



LONG QUAL	4.5	-0.5
SHORT QUAL	-4.5	0.5
SDL STANDOFF	-8	2
BIT SIZE	-8	2
BIT SIZE	6	16
SDL CALIPER	6	16
GAMMA RAY	0	150

DL0D	0	10	25	GM/CC	25
PE CORR	0	10	25	GM/CC	25
BULK DENSITY	1.95	GM/CC	2.95		
NEU POROSITY	45	PERCENT	-15		
NEUTRON MATRIX = LIME					

UPL0G # 1 Depth: 2723.30 Service:none.002 Unit:10598
 Replay Log Date: Time: Vers:2.24

 GAMMA RAY TOOL SHOP CALIBRATION SUMMARY

PERFORMED: 22:22:30 11/3/92 LAST SHOP CALIBRATION: 17:37:39 08/8/92
 SERIAL NUMBER: 114401 MODEL: NGRT-A
 TRUCK UNIT NUMBER: 10598 PROGRAM VERSION: 2.24
 PERFORMED BY: L. JONES

	MEASURED	CALIBRATED	UNITS
BACKGROUND	5	5	GAPI
BACKGROUND+CALIBRATOR	229	226	GAPI
CALIBRATOR	223	221	GAPI

GAMMA RAY TOOL BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 23:12:41 12/16/92 LAST SHOP CALIBRATION: 22:22:30 11/3/92

	SHOP	FIELD	UNITS
BACKGROUND	5	5	GAPI
BACKGROUND+CALIBRATOR	226	222	GAPI
CALIBRATOR	221	217	GAPI

GAMMA RAY TOOL AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 07:39:57 12/19/92 LAST SHOP CALIBRATION: 22:22:30 11/3/92

	BEFORE	AFTER	UNITS
BACKGROUND	5	5	GAPI
BACKGROUND+CALIBRATOR	223	226	GAPI
CALIBRATOR	217	221	GAPI

 DUAL SPACED NEUTRON II SHOP CALIBRATION SUMMARY

PERFORMED: 16:09:08 11/9/92 LAST SHOP CALIBRATION: 15:29:41 08/8/92
 SERIAL NUMBER: A009 MODEL: DSN-A
 SOURCE NUM: DSN 103 CALIBR NUM: 4912 NE
 TRUCK UNIT NUMBER: 10598 PROGRAM VERSION: 2.24
 PERFORMED BY: L. JONES

	MEASURED	CALIBRATED	UNITS
RATIO:	6.528	6.527	
POROSITY:	24.688	24.685	x

FIELD CHECK BLOCK

	MEASURED	CALIBRATED	UNITS
CHECK RATIO:	5.339	5.338	
CHECK POROSITY:	19.130	19.127	x

MEAN(1,1) = 7.64
 MEAN(1,2) = 61.84
 MEAN(2,1) = 5.12
 MEAN(2,2) = 60.12
 MEAN(3,1) = 9684.59
 MEAN(3,2) = 1685.59
 MEAN(4,1) = 14859.56
 MEAN(5,1) = 8859.80
 MEAN(6,1) = 3259.62

DUAL SPACED NEUTRON II BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 15:03:11 12/16/92 LAST SHOP CALIBRATION: 16:09:08 11/9/92

	SHOP	FIELD	UNITS
CHECK RATIO	5.338	5.310	
CHECK POROSITY	19.127	18.995	x

DUAL SPACED NEUTRON II AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 08:49:51 12/19/92 LAST SHOP CALIBRATION: 16:09:08 11/9/92

	BEFORE	AFTER	UNITS
CHECK RATIO	5.310	5.376	
CHECK POROSITY	18.995	19.308	x

 SPECTRAL DENSITY (8 BIT) SHOP CALIBRATION SUMMARY

PERFORMED: 18:00:35 11/10/92 LAST SHOP CALIBRATION: 17:01:54 11/10/92
 SERIAL NUMBER: PAD145 MODEL: SDLT-A
 SOURCE NUM: 14006W CALIBR NUM: SDL
 TRUCK UNIT NUMBER: 10598 PROGRAM VERSION: 2.24
 PERFORMED BY: L. JONES

PRIMARY CALIBRATOR

	MEASURED	CALIBRATED	UNITS
DENSITY	1.688	1.687	GM/CC
CORRECTION	0.023	0.021	GM/CC
Pe SHORT	3.253	3.219	
Pe LONG	2.970	2.977	

ALUMINUM BLOCK

	MEASURED	CALIBRATED	UNITS
DENSITY	2.608	2.597	GM/CC
CORRECTION	0.057	0.047	GM/CC
Pe SHORT	3.224	3.190	
Pe LONG	3.205	3.200	

ALUMINUM BLOCK W/SLEEVE

	MEASURED	CALIBRATED	UNITS
DENSITY	2.601	2.590	GM/CC
CORRECTION	-0.059	-0.064	GM/CC
Pe SHORT	6.285	6.246	
Pe LONG	6.076	5.927	

CALIBRATION COEFFICIENTS

	EXPECTED RANGE	CALIBRATED	UNITS
SHORT SPACE			
DENSITY SLOPE	-6.40 -> -7.60	-7.000	GM/CC
DENSITY INTERCEPT	27.00 -> 37.00	32.152	GM/CC
PE SLOPE	1.20 -> 2.30	1.688	
PE INTERCEPT	-2.20 -> -4.00	-2.710	
LONG SPACE			
DENSITY SLOPE	-1.29 -> -1.39	-1.321	GM/CC
DENSITY INTERCEPT	7.00 -> 8.10	7.492	GM/CC
PE SLOPE	1.30 -> 2.50	1.741	
PE INTERCEPT	-0.70 -> -2.10	-0.755	

ALUMINUM SLIDE

	MEASURED	CALIBRATED	UNITS
DENSITY	1.656	1.656	GM/CC
CORRECTION	-0.040	-0.041	GM/CC
Pe SHORT	4.624	4.588	
Pe LONG	4.090	4.041	

ALUMINUM SLIDE IN

	MEASURED	CALIBRATED	UNITS
DENSITY	2.172	2.159	GM/CC
CORRECTION	0.030	0.025	GM/CC
Pe SHORT	4.830	4.793	
Pe LONG	3.755	3.722	

BRASS SLIDE

	MEASURED	CALIBRATED	UNITS
DENSITY	2.380	2.368	GM/CC
CORRECTION	-0.329	-0.336	GM/CC
Pe SHORT	6.307	6.268	
Pe LONG	3.394	3.380	

SPECTRAL DENSITY (8 BIT) BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 15:37:48 12/16/92 LAST SHOP CALIBRATION: 18:00:35 11/10/92

	SHOP	FIELD	UNITS
ALUMINUM SLIDE IN	2.159	2.159	GM/CC
ALUMINUM DENSITY	0.025	0.025	GM/CC
ALUMINUM PE SHORT	4.793	4.844	
ALUMINUM PE LONG	3.722	3.749	

SPECTRAL DENSITY (8 BIT) AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 09:21:22 12/19/92 LAST SHOP CALIBRATION: 18:00:35 11/10/92

	BEFORE	AFTER	UNITS
ALUMINUM SLIDE IN	2.159	2.160	GM/CC
ALUMINUM DENSITY	0.025	0.024	GM/CC
ALUMINUM PE SHORT	4.844	4.738	
ALUMINUM PE LONG	3.749	3.831	

 SDL CALIPER SHOP CALIBRATION SUMMARY

PERFORMED: 18:17:48 11/10/92 LAST SHOP CALIBRATION: 18:16:14 11/10/92
 SERIAL NUMBER: 112632 MODEL: SDLT-A
 TRUCK UNIT NUMBER: 10598 PROGRAM VERSION: 2.24
 PERFORMED BY: L. JONES

	MEASURED	CALIBRATED	UNITS
VALUE 1	7.965	8.000	INCH
VALUE 2	14.999	15.000	INCH

SDL CALIPER BEFORE SURVEY FIELD CHECK SUMMARY

PERFORMED: 17:03:35 12/16/92 LAST SHOP CALIBRATION: 18:17:48 11/10/92

	SHOP	FIELD	UNITS
VALUE 1	8.000	8.106	INCH

SDL CALIPER AFTER SURVEY FIELD CHECK SUMMARY

PERFORMED: 09:40:19 12/19/92 LAST SHOP CALIBRATION: 18:17:48 11/10/92

	BEFORE	AFTER	UNITS
VALUE 1	8.106	7.910	INCH

PLS-II CALIBRATION SUMMARY TABLE

SERVICE or SIGNAL	SHOP	BEFORE	AFTER	CHANGE	TOLERANCE
GAMMA	221	217	221	-4	+/- 9.0
DSN POROSITY	19.127	18.995	19.308	-0.313	+/-0.9
BULK DENSITY	2.159	2.159	2.160	-0.001	+/-0.015
DENSITY CORRECTION	0.025	0.025	0.024	0.001	+/-0.015
DENSITY PE SHORT	4.793	4.844	4.738	0.105	+/-0.3
DENSITY PE LONG	3.722	3.749	3.831	-0.081	+/-0.3
CALIPER VALUE 1	8.000	8.106	7.910	0.196	+/-0.5

PLS-II FILTER & DELAY SUMMARY

FILTER & DELAY SUMMARY
 DATE: 20-DEC-1992 14:07:02

FILTER LENGTH AND DELAY ARE IN METERS

MNEM	TOOL	DESCRIPTION	FILTER LENGTH	DELAY	FILTER TYPE
MAGRK	DITSHD	DEPTH PANEL MAGNETIC MARK	0.000	0.000	BLOCK
DL0D	CH_TEN	CABLE HEAD TENSION	0.000	0.000	NONE
BATEMP	CH_TEN	CABLE HEAD TEMPERATURE	0.000	0.000	BLOCK
PLOC	CH_TEN	CABLE HEAD PAD LOCATOR	0.000	0.000	BLOCK
H2_V	DSTU	AUXILIARY POWER VOLTAGE	0.000	0.000	NONE
H5_V	DSTU	INSTRUMENT POWER VOLTAGE	0.000	0.000	NONE
DSTEMP	DSTU	DSTU TEMPERATURE (F)	1.220	0.000	BLOCK
RGR	GAMMA	NATURAL GAMMA RAY	0.492	14.025	BLOCK
WIN1H	CSNG_T	CSNG WINDOW HIGH 1	0.381	9.933	BLOCK
WIN2H	CSNG_T	CSNG WINDOW HIGH 2	0.381	9.933	BLOCK
WIN3H	CSNG_T	CSNG WINDOW HIGH 3	0.381	9.933	BLOCK
WIN4H	CSNG_T	CSNG WINDOW HIGH 4	0.381	9.933	BLOCK
WIN5H	CSNG_T	CSNG WINDOW HIGH 5	0.381	9.933	BLOCK
WIN6H	CSNG_T	CSNG WINDOW HIGH 6	0.381	9.933	BLOCK
WIN7H	CSNG_T	CSNG WINDOW HIGH 7	0.381	9.933	BLOCK
WIN8H	CSNG_T	CSNG WINDOW HIGH 8	0.381	9.933	BLOCK
WIN9H	CSNG_T	CSNG WINDOW HIGH 9	0.381	9.933	BLOCK
WIN10H	CSNG_T	CSNG WINDOW HIGH 10	0.381	9.933	BLOCK
WIN11H	CSNG_T	CSNG WINDOW HIGH 11	0.381	9.933	BLOCK
WIN12H	CSNG_T	CSNG WINDOW HIGH 12	0.381	9.933	BLOCK
WIN13H	CSNG_T	CSNG WINDOW HIGH 13	0.381	9.933	BLOCK
WIN1L1	CSNG_T	CSNG WINDOW LITHOLOGY 1	0.381	9.933	BLOCK
WIN1L2	CSNG_T	CSNG WINDOW LITHOLOGY 2	0.381	9.933	BLOCK
WIN1L3	CSNG_T	CSNG WINDOW LITHOLOGY 3	0.381	9.933	BLOCK
WIN1CA	CSNG_T	CSNG WINDOW CASING 1	0.381	9.933	BLOCK
WIN2CA	CSNG_T	CSNG WINDOW CASING 2	0.381	9.933	BLOCK
RGRBLK	CSNG_T	RAW GAMMA - BLOCK FILTER	0.686	9.932	BLOCK
RGRDYN	CSNG_T	RAW GAMMA - DYNAMIC FILTER	0.381	9.932	BLOCK
NR0ISE	CSNG_T	SPECTRAL NOISE	0.381	9.932	BLOCK
STAB	CSNG_T	CSNG STABILIZER	0.000	9.932	NONE
AMER	CSNG_T	AMERICIUM COUNTS	0.381	9.932	BLOCK
SPECHI	CSNG_T	CSNG HIGH ENERGY SPECTRUM SUM	0.000	9.932	NONE
SPECLO	CSNG_T	CSNG LOW ENERGY SPECTRUM SUM	0.000	9.932	NONE
LSPEED	CSNG_T	LINE SPEED	0.000	0.000	NONE
SW_POS	CSNG_T	SWITCH POSITION	0.000	9.932	NONE
FRMNT	CSNG_T	CSNG SPECTRAL FRAME COUNTER	0.000	9.932	NONE
C_TIME	CSNG_T	ACCUMULATION TIME	0.000	9.932	NONE
STAB_F	CSNG_T	CSNG STABILIZER (FIXED)	0.000	9.932	NONE
AMER_F	CSNG_T	AMERICIUM COUNTS (FIXED)	0.000	9.932	NONE
CCL	CSNG_T	CSNG CCL INPUT	0.000	0.000	NONE
NSDN	DSN_II	DSN II NEAR SPACED COUNTS	0.410	6.549	BLOCK
FDNS	DSN_II	DSN II FAR SPACED COUNTS	0.082	6.701	BLOCK
SDENS	SDLB	SDL SHORT SPACED DENSITY	0.530	1.114	BLOCK
SBART	SDLB	SDL SHORT SPACED BARITE	0.530	1.114	BLOCK
SLTH	SDLB	SDL LONG SPACED LITHOLOGY	0.530	1.114	BLOCK
CESHI	SDLB	SDL SHORT SPACED CESIUM HI	0.530	1.114	BLOCK
CESLO	SDLB	SDL SHORT SPACED CESIUM LO	0.530	1.114	BLOCK
LDENS	SDLB	SDL LONG SPACED DENSITY	0.380	1.215	BLOCK
LBART	SDLB	SDL LONG SPACED BARITE	0.380	1.215	BLOCK
PBAR	SDLB	PE LONG SPACED BARITE	0.380	1.340	BLOCK
PELDEN	SDLB	PE LONG SPACED DENSITY	0.380	1.340	BLOCK
LLTH	SDLB	SDL LONG SPACED LITHOLOGY	0.380	1.215	BLOCK
CELLO	SDLB	SDL LONG SPACED CESIUM HIGH	0.380	1.215	BLOCK
CELLO	SDLB	SDL LONG SPACED CESIUM LOW	0.380	1.215	BLOCK
SBAR	SDLB	SDL SHORT SPACED BARITE	0.000	1.114	NONE
SDNSU	SDLB	SDL SHORT SPACED DENSITY	0.000	1.114	NONE