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SANDIA CORPORATION
SANDIA BASE, ALBUQUERQUE, N. M.

Ref. Sym: 5110 (100)

[redacted] RG

326 US ATOMIC ENERGY COMMISSION

Location SNL Roll # 1382
Collection Central Tech. Files
Folder O-1 IVY
(3rd Folder)

Air Force Cambridge Research Center
230 Albany Street
Cambridge 39, Massachusetts

Attention: Miss Edna Ruth Bargfield

For: Mr. Norman A. Haskell

Subject: Preliminary Data on IVY Air Shocks

Enclosed are subject data taken by the Sandia Corporation group and supplied with the hope that you may employ these results meaningfully in preparing your reports and interpreting your data.

Arrival times to specified (ground level, not slant) distances are probably as accurate now as they ever will be. Peak overpressure values and durations of positive phases may get slightly different final values after we have the opportunity of reviewing the played-back records more closely.

On the King shot you will note quite large differences between data taken on the gages placed over the reef (so-called "water line") and over land. There was evidently a good "precursor" of the type described in WT-501.

CLASSIFICATION CANCELLED
BY AUTHORITY OF DOE/OC
[signature] 11/30/89
REVIEWED BY J. Diaz DATE 3/15/89

BEST AVAILABLE COPY

Everett F. Cox, Manager
Weapons Effects Department

EFC:es

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INVENTORIED 2510 JAN 8 '54

INVENTORIED MAR 7 '55 4162

CDL No.	
ACCOUNTABILITY CARD	✓
FILE No.	O-1 Ivy

CENTRAL M & R CONTROL NO. Q ~~[illegible]~~ (516)

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MIKE SHOT

Ref. Sym: 5110 (100)

Island	Station	Distance (ft)	Peak (psi)	Arrival Time (sec)	T + (sec)	Type of gauge	Notes
Bogon	615.02	8,250		1.379			
Engebi	611.01	15,900	17.46	5.18	3.81	SOB	
			20.26	5.18	3.91	PS	
Muzin	612.02	21,412	12.10	8.70	5.96	SOB	
			12.27	8.81	5.85	PS	
Aomon	611.04	47,574	2.68	28.86	8.86	SOB	
			2.60[a]	28.87	9.53	PS	
Runit	613.02	74,884	1.32[a]	51.19	12.73	SOB	0.72 sec rise time
			1.24[a]	51.19	12.87	PS	0.76 sec rise time
Parry	612.01	114,240	0.46[a]	83.27	15.51	SOB	1.6 sec rise time
			0.66[a]	83.32	14.50	PS	1.55 sec rise time
	USS Estes	185,400		145			

[a]Value taken from Brush record; all other P_{max} taken from IBM

SOB - side-on baffle; PS - pitot tube

KING SHOT

	Water Line	Ground Distance (ft)				
Runit	617.01	3,034	88.85	0.880		Gauge broke off
	617.02	3,533	64.60	0.965		Gauge broke off
	617.03	4,531	40.59	1.420	1.05	
	617.04	5,531	24.57	1.930	1.11	
	617.05	6,530	19.83	2.515	1.67	
	617.06	7,529	15.44[a]	3.130		Cable broke
	617.07	10,529	7.10	5.190	1.95	
	617.08	15,494	3.75	8.970	3.05	
Parry	612.02	55,132	0.33	38.76	5.05	
	Land Line					
Runit	6101.01	3,458	62.31	0.800	1.23	T_a (main shock) = 0.96; $T(P_{max})$ = 1.01
	6101.02	5,490	16.26	1.755	1.54	T_a (main shock) = 1.845; $T(P_{max})$ = 1.925
	6101.03	7,502	11.36[a]	3.080	1.76	Wave starting to clean up; $T(P_{max})$ = 3.22
	6101.04	10,188	8.54	4.940	1.95	~0.04 sec rise time; 1414 psi initial pressure

[a]Value taken from Brush record instead of IBM run