12 December 2006 M.S.

Sample 0P-1 Analysis

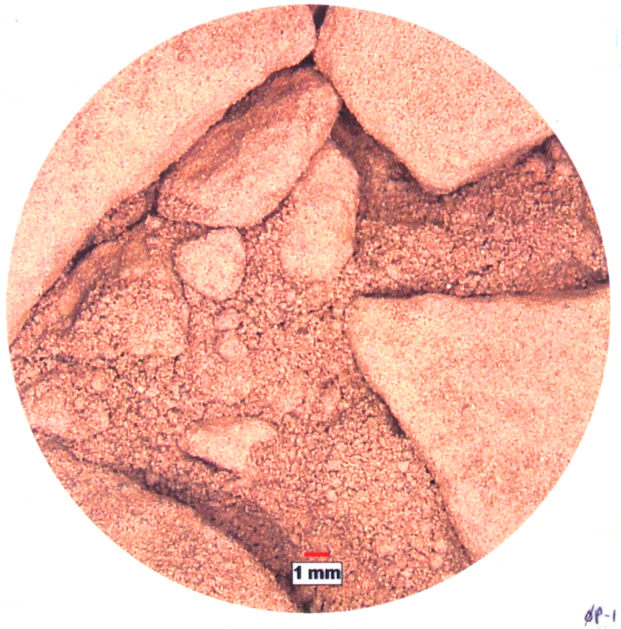
	Mass of fraction #1 of 4:	Percent of fraction #1 of 4:	Mass of fraction #2 of 4:	Percent of fraction #2 of 4:		Mass of combined 1 and 2:	Combined percentage:	Cumulative percentage:
1 1/4"	0.0 g	0.00 %	58.2 g	9.53 %		58.2 g	5.10 %	5.10 %
1"	0.0 g	0.00 %	0.0 g	0.00 %		0.0 g	0.00 %	5.10 %
5/8"	56.0 g	10.58 %	96.9 g	15.86 %		152.9 g	13.41 %	18.51 %
5/16"	221.6 g	41.86 %	218.8 g	35.81 %		440.4 g	38.62 %	57.13 %
No. 5	78.3 g	14.79 %	68.8 g	11.26 %		147.1 g	12.90 %	70.03 %
No. 10	23.6 g	4.46 %	24.8 g	4.06 %		48.4 g	4.24 %	74.28 %
No. 18	14.5 g	2.74 %	13.9 g	2.28 %		28.4 g	2.49 %	76.77 %
No. 30	12.6 g	2.38 %	11.9 g	1.95 %		24.5 g	2.15 %	78.92 %
No. 40	10.5 g	1.98 %	10.5 g	1.72 %	12/12/06	21.0 g	1.84 %	80.76 %
No. 50	13.4 g	2.53 %	13.0 g	2.13 %	M.S.	26.4 g	2.32 %	83.07 %
No. 70	13.2 g	2.49 %	12.6 g	2.06 %	25.8	~~45.6~~ g	2.26 %	85.34 %
No. 100	13.7 g	2.59 %	12.7 g	2.08 %	26.4	~~30.2~~ g	2.32 %	87.65 %
No. 140	23.7 g	4.48 %	21.9 g	3.58 %	45.6	~~25.3~~ g	4.00 %	91.65 %
No. 200	15.1 g	2.85 %	15.1 g	2.47 %	30.2	~~9.50~~ g	2.65 %	94.30 %
No. 270	12.9 g	2.44 %	12.4 g	2.03 %	25.3	~~30.2~~ g	2.22 %	96.52 %
No. 325	4.767 g	0.90 %	4.729 g	0.77 %		9.50 g	0.83 %	97.35 %
Pan	15.5 g	2.93 %	14.7 g	2.41 %		30.2 g	2.65 %	100.00 %
Total	529.4 g	100.00 %	610.9 g	100.00 %		1140.3 g	100.00 %	

minus original mass: -531.3 g = 1.9 g loss

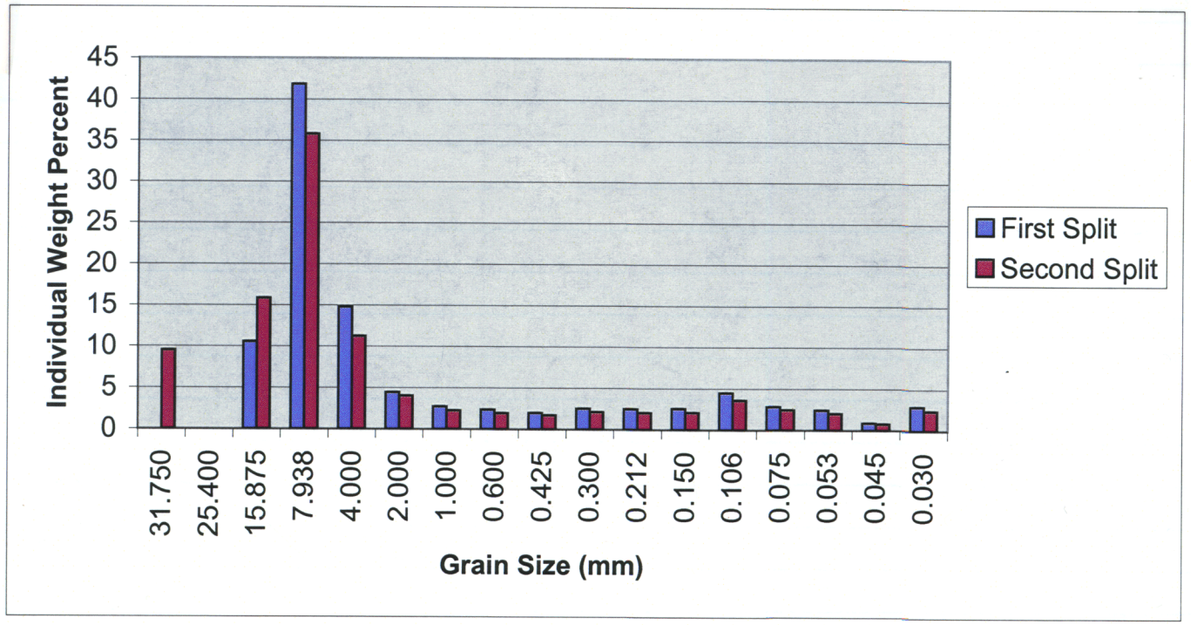
- 611.9 g = 1.0 g loss

Base sample density:

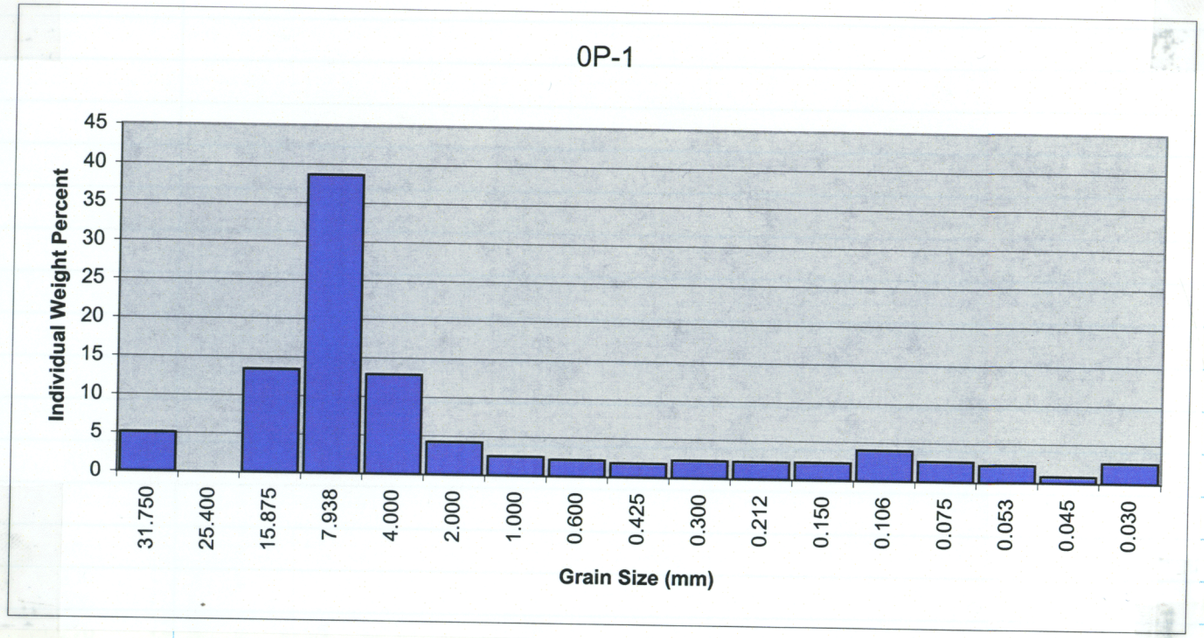
12 December 2006 M.S.

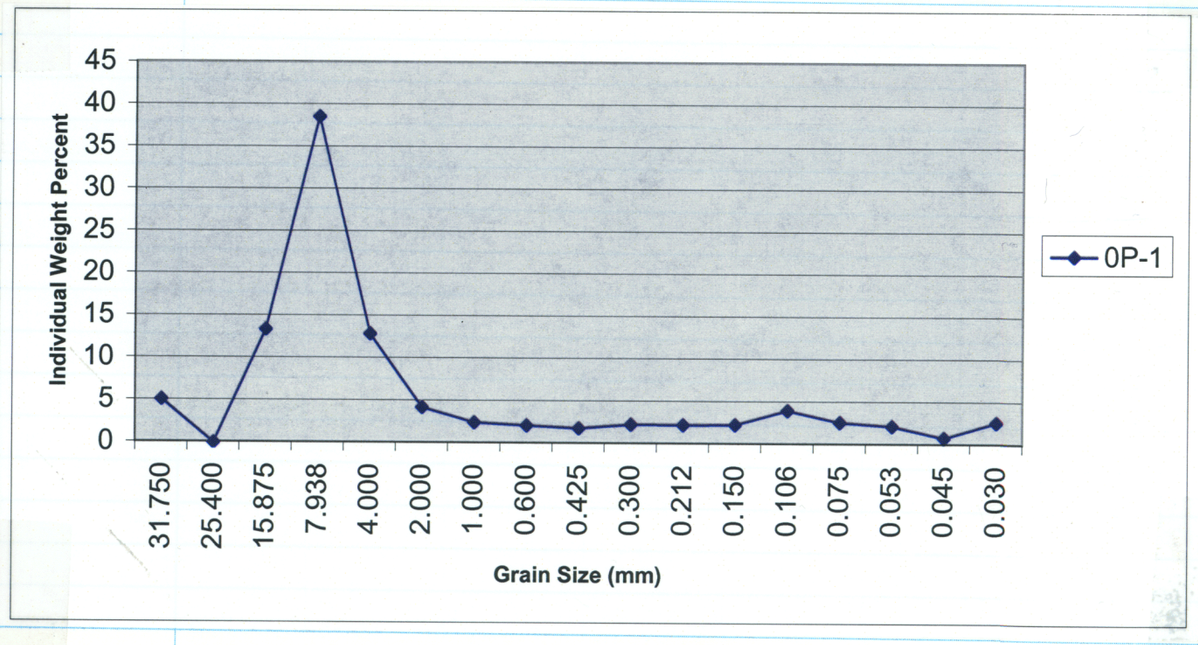


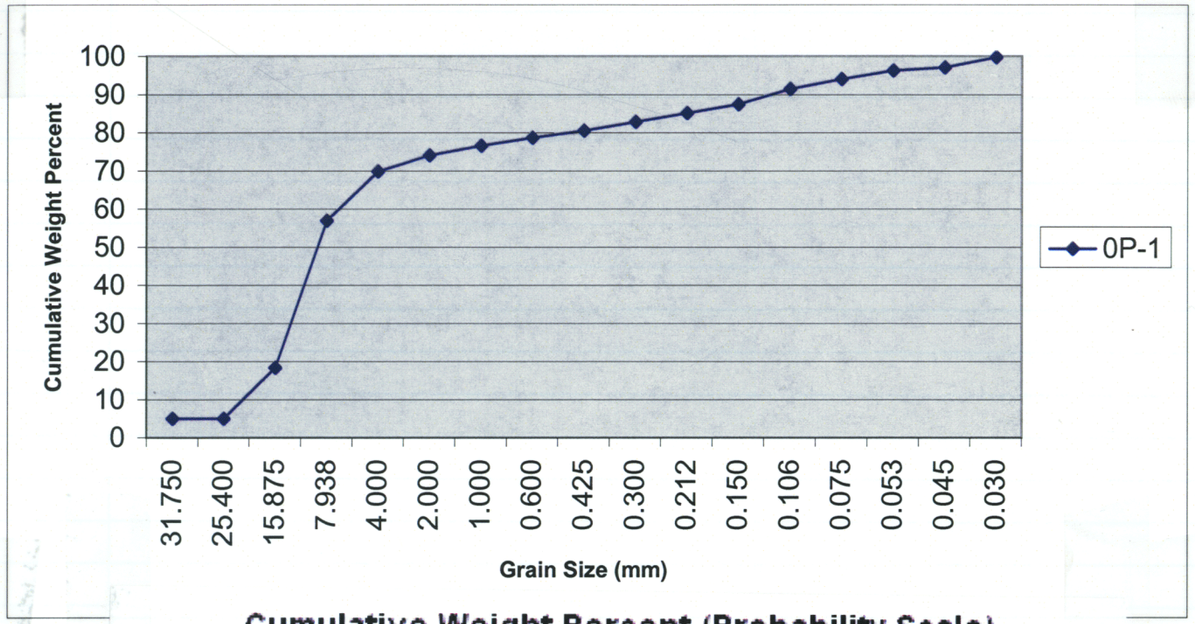
0P-1

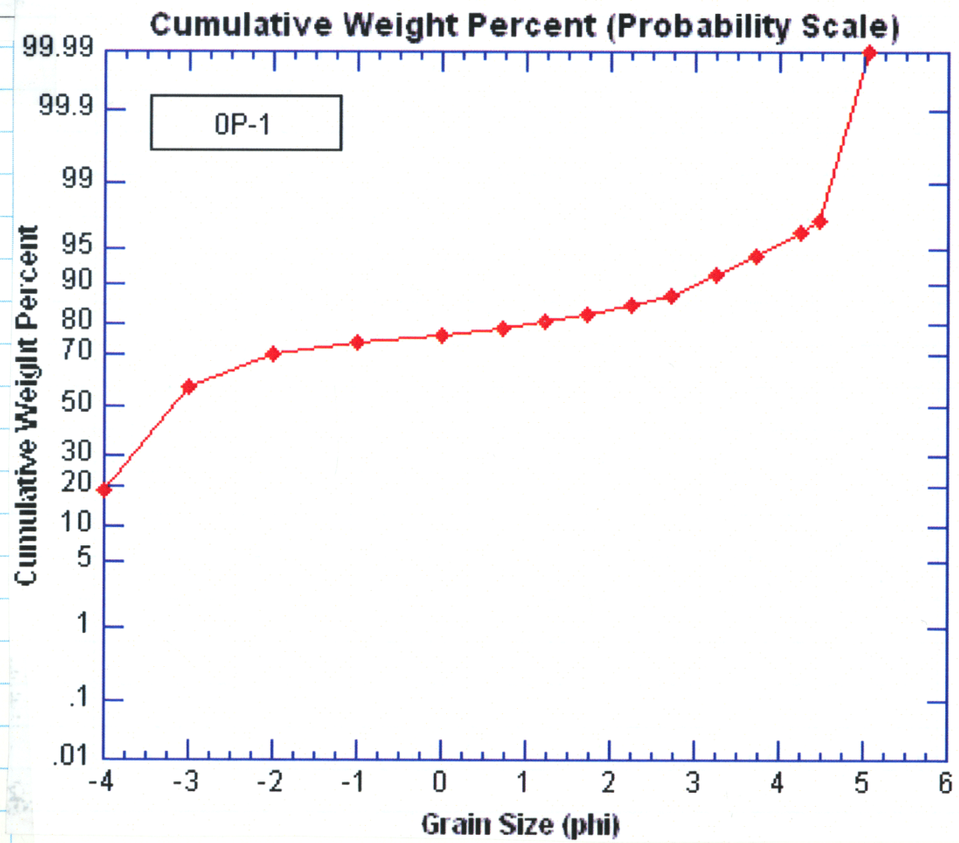


Splits from sample: 0P-1









12 December 2006 MR

12 December 2006 M.S.

Sample 4F Analysis

	Mass of fraction #1 of 4:	Percent of fraction #1 of 4:	Mass of fraction #2 of 4:	Percent of fraction #2 of 4:	Mass of combined 1 and 2:	Combined percentage:	Cumulative percentage:
1 1/4"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
1"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
5/8"	22.4 g	4.55 %	7.455 g	1.35 %	29.9 g	2.85 %	2.85 %
5/16" M.S. 11/21/06	7.431 g	1.51 %	12.7 g	2.29 %	20.1 g	1.92 %	4.78 %
No. 5 14.6	~~14.9~~ g	2.97 %	12.1 g	2.18 %	26.7 g	2.55 %	7.33 %
No. 10	15.3 g	3.11 %	17.4 g	3.14 %	32.7 g	3.13 %	10.45 %
No. 18	28.9 g	5.87 %	33.3 g	6.01 %	62.2 g	5.94 %	16.40 %
No. 30	31.7 g	6.44 %	36.9 g	6.66 %	68.6 g	6.56 %	23.00 %
No. 40	30.7 g	6.24 %	35.8 g	6.46 %	66.5 g	6.36 %	29.31 %
No. 50	47.5 g	9.65 %	55.4 g	10.00 %	102.9 g	9.83 %	39.14 %
No. 70	49.7 g	10.09 %	57.7 g	10.42 %	107.4 g	10.26 %	49.41 %
No. 100	43.2 g	8.77 %	50.7 g	9.15 %	93.9 g	8.97 %	58.38 %
No. 140	67.1 g	13.63 %	79.6 g	14.37 %	146.7 g	14.02 %	72.40 %
No. 200	61.1 g	12.41 %	70.8 g	12.78 %	131.9 g	12.61 %	85.01 %
No. 270	38.8 g	7.88 %	45.0 g	8.12 %	83.8 g	8.00 %	93.01 %
No. 325	8.745 g	1.78 %	9.900 g	1.79 %	18.6 g	1.78 %	94.80 %
Pan	25.2 g	5.12 %	29.2 g	5.27 %	54.4 g	5.20 %	100.00 %
Total	492.4 g	100.00 %	554.0 g	100.00 %	1046.3 g	100.00 %	
minus original mass	- 493.6 g		- 554.8 g.				
	= 1.2 g loss		= 0.8 g loss				

Base sample density:

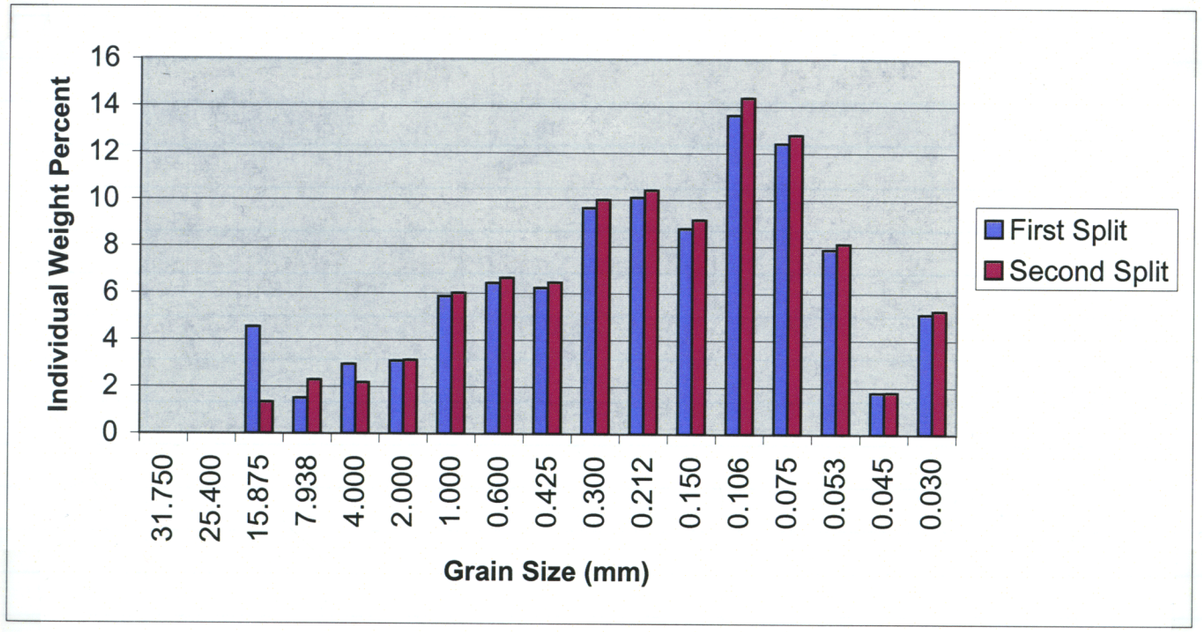
_____

= _____

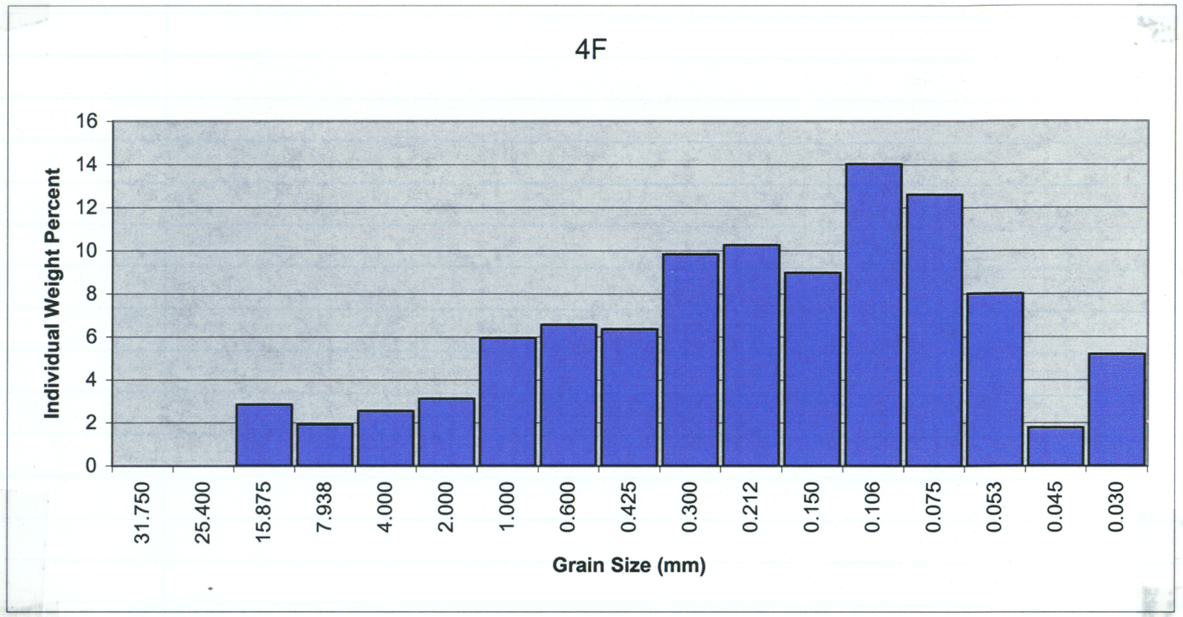
= _____

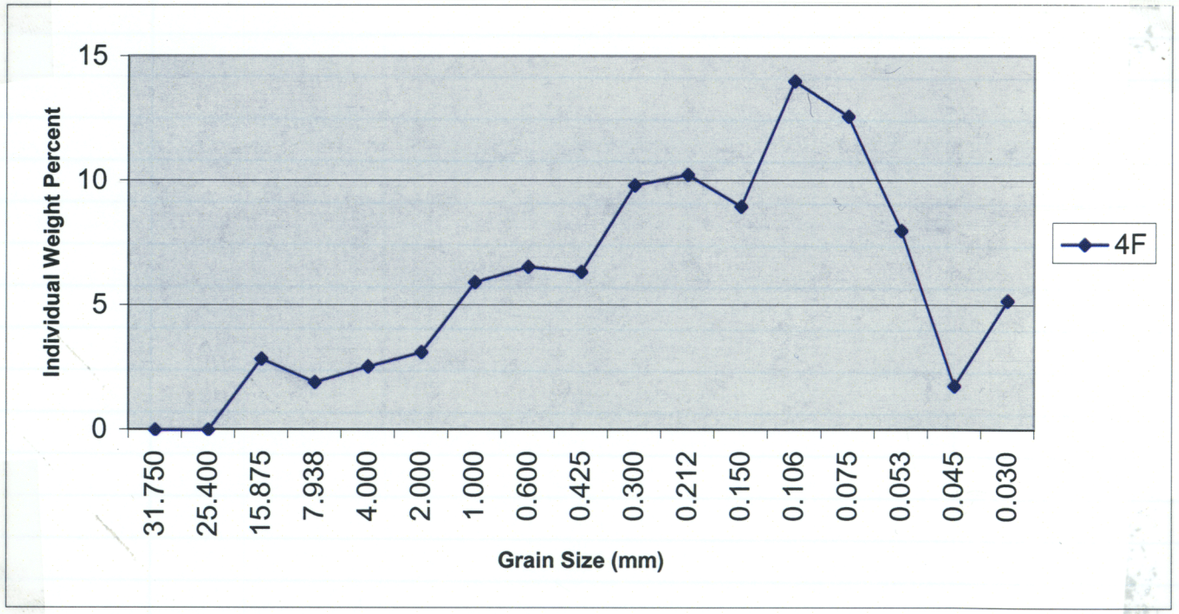
12 December 2006 M.S.

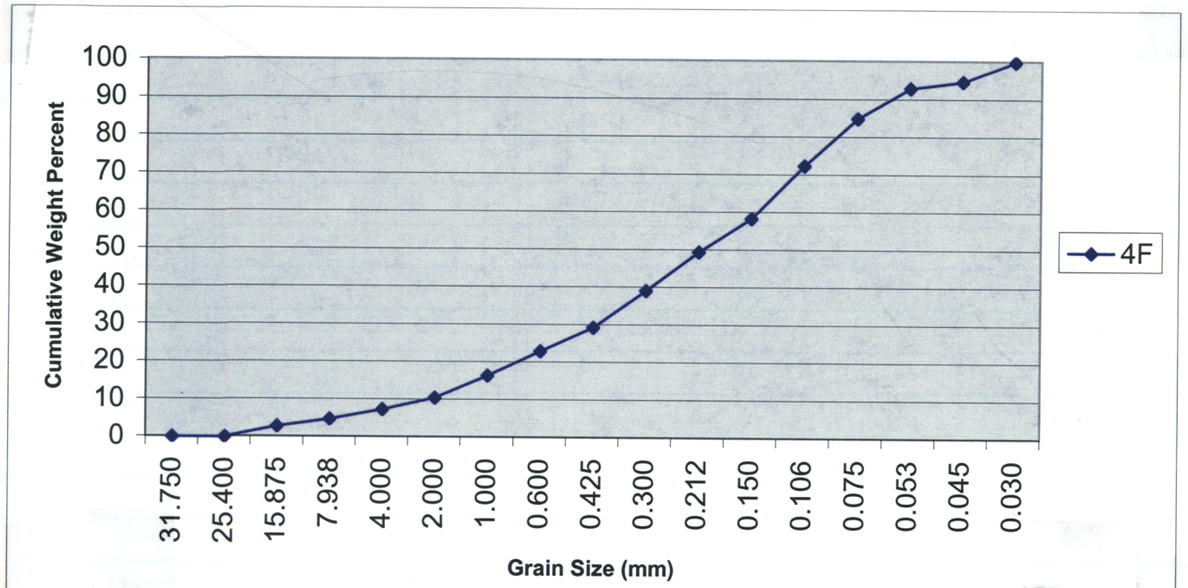
4F

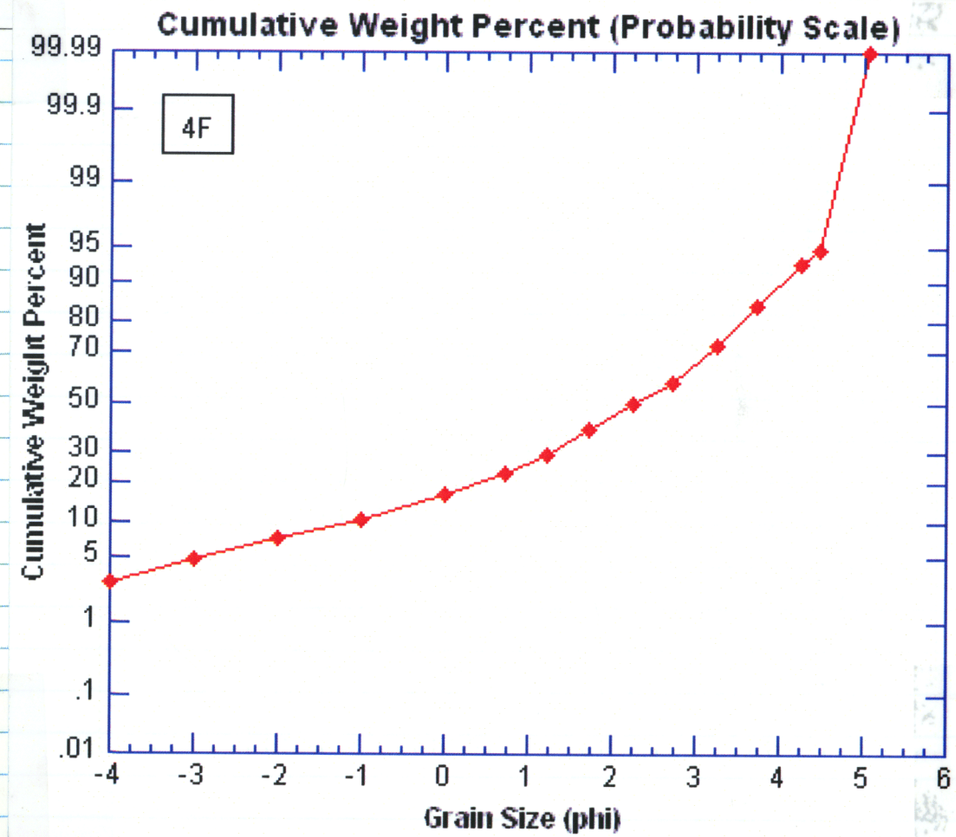


Splits from sample: 4F









12 December 2006 MB

11 December 2006 M.S.

Mass of base sample and moisture content:

Sample ID:	Mass:
ØE-1	1857.9 g
EXTRA F(V)	638.5 g
	g
	g

Mass of respectively labeled drying pans:

1675.1 g
1685.6 g
g
g

Mass of dried sample and pan:

Sample ID:	Mass:
ØE-1	3523.6 g
EXTRA F(V)	2315.6 g
	g
	g

Mass of dried sample (calculated)**:**

Sample ID:	Mass:
ØE-1	1848.5 g
EXTRA F(V)	630.0 g
	g
	g

Mass of water lost from base sample (calculated)**:**

Sample ID:	Mass:
ØE-1	9.4 g
EXTRA F(V)	8.5 g
	g
	g

Mass (M) of sub-sample bag:

$\underline{M}_{avg}$ 6.8 g (Previously calculated, P.8)

11 December 2006 M.S.

Mass of the sample split and sub-sample bag: **Mass of sample split** (calculated)**:**

Sample ID:				Mass:
ØE-1	#1	448.6 g	-6.8 g =	441.8 g
	#2	462.2 g	-6.8 g =	455.4 g
	#3	479.2 g	-6.8 g =	472.4 g
	#4	492.2 g	-6.8 g =	485.4 g
EXTRA F(V)	#1	325.6 g	-6.8 g =	318.8 g
	#2	317.9 g	-6.8 g =	311.1 g
	#3	g	-6.8 g =	g
	#4	g	-6.8 g =	g
	#1	g	-6.8 g =	g
	#2	g	-6.8 g =	g
	#3	g	-6.8 g =	g
	#4	g	-6.8 g =	g
	#1	g	-6.8 g =	g
	#2	g	-6.8 g =	g
	#3	g	-6.8 g =	g
	#4	g	-6.8 g =	g

Re-evaluation of total sample mass (calculated)**:**

Sample ID:	Mass:	
ØE-1	1855.0 g	(+6.5 from original calculation for dried sample mass)
EXTRA F(V)	629.9 g	(-0.1 from original calculation for dried sample mass)
	g	(from original calculation for dried sample mass)
	g	(from original calculation for dried sample mass)

11 December 2006 M.S.

12 December 2006 M.S.

Sample ØE-1 Analysis

	Mass of fraction #3 of 4:	Percent of fraction #3 of 4:	Mass of fraction #4 of 4:	Percent of fraction #4 of 4:	Mass of combined 3 and 4:	Combined percentage:	Cumulative percentage:
1 1/4"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
1"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
5/8"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
5/16"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 5	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 10	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 18	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 30	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 40 M.S. 11/22/06	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 50 6.086	~~5.460~~ g	1.24 %	6.175 g	1.24 %	12.26 g	1.28 %	1.28 %
No. 70	100.7 g	21.35 %	102.6 g	21.15 %	203.3 g	21.25 %	22.53 %
No. 100	221.4 g	46.94 %	226.0 g	46.60 %	447.4 g	46.76 %	69.29 %
No. 140	108.0 g	22.90 %	113.1 g	23.32 %	221.1 g	23.11 %	92.40 %
No. 200	26.6 g	5.64 %	27.9 g	5.75 %	54.5 g	5.70 %	98.10 %
No. 270	8.070 g	1.71 %	8.420 g	1.74 %	16.5 g	1.72 %	99.82 %
No. 325	0.661 g	0.14 %	0.716 g	0.15 %	1.377 g	0.14 %	99.97 %
Pan	0.153 g	0.03 %	0.156 g	0.03 %	0.309 g	0.03 %	100.00 %
Total	471.67 g	100.00 %	485.1 g	100.00 %	956.7 g	100.00 %	

minus original mass = 472.4 g − 0.7 g Loss

= 485.4 g − 0.3 g Loss

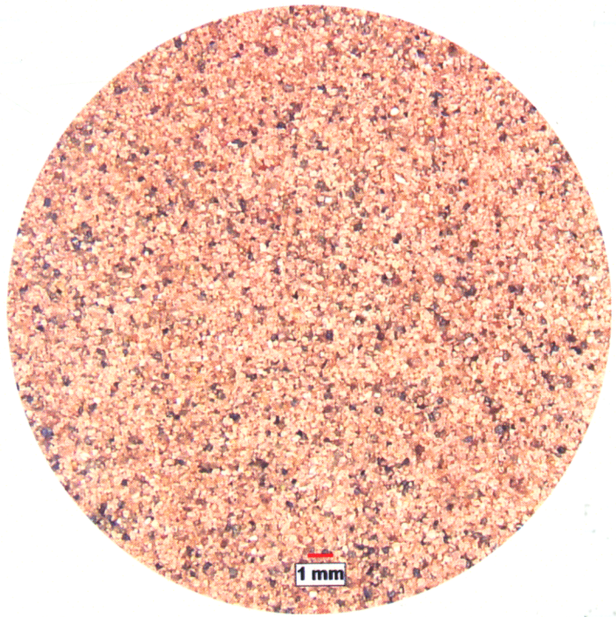
Base sample density:

_____

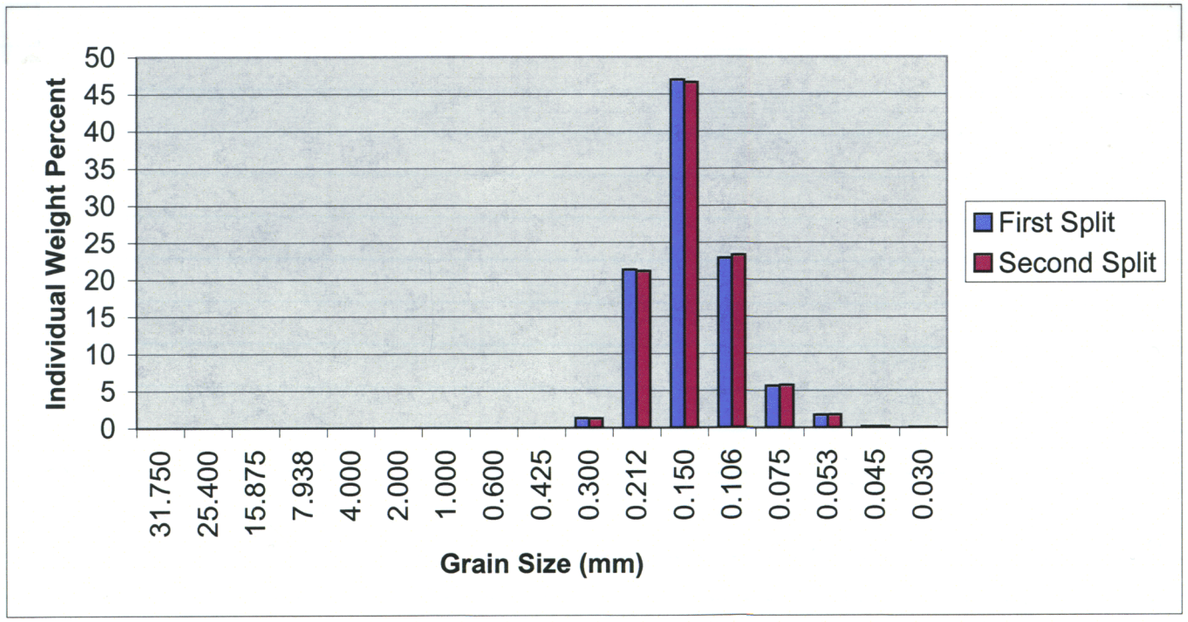
= _____

= _____

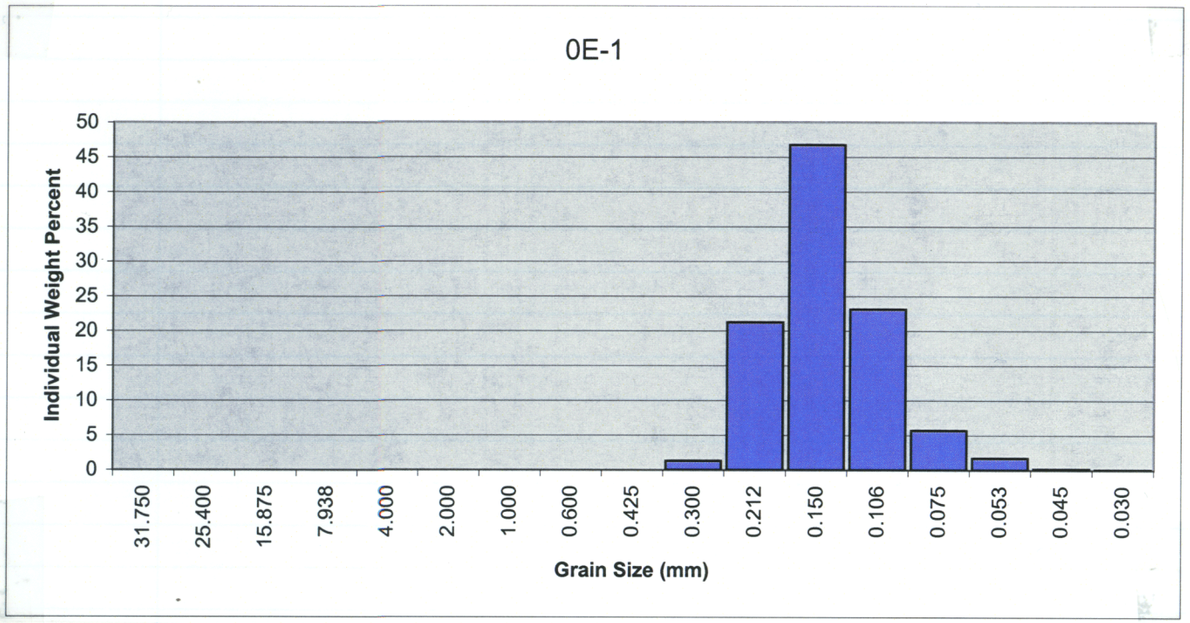
12 December 2006 M.S.

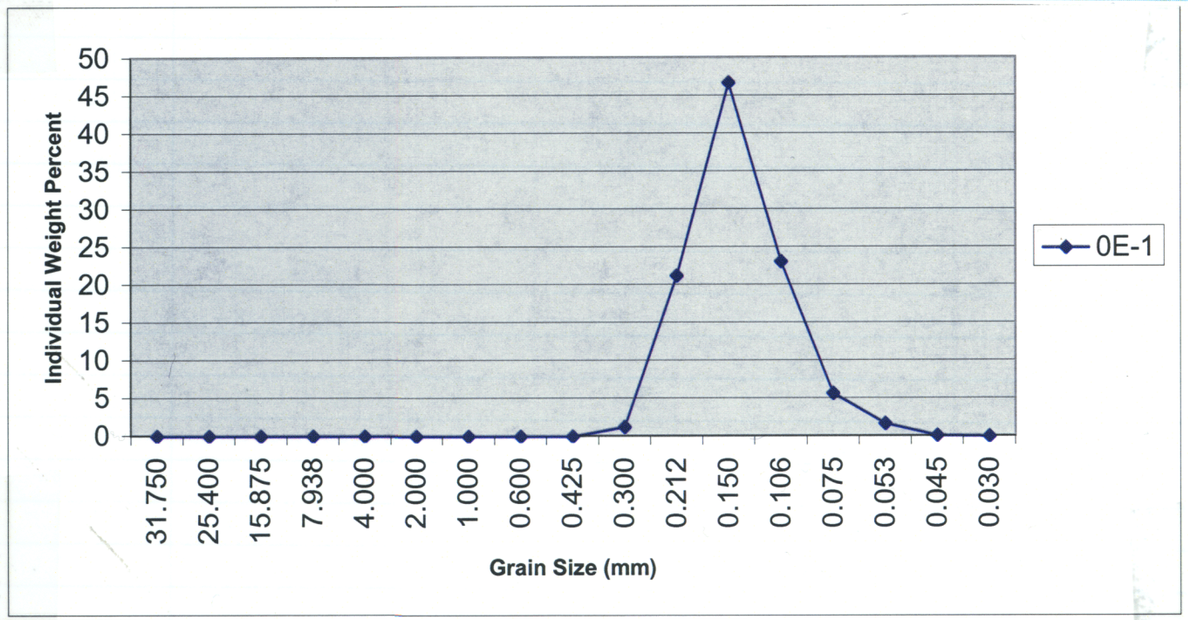


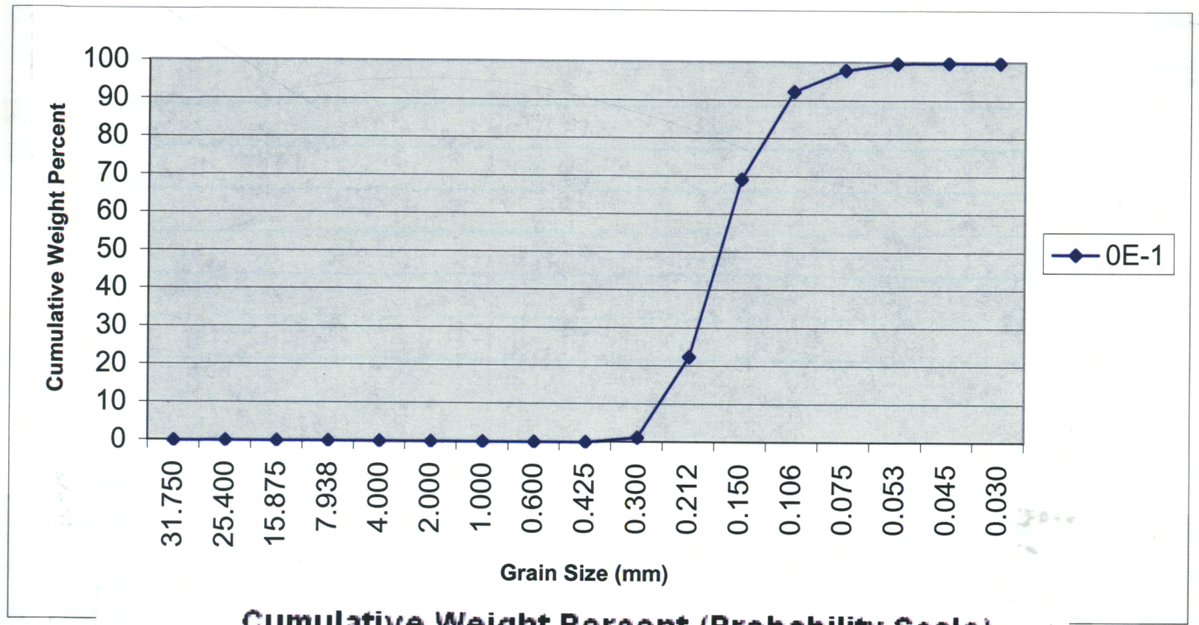
0E-1

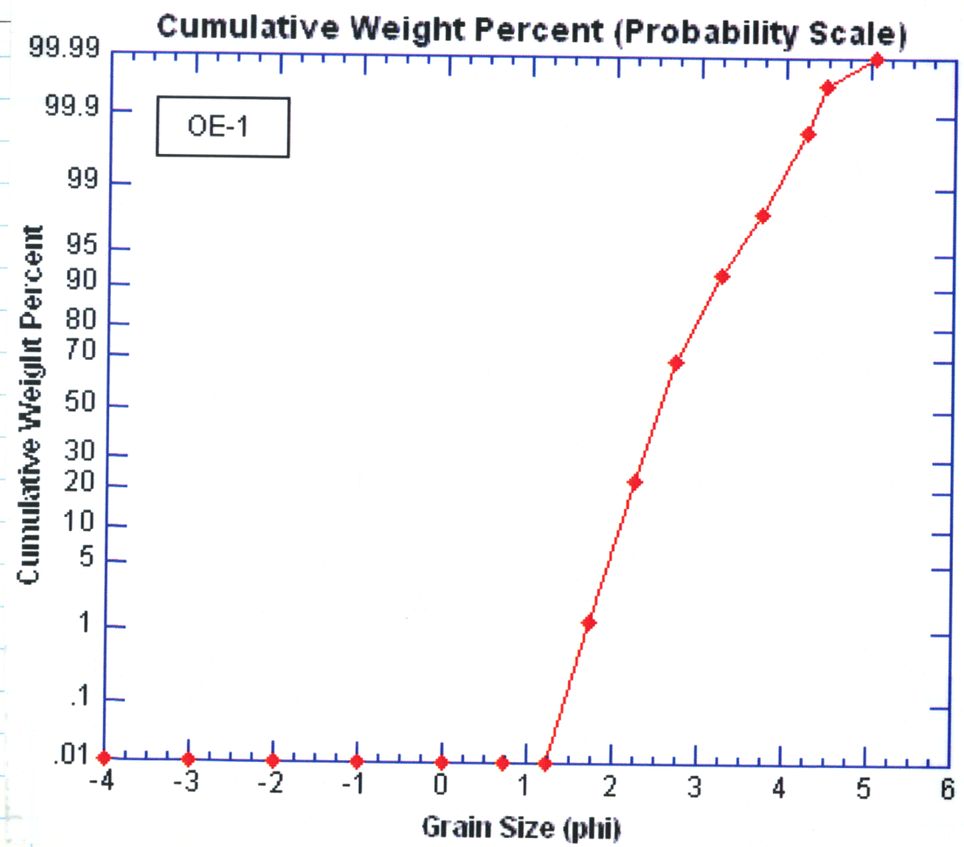


Splits from sample: 0E-1









12 December 2006 M.R.

13 December 2006 M.S.

Sample EXTRA F(v) Analysis

	Mass of fraction #1 of ~~4~~ 2:	Percent of fraction #1 of ~~4~~ 2:	Mass of fraction #2 of ~~4~~ 2:	Percent of fraction #2 of ~~4~~ 2:	Mass of combined 1 and 2:	Combined percentage:	Cumulative percentage:
1 1/4"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
1"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
5/8"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
5/16"	0.0 g	0.00 %	0.0 g	0.00 %	0.0 g	0.00 %	0.00 %
No. 5	3.827 g	1.21 %	2.624 g	0.85 %	6.451 g	1.03 %	1.03 %
No. 10	3.655 g	1.15 %	2.773 g	0.89 %	6.428 g	1.02 %	2.05 %
No. 18	5.092 g	1.61 %	5.256 g	1.69 %	10.3 g	1.65 %	3.70 %
No. 30	6.565 g	2.07 %	6.528 g	2.10 %	13.1 g	2.09 %	5.79 %
No. 40	6.819 g	2.15 %	6.735 g	2.17 %	13.6 g	2.16 %	7.95 %
No. 50	10.7 g	3.37 %	10.7 g	3.45 %	21.4 g	3.41 %	11.36 %
No. 70	14.4 g	4.54 %	14.9 g	4.80 %	29.3 g	4.67 %	16.03 %
No. 100	21.5 g	6.78 %	21.3 g	6.87 %	42.8 g	6.82 %	22.86 %
No. 140	46.4 g	14.63 %	48.5 g	15.63 %	94.9 g	15.13 %	37.99 %
No. 200	34.3 g	10.82 %	24.3 g	7.83 %	58.6 g	9.34 %	47.33 %
No. 270	27.8 g	8.77 %	34.2 g	11.02 %	62.0 g	9.88 %	57.21 %
No. 325	17.9 g	5.65 %	23.5 g	7.58 %	41.4 g	6.60 %	63.81 %
Pan	118.1 g	37.25 %	108.9 g	35.10 %	227.0 g	36.19 %	100.00 %
Total	317.1 g	100.00 %	310.2 g	100.00 %	627.3 g	100.00 %	
minus original mass	- 318.8 g = 1.7 g Loss		- 311.1 g = 0.9 g Loss				

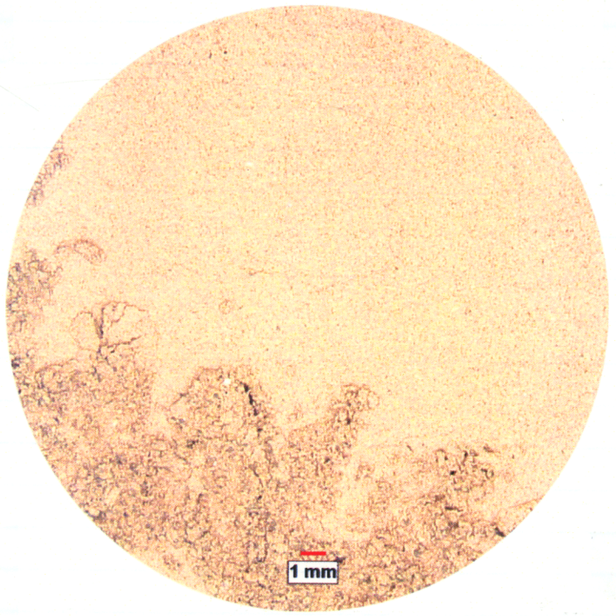
Base sample density:

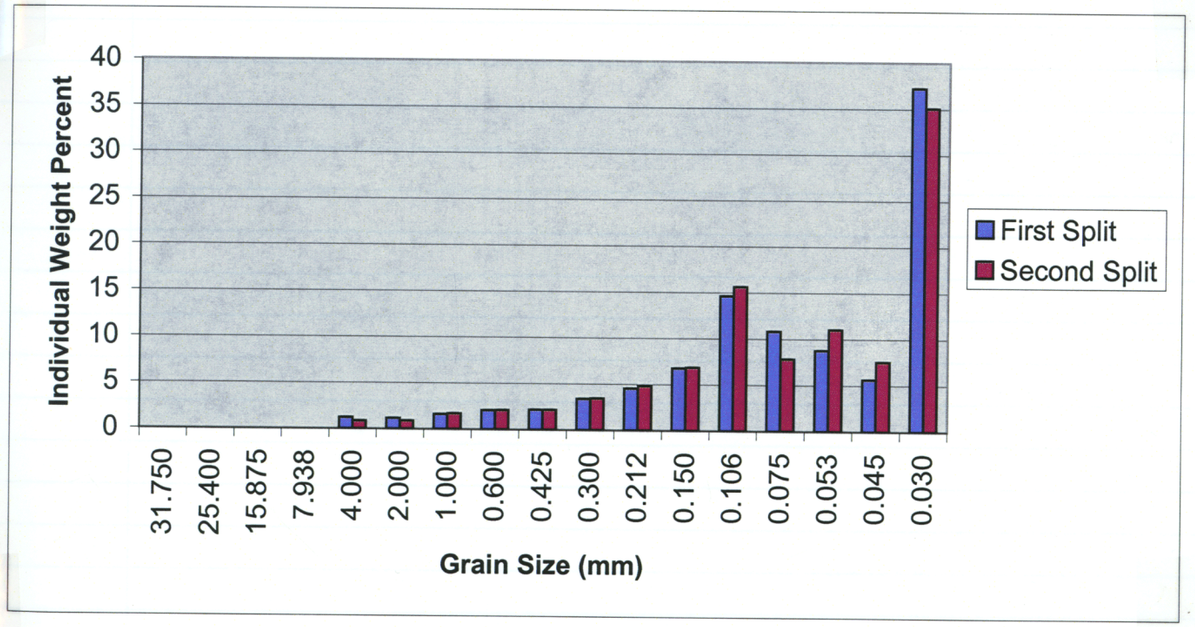
_____

= _____

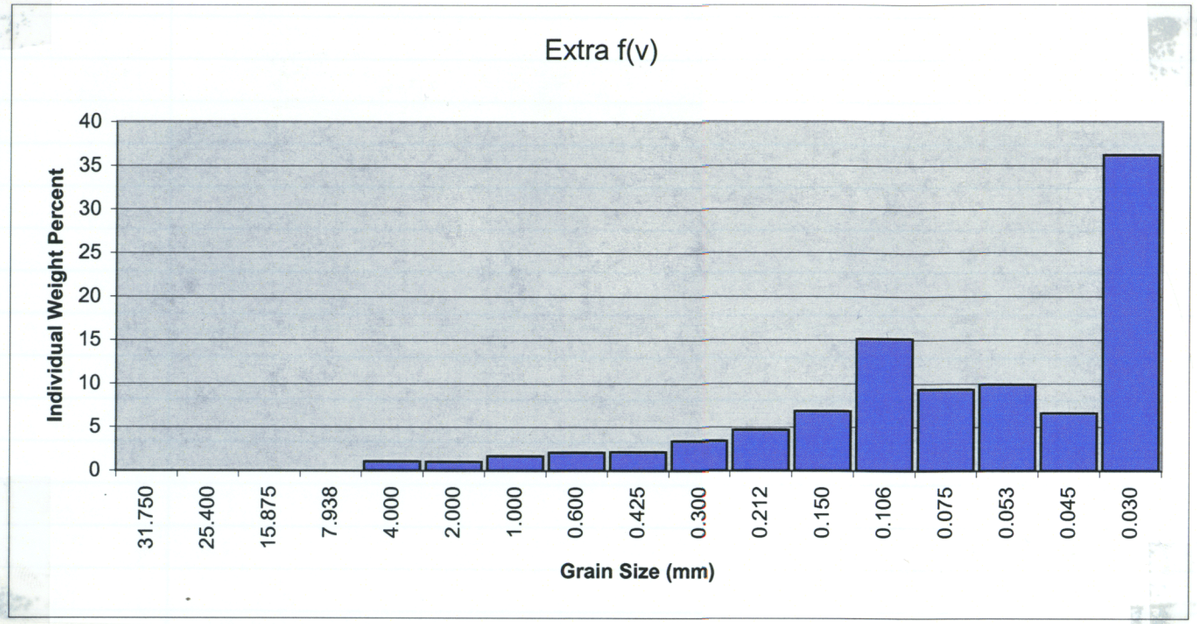
= _____

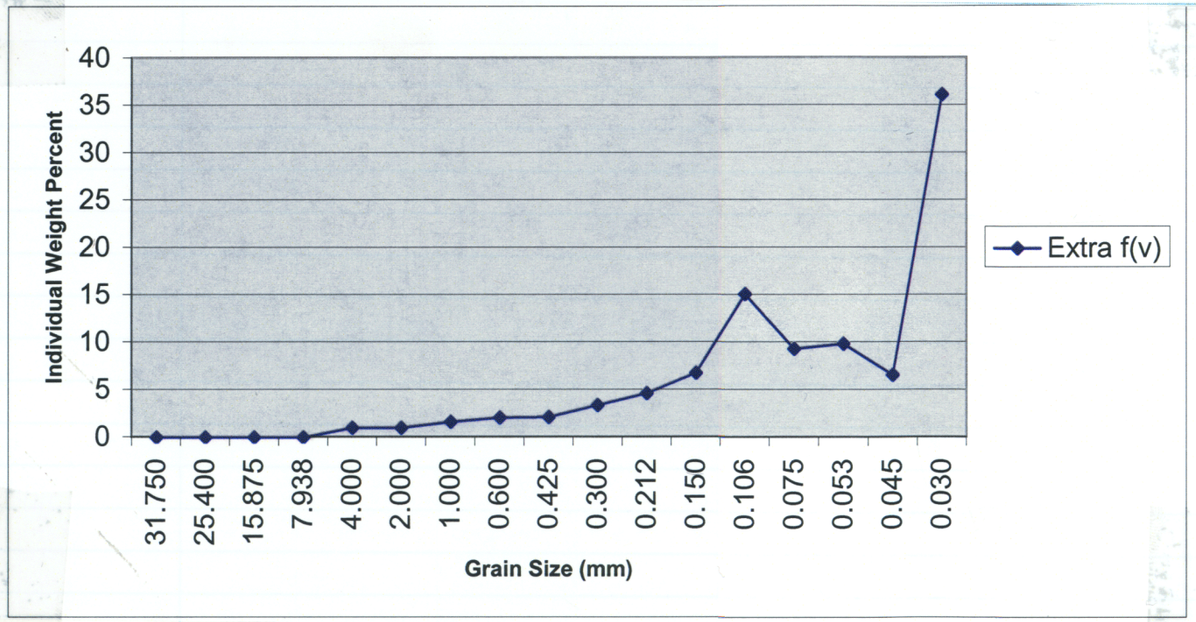
13 December 2006 M.S.

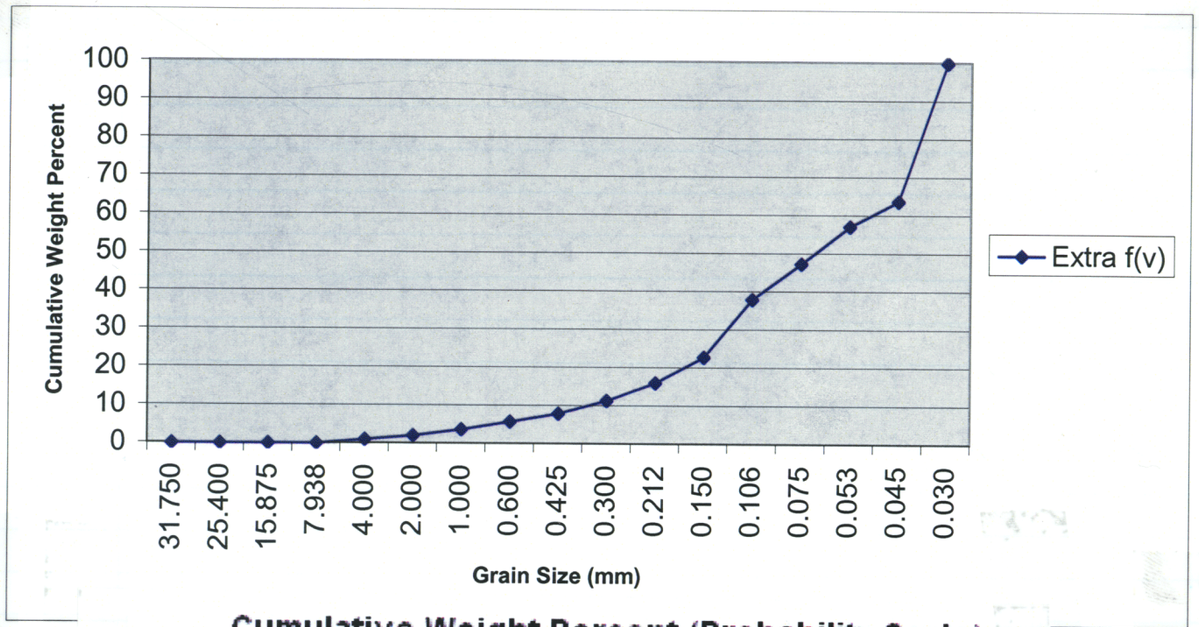


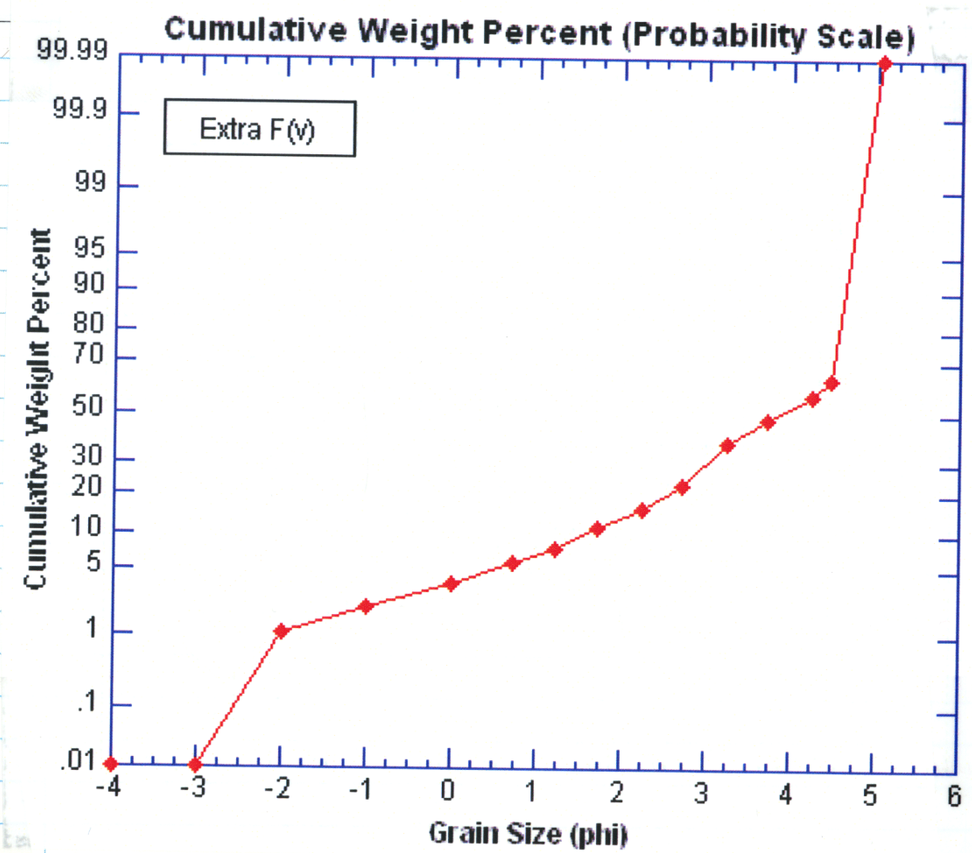


Splits from sample: Extra f(v)









13 December 2006 MB

Pages 1 through 73 are for analyses regarded as Chapter 1. Pages 74 through 140 are blank. Mark Silver estimated the number of pages needed for future grain-size analyses and began Chapter 2 on page 141. However, the analyses were not completed before his departure from CNWRA. The anticipated analyses will be conducted by another person and recorded in a different scientific notebook. The last page of Chapter 2 is page 183. The remainder of Scientific Notebook 818 is blank. Chapter 2 analyses were completed.

Donald Hooper _____ (initials)

Date: July 3, 2007

GEOSCIENCES AND ENGINEERING DIVISION

SCIENTIFIC NOTEBOOK REVIEW CHECKLIST RECORD

Scientific Notebook No. 818 Project Numbers: 20.06002.01.312

Accomplished

- [✓] 1. Initial entries per QAP-001
- [✓] 2. Dating of entries
- [✓] 3. Corrections (crossed out, one line through w/initials/date)
- [✓] 4. No White out used
- [✓] 5. Page number visible on copy or original notebook
- [✓] 6. In process entries per QAP-001
- [✓] 7. Figure information present
- [✓] 8. Text readable
- [N/A ✓] 9. Copyrighted material is identified
- [✓] 10. Permanent ink or type only
- [✓] 11. Signing of entries (not required on each page)
- [NA] 12. Electronic media in the scientific notebook properly labeled
- [✓] 13. NRC Supplementary Scientific Notebook Questions are addressed.
- [✓] 14. The independent, two person verification required by AP-019, Section 5.2.1.2(b) is complete

Any discrepancies must be resolved before notebook closeout.

==========

I have reviewed this scientific notebook and find it in agreement with QAP-001.

Manager's Signature

~~10/01/07~~ 12/28/07 (PD)
Date

Attach this completed form to the last page of the notebook.

Form QAP-01 (03/2007)