TRANSPACIFIC GEOOTHERMAL
ESI Vale #A-S-ALT

DATE: Sunday Feb. 20, 1994
TIME: 08:00 hrs
STATUS: OOH

PRESENT DEPTH: 3015'
PREVIOUS DEPTH: 3015'
FOOTAGE CUT: 0'
Midnight Depth: 2950'

DRILL RATE
MAX: 0.0 FT/HR
MIN: 0.0 FT/HR
AVE: 0.0 FT/HR
CURRENT: 0.0 FT/HR
Drill Hrs: 16.50 hrs

GASES
CO2: 550-1050 ppm
H2S: 0 ppm
Methane: 0-3 ppm

TEMPERATURE

DEPTH
IN OUT IN OUT

3015' 101 117

MUD LOSSES/DRILLING NOTES
No downhole mud loss or fluid gains during past 24 hrs.

Trip @ 3015', B7 #9 200'/13.0 hrs.

80-100% fresh-sli altered Basalt, tr-20% Sandstone

Trip OOH @ 3015', change stabs & RIH on wiper run. Find 2' fill & circ 10 a.m. to 5 p.m. waiting on Schlumberger, OOH. Rig-up Schlumberger & run logs 8:30 p.m. to 12:30 a.m. R/D Schlumberger & RIH. Circ & rig-up lay-down machine. Currently L/D 4.5" D.P. to prepare to run casing.

BOPE Test record: Function test BOPE during trip at 3015', on 2/19 at 6:30 p.m.

3010'

Pan casing 2/20/94 (7'). Nonreturn on cement. Prob. lost at LC zone @ 800'. But was > 130' clean cement, so could have been lost at 5600 ft @ 95%.
Squeezed 24 bbl cam down 92% @ 7' annulus filled up & drag stacked @ 800', 3 hrs.
Additional squeeze 8 bbl. (2 bbl 2/21/94). Redrilled wellbore to 10,000', welded in @ 559, postheated, posted down 3 hrs. (took most 7 2/21/94 daylight).
**TECTON GEOLOGIC INC.**

**Daily 08:00 AM Morning Report**

**AM:** Wayne Monger  
**PM:** Mike McLaughlin  

**TRANS-PACIFIC GEOTHERMAL**  
**ESI Vale #A-S-ALT**

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**DATE:** Friday, Feb. 18, 1994  
**TIME:** 06:00 hrs  
**DEPTH**  
<table>
<thead>
<tr>
<th>DEPTH</th>
<th>IN</th>
<th>OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2400</td>
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<td>109</td>
</tr>
<tr>
<td>2450</td>
<td>105</td>
<td>108</td>
</tr>
</tbody>
</table>

**PRESENT DEPTH:** 2675'  
**PREVIOUS DEPTH:** 2380'  
**FOOTAGE CUT:** 276'  
**Midnight Depth:** 2515'

**DRILL RATE**  
MAX: 157.3 FT/HR  
MIN: 1.0 FT/HR  
AVE: 24.6 FT/HR  
**CURRENT:** 40-65 FT/HR  
**Drill Hrs:** 11.25 hrs

**GASES**  
CO2: 550-1050 PPM  
H2S: 0 PPM  
Methane: 0-3 PPM

**MUD LOSSES/DRILLING NOTES**  
No downhole mud loss OR fluid gains during past 24 hrs.  
Trip @ 2408', Bit #7 74'/16 hrs  
NB#8 Reed EHP-43A w/ rotary drilling.

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**LITHOLOGY/REMARKS**  
- 2380'-2510': 100% Basalt (com unaltered to incr moderate bleached/ altered w/ depth.)
- 2510'-2560': 20-80% altered Basalt, 20-80% Siltstone.
- 2560'-2610': 100% altered/chlorzd Basalt
- 2610'-2630': 20-30% altered Basalt, 70-80% Tuff/Tuff Seds
- 2630'-2670': 100% Tuff/Tuff Seds (very soft, v com clay)

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**BOPE Test record:** Function test Blind & Pipe rams during trip at 2408' on 2/17/94.
CONFIDENTIAL

TECTON GEOLOGIC INC.
Daily 06:00 AM Morning Report

AM: Wayne Monger
PM: Mike McLaughlin

TRANSPARENT ГЕОТЕРМАЛЬ
ESI Vale #A-S-ALT

DATE: Thursday Feb. 17, 1994
TIME: 08:00 hrs DEPTH
STATUS: Drilling

PRESENT DEPTH: 2390'
PREVIOUS DEPTH: 2315'
FOOTAGE CUT: 84'
Midnight Depth: 2374'
DRILL RATE
MAX: 23.7 FT/HR
MIN: 1.0 FT/HR
AVE: 4.5 FT/HR
CURRENT: 3-7 FT/HR
Drill Hrs: 16.50 hrs

GASES
CO2: 550-1050 PPM
H2S: 0 PPM
Methane: 0-trace PPM

TEMPERATURE
IN OUT IN OUT
2350 102 104
2390 106 109

Bottom-up temp after trip = 107 F.

MUD LOSSES/DRILLING NOTES
No downhole mud loss OR fluid gains
during past 24 hrs since 2325'.

SURVEYS
2294' 3.25deg N74E No°F
2326' 3.25deg S86E No°F

Trip @ 2334', No gains after trip.

DEPTH LITHOLOGY/REMARKS
2310' - 2339' 100% Basalt (pred unaltered to locally moderate
bleached appr. hard-very hard).

Trip @ 2334', Blt #6 200' / 17.5 hrs. NB#7 Reed HD13G w/ Mud Motor

BOPE Test record: Function test Blind & Pipe rams during trip
at 2334' @ 11:30 am 2/16/94.
TECTON GEOLOGIC INC.
Daily 06:00 AM Morning Report

AM: Wayne Monger
PM: Mike McLaughlin

DATE: Wednesday Feb. 16, 1994

<table>
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|      | 2150  | IN 100
|      | 2200  | OUT 106
|      | 2250  | IN 102
|      | 2300  | OUT 105
|      | 2350  | IN 99
|      | 2400  | OUT 102
|      | 2450  | IN 105
|      | 2500  | OUT 110

DRILL RATE
MAX: 73.7 ft/hr
MIN: 0.8 ft/hr
AVE: 11.4 ft/hr
CURRENT: 11-17 ft/hr
Drill Hrs: 16.50 hrs

GASES
CO2: 450-820 ppm
H2S: 0 ppm
Methane: 0-1 ppm

MUD LOSSES/DRILLING NOTES
No downhole mud loss noted during past 24 hrs.

SURVEYS
2112' 3.75deg S26E No F
2143' 3.75deg S43E 117 F
2176 3.50deg S60E No F
2206 3.50deg S60E No F
2236 3.50deg S76E No F
2267 3.50deg N87E No F

DEPTH
2130'-2310'

LITHOLOGY/REMARKS
100% Basalt (red unalt-locc hlv all)

Trip @ 2134' Bit B8M 01/7/94 5 hrs. NBIM HTC ATJ-1-S w/ Mud Motor

COPE Test record: Function test Blind & Pipe rams during trip at 2134', @ 10:00 am 2/15/94.
TECTON GEOLOGIC INC.
Daily 08:00 AM Morning Report

AM: Wayne Monger
PM: Mike McLaughlin

DATE: Tuesday, Feb. 15, 1994
TIME: 08:00 hrs

STATUS: Drilling

PRESENT DEPTH: 2132' ft
PREVIOUS DEPTH: 1877' ft
FOOTAGE CUT: 255' ft
Midnight Depth: 2114'

DRILL RATE
MAX: 117.3 FT/HR
MIN: 1.1 FT/HR
AVE: 15.0 FT/HR
CURRENT: 1.4 FT/HR
Drill Hrs: 17.00 hrs

TEMPERATURE
DEPTH  IN   OUT
1800  106   109
1950  107   111
2000  109   112
2050  109   113
2100  105   110
2130  103   106

GASES
CO2: 450-820 PPM
H2S: 0 PPM
Methane: 0-1 PPM

MUD LOSSES/DRILLING NOTES
No downhole mud loss noted during past 24 hrs.
Trip @ 2053', Bit #4 353'/18.5 hrs.
NB#5 Smith W/ Mud Motor.

SURVEYS
1931' 3.25deg S05E 122 3'F
2053' 2.75 deg S02E 122 7'F

BOPE Test record: Function test during trip @ 2063' on 2/14/94.

DEPTH        DEPTH
1860'-1940' 100% Basalt
1940'-2000' 10-80% Basalt (loc v strongly alt.),
2000'-2080' 20-60% Siltstone, tr-50% Sandstone (tuff sands),
2080'-2100' 60-80% Basalt, 20-40% Siltstone
2100'-2130' 100% Basalt

2148' on 2/15, pm
may resum + log 2/19
TECTON GEOLOGIC INC.
Daily 06:00 AM Morning Report

AM: Wayne Monger
PM: Mike McLaughlin

DATE: Monday Feb. 14, 1994
TIME: 06:00 hrs
STATUS: Drilling

DEPTHS
PRESENT DEPTH: 1877'
PREVIOUS DEPTH: 1620'
FOOTAGE CUT: 257'
Midnight Depth: 1780'

DRILL RATE
MAX: 185.1 FT/HR
MIN: 1.8 FT/HR
AVE: 13.1 FT/HR
CURRENT: 16-25 FT/HR
Drill Hrs: 18.75 hrs

GASES
CO2: 450-820 PPM
H2S: 0 PPM
Methane: 0-1 PPM

TEMPERATURE
DEPTH IN OUT IN OUT
1650 98 100 99 102
1700 97 101 99 102
1850 102 105 104 107
1870 105 108 105 108

MUD LOSSES/DRILLING NOTES
Downhole mud loss from 816' now fully stopped. No further downhole mud losses noted in past 24 hrs.

SURVEYS
1620' 1.00deg S02W 108°F
1777' 2.50deg S22E 111°F

LITHOLOGY/REMARKS
1620'-1660' 40-90% hvly chloritized Siltstone (tuff, scinders)
10-60% hvly chloritized Basalt
1660'-1720' 90-100% Basalt, tr-10% Siltstone
1720'-1760' 40-90% tuffaceous Siltstone, 10-60% Basalt
1760'-1860' 90-100% Basalt (pred unalt/ hvly martitized w/ sulfides?/hematite 1810-20'), tr-10% Siltstone

Trip @ 1695'
Bit #3 508'/39.6 hrs, Rcm last 15' to bottom.

BOPE Test record: Function test during trip @ 1695' at 15:30 hrs on 2/13/93.
DATE: Sunday Feb. 13, 1994
TIME: 06:00 hrs
STATUS: Drilling

DEPTH

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<td>91</td>
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<tr>
<td>1600</td>
<td>95</td>
<td>98</td>
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</table>

Present Depth: 1620'
Previous Depth: 1254'
Footage Cut: 366'
Midnight Depth: 1562'

DRILL RATES

| MAX | 72.6 FT/HR | 1620 | 97 | 100 |
| MIN | 2.2 FT/HR  |      |    |     |
| AVE | 15.9 FT/HR |      |    |     |

CURRENT: 12-17 FT/HR

GAS

<table>
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<tr>
<th>CO2</th>
<th>450-820 PPM</th>
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<tbody>
<tr>
<td>H2S</td>
<td>0 PPM</td>
</tr>
<tr>
<td>Methane</td>
<td>0-1 PPM</td>
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MUD LOSSES/DRILLING NOTES

Downhole mud loss nearly eliminated with rate at less than 5 bbls/hr.

DEPTHS LITHOLOGY/REMARKS

<table>
<thead>
<tr>
<th>DEPTH</th>
<th>LITHOLOGY/REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1250'-1310'</td>
<td>100% Basalt (unaltered - locally highly mineralized w/hematite, chlorite, opal/qtz, calc, gyp xls.)</td>
</tr>
<tr>
<td>1310'-1350'</td>
<td>70-90% Basalt, 10-30% red-brn Claystone</td>
</tr>
<tr>
<td>1350'-1430'</td>
<td>100% Basalt (mod-com hematite mineralized)</td>
</tr>
<tr>
<td>1430'-1540'</td>
<td>30-100% Siltstone, tr-30% Sandstone, tr-80% Basalt</td>
</tr>
<tr>
<td>1540'-1600'</td>
<td>100% Basalt (unaltered - moderately mineralized w/hematite, chlorite, opal/qtz, gyp xls.)</td>
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BOPE Test record: Function test at 06:00 hrs 2/13.
TEKTONE GEOLOGIC INC.
 Daily 06:00 AM Morning Report

AM: Wayne Monger
PM: Mike McLaughlin

DATE: Saturday Feb 12, 1984

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<td>1200</td>
<td>80</td>
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<tr>
<td>1250</td>
<td>83</td>
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</table>

DRILL RATE
MAX: 232.7 FT/HR
MIN: 1.8 FT/HR
AVE: 13.7 FT/HR
CURRENT: 23-37 FT/HR

GASES
CO2: 450-820 PPM
H2S: 0 PPM
Methane: 0-2 PPM

MUD LOSSES/DRILLING NOTES
Trip @ 1187', Bit #2 662'/20 hrs.
NB#3 Sec S33S, Resume drilling w/mud loss starting at 25 bbls/hr but reduce to 10-13 bbls/hr loss by 6 AM.

LITHOLOGY/REMARKS
900'-1250'
100% Grassy Mt. Basalt (locally highly mineralized w/hematite, chlorite, opal/gtz, calc.)
(red oxidized soil horizon at 1220').

BOPE Test record: Function test at 19:30 hrs 2/11.
**TECTON GEOLOGIC INC.**

**Daily 08:00 AM Morning Report**

**AM:** Wayne Mongcr  
**PM:** Mike McLaughlin

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**DATE:** Friday, Feb. 11, 1994

**TIME:** 08:00 hrs

**DEPTH**

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<tr>
<th>Status</th>
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<th>600</th>
<th>700</th>
<th>750</th>
<th>800</th>
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<tbody>
<tr>
<td><strong>PRESENT DEPTH</strong></td>
<td>983'</td>
<td>650</td>
<td>550</td>
<td>575</td>
<td>850</td>
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<td><strong>PREVIOUS DEPTH</strong></td>
<td>525'</td>
<td>700</td>
<td>700</td>
<td>800</td>
<td>850</td>
</tr>
<tr>
<td><strong>FOOTAGE CUT</strong></td>
<td>458'</td>
<td>750</td>
<td>850</td>
<td>950</td>
<td>950</td>
</tr>
</tbody>
</table>

**DRILL RATE**

| Max: 310.0 FT/HR | 900 | 60 |
| Min: 2.6 FT/HR   | 950 | 63 |
| AVE: 105.0 FT/HR | 960 | 67 |
| CURRENT: 13-17FT/HR | 850 | 59 |

**GASES**

| CO2: 320-670 PPM | H2S: 0 PPM | Methane: 0-2 PPM |

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**MUD LOSSES/DRILLING NOTES**

Possible loss zone @ 895' (35.0 bbls)
Partial to 100% loss zone @ 818'  
After setting high vis pill, continue to drill ahead w/ 50-90 bbls/hr losses

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**SURVEYS**

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<th>Depth</th>
<th>Lat.</th>
<th>Dir.</th>
<th>Frac.</th>
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<tr>
<td>755'</td>
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<td>N02W</td>
<td>74 F</td>
</tr>
<tr>
<td>924'</td>
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<td>No dir</td>
<td>85 F</td>
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**DEPTH**

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<th>Depth</th>
<th>Lithology/Remarks</th>
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</thead>
<tbody>
<tr>
<td>520'-550'</td>
<td>60-10% fn gr Sandstone, 40-90% gray Siltstone</td>
</tr>
<tr>
<td>550'-660'</td>
<td>100% gray Siltstone</td>
</tr>
<tr>
<td>660'-730'</td>
<td>10-70% fn gr Sandstone, 30-90% gray Siltstone</td>
</tr>
<tr>
<td>730'-850'</td>
<td>100% gray Siltstone w/ heavy clay</td>
</tr>
<tr>
<td>850'-920'</td>
<td>80-90% brown sily Limestone, 10-40% Siltstone</td>
</tr>
<tr>
<td>920'-940'</td>
<td>90% brown sily Limestone, 10% Siltstone</td>
</tr>
<tr>
<td>940'-960'</td>
<td>80% med gr sily Sandstone, 20% brn Limestone</td>
</tr>
<tr>
<td>960'-980'</td>
<td>100% Tuffaceous sediments/white clay with abt. hvly rexin/chloritized basalt frags</td>
</tr>
<tr>
<td></td>
<td>100% mod-heavily mineralized/chloritized Basalt</td>
</tr>
</tbody>
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**BOPE Test record:** Leak-off test at 10:30 hrs 2/8 - shoe holds, 0.68 psi/ft. = 13.0 ppg muds.