

PETRO-TECH PERUANA S.A

Page -

1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 25/03/98

Depth	10833	Drilled	144	G a.m.	10948	Days	69	Rig	PETREX-3			
Formation	B.SALINA PO SHORT TRIP - DRILLING.											
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section		Coordinates					
LITHOLOGY												
From	To	Dol %	Lim %	Chyst %	Shale %	Sist %	Sst %	Sand %	Cgl %	Fluor %	TG unit	C1 ppm
10810	10815				50		10	40		15		
	10820				50		20	30		5-15		
	10825				60		30	10		5		
	10830				70		20	10		5		
	10835				60		30	10		NF		
	10840				50		30	20		5		
	10845				60		30	10		5		
	10850				70	20	10			NF		
	10855				80	10	10			NF		
	10870				70	20	10			NF		
	10875				50	10	30	10		15-30		
	10880				60	10	20	10		15		
	10885				80	10	10			5		
	10890				70	10	20			15		
	10895				80	10	10			NF		
	10900				40	10	30	20		5		
	10910				70	10	20			5		
	10915				80	10	10			NF		
	10920				80		10			NF		
	10930				80	10	10			NF		
	10940				70	20	10			NF		
	10945				80	10	10			NF		

Remarks BCK 265 MAX FOR GAS: 410 @10878 CONEX GAS: 339 @10917 450 @10896
 PALEO: 10789 - 10840 FAUNA PG/SN VERY POOR.

3-98; 8:35;
24-1998 8:43AM

4393137 => PETRO-TECH PERUANA ; #3
FROM PETRO TECH PERUANA 074393137

P. 3

Page - 1

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 24/03/98

Depth	10789	Drilled	51	6 a.m.	10818	Days	68	Rig	PETREX-3																																																																																																																																																	
Formation	B.SALINA PO DRILLING																																																																																																																																																									
<table border="1"> <thead> <tr> <th colspan="2">SURVEYS</th> <th colspan="2">V. Angle</th> <th colspan="2">True Direction</th> <th colspan="2">V. Depth</th> <th colspan="2">H. Section</th> <th colspan="2">Coordinates</th> </tr> <tr> <th>M. Depth</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>										SURVEYS		V. Angle		True Direction		V. Depth		H. Section		Coordinates		M. Depth																																																																																																																																				
SURVEYS		V. Angle		True Direction		V. Depth		H. Section		Coordinates																																																																																																																																																
M. Depth																																																																																																																																																										
<table border="1"> <thead> <tr> <th colspan="2">LITHOLOGY</th> <th>Dol %</th> <th>Lim %</th> <th>Clyst %</th> <th>Shale %</th> <th>Slat %</th> <th>Sst %</th> <th>Sand %</th> <th>Cgl %</th> <th>Fluor %</th> <th>TG unit</th> <th>Ci ppm</th> </tr> <tr> <th>From</th> <th>To</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>10765</td> <td>10770</td> <td></td> <td></td> <td></td> <td>40</td> <td></td> <td></td> <td>60</td> <td></td> <td>50</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10775</td> <td></td> <td></td> <td></td> <td>20</td> <td></td> <td></td> <td>80</td> <td></td> <td>50-75</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10780</td> <td></td> <td></td> <td></td> <td>40</td> <td></td> <td></td> <td>60</td> <td></td> <td>30</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10785</td> <td></td> <td></td> <td></td> <td>60</td> <td></td> <td></td> <td>40</td> <td></td> <td>15</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10789</td> <td></td> <td></td> <td></td> <td>70</td> <td></td> <td></td> <td>30</td> <td></td> <td>5-15</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10795</td> <td></td> <td></td> <td></td> <td>80</td> <td></td> <td>20</td> <td></td> <td></td> <td>NF</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10800</td> <td></td> <td></td> <td></td> <td>70</td> <td></td> <td>20</td> <td>10</td> <td></td> <td>5</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10805</td> <td></td> <td></td> <td></td> <td>50</td> <td></td> <td>20</td> <td>30</td> <td></td> <td>15</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10810</td> <td></td> <td></td> <td></td> <td>60</td> <td></td> <td>20</td> <td>20</td> <td></td> <td>5-15</td> <td></td> <td></td> </tr> </tbody> </table>												LITHOLOGY		Dol %	Lim %	Clyst %	Shale %	Slat %	Sst %	Sand %	Cgl %	Fluor %	TG unit	Ci ppm	From	To												10765	10770				40			60		50				10775				20			80		50-75				10780				40			60		30				10785				60			40		15				10789				70			30		5-15				10795				80		20			NF				10800				70		20	10		5				10805				50		20	30		15				10810				60		20	20		5-15		
LITHOLOGY		Dol %	Lim %	Clyst %	Shale %	Slat %	Sst %	Sand %	Cgl %	Fluor %	TG unit	Ci ppm																																																																																																																																														
From	To																																																																																																																																																									
10765	10770				40			60		50																																																																																																																																																
	10775				20			80		50-75																																																																																																																																																
	10780				40			60		30																																																																																																																																																
	10785				60			40		15																																																																																																																																																
	10789				70			30		5-15																																																																																																																																																
	10795				80		20			NF																																																																																																																																																
	10800				70		20	10		5																																																																																																																																																
	10805				50		20	30		15																																																																																																																																																
	10810				60		20	20		5-15																																																																																																																																																

Remarks: BCK: 245 MAX FOR GAS: 427 @10766 TRIP GAS: 2034 @10789 CONEX GAS: 338 @10753
CHANGE BIT @10789
PALEO: 10640-10700 FAUNA PG/SN ABUNDANT + BALC. RWK TRACES
10700-10720 FAUNA PG/SN COMMON + BALC. RWK TRACES
10720-10789 FAUNA PG/SN TRACES

7:35;
998 7:43AM

074393137 => PETRO-TECH PERUANA ; #8
JM PETRO TECH PERUANA 074393137

P. 8

Page - 1

TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 22/03/98

Depth	10586	Drilled	136	6 a.m.	10526	Days	66	Rig	PETREX-3
Formation	B.SALINA PO DRILLING								
SURVEYS									
M. Depth	V. Angle	True Direction			V. Depth	H. Section		Coordinates	

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL RECORD

Well : LO16-24

Date 21/03/98

[illegible][illegible]

PG/SN VERY POOR

PG/SN VERY POOF.

Paleo: 10220 - 10290: Pg-Su f up.
 - 10320: Pg-Su f up + Bald rock f tz.
 - 10340: Pg-Su f up

BOG: 201 @ max-fm gas: 315 u @ 10,338', short trip gas: 212 u @ 10,379'
 aux. gas: 231 u @ 10,411'

Prod. 16,382 (+193)

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **20/03/98**Depth **10306** Drilled **143** 6 a.m. **10326** Days **64** Rig **PETREX-3**Formation **B.SALINA** PO **REPAIRING ROTARY TABLE CHAIN.****SURVEYS**

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY	From	To	Dol %	Lim %	Cyst %	Shale %	Sist %	Sst %	Sand %	Cgl %	Fluor %	TG unit	Ci ppm
	10190	10200				60	10	20	10		5-15		
		10205				40	10	40	10		5-15		
		10210				50	10	30	10		5		
		10215				50		40	10		5-15		
		10220				60		30	10		5-15		
		10225				20		50	30		5		
		10230				70		20	10		5-15		
		10235				50	20	30			5		
		10240				60	10	30			15		
		10245				60	20	20			15		
		10260				50	20	30			5-15		
		10280				60	20	20			5		
		10285				60	10	20	10		5		
		10300				70	10	20			5		
		10315				60	20	20			15		
		10325				70	10	20			15		

Remarks **BCK: 210 MAX FOR GAS: 235 @ 10180 CONEX GAS: 227 @ 10285 231 @ 10253**
PALEO: 10040-10220 FAUNA PALEGREDA/SALINA VERY POOR.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well **LO16-24**

Date 19/03/98

Well		LO16-24		Date	
Depth		10163		Drilled	
123		6 a.m.		10204	
Days		63		Rtg	
PETREX-3		Formation		B.SALINA	
PO		DRILLING			
SURVEYS					
M. Depth		V. Angle		True Direction	
V. Depth		H. Section		Coordinates	
LITHOLOGY		Dol		Lim	
From To		%		%	
		Clyst		Shale	
		%		%	
		Slat		Sst	
		%		%	
		Sand		Cgl	
		%		%	
		Fluor		TG	
		%		unit	
				C ₁	
				ppm	
10040	10050			50	10
	10055			60	10
	10060			60	20
	10070			50	20
	10075			70	20
	10080			70	10
	10085			70	10
	10090			50	10
	10100			50	20
	10110			50	20
	10120			40	20
	10130			70	10
	10135			70	10
	10140			60	20
	10150			60	10
	10155			50	10
	10170			60	10
	10180			50	10
	10190			70	10

Remarks BCK: 202 MAX FOR GAS: 408 @ 10050' TRIP GAS: 4658 @ 10040'

PETRO-TECH PERUANA S.A

Page -

1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 18/03/98

Depth 10040 Drilled 30 6 a.m. 10040 Days 62 Rig PETREX-3

Formation B.SALINA PO RIH

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
9951'	47.9	S	61.9 W	7062.53'	6236.66	S	2272.36 W 5817.36

LITHOLOGY

From	To	Dol %	Lim %	Chyst %	Shale %	Sist %	Sst %	Sand %	Cgl %	Fluor %	TG unit	C ₁ ppm
------	----	-------	-------	---------	---------	--------	-------	--------	-------	---------	---------	--------------------

Remarks PALEO: 9530'-9590' FAUNA PALEGREDA/SALINA VERY POOR

9590'-9830' FAUNA PG/SN POOR TO COMMON + BALC. RWK TRACES

9830'-9990' FAUNA PG/SN VERY POOR + BALC. RWK TRACES

9990'-10040' FAUNA PG/SN TRACES.

Ing. Marco Augue

PETRO-TECH PERUANA S.A.
LO16 (not named), LO16-24
LOBITOS, Offshore Peru

SURVEY LISTING Page 1
Your ref : Sidetrack #1
Last revised : 17-Mar-98

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR COORDINATES	Dogleg Deg/100Ft	Vert Sect
5021.00	51.40	253.70	3711.17	1065.69 S 2441.43 W	0.00	2652.57
5399.00	49.00	254.70	3953.12	1144.80 S 2720.83 W	0.67	2942.68
5935.00	44.10	255.60	4321.63	1244.62 S 3096.80 W	0.92	3330.98
6124.00	43.20	255.70	4458.38	1276.95 S 3223.18 W	0.48	3461.12
6314.00	42.10	255.80	4598.12	1308.64 S 3347.95 W	0.58	3589.53
6504.00	40.80	255.90	4740.53	1339.39 S 3469.90 W	0.69	3714.97
6693.00	39.80	256.40	4884.67	1368.65 S 3588.59 W	0.56	3836.84 Tie-on Point
6876.00	39.20	255.20	5025.88	1397.20 S 3701.43 W	0.53	3952.94
6908.00	37.40	254.30	5051.00	1402.41 S 3720.56 W	5.89	3972.75
6940.00	35.30	252.70	5076.77	1407.79 S 3738.75 W	7.20	3991.70
6972.00	34.80	252.70	5102.96	1413.26 S 3756.30 W	1.56	4010.07
7035.00	36.50	253.50	5154.16	1423.92 S 3791.43 W	2.80	4046.78
7098.00	39.40	253.50	5203.83	1434.93 S 3828.57 W	4.60	4085.50
7162.00	42.50	253.70	5252.16	1446.77 S 3868.81 W	4.85	4127.42
7225.00	45.50	253.70	5297.47	1459.05 S 3910.81 W	4.76	4171.15
7288.00	47.40	247.50	5340.90	1474.24 S 3953.82 W	7.74	4216.76
7420.00	51.40	250.70	5426.80	1509.90 S 4047.44 W	3.54	4316.84
7515.00	51.30	250.20	5486.13	1534.72 S 4117.35 W	0.42	4391.01
7610.00	51.10	250.30	5545.66	1559.74 S 4187.03 W	0.23	4465.02
7767.00	50.60	250.50	5644.78	1600.58 S 4301.73 W	0.33	4586.74
7926.00	49.70	249.50	5746.67	1642.33 S 4416.44 W	0.74	4708.76
8084.00	49.00	248.90	5849.59	1684.89 S 4528.50 W	0.53	4828.51
8242.00	48.20	248.10	5954.08	1728.32 S 4638.77 W	0.63	4946.84
8401.00	47.60	247.50	6060.68	1772.89 S 4748.00 W	0.47	5064.54
8560.00	47.10	247.20	6168.40	1817.93 S 4855.92 W	0.34	5181.15
8755.00	45.90	246.60	6302.63	1873.42 S 4986.03 W	0.65	5322.10
8912.00	48.20	246.00	6409.60	1919.61 S 5091.24 W	1.49	5436.50
9071.00	53.30	245.50	6510.17	1970.18 S 5203.46 W	3.22	5558.92
9192.00	54.00	245.50	6581.88	2010.60 S 5292.14 W	0.58	5655.80
9350.00	52.60	244.40	6676.31	2064.22 S 5406.90 W	1.05	5781.60
9509.00	50.90	243.80	6774.74	2118.75 S 5519.22 W	1.11	5905.36
9667.00	49.70	243.00	6875.67	2173.18 S 5627.92 W	0.85	6025.65
9825.00	48.80	242.20	6978.80	2228.26 S 5734.19 W	0.89	6143.84
9951.00	47.90	241.90	7062.54	2272.38 S 5817.36 W	0.74	6236.66

PETRO TECH - PERUANA S.A.
Gerencia de Exploración
y Desarrollo
17 MAR. 1998
RECIBIDO

All data is in feet unless otherwise stated.
Coordinates are from slot #24 and TVDs are from wellhead.
Vertical section is from N 0.00 W 0.00 on azimuth 251.70 degrees.
Calculation uses the minimum curvature method.

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well **L016-24**Date **17/03/98**

Depth **10010** Drilled **810** 6 a.m. **10040** Days **61** Rig **PETREX-3**
 Formation **B.SALINA** PO **POOH/CHANGE BIT**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
9192	54	S 65.5 W	8581.88		
9350	52.8	S 64.4 W	8676.30		
9509	50.9	S 63.8 W	8774.73		
9667	49.7	S 63.0 W	8875.86		
9825	48.8	S 62.2 W	8976.79		

LITHOLOGY	To	Dol %	Lim %	Chst %	Shale %	Slat %	Sst %	Sand %	Cgl %	Fluor %	TG unit	C _i ppm
From												
9360	9420				80	10				NF		
	9440				100					NF		
	9480				90	10				NF		
	9490				100					NF		
	9520				90	10				NF		
	9610				90	10				NF		
	9640				100					NF		
	9680				90	10				NF		
	9730				100					NF		
	9760				100					NF		
	9830				90	10				NF		
	9840				80	20				NF		
	9860				80	10	10			NF		
	9880				80	20				NF		
	9890				90	10				NF		
	9910				80	20				NF		
	9920				90	10				NF		
	9930				80	10	10			NF		
	9960				90	10				NF		
	9980				80	10	10			NF		
	9990				90	10				NF		
	10000				30		30	40		50		
	10020				20		30	50		50		
	10030				40	20	40			15-30		
	10040				60	20	20			15		

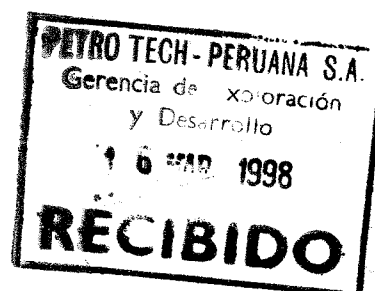
Remarks **BASAL SALINA FM. @9990' MD 7034 SS. S: 2286 W: 5843 HD: 6274****BCK: 205 MAX FOR GAS: 490 @9953 AND 4719 @9320 CONEX GAS: 1896 @9380, 2070 @9444****PALEO: 9110-9250' FAUNA PG/BN POOR****9250-9630' FAUNA PG/BN VERY POOR.**

Ing. Marco Duque

PETRO-TECH PERUANA S.A.
LO16 <not named>, LO16-24
LOBITOS, Offshore Peru

SURVEY LISTING Page 1
Your ref : Sidetrack #1
Last revised : 16-Mar-98

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR COORDINATES	Dogleg Deg/100Ft	Vert Sect
5021.00	51.40	253.70	3711.17	1065.69 S 2441.43 W	0.00	2652.57
5399.00	49.00	254.70	3953.12	1144.80 S 2720.83 W	0.67	2942.68
5935.00	44.10	255.60	4321.63	1244.62 S 3096.80 W	0.92	3330.98
6124.00	43.20	255.70	4458.38	1276.95 S 3223.18 W	0.48	3461.12
6314.00	42.10	255.80	4598.12	1308.64 S 3347.95 W	0.58	3589.53
6504.00	40.80	255.90	4740.53	1339.39 S 3469.90 W	0.69	3714.97
6693.00	39.80	256.40	4884.67	1368.65 S 3588.59 W	0.56	3836.84 Tie-on Point
6876.00	39.20	255.20	5025.88	1397.20 S 3701.43 W	0.53	3952.94
6908.00	37.40	254.30	5051.00	1402.41 S 3720.56 W	5.89	3972.75
6940.00	35.30	252.70	5076.77	1407.79 S 3739.75 W	7.20	3991.70
6972.00	34.80	252.70	5102.96	1413.26 S 3756.30 W	1.56	4010.07
7035.00	36.50	253.50	5154.16	1423.92 S 3791.43 W	2.80	4046.78
7098.00	39.40	253.50	5203.83	1434.93 S 3828.57 W	4.60	4085.50
7162.00	42.50	253.70	5252.16	1446.77 S 3868.81 W	4.85	4127.42
7225.00	45.50	253.70	5297.47	1459.05 S 3910.81 W	4.76	4171.15
7288.00	47.40	247.50	5340.90	1474.24 S 3953.82 W	7.74	4216.76
7420.00	51.40	250.70	5426.80	1509.90 S 4047.44 W	3.54	4316.84
7515.00	51.30	250.20	5486.13	1534.72 S 4117.35 W	0.42	4391.01
7610.00	51.10	250.30	5545.66	1559.74 S 4187.03 W	0.23	4465.02
7767.00	50.60	250.50	5644.78	1600.58 S 4301.73 W	0.33	4586.74
7926.00	49.70	249.50	5746.67	1642.33 S 4416.44 W	0.74	4708.76
8084.00	49.00	248.90	5849.59	1684.89 S 4528.50 W	0.53	4828.51
8242.00	48.20	248.10	5954.08	1728.32 S 4638.77 W	0.63	4946.84
8401.00	47.60	247.50	6060.68	1772.89 S 4748.00 W	0.47	5064.54
8560.00	47.10	247.20	6168.40	1817.93 S 4855.92 W	0.34	5181.15
8755.00	45.90	246.60	6302.63	1873.42 S 4986.03 W	0.65	5322.10
8912.00	48.20	246.00	6409.60	1919.61 S 5091.24 W	1.49	5436.50
9071.00	53.30	245.50	6510.17	1970.18 S 5203.46 W	3.22	5558.92
9192.00	54.00	245.50	6581.88	2010.60 S 5292.14 W	0.58	5655.80
9350.00	52.60	244.40	6676.31	2064.22 S 5406.90 W	1.05	5781.60



All data is in feet unless otherwise stated
Coordinates are from slot #24 and TVDs are from wellhead.
Vertical section is from N 0.00 W 0.00 on azimuth 251.70 degrees.
Calculation uses the minimum curvature method.

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 16/03/98

Depth 9200 Drilled 391 6 a.m. 9387 Days 60 Rig PETREX-3

Formation S.CRISTOBAL PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
8755'	45.9	S 66.6 W	6302		
8912'	48.2	S 66.0 W	6409		
9071'	53.5	S 65.5 W	6510		

LITHOLOGY		Clyst %	Shale %	Slat %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From	To											
9050	9060		100							NF		
	9090		90	10						NF		
	9110		100							NF		
	9150		90	10						NF		
	9170		80	10		10				NF		
	9180		90	10						NF		
	9200		100							NF		
	9210		90	10						NF		
	9230		100							NF		
	9260		90	10						NF		
	9270		100							NF		
	9290		90	10						NF		
	9300		100							NF		
	9340		90	10						NF		
	9350		100							NF		
	9360		90	10						NF		
	9380		100							NF		

Remarks BCK: 205 MAX FOR GAS: 342 @ 9038' CONEX. GAS: 206 @ 9155'

PALEO: 8909' - 8990' FAUNA PALEGREDA/SALINA VERY POOR

8990' - 9110' FAUNA PG/SN VERY POOR TO POOR + BALC. RWK TRACES.

Date 15/03/98

Last Modification 15/03/98 - 07:46:58

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 14/03/98

Depth 8670 Drilled 273 6 a.m. 8809 Days 58 Rig PETREX-3

Formation MOGOLLON PO POOH/CHECK SLIM ONE

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
8401'	47.6	S 67.5 W	6060	5064	S 1772 W 4748
8560	47.1	S 67.2 W	6168	5181	S 1817 W 4855

LITHOLOGY		Cyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C ₁ ppm
From	To											
8450	8460	20	70	10						NF		
	8470	30	60	10						NF		
	8480	30	50	10		10				NF		
	8490	30	40	10	10	10				5		
	8500	30	40		20	10				5		
	8510	20	60	10		10				NF		
	8520		50	10	10	30				15		
	8530		40		20	40				30		
	8540		50		20	30				15-30		
	8550		60		10	30				15		
	8560		50		20	30				15		
	8570		60		10	30				15		
	8580		60			40				15		
	8590		60			20				15		
	8600		50	10		40				15-30		
	8610		60	10		30				15		
	8620		70	10		20				5-15		
	8640		60	10		30				15		
	8650		50	20		30				15		
	8660		70	10		20				5		
	8670		60	20		20				5		
	8710		60	10		10				5		
	8720	40	30	10	10	10				5		
	8730	40	20	10	10	20				5		
	8750	60	20	10		10				5		
	8760	60	30			10				5		
	8780	60	20	10		10				NF		
	8809	60	20	10		10				NF		

Remarks BCK: 206 MAX FOR GAS: 290 @ 8406 CONEX. GAS: 254 @ 8617
 PALEO: 8020 - 8470 FAUNA PALEGREDA/SALINA COMMON TO ABUNDANT
 8470 - 8490 FAUNA PALEGREDA/SALINA VERY POOR.

Last Modification 14/03/98 - 08:16:50

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well L016-24

Date 13/03/98

Depth 8397 Drilled 541 6 a.m. 8470 Days 57 Rig PETREX-3
 Formation MOGOLLON PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
7926	49.7	S	69.5 W	5748	4708	S	1642 W 4418
8084	49.0	S	68.9 W	5849	4828	S	1684 W 4528
8242	48.2	S	68.1 W	5954	4946	S	1728 W 4638

LITHOLOGY		Clyst %	Shale %	Slat %	Sand %	Sst %	Cpl %	Dol %	Lim %	Fluor %	TG unit	C ₁ ppm
From	To											
7940	7970	40	60							NF		
	7990	30	60	10						NF		
	8020	20	60	10		10				NF		
	8040	30	60	10						NF		
	8080	20	60	10		10				NF		
	8080	30	60	10						NF		
	8100	30	60			10				NF		
	8130	30	70							NF		
	8170	30	60	10						NF		
	8190	30	60			10				NF		
	8220	20	70	10						NF		
	8240	20	60	10		10				NF		
	8250	20	70	10						NF		
	8270	20	60	10		10				NF		
	8310	20	70	10						NF		
	8330	20	60	10		10				NF		
	8350	30	60	10						NF		
	8380	30	50	10		10				NF		
	8370	40	50	10						NF		
	8380	30	50	10		10				NF		
	8390	50	30	20						NF		
	8410	30	50	10		10				NF		
	8430	30	60	10						NF		
	8440	40	40	10		10				NF		
	8450	40	50	10						NF		

Remarks BCK: 206 MAX FOR GAS: 158 @ 8112' CONEX. GAS: 214 @ 8361.

PALEO: 7370 - 7610 BARREN

7610 - 8020 FAUNA PALEGREDA/SALINA VERY POOR TO POOR.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well L016-24

Date 12/03/98

Depth 7858 Drilled 482 6 a.m. 7551 Days 58 Rig PETREX-3

Formation MOGOLLON PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
7420	51.4	S 70.7 W	5428	4318	S 1509 W 4047
7515	51.3	S 70.2 W	5486	4391	S 1534 W 4117
7610	51.1	S 70.3 W	5545	4465	S 1559 W 4187
7707	50.8	S 70.5 W	5644	4588	S 1600 W 4301

LITHOLOGY	From	To	Chst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
	7370	7380	80		10		10				5		
		7390	80		10	10	20				5		
		7400	80		10	10	30				NF		
		7410	80		10		10				NF		
		7420	80		10		10				NF		
		7430	50		10	20	20				15		
		7440	30		10	40	20				30-50		
		7450	30			30	40				50		
		7460	30			40	30				50		
		7470	20			30	50				50		
		7480	60			10	30				30		
		7500	50		10	10	30				30		
		7520	40		10	20	30				15		
		7530	10		10	50	30				5		
		7540	20		10	40	30				15		
		7550	40	20		20	20				30		
		7560	60	10	10		20				5-15		
		7570	50	30	10		10				5		
		7580	50	20	10		20				5		
		7590	40	30	20		10				5		
		7600	60	20	10		10				5		
		7620	50	30	20						NF		
		7650	50	40	10						NF		
		7680	50	30	10		10				NF		
		7700	50	20	20		10				NF		
		7710	60	20	20						NF		
		7730	50	30	10		10				NF		
		7750	50	30	20						NF		
		7770	30	40	10		10		10		NF		
		7790	60	20	20						NF		
		7840	30	60	10						NF		
		7880	30	50	10		10				NF		
		7870	20	70	10						NF		
		7880	30	60	10						NF		
		7890	50	40	10						NF		
		7940	30	60	10						NF		

Remarks BCK: 205 MAX FOR GAS: 915 @ 7461' CONEX. GAS: 235 @ 7824'
 PALEO: 7167 - 7347 FAUNA PALEGREDA COMMON TO ABUNDANT
 7347 - 7370 FAUNA PALEGREDA VERY POOR.

John M. D. Jaque

PETRO-TECH PERUANA S.A.
LO16 <not named>, LO16-24
LOBITOS, Offshore Peru

SURVEY LISTING Page 1
Your ref : Sidetrack #1
Last revised : 11-Mar-98

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR COORDINATES	Dogleg Deg/100Ft	Vert Sect
5021.00	51.40	253.70	3711.17	1065.69 S 2441.43 W	0.00	2652.57
5399.00	49.00	254.70	3953.12	1144.80 S 2720.83 W	0.67	2942.68
5935.00	44.10	255.60	4321.63	1244.62 S 3096.80 W	0.92	3330.98
6124.00	43.20	255.70	4458.38	1276.95 S 3223.18 W	0.48	3461.12
6314.00	42.10	255.80	4598.12	1308.64 S 3347.95 W	0.58	3589.53
6504.00	40.80	255.90	4740.53	1339.39 S 3469.90 W	0.69	3714.97
6693.00	39.80	256.40	4884.67	1368.65 S 3588.59 W	0.56	3836.84
6876.00	39.20	255.20	5025.88	1397.20 S 3701.43 W	0.53	3952.94
6908.00	37.40	254.30	5051.00	1402.41 S 3720.56 W	5.89	3972.75
6940.00	35.30	252.70	5076.77	1407.79 S 3738.75 W	7.20	3991.70
6972.00	34.80	252.70	5102.96	1413.26 S 3756.30 W	1.56	4010.07
7035.00	36.50	253.50	5154.16	1423.92 S 3791.43 W	2.80	4046.78
7098.00	39.40	253.50	5203.83	1434.93 S 3828.57 W	4.60	4085.50
7162.00	42.50	253.70	5252.16	1446.77 S 3868.81 W	4.85	4127.42
7225.00	45.50	253.70	5297.47	1459.05 S 3910.81 W	4.76	4171.15
7288.00	47.40	247.50	5340.90	1474.24 S 3953.82 W	7.74	4216.76

Tie-on Point



All data is in feet unless otherwise stated
Coordinates are from slot #24 and TVDs are from wellhead.
Vertical section is from N 0.00 W 0.00 on azimuth 251.70 degrees.
Calculation uses the minimum curvature method.

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 11/03/98

Depth	7374	Drilled	437	8 a.m.	7374	Days	55	Rig	PETREX-3
Formation	MOGOLLON	PO	RIH TO DRILLING						

SURVEYS		True Direction		V. Depth	H. Section	Coordinates	
M. Depth	V. Angle					S	W
7036	36.5	S	73.5 W	5154	4046	S	1423 W 3791
7088	39.4	S	73.5 W	5203	4095	S	1434 W 3828
7162	42.5	S	73.7 W	5262	4127	S	1446 W 3868
7225	45.5	S	73.7 W	5297	4171	S	1459 W 3910
7288	47.4	S	67.5 W	5340	4216	S	1474 W 3953

LITHOLOGY		Chert %	Shale %	Silt %	Sand %	Sat %	Cpl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm
From	To											
7060	7070	80		10		10				NF		
	7080	70		10		10		10		NF		
	7130	90		10						NF		
	7150	80		10		10				NF		
	7160	60		10		20		10		NF		
	7170	70		10		20				NF		
	7180	80		10		10				NF		
	7210	70		10		20				NF		
	7240	80		10		10				NF		
	7280	90		10						NF		
	7290	90		10						NF		
	7310	80	20							NF		
	7320	70	20			10				NF		
	7330	60	30			10				NF		
	7340	50	20	10		20				NF		
	7360	40	10	10	10	30				5		
	7380	30	10	10	20	30				5		
	7370	80		10	10	20				NF		

Remarks BCK: 205 MAX FOR GAS: 319 @ 7245.
 MOGOLLON FM. @ 7310 MD 5300 SS S: 1480 W: 3969 HD: 4236
 PALEO: 6880 - 6920 PALEGREDA FAUNA TRACES
 6920 - 7160 PALEGREDA FAUNA POOR TO COMMON.

DAILY GEOLOGICAL REPORT

Date 10/03/98

Well		LOG-24													
Depth	0937	Drilled	30	6 a.m.	7078	Days	54	Rig	PETREX-3						
Formation	Mogollon	PO	DRILLING AND SLIDING												
SURVEYS															
M. Depth	V. Angle	True Direction			V. Depth		H. Section	Coordinates							
LITHOLOGY															
From	To	Cyst %	Shale %	Slat %	Sand %	Set %	Cgl %	Dol %	Lim %	Flour %	TG unit	C _i ppm			
0910	0930	80		10		10				NF					
	0937	90				10				NF					
	0960	90		10						NF					
	0970	80		10		10				NF					
	0980	90		10						NF					
	7010	80		10		10				NF					
	7020	70		10		20				NF					
	7030	80		10		10				NF					
	7050	90		10						NF					
	7080	80		10		10				NF					

Remarks BCK: 205 MAX FOR GAS: 209 @ 6835

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO18-24

Date 06/03/98

Depth 6872 Drilled — 6 a.m. 6872 Days 50 Rig PETREX-3

Formation PALEGREDA PO POOH TO CHECK MWD&BIT

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY

From	To	Clyst %	Shale %	Skt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
------	----	---------	---------	-------	--------	-------	-------	-------	-------	---------	---------	--------

Remarks CONTINUE POOH AND L.D.D.P. TO CLEAN PLUG.
MU MOTOR AND STEREABLE ASSY W/8 1/2" BIT
RIH AT 2846. TEST SLIM ONE, DIDN'T SIGNAL POOH.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 05/03/98

Depth	6872	Drilled	—	G a.m.	6872	Days	49	Rig	PETREX-3			
Formation	PALEGREDA	PO	POOH TO CHECK D.P.									
SURVEYS												
M. Depth	V. Angle	True Direction			V. Depth	H. Section		Coordinates				
LITHOLOGY												
From	To	Chyt %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm

Remarks R/U 8 1/2" BIT, POWER PAK AND BHA. RIH TO 3810'.
R/U KELLY, TESTED SLIM ONE, HIGH PRESSURE.
POOH TO CHECK FOR PLUG IN D.P.

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **03/03/98**

Depth	7150	Drilled	---	8 a.m.	7150	Days	47	Rig	PETREX-3			
Formation	PALEGREDA	PO	RIG IN STAND BY.									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section		Coordinates					
LITHOLOGY												
From	To	Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm

Remarks **SUSAN LYNN BARGE IN Mc DONALD DOCK**
REPLACED CRANE MC005 BY CRANE MC008. INSTALL MAST AND CABLES TO CRANE MC008.
CRANE OPERATIVE. CHANGE SUSAN LYNN BOW PORT WINCH CABLE.



PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 02/03/98

Well	LO16-24											
Depth	7150	Drilled	---	6 a.m.	7150	Days	46	Rig	PETREX-3			
Formation	PALEGREDA		PO RIG IN STAND BY .									
SURVEYS												
M. Depth	V. Angle		True Direction			V. Depth		H. Section		Coordinates		
LITHOLOGY												
From	To	Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C ₁ ppm

Remarks SET SIDE TRACK CEMENT PLUG(CEMENT TOP ESTIMATED AT 6750')
SUSAN LYNN BARGE DISCONNECT ELECTRIC CABLE AND MUD LINES FROM PLATFORM AND TOWED
TO MC DONALD DOCK TO CHANGE CRANE. TOOK APART BLOCK PULLEY AND CABLE.
WAITING TOOLS TO CONTINUE TAKING APART CRANE

PETRO-TECH PERUANA S.A.

Page - 1

DAILY GEOLOGICAL REPORT

Well **LO10-24**Date **1/03/98**Depth **7150** Drilled **---** G.m. **7150** Days **44** Rig **PETREX-3**Formation **PALEGREDA** PO **WOC**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clyst	Shale	Sist	Sand	Sel	Cgl	Dol	Lim	Flint	TGS	Ci
From	To	%	%	%	%	%	%	%	%	%	unit	ppm

Remarks **DRILLED CMT @ 6850', SOFT CMT, CIRC, WOC, RIH TUB. DRILLED CMT FROM 6850' TO 7150', SOFT CMT POOH TUB. FOR NEW CMT PLUG, RIH W/FREE POINT FOR CMT PLUG @ 7150'**

PETRO-TECH PERUANA S.A.

Page - 1

DAILY GEOLOGICAL REPORT

Well **LO16-24**Date **28/02/98**Depth **6485** Drilled **166** 8 a.m. **6651** Days **43** Rig **PETREX-3**Formation **PALEGREDA** PO **DRILLING CEMENT**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Chal	Shale	Slat	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	C _i
From	To	%	%	%	%	%	%	%	%	%	unit	ppm

Remarks **SET CEMENT PLUG FROM 7202' TO 6485, WDC; POOH TUB. @ 6485', CIRC. DRILLED CMT. FROM 6485' TO 6651'**

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **25/02/98**

Depth	6730	Drilled	---	6 a.m.	6804	Days	40	Rig	PETREX-3			
Formation	PALEGREDA	PO	CIRC. FOR GAS PRES.									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section		Coordinates					
LITHOLOGY												
From	To	Clyst %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm

Remarks CIRC. FOR CLEAN IN CASING, CIRC. FOR CONTROLLED MUD WEIGHT, CIRC. DRILLED CEMENT PLUG FROM 6730' TO 6804' , CIRC FOR GAS & CRUDE PRES. (11.9 IN, 11.4 OUT).

Page - 1

Well L016-24

Date 24/02/98

Remarks LOST CIRCULATION WAS CONTROLLED, RIH TUB @ 10,000' & SET CMT PLUG, POOH TUB. @ 7213' & SET CMT PLUG.

Page - 1

Welt **L016-24**

Date 23/02/98

Depth	10775	Drilled	—	6 a.m.	10775	Days	39	Rig	PETREX-3			
Formation	B. SALINA											
PO	PUMP MUD & LOST MAT.											
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth		H. Section		Coordinates				
LITHOLOGY												
From	To	Clyst %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C ₁ ppm

Remarks POOH TO SHOE, PUMPED 60 BBLs OF MUD AND LOST MAT. DESPLACING.
CHECK ANULAR LOSSING 10 BBLs OF MUD, RIH TO 10090.

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORT

Well **LO1624**Date **22/02/98**

Depth **10775** Drilled **—** 8 a.m. **10775** Days **38** Rig **PETREX-3**
Formation **B. SALINA** PO **CIRCULATING.**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clst	Shale	Slat	Sand	Sst	Cpl	Dol	Lim	Fluor	TG	C1
From	To	%	%	%	%	%	%	%	%	%	unit	ppm

Remarks **POOH TUB. HALLIBURTON PREPARING TO LOGS.****RIH DLL-MSFL-GR and LOGGED W/VERY DIFFICULTY FROM 9900' to 6800'****GR UNTIL SURF.**

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **21/02/98**

Depth	10775	Drilled	—	6 a.m.	10775	Days	37	Rig	PETREX-3			
Formation	B. SALINA	PO	POOH TUB.									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section		Coordinates					
LITHOLOGY												
From	To	Clyst %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm

Remarks **POOH WASH PIPE, MU OVERSHOT & BHA, RIH, GET TOP FISH @ 10114, WORK & TENS. NEGATIVE HALLIBURTON RIH FOR BACK OFF COULDN'T PASS, POOH, PUT KELLY, WORK TUB. TENS. 450,000LBS. NEGATIVE CIRC FOR GAS PRES.**

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **18/02/98**Depth **10775** Drilled **—** 6 a.m. **10775** Days **34** Rig **PETREX-3**Formation **B.SALINA** PO **WORKING PIPE.****SURVEYS**

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clyst	Shale	Sst	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	C ₁
From	To	%	%	%	%	%	%	%	%	%	unit	ppm

Remarks **BACK OFF @ 10084' OK (HALLIBURTON).**
RECUPERA TUBERIA HASTA 10084' (TOPE DE PESCADO)
ARMA Y BAJA PESCANTE, MANIOBRA Y CONECTA TUBERIA
TRABAJANDO TUBERIA PARA INTENTAR LIBERAR.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Date 17/02/98

Well LO16-24

Depth 10775 Drilled — 6 a.m. 10775 Days 33 Rig PETREX-3

Formation B.SALINA PO PREP. TO BACK OFF.

SURVEYS			True Direction		V. Depth	H. Section	Coordinates	
M. Depth	V. Angle							

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
From	To											

Remarks

DAILY GEOLOGICAL REPORT

Well **LO16-24**

Date **15/02/98**

Depth **10775** Drilled **83** 6 a.m. **10775** Days **31** Rig **PETREX-3**

Formation **B.SALINA** PO **WORKING IN STUCK PIPE**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY	From	To	Clst %	Shale %	Sst %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
	10715	10720		70	10		20				NF		
		10725		80	10		10				NF		
		10730		70	10		20				5		
		10735		80	10		10				NF		
		10740		60	10	10	20				5		
		10745		40		50	10				5		
		10750		30		30	40				5		
		10755		10		10	80				5		
		10760		10		20	70				5		
		10765		30		10	60				5		
		10770		20		60	20				5-15		

Remarks **BCK: 105 MAX FOR GAS: 2350 @ 10755 TRIP GAS: 3741 @ 10692**
CONEX GAS: 519 @ 10769 AND 206 @ 10705
GAS CUT MUD @ 10775
PALEO: 10680 - 10740 FAUNA PG/SN VERY POOR + BALC. RWK TRACES.

45° desde B.S.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO18-24

Date 13/02/98

Depth	10848	Drilled	122	6 a.m.	10674	Days	29	Rig	PETREX-3			
Formation	B.SALINA	PO	DRILLING									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section		Coordinates					
LITHOLOGY												
From	To	Chyt %	Shale %	Silt %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
10560	10570		90	10						NF		
	10580		80	10		10				NF		
	10585		60	10	20	10				NF		
	10590		70	10		20				NF		
	10600		60	10	10	20				NF		
	10610		80	10		10				NF		
	10615		70	10		20				NF		
	10630		80	10		10				NF		
	10635		70	10	10	10				NF		
	10645		80	10		10				NF		
	10655		90	10						NF		
	10670		80	10		10				NF		

Remarks BCK: 120 MAX FOR GAS: 369 @ 10573' CONEX. GAS: 434 @ 10643 AND 305 @ 10611'

PALEO: 10420' - 10680' FAUNA PG/SN VERY POOR.

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 12/02/98

Depth 10526 Drilled 176 6 a.m. 10568 Days 28 Rig PETREX-3

Formation B.SALINA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
From	To											
10390	10400		80	10		10				NF		
	10410		70		10	20				5		
	10420		60	10	10	20				5		
	10430		80	10		10				NF		
	10440		50		30	20				5-15		
	10445		50		40	10				15		
	10450		60		30	10				5		
	10460		70		10	20				NF		
	10465		70	10		20				NF		
	10485		80	10		10				NF		
	10485		90	10						NF		
	10515		80	10		10				NF		
	10545		90	10						NF		
	10560		80	10		10				NF		

Remarks BCK: 120 MAX FOR GAS: 146 @ 10469 CONEX. GAS: 229 @ 10484.

PALEO: 10230' - 10420' FAUNA PG/SN VERY POOR.

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 11/02/98

Depth 10350 Drilled 143 6 a.m. 10402 Days 27 Rig PETREX-3
 Formation B.SALINA PO DRILLING

SURVEYS

M. Depth V. Angle True Direction V. Depth H. Section Coordinates

LITHOLOGY		Clyst	Shale	Sist	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	Ci
From	To	%	%	%	%	%	%	%	%	%	unit	ppm
10210	10220		30		40	30				50		
	10230		70	10	10	10				5-15		
	10240		60		30	10				30		
	10250		50	10	30	10				30-50		
	10260		20	10	50	20				50-75		
	10270		40	10	20	30				30-50		
	10275		50		30	20				30		
	10295		60	10	10	20				15		
	10300		50	10	30	10				30		
	10310		50		30	20				50		
	10320		70		20	10				15-30		
	10330		70		10	20				15		
	10340		60		20	20				15-30		
	10350		70		10	20				15		
	10370		70	10		20				5-15		
	10380		60	10	10	20				15		
	10390		70	10		20				5-15		

Remarks BCK: 110 MAX FOR GAS : 450 @ 10274' 240 @ 10301" TRIP GAS : 5720 @ 10208'

CONEX GAS : 216 @ 10326'

PALEO: 10190' - 10230' FAUNA PG/SN VERY POOR.

FROM : PETREX Saipem Group

PHONE NO. :

Feb. 10 1998 10:17AM P8

DEPTH (FT)	TOTAL GAS (UNITS)	ROP (FT/HR)	DEPTH (FT)	TOTAL GAS (UNITS)	ROP (FT/HR)
10,153.7	95.9	47.3	10,203.3	100.3	12.5
10,155.0	96.2	47.3	10,204.7	96.5	12.8
10,155.7	96.2	37.8	10,205.2	96.8	11.9
10,156.3	96.1	37.8	10,207.0	96.1	5.2
10,157.7	96.2	38.2	10,207.7	96.1	17.4
10,158.3	96.2	42.2	10,208.3	5,720.4	17.4
10,159.7	96.3	37.3	10,209.7	112.8	19.5
10,160.9	96.3	31.6	10,210.3	102.8	17.6
10,161.7	96.3	24.9	10,211.7	100.9	8.8
10,162.9	96.2	31.5	10,212.3	101.7	6.9
10,163.7	96.2	44.2	10,213.7	100.9	5.9
10,164.8	96.2	47.9	10,214.2	122.7	6.5
10,166.2	96.3	39.1	10,216.2	120.8	0.3
10,166.8	96.4	40.0	10,218.2	113.7	6.3
10,168.1	97.2	17.6	10,220.1	194.0	6.6
10,168.8	97.9	15.0			
10,170.1	103.4	12.9			
10,170.7	102.8	11.1			
10,172.1	98.9	8.7			
10,172.7	97.8	10.8			
10,174.0	98.1	55.6			
10,174.7	98.1	22.5			
10,176.0	98.0	14.1			
10,176.7	98.0	21.2			
10,177.3	98.4	21.2			
10,178.7	95.9	24.4			
10,179.3	95.8	27.3			
10,180.7	96.0	16.1			
10,181.2	97.2	47.0			
10,182.7	97.9	13.3			
10,183.2	99.6	12.0			
10,184.7	99.7	14.5			
10,185.8	99.2	16.5			
10,187.1	99.5	17.9			
10,187.8	100.5	59.1			
10,189.1	100.2	13.7			
10,189.8	100.8	7.8			
10,191.1	100.7	11.1			
10,191.7	98.4	13.7			
10,193.1	98.3	14.8			
10,193.7	97.1	8.3			
10,195.0	96.9	6.4			
10,195.7	96.9	8.8			
10,196.3	95.8	8.8			
10,197.7	95.8	10.2			
10,198.3	95.8	17.6			
10,199.3	95.8	15.4			
10,200.7	95.8	17.1			
10,201.3	98.4	16.3			
10,202.7	118.7	13.5			

8

FROM : PETREX Saipem Gro

PHONE NO. :

Feb. 10 1998 10:16AM P7

Feb, 10, 98.

DEPTH (FT)	TOTAL GAS (UNITS)	ROP (FT/HR)	DEPTH (FT)	TOTAL GAS (UNITS)	ROP (FT/HR)
10,063.7	106.5	16.4	10,103.0	110.9	41.4
10,065.1	106.7	17.6	10,104.9	109.0	37.6
10,066.7	106.6	22.3	10,105.8	225.3	27.2
10,067.0	106.9	21.3	10,107.1	118.0	20.0
10,067.7	106.8	17.0	10,107.8	117.8	23.6
10,069.0	106.2	22.3	10,109.1	111.6	23.6
10,069.6	106.6	17.1	10,109.7	110.7	38.1
10,081.0	107.0	17.7	10,111.0	145.0	24.5
10,081.6	105.1	33.3	10,111.7	130.0	23.2
10,082.9	106.9	26.4	10,113.0	114.0	27.6
10,083.6	106.9	20.0	10,113.7	111.4	16.6
10,084.8	106.3	26.8	10,115.0	110.0	30.7
10,085.6	106.3	26.5	10,115.6	110.8	17.1
10,086.9	107.1	36.5	10,116.9	111.4	20.0
10,087.6	107.1	22.4	10,117.6	111.4	34.4
10,088.8	107.1	25.1	10,118.6	111.7	34.2
10,089.6	107.1	30.9	10,119.6	112.1	46.3
10,070.6	107.5	29.9	10,120.6	114.0	54.1
10,071.6	107.5	13.9	10,121.6	111.0	70.5
10,072.8	112.5	14.5	10,122.6	111.5	32.7
10,074.1	109.4	09.0	10,123.0	112.5	10.7
10,074.7	106.6	71.6	10,124.6	120.3	11.6
10,076.1	109.7	36.9	10,126.1	111.6	5.9
10,076.7	106.7	56.1	10,126.8	116.2	6.2
10,078.0	124.5	14.4	10,128.1	111.9	11.6
10,078.7	126.3	20.0	10,129.0	106.7	4.6
10,080.0	114.2	38.7	10,130.1	105.3	7.3
10,080.6	106.3	27.6	10,130.7	104.6	11.0
10,082.0	106.3	26.1	10,132.0	105.4	22.3
10,082.6	106.6	32.4	10,132.7	105.7	28.5
10,083.9	106.9	32.4	10,134.0	106.8	31.7
10,084.6	106.9	38.7	10,134.7	256.6	7.8
10,085.9	114.3	38.7	10,136.0	194.0	9.3
10,086.6	114.3	21.0	10,136.6	194.0	33.5
10,087.9	111.4	21.2	10,137.9	131.6	7.6
10,088.6	111.4	41.8	10,138.6	131.6	6.3
10,089.6	106.0	39.4	10,139.9	104.7	4.9
10,090.6	106.0	53.1	10,140.6	104.7	8.3
10,091.6	106.1	55.5	10,141.9	104.9	5.0
10,093.1	106.5	40.4	10,142.7	104.9	7.0
10,093.6	106.3	35.8	10,143.8	105.2	5.8
10,095.1	106.7	31.1	10,144.7	105.2	12.9
10,095.7	106.9	36.9	10,145.6	96.4	7.9
10,097.1	109.8	26.1	10,147.1	96.2	20.4
10,097.7	110.1	32.4	10,147.8	96.2	11.5
10,099.0	110.0	37.8	10,149.1	96.2	12.6
10,099.7	110.0	48.2	10,149.7	66.3	52.6
10,101.0	111.0	46.3	10,151.1	96.4	26.6
10,101.6	111.2	44.8	10,151.7	96.1	15.2
10,103.0	110.9	44.2	10,153.0	96.2	13.7

BASAL

SALINA TOP

7

Again looking
Page 5

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Page - 1

Well LO16-24

Depth 10207 Drilled 142 6 a.m. 10218 Days 26 Rtg PETREX-3

Formation B.SALINA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
10020	45.0	S 69.5 W	7084	6337	S 2052 W 5696
10147	44.6	S 68.1 W	7154	6427	S 2084 W 6060

LITHOLOGY

From	To	Clst %	Shale %	Sst %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
10140	10145		50	20	10	20				15		
	10150		50	10	20	20				30		
	10160		50	20		30				15-30		
	10170		70	10	10	10				5-15		
	10180		50	10	30	10				30-50		
	10190		20		60	20				75		
	10200		30		40	30				50-75		
	10210		50		20	30				30-50		

Remarks BASAL SALINA FM. @ 10080 MD 7052 SS. S.2068 W.6036 HD 6381
 PALEO: 9860-9980 FAUNA PG/SN COMMON + BALC. RWK TRACES TO VERY POOR
 9980-10080 FAUNA PG/SN ABUNDANT + BALC. RWK VERY POOR TO POOR
 10080-10190 FAUNA Pg/sn vp.

11: 2/10/98
 DE: 6/20/98

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **09/02/98**Depth **10085** Drilled **375** 6 a.m. **10150** Days **25** Rig **PETREX-3**Formation **S.CRISTOBA** PO **DRILLING****SURVEYS**

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
9640'	46.8	S	69.8 W	6900'	6065'	S	1959 W 5740
9830'	45.8	S	70.1 W	6931'	6202'	S	2006 W 5869

LITHOLOGY		Clst %	Shale %	Slat %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
From	To											
9780	9790		90	10						NF		
	9800	10	80	10						NF		
	9810		90	10						NF		
	9830		100							NF		
	9840		90	10						NF		
	9850	80		10		10				NF		
	9870		90	10						NF		
	9880		80	10		10				NF		
	9890		90			10				NF		
	10010		80	10		10				NF		
	10030		90	10						NF		
	10050		80	10		10				NF		
	10070		90	10						NF		
	10080		80	10		10				NF		
	10090		60	10		30				NF		
	10100		60	10		30				NF		
	10110		70	10		20				NF		
	10130		70	20		10				5		
	10140		80	10		10				NF		

Remarks PALEO: 9410' - 9630' FAUNA PG/SN VERY POOR

9630' - 9690' FAUNA PG/SN VERY POOR + BALC. RWK TRACES

9690' - 9860' FAUNA PG/SN COMMON + BALC. RWK VERY POOR.

Post-it™ Transmisión por Fax 7671		FECHA/ DATE Feb. 09	N° DE PAGINAS/ # OF PAGES 1
PARA/TO Geología		DE/FROM B. Morales	
COMPANIA/CO.		COMPANIA/CO.	
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #	
FAX		FAX	

DAILY GEOLOGICAL REPORT

Well **LO16-24**

Date **08/02/98**

Depth **9890** Drilled **408** 6 a.m. **9800** Days **24** Rig **PETREX-3**
 Formation **S.CRISTOBA** PO **DRILLING**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
9262'	48.70	S 72.40 W	6545.26	5785.97	S 1869.15 W 5478.11
9451'	47.50	S 71.30 W	6671.48	5828.80	S 1912.98 W 5609.78

LITHOLOGY

From	To	Clst %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
9380	9400	30	50	20						NF		
	9420	20	60	20						NF		
	9460	10	80	10						NF		
	9500	10	90							NF		
	9510	10	80	10						NF		
	9520		90	10						NF		
	9530	20	70	10						NF		
	9540	10	80	10						NF		
	9550	20	80							NF		
	9570	10	70	20						NF		
	9580	10	80	10						NF		
	9600		80	10		10				NF		
	9610		80	10		10				5		
	9630		80	10		10				NF		
	9650		80	10		10				5		
	9680		90	10						NF		
	9670		80	10		10				5		
	9680		80	10		10				NF		
	9690		90	10						NF		
	9710		80	10		10				5		
	9780		90	10						NF		

Remarks **BCK: 120 MAX FOR GAS 1294 @ 9498' CONEX. GAS: 529 @ 9440'.**
PALEO: 9030' - 9150' FAUNA PG/SN POOR + BALC. RWK TRACES.
9150' - 9410' FAUNA PG/SN VERY POOR TO POOR.

6843'
LS

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 07/02/98

Depth 9282 Drilled 433 6 a.m. 9365 Days 23 Rig PETREX-3
 Formation S.CRISTOBA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
8881'	50.70	S 73.30 W	6299.10	5485.46	S 1784.04 W 5198.06
9072	49.80	S 73.10 W	6421.23	5642.15	S 1826.48 W 5338.64

LITHOLOGY		Chyst	Shale	Sist	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	C ₁
From	To	%	%	%	%	%	%	%	%	%	unit	ppm
9020	9040	20	70	10						NF		
	9060	20	70	10						NF		
	9070	10	60	20		10				NF		
	9080	10	70	10		10				NF		
	9090	10	80	10						NF		
	9110	20	60	10		10				NF		
	9130	20	70	10						NF		
	9140	20	60	20						NF		
	9150	30	30	20		10		10		NF		
	9160	30	50	10		10				NF		
	9170	30	60	10						NF		
	9180	30	50	10		10				NF		
	9210	20	70	10						NF		
	9220	20	60	10		10				NF		
	9240	30	60	10						NF		
	9260	50	40	10						NF		
	9280	30	70							NF		
	9310	30	60	10						NF		
	9330	40	60							NF		
	9340	60	30	10						NF		
	9350	10	70	20						NF		
	9360	30	50	20						NF		
	9370	20	60	10		10				NF		
	9380	30	60	10						NF		

Remarks BCK: 95 MAX FOR GAS: 555 @ 9253 CONEX. GAS: 382 @ 8965

PALEO: 8440 - 8580 FAUNA PG/SN POOR TO COMMON

8580 - 8800 FAUNA PG/SN VERY POOR TO POOR

8800 - 9030 FAUNA PG/SN POOR TO COMMON + BALC. RWK

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 06/02/98

Depth 8849 Drilled 579 6 a.m. 9028 Days 22 Rig PETREX-3

Formation S.CRISTOBA PO CIRCULATING TO SHORT TRIP

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
8311'	51.50	S 74.50 W	5942.98	5051.32	S 1662.64 W 4769.90
8502'	51.40	S 74.50 W	6061.88	5200.44	S 1702.58 W 4913.94
8692'	51.40	S 74.10 W	6180.29	5348.71	S 1742.79 W 5056.99

LITHOLOGY

From	To	Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
8330	8350	70		20		10				NF		
	8380	80		20						NF		
	8390	80		10		10				NF		
	8400	70		20		10				NF		
	8410	80		20						NF		
	8420	50	20	20		10				NF		
	8430	40	20	10	10	20				NF		
	8440	50	20	10		20				NF		
	8460	50	30	10		10				NF		
	8470	40	30	20		10				NF		
	8480	40	20		10	30				5		
	8490	30	20		20	30				15		
	8500	40	20		10	30				5		
	8520	30	20	20		30				NF		
	8530	40	20	20		20				NF		
	8540	40	20	20		20				5		
	8550	30	10	10	10	40				15		
	8560	40	10	20		30				5		
	8570	40	10	10	10	30				5		
	8580	50	20	20		10				NF		
	8590	60	20	10		10				NF		
	8600	50	30	10		10				NF		
	8610	30	10	10	20	30				30		
	8620	50	10	20		20				5		
	8630	40		10	30	20				15-30		
	8640	40	30	20		10				NF		
	8650	50	30	10		10				5		
	8660	40	20		10	30				15		
	8670	20	40	20		20				5-15		
	8680	50	20	20		10				NF		
	8700	40	40	10		10				NF		
	8710	20	60	10		10				NF		
	8720	30	50	10		10				NF		
	8730	30	40	20		10				5		
	8740	40	30	20		10				5		
	8750	60	30	10						NF		
	8760	50	40	10						NF		
	8770	30	70							NF		
	8780	40	60							NF		
	8790	20	80							NF		
	8800	20	70	10						NF		
	8810	40	50	10						NF		
	8820	60	30	10						NF		
	8840	40	50	10						NF		
	8860	60	30	10						NF		
	8880	70	20	10						NF		
	8900	60	20	20						NF		
	8920	70	20	10						NF		

Last Modification 06/02/98 - 07:57:09

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Page - 2

Well LO16-24

Date 06/02/98

8930	60	30	10	NF
8940	80	20		NF
8950	70	20	10	NF
8960	70	30		NF
8990	90	10		NF
9020	30	60	10	NF

Remarks PALEO: 7730' - 8330' FAUNA PG/SN POOR TO COMMON
8330' - 8440 FAUNA PG/SN COMMON TO ABUNDANT.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 05/02/98

Depth 8270 Drilled 761 6 a.m. 8350 Days 21 Rig PETREX-3

Formation S. CRISTOB PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
7615'	52.50	S 75.70 W	5515.00	4504.39	S 1523.49 W 4239.00
7773'	52.30	S 75.90 W	5611.41	4629.05	S 1554.19 W 4360.35
7931'	52.10	S 75.80 W	5708.25	4753.37	S 1584.92 W 4481.36
8121'	51.90	S 74.80 W	5825.22	4902.59	S 1623.17 W 4626.11

LITHOLOGY		Clyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From	To											
7640	7660	80			10	10				5-15		
	7680	80		10		10				NF		
	7690	60		10	10	20				5		
	7700	30		10	20	40				30		
	7710	30		10	10	50				30		
	7720	60		20		20				5		
	7730	60		10		30				NF		
	7740	70		20		10				NF		
	7750	80		20						NF		
	7760	90		10						NF		
	7770	70		10		20				NF		
	7780	70		20		10				NF		
	7800	80		10		10				NF		
	7810	80		20						NF		
	7830	60	20	10		10				NF		
	7840	50	20	10		20				NF		
	7860	50	20	20		10				NF		
	7880	60	20	20						NF		
	7900	60	10	10		20				NF		
	7910	60	20	10		10				NF		
	7930	60	20	10		10				NF		
	7940	40	30	20		10				NF		
	7950	60	20	10		10				NF		
	7960	80	10	10						NF		
	7970	60	20	10		10				NF		
	8000	70	20	10						NF		
	8010	40	40	10		10				NF		
	8020	40	50	10						NF		
	8030	60	30	10						NF		
	8040	60	20	10		10				NF		
	8060	80	20							NF		
	8080	80	10	10						NF		
	8090	90	10							NF		
	8100	80	10			10				NF		
	8120	70	20	10						NF		
	8140	80		10		10				NF		
	8170	90		10						NF		
	8180	80		20						NF		
	8220	50	40	10						NF		
	8230	60	20							NF		
	8260	70	20	10						NF		
	8270	80		20						NF		
	8280	70	30							NF		
	8310	50	40	10						NF		
	8330	40	40	10						NF		

10

PETRO-TECH PERUANA S.A

Page - 2

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **05/02/98****Remarks** PALEO: 7355' - 7430' FAUNA PG/SN VERY POOR TO POOR

7430' - 7610' BARREN

7610' - 7730' FAUNA PG/SN VERY POOR.

SAN CRISTOBAL FM. @ 7950 MD 5664 SS S: 1568 W: 4493 HD: 4765.

PETRO-TECH PERUANA S.A.

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 04/02/98

Depth 7509 Drilled 287 8 a.m. 7655 Days 20 Rig PETREX-3

Formation MOGOLLON PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates
6922	41.4	S	76.3 W	5058		
7110	45.8	S	76.8 W	5194		
7299	50.7	S	77.1 W	5320		
7457	52.4	S	78.8 W	5418		

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Set %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
From	To											
7300	7310	80		10				10		NF		
	7320	80		10		10				NF		
	7330	90		10						NF		
	7340	80		10		10				NF		
	7350	40		10	10	40				30		
	7355	20			20	60				75		
	7420	80		10		10				NF		
	7430	70		20		10				NF		
	7440	10			60	30				15		
	7450	10			70	20				5-15		
	7460	10			70	20				30		
	7470	10			60	30				50		
	7480	20			30	50				75		
	7490	30			40	30				50		
	7500	40			10	50				30-50		
	7520	60			10	30				15-30		
	7530	60			20	20				30		
	7540	50			30	20				30		
	7550	40			20	40				50		
	7560	60			20	20				15-30		
	7570	80		10		10				5		
	7580	20			60	20				50		
	7590	30			10	60				50		
	7600	40			20	40				30-50		
	7610	70			10	20				15-30		
	7620	80			10	10				5		
	7630	70		10		20				15		
	7640	80		10		10				5		

Remarks PALEO: 6807 - 7130 FAUNA PG/SN VERY POOR TO POOR

7130 - 7190 FAUNA PG/SN COMMON

7190 - 7355 FAUNA PG/SN VERY POOR TO POOR.

SS: whitish, gy whitish, 100% of, glauc, calc cut.

Fl: pale yellow, slow cut milky wh. in cut.

de G. M. P. (s)

H: G. M. P.

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 03/02/98

Depth 7222 Drilled 410 6 a.m. 7325 Days 19 Rig PETREX-3

Formation MOGOLLON PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm
From	To											
6812	6830	90		10						NF		
	6840	90		10						NF		
	6860	80		10		10				NF		
	6870	80		10	10	20				NF		
	6900	80		10		10				NF		
	6920	90		10						NF		
	6960	80		10		10				NF		
	7000	90		10						NF		
	7010	80		10		10				NF		
	7060	90		10						NF		
	7070	80		20						NF		
	7080	80		10		10				NF		
	7090	70		10		20				NF		
	7160	80		10		10				NF		
	7170	70		20		10				NF		
	7190	80		20						NF		
	7210	70		20		10				NF		
	7240	80		10		10				NF		
	7260	90		10						NF		
	7280	70		20		10				NF		
	7300	90		10						NF		

Remarks

Post-it TM Transmisión por Fax 7671		FECHA/DATE Feb. 03	Nº DE PAGINAS/ # OF PAGES 1
PARA/TO Geología		DE/FROM b. Morales	
COMPANIA/CO.		COMPANIA/CO.	
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #	
FAX		FAX	

Last Modification 03/02/98 - 07:34:53

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 02/02/98

Depth	6812	Driiled	5	6 a.m.	6812	Days	18	Rig	PETREX-3			
Formation	MOGOLLON	PO	RIH.									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates						
LITHOLOGY												
From	To	Clst %	Shale %	Sst %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C ₁ ppm
6807	6812	80		10		10				NF		

Remarks CEMENT TOP @ 6758'

Post-It[®] Transmisión por Fax 7671

FECHA/DATE	Feb. 2	N° DE PAGINAS/ # OF PAGES	1
PARA/TO	Geologia		
DE/FROM	b. Morales		
COMPANIA/CO.	COMPANIA/CO.		
DEPARTAMENTO/DEPT.	TELEFONO/PHONE #		
FAX	FAX		

DAILY GEOLOGICAL REPORT

Well **LO18-24**

Date **01/02/98**

Depth	6807	Drilled	—	G.a.m.	6807	Days	17	Rig	PETREX-3			
Formation	MOGOLLON											
PO	WAITING ON CEMENT.											
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates						
LITHOLOGY												
From	To	Clyst %	Shale %	Slat %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm

Remarks **CGS 9 56" @ 6807.**

DAILY GEOLOGICAL REPORT

Well **LO16-24**

Date **31/01/98**

Depth	6807	Drilled	285	6 a.m.	6807	Days	16	Rig	PETREX-3
Formation	MOGOLLON	PO	CIRCULATING						

SURVEYS						
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates
6504	40.8	S	75.9 W	4740		
6893	39.8	S	76.4 W	4884		

LITHOLOGY		Clyst %	Shale %	Silt %	Sand %	Sat %	Col %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
From	To											
6740	6750	70		10		20				NF		
	6760	80		10		10				NF		
	6770	90		10						NF		
	6780	70		10		20				NF		
	6807	80		10		10				NF		

Remarks **MOGOLLON FM. @ 6700 MD 4835 SS. S: 1370 W: 3593 HD: 3845**

RUN SONIC - GR LOG 2884 - 2485

PALEO: 6370 - 6720 PALEGREDA FAUNA TRACES. 6720-6807 PG. FAUNA VERY POOR.

PETRO-TECH PERUANA S.A

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 30/01/98

Depth 6522 Drilled 570 6 a.m. 6775 Days 15 Rig PETREX-3

Formation PALEGREDA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
5935'	44.1	S	75.6 W	4321'	3334'	S	1244.6 W 3098.8
6124'	43.2	S	75.7 W	4458'	3464'	S	1278.9 W 3223.1
6314'	42.1	S	75.8 W	4593.1	3592'	S	1308.6 W 3347.9

LITHOLOGY	To	Cyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From												
6100	6110	80		10				10		NF		
	6130	70		10		10		10		NF		
	6140	80		10				10		NF		
	6160	90		10						NF		
	6170	80		20						NF		
	6180	80		10				10		NF		
	6200	90		10						NF		
	6220	80		10				10		NF		
	6230	90		10						NF		
	6250	100								NF		
	6270	90		10						NF		
	6280	100								NF		
	6290	90		10						NF		
	6390	100								NF		
	6400	80		20						NF		
	6450	90		10						NF		
	6460	100								NF		
	6540	90		10						NF		
	6550	80		10				10		NF		
	6560	90		10						NF		
	6570	70		20				10		NF		
	6580	90		10						NF		
	6620	80		10		10				NF		
	6640	90		10						NF		
	6650	80		10		10				NF		
	6660	80		10				10		NF		
	6670	80		20						NF		
	6700	90		10						NF		
	6730	80		10		10				NF		
	6740	70		20		10				NF		

Remarks PALEO: 5950 - 6370 FAUNA PALEGREDA TRACES.

Post-it® Transmisión por Fax 7671		FECHA/ DATE Jan 30	Nº DE PAGINAS/ # OF PAGES 1
PARA/TO Geologue		DE/FROM B. Morales	
COMPANIA/CO.		COMPANIA/CO.	
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #	
FAX		FAX	

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 29/01/98

Depth	5062	Drilled	—	6 a.m.	6130	Days	14	Rig	PETREX-3			
Formation	PALEGREDA	PO	DRILLING									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates						
3465	58.9	S	71.0 W	2837	1372	S	673.48	W	1217.7			
3688	58.4	S	71.9 W	2953	1562	S	733.6	W	1397.4			
4165	56.4	S	71.6 W	3210	1963	S	859.6	W	1779.0			
LITHOLOGY												
From	To	Clyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	C1 ppm
5960	5980	90		10						NF		
	5990	80		10				10		NF		
	6010	90		10						NF		
	6030	80		20						NF		
	6040	90		10						NF		
	6050	80		10				10		NF		
	6060	80		20						NF		
	6100	80		10				10		NF		

Remarks

Post-It® Transmisión por Fax 7671

FECHA/DATE	Jan. 29	Nº DE PAGINAS/ # OF PAGES	1
PARA/TO	Geologia		
DE/FROM	C. Morales		
COMPANIA/CO.			
DEPARTAMENTO/DEPT.			
FAX			

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well L016-24

Date 28/01/98

Depth	5652	Drilled	—	6 a.m.	5652	Days	13	Rig	PETREX-3			
Formation	PALEGREDA	PO	RIH TO SHOE.									
SURVEYS												
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates						
LITHOLOGY												
From	To	Clyst %	Shale %	Sst %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm

Remarks

Post-it™ Transmisión por Fax 7671		FECHA/ DATE	Jan 28	Nº DE PAGINAS/ # OF PAGES	1
PARA/TO	Geologia	DE/FROM	B. Morales		
COMPANIA/CO.		COMPANIA/CO.			
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #			
FAX		FAX			

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well **LO16-24**Date **27/01/98**Depth **5652** Drilled **—** 6 a.m. **5652** Days **12** Rig **PETREX-3**Formation **PALEGREDA** PO

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Cyst	Shale	Sist	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	C ₁
From	To	%	%	%	%	%	%	%	%	%	unit	ppm

Remarks **POH W/ DIFFICULTY TO SHOE . REPAIRING CLUTCH OF DRAWWORK.**

Post-it [®] Transmisión por Fax 7671		FECHA/ DATE Jan 27	Nº DE PAGINAS/ # OF PAGES 1
PARA/TO Geología	DE/FROM b. Morales		
COMPANIA/CO.	COMPANIA/CO.		
DEPARTAMENTO/DEPT.	TELEFONO/PHONE #		
FAX	FAX		

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 26/01/98

Depth 5952 Drilled 440 6 a.m. 5952 Days 11 Rig PETREX-3
 Formation PALEGREDA PO POOH.

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
5588	47.6	S	78.5 W	4077	3085	S	1131.3 W 2872.6
5776	45.8	S	78.8 W	4208	3221	S	1162.9 W 3005.7

LITHOLOGY		Chal	Shale	Sist	Sand	Sst	Cgl	Dol	Lim	Fluor	TG	Ci
From	To	%	%	%	%	%	%	%	%	%	unit	ppm
5830	5860	90						10		NF		
	5740	100								NF		
	5810	90		10						NF		
	5820	80		20						NF		
	5830	100								NF		
	5840	80		10				10		NF		
	5860	90						10		NF		
	5890	100								NF		
	5910	90		10						NF		

Remarks PALEO: 5380 - 5910 FAUNA PALEGREDA TRACES TO VERY POOR.

Post-It [™] Transmisión por Fax 7671		FECHA/DATE Jan. 26	N° DE PAGINAS/1 OF PAGES 1
PARA/TO Geologia	DE/FROM b. Morales		
COMPANIA/CO.	COMPANIA/CO.		
DEPARTAMENTO/DEPT.	TELEFONO/PHONE #		
FAX	FAX		

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 25/01/98

Depth 5512 Drilled 1424 6 a.m. 5638 Days 10 Rig PETREX-3

Formation PALEGREDA PO REPARING MUD PUMP.

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
4450'	55.40	S 74.70 W	3369.49	2199.23	S 912.80 W 2009.99
4641'	54.10	S 74.50 W	3479.73	2354.81	S 954.02 W 2160.37
4831'	52.80	S 75.60 W	3592.88	2506.97	S 993.41 W 2307.82
5021'	51.40	S 75.70 W	3709.59	2656.29	S 1030.57 W 2453.07
5210'	50.30	S 76.50 W	3828.91	2802.16	S 1065.78 W 2595.34

LITHOLOGY	From	To	Clyst %	Shale %	Sst %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
	4370	4400	80		10		10				5		
		4410	80		20						NF		
		4470	80		10		10				5		
		4480	80		20						NF		
		4500	80		10		10				5		
		4520	70		10		10		10		NF		
		4540	70		20				10		NF		
		4560	80		10				10		NF		
		4590	90		10						NF		
		4610	90						10		NF		
		4630	100								NF		
		4670	90		10						NF		
		4680	70		20				10		NF		
		4690	70		10		10		10		NF		
		4700	60		10		20		10		NF		
		4720	70		10		10		10		NF		
		4730	70		20				10		NF		
		4760	70		10		10		10		NF		
		4770	60		20		10		10		NF		
		4780	80		10		10				NF		
		4870	90		10						NF		
		4970	70		20				10		NF		
		4990	80		10		10				NF		
		5060	90		10						NF		
		5070	80		10				10		NF		
		5080	80		10						NF		
		5100	100								NF		
		5130	80		10				10		NF		
		5150	90		10						NF		
		5160	100								NF		
		5220	90		10						NF		
		5240	100								NF		
		5270	80		10		10				NF		
		5340	90		10						NF		
		5360	80		20						NF		
		5370	90		10						NF		
		5380	70		20				10		NF		
		5390	90						10		NF		
		5450	100								NF		
		5480	90		10						NF		
		5490	100								NF		
		5500	90		10						NF		
		5510	80		10		10				NF		
		5520	90		10						NF		
		5530	80		10		10				NF		
		5580	100								NF		
		5600	90		10						NF		
		5610	100								NF		

Last Modification 25/01/98 - 08:00:06

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 25/01/98

5620	80	10	10	NF
5630	90	10		NF

Remarks MAX FOR GAS: 1600 @ 4400 TRIP GAS: 3200 @ 4817.
 PARINAS FM. @ 4230' MD 3191' Ss. S:863 W: 1835 HD: 2028 (LITOL. TOP)
 PALEGREDA FM. @ 4540' MD 3366' Ss. S: 932 W: 2081 HD: 2281 (LITOL TOP)
 PALEO: 4010 - 4100 FAUNA LW CHACRA POOR
 4100 - 4280 FAUNA LW CHACRA ABUNDANT
 4280 - 4930 FAUNA LW CHACRA VERY POOR
 4930 - 5380 FAUNA PALEGREDA TRACES.

Ceras Nlorals

Parinas top at 4190' MD

Palegrede Top at 4930' MD.

Oxauco	54	(+54)
Piña Negra	6961	(-55)
Lobitos	6234	(-72)
Providencia	916	(+29)
Litoral	1300	(-11)
Dorsone	1861	+47
Total	17326	(-00)

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 24/01/98

Depth 4088 Drilled 1388 6 a.m. 4404 Days 9 Rig PETREX-3
 Formation CHACRA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
2990'	56.30	S	71.30 W	2583.05	970.52	S	47.09 W 835.97
3149'	57.30	S	71.80 W	2670.11	1103.54	S	589.20 W 962.17
3308'	58.10	S	72.10 W	2755.08	1237.89	S	630.84 W 1089.95
3466'	58.80	S	71.00 W	2837.83	1372.58	S	673.47 W 1217.74
3656'	58.50	S	72.10 W	2936.34	1534.90	S	724.86 W 1371.74

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From	To											
3040	3070	70		20				10		NF		
	3190	80		10				10		NF		
	3220	70		20				10		NF		
	3250	90		10						NF		
	3280	80		10		10				NF		
	3310	70		10				20		NF		
	3340	70		10		10		10		NF		
	3430	80		10				10		NF		
	3460	90		10						NF		
	3490	80		10				10		NF		
	3580	90		10						NF		
	3760	80		10				10		NF		
	3820	70		10				20		NF		
	3880	70		10		10		10		NF		
	4050	80		10				10		NF		
	4170	90		10						NF		
	4190	100								NF		
	4230	90		10						NF		
	4240	80		20						NF		
	4260	80		10		10				NF		
	4270	90		10						NF		
	4280	80		10		10				NF		
	4290	90		10						NF		
	4310	80		20						NF		
	4340	80		10		10				5		
	4350	80		20						NF		
	4370	80		10		10				5		

Remarks PALEO: 2470' - 2910' FAUNA CHACRA VERY POOR

2910' - 3070' FAUNA CHACRA COMMON

3070' - 4010' FAUNA CHACRA VERY POOR.

Last Modification 24/01/98 - 07:49:20

PETRO-TECH PERUANA S.A.

Page - 1

DAILY GEOLOGICAL REPORTWell **LO16-24**Date **23/01/98**Depth **2700** Drilled **230** 6 a.m. **3150** Days **8** Rig **PETREX-3**Formation **CHACRA** PO **DRILLING****SURVEYS**

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
2352	48.30	S	69.30 W	2205.59	458.71	S	379.68 W 350.19
2548	53.80	S	71.70 W	2328.77	609.06	S	430.42 W 493.84
2674	54.20	S	71.50 W	2402.83	710.98	S	462.59 W 590.56

LITHOLOGY		Cyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From	To											
2470	2530	90						10		NF		
	2560	90		10						NF		
	2590	80		10				10		NF		
	2650	90		10						NF		
	2680	100								NF		
	2710	90		10						NF		
	2740	80		20						NF		
	2830	90		10						NF		
	2890	70		10				20		NF		
	2920	70		20				10		NF		
	2950	60		20				20		NF		
	2980	70		20				10		NF		
	3040	80		10				10		NF		

Remarks **PALEO: 1710' - 1980' CLAVIGERINELLA COLOMBIANA FAUNA COMMON****1980' - 2470' QUEMADA FAUNA TRACES.****CHACRA Fm. @ 2830' MD 2438' Ss. (TOPE LITOL)**Post-It[®] Transmisión por Fax 7671

FECHA/DATE	Jan. 22	N° DE PAGINAS/ # OF PAGES	4
PARA/TO	Geologu	DE/FROM	b. Morales
COMPANIA/CO.		COMPANIA/CO.	
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #	
FAX		FAX	

PETRO TECH - PERUANA S.A.
 Gerencia de Exploración
 y Desarrollo
 23 ENE. 1998
RECIBIDO

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORT

Well LO18-24

Date 23/01/98

Depth 2700 Drilled 230 6 a.m. 3150 Days 8 Rig PETREX-3
 Formation CHACRA PO DRILLING

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates
2352	48.30	S 69.30 W	2205.59	458.71	S 379.68 W 350.19
2548	53.80	S 71.70 W	2328.77	609.08	S 430.42 W 463.84
2674	54.20	S 71.50 W	2402.83	710.98	S 462.59 W 590.56

LITHOLOGY	From	To	Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
	2470	2530	90						10		NF		
		2580	90		10						NF		
		2590	80		10				10		NF		
		2650	90		10						NF		
		2680	100								NF		
		2710	90		10						NF		
		2740	80		20						NF		
		2830	90		10						NF		
		2890	70		10				20		NF		
		2920	70		20				10		NF		
		2950	60		20				20		NF		
		2980	70		20				10		NF		
		3040	80		10				10		NF		

Remarks PALEO: 1710' - 1960' CLAVIGERINELLA COLOMBIANA FAUNA COMMON

1960' - 2470' QUEMADA FAUNA TRACES.

CHACRA Fm. @ 2830' MD 2438' Ss.

Post-it [™] Transmisión por Fax 7671		FECHA/DATE Jan 22	Nº DE PAGINAS/OF PAGES 1
PARA/TO Geologo	DE/FROM b. Morales		
COMPANIA/CO.	COMPANIA/CO.		
DEPARTAMENTO/DEPT.	TELEFONO/PHONE #		
FAX	FAX		

PETRO-TECH PERUANA S.A.

DAILY GEOLOGICAL REPORT

Well L016-24

Date 2001/98

Depth 2470

Drilled

ES2

8 a.m.

2470

Days

5

Rig

PETREX-3

Formation

PO CIRCULATE FOR LOGGIN

SURVEYS

M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates	
2161'	37.70	S	67.10 W	2068.23	322.35	S	331.85 W 229.00
2225'	41.50	S	68.20 W	2115.55	363.04	S	347.67 W 236.73
2289'	44.00	S	68.90 W	2162.27	408.75	S	363.37 W 307.47
2352'	48.30	S	69.30 W	2205.59	452.43	S	379.58 W 360.19

LITHOLOGY

From	To	Cyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Del %	Lim %	Flint %	TG unit	Cl ppm
1980	2010	70		10		10		10				
	2040	70		10		10		10				
	2130	60		20		10		10				
	2160	70		20				10				
	2190	60		30		10						
	2250	70		10		10		10				
	2280	90		10								
	2340	90		10								
	2370	100										
	2400	100										
	2430	90		10								
	2460	80		10				10				
	2470	90		10								

Remarks

Post-it® Transmisión por Fax 7671

RECIBI	DATE Jan-20	N° DE PAGINAS	1
DE/TO	Geologia	DE/FROM	B. Morales
COMPANIA/CO.		COMPANIA/CO.	
DEPARTAMENTO/DEPT.		TELEFONO/PHONE	
FAX		FAX	

850 x 650 x 7/16 x 1336

PETRO-TECH PERUANA S.A

Page - 1

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 19/01/98

Depth	1818	Drilled	773	6 a.m.	2001	Days	4	Rig	PETREX-3
Formation	TALARA GRP	PO	DRILLING						

SURVEYS						
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates
1372	18.5	S	7.90 W	1363.38	24.57	S 93.16 E 5.22
1467	22.30	S	13.70 W	1452.42	40.88	S 125.82 W 1.13
	24.00					149.29 W 8.30

LITHOLOGY		Clyst %	Shale %	Silt %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm
From	To											
1280	1290	20		10	30	30		10		NF		
	1320	10			50	30		10		NF		
	1350	10			60	20		10		NF		
	1380	10			80	10				NF		
	1440	10			70	20				NF		
	1500	10			60	30				NF		
	1530	80			10	10				NF		
	1560	80			10	10				NF		
	1600	70		10		10		10		NF		
	1680	60		20		10		10		NF		
	1740	70		10		10		10		NF		
	1770	60		20		10		10		NF		
	1800	80				10		10		NF		
	1860	70		10		10		10		NF		
	1980	80		10				10		NF		

Remarks BCK 70 MAX FOR GAS: 150 @ 1421'

PALEO: 930' - 1110' FAUNA TALARA VERY POOR.

1110' - 1470' BARREN.

1470' - 1710' FAUNA CLAVIGERINELLA COLOMBIANA ZONE Vp. TO POOR.

Post-it® Transmisión por Fax 7671		FECHA/DATE	Jan. 19	Nº DE PAGINAS/ # OF PAGES	1
PARA/TO		Geologia			
DE/FROM		b. Morales			
COMPANIA/CO.		COMPANIA/CO.			
DEPARTAMENTO/DEPT.		TELEFONO/PHONE #			
FAX		FAX			

DEPTH LST DOLO SHAL Silt SS SD NR FL
1201

DAILY GEOLOGICAL REPORT

Well LO16-24

Date 18/01/98

Depth	1045	Drilled	475	6 a.m.	1270	Days	3	Rig	PETREX-3
Formation	TALARA GRP PO DRILLING								

SURVEYS						
M. Depth	V. Angle	True Direction		V. Depth	H. Section	Coordinates
809	1.60	S	16.3 E	808.91	9.28	
871	2.8	S	12.4 E	870.87	1.95	
933	4.3	S	4.20 W	932.75	2.91	

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Cl ppm
From	To											
750	780	50		10	10	20		10		NF		
	810	40		10	20	20		10		NF		
	840	40			10	40		10		NF		
	870	50			10	30		10		NF		
	930	60			10	30				NF		
	960	60		10	10	20				NF		
	990	60		10		30				NF		
	1020	20			40	40				NF		
	1080	20			50	30				NF		
	1110	30			50	20				NF		
	1140	40			30	30				NF		
	1200	20			60	20				NF		
	1230	10			70	20				NF		
	1260	20			60	20				NF		

Remarks PALEO: 750' - 930' FAUNA TALARA VERY POOR.

Last Modification 18/01/98 - 08:05:48

DAILY GEOLOGICAL REPORT

Well **LO16-24**

Date **17/01/98**

Depth **570** Drilled **--** 6 a.m. **609** Days **2** Rig **PETREX-3**

Formation PO **DRILLING**

SURVEYS

M. Depth	V. Angle	True Direction	V. Depth	H. Section	Coordinates

LITHOLOGY		Clyst %	Shale %	Sist %	Sand %	Sst %	Cgl %	Dol %	Lim %	Fluor %	TG unit	Ci ppm
From	To											

Remarks **CONDUCTOR 18" @ 569'**

Last Modification 17/01/98 - 07:48:05