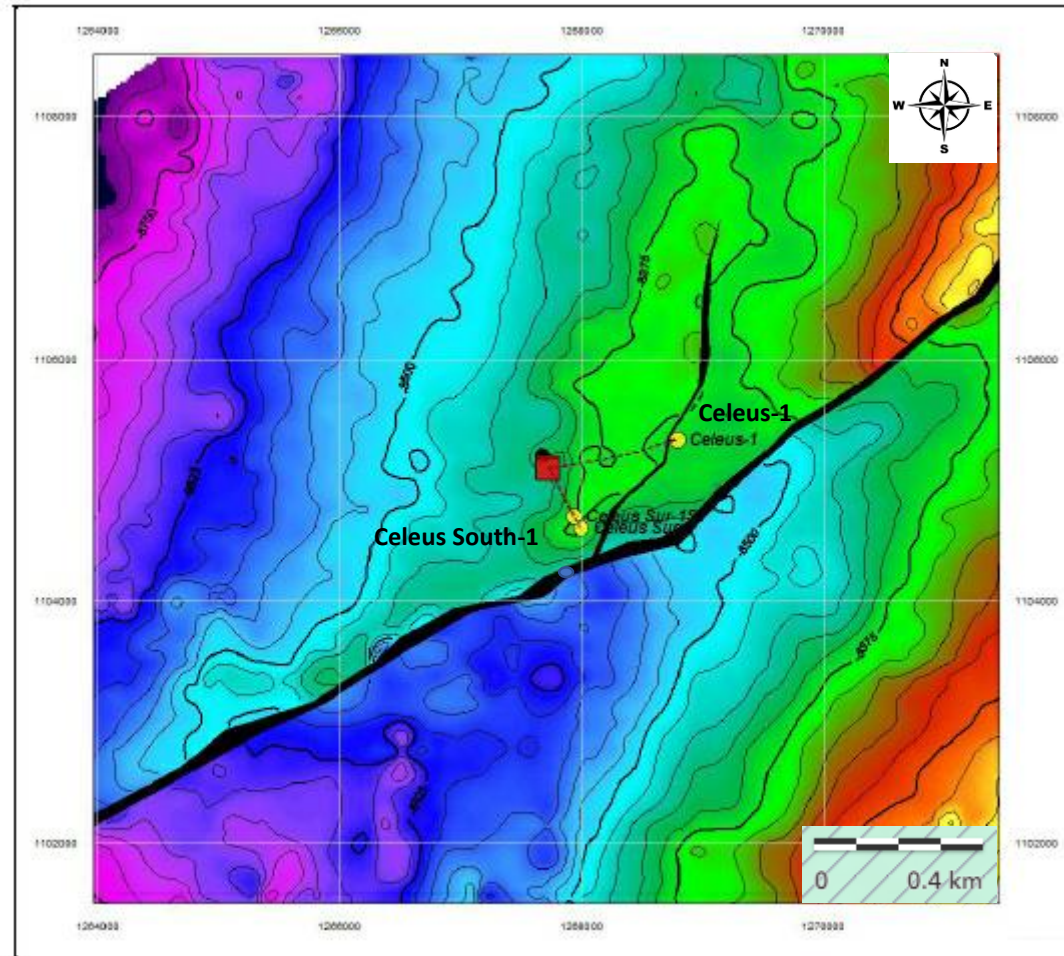
- ✓ LLANOS 17 S 3D-2010

### WELLS

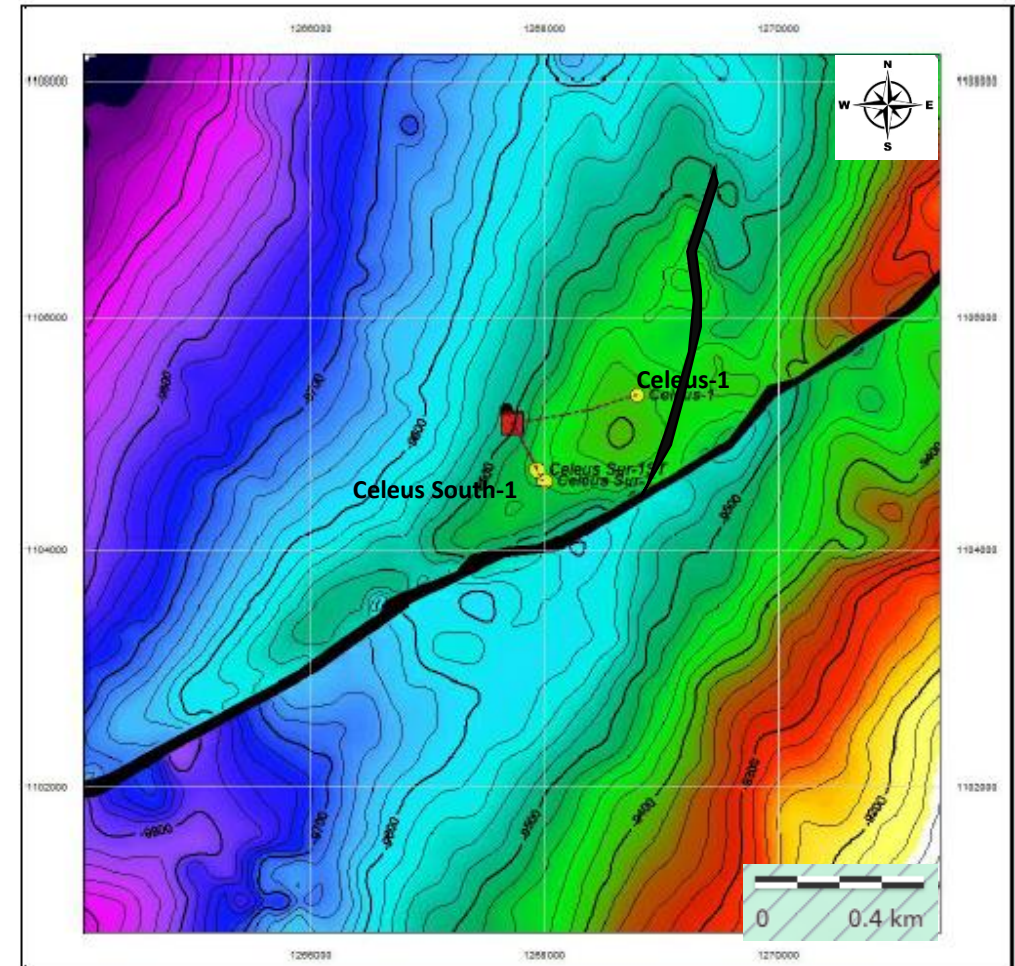
- ✓ Celeus-1
- ✓ Celeus Sur-1
- ✓ Celeus Sur-1 ST

# TIME STRUCTURAL MAPS

Time structural map Carbonera C7 Fm

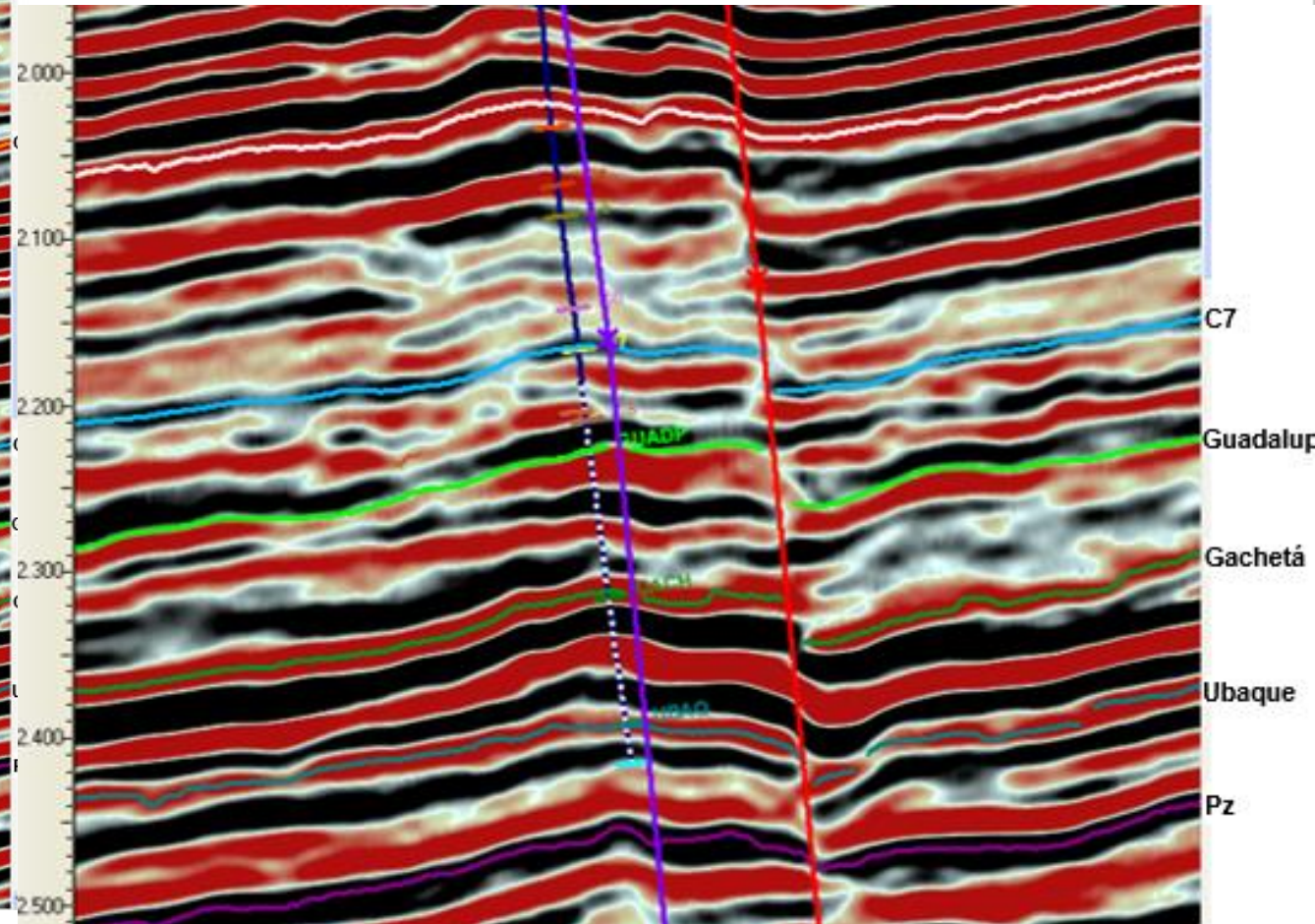
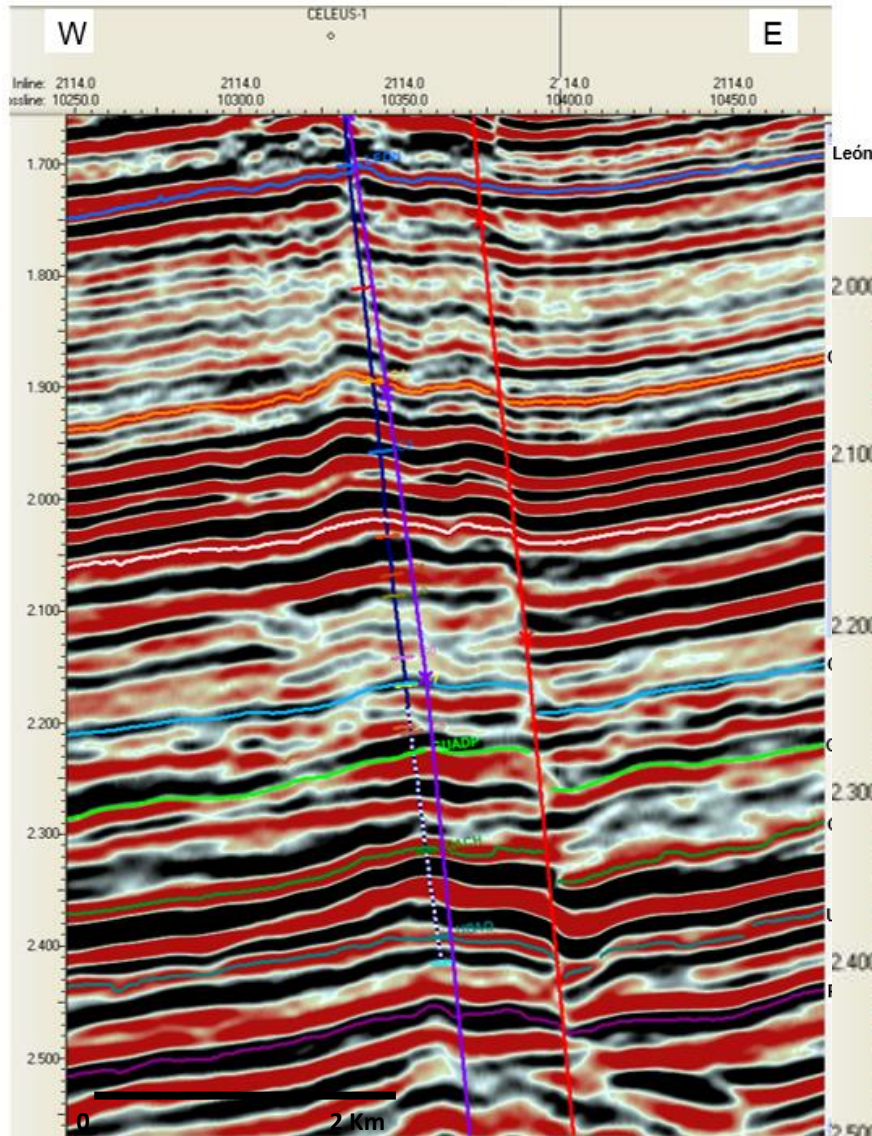
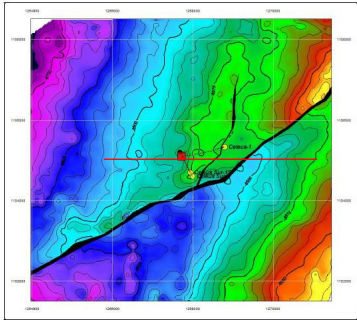


Time structural map Gacheta Fm



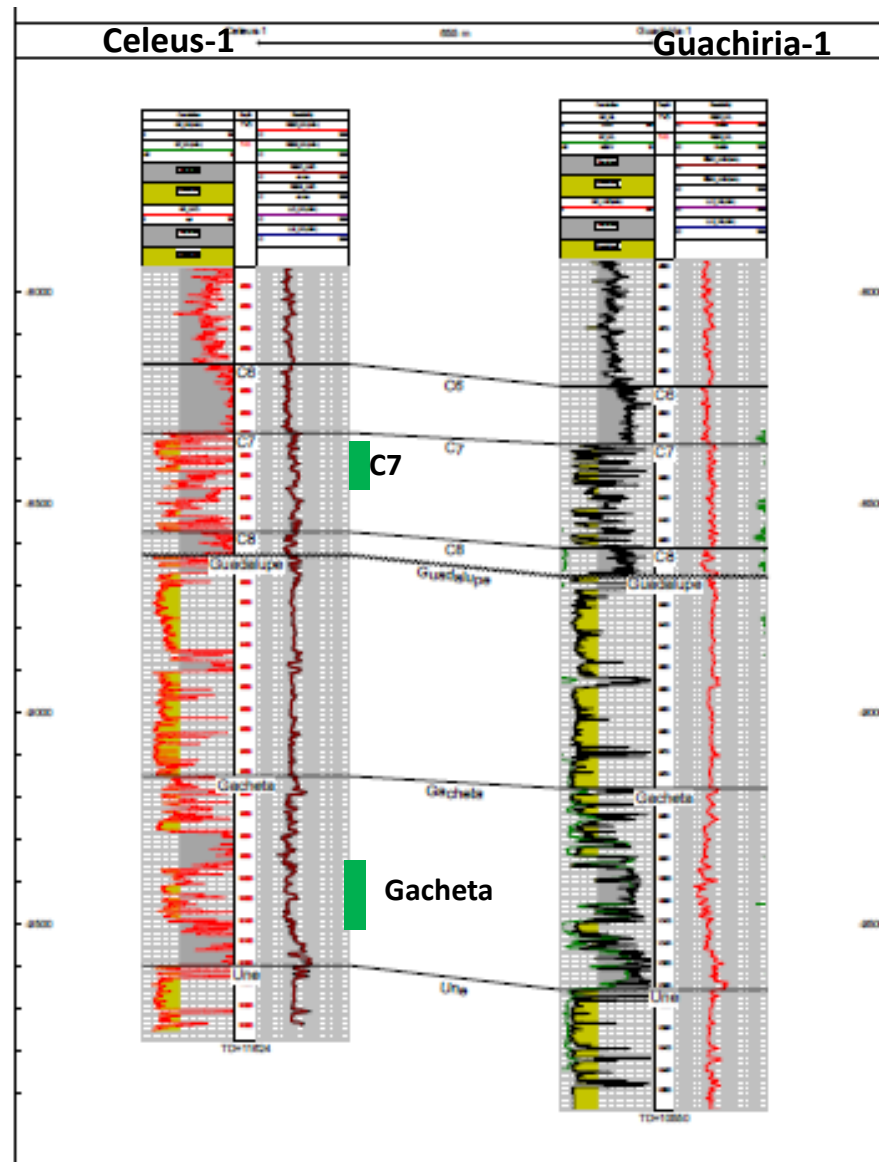
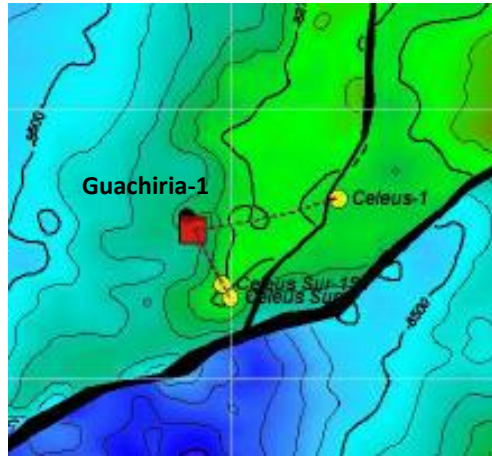


# DIP INLINE 2114





# WELLS INFORMATION



## Celeus-1 Plugged and abandoned

**Company:** Ramshorn International LTD

**Date:** 12 -March 2012 /15 of April - 2012

**Targets:** Gacheta FM & Carbonera FM C7.

**TD:** 11624' MD

### Initial Test:

Carbonera Fm C7, **108 BOPD, 37° API & 47% BSW**

Gacheta Fm, **139 BOPD, 34.1° API & 29% BSW**

## Celeus Sur-1 Operational problems, abandoned

**Company:** Ramshorn International LTD

**Date:** 22 - May / 3 of June -2013

**Targets:** Gacheta FM, Carbonera FM C5

**TD:** 10.700' MD

**No testing**

## Celeus Sur-1 ST Plugged and abandoned

**Company:** Ramshorn International LTD

**Date:** 13 of June– 21 of June -2013

**TD:** 10.673'

# PRODUCTION TEST

## INFORME MENSUAL SOBRE ENSAYOS DE POTENCIAL DE POZOS DE PETROLEO

CONCESION: LLANOS-17 OPERADOR: RAMSHORN INTERNATIONAL CAMPO: CELEUS ESTRUCTURA: ANTIC. FALLADO  
FORMACION: C-7 BLOQUE: LLANOS-17 YACIMIENTO: CARBONERA Año: 2012 Mes: AGOSTO

Pozo No.	Metodo Prod.	Fecha del Ensayo	Estado Pozo	Tamaño Choke	PRESION		POZO EN BOMBEO			Produccion Petroleo Barriles	Gravedad Petroleo 60° F	Produccion Agua Barriles	Produccion Gas MPC	R.G.A.
					Presion tuberia	Presion Revest	PIP (psi)	Frec (hz)	Duracion Ensayo					
CELEUS-1	FN	15	Inacti	128	4	128			13	703	32,25	240		0
CELEUS-1	FN	16	Inacti	128	4				24	517	30,10	33		0
CELEUS-1	FN	17	Inacti	128	5				24	406	33,60	21		0
CELEUS-1	FN	18	Inacti	128	4				24	267	35,10	21		0
CELEUS-1	FN	19	Inacti	128	2				24	130	33,30	25		0
CELEUS-1	FN	20	Inacti	128	2				24	184	32,60	74		0
CELEUS-1	FN	21	Inacti	128	1				24	201	35,10	122		0
CELEUS-1	FN	22	Inacti	128	3				24	108	30,90	98		0
CELEUS-1	FN	23	Inacti	128	2				8	68	30,10	48		0

Production from 70 BO up to 700  
Carbonera C7 FM

## INFORME MENSUAL SOBRE ENSAYOS DE POTENCIAL DE POZOS DE PETROLEO

CONCESION: LLANOS-17 OPERADOR: RAMSHORN INTERNATIONAL CAMPO: CELEUS ESTRUCTURA: ANTIC. FALLADO  
FORMACION: GACHETA BLOQUE: LLANOS-17 YACIMIENTO: GACHETA Año: 2012 Mes: AGOSTO

Pozo No.	Metodo Prod.	Fecha del Ensayo	Estado Pozo	Tamaño Choke	PRESION		POZO EN BOMBEO			Produccion Petroleo Barriles	Gravedad Petroleo 60° F	Produccion Agua Barriles	Produccion Gas MPC	R.G.A.
					Presion tuberia	Presion Revest	PIP (psi)	Frec (hz)	Duracion Ensayo					
ELEUS-1	FN	4	Cerrad	128	12	7			8	323	34,30	103		0
ELEUS-1	FN	5	Cerrad	128	5				24	243	33,87	137		0
ELEUS-1	FN	6	Cerrad	128	3	3			24	223	34,17	135		0
ELEUS-1	FN	7	Cerrad	128	3	3			24	176	34,30	128		0
ELEUS-1	FN	8	Cerrad	128	3	3			24	154	34,50	72		0
ELEUS-1	FN	9	Cerrad	128	2				24	51	33,60	82		0
ELEUS-1	FN	10	Cerrad	128	2				24	168	34,70	113		0
ELEUS-1	FN	11	Cerrad	128	2	2			24	135	34,30	58		0
ELEUS-1	FN	12	Cerrad	128	2	2			24	139	34,50	56		0

Production from 50 BO up to 300  
Gacheta FM



# VOLUMETRIC ESTIMATION

## PROSPECTO CELEUS

VOLUMETRIC CALCULATIONS				
CARBONERA C7				
PROSPECT		P10	P50	P90
AREA	ACRES	600	400	90
THICKNESS	FEET	25	20	15
POROSITY	FRACTION	0.25	0.22	0.19
OIL SATURATION	FRACTION	0.72	0.64	0.53
VOLUMETRIC FACTOR	B(RES)/B(STAND)	1.1	1.1	1.1
RECOVERY FACTOR	FRACTION	0.57	0.51	0.42
<b>Recoverable Volume</b>	<b>MMBBLs</b>	<b>19.04</b>	<b>7.94</b>	<b>0.96</b>

VOLUMETRIC CALCULATIONS,				
GACHETA				
PROSPECT		P10	P50	P90
AREA	ACRES	600	400	100
THICKNESS	FEET	12	10	8
POROSITY	FRACTION	0.2	0.18	0.16
OIL SATURATION	FRACTION	0.7	0.68	0.65
VOLUMETRIC FACTOR	B(RES)/B(STAND)	1.1	1.1	1.1
RECOVERY FACTOR	FRACTION	0.55	0.49	0.4
<b>Recoverable Volume</b>	<b>MMBBLs</b>	<b>7.11</b>	<b>3.45</b>	<b>0.59</b>

PRODUCCION ACUMULADA TOTAL POR POZO (MBO)			
Pozo	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
Celeus-1	109,07	650,45	0,00
<b>Total</b>	<b>109,07</b>	<b>650,45</b>	<b>0,00</b>

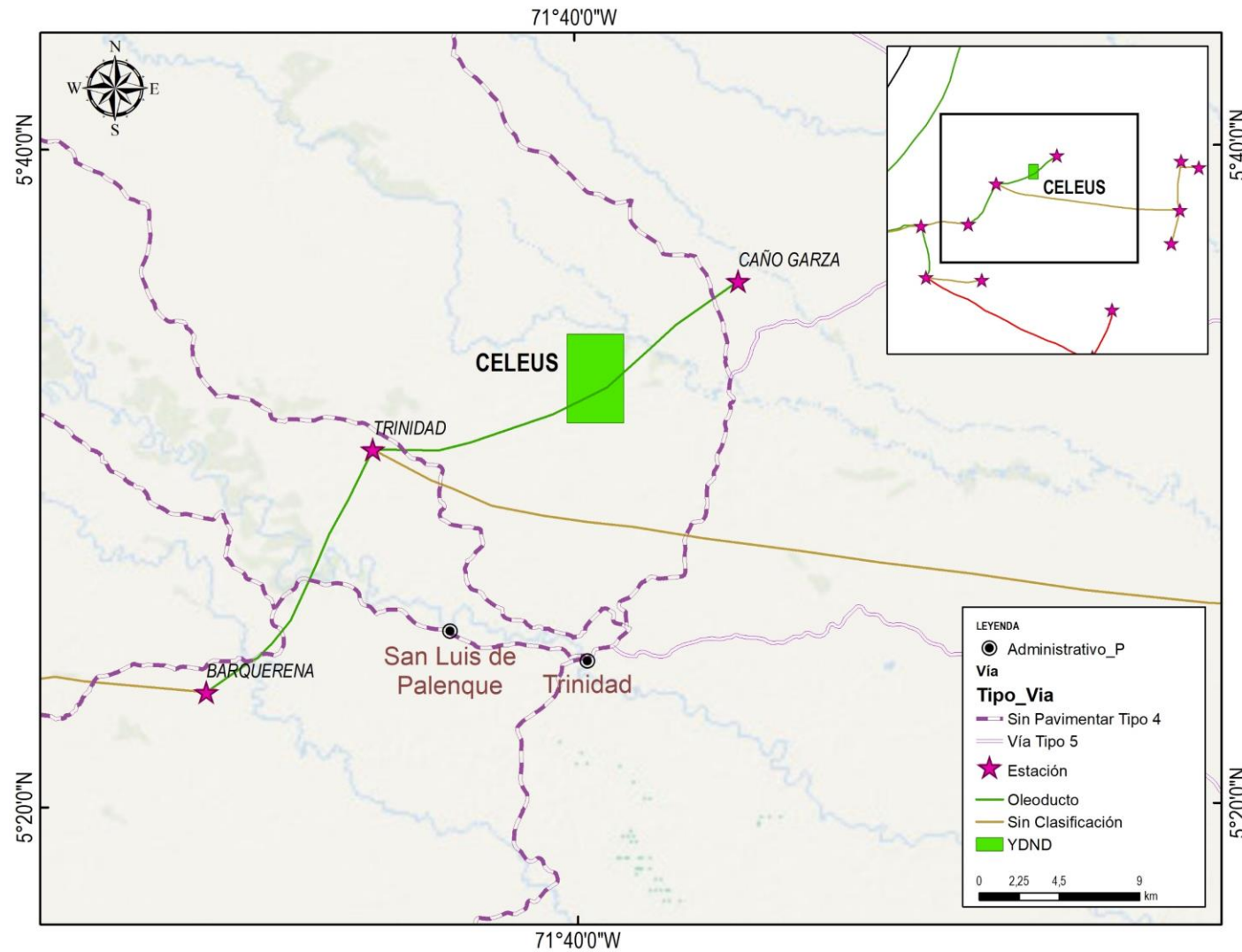
PRODUCCION ACUMULADA AÑO 2014 POR FORMACION				PRODUCCION ACUMULADA TOTAL POR FORMACION			
Formación	Aceite (MBO)	Agua (MBW)	Gas (MMPC)	Formación	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
Gacheta	35,64	423,29	0,00	Gacheta	88,31	569,57	0,00
Carbonera	18,57	80,20	0,00	Carbonera	20,77	80,88	0,00
<b>Total</b>	<b>54,20</b>	<b>503,49</b>	<b>0,00</b>	<b>Total</b>	<b>109,07</b>	<b>650,45</b>	<b>0,00</b>

Tabla 6.1 Producción por pozo y por formación Campo Celeus Año 2014

### Important issues

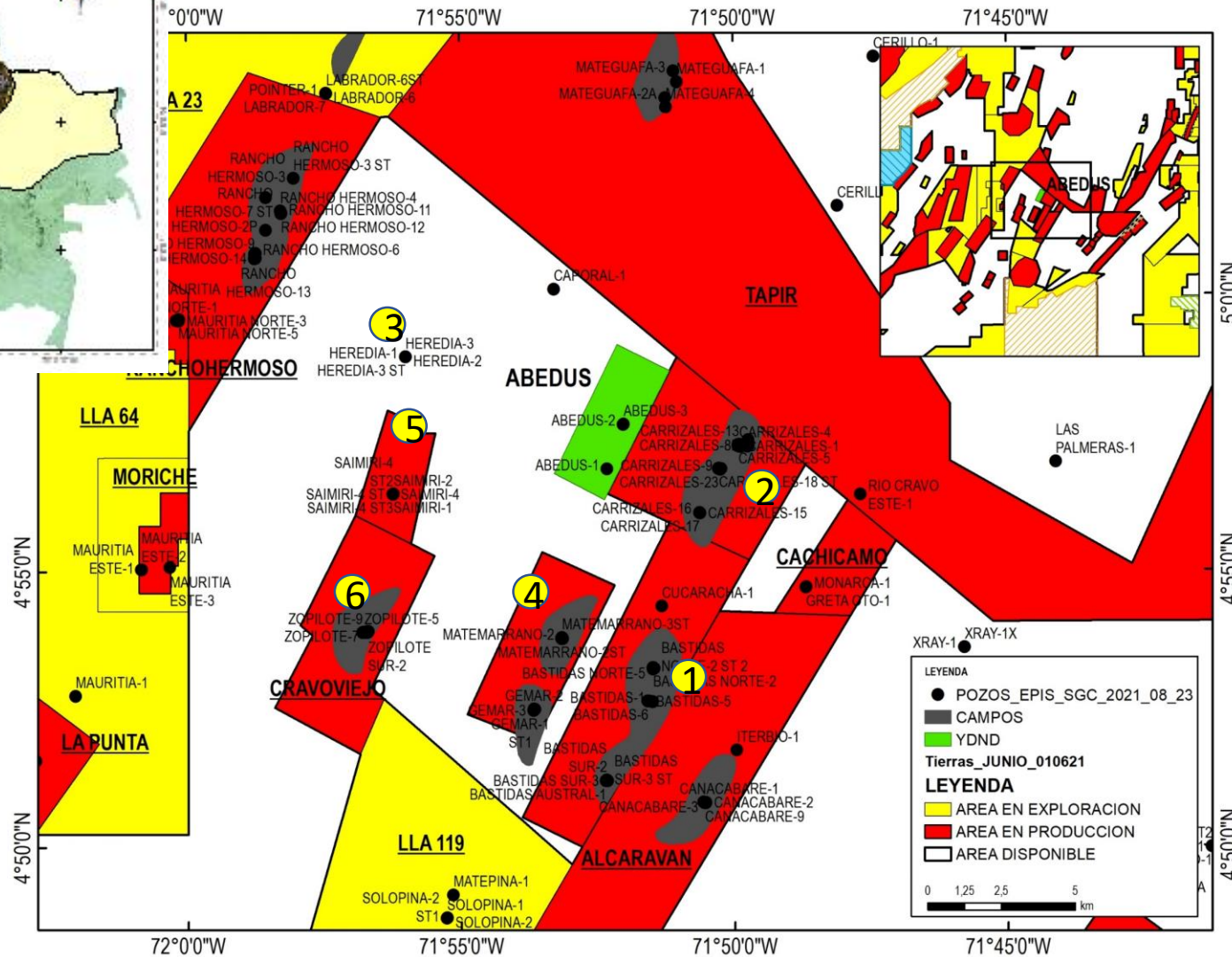
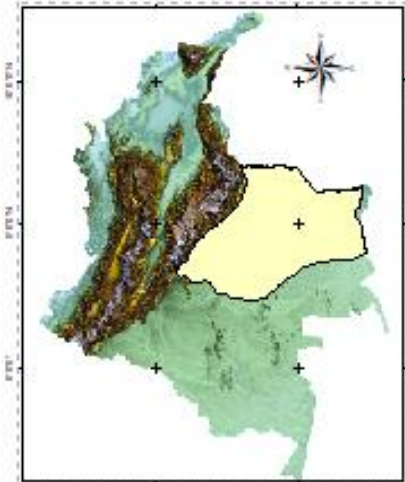
- The commerciality of the area was not declared.
- The project was not economically profitable for the company at that moment
- The area was relinquished to ANH in 2017

# INFRASTRUCTURE





# ABEDUS AREA



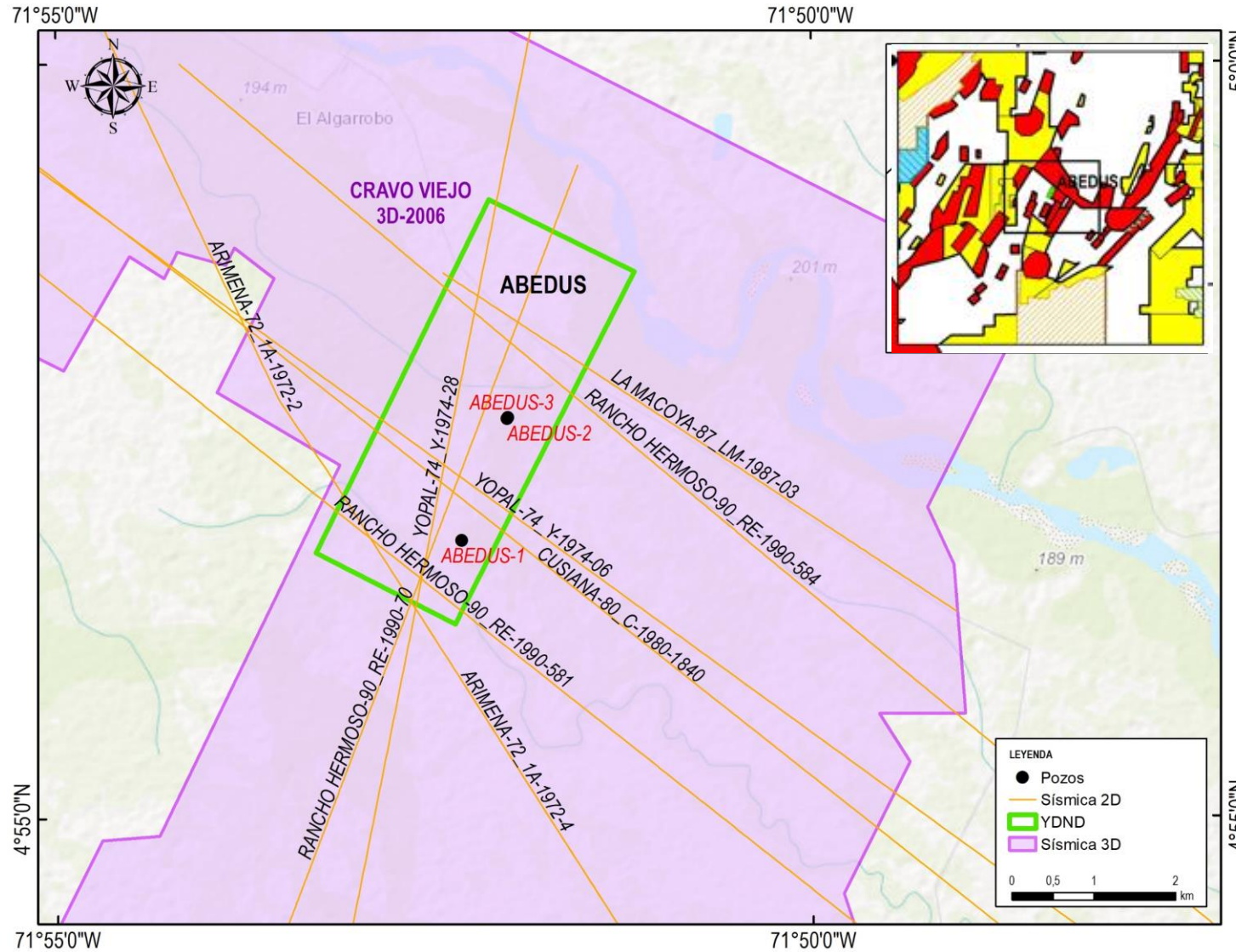
Abedus Area: 940,35Ha

## Production Areas

Field	OOIP (MMBIs)
<b>Abedus</b>	<b>1.1</b>
<b>1. Bastidas</b>	<b>14.5</b>
<b>2. Carrizales</b>	<b>28.9</b>
<b>3. Heredia</b>	<b>3.5</b>
<b>4. Matemarrano</b>	<b>6.3</b>
<b>5. Saimiri</b>	<b>1.9</b>
<b>6. Zopilote</b>	<b>18.0</b>

\*Taken from ITA-2013 Grupo C&C Energia

# SEISMIC AND WELLS



## Available data

### SEISMIC

- ✓ Cravo Viejo 3D-2006

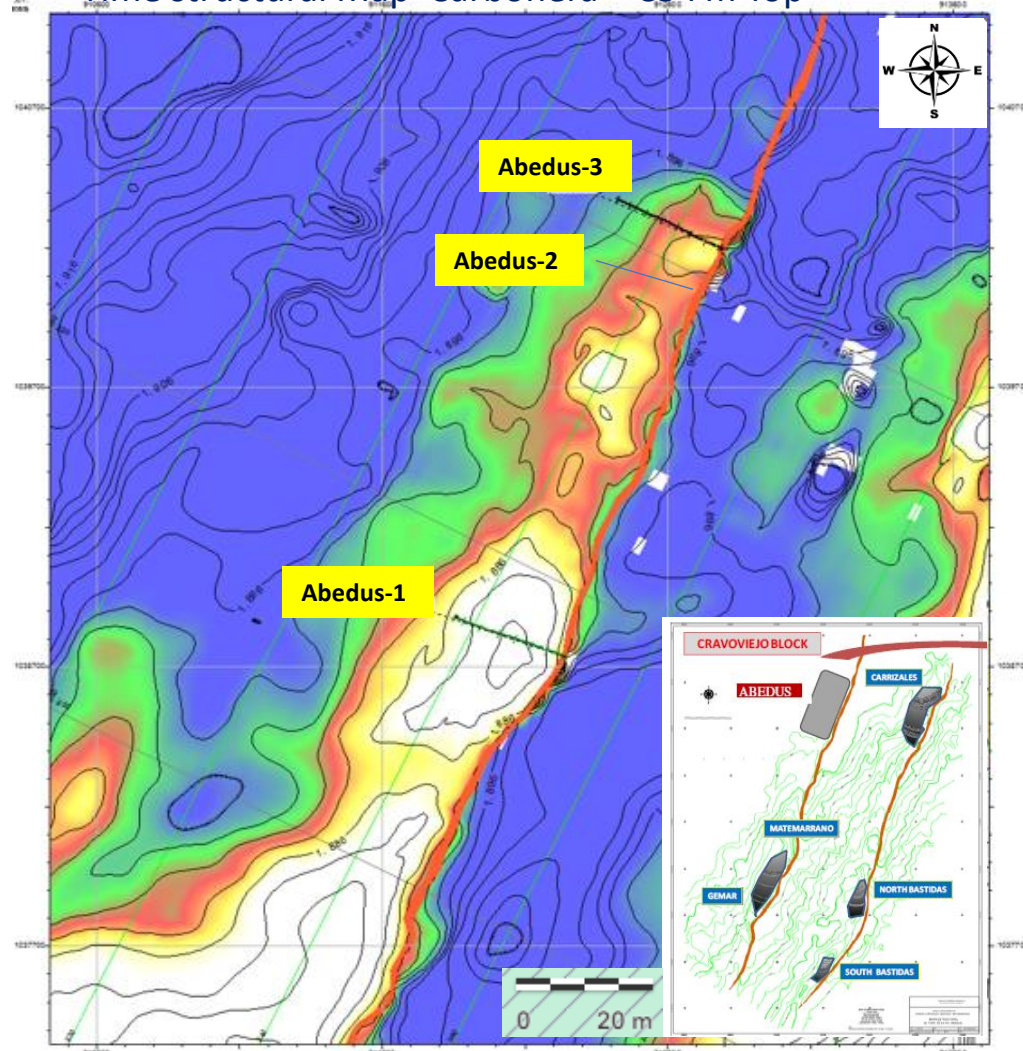
### WELLS

- ✓ Abedus-1
- ✓ Abedus-2
- ✓ Abedus-3

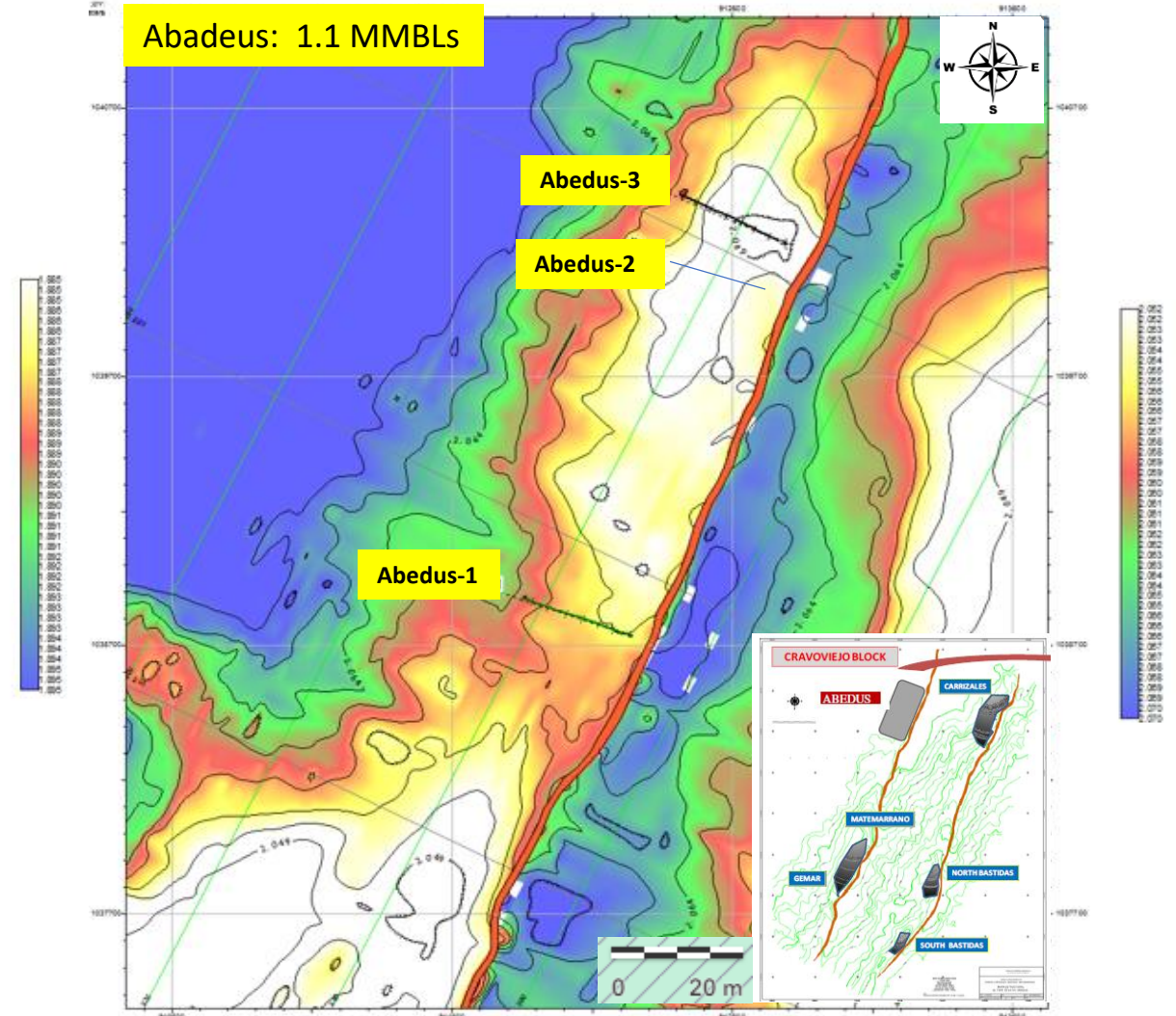


# TIME STRUCTURAL MAPS

Time structural Map Carbonera – C5 Fm Top



Time structural Map Gachetá, middle Sand Fm Top

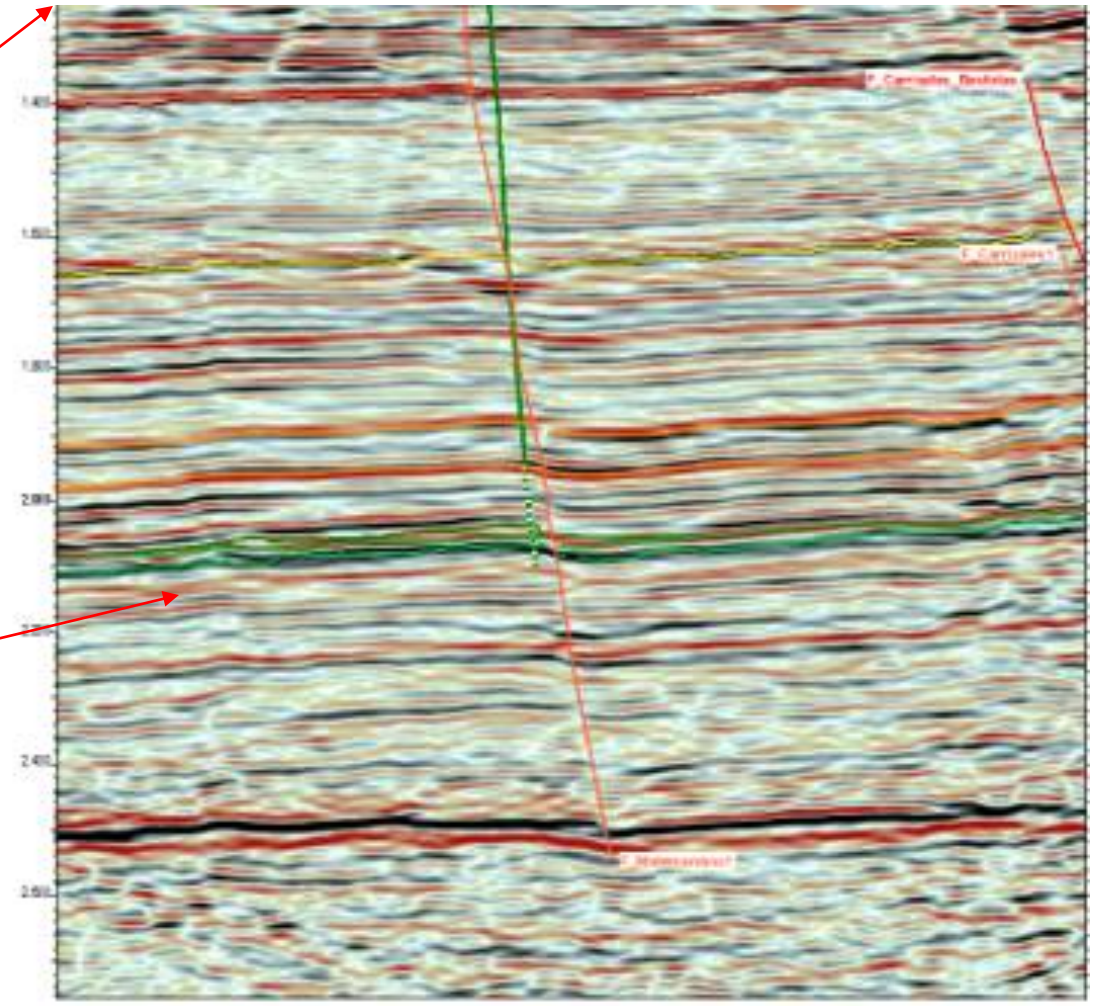
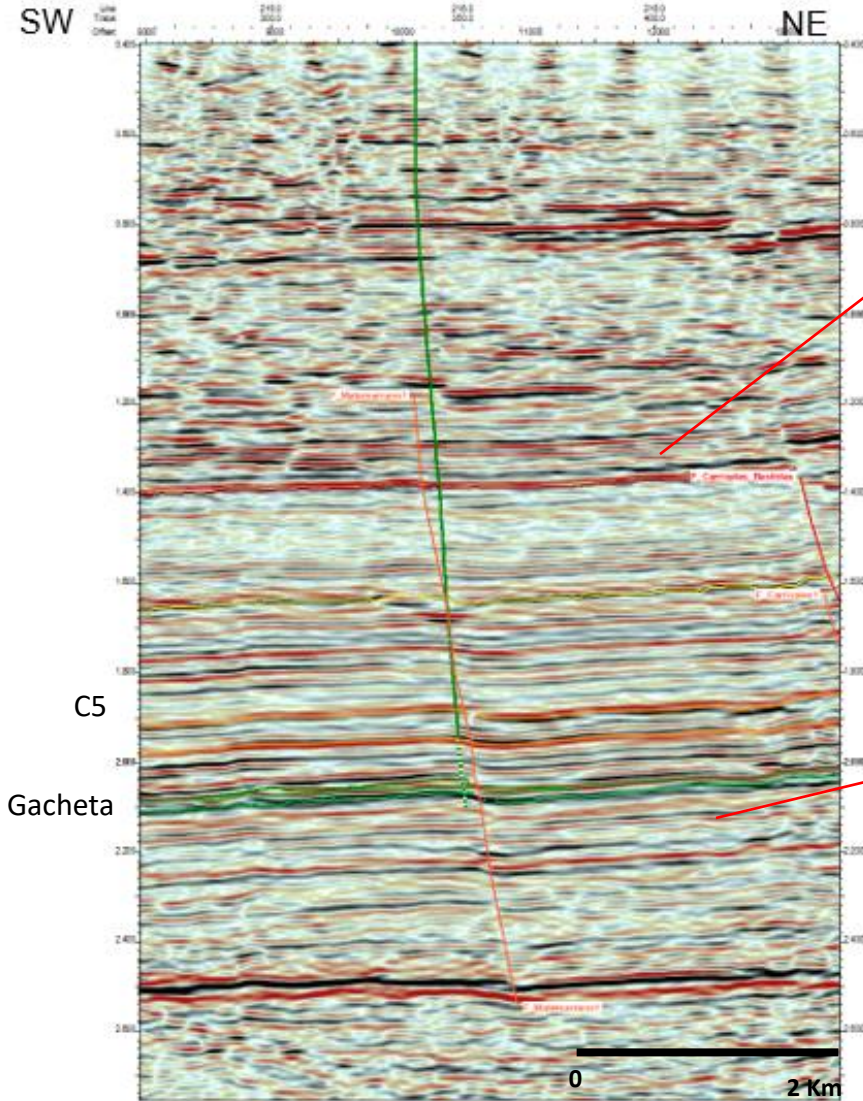


\*Taken from ITA Grupo C&C Energia



# DIP SEISMIC LINE

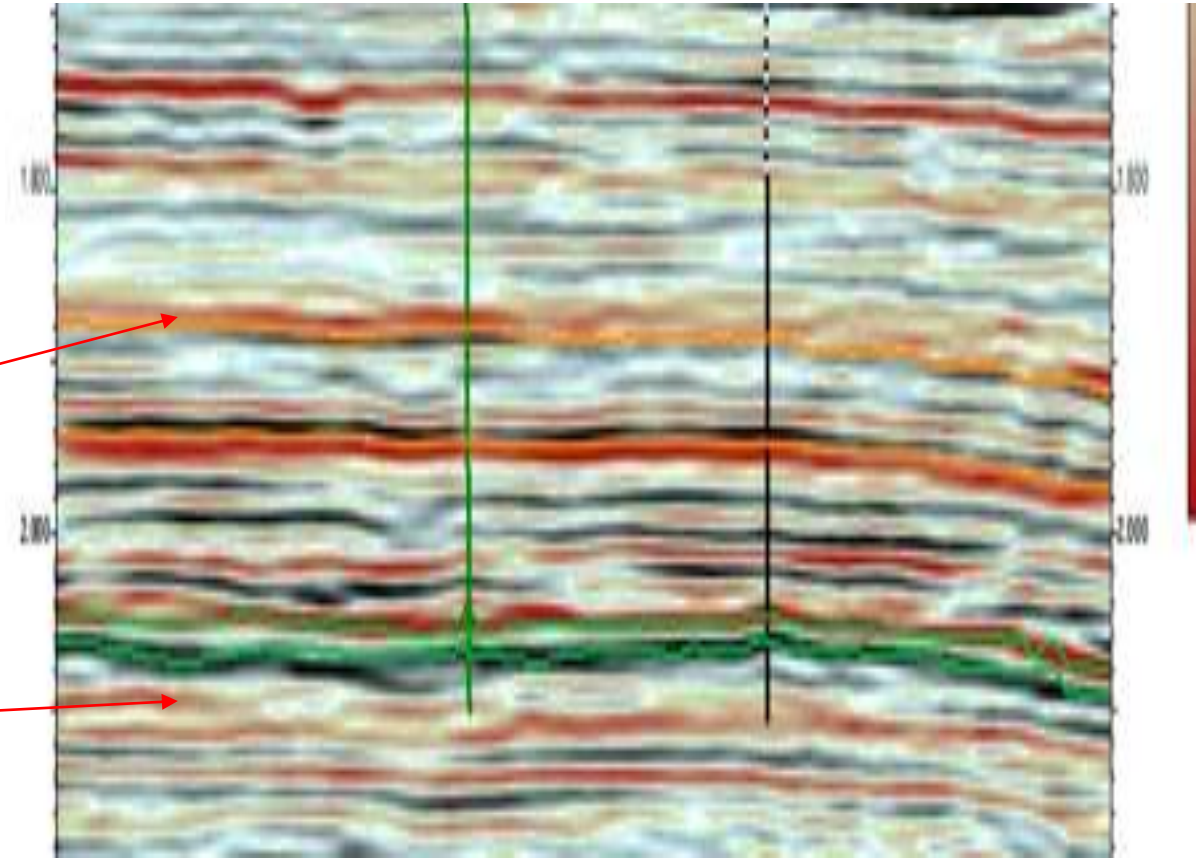
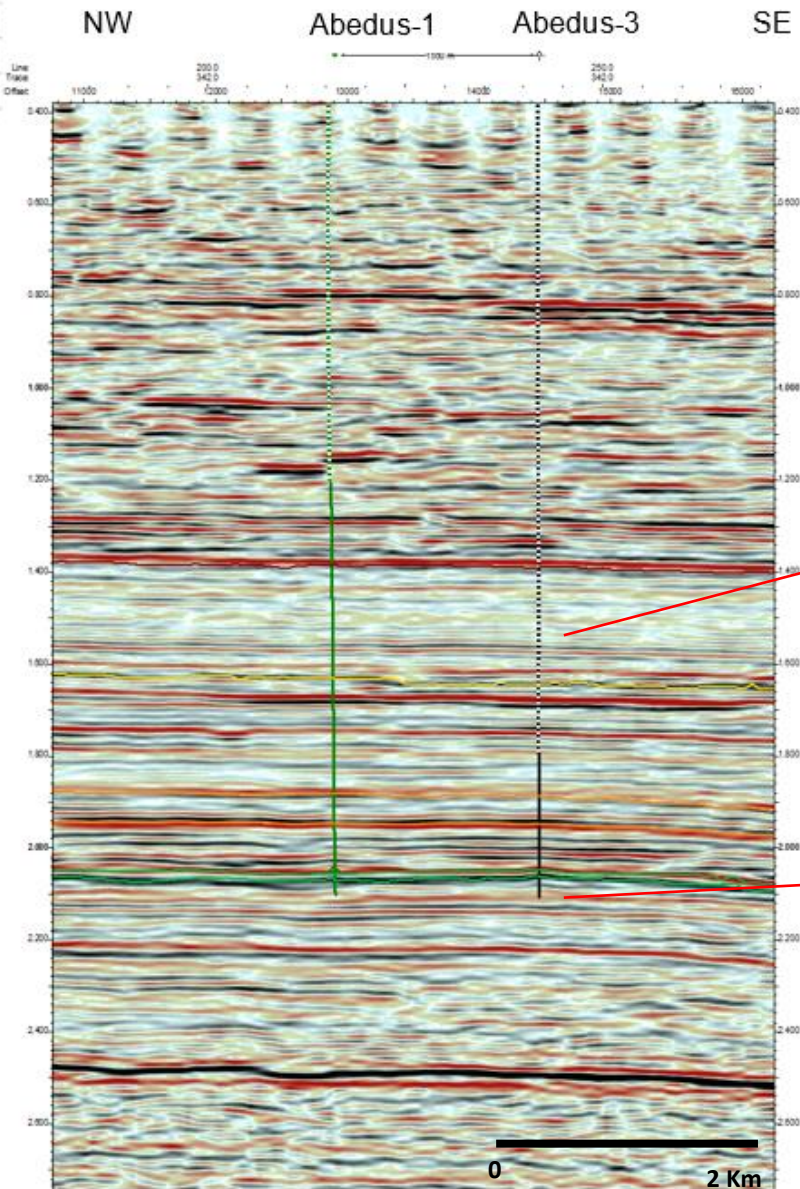
Abedus-1



\*Taken from ITA Grupo C&C Energia



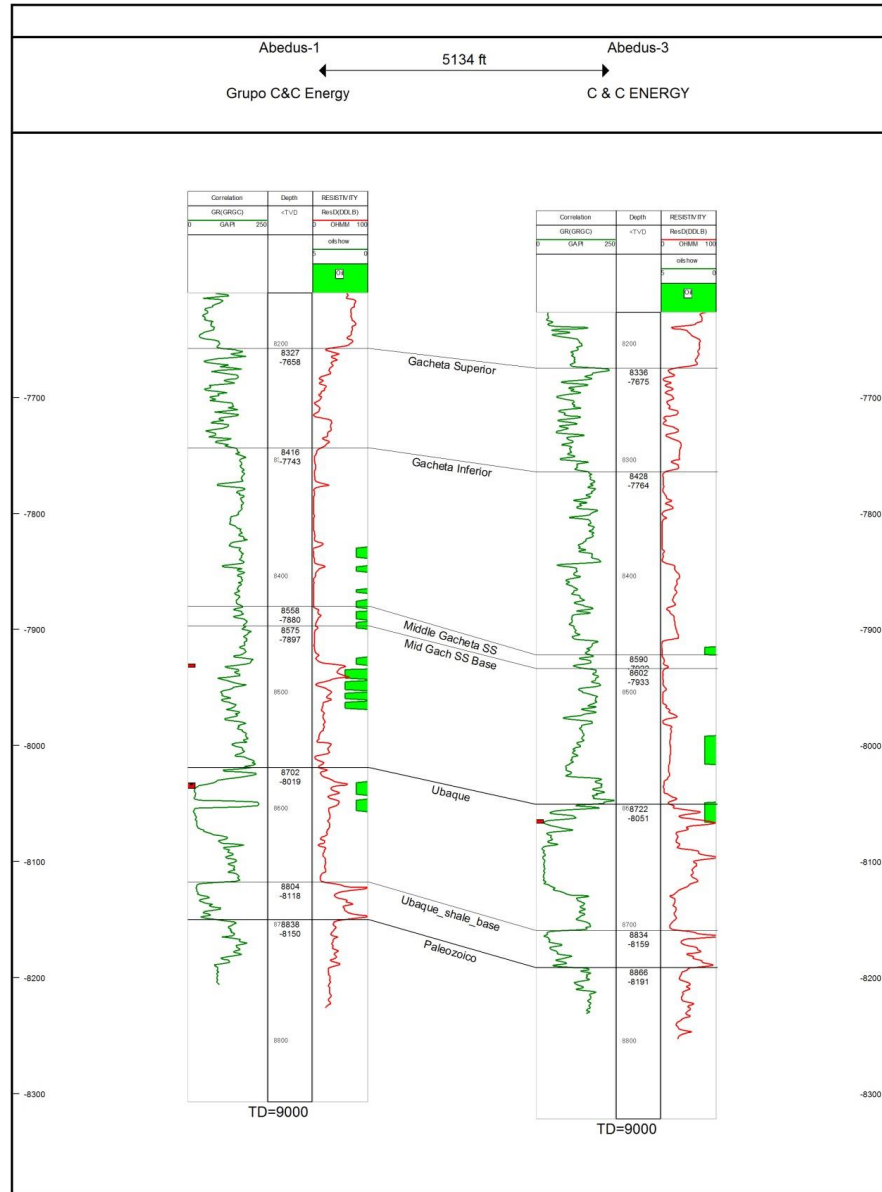
# STRIKE SEISMIC LINE



\*Taken from ITA Grupo C&C Energia







## Abedus-3

**Company: Grupo C&C Energy**

**Date: 19 –January/24- September -2011**

**Targets: Ubaque, Gacheta FM, Carbonera FM C5**

**TD: 8977' MD**

**DST TEST:**

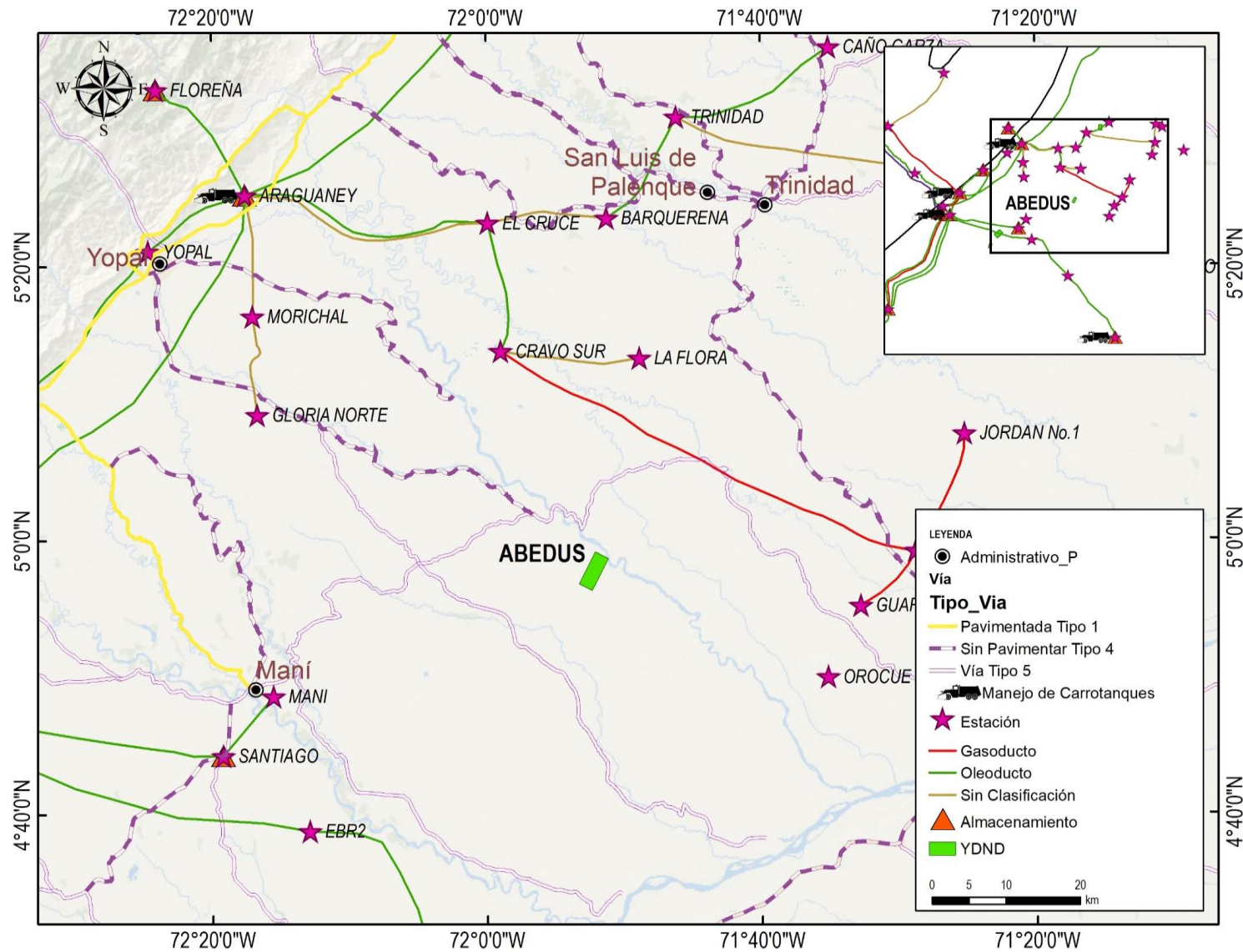
**Carbonera Fm C5, 18 BOPD, 29° API & 92% BSW**

**Ubaque Fm, 12 BOPD, 14° API & 97%BSW**

## Important issues

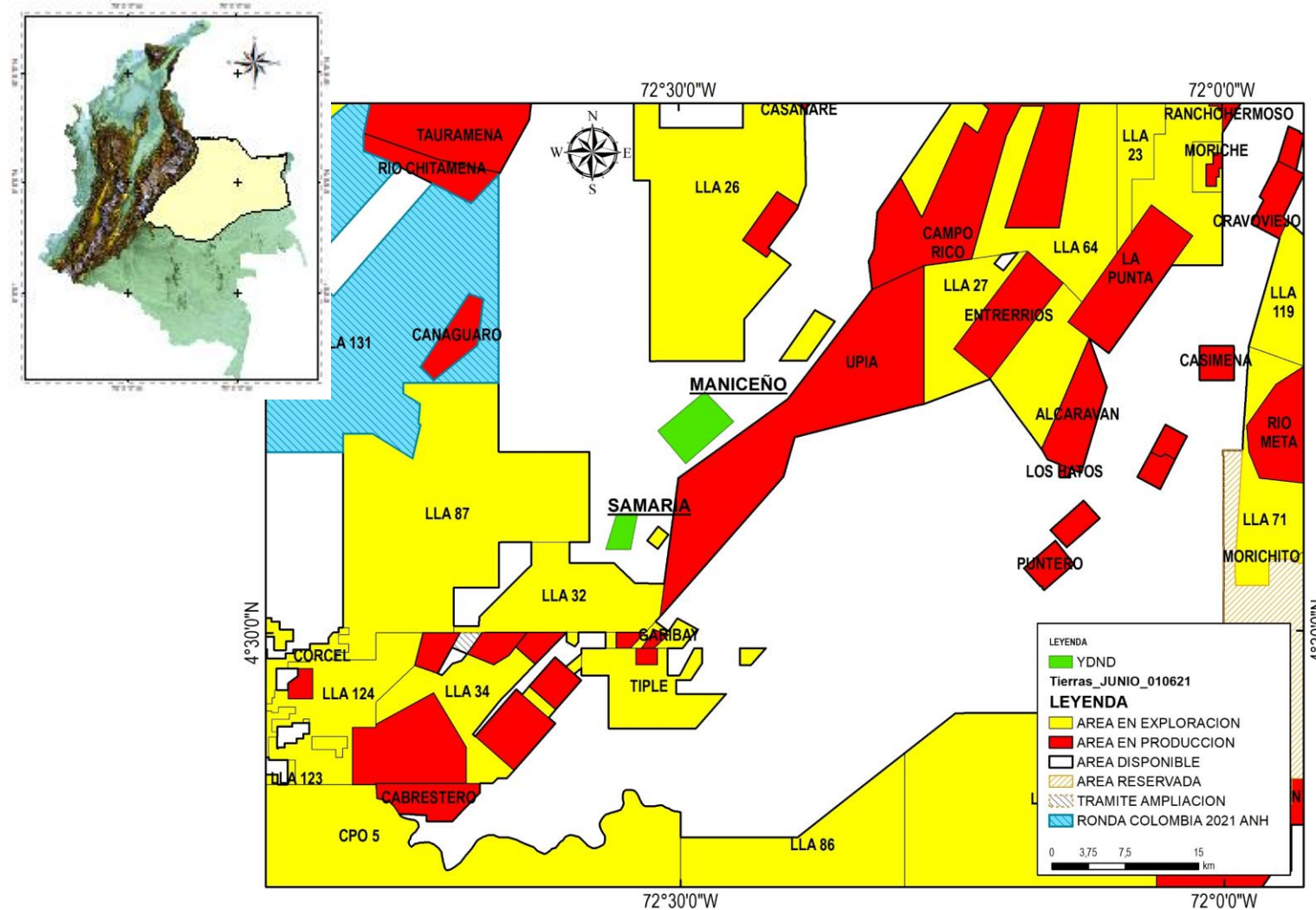
- C & C energy in 2013 determine an OOIP of 1.1 MMBLs for Abedus area
- Abedus -3 was closed with production of 60 bbls of oil and 97% BSW
- The Company did not have the facilities for water production.
- The area was relinquished to the ANH in 2017

# INFRASTRUCTURE





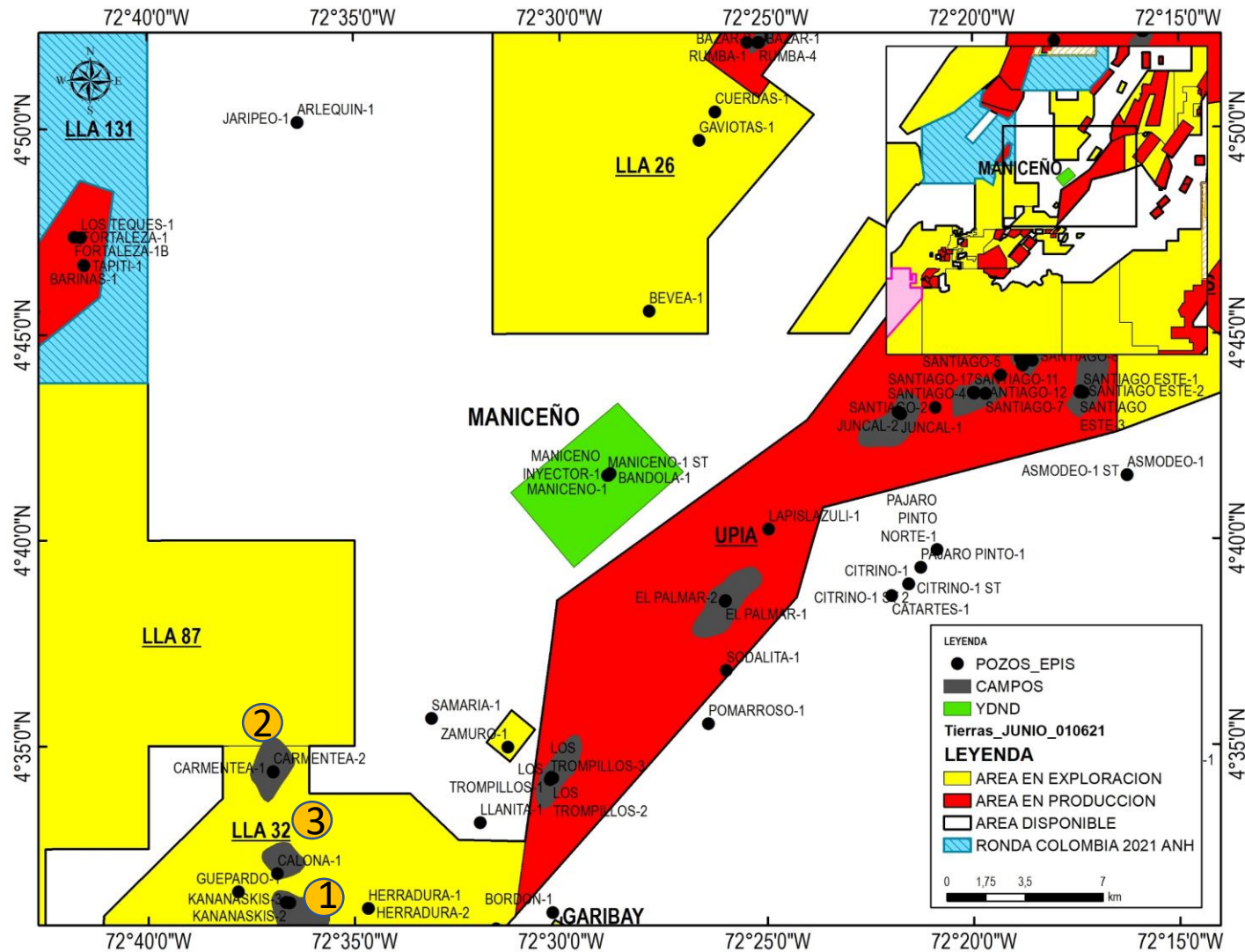
## MANICEÑO AND SAMARIA AREAS



- Samaria and Manicéño areas were part of Llanos-32 block, that is a Exploration and Production Contract of Hydrocarbons , signed by the ANH and a join venture of Ramshorn International and Tc oil & services in 2009 .

- These areas were relinquished to ANH in 2017

# MANICEÑO FIELD



Manicéño area : 2.759 Ha

## Production Areas

1. Kanaskis area : Dic/2015

Total production: 2.839.930 BO from Mirador and Une Fm.

2. Carmentea area: Dic/2015

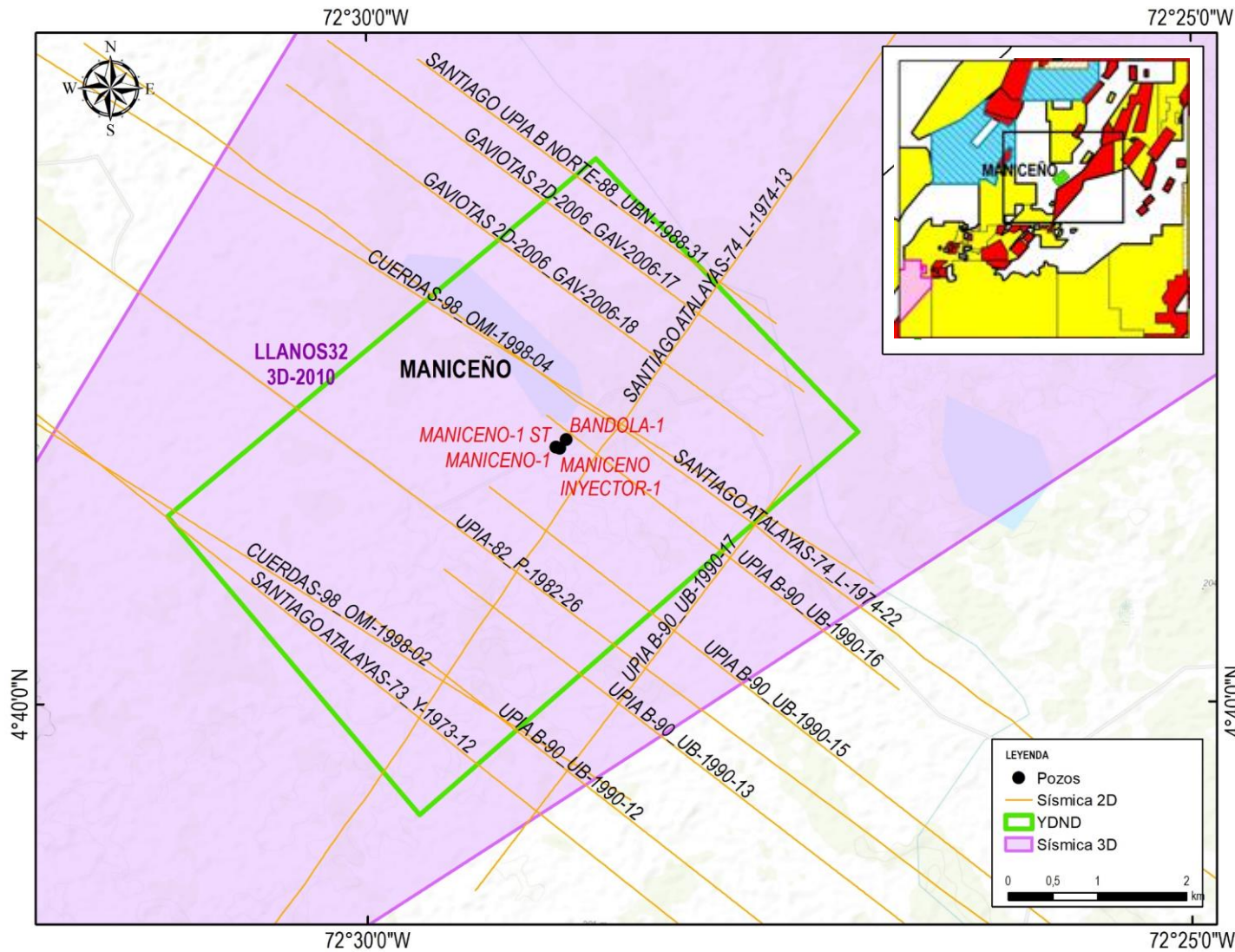
Total production: 967.530 BO from Mirador and Une Fm.

3. Calona area: Dic/2015

Total production: 6.200 BO, from Gacheta, Guadalupe, Une & mirador Fm1



# SEISMIC AND WELLS



## Available data

### SEISMIC

- ✓ LLANOS 32 S 3D-2010

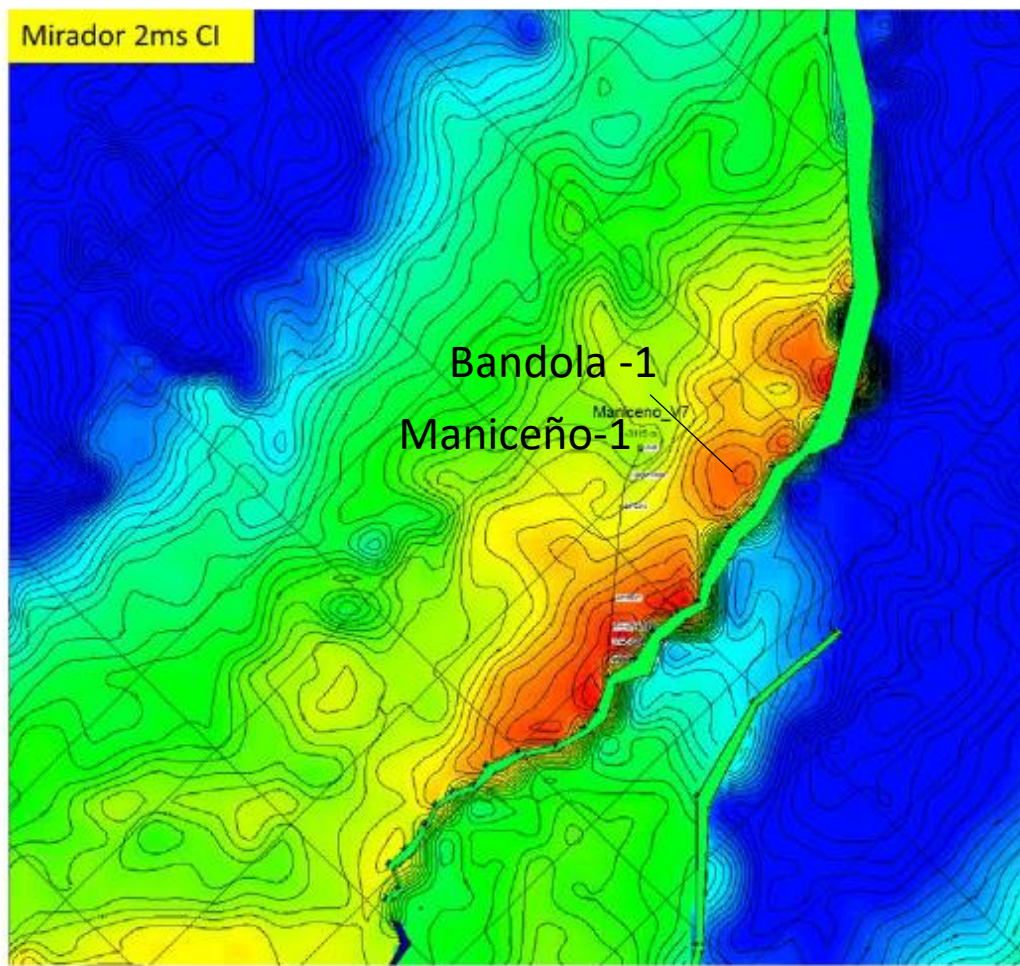
### WELLS

- ✓ Maniceno-1
- ✓ Bandola-1

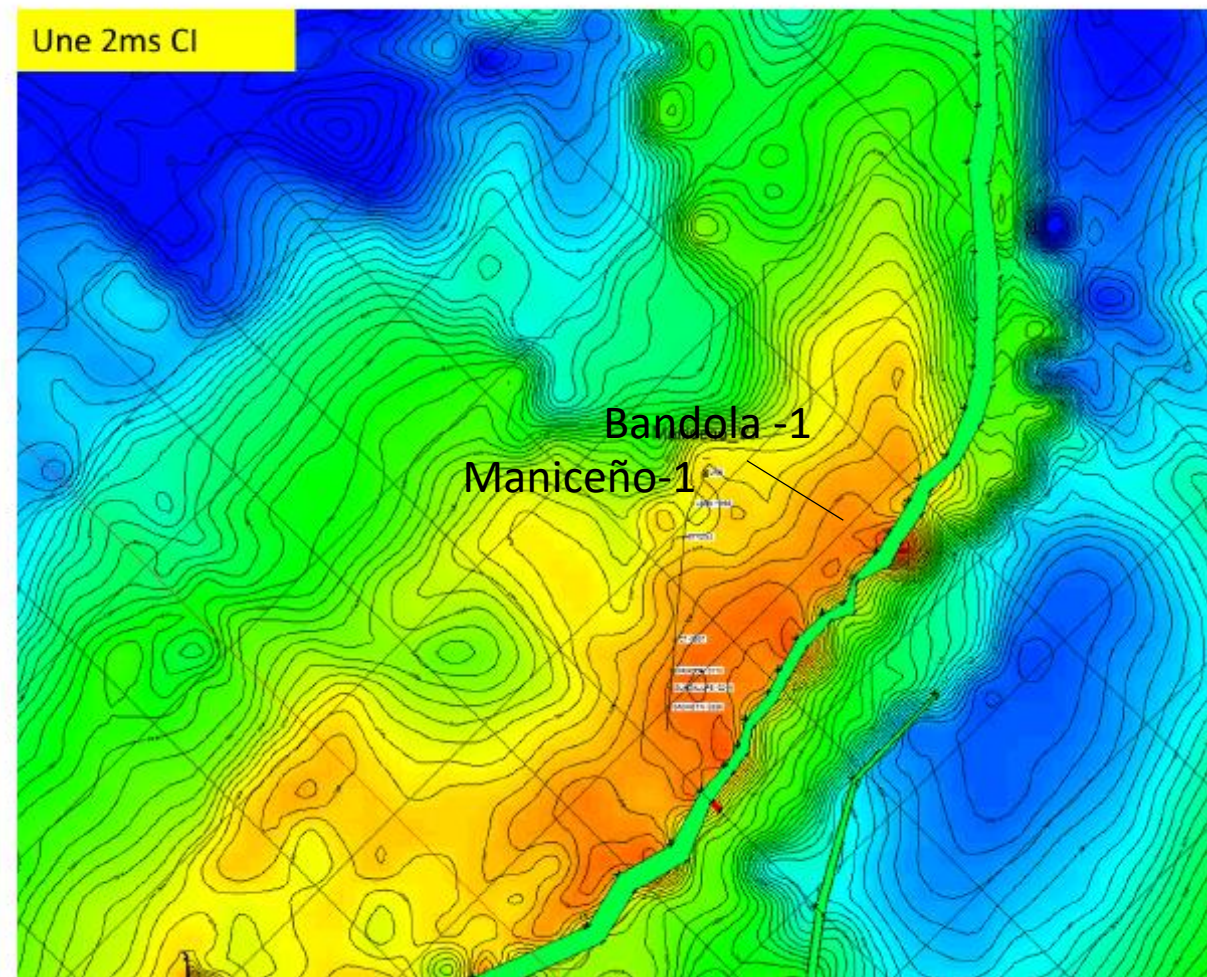


# TIME STRUCTURAL MAPS

Time structural map Mirador Fm



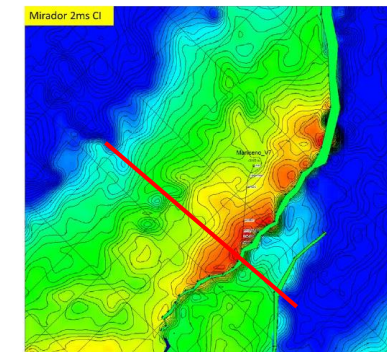
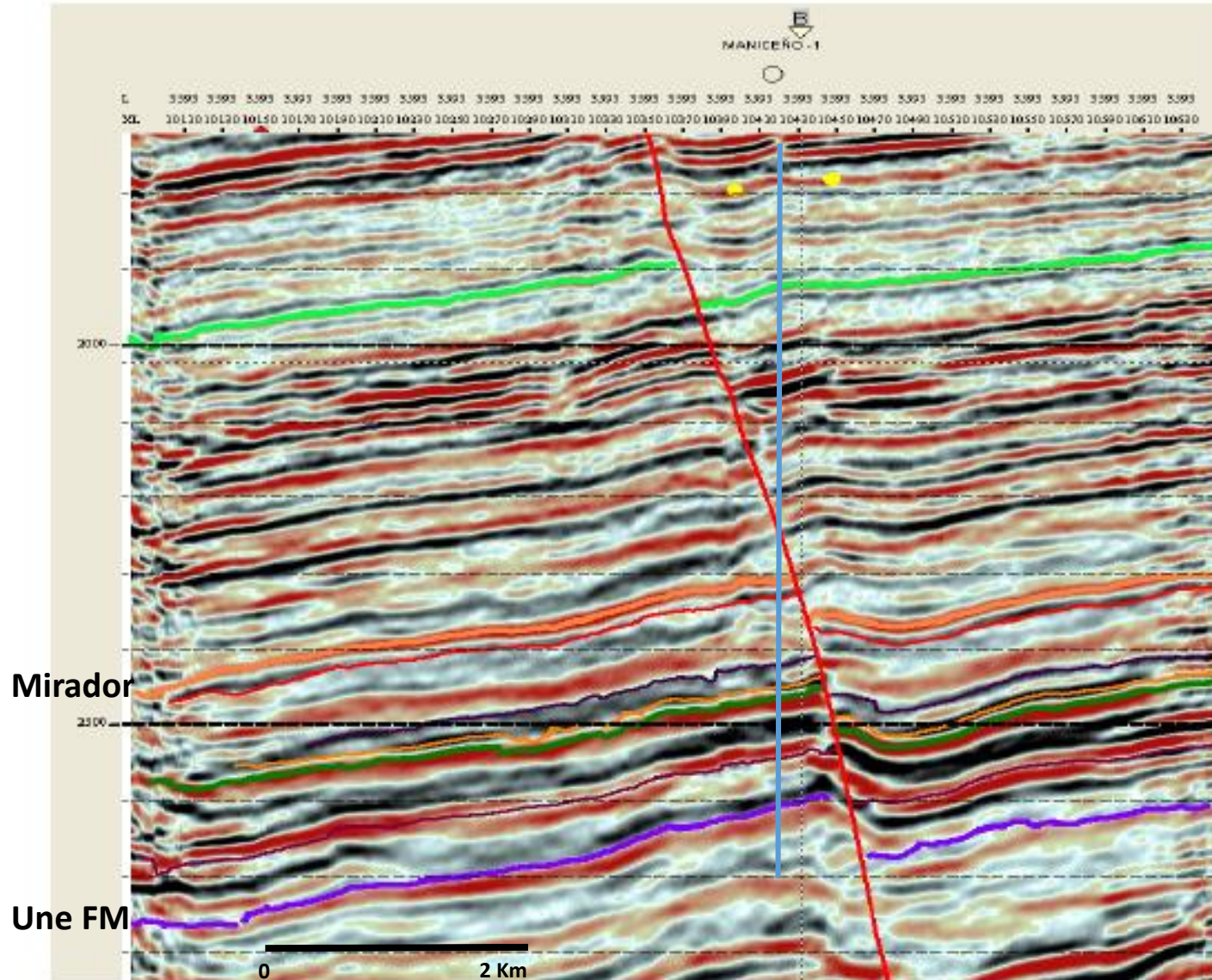
Time structural map Une Fm



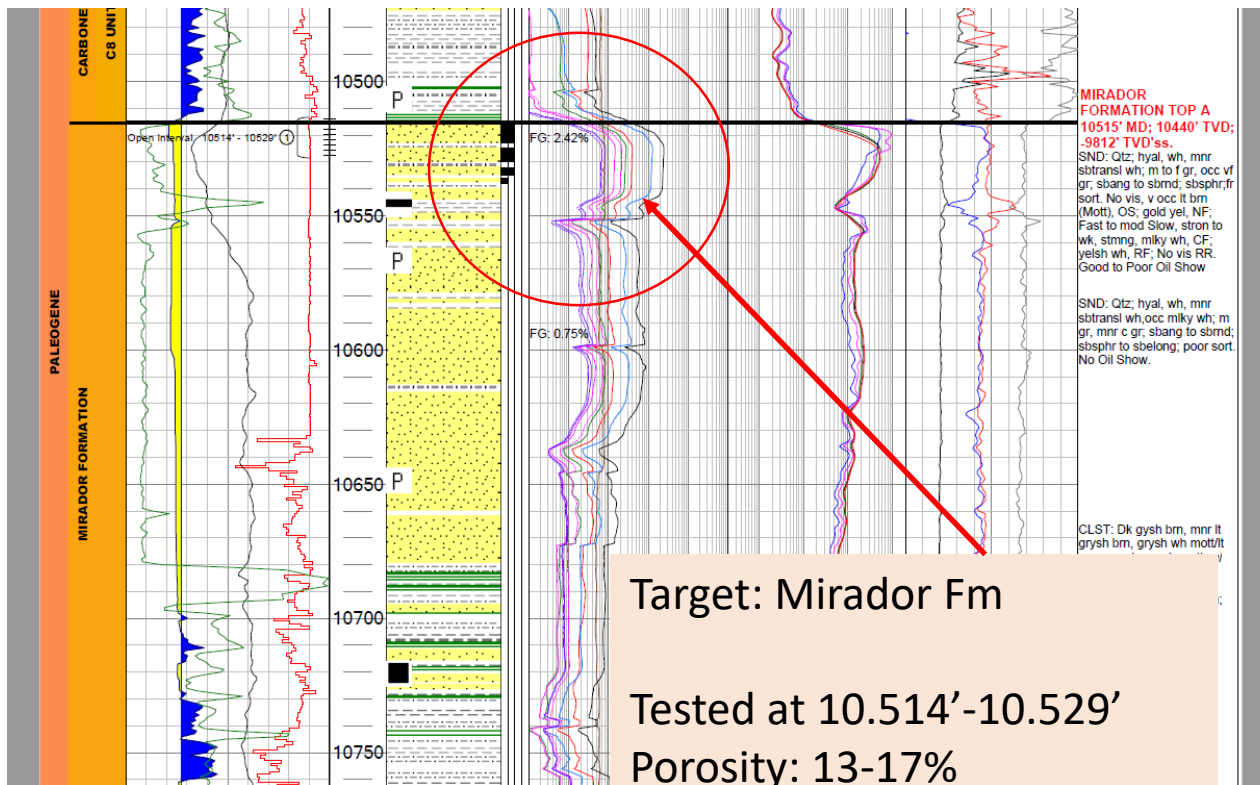
\*Taken from ITA Parex Resources



# DIP SEISMIC LINE



# BANDOLA -1 WELL



Target: Mirador Fm

Tested at 10.514'-10.529'

Porosity: 13-17%

Sw:40-60%

## Bandola -1

**Company: P1 Energy Delta Corp**

**Date: 18-26 -/February 2013**

**Targets: Mirador FM & Une Fm**

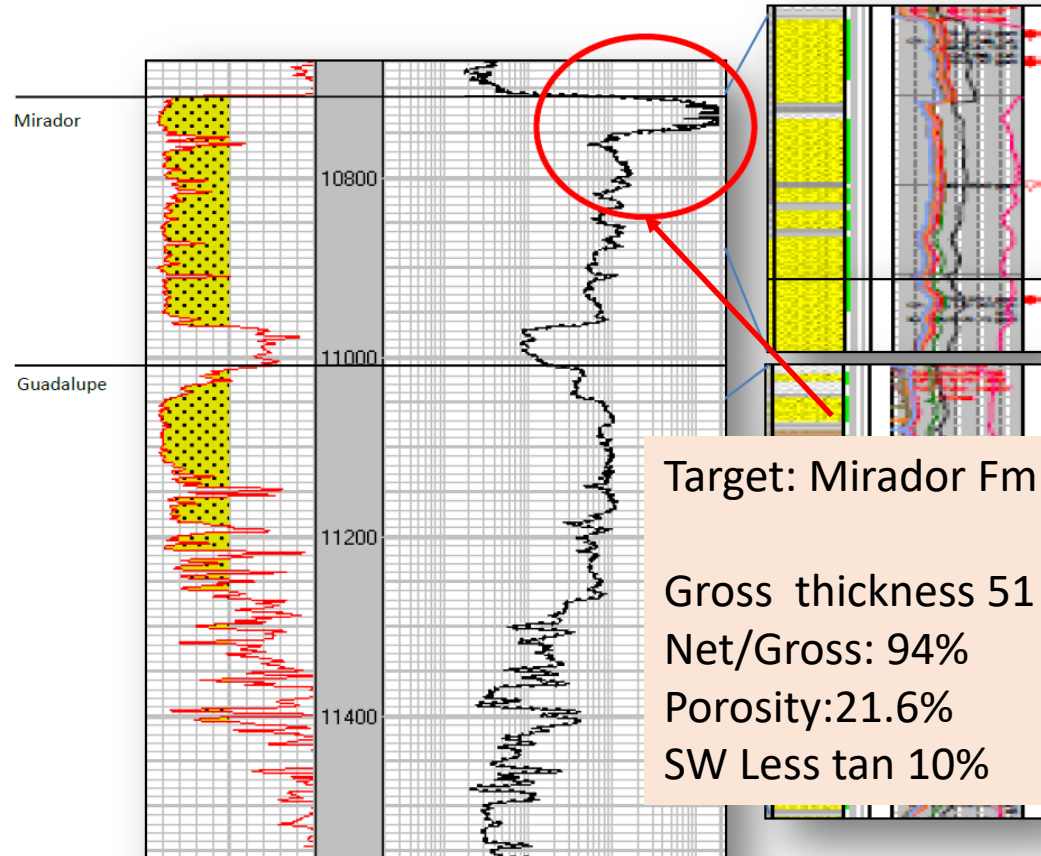
**TD: 11560' MD**

**Initial Production: Mirador FM**  
**2.530 bopd, 29°API & 34% BSW**

Mes	PROD. PETRÓLEO Bandola [barriles]
abr-13	53.921
may-13	75.070
jun-13	68.955
<b>TOTAL 1er Semestre 2013</b>	<b>197.946</b>



# MANICEÑO -1 ST1 WELL



Target: Mirador Fm  
Gross thickness 51 feet  
Net/Gross: 94%  
Porosity: 21.6%  
SW Less than 10%

## Maniceño-1 ST1

**Company:** P1 Energy Delta Corp

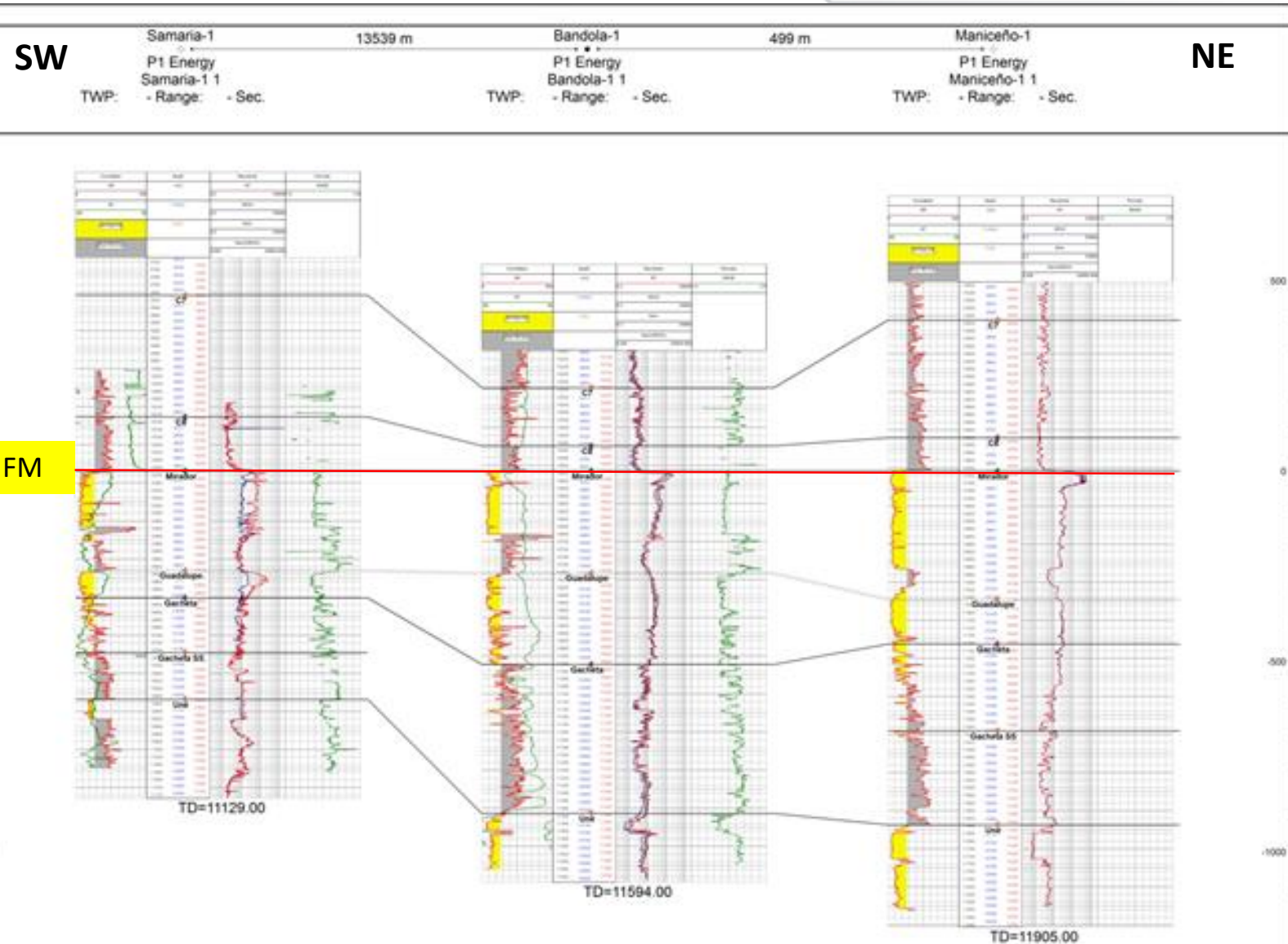
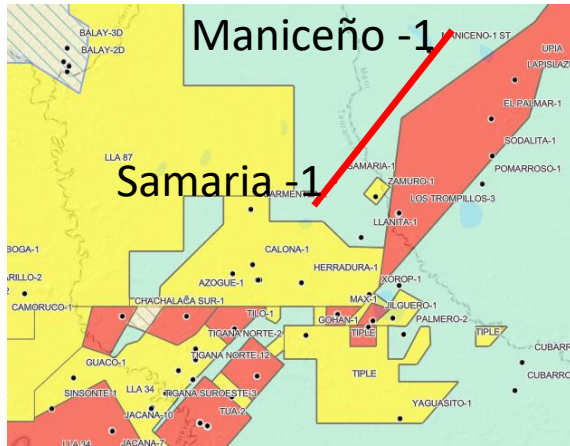
**Date:** 2 of March 2012 – 29 of March of 2012

**Targets:** Mirador FM & Une.

**TD:** 12408.6' MD

Mes	PROD. PETRÓLEO Maniceño [barriles]
ene-13	49.291
feb-13	37.678
mar-13	33.849
abr-13	29.206
may-13	28.019
jun-13	18.950
<b>TOTAL 1er Semestre 2013</b>	<b>196.993</b>

# STRATIGRAPHIC CORRELATION



Mirador FM

**Reservoir Properties:**  
Gross Thickness: 51' TVD  
Net/Gros: 94%  
Avg. Porosity: 21.6%

\*Taken from ITA Parex Resources



# PRODUCTION BANDOLA -1 AND MANICEÑO -1 2014

MES	PRODUCCIÓN REAL 2014		Observaciones
	PETRÓLEO	GAS	
	(BOPD)	(KPC)	
Enero	1174	455	Pozos en Producción: Maniceño-1ST, Bandola-1.
Febrero	997	379	Pozos en Producción: Maniceño-1ST, Bandola-1.
Marzo	1018	383	Pozos en Producción: Maniceño-1ST, Bandola-1.
Abril	880	367	Pozos en Producción: Maniceño-1ST, Bandola-1.
Mayo	841	364	Pozos en Producción: Maniceño-1ST, Bandola-1.
Junio	707	325	Pozos en Producción: Maniceño-1ST, Bandola-1.
Julio	670	321	Pozos en Producción: Maniceño-1ST, Bandola-1.
Agosto	623	326	Pozos en Producción: Maniceño-1ST, Bandola-1.
Septiembre	437	174	Pozo Maniceño-1ST cerrado por WS. Pozo Bandola -1 produciendo.
Octubre	506	292	Pozos en Producción: Maniceño-1ST, Bandola-1.
Noviembre	441	274	Pozos en Producción: Maniceño-1ST, Bandola-1.
Diciembre	397	254	Pozos en Producción: Maniceño-1ST, Bandola-1.

Tabla 7.1. Producción año 2014, Área Maniceño.

## December 2012

Tipo de Reserva	Campo Maniceño
Reservas Probadas (barriles)	279.398
Reservas Probables (barriles)	879.441
Reservas Posibles (barriles)	660.085
<b>TOTAL</b>	<b>1.818.924</b>

# ACCUMULATED PRODUCTION

PRODUCCIÓN ACUMULADA TOTAL POR POZO			
Pozo	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
Maniceño-1ST	806,86	6.719,60	304,88
Bandola-1	527,00	3.822,41	171,18
<b>Total</b>	<b>1.333,86</b>	<b>10.542,00</b>	<b>476,06</b>

PRODUCCIÓN ACUMULADA TOTAL POR FORMACIÓN			
Formación	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
MIRADOR	1.333,86	10.542,00	476,06
<b>Total</b>	<b>1.333,86</b>	<b>10.542,00</b>	<b>476,06</b>

PRODUCCIÓN ACUMULADA 2015 POR POZO			
Pozo	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
Maniceño-1ST	2,52	153,42	1,10
Bandola-1	2,74	113,64	1,35
<b>Total</b>	<b>5,26</b>	<b>267,06</b>	<b>2,46</b>

PRODUCCIÓN ACUMULADA 2015 POR FORMACIÓN			
Formación	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
MIRADOR	5,26	267,06	2,46
<b>Total</b>	<b>5,26</b>	<b>267,06</b>	<b>2,46</b>

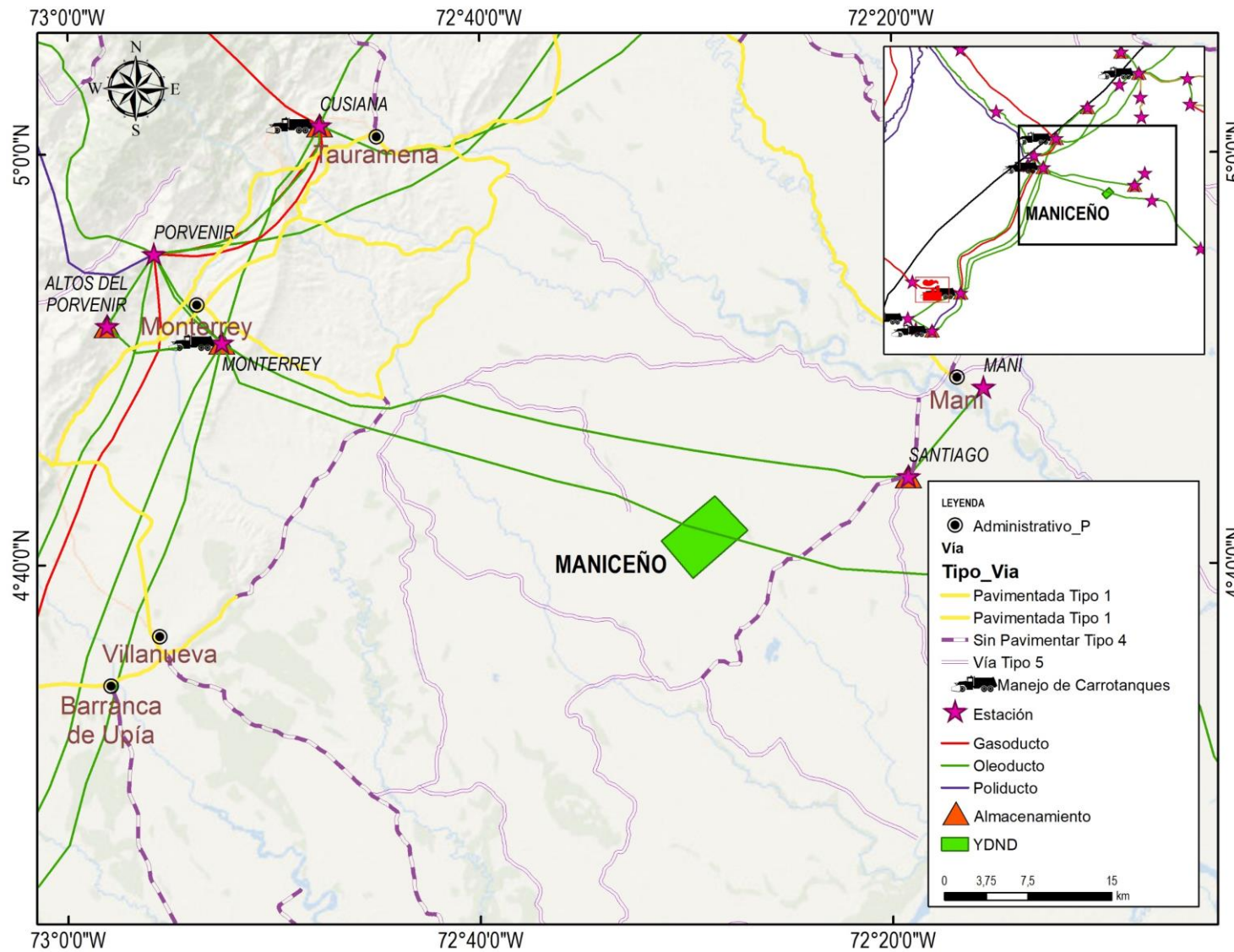
Tabla 6.1 Producción acumulada por pozo y por formación 2015, Área Maniceño

## Important issues

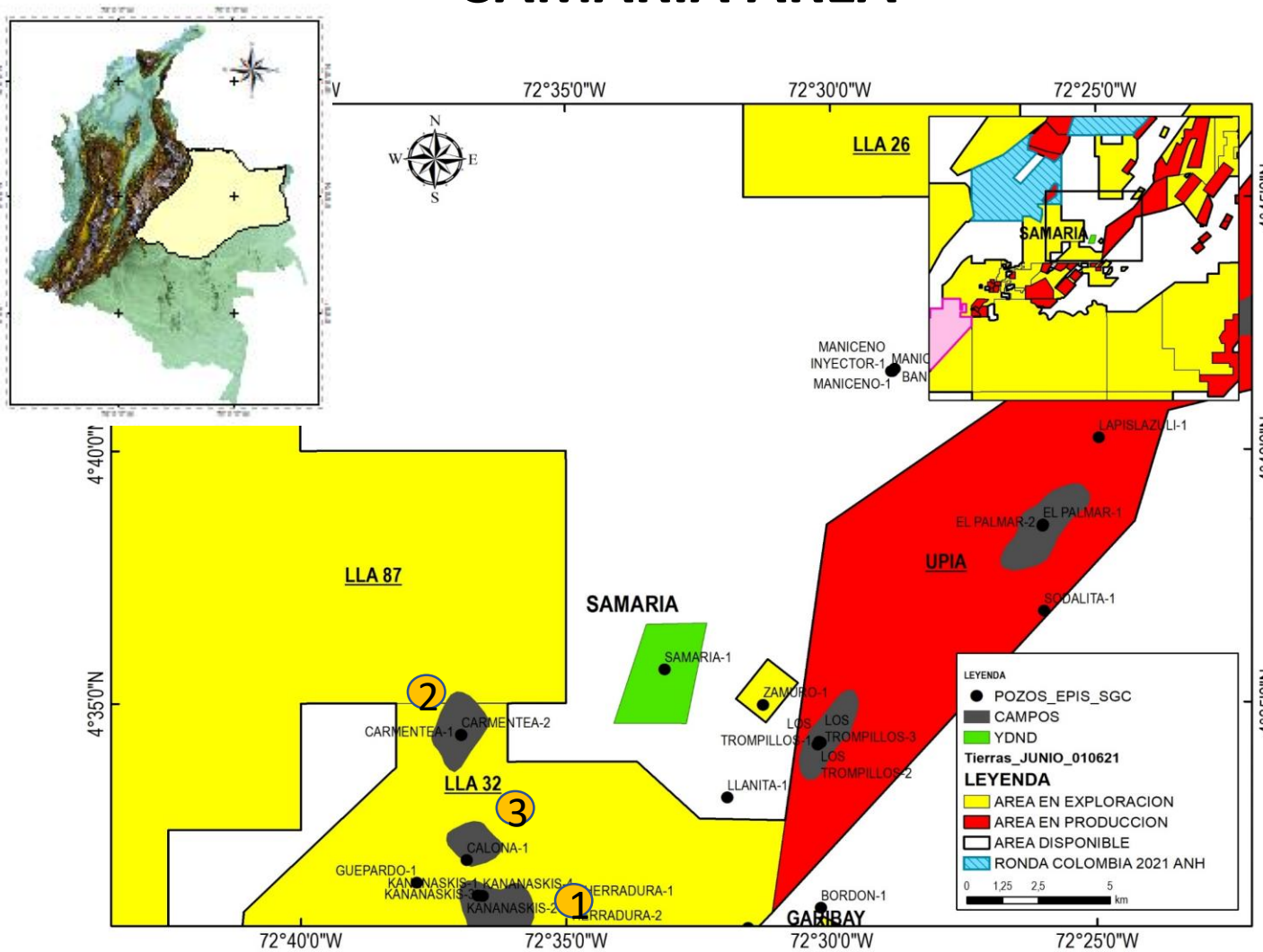
- The Declaration of commerciality of Maniceño area was in 2016
- The Company finished the contact of Maniceño area in 2017
- The area was relinquished to the ANH in 2017



# INFRASTRUCTURE



# SAMARIA AREA



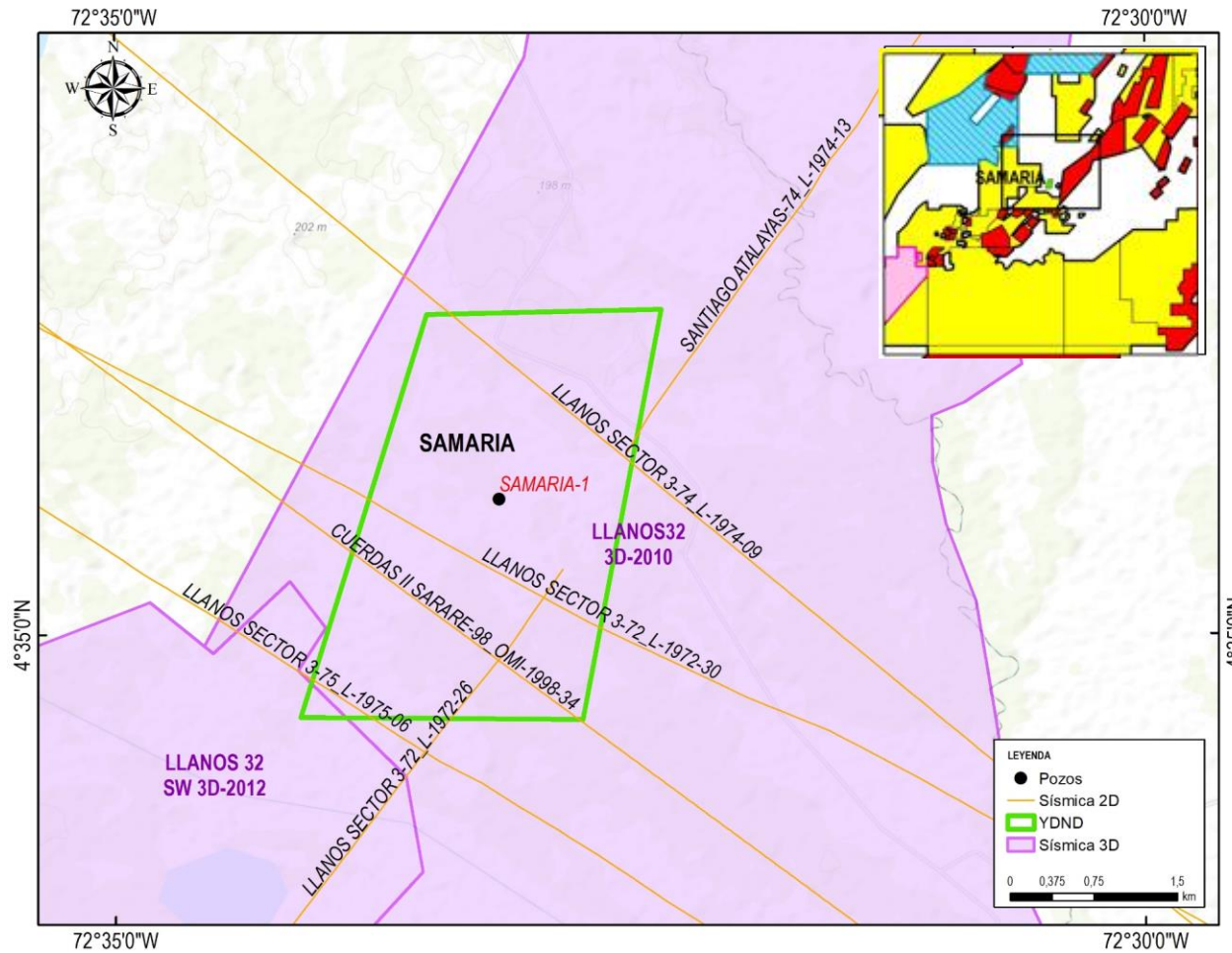
Samaria area : 844 Ha

## Production Areas

- 1. Kanaskis area : Dic/2015**  
Total production: 2.839.930 BO from Mirador and Une Fm.
- 2. Carmentea area: Dic/2015**  
Total production: 967.530 BO from Mirador and Une Fm.
- 3. Calona area: Dic/2015**  
Total production: 6.200 BO, from Gacheta, Guadalupe, Une & mirador Fm1.



# SEISMIC AND WELLS



## Available data

### SEISMIC

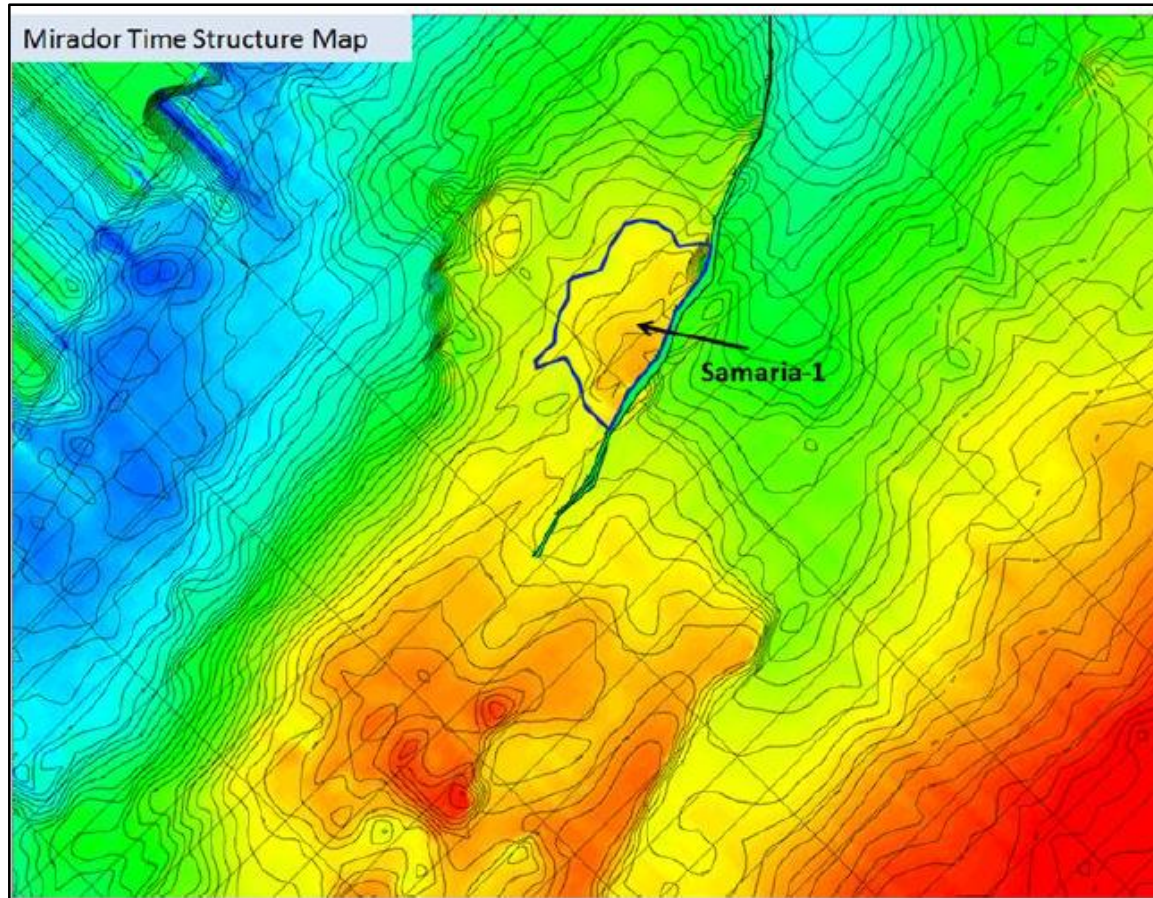
- ✓ LLANOS 32 S 3D-2010

### WELLS

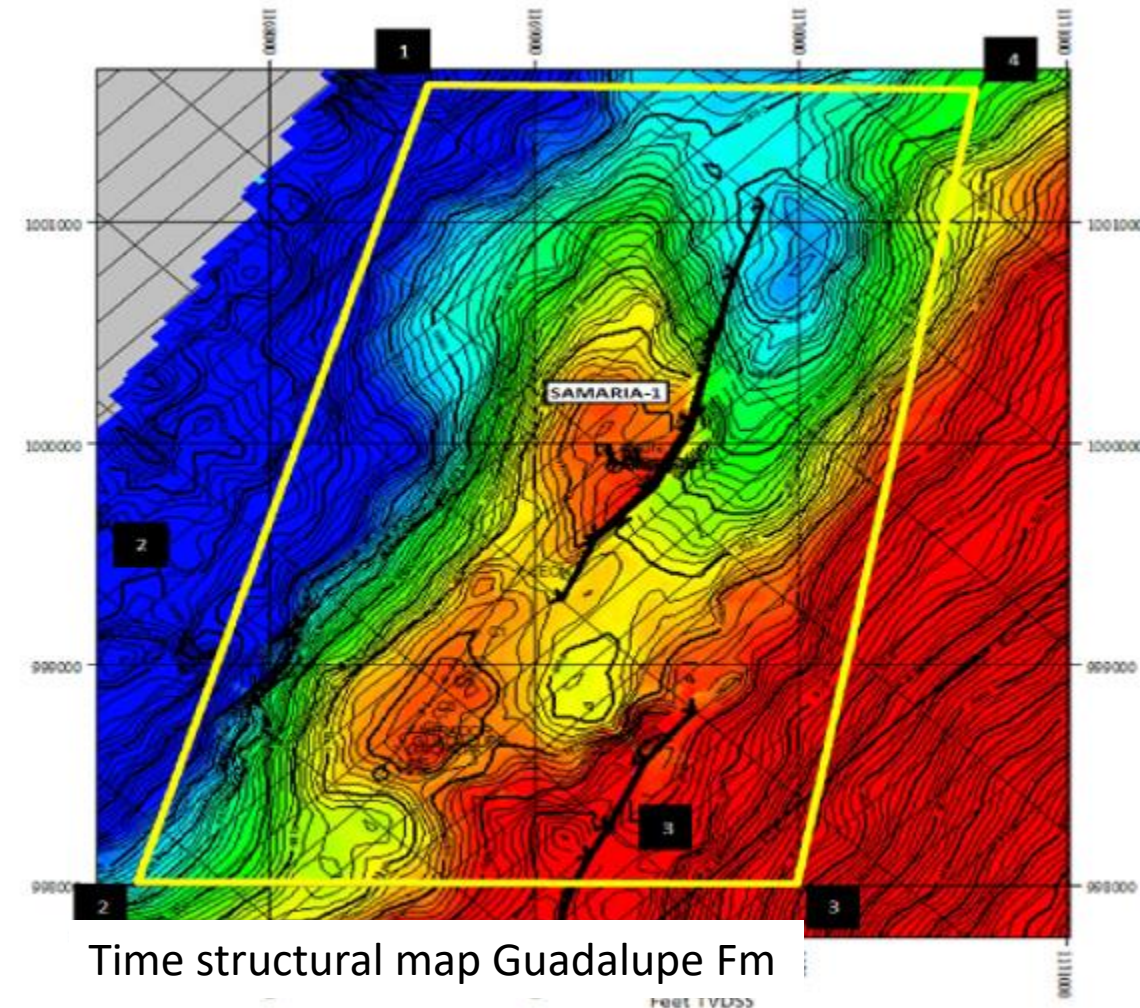
- ✓ Samaria-1



# TIME STRUCTURAL MAPS



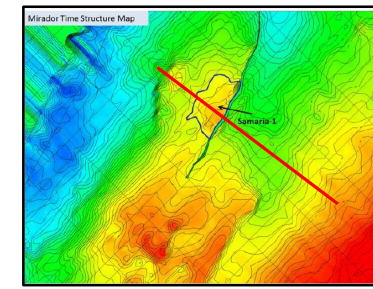
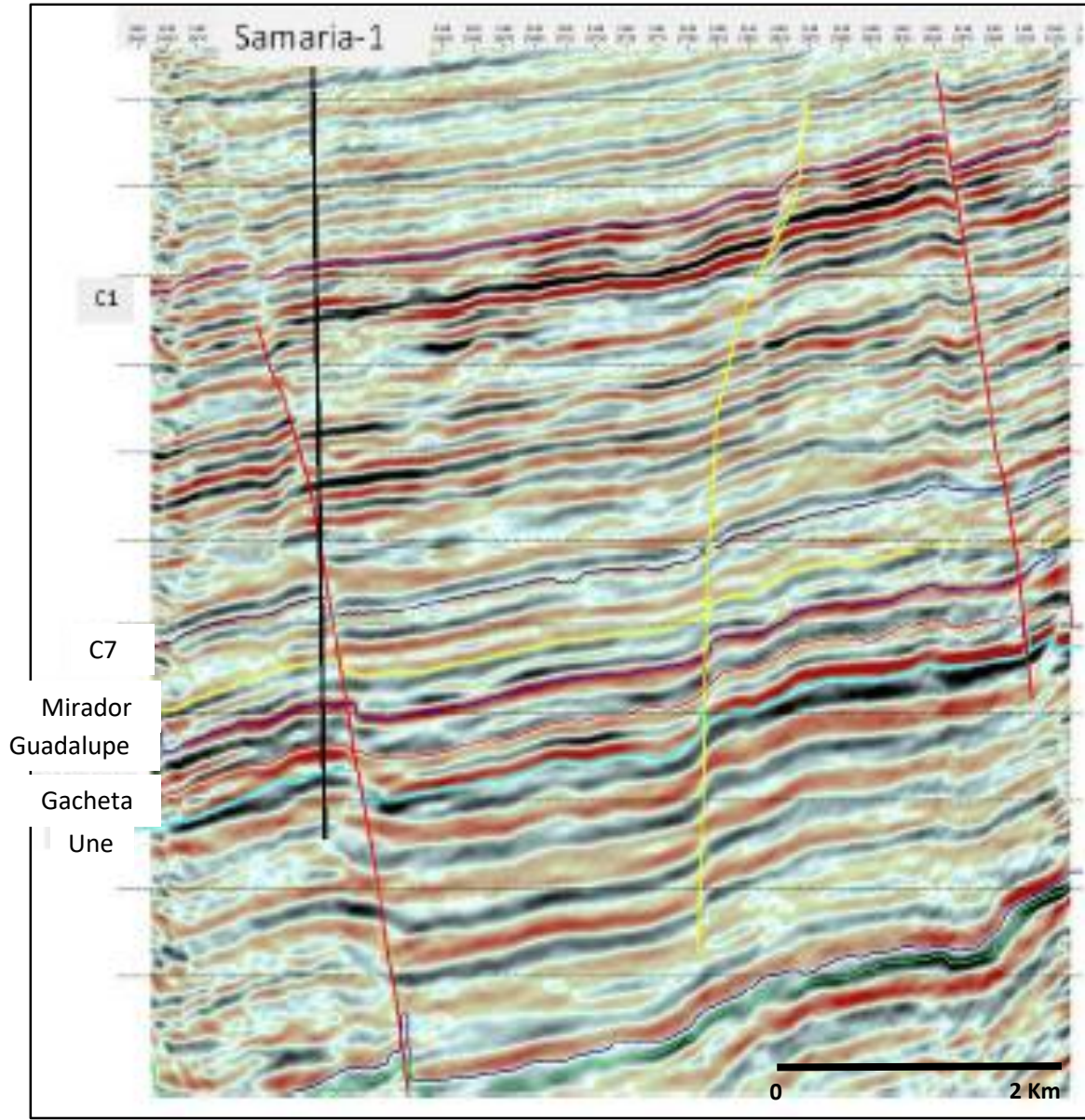
Time structural map Mirador Fm



Time structural map Guadalupe Fm

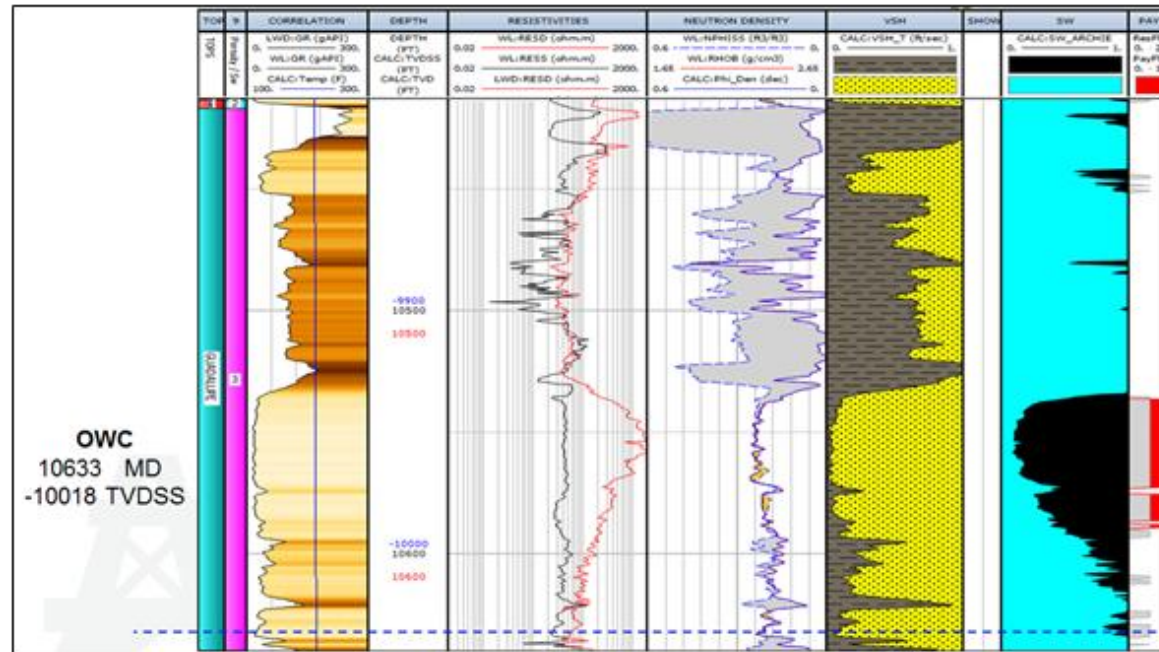


# DIP SEISMIC LINE



\*Taken from ITA Parex Resources

## Petrophysical Evaluation of Guadalupe Fm. Samaria-1 Well



Production of January 2013: **1.600 Barriles, 55.6 BOPD**

## SAMARIA-1

**Company:** P1 Energy Delta Corp

**Date:** June -2012

**Targets:** Mirador Fm & Une Fm.

**TD:** 11200' MD

**Production Test:**

**Guadalupe Fm**

**Interval, 10532-10552, 945 BOPD, 12.5° API & 40 BSW**

PARAMETROS	
FORMACIÓN	Guadalupe
ARENA PETROLÍFERA (pies)	49
POROSIDAD TOTAL (%)	0,2
POROSIDAD EFECTIVA (%)	0,19
So	0,8

\*Taken from ITA Parex Resources



Volumetric estimation of 2013: **1.29 MMBBL**

## Accumulated production-2015

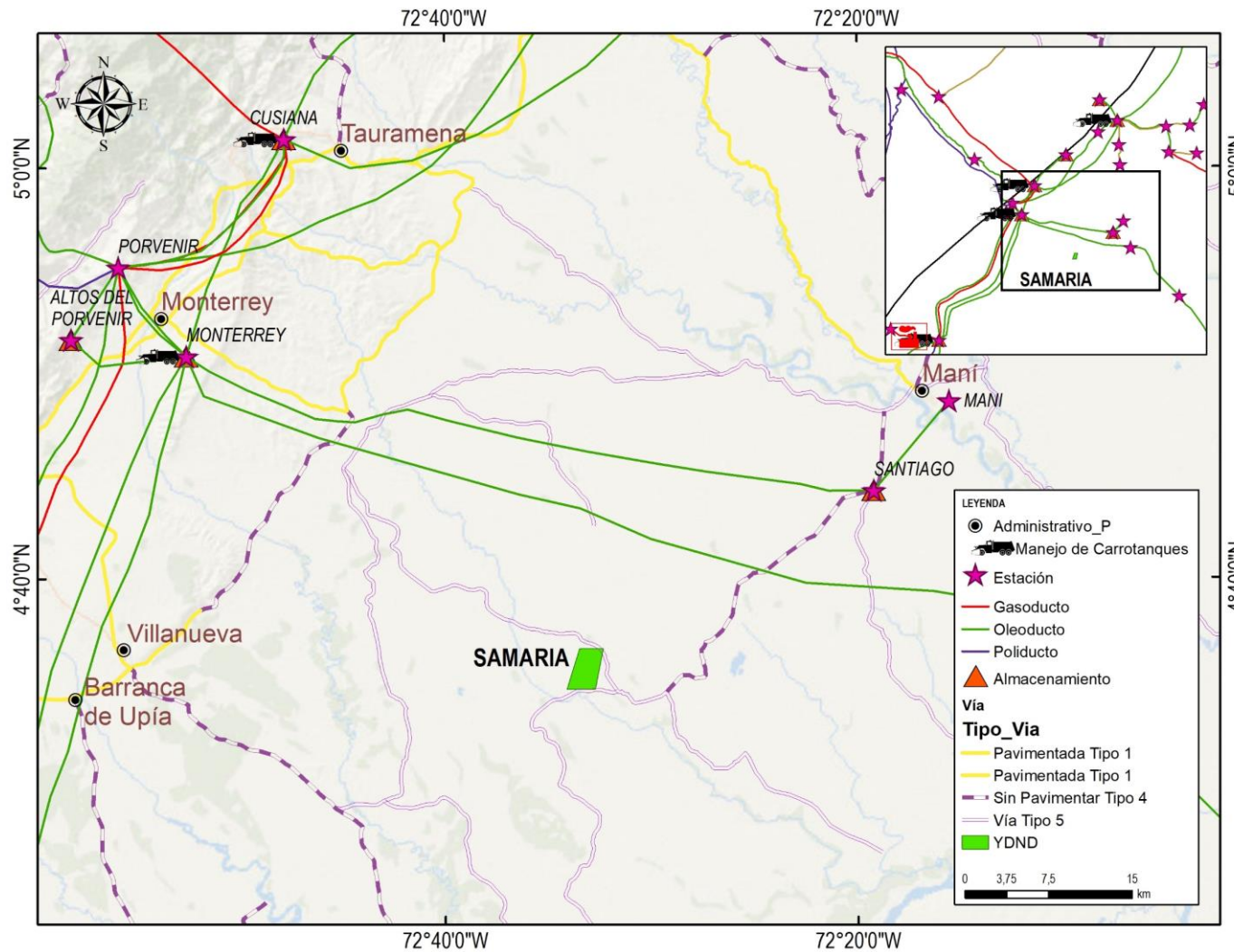
PRODUCCIÓN ACUMULADA TOTAL POR POZO (MBO)			
Pozo	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
Samaria-1	29,3	146,7	0,00
<b>Total</b>	<b>29,3</b>	<b>146,7</b>	<b>0,00</b>

PRODUCCIÓN ACUMULADA TOTAL POR FORMACIÓN			
Formación	Aceite (MBO)	Agua (MBW)	Gas (MMPC)
GUADALUPE	29,3	146,7	0,00
<b>Total</b>	<b>29,3</b>	<b>146,7</b>	<b>0,00</b>

## Important issues

- Commerciality was not declared in the Samaria area
- Was not Viable to inject the water produce from the Samaria-1 well into the Meniceño Inyector well.
- The area was relinquished to ANH in 2017

\*Taken from ITA Parex Resources





## CONCLUSIONS

- All the areas are cover with 3D seismic of good quality
- The stratigraphic correlations shows the continuity of the main reservoirs in the area
- In Celeus area **were drilled one well, Celeus -1** that was tested in Carbonera C7 Fm from this interval produced **100 BOPD of 37° API** and Gacheta Fm produced **139 BOPD of 34.1° API**.
- In the Abedus area were drilled 2 producers Wells, **Abedus-1 ,Abedus-3** that proved oil in Carbonera FmC5, C7, Gacheta and Ubaque Fm, with productions upper **130 BOPD of 30° API**
- The Abedus area was relinquished because the company did not have the facilities to handle high amounts of water.
- All the Wells located in each area have shown an important production from the main reservoirs as Carbonera C5, C7, Mirador, Gacheta and Guadalupe.

- Despite of no declaring commerciality in Samaria Area, the well had production over **900 BOPD with 12 API** from Guadalupe formation
- In the Maniceño area, were drilled Bandola -1 and Maniceño -1 Wells in 2014 with values of production upper **400 BOPD up to 1.000 BOPD** from Mirador Fm.

### Opportunities Summary

OPPORTUNITY	FORMATION	CONTIGENT RESOURCES (ANH) MMB
ABEDUS AREA	Carbonera C5 fm	0,30
CELEUS AREA	Carbonera C7 fm	0,34
MANICEÑO AREA	Mirador Fm	1,00
SAMARIA AREA	Guadalupe Fm	0,40