

ANALISIS MINERALOGICO DE ARCILLAS. MUESTRAS
TOMADAS EN LAS HOJAS 17-18 (NAVA DE LA ASUN-
CION), 17-19 (VALVERDE DEL MAJANO), 18-18 (TUREGA-
NO), 18-19 (SEGOVIA), 18-21 (S. LORENZO DE EL ES -
CORIAL), 19-18 (PRADENA) Y 19-20 (TORRELAGUNA)
DEL MAPA NACIONAL 1:50.000 .

INFORME COMPLEMENTARIO

"PROYECTO DE ESTUDIO GEOLOGICO A ESCALA 1:50.000
DE LAS HOJAS N° 532, 507, 508, 483, 533, 509, 557,
456, 457, 458 Y 484 Y LA HOJA N° 482."



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2.3.- Resultados

2.3.1.- Análisis cualitativo

Las fases reconocidas se recogen en el encabezamiento de las tablas anexas. Las abreviaturas utilizadas tienen el siguiente significado:

FK =Feldespató potásico	FP= Feldespató plagioclasa
CUAR =Cuarzo	CALC = Calcita
DOLO =Dolomita	FILO = Filosilicatos
PALI =Paligorskita	MICA = Mica
MONT = Montmorillonita	CLOR = Clorita
KAOL = Caolinita	

2.3.2.- Análisis semicuantitativo

Para los distintos minerales y reflexiones se han considerado los poderes reflectantes que se indecan a continuación:

<u>Grupo de minerales</u>	<u>Reflexión (A)</u>	<u>Poder reflectante</u>
Filosilicatos	4.49	0.1
Cuarzo	3.33	1.5
Calcita	3.03	1
Dolomita	2.88	1
Mica	10	0.5
Caolinita	7.2	1
Montmorillonita	17	2
Clorita	14	1
Paligorskita	10.6	0.25

TABLA 1. ANALISIS CUALITATIVO DE FASES MINERALES POR DIFRACCION DE RAYOS X.

	Ref.	I	K	P	S	a	b	c	Q	F	C	D	Ce	s	p	h
18-19 EG-OS	9728	-	-						-				-			.
"	9729	-	-						-							
"	9731	-	-		.							-		.		
"	9747	-	-						-							.
"	9750	-	-						-							
"	9752	-	-													
19-20 EG-OS	9754	-	-		.				-		-	-	-			
"	9769	.	-	-		.			-		-	-		.		
"	9774	-		-					-		-	-				.
"	9779	-		-	-						-	-		.	.	.
"	9780	-		-	.				-		-		-			
"	9784	-	-		-				-		-	-	-			

SIMBOLOGIA.- I= illita; K= caolinita ; P= paligorsquita; S= esmectita ; a= Interestratificado illita-esmectita; b= interestratificado clorita - esmectita; Q= cuarzo ; F= feldespatos; C= calcita; D= dolomita; Ce= cerusita; s= siderita; p= pirita; h= hematites y/o goetita. -= presente; .= trazas o dudoso.

TABLA 2. Estimaciones semicuantitativas de los componentes principales de la fracción arcilla.

	Ref,	I	:	K	:	S
18-19 EG-OS	9728	0.40		0.60		
"	9729	0.36		0.63		
"	9731	0.70		0.30		
"	9747	0.27		0.72		
"	9750	0.47		0.53		
"	9752	0.40		0.60		
19-20 EG-OS	9754	0.60		0.40		
"	9769	0.85		0.15		
"	9774	0.78		0.22		
"	9779	0.73		0.27		
"	9780	0.81		0.19		
"	9784	0.68		0.28		0.02

SIMBOLOGIA.- I= illita; K= caolinita; S= esmectita.

TABLA 3. Estimaciones semicuantitativas de los componentes mayoritarios de la totalidad de la muestra.

	Ref.	Q	:	f	:	C	:	D	:	Ce
18-19 EG-OS	9728	0.59		0.41						
"	9729	0.37		0.63						
"	9731	0.22		0.57				0.30		
"	9747	0.25		0.75						
"	9750	0.15		0.85						
19-20 EG-OS	9754	0.27		0.62		0.08		0.01		
"	9769	0.26		0.62		0.07		0.04		
"	9774	0.24		0.64		0.05		0.05		
"	9780	0.17		0.74						0.17
"	9784	0.25		0.75						

SIMBOLOGIA. Q= cuarzo; f= filosilicatos; C= calcita; D= dolomita; Ce= cerusita

ANALISIS MINERALOGICO DE MATERIALES ARCILLOSOS DE DIVERSAS FORMACIONES
 EN LAS HOJAS N° 17-19, 18-19, 18-21 y 19-20 DEL MAPA NACIONAL 1/50000

	REFERENCIA	FK	FP	CUAR	CALC	DOLO	FILO	PAJI	MICA	MONT	CLOR	KAOL
17-19 EG-OS	9532	si	no	41.3	0.0	0.0	58.7	31.5	19.9	7.3	0.0	0.0
"	9533	si	si	62.3	0.0	0.0	37.7	0.0	5.3	31.9	0.0	0.5
"	9534	si	si	75.6	0.0	0.0	24.3	0.0	6.5	17.1	0.0	0.7
"	9535	si	si	42.1	0.0	0.0	57.9	0.0	15.1	38.2	0.0	4.6
"	9536	si	si	75.1	0.0	0.0	24.9	0.0	5.3	18.3	0.0	1.3
"	9537	si	si	53.9	0.0	0.0	46.1	0.0	12.4	28.5	0.0	5.2
"	9538	si	no	53.9	0.0	0.0	46.1	0.0	30.1	4.9	0.0	11.1
"	9539	si	no	55.8	0.0	0.0	44.2	11.6	20.5	5.9	0.0	6.2
17-19 EG-MS	9702	si	no	38.9	0.0	0.0	61.1	4.6	41.3	1.9	0.0	13.3
"	0101	si	si	54.5	0.0	0.0	45.5	0.0	13.2	28.5	0.0	3.8
"	0102(L1)	si	si	66.7	0.0	0.0	33.3	0.0	7.7	24.0	0.0	1.6
"	0102(L2)	si	si	37.6	0.0	0.0	62.4	0.0	25.7	29.1	0.0	7.6
"	0103(L1)	si	si	61.4	0.0	0.0	38.6	0.0	12.1	22.7	0.0	3.8
"	0103(L2)	si	no	50.8	0.0	0.0	49.2	0.0	27.4	11.7	0.0	10.1
"	0104	si	si	60.7	0.0	0.0	39.3	0.0	13.0	23.6	0.0	2.7
"	0105	si	si	48.6	0.0	0.0	51.4	0.0	19.4	26.5	0.0	5.5
"	0106	si	si	58.3	0.0	0.0	41.7	0.0	10.4	28.6	0.0	2.7
"	0201	si	no	60.6	0.0	0.0	39.4	3.7	18.0	24.6	0.0	5.1
"	0203	si	no	68.0	0.0	0.0	32.0	0.0	11.4	13.4	0.0	7.2
"	0205	si	no	69.9	0.0	0.0	30.1	0.0	11.3	10.0	0.0	8.8
"	0212	si	no	49.4	0.0	0.0	50.6	0.0	13.3	23.5	0.0	13.8

ANALISIS MINERALOGICO DE MATERIALES ARCILLOSOS DE DIVERSAS FORMACIONES
EN LAS HOJAS N° 17-19, 18-19, 18-21 y 19-20 DEL MAPA NACIONAL 1/50000

REFERENCIA	FK	FP	CUAR	CALC	DOLO	FILO	PALI	HICA	MONT	CLOR	KAOL
18-19 EG-MS 9763	si	no	45.3	0.0	0.0	54.7	0.0	27.0	15.8	0.0	11.9
" 9764	no	no	17.5	7.7	11.2	63.7	0.0	46.3	7.9	0.0	9.5
17-19 EG-OS 9500	no	no	47.7	9.6	0.0	42.7	10.6	0.0	32.1	0.0	0.0
" 9501	si	no	73.1	1.6	0.0	25.3	0.0	9.7	5.9	0.0	9.7
" 9502	si	no	72.3	0.0	0.0	27.7	25.0	0.0	2.7	0.0	0.0
" 9503	si	no	77.9	0.0	0.0	22.1	20.8	0.6	0.4	0.0	0.3
" 9506	si	si	43.6	0.0	0.0	56.4	53.2	1.7	0.6	0.0	0.9
" 9507	si	no	40.8	0.0	0.0	59.2	29.6	13.9	5.3	4.5	5.9
" 9509	si	no	64.7	0.0	0.0	35.3	6.9	5.1	21.8	0.0	1.4
" 9512	si	no	67.4	0.0	0.0	32.6	0.0	11.4	15.5	0.0	5.7
" 9513	si	no	74.8	0.0	0.0	25.2	0.0	5.4	19.2	0.0	0.0
" 9514	si	no	58.8	0.0	0.0	41.2	0.0	11.3	18.7	0.0	11.3
" 9515	si	no	89.6	0.0	0.0	10.4	0.0	1.2	9.2	0.0	0.0
" 9516	si	no	26.2	0.0	0.0	73.8	0.0	3.0	0.0	0.0	10.3
" 9517	si	no	42.1	0.0	0.0	57.9	0.0	42.3	0.0	0.0	13.6
" 9518	si	no	26.4	0.0	0.0	73.6	0.0	62.3	0.0	0.0	11.3
" 9521	si	no	67.9	0.0	0.0	32.1	0.0	7.4	24.7	0.0	0.0
" 9524	si	no	44.1	7.6	13.6	34.7	23.1	10.4	0.0	0.0	1.2
" 9526	no	no	81.1	0.0	0.0	18.9	0.0	0.0	18.9	0.0	0.0
" 9529	si	no	49.0	19.8	1.5	29.8	10.2	11.4	5.5	0.0	2.7
" 9531	si	no	41.7	20.2	2.8	32.3	15.7	9.3	5.4	0.0	1.3

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	REFERENCIA	FK	FP	CUAII	CALC	DOLO	FILO	PALI	MICA	MONF	CLOR	KACL
19-20 EG-MS,	9719	si	si	67.8	0.0	0.0	32.2	0.0	13.3	15.2	0.0	3.7
"	9720	si	si	59.9	0.0	0.0	40.1	0.0	12.0	22.0	0.0	6.1
"	9721	si	si	64.5	0.0	0.0	35.5	0.0	13.9	18.6	0.0	3.0
19-20 EG-OS	9793	no	no	10.7	45.3	20.1	23.9	11.1	13.4	0.8	0.0	1.5
"	9794	no	no	10.3	23.6	40.6	25.5	8.3	8.8	0.0	0.0	8.4
"	9795	si	si	13.9	11.1	16.7	58.4	55.6	1.3	0.0	0.0	1.6
"	9796	si	no	54.7	11.4	0.0	33.9	0.0	23.7	3.8	0.0	6.4
"	9797	si	si	20.5	0.0	0.0	79.5	11.6	55.2	2.9	0.0	9.9
"	9803	si	no	71.5	0.0	0.0	29.5	0.0	5.4	0.7	0.0	22.4
"	9808	si	si	25.5	0.0	0.0	11.5	0.0	4.8	5.7	0.0	1.0
"	9811	si	si	22.7	6.2	3.6	67.5	10.2	47.6	0.0	0.0	11.1
"	0301	si	si	48.0	3.0	0.0	49.0	0.0	34.8	3.1	0.0	4.0
"	0303	si	si	19.7	6.0	14.4	19.9	0.0	14.3	1.6	0.0	4.0
"	0402	si	si	73.3	0.0	0.0	26.7	0.0	5.6	20.0	0.0	4.1
"	0404	si	si	62.3	0.0	0.0	37.7	0.0	6.4	30.1	0.0	4.2
"	0501(L1)	si	si	64.9	0.0	0.0	35.1	0.0	18.1	13.2	0.0	3.8
"	0501(L2)	si	no	50.7	0.0	0.0	49.3	0.0	30.0	12.8	0.0	6.5
18-21 EG-OS	9900	si	si	65.6	0.0	0.0	34.4	0.0	12.0	17.4	0.0	5.0
"	9901	si	si	68.4	0.0	0.0	31.6	0.0	14.8	13.4	0.0	3.4
"	9902	si	si	67.3	0.0	0.0	32.7	0.0	8.5	20.9	0.0	3.3
"	9903	si	no	51.7	0.0	0.0	45.3	0.0	14.6	18.6	0.0	3.5

17-18 EG

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18-18 EG

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REF	F K	F P	CUARZO	CALCITA	DOLOM.	FILOSI.	PALI.	MICA	ESMEC.	CLORITA	CAOLI.
MS-9602	no	no	59.5	0	0	40.5	0.1	4.2	0	0	36.2
MS-9603	no	no	95.2	0	0	4.8	0.2	2.1	0	0	2.5
MS-9604	si	no	51.4	0	0	48.6	4.0	32.4	2.3	0	9.5
MS-9605	si	no	73.3	0	0	26.7	0	0	0	0	26.7
MS-9606	si	no	93.9	0	0	6.1	0.4	2.9	0	0	2.8
MS-9607	si	no	96.6	0	0	3.4	0.2	1.2	0.3	0	1.7
MS-9612	si	no	93.4	0	0	7.6	0.3	3.6	1.0	0	2.7
MS-9613	si	no	97.3	0	0	2.7	0.1	0.5	0.2	0	1.9
MS-9614	si	no	48.8	0	0	51.2	11.6	34.7	0	0	4.9
MS-9615	si	no	60.1	0	0	39.9	7.8	15.8	13.3	0	3.0
MS-9616	no	no	8.1	58.1	15.2	18.3	3.6	14.7	0	0	0
MS-9618	si	si	73.7	0	0	26.3	1.9	12.6	0	11.8	0
MS-9621	si	si	64.2	0	0	35.8	11.2	21.8	1.6	0	1.5
MS-9622	si	si	64.8	0	0	35.2	21.4	13.8	0	0	0
MS-9623	no	si	55.4	0	0	44.6	0	19.9	0	0	24.7
MS-9624	si	no	65.9	0	0	34.1	22.0	9.9	1.5	0	1.7
OS-9600	si	si	39.4	50.1	0	10.5	4.0	6.5	0	0	0
OS-9602	si	no	75.9	0	0	24.1	3.2	18.2	0.9	0	1.8
OS-9603	si	no	82.4	0	0	17.6	1.7	13.3	1.0	0	1.6
OS-9608	si	si	66.7	0	0	33.3	17.6	14.4	0	0	1.3
OS-9612	no	no	2.8	1.9	86.7	8.5	1.1	7.4	0	0	0

