

LS9609 Rio 96 line log
slope 09/2/96

John Anderson's (Rice U.) Gulf of Mexico project.
From RIO '95, '96 binder

Lines:

S1A	S5B	S12A
S1B	S6A	S13A
S1C	S6B	S14A
S1D	S7A	S15A
S2A	S8A	S16A
S3A	S9A	S17A
S3B	S10A	
S5A	S11A	

Starting date: 1996-09-02

Starting latitude, longitude: 26° 41.164' -96° 35.393'

Ending date: 1996-09-04

Ending latitude, longitude: 26° 38.36' -96° 25.47'

Firing Rate: 3s

Geophones: little benthos

Source: 20³in

Time: 20ms

Amp – 1

Hi pass: 0000

Low pass: 1000

Shooting: 3000 ms

Record Length: 2048 ms

2000 Hz

AGC on 3 gain ADL

Line name: Rio 96 - SIA, IB, TC Energy: 20 in J/PSI Tape #: _____
 Descr: Slope, 20ⁱⁿ air gun Firing Rate: 3s Filter: _____
 Date: 9-2-96 Geophones: little bent thru Source: ci

Time 20ms
 Amp: 1
 hipass 0000 200ms
 low pass 1000 2000Hz
 - AGC on 3gm ADL
 Core base line 00001
 using L. Hard #2 p. 1
 Neg reverb
 Pos wiggle
 shot 2 2

Time Gmt	SP/Fix	LAT.	LONG. W	WD ^(m)	Ship spd/dir	Nav. system
1638	00/06	26° 41.164'	096° 35.393'	94	3.9 kt/146°	Trimble SOL SIA
1644	01/125	26° 40.78'	096° 35.23	94	5.0K/156°	Trimble SOL SIA + use
1658	02/460	26° 39.83	096° 34.65	94	5.5K/148°	
1705	Stop running 26° 39	33 46° 34.39	h/k need to shut off compressor - circling back around to			
1931	00/00	26° 41.29' (26.688)	96° 35.57' (96.592)	94	4.99K/140°	SOL SIB
1945	01/275	26° 40.50	96° 35.03	94	4.47/146°	to WP31
2000	02/565	26° 39.65'	96° 34.51	94	4.7/154°	" "
2015	03/870	26° 38.44'	96° 33.84'	94	4.4/143°	" "
2030	04/1175	26° 37.38	96° 29.50 ?	94(?)	4.8/146°	" "
2045	05/	26°	96°	94?		
2058	05/1365	26° 36.73'	96° 32.86'	94?	5.7/136°	@ WP31
2045	06/1470	26° 36.3'	96° 32.55'	94	4.6/142°	to WP32
2100	07/1795	26° 35.24'	96° 31.63'	94?	5.6/132°	to WP32
2115	08/2090	26° 34.24'	96° 30.8'	94?	5.2/131°	to WP32
2116	09/2140	26° 34.11	96° 30.70	94?		@ WP32
2130	10/2380	26° 33.36	96° 29.95	94?	5.7/131°	head to 33
2145	11/2687	26° 32.30	96° 28.83	91	5.9/131°	
2200	12/2978	26° 31.33	96° 27.85	91	5.1/131°	to WP33
2215	13/3283	26° 30.28	96° 26.76	93	5.6/129°	
2230	14/3585	26° 29.28	96° 25.71	93	5.5/128°	
2240(?)	15/3771	26° 28.70	96° 25.10	95	4.8/133°	to WP33
2245	16/3886	26° 28.3	96° 24.83	93	5.4/136°	@ WP33
2300	17/4178	26° 27.19	96° 24.07	92	6.0/147°	
2315	18/	26° 25.90	96° 23.24	92	5.4/143°	to WP34
2330	19/4779	26° 24.82	96° 22.52	92	5.4/142°	EOL SIB + SOL SIA
2334	1/60	26° 24.48	96° 22.32	92	5.7/147°	@ WP34
2344	2/289	26° 23.62	96° 22.28	89	5 ?	
2301	3/615	26° 22.31	96° 21.45	93	5.5/146°	to WP35
0003	4/618	26° 22.13	96° 21.40	94	5.1/ ?	@ WP35

Notes

Test 1 + Test 2 being shot on way to WP30 - ~94m Hz

WP30 Amp on GPC 4th dB no ext amp on Elics

GPC 3d key 0.5 ASCAN

GPC filter 60-1700 Hz

plus 20dB horn

GPC filter 570-1700 Hz

restarting line (repeating some need to edit out in primary)

noise on Elics pretty strong

returning to eol SIA 1953

speeding up to 6.0K

2007 reef

heading to WP32

1/4 mile to WP32

heading to WP33

2127 speeding up

incredible internal structures!

switching compressors

turning to WP34

compare to next 30 min data - any quality?

strong current

for off track + trying to get back on line

*note: WP36 is same as WP35 - now on

Wain L. 11/22

Line name: <u>SIC, D, 2A, 3A</u>	Energy: <u>20th J/PSI</u>	Tape #: _____
Descr: <u>20th 3 am</u>	Firing Rate: <u>3000 ms</u>	Filter: _____
Date: <u>9/02/96</u>	Geophones: <u>little bar/hop</u>	Source: <u>ci</u>

Time	SP/Fix	LAT.	LONG.	WD	Ship spd/dir	Nav. system	Notes
0016	5/942	26° 21.08	96° 21.12	99	4.1/173°	continue SIC	
0033	6/1267	26° 19.70	96° 21.09	92	4.8/178.4°	to WP37	- to WP37, in a depression on SF
0049	7/1576	26° 18.41	96° 21.04	94	5.7/173		
0105	8/1913	26° 16.91	96° 21.02	96	5.4/181		
0112	9/2051	26° 16.31	96° 21.01			@ wp37	I messed up WP38!! reversed lat/long!
0120							generator died
0133	1/165	26° 16.35	96° 20.81	97	6.1/185°	SOL SID	* power went out - turned everything off - starting over at WP37
0150	2/505	26° 14.88	96° 21.19	101	4/191	@ WP37	
0201	3/723	26° 14.15	96° 21.42	101	5.2/180		
0216	4/1035	26° 13.00	96° 21.70	101	5.4/180		- add in WP 44 & 45 (other com print lost)
0230	5/1310	26° 12.02	96° 22.01	101	4.2/179	@ WP38	
0246	6/1622	26° 10.93	96° 22.11	98	5.5/188	- to WP39	
0302	7/1925	26° 9.84	96° 22.23	96	5.3/181		
0314	8/2264	26° 9.78	96° 22.36	98	5.4/180	@ WP39 - starting onto WP40	
0330	9/2520	26° 7.62	96° 22.34	98	4.9/174		
0348	10/2868	26° 6.38	96° 22.35	102	4.8/179		
0403	11/3178	26° 5.19	96° 22.30	102	4.6/178		
0407	EOL SID						
0409	0/6	26° 4.88	96° 22.12	102?		EOL SID SOL	S2A @ wp40
0415	01/111	26° 05.95	96° 21.72	102?	5/094°	head to wp41	compressor
0430	02/400	26° 4.85	96° 20.21	174	5.4/092°	"	0428 ↑ EPC gain to 54dB
0445	03/715	26° 04.87	96° 18.65		5/091°		0436 ↑ EPC gain to 64dB
0500	04/1008	26° 04.79	96° 17.13	295	5.2/087°	to 41	0440 ↑ EPC gain to 64dB
0502	05/1103	26° 04.80	96° 16.65	341	turn	to 41	0.4 nm out from 41
0516	01/211	26° 05.92	96° 16.88	331	6.2/337°	EOL S2A SOL S3A	Elics origin 300ms
0531	02/515	26° 07.55	96° 17.14	320	6.4/335°	to wp42	EPC 300ms delay
0546	03/817	26° 09.20	96° 17.35	407	6.5/348°	to wp42	0517 ↑ EPC gain to 74dB
0556	04/1013	26° 10.26	96° 17.53	403	6.8/351°	"	0542 ↑ EPC gain to 84dB
0615	05/1392	26° 12.40	96° 17.45	~400?	6/352°	@ wp42	compressor
0630	06/1693	26° 14.07	96° 17.30	~400?	5.5/354°	to wp43	anyh!
0645	07/1995	26° 15.76	96° 17.20	~350?	5.2/350°	" "	0553 Elics at to wp 40
0700	08/2297	26° 17.46	96° 17.14	~300?	6.7/351°	to wp43	0607 ↑ EPC gain to 90dB
0715	09/2607	26° 19.25	96° 17.01	~300?	7.0/354°		0610 EPC filter 70ms
0729	10/2876	26° 20.65	96° 16.93	?	6.1/344°	@ wp43	note add or remove
0745	N/3263	26° 22.25	96° 17.30		5.0/349°	to wp44	up side canyon
							showing a little bit
							heading to wp44
							auto pilot stopped → course wiggle

Line name: S3A, S3B, S5A, SB

Energy: J/PSI

Tape #:

Descr: 20m³ slope R1096

Firing Rate: 35

Filter: 50-1700 Hz

Date: 09/03/96

Geophones: Little Benthos

Source: 20 ci Allevage

Time	SP/Fix	LAT.	LONG.	WD(m)	Ship spd/dir	Nav. system	Notes
0800	12/3497	26° 23.78'	96° 17.57'	? ~ 300	5.6 / 340°	to wp 44	~ 8nm away
0815	13/3802	26° 25.32	96° 17.86	? ~ 300	6.0 / 341°	to wp 44	
0830	14/4090	26° 26.83	96° 18.20	? ~ 300	6.5 / 344°	" "	
0845	15/4392	26° 28.29	96° 18.51	? ~ 300	6.5 / 340°	" "	
0900	16/4693	26° 29.99'	96° 18.83'	? ~ 300	6.5 / 343°	sol S3A sol S3B	sol 3A sol 3B
0915	01/290	26° 31.57	96° 19.15'	? ~ 300	6.5 / 344°	to wp 44	
0917	02/337	26° 31.67'	96° 19.18'			@ wp 44	head to wp 45
0930	03/588	26° 33.11'	96° 19.51'	? ~ 300	6.4 / 340°	to wp 45	
0945	04/893	26° 34.69'	96° 19.87'	? ~ 300	6.8 / 332°	" "	data quality improved
1000	05/1193	26° 36.25'	96° 20.32'	? ~ 300m	6.1 / 341°	" "	
1015	06/1495	26° 37.81	96° 20.72'	? ~ 300	6.4 / 342°	" "	
1030	07/1792	26° 39.36	96° 21.10'	? ~ 300m	6.2 / 346°	" "	
1045	08/2097	26° 41.92'	96° 21.48	? ~ 300m	5.6 / 344°	" "	4nm from wp 45
1050	09/2191	26° 41.41	96° 21.57'			@ wp 45	
1100	10/2401	26° 41.72	96° 22.161'	? ~ 400ish	5.4 / 69°	to wp 46	ops - combined lines 3 & 4
1115	11/2700	26° 42.18	96° 19.09'	> 400?	5.8 / 075°	" "	
1130	12/2999	26° 42.59	96° 17.58'		5.6 / 058°	" "	Δ EPC delay to 501ms Elics delay to 500ms
1145	13/3298	26° 43.03	96° 16.03	? ~ 500	5.8 / 066°		
1200	14/3594	26° 43.48	96° 14.52	? ~ 500	5.9 / 059°		@ WP 46 - EOL S3B
1211	15/	26° 43.83	96° 13.36				
1217	1/96	26° 43.45	96° 13.19	7500?	5.6 / 168	to wp 47	sol SA increase gain by 10dB - both EPC & Elics * reduced air pressure gun is firing out → 1400psi instead of 2000psi (large compressor on frt + 2 again - reduce so smaller one can carry through)
1232	2/409	26° 42.14	96° 13.00		5.3 / 175	"	
1248	3/725	26° 40.78	96° 12.90		4.8 / 170	"	
1304	4/1033	26° 39.39	96° 12.74		5.5 / 164	"	
1319	5/1340	26° 38.11	96° 12.58	> 600?	5.3 / 178	"	weather worsen → rain & chop w/ the reg. low swell → a few whitecaps seas calming down
1335	6/1651	26° 36.76	96° 12.47		5.6 / 188	"	
1350	7/1973	26° 35.46	96° 12.41		5.2 / 156	"	
1405	8/2271	26° 34.21	96° 12.14		4.9 / 153	"	
1421	9/2578	26° 32.91	96° 12.07	> 700?	6.1 / 161	"	sol SA & sol SB
1436	10/2887	26° 31.66	96° 11.90		5.5 / 170		
1452	11/3194	26° 30.26	96° 11.78		4.5 / 172		
1507	12/3508	26° 28.95	96° 11.69		4.3 / 158		
1522	13/3808	26° 27.71	96° 11.45		5.3 / 160		sol 3A & sol 3B
1538	14/4120	26° 26.33	96° 11.13	7700	4.9 / 171		
1553	15/4414	26° 25.11	96° 11.19		5.3 / 157	EOL S5A & SOL S5B	sol 3A & sol 3B
1557	1/74	26° 24.69	96° 11.17		5.4 / 167	@ wp 47	
1612	2/385	26° 23.38	96° 11.17		6.2 / 175	to wp 48	

Line name: <u>SSB, 6A, 6B, 7A, 8A, 9A</u>			Energy: <u>J/PSI</u>		Tape #: <u> </u>		
Descr: <u>20:1 slope Rio '96</u>			Firing Rate: <u>3 s</u>		Filter: <u>50-1700 Hz (EPC) / changes to 65-1700 Hz</u>		
Date: <u>09/03/96</u>			Geophones: <u>little center</u>		Source: <u>20 ci</u>		
Time	SP/Fix	LAT.	LONG.	^{Brown map} WD	Ship spd/dir	Nav. system	Notes
1627	3/689	26° 22.05	96° 11.15	~650?	6.5/170	to WP 48	
1642	4/987	26° 20.68	96° 11.10	"	3.8/179	"	
1658	5/1295	26° 19.34	96° 11.11	"	5.4/169	"	
1712	6/1589	26° 18.02	96° 11.04	"	6/179	"	
1728	7/1902	26° 16.54	96° 11.00	"	5.4/171	"	
1744	8/2214	26° 15.03	96° 10.98	"	5.5/181		band of noise in data not like what
1759	9/2519	26° 13.66	96° 10.98	"	5.9/177		seen getting - both EPC & Elica show
1815	10/2864	26° 12.11	96° 10.98	"	6.0/174		"
1830	11/3145	26° 10.67	96° 10.93	"	5.6/180		"
1848	12/3493	26° 9.08	96° 10.90	"	5.8/170		"
1904	13/3821	26° 7.51	96° 10.87	"	5.3/168		* 1855 turn air pressure back up
1919	14/4128	26° 6.11	96° 10.83	"	5.4/172		to 200psi
1935	15/4441	26° 4.67	96° 10.77	"	5.9/179		* turn filter (EPC) up to 65 Hz
1955	16/4474	26° 4.49	96° 10.78			@ WP48	- up delay to .700 on EPC
1959	00/00	26° 04.51	96° 10.73	"	5.5/268°	SOL 6A to WP49	circles back to 48
2015	01/324	26° 04.5	96° 12.28	"	4.7/269°		bad interference still
2023	02/482	26° 4.52	96° 13.02			SOL 6A	
2038							stopping to run streamer test → ? data
2055							assistant line. (GB @ WP48)
2059	00/00	26° 04.52	96° 10.77		turning onto	WP 48	circles to WP48 (no additional gain)
2115	01/319	26° 04.52	96° 12.16	* 750ms	5.8/274°	SOL 6B	→ added 10dB to both both EPC & Elica
2130	02/617	26° 04.50	96° 13.47	shallowing	4.9/271°		DATA good!! streamer works!
2136	03/742	26° 04.51	96° 14.00	uping	4.6/252°	to WP49	Δ Elica nigh to 500ms + EPC delay to 501ms
2200	04/461	26° 6.52	96° 14.07	* 750ms	4.5/1006°	SOL 6B SOL 57A	@ WP49
2217	02/770	26° 07.96	96° 14.09	~850ms	5.7/355°	to WP50	
2220	03/0829	26° 8.18	96° 14.11		4.3/347°	"	
2230	01/190	26° 08.23	96° 14.97	~700ms	5/216°	SOL 57A SOL 58A	@ WP50 remove add'l 10dB from Elica & EPC
2245	02/499	26° 8.21	96° 16.29	~500ms	4.8/216°	head to WP51	
2300	03/792	26° 08.17	96° 17.60	~500ms	4.6/266°	"	changed EPC delay to 200ms
2315	04/1091	26° 08.15	96° 18.91	229m	4.9/275°	"	
2330	05/1389	26° 08.11	96° 20.22	191m	4.4/250°	"	
2345	06/1689	26° 08.10	96° 21.56	108m	4.3/259	"	EPC delay changed to 0ms
2400/0000	07/1995	26° 08.11	96° 22.98	89m	5.6/256	"	slight velocity ↑ to 51kts 2344 Elica nigh to 9
0014	08/2278	26° 07.98	96° 24.34	78	5.3/274		
0016	09/2316	26° 8.00	96° 24.53	77			
0033	01/329	26° 09.54	96° 24.62	76	6.4/355	SOL 58A @ WP51 + SOL 59A	on way to WP52

Line name: S9A-S15A Energy: J/PSI Tape #: GPGLL GPS
 Descr: 20 m³ Rio 96-slope Firing Rate: 3s Filter: 65-1700 Hz
 Date: 09/03/96 Geophones: little Ben Source: 20 ci

m=meter
ms=milliseconds

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Time	SP/Fix	LAT.	LONG.	WD	Ship spd/dir	Nav. system	Notes
0049	02/664	26° 11.12	96° 24.68	74	5.7/355	to WP 52	
0104	03/946	26° 12.58	96° 24.72	72	6.8/353	"	
0123	04/1325	26° 14.44	96° 24.80	74	5.9/358	"	
0126	05/1383	26° 14.76	96° 24.79	73			
0141	06/291	26° 14.91	96° 23.61	80	4.1/82	EOL S9A - SOL S10A - @ WP 52	
0156	07/594	26° 15.03	96° 20.40	86	5.4/81	to WP 53	
0213	08/04/911	26° 15.15	96° 21.08	101	5.4/71	"	
0232	05/1304	26° 15.28	96° 19.42	1	5.2/78	* fix 384 - hit mark twice	
0247	06/1618	26° 15.46	96° 18.11	~250?	4.9/82		
0305	07/1971	26° 15.57	96° 16.53	7300	4.1/89		EPC delay .150
0321	08/0288	26° 15.60	96° 15.18	"	4.6/87		EPC delay .200
0329	09/2456	26° 15.70	96° 14.48	7400		@ WP 53	EPC delay .250
0346	01/319	26° 17.14	96° 14.48	-	6.3/349	EOL S10A, SOL S11A - to WP 54	
0400	02/607	26° 18.64	96° 14.54	~450m?	5.9/354°	- to WP 54	EPC delay .300
0415	03/910	26° 20.13	96° 14.47	~450m?	6.2/351°	to WP 54	
0430	04/1206	26° 21.68	96° 14.58	>450m?	2.9/354°	"	Compressor ~ 1480 psi
0445	05/1509	26° 23.08	96° 14.68	>500m?	6.2/357°	"	transfired 0323
0500	06/1812	26° 24.57	96° 14.60	>500m?	5.0/264°	to 11A SOL 12A	
0515	07/2885	26° 24.36	96° 15.79	>500m?	5.7/240°	to WP 55	@ WP 54 to WP 55 32ms to EPC delay
0530	08/588	26° 23.96	96° 17.21	~400ms	6.2/244°	"	
0543	03/879	26° 23.60	96° 18.06	181m	5.9/255°	"	
0552	04/1041	26° 23.41	96° 19.42	131m	6.1/320°	to 12A SOL 13A	
0600	01/134	26° 24.02	96° 19.61	132m	5.9/344°	to WP 56	@ WP 55 to WP 56 Δ EPC delay to 0ms
0615	02/433	26° 25.54	96° 19.84	138m	5.9/340°	"	
0630	03/735	26° 27.07	96° 20.10	146m	5.9/347°	"	3 mile from WP 56
0645	04/1036	26° 28.54	96° 20.40	146m?	6.4/338°	"	
0700	05/1335	26° 29.92	96° 20.84	165m	5.8/344°	"	
0709	06/1525	26° 30.77	96° 20.99	178m	5.0/063°	@ WP 56	
0715	01/109	26° 31.02	96° 20.58	187m	5.1/066°	to 13A SOL 14A	synch error?
0719				250m		to WP 57	to WP 57
0730	02/396	26° 31.39	96° 19.18	329m	6.0/060°	"	Δ EPC delay to 200ms
0745	03/698	26° 31.87	96° 17.78	411m	5.3/064°	"	
0800	04/997	26° 32.35	96° 16.46	476m	5.3/070°	"	Δ EPC delay to 501ms
0804	05/1081	26° 32.46	96° 16.16	497m	-	@ WP 57	
0815	01/206	26° 33.53	96° 16.19	511m	6.0/346°	to 14A SOL 15A	to WP 58
0830	02/510	26° 35.06	96° 16.32	535m	5.8/346°	to WP 58	EPC delay 501ms

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Line name: <u>Rio 96-S15A</u>	Energy: <u> </u> J/PSI	Tape #: <u> </u>
Descr: <u>Slope</u>	Firing Rate: <u>35</u>	Filter: <u>65-1700Hz</u>
Date: <u>09/04/96</u>	Geophones: <u>System benches</u>	Source: <u>20 slugs</u>

[illegible]