INTERNATIONAL TECHNOLOGY CORPORATION

ROCKY FLATS PLANT
GROUND WATER SAMPLE COLLECTION LOG

PROJECT NAME Quarterly Ground Water Sampling
PROJECT NO 304902.2 4 . 0 1 0 1
COC/RFA NO. IT 002964 R3
COC/RFA NO. IT-002977V IT-002617
COC/RFA NO.. IT 002801
QC REVIEW BY/DATE.

SAMPLE NO. GW 0 2 0 8 4 IT
WELL I.D.. 05391
SAMPLES COLLECTED BY R. DARNELL
ZONE. 3 C. DONOHO
DATES COLLECTED 12/5/91

PURGE METHOD – TYPE USED.
☒ BAILER ☒ TEFLON
☐ OTHER N/A

CASING SIZE (INCHES) (A)	1	(2)	3	4	6
UNIT CASING VOLUME (GAL/LIN FT) (B)	0.04	0.16	0.37	0.65	1.50

PURGING REQUIREMENTS & CALCULATIONS – Datum: Top of Casing (TOWC) PURGE DATE 12/5/91
ID = WELL CASING INSIDE DIAMETER (INCHES) = 2
UV = UNIT CASING VOLUME (GAL/LINEAR FOOT) = .16
WD = DEPTH TO WATER (FEET) = 34.93
TD = TOTAL DEPTH (FEET) MEASURED TOTAL DEPTH (MTD) – PROBE END 39.43 + .07 = 39.50
IC = INITIAL WATER VOLUME (GALLONS) = TD – WD = 39.50 – 34.93 = ~~4.73~~ 4.57
IV = INITIAL WATER VOLUME (GALLONS) = UV x IC = .16 x 4.57 = .73
SD = DEPTH TO TOP OF SCREEN = 27.1 – 2 FEET = 25.1
IS WD LESS THAN SD – 2 FEET? (Y/N) N IF Y THEN
AC = ADJUSTED WATER (FEET) = TD – SD = N/A – N/A = N/A
AV = ADJUSTED CASING VOLUME (GAL) = UV x AC = N/A x N/A = N/A
THEN 2 x AV = 2 x N/A = N/A (GAL)
IF N THEN 3 x IV = 3 x .73 = 2.19 (GAL) CHECKED BY DCD

PURGED VOLUMES AND RECHARGE

VOLUME PURGED (GAL)	TEMP C	CONDUCTANCE (mo/cm)	pH (SU)	DO (mg/L)	NITRATE (ppm)	TIME (24 HOUR)	TURBIDITY (FTU)	WATER DESCRIPTION (COLOR TURBIDITY ODOR OIL ETC.)
INIT	11.2	.68	7.39	5.9	N/A	1011	14.	CLEAR
.37	11.2	.69	7.41	N/A	N/A	1015	N/A	CLEAR
.74	11.5	.71	7.47	N/A	N/A	1017	N/A	CLEAR
1.11	11.1	.66	7.48	10.3	N/A	1023	180	CLOUDY
1.48	10.9	.61	7.54	N/A	N/A	1025	N/A	CLOUDY
1.85	11.4	.58	7.56	NA	N/A	1027	N/A	CLOUDY
2.22	11.0	.57	7.56	9.5	N/A	1030	243	CLOUDY

PURGE VOLUMES & RECHARGE
ACTUAL PURGED VOLUME (GALLONS) = _____ PURGED DRY? (Y/N) = _____
90% OF IC = 0.9 x IC (OR AC) = 0.9x _____ = _____
10 MINUTE WATER LEVEL RECOVERY TIME START _____ TIME STOP _____
ER = ESTIMATED 30 MINUTE RECHARGE = (TD – 10 MINUTE WD) x 3 = (_____ – _____) x 3 = _____
DEPTH TO WATER PRIOR TO SAMPLING _____ VOLUME _____ TIME _____ DATE _____
DEPTH TO WATER PRIOR TO SAMPLING _____ VOLUME _____ TIME _____ DATE _____
2nd 10 MIN RECHARGE ER = (_____ – _____) X 3 = _____
3rd 10 MIN RECHARGE ER = (_____ – _____) X 3 = _____ CHECKED BY _____

ADMIN RECORD

A-OU02-000184

INTERNATIONAL TECHNOLOGY CORPORATION

ROCKY FLATS PLANT
GROUND WATER SAMPLE COLLECTION LOG
CONTINUED

PROJECT NAME. Quarterly Ground Water Sampling SAMPLE NO. GW 0 2 0 8 4 IT
PROJECT NUMBER: 304902. 2 4 . 0 1 0 1 WELL I.D: 05291

EQUIPMENT TYPE	EQUIPMENT ID#	STANDARD USED	EQUIPMENT READING	TEMPERATURE	DATE	TIME
PH	9010118997	4.0/7.0	4.00/7.05	13.9/13.3	12/5/91	1001
COND	8912023464	1.00	.99	13.7	12/5/91	1002

SAMPLE METHOD – TYPE USED:
- ☒ PUMP ☒ PERISTALTIC
- ☒ BAILER ☒ TEFLON
- ☐ OTHER _____

PH OFFSCALE NO
- ☐ ~~YES TOTAL ALKALINITY _____ x 10 _____ ppm AT _____ pH~~
- ☐ NO TOTAL ALKALINITY (FULL RANGE) 204 ppm AT 5.19 pH

TEMP (°C)	pH (SU)	CONDUCTIVITY (mx/cm)	DO (mg/L)	DATE	TIME	TURBIDITY (FTU)	INITIALS
11.0	7.56	.57	9.5	12/5/91	1030	243	RPC

ANALYSIS	PARTIAL / FULL	RAD	VOA	INORG.	NITRATE	a.d. + /	/ / / /	DISS. METALS	TOTAL METALS	Pu/Am	TRIT	/ / / / Pu	/ / / / Am	Cs, Sr	CYANIDE	ORTHO-PHOS-PHATE	RAD ISO OTHER
BNA PCB	VOLUME	100 ml	(2) 40ml	1 LITER	250 ml	1 LITER	GAL	1 LITER	1 LITER	GAL	100 ml	GAL	GAL	GAL	1 LITER	250 ml	
PEST	PRES.				H_2SO_4	HNO_3	HNO_3	HNO_3	HNO_3	HNO_3		HNO_3	HNO_3	HNO_3	NaOH		
	/ / / /					FILTER	FILTER	FILTER						FILTER		FILTER	
12/5 12/5	DATE	12/5/91	12/5	12/5	12/5		12/5	12/5	12/5		12/5	12/5	12/5		12/5	12/5	12/5
1044 1046	TIME	1006	1041	1048	1050		1147	1212	1216		1217	1330	1330		1402	1214	1042
NO OF BOTTLES			2	1	1		1	1	1		1	1	1		1	1	1

COMMENTS _____

PRINT NAME RON DARNELL
SIGNATURE Ron Darnell