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CRUISE										LINE										AREA-PROJECT										DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
JG 29-2										GWA-18										Guatemala										16 JUNE 78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP		REC.		FLD		REP.		WATER		REL FIRE		CONTINUITY				REMARKS				OB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	DPTH	(Fm)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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[illegible]

CRUISE IG 29-2				LINE GUA-18		AREA-PROJECT														DATE 16 JUNE 78																
	TIME				REEL					SH. PT				RECORD NO.					STRMER DEPTH						GAIN (db)			TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT									
01	1	8	3	4	2	9	2	0	1	0	1	2	4	6	2	3	4	5	start 2 mil						12	24	20					F/S new data at 2 mil				
02	1	8	5	1	2	9	2	0	1	0	1	2	9	8	2	4	3	1															L/S			
03	1	8	5	2	2	9	2	0	1	1	1	3	0	2	2	4	3	2	84 64 - 93 86 66 0 FAST 90						12	24						F/S monitor				
04	1	8	5	3							1	3	0	5	2	4	3	5							2176							change trip				
05											1	3	4	3	2	5	0	3							0							"				
06											1	3	4	4	2	5	0	3							2176							"				
07	1	9	1	0							1	3	5	5	2	5	1	7														LS				
08	1	9	1	2	2	9	2	0	1	2	1	3	6	0	2	5	2	0														FS				
09											1	3	6	3	2	5	2	3							1952							change trip				
10											1	3	8	9	2	5	5	5	48																	
11											1	3	9	3	2	5	6	1	Trip delay DELAY only													change trip				
12											1	3	9	6	2	5	6	4							2016							change trip				
13											1	4	0	4	2	5	7	4							1984							change trip				
14	1	9	3	0							1	4	1	2	2	6	0	4							2208							LS				
15					2	9	2	0	1	3	1	4	1	6	2	6	0	5														FS				
16																									2720			AUTO	mod			change trip				
17											1	4	6	0	2	6	6	1	82 60 - 94 85 530 Fast 90						12	24	20					change initial gain				
18	1	9	4	8							1	4	6	8	2	6	7	1														LS				
19																			Change to 4 1/2 mil data																	
20	1	9	4	9	2	9	2	0	1	4	1	4	7	2	2	6	7	2	start 4 mil data													FS 4 mil data				
21											1	4	7	4	2	6	7	4														monitor				
22											1	4	8	7																		missed shot				
23											1	4	8	8	2	7	1	1														continue				
24											1	5	1	8	2	7	4	6							3040											

MAX PULSE

CRUISE				LINE				AREA-PROJECT																DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
IG-29-2				GUA-18				GUATEMALA																16 June 78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES		CONTINUITY OR LEAKAGE				REMARKS				OB INIT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	RATE	DPH	Fm	TIMES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

CRUISE				LINE				AREA-PROJECT				DATE																																															
1629-7				GUA-18				Guatemala				June 17, 1978																																															
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.				REC. LGTH				FLD				REP. RATE				WATER DPTH (Fm)				REL FIRE TIMES				CONTINUITY OR LEAKAGE				REMARKS				OB INIT			
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6				INIT RATE FINL				DEL.				LGTH				FLD				RATE				DPTH				TIMES															
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	REMARKS	OB	INIT													
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	LS Short Rec															
0	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	FS																
0	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	Monitor																	
0	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	LS																		
0	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	FS Monitor																			
0	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	DUD																				
0	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	LS																					
0	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	FS-Monitor																						
0	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	DUD																							
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL	FIRE	TIMES	CONTINUITY	OR	LEAKAGE	LS														
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	REP.	RATE	WATER	DPTH	(Fm)	REL																					

CRUISE				LINE GUA-20, 21, 22																AREA-PROJECT																DATE									
IG29-2				Sonobuoys 6-9																Guatemala																17 June 78									
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES		CONTINUITY OR LEAKAGE				REMARKS				OB INIT	
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6				INIT RATE FINL				DEL.		LGTH		FLD		RATE		DPTH		TIMES		OR LEAKAGE									
0	1	1	5	3	4	3	9	2	0	3	6	5	7	1	1	4	0	2	4	END Sonobuoy # 7																		LS END LINE GUA-20							
0	2	1	7	2	2	3	9	2	0	3	6	5	6	8		1	0	2	5	BEGIN LINE GUA-21				12														FS							
0	3	1	7	2	3	3	9	2	0	3	6	5	7	0		1	0	2	7																	FS - Sonobuoy 8									
0	4	1	7	4	4	3	9	2	0	3	6	6	0	7		1	0	7	5																	Monitor									
0	5	1	7	5	9	3	9	2	0	3	6	6	3	7		1	1	3	3																	LS									
0	6	1	8	0	1	3	9	2	0	3	7	6	4	0		1	1	3	4																	FS									
0	7	1	8	0	2	3	9	2	0	3	7	6	4	1		1	1	3	5																	Monitor									
0	8	1	8	3	3								3	7		7	0	1	2																	LS									
0	9	1	8	3	7								3	7		7	0	8	2																	FS									
1	0												7	1	3		1	2	3																	change sword length									
1	1	1	9	0	3								3	7		7	5	7	7																	LS									
1	2	1	9	0	4								3	8		7	5	9	0																	FS									
1	3	1	9	0	5								3	8		7	6	0	1																	Monitor									
1	4	1	9	5	0								3	8		8	4	7	6																	LS									
1	5	1	9	5	1								3	9		8	4	8	7																	FS									
1	6	1	9	5	2								3	9		8	5	1	2																	Monitor									
1	7												8	6	1																					Missed Shot									
1	8	1	9	5	9								8	6	2		1	4	4	4																	continue								
1	9	2	0	0	0								8	6	4		1	4	4	6																	LS SB 8								
2	0																																			}									
2	1																																			Testing Sonarlet									
2	2	2	0	4	8								9	5	4		1	4	5	1																	FS change amp 22 = ph 4.5								
2	3	2	0	4	9	2	9	2	0	3	9		9	5	6		1	4	5	3																	FS change amp 23 = ph 4.6								
2	4	2	1	0	5								9	5	5		1	5	1	0																	FS SB 9 phone 47ng								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	6	3	2	3	4	5	6	30	FAST	90	1064	12	32	MAXI				monitor						

CRUISE 16-29-2				LINE GUA-25 Sonobuoy 12-14				AREA-PROJECT GUATEMALA												DATE 18-6-78																
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4										5	6	INIT
01	05	49			29	20	44				19	67	25	11																					FS continue	
02	05	50									19	69	25	13																				Sonobuoy 12 FS		
03	05	51			29	20	44				19	72	25	16	80	80	20	55	54	50	30	fast	90	4064	12	12	32	1870	Mini-pulse				monitor			
04	55	58			35						19	85	25	38																				problems with bundle		
05											19	88																								
06													25	32																					no shot	
07													25	33																					no shot	
08													25	34																					no shot	
09													25	35																					no shot	
10													25	36																					no shot	
11													25	37																					no shot	
12													25	40																					no shot	
13	06	07									20	01	25	41																					continue	
14											20	02																							problems	
15													25	42																					as shot	
16													25	43																					no shot	
17													25	44																					no shot	
18													25	45																					no shot	
19					29	20	44						25	46																					4/5	
20	06	22						45	20	30			24	47																					FS Restart Tx	
21	06	24						45	20	33			25	52	78	58	28	97	56	30	fast	90	4064	12	12										Sonobuoy 13 3rd - Monitor	
22	67	21									21	39	27	24																					4/5	
23					29	20	46				21	43	27	25																					FS monitor	
24	07	24									21	46	27	30																					begin Sonobuoy 14	

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Guatemala - Sonobuoy

DATE _____

18 June 78

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CRUISE				LINE				AREA-PROJECT				DATE																																	
IG29-2				CVA-27 Sonobuoys				Guatemala - Sonobuoys				18 June 78- 19 June 78																																	
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES		CONTINUITY OR LEAKAGE				REMARKS				OB INIT	
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6				INIT		RATE		FINL																					
01	21	07		29	20	54	33	87		44	46	23	5	5	4	18	FAST	90	672	12	12	32	70	MAXI										change trip											
02	21	10					33	91		44	52								1024															"											
03	21	27				54	34	25		45	13																							LS											
04	21	28	29	20	55		34	26		45	14											74												FS											
05	21	29				55	34	27		45	15	35	89	56	55	45																		Monitor											
06							34	93																											missed ?										
07							34	94		46	17																							continue											
08	22	25	29	20	55		35	33		46	66																							LS											
09	22	26				56	35	36		46	67																							FS	Bad Shot										
10	22	27				56	35	37		46	70											150												Monitor											
11	22	40				56	35	60		47	17																							LS Sonobuoy 18											
12	22	40				56	35	61		47	20																							FS Sonobuoy 19											
13	22	57	29	20	56		35	91								24	FAST	90		12	12	32												missed shots, begin											
14	22	59					35	97		47	56																							continue											
15	23	27	29	20	56		36	49		50	42																							LS											
16			29	20	57		36	52		50	43	8	5	38	6	48	39	24	FAST	90		12	12	32	360	MAXI								FS											
17	00	22					37	53		52	07																								LS Sonobuoy 19										
18	00	23	29	20	57		37	55		52	11																							FS Sonobuoy 20											
19		26				57	37	59		52	13																							LS											
20	00	27	29	20	58		37	61		52	14																							FS											
21	00	28				58	37	63		52	16																							Monitor											
22	00	33				58	37	73		52	32																							LS Sonobuoy 20											
23	00	34				58	37	75		52	35																							FS Sonobuoy 21											
24	00	45				58	37	75		52	60																							LS Sonobuoy 21/FS 22											

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END GUA-29
BEGIN GUA-30

CRUISE				LINE				AREA-PROJECT				DATE																			
IG 29-2				GUA 30				Guatemala				19 June 78																			
	TIME	REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20										1
01	1510	29	20	72	16	34								30	60	90	0	10	24	20	39								changed trip delay		
02	1523				16	77								21	44														LS		
03	1524	29	20	73	16	80								31	45	22	23	20											FS monitor		
04	1606	29	20	73	18	06								33	43						39								LS short		
05	1609	29	20	71	18	09								33	44	39													FS monitor		
06					74	19	32							35	37														LS short record		
07					19	34								35	40														FS (bad record?)		
08					19	35																							missed shot		
09	1649	29	20	75	19	36								35	41	60					39								monitor		
10	1731				20	02								37	40														LS		
11	1733	29	20	76	20	05								37	41														FS (- bad record?)		
12					20	07								27	13	61					40								monitor		
13	1815	29	20	76	21	94								41	42														LS		
14	1816				21	96								41	43														FS		
15	1819				77	22	07							41	56														monitor		
16					77	23	25							43	44														LS		
17	1900				78	23	27							43	45						38								FS monitor		
18	1904					23	46							43	62														changed trip delay		
19	1941				78	24	53							45	43														LS		
20	1941				79	24	55							45	44														FS monitor		
21																													shot missed?		
22	1952					24	82							46	76						71								continue		
23	2024				79	25	83							47	42														LS		
24	2025				80	25	85							47	43	85	63				75								FS monitor		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20										

CRUISE				LINE				AREA-PROJECT																DATE										
IC 29-2				GUA 30-31				Guatemala																19 June 1978										
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4										5
01					29	20	80				26	74			55	74					30	fast	90	0	10	24	20							
02																																		
03	2	0	5	5							26	75			50	75																		
04	2	1	0	8							27	12			51	41					END LINE GUA -30													LS
05	2	1	0	9	29	20	81				27	15			51	42					BEGIN LINE GUA -31													FS monitor
06	2	1	5	1			81				28	41			53	41																	LS	
07	2	1	5	2	29	20	82				28	46			53	42	85	62	-9-9384														FS / Monitor	
08											28	94			54	22																	Missed Shots	
09	2	2	3	4	29	20	82				29	72			55	36																	LS	
10	2	2	3	5			83				29	76			55	37																	FS	
11	2	3	3	6			83				29	77			55	40																	Monitor	
12	2	3	1	7	29	20	83				31	01			57	33																	L/S	
13	2	3	1	8	29	20	84				31	05			57	34																	F/S airgun	
14	2	3	1	9			84				31	06			57	35	80	60	-847.50	30	fast	90	0	10	24	20	55	-21	01	01			MONITOR fire control problems	
15	00	0	1		29	20	84				32	33			61	34																	many random fires	
16	00	0	2				85				32	36			61	35																	FS Missed Shot	
17	00	0	3				86				32	38			61	37																	Monitor	
18											32	46																					Missed Shot	
19											32	83			62	13																		
20	00	4	5		29	20	85				33	63			63	32																	LS	
21					29	20	86				33	65			63	33																	FS short record	
22											33	67			63	34																	monitor	
23											33	93																					Missed Shot	
24	01	2	7		29	20	86				34	90			65	26																	LS	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20														

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CRUISE				LINE				AREA-PROJECT																DATE										
IG-29-2				GUA-32																				20 JUNE 78										
TIME	REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20										1	2	3	4	5
01	05	53	29	20	93	4	28	7	01	15					24	FAST	90	-	10	04	20	270	-	29	22	22				FS, monitor				
02	6	38				4	39	2		26	4																				1/5 live GUA-32			
03	6	58				4	39	3		26	5																				FS LINE GUA-33			
04	6	38			93	4	41	9		31	8																				LS			
05			29	20	94	4	42	4		37	9																				FS			
06	6	41	29	20	94	4	43	1		32	7	8	5	7	-	6	8	5				132									Monitor			
07	7	20				4	54	9		51	4																				LS			
08	7	21	29	20	95	4	33	2		51	6											65	22	23	22						FS Monitor			
09	8	08				4	68	6		71	3																				LS			
10	8	07	29	20	96	4	68	8		71	4											65	22	23	22						FS Monitor			
11	08	49				4	81	5		11	13																				LS			
12	08	50	29	20	97	4	81	8		11	14	8	5	6	-	1	8	9	6	24	FAST	90	0	10	24	20	62	-	23	23	22	FS, monitor		
13						4	82	6		11	22																					NO T/B		
14	09	33	29	20	97	4	94	7		13	12																					LS		
15		33	29	20	98	4	94	9		13	13	8	5	5	-	7	9	6	24	fast	90	0	10	24	20	65	22	24	23			FS Monitor		
16	10	15			98	5	07	4		15	09																					LS		
17	10	16	29	20	99	5	07	7		15	11	8	5	5	-	9	9	6	24	fast	90	0	10	24	20	65	23	24	23			FS Monitor		
18	10	58				5	20	3		17	06																					LS		
19	10	57	29	20	100	5	20	5		17	07	8	5	6	-	1	0	0	6	24	fast	90	0	10	24	20	68	22	25	24			FS Monitor	
20	11	41			100	5	33	1		21	05																					LS		
21	11	42			101	5	33	3		21	06	8	5	6	-	6	10	8	6	24	fast	90	0	10	24	20	69	25	24	24			FS	
22	11	24			101	5	45	9		23	03																					LS		
23	11	25			102	5	46	3		23	04	9	5	8	-	7	5	7	24	FAST	90	0	10	24	20	70	26	24	23			FS MONITOR		
24	13	67	29	21	102	5	57	0		25	03																					LS	Start rec	

CRUISE				LINE				AREA-PROJECT																DATE																								
JG 272				GUA 33																				20 June 1978																								
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES			CONTINUITY OR LEAKAGE				REMARKS				OB INIT							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4						5	6	INIT	RATE	FINL														
01	1	3	0	8	2	9	2	1	0	3	5	5	7	2	2	5	0	4	8	2	5	1	-	9	3	9	6	7	24	Fast	70	0	10	24	20	70		22	23	23					FS	Monitor		
02	1	3	4	9	2	9	2	1	0	3	5	7	1	8	2	7	0	8	0	5	7	-	9	2	9	7	1									24	23	23					LS					
03	1	3	5	0	2	9	2	1	0	4	5	7	2	0	2	7	0	3																	70	23	23	24					FS	Monitor				
04	1	4	3	3	2	9	2	1	0	4	5	8	4	8	3	1	0	3																		23	23	23					LS	short				
05	1	4	3	4	2	9	2	1	0	5	5	8	5	1	3	1	0	4	8	5	-	9	2	9	7	4								70	23	23	23					FS	monitor					
06	1	5	1	6	2	9	2	1	0	5	5	9	7	7	3	3	0	2																	23	22	23					LS	(short rec.)					
07	1	5	1	7	2	9	2	1	0	6	5	9	7	9	3	3	0	3	8	1	6	1	-	9	4	0	5							70								FS						
08	1	5	5	9	2	9	2	1	0	6	6	1	0	5	3	5	0	1																									LS					
09					2	9	2	1	0	7	6	1	0	7	3	5	0	2																										FS				
10											6	1	0	8																														FS	- Not good			
11	1	6	0	0	2	9	2	1	0	7	6	1	0	9	3	5	0	3	7	5	0	-	8	0	0	3								69								lost shot						
12	1	6	4	2						0	7	6	2	3	4	3	7	0	0																		29	22	22					LS	short record			
13	1	6	4	2						0	8	6	2	3	6	3	6	7	1	7	0	5	-	7	5	9	3							66								FS	monitor					
14	1	7	2	4	2	9	2	1	0	8	6	3	6	2	4	0	7	7																		28	23	22					LS	short				
15	1	7	2	5	2	9	2	1	0	9	6	3	6	4	4	1	0	0																70	32	24	23					FS	monitor					
16	1	8	0	8	2	9	2	1	0	9	6	4	9	2	4	3	0	0	7	9	5	6	-	7	5	3	5									28	22	24					LS					
17	1	8	0	8	2	9	2	1	1	0	6	4	9	4	4	3	0	1																71	28	22	24					FS	monitor					
18	1	8	5	1	2	9	2	1	1	0	6	6	2	1	4	5	0	0																									LS	short				
19	1	8	5	2	2	9	2	1	1	1	6	6	2	3	4	5	0	1	8	0	5	-	8	5	3	9	24	Fast	50	0	10	24	20	70	-	80	28	80					FS	monitors				
20	1	9	3	5	2	9	2	1	1	1	6	7	5	2	4	7	0	2																		19	22	18	-					LS				
21	1	9	3	5	2	9	2	1	1	2	6	7	5	4	4	7	0	3	7	5	9	-	7	4	5	3								110	18	19	18	-				FS	monitor					
22	2	0	1	7						12	6	8	8	1	5	1	0	2																		24	29	23					LS	- Spraying				
23	2	0	1	8						13	6	8	8	3	5	1	0	3																170	26	80	-					FS	monitor					
24	2	1	0	2						13	7	0	1	1	5	3	0	3																		17	21	19	-					LS				

[illegible]

[illegible]

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CRUISE				LINE	AREA-PROJECT	DATE																																	
IG 29-2				TR M-1/2	Guatemala	6-21-78/6-22-78																																	
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH						GAIN (db)			TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES				CONTINUITY OR LEAKAGE				REMARKS	OB INIT
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6						INIT RATE FINL																	
01 2330				292148				3800				7166				7481-544940						30 fast 90			0	10	12	27	23	80802426								ES / Monitor	
02 0027				48				3925				7363																	22	23802323								LS	
03 0028				292149				3928				7364				8061-845131														22802323								FS / Monitor	
04 0046				49				3967				7432										End Line			TR M-1													LS	
05 0049				49				3968				7433										Begin Line			TR M-2													FS	
06 0125				292149				4054				7561																		80808080								LS	
07 0126				292150				4057				7562																		80801718								FS	
08 0128				50				4060				7565																	24	80801220								Monitor	
09								4132																															
10								4133				7675																										missed shot	
11 0226				292150				4188				7761																		80801718								continue	
12 0227				51				4190				7762																	28	11801420								LS	
13 0324				292151				4316				1160																										FS / Monitor	
14 0325				52				4319				1161				8055-405134													31	24802526								LS	
15 0424				52				4444				357																		25802526								FS / Monitor	
16 0425				292153				4452				360																	43	21802180								LS	
17 0428				53				4457				365																		20802180								FS	
18 0521				53				4578				556																		26802480								Monitor	
19 0522				292154				4580				557				75-8539						30 FAST 90			0	10	12	27	65	21802280								LS	
20 0619				292154				4705				754																		22802380								FS / Monitor	
21 0619				292155				4706				755										30 FAST 90			0	10	12	27	80									LS	
22								4710				7471																		20-21-								ES Monitor	
23								4711				757																										missed shots	
24 0719				292155				4840				1154																										continue	
																																						LS	

New line

[illegible]

CRUISE				LINE				AREA-PROJECT																DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
IG29-2				TRM-4				Mexican Shelf / Oaxacan Slope																6/23/78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES				CONTINUITY OR LEAKAGE				REMARKS				OB INIT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6				INIT		RATE		FINL		DEL.		LGTH		FLD		RATE		DPTH		TIMES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
01	01	53		29	7	1	7	5		73	1	5		57	5	2		74	3	3	-	90	6	5	4	30	Fast	90	0	10	12	27	127	23	80	19	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

[illegible]

End Line TRM-5
Begin Line TRM-6

END TERM-b

[illegible]

CRUISE				LINE				AREA-PROJECT				DATE																										
IG-29-2				Sonobuoy 25 MX 3				Oaxaca				24 June 1978																										
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4										5	6	INIT	RATE	FINL
01	1	1	5	2	2	9	2	2	2	0	2	1	9	2	4	1	5	2	4	6	3	0	4	0	1	5	3	6	1	0	2	0	12	40	FS Monitor			
02											2	2	7	6																					missed shot			
03	1	8	3	6	2	9	2	2	2	0	2	3	2	6																					LS Short			
04	1	8	3	7	2	9	2	2	2	1	2	3	2	8																					FS Monitor			
05	1	9	1	8	2	9	2	2	2	1	2	4	5	4																					LS			
06	1	9	1	9	2	9	2	2	2	2	2	4	5	6																					LS monitor			
07	1	9	2	3							2	4	6	9																					- Lost Shot line MX 3			
08											2	5	0	5																					- Guns went bad around here			
09	2	0	0	2	2	9	2	2	2	2	2	5	8	4																					LS Short			
10	2	0	0	3	2	9	2	2	2	3	2	5	8	6																					FS Monitor			
11	2	0	0	8							2	6	0	4																					Δ rep rate			
12	2	0	1	1							2	6	1	0																					continue after missed shots			
13	2	0	2	5							2	6	4	1																					continue after many missed shots			
14																																				← missed shots		
15	2	0	4	9							2	6	9	6																					* guns almost			
16	2	0	5	0	2	9	2	2	2	3	2	7	0	0																					Lost alot of shots before this point			
17	2	1	0	4	2	9	2	2	2	3	2	7	3	0																					are prelo			
18	2	1	0	5	2	9	2	2	2	4	2	7	3	2																					LS Short			
19											2	7	3	5																					FS monitor			
20																																				missed?		
21	2	1	2	0							2	7	6	9																								
22											2	8	1	6																						MX-4 line START		
23	2	1	4	4	2	9	2	2	2	4	2	8	2	5																						TRIP Delay		
24	2	1	5	1	2	9	2	2	2	4	2	8	4	0																						Sonobuoy 25 FS		
																																					LS 5625 / FS 5626	

[illegible]

[illegible]

CRUISE				LINE				AREA-PROJECT																DATE												
IG 29-2				MX-6				Oaxaca																25 June 78												
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES				CONTINUITY OR LEAKAGE	REMARKS	OB INIT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4						5	6	INIT	RATE			
01	10	41			29	22	36			00	01																							START OF LINE MX-6		
02	11	00					36				57																							L/S		
03	11	02			29	22	37			00	60																							F/S - Monitor		
04					29	22	37				177																							L/S		
05	11	40			29	22	38				180																							F/S - Monitor		
06	12	13					38				278																								Δ trip delay	
07	12	19			29	22	38				296																							L/S		
08	12	21			29	22	39				302																							F/S Monitor		
09							39				326																								NO TB missed shots?	
10	12	30					39				327																								CONTINUE	
11	12	59			29	22	39				420																								L/S	
12	13	00					40				423																								F/S	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																
13	13	40					40				537																									
14	13	40			29	22	41				539																								LS - Short	
15	14	18			29	22	41				634																								FS monitor	
16	14	19					42				657																								LS	
17	14	59					42				774																								FS - monitor	
18	15	00			29	22	43				777																								LS Short	
19	15	38					43				892																								FS monitor	
20	15	39					44				895																								LS	
21	15	41					44				902																								FS monitor	
22	16	19					44				1002																								Δ rec. length	
23	16	19					45				1004																								LS	
24	16	39									1675																								FS monitor	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20															LS MX-6	

Shot and
counter
Sick

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

[illegible]

CRUISE				LINE				AREA-PROJECT				DATE																															
IG29-2				MX-9, SB-28				Oaxaca				Note Bubble #1 gain reduced to 6db Use #2 Bubble																															
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES		CONTINUITY OR LEAKAGE		REMARKS.		OB INIT			
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20				1 2 3 4 5 6				INIT		RATE		FINL																			
01 0515				292265				1				159				1068				40		Fast		90		2048		11		24		20		1740		-MAXI-		F/S Monitor					
02				265				6				6								36																		chg INIT GAIN					
03 0520				265				15				17								30																		chg INIT GAIN					
04 0527				265				36				44																										SB #28 F/S					
05				265				77				115																										LS SB #28					
06 0541				265				78				116																										FS SB #29					
07 0555				292265				119				167																										LS					
08 0556				292266				122				170				756				-7896		30		Fast		90		2048		11		24		20		1740		-MAXI-		FS monitor			
09				266				147				221																										Dummy					
10				266				148				222																										CONTINUE					
11				292266				240				356																										L/S					
12 636				292267				243				357								30		Fast		90		2048		11		24		20		1890				F/S MONITOR					
13 0714				292267				357				541																										LS					
14 0715				292268				360				542				756				-7996		30		Fast		90		2048		11		24		20		1760		MAXI		FS monitor, noted			
15				292268				475				725																										LS problem w/ Bubble #1, reduced gain to 6db					
16 0754				292269				478				726				856				-109870		30		Fast		90		2048		11		24		20		1960		MAXI		FS			
17 0800								495				747																										Top. Malfunction - Missed Shot					
18												1036																										Charge bubble 1 gain to 0db					
19 0830				292269				584				1077																										LAST SHOT		MX-9, SB-28			
20 0917				69				725				1100																										First Shot		MX-10			
21 0918				69				729				1104																												FS continue			
22 0920				292269				735				1112																										SB - 30 FS					
23 0922				292270				740				1113				756				-7896		30		Fast		90		2048		11		24		20		1860		-MAXI-		L/S			
24				70				854				1275																										FS - Monitor					
1 2 3 4				5 6 7 8 9 10				11 12 13 14				15 16 17 18 19 20																										L/S					

← LAST SHOT → MX-9, SB-28
 ← First Shot → MX-10

CRUISE				LINE				AREA-PROJECT												DATE																																							
2629-2				MK-10/11				OZZACA												26 June 78																																							
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4										5	6	INIT	RATE	FINL																					
01	1	0	0	0	2	9	2	2	7	1	8	5	7	1	2	2	6	6	0	6	3	0	FAST	90	2048	11	24	30	1740	-MAXI-									F/S MONITOR																				
02					2	9	2	2	7	1	9	7	5		1	4	6	4																						L/S																			
03	1	0	4	0	2	9	2	2	7	2	9	7	7		1	4	6	5	8	6	1	30	FAST	90	2048	11	24	30	1460												F/S MONITOR																		
04	1	1	2	0						7	2	1	0	9	4		1	6	5	2																					L/S																		
05	1	1	2	4	2	9	2	2	7	3	1	0	9	7		1	6	5	3	8	6	0	30	FAST	90	2048	11	24	20	1555	-MAXI-											F/S Monitor																	
06	1	2	0	0						7	3	1	2	1	2		2	0	3	6																						LS																	
07																																												End of Line, End Reel															
08																																																											
09	1	5	3	2	2	9	2	2	7	4	0	0	0	1		0	0	0	1																																								
10	1	5	3	3										4		4	7	5	1	9	7	3	5	30	Fast	90	256	11	24																	F/S - MX - 11													
11														1	8	0		1	2	0																										monitor, a trip delay													
12														9	3			1	3	4																										used to													
13	1	6	0	7																																												a trip delay											
14	1	6	1	1	2	9	2	2	7	4				1	1	6		1	6	3																											a trip delay												
15	1	6	1	2	2	9	2	2	7	5				1	1	9		1	6	4	9	5	9	8	5	9																						LS											
16																																																	FS monitor										
17	1	6	5	1	2	9	2	2	7	5				2	1	7		3	2	6																													a trip delay										
18	1	6	5	2	2	9	2	2	7	6				2	3	9		3	5	1																													LS										
19																																																				FS Monitor							
20	1	7	3	1	2	9	2	2	7	6				2	4	9		3	6	4																													a trip delay										
21	1	7	3	1	2	9	2	2	7	7				3	5	8		5	3	7	6	5	6	8	4	5	4																						LS										
22	1	7	3	5																																															FS monitor								
23	1	8	1	0	2	9	2	2	7	7				4	7	4		5	5	3																															FS SB-31								
24	1	8	1	1	2	9	2	2	7	8				4	7	7		7	2	4	7	5	2	9	6	5	3																								LS								
																																																									FS monitor		

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[illegible]

CRUISE				LINE				AREA-PROJECT														DATE																		
IG29-2				MX-14				MEXICO / MAXIPULSE														27 JUNE 78																		
	TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)			TRIP DEL.	REC. LGTH	FLD	REP. RATE	WATER DPTH (Fm)	REL-FIRE TIMES	CONTINUITY OR LEAKAGE	REMARKS	OB INIT								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3										4	5	6	INIT	RATE	FINL		
01	06	05			29	22	90				1				1	8	64	-	79	65						30	FAST	90	0	11	24	20	245	-MAXI-					F/S MONITOR	
02							90				74				11	1																						Bummy		
03							90				75				11	2																						CONTINUE		
04					29	22	90				116				16	4																						L/S		
05	06	45			29	22	91				118				16	5	85	89	-	109	83					30	FAST	90	0	11	24	20	333	-MAXI-					F/S MONITOR	
06	07	22					97				233				35	0																						LS		
07	07	23			29	22	92				235				35	1	84	63	-	69	62					30	FAST	90	0	11	24	20	505	-MAXI-					FS/Monitor	
08											263				40	4																						change delay		
09	0										265				40	6																						change delay		
10	08	03			29	22	92				352				53	5																						LS		
11	08	04			29	22	93				356				63	6											30	FAST	90	2048	11	24	20	900	-MAXI-				FS, monitor	
12	08	43					93				474				72	4																						LS		
13	08	43			29	22	94				476				72	5	97	01	-	102	02					30	FAST	90	2048	11	24	20	1200	-MAXI-					FS - Monitor	
14					29	22	94				590				110	7																							LS	
15	09	22			29	22	95				593				111	0	82	65	-	88	65					30	FAST	90	2048	11	24	20	1312	-MAXI-					FS - MONITOR	
16							95				675				123	1																							DUDE	
17	09	50					95				676				123	2																							CONTINUE	
18	09	56					95				672				123	2																							Chg + Trip DEL.	
19					29	22	95				709				127	3																							LS	
20	10	01			29	22	96				711				127	4	88	58	-	179	63					30	FAST	90	3072	11	24	20	1580	←MAXI→					F/S MONITOR	
21	10	41					96				828				146	1																							LS	
22	10	42			29	22	97				830				146	4	80	59	-	60	88					30	FAST	90	3584										FS MONITOR	
23	11	20					97				947				164	6																							LS - short Record	
	11	21			29	22	98				948				164	7	85	1	-	109	66					30	FAST	90	3584	11	24	20	2120	←MAXI→					F/S - Monitor	

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CRUISE IG29-2				LINE MX-16				AREA-PROJECT Mexico				DATE 28 June 78																															
TIME				REEL				SH. PT				RECORD NO.				STRMER DEPTH				GAIN (db)				TRIP DEL.		REC. LGTH		FLD		REP. RATE		WATER DPTH (Fm)		REL FIRE TIMES		CONTINUITY OR LEAKAGE		REMARKS		OB INIT			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5	6	INIT	RATE	FINL	DEL.	LGTH	FLD	RATE	DPTH	1	2	1	2	REMARKS	OB	INIT			
0	1	09	03	2	9	2	3	2	3	1	0	1	5	1	6	7	4										30	FAST	90	40%	11	24	20							NO, TB CONTINUE APPROX 2.5 SOPS			
0	2									1	0	6	6																											MISSED SHOT			
0	3	0	9	2	1					1	0	6	7																											CONTINUE			
0	4			2	9	2	3	2	3	1	1	1	0																											LS			
0	5	0	9	2	9	2	3	2	4	1	1	1	5														30	FAST	90	40%	11	24	20	2335	20	18	19			FS MONITOR			
0	6									1	2	3	1																											LS			
0	7	1	0	2	9	2	3	2	5	1	2	3	4														30	FAST	90	40%	11	24	20	2150	15	18	19			FS MONITOR			
0	8	1	0						25	1	3	4	8																											LS			
0	9	1	0	2	9	2	3	2	5	1	3	5	2														30	FAST	90	40%	11	24	20	2060	18	19	19			FS Monitor			
1	0	1	1	2	9	2	3	2	6	1	4	6	7																											LS			
1	1																																										
1	2																																										
1	3																																										
1	4																																										
1	5																																										
1	6																																										
1	7																																										
1	8																																										
1	9																																										
2	0																																										
2	1																																										
2	2																																										
2	3																																										
2	4																																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																						