MASTER

SAMPLE DESCRIPTIONS AND SUMMARY LOGS
OF SELECTED WELLS
WITHIN THE HANFORD RESERVATION

(Four Volumes)

VOLUME II

W. K. Summers
R. T. Hanson

W. K. Summers and Associates
Consultants

January 1977

NOTICE

This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor the United States Department of Energy, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.

This report is based on work sponsored by Atlantic Richfield Hanford Company under United States Energy Research and Development Administration Contract EY-76-C-06-2130.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

fly

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 003000
W 045000
Altitude 503

Other Data used in Interpretation

(1) Driller's Log
(2) E Log

Well 699 - 3 - 45

brownish buff
buff
buff
buff
buff
buff
greyish buff (salt & pepper)
whitish buff; ASH(?)
brownish black

DEPTH
(FT.)

0

TO

15

ROCK CLASSIFICATION

silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT $\geq$ gravel	0			
sand	2	vfs-ms	l	sb rnd
OTHER $\geq$ gravel	0			
sand	78	vfs-ms	m	sb rnd
SILT AND CLAY	20			

REMARKS

color Brownish Buff
HCL +

Micaceous

Immature

DEPTH
(FT.)

15

TO

25

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT $\geq$ gravel	0			
sand	10	vfs-ms	l	sb rnd
OTHER $\geq$ gravel	0			
sand	80	vfs-ms	m	sb ang
SILT AND CLAY	10			

REMARKS

color Buff
HCL +

Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-3-45

DEPTH
(FT.)

25

TO

30

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	_____	_____	_____	_____
OTHER > gravel sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

30

TO

45

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	0 8	vfs-ms	l	sb rnd
OTHER > gravel sand	0 75	vfs-ms	m	sb ang
SILT AND CLAY	17			

REMARKS

color
HCL

Buff

+

Micaceous

Frosted Quartz

Immature

WELL NUMBER

699-3-45

DEPTH
(FT.)

45

TO

70

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
OTHER > gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

70

TO

75

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0	_____	_____	_____
sand	5	vfs-ms	m	sb rnd
OTHER > gravel	0	_____	_____	_____
sand	80	vfs-ms	m	sb rnd
SILT AND CLAY	15			

REMARKS

color Buff
HCL +

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-3-45

DEPTH
(FT.)

75

TO

90

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel sand	_____	_____	_____	_____
OTHER	>gravel sand	_____	_____	_____	_____
SILT AND CLAY		_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

90

TO

95

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel sand	0 5	vfs-ms	m	sb rnd
OTHER	>gravel sand	0 80	vfs-ms	m	sb rnd
SILT AND CLAY		15			

REMARKS

color Buff
HCL +

Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-3-45

DEPTH
(FT.)

95

TO

105

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
OTHER	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
SILT AND CLAY		_____			

REMARKS

 color
 HCL

Sample missing

DEPTH
(FT.)

105

TO

110

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-crp	m	rnd
	sand	20	vfs-ms	m	sb rnd
OTHER	>gravel	10	vfp-crp	m	rnd
	sand	30	vfs-ms	m	sb rnd
SILT AND CLAY		20			

REMARKS

 color Buff
 HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

110

TO

125

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	30	vfp-crp	m	rnd
	sand	15	vfs-vcrs	m	sb ang
OTHER	> gravel	30	vfp-crp	m	rnd
	sand	25	vfs-vcrs	h	sb rnd
SILT AND CLAY		0			

REMARKS

color Greyish Buff ("salt & pepper") Matrix
HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

125

TO

130

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	50	vfp-mp	m	rnd
	sand	10	vfs-vcrs	m	sb rnd
OTHER	> gravel	20	vfp-mp	m	rnd
	sand	10	vfs-vcrs	h	sb rnd
SILT AND CLAY		10			

REMARKS

color Whitish Buff
HCL -

Some Ash (?) Frosted Quartz

Immature

WELL NUMBER

699-3-45

DEPTH
(FT.)

130

TO

155

ROCK CLASSIFICATION

Basalt Flow

%SIZE RANGESPHERICITYROUNDNESSBASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Black

DEPTH
(FT.)

155

TO

165

ROCK CLASSIFICATION

Basalt Flow or Boulder

%SIZE RANGESPHERICITYROUNDNESSBASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Reddish Black

WELL NUMBER

699-3-45

DEPTH
(FT.)

165

TO

170

ROCK CLASSIFICATION

Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>80</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sh rnd</u>
OTHER > gravel	<u>5</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
sand	<u>0</u>	<u></u>	<u></u>	<u></u>
SILT AND CLAY	<u>3</u>			

REMARKS

color Brownish BlackHCL +

Flow Layer fragments

Immature

DEPTH
(FT.)

170

TO

350

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u></u>	<u></u>	<u></u>	<u></u>
sand	<u></u>	<u></u>	<u></u>	<u></u>
OTHER > gravel	<u></u>	<u></u>	<u></u>	<u></u>
sand	<u></u>	<u></u>	<u></u>	<u></u>
SILT AND CLAY	<u></u>			

REMARKS

color HCL

Sample missing

Total Drilled Depth reported as 350'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

TD 204

brown

greyish black

greyish black
greyish black

greyish buff

greyish buff

greyish buff
greyish buff

greyish buff

N 007875

W 031800

Altitude 552

Other Data used in
Interpretation

(i) E Log

Well 699 - 8 - 32

DEPTH (FT.) 0 TO 4 ROCK CLASSIFICATION silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>0</u>			
sand	<u>25</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>0</u>			
sand	<u>50</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>25</u>			

REMARKS

color Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 4 TO 49 ROCK CLASSIFICATION Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>2</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>70</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>7</u>			

REMARKS

color Greyish Black
HCL -

Unfrosted Quartz

Immature

DEPTH (FT.) 49 TO 57 ROCK CLASSIFICATION gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u>12</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	<u>sand</u>	<u>62</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	<u>> gravel</u>	<u>8</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	<u>sand</u>	<u>16</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>2</u>			

REMARKS

color Greyish Black
HCL -

Unfrosted Quartz

Immature

DEPTH (FT.) 57 TO 64 ROCK CLASSIFICATION slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u>4</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	<u>sand</u>	<u>70</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	<u>> gravel</u>	<u>2</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	<u>sand</u>	<u>22</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>2</u>			

REMARKS

color Greyish Black ("salt & pepper")
HCL -

Unfrosted Quartz

Mature

DEPTH (FT.) 64 TO 101 ROCK CLASSIFICATION slightly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	<u>2</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>36</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>2</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>50</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>10</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 101 TO 140 ROCK CLASSIFICATION slightly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT ≥ gravel	<u>2</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>26</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER ≥ gravel	<u>2</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>60</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>10</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

140

TO

141

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>15</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>26</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>8</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>50</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

141

TO

153

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>2</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>31</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>2</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>50</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>15</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-8-32

DEPTH
(FT.)

153

TO

204

ROCK CLASSIFICATION

silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT ≥ gravel	14	vfp-crp	m	rnd
sand	20	vfs-vcrs	m	sb rnd
OTHER ≥ gravel	19	vfp-crp	m	rnd
sand	35	vfs-vcrs	m	sb rnd
SILT AND CLAY	12			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous

Immature

Total Drilled Depth reported as 204'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT ≥ gravel				
sand				
OTHER ≥ gravel				
sand				
SILT AND CLAY				

REMARKS

color

HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 008577

E 002324

Altitude 416

Other Data used in
Interpretation

Driller's Log

ELL 699-9-E2

buff brown
greyish brown
greyish buff

brownish buff

brownish buff

greyish brown

greyish brown
greyish brown
greyish buff
greyish brown

greyish brown

greyish brown
greyish brown
greyish brown
tan

tan

greyish brown; TRACE DIATOMITE (?)
TRACE OF DIATOMITE (?)
brownish tan

greenish tan
greenish tan; ASH PEBBLES
light brown; ASH PEBBLES

reddish light brown; ASH PEBBLES

brownish buff
brownish buff
greyish buff
greyish buff

grey

DEPTH
(FT.)

0

TO

5

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	30	vfs-ms	1	sb rnd
OTHER > gravel	0			
sand	67	vfs-ms	1	sb rnd
SILT AND CLAY	3			

REMARKS

color Buff Brown
HCL -

Slightly Micaceous Frosted Quartz

Mature

DEPTH
(FT.)

5

TO

25

ROCK CLASSIFICATION

silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	18	vfp-mp	1	sb rnd
sand	30	vfs-vcrs	1	sb rnd
OTHER > gravel	15	vfp-mp	1	sb rnd
sand	30	vfs-vcrs	1	rnd
SILT AND CLAY	7			

REMARKS

color Greyish Brown
HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

25

TO

30

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	30	vfp-mp	1	rnd
sand	13	vfs-crs	1	sb rnd
OTHER > gravel	35	vfp-mp	m	w rnd
sand	21	vfs-crs	1	rnd
SILT AND CLAY	1			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

30

TO

80

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT ≥ gravel	43	vfp-smcb	1	rnd
sand	16	vfs-vcrs	1	sb rnd
OTHER ≥ gravel	17	vfp-crp	m	w rnd
sand	20	vfs-vcrs	1	rnd
SILT AND CLAY	4			

REMARKS

color Brownish Buff

HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

80

TO

85

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	59	vfp-smcb	1	w rnd
	sand	2	vfs-vcrs	1	sb rnd
OTHER	>gravel	30	vfp-mp	m	rnd
	sand	8	vfs-vcrs	1	sb rnd
SILT AND CLAY		1			

REMARKS

color Brownish Buff
HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

85

TO

105

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	30	vfp-mp	1	rnd
	sand	14	vfs-vcrs	1	sb rnd
OTHER	>gravel	25	vfp-mp	m	w rnd
	sand	29	vfs-vcrs	m	sb rnd
SILT AND CLAY		2			

REMARKS

color Brownish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 105 TO 140 ROCK CLASSIFICATION gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>22</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
sand	<u>14</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>10</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
sand	<u>49</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>5</u>			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 140 TO 145 ROCK CLASSIFICATION sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>40</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>8</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>30</u>	<u>vfp-mp</u>	<u>m</u>	<u>w rnd</u>
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>2</u>			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous

Immature

WELL NUMBER

699-9-E2

DEPTH
(FT.)

145

TO

160

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	27	vfp-crp	1	rnd
	sand	14	vfs-vcrs	1	sb rnd
OTHER	>gravel	17	vfp-mp	m	w rnd
	sand	40	vfs-vcrs	m	sb rnd
SILT AND CLAY		2			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

160

TO

165

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	50	vfp-crp	1	w rnd
	sand	6	vfs-vcrs	1	rnd
OTHER	>gravel	20	vfp-crp	1	w rnd
	sand	22	vfs-vcrs	1	sb rnd
SILT AND CLAY		2			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

165

TO

170

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	9	vfp-fp	1	rnd
	sand	21	vfs-vcrs	1	rnd
OTHER	>gravel	9	vfp-fp	1	rnd
	sand	57	vfs-vcrs	1	sb rnd
SILT AND CLAY		4			

REMARKS

color Greyish BrownHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

170

TO

195

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	40	vfp-smcb	1	w rnd
	sand	10	vfs-vcrs	1	sb rnd
OTHER	>gravel	20	vfp-smcb	1	w rnd
	sand	26	vfs-vcrs	1	sb rnd
SILT AND CLAY		4			

REMARKS

color Greyish BrownHCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

195

TO

200

ROCK CLASSIFICATION

gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	15	vfp-mp	1	rnd
sand	11	vfs-vcrs	1	sb ang
OTHER > gravel	10	vfp-mp	m	w rnd
sand	60	vfs-vcrs	1	sb rnd
SILT AND CLAY	4			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

200

TO

210

ROCK CLASSIFICATION

sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT ≥ gravel	35	vfp-mp	1	rnd
sand	6	vfs-vcrs	1	sb ang
OTHER ≥ gravel	25	vfp-mp	m	w rnd
sand	32	vfs-vcrs	1	sb rnd
SILT AND CLAY	2			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

210

TO

220

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	55	vfp-mp	1	w rnd
	sand	9	vfs-vcrs	1	sb rnd
OTHER	>gravel	10	vfp-mp	m	w rnd
	sand	15	vfs-vcrs	1	rnd
SILT AND CLAY		11			

REMARKS

color Greyish Tan

HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

220

TO

225

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-mp	1	w rnd
	sand	9	vfs-vcrs	1	sb rnd
OTHER	>gravel	15	vfp-mp	m	w rnd
	sand	42	vfs-vcrs	1	sb rnd
SILT AND CLAY		9			

REMARKS

color Tan

HCL -

Immature

DEPTH
(FT.)

225

TO

245

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	vfp-fp	1	rnd
	sand	8	vfs-crs	1	sb rnd
OTHER	> gravel	0			
	sand	77	vfs-crs	m	sb rnd
SILT AND CLAY		10			

REMARKS

color

Tan

HCL

-

Slightly Micaceous

Immature

DEPTH
(FT.)

245

TO

265

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	30	vfp-mp	1	w rnd
	sand	16	vfs-vcrs	1	sb rnd
OTHER	> gravel	5	vfp-mp	m	w rnd
	sand	26	vfs-vcrs	1	rnd
SILT AND CLAY		23			

REMARKS

color

Greyish Brown

HCL

-

Frosted Quartz

Lithified

Trace of Diatomaceous Earth (?)

Immature

DEPTH
(FT.)

265

TO

315

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	13	vfp-mp	1	rnd
	sand	30	vfs-vcrs	1	sb rnd
OTHER	> gravel	0			
	sand	44	vfs-vcrs	1	rnd
SILT AND CLAY		13			

REMARKS

color Brownish TanHCL -

Slightly Micaceous Trace of Diatomaceous Earth (? between 265' & 275')

Immature

DEPTH
(FT.)

315

TO

330

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	37	vfp-crp	1	sb rnd
	sand	6	vfs-vcrs	1	sb rnd
OTHER	> gravel	7	vfp-mp	m	w rnd
	sand	42	vfs-vcrs	1	rnd
SILT AND CLAY		8			

REMARKS

color Greenish TanHCL -

Slightly Micaceous Compacted

Immature

DEPTH
(FT.)

330

TO

335

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel sand	5	vfp-crp	1	sb rnd
		6	vfs-crs	1	sb rnd
OTHER	> gravel sand	3	vfp-mp	m	sb rnd
		68	vfs-crs	1	sb rnd
SILT AND CLAY		18			

REMARKS

color Greenish Tan
HCL -

Micaceous Ash (pebbles present)

Immature

DEPTH
(FT.)

335

TO

340

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel sand	0			
		5	vfs-ms	1	sb rnd
OTHER	> gravel sand	0			
		88	vfs-ms	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Light Brown
HCL -

Micaceous Ash (pebbles present) Frosted Quartz (?)

Mature

DEPTH
(FT.)

340

TO

395

ROCK CLASSIFICATION

slightly gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>6</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>3</u>	<u>vfs-ms</u>	<u>1</u>	<u>rnd</u>
OTHER > gravel	<u>0</u>			
sand	<u>69</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>22</u>			

REMARKS

color Reddish Light BrownHCL -

Micaceous Ash (pebbles present)

Immature

DEPTH
(FT.)

395

TO

405

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT ≥ gravel	<u>1</u>	<u>-fp-</u>	<u>1</u>	<u>rnd</u>
sand	<u>3</u>	<u>vfs-crs</u>	<u>1</u>	<u>rnd</u>
OTHER ≥ gravel	<u>0</u>			
sand	<u>81</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>15</u>			

REMARKS

color Brownish BuffHCL -

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

405

TO

415

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	38	vfp-vcrp	1	rnd
	sand	8	vfs-crs	1	sb rnd
OTHER	>gravel	8	vfp-mp	m	rnd
	sand	43	vfs-crs	1	sb rnd
SILT AND CLAY		3			

REMARKS

color Brownish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

415

TO

420

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-mp	m	sb rnd
	sand	18	fs-vcrs	1	sb ang
OTHER	>gravel	10	vfp-mp	m	rnd
	sand	36	fs-vcrs	1	sb rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff ("salt & pepper")
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

420

TO

425

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>0</u>			
sand	<u>43</u>	<u>fs-crs</u>	<u>1</u>	<u>sb ang</u>
OTHER > gravel	<u>0</u>			
sand	<u>55</u>	<u>fs-crs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>2</u>			

REMARKS

color Greyish Buff ("salt & pepper")
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

425

TO

450

ROCK CLASSIFICATION

gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>11</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>37</u>	<u>fs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER > gravel	<u>7</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
sand	<u>42</u>	<u>fs-vcrs</u>	<u>1</u>	<u>sb ang</u>
SILT AND CLAY	<u>3</u>			

REMARKS

color Grey
HCL -

Sample interval 435'-440' missing

Immature

Total Drilled Depth reported as 454'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 010000

E 012000

Altitude 429

Other Data used in
Interpretation

Driller's Log

Well 699-10-E12

DEPTH (FT.) 0 TO 5 ROCK CLASSIFICATION silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>30</u>	<u>vfp-smcb</u>	<u>l</u>	<u>w rnd</u>
sand	<u>15</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>10</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
sand	<u>24</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb ang</u>
SILT AND CLAY	<u>21</u>			

REMARKS

color Greyish Brown
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 5 TO 90 ROCK CLASSIFICATION silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>59</u>	<u>vfp-crp</u>	<u>l</u>	<u>rnd</u>
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>7</u>	<u>vfp-crp</u>	<u>l</u>	<u>rnd</u>
sand	<u>7</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb ang</u>
SILT AND CLAY	<u>7</u>			

REMARKS

color Greyish Black
HCL +

Immature

DEPTH
(FT.)

90

TO

95

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand		<u>5</u>	<u>vfp-fp</u>	<u>m</u>	<u>rnd</u>
		<u>30</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel sand		<u>0</u>			
		<u>65</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color
HCL

Buff

-

Micaceous

Unfrosted Quartz

Mature

DEPTH
(FT.)

95

TO

100

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand		<u>25</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
		<u>14</u>	<u>vfs-crs</u>	<u>l</u>	<u>sb ang</u>
OTHER > gravel sand		<u>3</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
		<u>33</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>25</u>			

REMARKS

color
HCL

Brown

-

Unfrosted Quartz

Immature

WELL NUMBER

699-10-E12

DEPTH
(FT.)

100

TO

105

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>70</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>7</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>10</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Black
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

105

TO

115

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>30</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>23</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER	>gravel	<u>5</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>29</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>13</u>			

REMARKS

color Brown
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

115

TO

120

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-fp	m	rnd
	sand	30	vfs-ms	m	sb rnd
OTHER	>gravel	0			
	sand	65	vfs-ms	h	sb rnd
SILT AND CLAY		0			

REMARKS

color Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

120

TO

135

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	47	vfp-crp	l	rnd
	sand	27	fs-vcrs	m	sb rnd
OTHER	>gravel	17	vfp-crp	l	rnd
	sand	9	fs-vcrs	m	sb rnd
SILT AND CLAY		0			

REMARKS

color Greyish Black
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

135

TO

145

ROCK CLASSIFICATION

gravelly sandy silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	15	vfp-mp	l	rnd
	sand	9	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	9	vfs-vcrs	m	sb rnd
SILT AND CLAY		67			

REMARKS

color Greyish-Red Tan
HCL +

Lithified by silt & clay

Immature

DEPTH
(FT.)

145

TO

150

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

DEPTH
(FT.)

150

TO

170

ROCK CLASSIFICATION

slightly gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	8	vfp-crp	l	rnd
	sand	5	vfs-vcrs	m	sb rnd
OTHER	> gravel	0			
	sand	15	vfs-vcrs	h	sb rnd
SILT AND CLAY		72			

REMARKS

color Greyish-Yellow Tan
HCL +

Slightly Micaceous Lithified by silt & clay

Immature

DEPTH
(FT.)

170

TO

180

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	60	vfp-mp	l	sb rnd
	sand	3	vfs-vcrs	m	sb ang
OTHER	> gravel	25	vfp-mp	m	sb rnd
	sand	10	vfs-vcrs	m	sb rnd
SILT AND CLAY		2			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

DEPTH
(FT.)

180

TO

205

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	30	vfp-crp	l	sb rnd
sand	7	vfs-vcrs	m	sb ang
OTHER > gravel	5	vfp-crp	l	sb rnd
sand	42	vfs-vcrs	h	sb ang
SILT AND CLAY	16			

REMARKS

color Greyish Brown
HCL -

Micaceous Unfrosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

205

TO

215

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	46	vfp-crp	l	rnd
sand	7	vfs-vcrs	m	sb rnd
OTHER > gravel	27	vfp-mp	m	rnd
sand	7	vfs-vcrs	m	sb rnd
SILT AND CLAY	13			

REMARKS

color Blackish Grey
HCL +

Caliche Present Lithified

Immature

DEPTH
(FT.)

215

TO

225

ROCK CLASSIFICATION

gravelly sandy Sil+

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-mp	1	sb ang
	sand	10	vfs-vcrs	1	sb ang
OTHER	> gravel	0			
	sand	10	vfs-vcrs	m	sb rnd
SILT AND CLAY		60			

REMARKS

color Blackish Grey
HCL +

Caliche Present Lithified

Immature

DEPTH
(FT.)

225

TO

235

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	45	vfp-mp	1	sb ang
	sand	5	vfs-vcrs	m	sb ang
OTHER	> gravel	35	vfp-mp	1	sb rnd
	sand	12	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color Greyish Brown
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

235

TO

255

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb ang</u>
	sand	<u>7</u>	<u>fs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb ang</u>
	sand	<u>90</u>	<u>fs-ms</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Greyish White
HCL -

Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

255

TO

260

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>40</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>3</u>	<u>fs-crs</u>	<u>1</u>	<u>sb ang</u>
OTHER	> gravel	<u>10</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>45</u>	<u>fs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>2</u>			

REMARKS

color Greyish White
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

260

TO

295

ROCK CLASSIFICATION

silty Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	23	vfp-crp	l	sb ang
	sand	7	vfs-ms	h	sb ang
OTHER	>gravel	9	vfp-mp	m	rnd
	sand	27	vfs-ms	h	sb rnd
SILT AND CLAY		34			

REMARKS

color Greyish Tan

HCL -

Micaceous

Immature

DEPTH
(FT.)

295

TO

325

ROCK CLASSIFICATION

Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	4	vfp-crp	l	sb ang
	sand	0			
OTHER	>gravel	1	vfp-mp	m	rnd
	sand	19	vfs-ms	h	sb rnd
SILT AND CLAY		76			

REMARKS

color Reddish Brown

HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

325

TO

340

ROCK CLASSIFICATION

slightly gravelly sandy Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	5	vfp-mp	1	sb ang
sand	5	vfs-vcrs	1	sb ang
OTHER > gravel	2	vfp-mp	m	rnd
sand	37	vfs-vcrs	m	sb rnd
SILT AND CLAY	51			

REMARKS

color Yellowish Brown

HCL -

Micaceous Unfrosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

340

TO

345

ROCK CLASSIFICATION

slightly gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	3	-vfp-	1	sb ang
sand	19	vfs-vcrs	1	sb rnd
OTHER > gravel	4	-vfp-	1	sb ang
sand	74	vfs-vcrs	m	sb rnd
SILT AND CLAY	0			

REMARKS

color Greyish White

HCL -

Slightly Micaceous Ash (fragments present) Unfrosted Quartz

Mature

DEPTH
(FT.)

345

TO

360

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	30	vfp-crp	l	sb rnd
	sand	36	vfs-vcrs	m	sb ang
OTHER	> gravel	10	vfp-mp	m	sb rnd
	sand	18	vfs-vcrs	m	sb rnd
SILT AND CLAY		6			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

360

TO

369

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	95	vfp-mp	m	rnd
	sand	3	vfs-vcrs	m	ang
OTHER	> gravel	0			
	sand	1	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color Black
HCL -

Submature

Total Drilled Depth reported as 369'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 010150

W 053550

Altitude 514

Well 699-10-54

Other Data used in
Interpretation

(1) Driller's Log

(2) Descriptive Log
from Newcomb,
et al, 1972, p.59

brownish buff

brownish buff
white-tan

brownish tan

brownish buff

yellowish brown
greyish brown
greyish tan
whitish tan; SLIGHTLY DIATOMACEOUS
whitish tan; DIATOMITE

WELL NUMBER

699-10-54

DEPTH
(FT.)

0

TO

69

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>6</u>	<u>vfs-ms</u>	<u>1</u>	<u>rnd</u>
OTHER > gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>84</u>	<u>vfs-ms</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>8</u>			

REMARKS

color
HCLBrownish Buff-

Micaceous

Unfrosted Quartz

Mature

DEPTH
(FT.)

69

TO

97

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY	<u> </u>			

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-10-54

DEPTH
(FT.)

97

TO

100

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	40	vfp-crp	l	rnd
sand	5	vfs-vcrs	m	sb rnd
OTHER > gravel	30	vfp-crp	m	w rnd
sand	23	vfs-vcrs	m	rnd
SILT AND CLAY	2			

REMARKS

color
HCL

Brownish Buff

-

Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

100

TO

109

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	33	vfp-crp	l	rnd
sand	10	vfs-crs	l	sb rnd
OTHER > gravel	27	vfp-crp	l	rnd
sand	24	vfs-crs	m	sb rnd
SILT AND CLAY	6			

REMARKS

color
HCL

White-Tan

-

Micaceous

Immature

DEPTH
(FT.)

109

TO

124

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	34	vfp-crp	1	rnd
	sand	13	vfs-vcrs	m	sb rnd
OTHER	>gravel	30	vfp-crp	1	w rnd
	sand	18	vfs-vcrs	1	sb rnd
SILT AND CLAY		5			

REMARKS

color Brownish Tan
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

124

TO

145

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	4	vfp-crp	1	rnd
	sand	6	vfs-vcrs	1	sb ang
OTHER	>gravel	3	vfp-crp	1	rnd
	sand	82	vfs-vcrs	m	sb rnd
SILT AND CLAY		5			

REMARKS

color Brownish Buff
HCL -

Micaceous Frosted Quartz

Immature

WELL NUMBER

699-10-54

DEPTH
(FT.)

145

TO

169

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
OTHER > gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color

HCL

Sample missing

DEPTH
(FT.)

169

TO

173

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	33	vfp-mp	1	rnd
sand	6	vfs-vcrs	1	sb rnd
OTHER > gravel	33	vfp-mp	1	rnd
sand	26	vfs-vcrs	1	sb rnd
SILT AND CLAY	2			

REMARKS

color

Yellowish Brown

HCL

-

Frosted Quartz

Compacted

Immature

DEPTH (FT.) 173 TO 180 ROCK CLASSIFICATION gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>8</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>4</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>7</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>55</u>	<u>vfs-crs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>26</u>			

REMARKS

color Greyish Brown
HCL -

Micaceous

Immature

DEPTH (FT.) 180 TO 184 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>37</u>	<u>vfp-crp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>3</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>29</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>26</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>5</u>			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Compacted (?)

Immature

DEPTH (FT.) 184 TO 193 ROCK CLASSIFICATION gravelly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	10	vfp-mp	1	sb rnd
sand	20	vfs-vcrs	1	sb rnd
OTHER >gravel	10	vfp-mp	1	sb rnd
sand	40	vfs-vcrs	m	rnd
SILT AND CLAY	20			

REMARKS

color Whitish Tan
HCL -

Slightly Diatomaceous Micaceous

Immature

DEPTH (FT.) 193 TO 200 ROCK CLASSIFICATION gravelly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	22	vfp-crp	1	sb rnd
sand	8	vfs-vcrs	1	sb rnd
OTHER >gravel	0			
sand	47	vfs-vcrs	1	rnd
SILT AND CLAY	23			

REMARKS

color Whitish Tan
HCL -

Diatomaceous (55%)

Immature

Total Drilled Depth reported as 200'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 011159

W 044960

Altitude 576

Other Data used in
Interpretation

(1) Driller's Log

(2) E-Log

Well 699 - 11 - 45A

greyish tan-greyish brown

greyish brown

greyish tan

greyish brown

greyish tan

greyish brown

greyish brown

greyish brown

greyish buff

brownish grey

DEPTH
(FT.)

0

TO

170

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	1	vfp-fp	1	sb rnd
sand	10	vfs-crs	m	rnd
OTHER > gravel	1	vfp-fp	1	sb rnd
sand	79	vfs-crs	m	sb rnd
SILT AND CLAY	9			

REMARKS

color Greyish Tan-Greyish Brown
HCL + (0'-165'), - (165'-170')

Slightly Micaceous Unfrosted Quartz

Sample intervals 50'-60' & 70'-80' missing

Immature

DEPTH
(FT.)

170

TO

210

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	37	vfp-crp	1	w rnd
sand	9	vfs-vcrs	m	sb rnd
OTHER > gravel	34	vfp-vcrp	m	w rnd
sand	19	vfs-vcrs	m	rnd
SILT AND CLAY	1			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

210

TO

230

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	15	vfp-crp	m	w rnd
	sand	18	vfs-vcrs	m	sb rnd
OTHER	>gravel	15	vfp-crp	m	w rnd
	sand	45	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greyish Tan

HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

230

TO

240

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-crp	l	rnd
	sand	5	vfs-vcrs	m	rnd
OTHER	>gravel	30	vfp-crp	l	w rnd
	sand	29	vfs-vcrs	m	sb rnd
SILT AND CLAY		11			

REMARKS

color Greyish Brown

HCL -

Slightly Micaceous Lithified (?)

Immature

DEPTH
(FT.)

240

TO

260

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-crp	1	rnd
	sand	6	vfs-vcrs	m	sb rnd
OTHER	> gravel	9	vfp-crp	1	w rnd
	sand	49	vfs-vcrs	m	sb rnd
SILT AND CLAY		26			

REMARKS

color Greyish TanHCL -

Slightly Micaceous

Frosted Quartz

Lithified by silt & clay

Immature

DEPTH
(FT.)

260

TO

270

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	35	vfp-crp	1	rnd
	sand	12	vfs-vcrs	1	sb ang
OTHER	> gravel	35	vfp-crp	1	rnd
	sand	15	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color Greyish BrownHCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

270

TO

295

ROCK CLASSIFICATION

slightly silty gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	17	vfp-mp	1	w rnd
sand	20	vfs-vcrs	m	sb rnd
OTHER > gravel	13	vfp-mp	m	w rnd
sand	42	vfs-vcrs	m	rnd
SILT AND CLAY	8			

REMARKS

color Greyish Brown

HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

295

TO

300

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	35	vfp-mp	1	sb rnd
sand	10	vfs-vcrs	m	rnd
OTHER > gravel	30	vfp-mp	m	rnd
sand	23	vfs-vcrs	m	rnd
SILT AND CLAY	2			

REMARKS

color Greyish Brown

HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

300

TO

350

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	12	vfp-crp	1	rnd
	sand	18	vfs-vcrs	m	rnd
OTHER	> gravel	8	vfp-mp	1	rnd
	sand	56	vfs-vcrs	m	sb rnd
SILT AND CLAY		6			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

350

TO

380

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	3	vfp-fp	1	sb rnd
	sand	33	vfs-vcrs	m	rnd
OTHER	> gravel	3	vfp-fp	1	sb rnd
	sand	56	vfs-vcrs	m	sb ang
SILT AND CLAY		5			

REMARKS

color Brownish Grey

HCL -

Slightly Micaceous Unfrosted Quartz Sample interval 355'-360' missing

Immature

Total Drilled Depth reported as 380'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 015323

E 012713

Altitude 411 (log)

Other Data used in
Interpretation

(1) Partial Driller's(?) Log

(2) E-Log

(3) Rod Ledgerwood
strip Log

Well 699 - 15 - E13 DB-2

buff

blackish grey

buff brown
buff brown

blackish brown

blackish brown
tan buff; TRACE DIATOMITE (?)

greyish buff

greyish white; 15% DIATOMITE
greyish brown; TRACE DIATOMITE
greyish buff

tan buff

buff tan

greenish buff
grey
buff grey
grey

grey
greyish buff
bluish grey

WELL NUMBER

699-15-E13

DEPTH
(FT.)

0

TO

5

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>3</u>	<u>-mp-</u>	<u>1</u>	<u>w rnd</u>
sand	<u>17</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>ang</u>
OTHER > gravel	<u>0</u>			
sand	<u>70</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>ang</u>
SILT AND CLAY	<u>10</u>			

REMARKS

color Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature .

DEPTH
(FT.)

5

TO

60

ROCK CLASSIFICATION

Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>76</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
sand	<u>10</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER > gravel	<u>11</u>	<u>vfp-crp</u>	<u>m</u>	<u>w rnd</u>
sand	<u>2</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>1</u>			

REMARKS

color Blackish Grey
HCL - (5'-55'), + (55'-60')

Caliche (pebbles & sand present between 55' & 60') Slightly Micaceous

Immature

DEPTH
(FT.)

60

TO

70

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	38	vfp-crp	l	w rnd
	sand	2	vfs-vcrs	l	rnd
OTHER	>gravel	41	vfp-crp	l	w rnd
	sand	13	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color Buff Brown
HCL - (60'-65'), + (65'-70')

Lithified by silt & clay

Immature

DEPTH
(FT.)

70

TO

75

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	2	vfs-vcrs	l	sb ang
OTHER	>gravel	0			
	sand	23	vfs-vcrs	m	sb rnd
SILT AND CLAY		75			

REMARKS

color Buff Brown
HCL -

Slightly Micaceous Lithified by silt & clay

Immature

DEPTH
(FT.)

75

TO

120

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	28	vfp-crp	1	w rnd
	sand	5	vfs-vcrs	m	sb ang
OTHER	>gravel	32	vfp-mp	1	w rnd
	sand	33	vfs-vcrs	m	sb ang
SILT AND CLAY		2			

REMARKS

color Blackish Brown
HCL - (75'-115'), + (115'-120')

Caliche (fragments present between 115' & 120') Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

120

TO

130

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	2	-mp-	m	sb rnd
	sand	2	vfs-vcrs	1	rnd
OTHER	>gravel	1	-mp-	1	w rnd
	sand	34	vfs-vcrs	m	sb ang
SILT AND CLAY		61			

REMARKS

color Buff Brown
HCL + (120'-125'), - (125'-130')

Slightly Micaceous Slightly Gypsiferous Unfrosted Quartz

Lithified by silt & clay

Immature

WELL NUMBER

699-15-E13

DEPTH
(FT.)

130

TO

140

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	2	vfs-ms	1	rnd
OTHER > gravel	0			
sand	95	vfs-ms	m	rnd
SILT AND CLAY	3			

REMARKS

color
HCL

Tan Buff

-

Slightly Diatomaceous (? sand)

Slightly Micaceous

Frosted Quartz

Mature

DEPTH
(FT.)

140

TO

145

ROCK CLASSIFICATION

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

145

TO

175

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	32	vfp-crp	1	w rnd
	sand	10	ms-vcrs	1	ang
OTHER	>gravel	55	vfp-crp	1	w rnd
	sand	3	ms-vcrs	m	sb ang
SILT AND CLAY		0			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

175

TO

180

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	-crp-	m	sb rnd
	sand	2	vfs-vcrs	1	ang
OTHER	>gravel	5	-crp-	m	sb rnd
	sand	72	vfs-vcrs	m	sb ang
SILT AND CLAY		16			

REMARKS

color Greyish White
HCL -

Diatomaceous (15%, fragments, pebbles & sand) Slightly Micaceous

Frosted Quartz Lithified (?)

Immature

DEPTH (FT.) 180 TO 185 ROCK CLASSIFICATION sandy Gravel

		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	>gravel	<u>25</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>27</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>rnd</u>
OTHER	>gravel	<u>30</u>	<u>vfp-mp</u>	<u>m</u>	<u>w rnd</u>
	sand	<u>14</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color Greyish Brown
HCL -

Slightly Diatomaceous (fragments, pebbles & sand present)

Slightly Micaceous Frosted Quartz Lithified

Immature

DEPTH (FT.) 185 TO 205 ROCK CLASSIFICATION Gravel

		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	>gravel	<u>39</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>4</u>	<u>ms-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER	>gravel	<u>42</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>15</u>	<u>ms-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Slightly Gypsiferous (pebbles & sand present)

Unfrosted Quartz

Immature

DEPTH (FT.) 205 TO 225 ROCK CLASSIFICATION Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>3</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>2</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>3</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
sand	<u>91</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>1</u>			

REMARKS

color Tan Buff
HCL -

Slightly Micaceous Frosted Quartz

Mature

DEPTH (FT.) 225 TO 245 ROCK CLASSIFICATION silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>-fp-</u>	<u>1</u>	<u>rnd</u>
sand	<u>1</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>0</u>			
sand	<u>78</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>20</u>			

REMARKS

color Buff Tan
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

245

TO

250

ROCK CLASSIFICATION

Silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	1	vfs-ms	m	sb rnd
OTHER > gravel	0			
sand	19	vfs-ms	h	sb ang
SILT AND CLAY	80			

REMARKS

color Greenish BuffHCL -

Slightly Micaceous Lithified by silt & clay

Immature .

DEPTH
(FT.)

250

TO

260

ROCK CLASSIFICATION

sandy Silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	1	vfs-ms	m	sb rnd
OTHER > gravel	0			
sand	34	vfs-ms	m	sb ang
SILT AND CLAY	65			

REMARKS

color GreyHCL -

Slightly Micaceous Unfrosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

260

TO

265

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	0			
sand	1	vfs-ms	m	rnd
OTHER >gravel	0			
sand	99	vfs-ms	m	sb ang
SILT AND CLAY	0			

REMARKS

color Buff Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Very Mature

DEPTH
(FT.)

265

TO

270

ROCK CLASSIFICATION

silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	0			
sand	1	vfs-ms	m	rnd
OTHER >gravel	0			
sand	8	vfs-ms	m	sb ang
SILT AND CLAY	91			

REMARKS

color Grey
HCL -

Slightly Micaceous Lithified (?)

Mature

DEPTH
(FT.)

270

TO

275

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	2	vfs-ms	m	sb rnd
OTHER	>gravel	0			
	sand	88	vfs-ms	m	sb ang
SILT AND CLAY		10			

REMARKS

color Grey

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

275

TO

290

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	2	vfs-crs	l	sb rnd
OTHER	>gravel	1	-mp-	m	sb rnd
	sand	27	vfs-crs	m	sb ang
SILT AND CLAY		70			

REMARKS

color Grey

HCL -

Slightly Micaceous Unfrosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

290

TO

295

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	0			
	sand	1	vfs-ms	1	sb ang
OTHER	> gravel	0			
	sand	97	vfs-ms	m	ang
SILT AND CLAY		2			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

295

TO

300

ROCK CLASSIFICATION

silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	0			
	sand	1	vfs-ms	1	ang
OTHER	> gravel	0			
	sand	19	vfs-ms	m	ang
SILT AND CLAY		80			

REMARKS

color Bluish Grey

HCL -

Slightly Micaceous Lithified (?)

Immature

WELL NUMBER

699-15-E13

DEPTH
(FT.)

300

TO

305

ROCK CLASSIFICATION

Gravel & Basalt Flow

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	20	vfp-mp	1	rnd-v ang
sand	0			
OTHER >gravel	0			
sand	0			
SILT AND CLAY	0			

REMARKS

color Black
HCL -

Caliche (pebbles & sand present)

Slightly Micaceous

Vesicular Basalt

Submature

DEPTH
(FT.)

305

TO

310

ROCK CLASSIFICATION

sandy Silt & Basalt Flow

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel				
sand	3	vfs-vcrs	m	ang
OTHER >gravel				
sand	7	vfs-vcrs	m	ang
SILT AND CLAY	20			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous

Vesicular Basalt

Unfrosted Quartz

Immature

Total Drilled Depth 924'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 014815

W 014963

Altitude 545

Other Data used in
Interpretation

(1) Driller's Log

(2) E-Log

Well 699 - 15 - 15A

grey

light grey
blackish grey

grey

light grey

greenish dark grey

greenish grey

greenish dark grey

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

Well 699 - 15 - 15A cont

Altitude _____

Other Data used in
Interpretation

greenish dark grey

greenish dark grey

greyish brown; ASH FRAGMENTS

DEPTH
(FT.)

0

TO

170

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-crp	1	rnd
	sand	56	vfs-vcrs	1	sb rnd
OTHER	> gravel	10	vfp-crp	1	rnd
	sand	21	vfs-vcrs	m	sb ang
SILT AND CLAY		3			

REMARKS

color Grey
HCL -

Slightly Micaceous Frosted Quartz

Sample intervals 50'-105' & 110'-155' missing

Immature

DEPTH
(FT.)

170

TO

185

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	-vfp-	1	rnd
	sand	54	vfs-vcrs	1	sb rnd
OTHER	> gravel	5	-vfp-	1	rnd
	sand	23	vfs-vcrs	m	sb rnd
SILT AND CLAY		13			

REMARKS

color Light Grey
HCL -

Lithified by silt & clay

Immature

WELL NUMBER

699-15-15A

DEPTH
(FT.)

185

TO

200

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>>gravel</u>	<u>50</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	<u>sand</u>	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	<u>>gravel</u>	<u>30</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	<u>sand</u>	<u>7</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Blackish Grey
HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

200

TO

230

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>>gravel</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>sand</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER	<u>>gravel</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>sand</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY		<u> </u>			

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-15-15A

DEPTH
(FT.)

230

TO

260

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>30</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>30</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
sand	<u>16</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>4</u>			

REMARKS

color Grey
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

260

TO

290

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>22</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
sand	<u>20</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>22</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
sand	<u>28</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>8</u>			

REMARKS

color Light Grey
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

290

TO

405

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	56	vfp-crp	1	rnd
sand	9	vfs-vcrs	1	sb rnd
OTHER > gravel	22	vfp-crp	m	rnd
sand	10	vfs-vcrs	m	sb rnd
SILT AND CLAY	3			

REMARKS

color
HCL

Greenish-Dark Grey

-

Slightly Micaceous

Compacted by silt, clay & very fine sand

Immature

DEPTH
(FT.)

405

TO

425

ROCK CLASSIFICATION

gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	15	vfp-mp	1	sb rnd
sand	28	vfs-vcrs	1	sb rnd
OTHER > gravel	15	vfp-mp	1	sb rnd
sand	28	vfs-vcrs	m	sb rnd
SILT AND CLAY	14			

REMARKS

color
HCL

Greenish Grey

-

Micaceous

Compacted by silt, clay & very fine sand

Immature

DEPTH
(FT.)

425

TO

545

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	46	vfp-crp	1	rnd
	sand	12	vfs-vcrs	1	sb rnd
OTHER	>gravel	23	vfp-crp	m	w rnd
	sand	12	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greenish-Dark Grey
HCL -

Caliche (present between 425' & 440') Slightly Micaceous

Compacted by silt, clay & very fine sand

Immature

DEPTH
(FT.)

545

TO

695

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	43	vfp-crp	1	rnd
	sand	18	vfs-vcrs	1	sb rnd
OTHER	>gravel	17	vfp-crp	m	w rnd
	sand	16	vfs-vcrs	m	sb rnd
SILT AND CLAY		6			

REMARKS

color Greenish-Dark Grey
HCL -

Slightly Micaceous Compacted by silt, clay & very fine sand

Immature

WELL NUMBER

699-15-15A

DEPTH
(FT.)

695

TO

748

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	21	vfp-mp	1	sb ang
	sand	23	vfs-vcrs	1	sb rnd
OTHER	> gravel	1	vfp-mp	m	rnd
	sand	35	vfs-vcrs	1	sb rnd
SILT AND CLAY		20			

REMARKS

color Greyish Brown
HCL +

Slightly Micaceous Ash (fragments present) Compacted

Immature

Total Drilled Depth reported as 748'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

N 015602

W 026370

Altitude 522

Other Data used in Interpretation

Driller's Log

Well 699 - 15 - 26

DEPTH
(FT.)

0

TO

15

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>10</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>18</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>71</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>ang</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Greyish BuffHCL +

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

15

TO

25

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>53</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>16</u>	<u>fs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>22</u>	<u>vfp-fp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>9</u>	<u>fs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color Greyish BlackHCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

25

TO

50

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	4	vfp-mp	l	sb rnd
	sand	52	vfs-vcrs	m	ang
OTHER	>gravel	2	vfp-mp	l	rnd
	sand	40	vfs-vcrs	m	ang
SILT AND CLAY		2			

REMARKS

color Blackish Grey ("salt & pepper")
HCL + (25'-30'), - (30'-45'), + (45'-50')

Slightly Micaceous Unfrosted Quartz

Submature

DEPTH
(FT.)

50

TO

55

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	30	vfp-mp	l	rnd
	sand	20	fs-vcrs	m	sb rnd
OTHER	>gravel	30	vfp-mp	l	rnd
	sand	20	fs-vcrs	m	sb ang
SILT AND CLAY		0			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

55

TO

80

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	13	vfp-crp	l	rnd
	sand	28	fs-vcrs	m	sb rnd
OTHER	> gravel	7	vfp-mp	m	rnd
	sand	52	fs-vcrs	m	sb ang
SILT AND CLAY		0			

REMARKS

color Buff Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

80

TO

90

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	75	vfp-mp	l	sb rnd
	sand	2	fs-vcrs	m	sb rnd
OTHER	> gravel	20	vfp-mp	l	rnd
	sand	3	fs-vcrs	m	ang
SILT AND CLAY		0			

REMARKS

color Black
HCL -

Slightly Micaceous Unfrosted Quartz

Submature

DEPTH
(FT.)

90

TO

110

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	44	vfp-mp	l	rnd
	sand	13	vfs-vcrs	m	sb rnd
OTHER	> gravel	23	vfp-crp	m	rnd
	sand	18	vfs-vcrs	m	sb ang
SILT AND CLAY		2			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

110

TO

135

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	37	vfp-crp	l	w rnd
	sand	3	vfs-vcrs	m	rnd
OTHER	> gravel	49	vfp-crp	l	w rnd
	sand	11	vfs-vcrs	m	ang
SILT AND CLAY		0			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

135

TO

140

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>10</u>	<u>vfp-mp</u>	<u>1</u>	<u>w rnd</u>
	sand	<u>12</u>	<u>fs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER	>gravel	<u>10</u>	<u>vfp-mp</u>	<u>1</u>	<u>w rnd</u>
	sand	<u>68</u>	<u>fs-vcrs</u>	<u>m</u>	<u>ang</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color Greyish Buff
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

140

TO

165

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>28</u>	<u>vfp-crp</u>	<u>1</u>	<u>w rnd</u>
	sand	<u>2</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	>gravel	<u>49</u>	<u>vfp-crp</u>	<u>1</u>	<u>w rnd</u>
	sand	<u>21</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>ang</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Sample interval 150'-155' missing

Immature

WELL NUMBER

699-15-26

DEPTH
(FT.)

165

TO

170

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>10</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
sand	<u>6</u>	<u>fs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER > gravel	<u>30</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
sand	<u>54</u>	<u>fs-vcrs</u>	<u>m</u>	<u>ang</u>
SILT AND CLAY	<u>0</u>			

REMARKS

color
HCLWhite-

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

170

TO

185

ROCK CLASSIFICATION

Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>35</u>	<u>vfp-crp</u>	<u>l</u>	<u>rnd</u>
sand	<u>1</u>	<u>fs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>53</u>	<u>vfp-crp</u>	<u>l</u>	<u>rnd</u>
sand	<u>11</u>	<u>fs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>0</u>			

REMARKS

color
HCLGreyish Buff-

Slightly Micaceous

Unfrosted Quartz

Immature

WELL NUMBER

699-15-26

DEPTH
(FT.)

185

TO

200

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	31	vfp-crp	l	w rnd
	sand	3	vfs-vcrs	m	sb rnd
OTHER	>gravel	27	vfp-crp	l	w rnd
	sand	38	vfs-vcrs	m	ang
SILT AND CLAY		1			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

200

TO

210

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

210

TO

220

ROCK CLASSIFICATION

Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	43	vfp-smcb	1	rnd
sand	2	vfs-vcrs	m	sb ang
OTHER > gravel	49	vfp-smcb	1	w rnd
sand	6	vfs-vcrs	m	sb ang
SILT AND CLAY	0			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Submature

DEPTH
(FT.)

220

TO

225

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	15	vfp-mp	1	w rnd
sand	3	vfs-vcrs	m	sb rnd
OTHER > gravel	20	vfp-mp	1	w rnd
sand	62	vfs-vcrs	m	sb ang
SILT AND CLAY	0			

REMARKS

color Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-15-26

DEPTH
(FT.)

225

TO

230

ROCK CLASSIFICATION

%SIZE RANGESPHERICITYROUNDNESSBASALT >gravel
sandOTHER >gravel
sand

SILT AND CLAY

REMARKS

color

HCL

Sample missing

DEPTH
(FT.)

230

TO

255

ROCK CLASSIFICATION

Sand

%SIZE RANGESPHERICITYROUNDNESSBASALT >gravel
sandOTHER >gravel
sand

SILT AND CLAY

REMARKS

color

HCL

Tannish Buff

+

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

255

TO

272

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	3	fs-ms	1	sb rnd
OTHER	>gravel	0			
	sand	97	fs-ms	m	ang
SILT AND CLAY		0			

REMARKS

color

White

HCL

-

Slightly Micaceous

Frosted Quartz

Very Mature

DEPTH
(FT.)

272

TO

285

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	12	vfp-crp	1	w rnd
	sand	2	vfs-vcrs	m	sb rnd
OTHER	>gravel	25	vfp-crp	1	w rnd
	sand	61	vfs-vcrs	m	ang
SILT AND CLAY		0			

REMARKS

color

Buff

HCL

-

Slightly Micaceous

Unfrosted Quartz

Immature

WELL NUMBER

699-15-26

DEPTH
(FT.)

285

TO

350

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	41	vfp-vcrp	l	rnd
	sand	10	vfs-vcrs	m	sb ang
OTHER	>gravel	19	vfp-crp	m	rnd
	sand	26	vfs-vcrs	m	sb ang
SILT AND CLAY		4			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

Total Drilled Depth reported as 350'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 017 000

W 007 000

Altitude 563

Other Data used in
Interpretation

Driller's Log

Well 699 - 17 - 70

DEPTH (FT.) 0 TO 15 ROCK CLASSIFICATION slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>></u> gravel	<u>0</u>	<u> </u>	<u> </u>	<u> </u>
sand	<u>25</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb rnd</u>
OTHER <u>></u> gravel	<u>0</u>	<u> </u>	<u> </u>	<u> </u>
sand	<u>60</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>15</u>			

REMARKS

color Buff
HCL +

Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 15 TO 35 ROCK CLASSIFICATION silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>></u> gravel	<u>0</u>	<u> </u>	<u> </u>	<u> </u>
sand	<u>15</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb rnd</u>
OTHER <u>></u> gravel	<u>0</u>	<u> </u>	<u> </u>	<u> </u>
sand	<u>50</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb ang</u>
SILT AND CLAY	<u>35</u>			

REMARKS

color Tan
HCL +

Micaceous

Immature

DEPTH (FT.)	<u>35</u>	TO	<u>105</u>	ROCK CLASSIFICATION <u>silty sandy Gravel</u>
----------------	-----------	----	------------	--

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>36</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>16</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>17</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>19</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY	<u>12</u>			

REMARKS

color Greyish Tan
HCL +

Caliche (present between 35' & 40')

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH (FT.)	<u>105</u>	TO	<u>110</u>	ROCK CLASSIFICATION <u>slightly silty gravelly Sand</u>
----------------	------------	----	------------	--

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>18</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>8</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>12</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>49</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY	<u>13</u>			

REMARKS

color Brown
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

110

TO

130

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>12</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>17</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>5</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>33</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		33			

REMARKS

color Brownish Buff
HCL -
Micaceous Unfrosted Quartz
Immature

DEPTH
(FT.)

130

TO

140

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>1</u>	<u>-vfp-</u>	<u>l</u>	<u>rnd</u>
	sand	<u>5</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>			
	sand	<u>30</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		64			

REMARKS

color Purple Grey
HCL -
Micaceous
Immature

DEPTH (FT.)	<u>140</u>	TO	<u>150</u>	ROCK CLASSIFICATION <u>sandy Gravel</u>
----------------	------------	----	------------	--

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>30</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>11</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>15</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>30</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>5</u>			

REMARKS

color Brownish Buff
HCL +
Micaceous Frosted Quartz
Immature

DEPTH (FT.)	<u>150</u>	TO	<u>155</u>	ROCK CLASSIFICATION <u>silty Sand</u>
----------------	------------	----	------------	--

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>10</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>70</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>20</u>			

REMARKS

color Brownish Buff
HCL -
Micaceous
Immature

WELL NUMBER

699-17-70

DEPTH (FT.) 155 TO 165 ROCK CLASSIFICATION gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>26</u>	<u>vfp-mp</u>	<u>1</u>	<u>w rnd</u>
<u>sand</u>	<u>7</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>6</u>	<u>vfp-mp</u>	<u>m</u>	<u>w rnd</u>
<u>sand</u>	<u>47</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>14</u>			

REMARKS

color Brownish Buff
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 165 TO 185 ROCK CLASSIFICATION silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>1</u>	<u>-vfp-</u>	<u>1</u>	<u>rnd</u>
<u>sand</u>	<u>5</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>1</u>	<u>-vfp-</u>	<u>1</u>	<u>rnd</u>
<u>sand</u>	<u>68</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>25</u>			

REMARKS

color Tan
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 185 TO 190

ROCK CLASSIFICATION

slightly silty gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>≥</u> gravel sand	20	vfp-mp	m	sb rnd
	6	vfs-vcrs	l	sb rnd
OTHER <u>≥</u> gravel sand	8	vfp-fp	m	rnd
	52	vfs-vcrs	m	sb rnd
SILT AND CLAY	14			

REMARKS

 color Tan
 HCL -

Micaceous Unfrosted Quartz

Immature

 DEPTH (FT.) 190 TO 205

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>></u> gravel sand	1	-vfp-	l	rnd
	9	vfs-crs	l	sb rnd
OTHER <u>></u> gravel sand	0			
	80	vfs-crs	m	sb rnd
SILT AND CLAY	10			

REMARKS

 color Tan
 HCL -

Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-17-70

DEPTH (FT.) 205 TO 215 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	27	vfp-mp	m	sb rnd
	sand	6	vfs-vcrs	l	sb rnd
OTHER	> gravel	12	vfp-fp	m	rnd
	sand	43	vfs-vcrs	m	sb rnd
SILT AND CLAY		12			

REMARKS

color Brownish Tan
HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 215 TO 220 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	40	vfp-crp	m	rnd
	sand	3	vfs-vcrs	l	sb rnd
OTHER	> gravel	30	vfp-vcrp	l	w rnd
	sand	15	vfs-vcrs	m	sb rnd
SILT AND CLAY		12			

REMARKS

color Greyish Brown
HCL +

Abundant Caliche Micaceous

Immature

DEPTH
(FT.)

220

TO

240

ROCK CLASSIFICATION

slightly silty gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	20	vfp-mp	m	sb rnd
sand	18	vfs-vcrs	l	sb rnd
OTHER > gravel	8	vfp-fp	m	rnd
sand	43	vfs-vcrs	m	sb rnd
SILT AND CLAY	11			

REMARKS

color Greyish Brown
HCL -

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

240

TO

250

ROCK CLASSIFICATION

silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	60	vfp-mp	m	rnd
sand	8	vfs-vcrs	m	sb rnd
OTHER > gravel	20	vfp-fp	m	rnd
sand	8	vfs-vcrs	m	sb rnd
SILT AND CLAY	4			

REMARKS

color Brownish Grey
HCL -

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

250

TO

255

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>35</u>	<u>vfp-fp</u>	<u>l</u>	<u>sb ang</u>
<u>sand</u>	<u>10</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>0</u>	<u></u>	<u></u>	<u></u>
<u>sand</u>	<u>23</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>32</u>			

REMARKS

color Brownish GreyHCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

255

TO

265

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>35</u>	<u>vfp-fp</u>	<u>l</u>	<u>sb ang</u>
<u>sand</u>	<u>13</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>0</u>	<u></u>	<u></u>	<u></u>
<u>sand</u>	<u>20</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>32</u>			

REMARKS

color Brownish GreyHCL +

Abundant Caliche

Immature

WELL NUMBER

699-17-70

DEPTH
(FT.)

265

TO

286

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	95	-vfp-	m-l	sb rnd-v ang
	sand	3	vfs-vcrs	m	sb rnd-v ang
OTHER	> gravel	0			
	sand	0			
SILT AND CLAY		2			

REMARKS

color Black
HCL -

Combination sediment & flow layer (?) or boulder (?)

Submature

Total Drilled Depth reported as 286'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 018953

W 058260

Altitude 571

Other Data used in
Interpretation

Driller's Log

Well 699 - 19 - 58

DEPTH (FT.) 0 TO 55 ROCK CLASSIFICATION Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	<u>1</u>	<u>-mp-</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>6</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb ang</u>
OTHER >gravel	<u>1</u>	<u>-mp-</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>88</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>4</u>			

REMARKS

color Brownish Buff-Buff
HCL +

Micaceous Frosted Quartz

Mature

DEPTH (FT.) 55 TO 65 ROCK CLASSIFICATION Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	<u>0</u>			
sand	<u>7</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
OTHER >gravel	<u>0</u>			
sand	<u>88</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>5</u>			

REMARKS

color Brownish Buff
HCL +

Micaceous Frosted Quartz

Mature

DEPTH
(FT.)

65

TO

75

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	2	vfs-ms	1	sb rnd
OTHER	>gravel	0			
	sand	95	vfs-ms	m	sb rnd
SILT AND CLAY		3			

REMARKS

color
HCL

Buff

-

Micaceous

Frosted Quartz

Mature

DEPTH
(FT.)

75

TO

95

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	4	vfs-ms	1	sb rnd
OTHER	>gravel	0			
	sand	92	vfs-ms	1	sb rnd
SILT AND CLAY		4			

REMARKS

color
HCL

Brownish Buff

- (75' - 85'), + (85' - 95')

Micaceous

Frosted Quartz

Mature

DEPTH (FT.)	95	TO	115	ROCK CLASSIFICATION
				Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	0			
sand	4	vfs-crs	1	sb rnd
OTHER >gravel	0			
sand	93	vfs-crs	1	sb rnd
SILT AND CLAY	3			

REMARKS

color Brownish Buff-Buff
HCL -

Micaceous Frosted Quartz

Mature

DEPTH (FT.)	115	TO	135	ROCK CLASSIFICATION
				silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	32	vfp-crp	m	rnd
sand	5	vfs-vcrs	1	sb rnd
OTHER >gravel	33	vfp-mp	1	rnd
sand	25	vfs-vcrs	1	sb rnd
SILT AND CLAY	5			

REMARKS

color Greyish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 135 TO 155 ROCK CLASSIFICATION Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>>gravel</u>	<u>55</u>	<u>vfp-smcb</u>	<u>m</u>	<u>w rnd</u>
	<u>sand</u>	<u>3</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	<u>>gravel</u>	<u>35</u>	<u>vfp-lgcb</u>	<u>1</u>	<u>w rnd</u>
	<u>sand</u>	<u>5</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>2</u>			

REMARKS

color Buff Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 155 TO 165 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>>gravel</u>	<u>25</u>	<u>vfp-mp</u>	<u>1</u>	<u>w rnd</u>
	<u>sand</u>	<u>12</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	<u>>gravel</u>	<u>35</u>	<u>vfp-mp</u>	<u>1</u>	<u>w rnd</u>
	<u>sand</u>	<u>22</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>6</u>			

REMARKS

color Buff Brown
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

165

TO

170

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	45	vfp-mp	1	w rnd
	sand	3	vfs-vcrs	1	rnd
OTHER	>gravel	45	vfp-mp	1	w rnd
	sand	6	vfs-vcrs	1	rnd
SILT AND CLAY		1			

REMARKS

color
HCL

Greyish Brown

-

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

170

TO

180

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-crp	1	w rnd
	sand	11	vfs-vcrs	1	sb rnd
OTHER	>gravel	25	vfp-crp	1	w rnd
	sand	41	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color
HCL

Greyish Brown

-

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 180 TO 185 ROCK CLASSIFICATION Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>46</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>1</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>51</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>1</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Frosted Quartz

Submature

DEPTH (FT.) 185 TO 190 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>25</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>13</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>30</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>25</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>7</u>			

REMARKS

color Buff Brown
HCL -

Slightly Micaceous

Immature

DEPTH (FT.) 190 TO 205 ROCK CLASSIFICATION gravelly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	8	vfp-mp	m	sb rnd
sand	9	vfs-vcrs	1	rnd
OTHER >gravel	6	vfp-mp	1	w rnd
sand	55	vfs-vcrs	m	sb rnd
SILT AND CLAY	22			

REMARKS

color Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH (FT.) 205 TO 225 ROCK CLASSIFICATION Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	82	vfp-mp	1	sb rnd-v ang
sand	15	vfs-vcrs	1	sb rnd-v ang
OTHER >gravel	1	vfp-mp	m	rnd
sand	1	vfs-vcrs	m	rnd
SILT AND CLAY	1			

REMARKS

color Black
HCL -

Slightly Micaceous Frosted Quartz Abundant Scoriaceous Lava

Immature

DEPTH
(FT.)

225

TO

235

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	43	vfp-mp	1	w rnd-v ang
	sand	49	fs-vcrs	1	sb rnd-v ang
OTHER	> gravel	5	vfp-mp	1	w rnd
	sand	3	fs-vcrs	m	sb rnd
SILT AND CLAY		0			

REMARKS

color
HCL

Black

-

Slightly Micaceous

Abundant Scoriaceous Lava

Frosted Quartz

Immature

DEPTH
(FT.)

235

TO

240

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	25	vfp-mp	1	w rnd-v ang
	sand	56	ms-vcrs	1	sb rnd-v ang
OTHER	> gravel	5	vfp-mp	1	w rnd
	sand	14	ms-vcrs	m	sb rnd
SILT AND CLAY		0			

REMARKS

color
HCL

Greyish Black

-

Ash Present

Frosted Quartz

Immature

DEPTH (FT.) 240 TO 250 ROCK CLASSIFICATION sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	54	vfp-mp	m	rnd-v ang
sand	29	vfs-vcrs	l	sb rnd-v ang
OTHER > gravel	0			
sand	16	vfs-vcrs	l	sb rnd
SILT AND CLAY	1			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Abundant Scoriaceous Lava Frosted Quartz
Immature

DEPTH (FT.) 250 TO 255 ROCK CLASSIFICATION slightly gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	7	vfp-mp	l	rnd-ang
sand	45	vfs-vcrs	l	sb rnd-v ang
OTHER > gravel	3	vfp-mp	m	sb rnd
sand	40	vfs-vcrs	m	sb rnd
SILT AND CLAY	5			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz
Immature

DEPTH (FT.) 255 TO 260 ROCK CLASSIFICATION Flow Layer

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT <u>> gravel</u>	<u>0</u>			
<u>sand</u>	<u>3</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd-v ang</u>
OTHER <u>> gravel</u>	<u>0</u>			
<u>sand</u>	<u>4</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>1</u>			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Scoriaceous Flow Layer with sediments (92%)
Frosted Quartz

DEPTH (FT.) 260 TO 265 ROCK CLASSIFICATION Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT <u>> gravel</u>	<u>90</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb ang-ang</u>
<u>sand</u>	<u>6</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd-v ang</u>
OTHER <u>> gravel</u>	<u>1</u>	<u>-vfp-</u>	<u>m</u>	<u>sb rnd</u>
<u>sand</u>	<u>2</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>1</u>			

REMARKS

color Greyish Black
HCL -

Slightly Micaceous Frosted Quartz
Submature

DEPTH
(FT.)

265

TO

280

ROCK CLASSIFICATION

Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	90	vfp-mp	m	sb ang-ang
sand	6	vfs-vcrs	m	sb rnd-vang
OTHER > gravel	1	-vfp-	m	sb rnd
sand	1	vfs-vcrs	m	sb rnd
SILT AND CLAY	2			

REMARKS

color Brownish Black

HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

280

TO

285

ROCK CLASSIFICATION

slightly silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	20	-	1	sb rnd-v ang
sand	7	vfs-vcrs	1	sb rnd-v ang
OTHER > gravel	0			
sand	1	vfs-vcrs	m	sb ang
SILT AND CLAY	2			

REMARKS

color Brownish Black

HCL -

70% Vesicular Flow Layer with sediments

Immature

WELL NUMBER

699-19-58

DEPTH
(FT.)

285

TO

300

ROCK CLASSIFICATION

gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	20	vfp-mp	m	sb ang
sand	63	vfs-vcrs	l	sb rnd-v ang
OTHER >gravel	0			
sand	1	vfs-vcrs	l	sb ang
SILT AND CLAY	16			

REMARKS

color Brownish Black
HCL -

Immature

Total Drilled Depth reported as 300'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color _____
HCL _____

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 019185

W 087736

Altitude 642

Other Data used in
Interpretation

Driller's Log

Well 699 - 19 - 88

tan

tan

black

greyish tan

brownish tan

brownish tan

greyish tan
black grey
greyish tan
greyish brown

greyish brown

DEPTH
(FT.)

0

TO

20

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>1</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>57</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>30</u>			

REMARKS

color Tan
HCL +

Micaceous

Immature

DEPTH
(FT.)

20

TO

45

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>32</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>16</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>15</u>	<u>vfp-fp</u>	<u>l</u>	<u>sb rnd</u>
	sand	<u>21</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>16</u>			

REMARKS

color Tan
HCL +

Slightly Micaceous

Immature

WELL NUMBER

699-19-88

DEPTH
(FT.)

45

TO

47

ROCK CLASSIFICATION

sandy Gravel & Basalt Flow

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	47	vfp-mp	l	rnd-v ang
	sand	44	ms-vcrs	m	sb rnd-ang
OTHER	>gravel	3	vfp-mp	l	w rnd
	sand	6	ms-vcrs	h	rnd
SILT AND CLAY		0			

REMARKS

color
HCL

Black

-

Unfrosted Quartz

Immature

DEPTH
(FT.)

47

TO

190

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-crp	l	sb rnd
	sand	26	vfs-vcrs	m	sb rnd
OTHER	>gravel	17	vfp-crp	l	rnd
	sand	28	vfs-vcrs	m	rnd
SILT AND CLAY		9			

REMARKS

color
HCL

Greyish Tan

-

Slightly Micaceous

Immature

WELL NUMBER

699-19-88

DEPTH
(FT.)

190

TO

270

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	15	vfp-crp	l	sb rnd
	sand	11	vfs-vcrs	m	sb rnd
OTHER	> gravel	15	vfp-crp	l	sb rnd
	sand	52	vfs-vcrs	m	rnd
SILT AND CLAY		7			

REMARKS

color Brownish Tan
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

270

TO

285

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-19-88

DEPTH
(FT.)

285

TO

305

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	vfp-mp	1	rnd
	sand	8	vfs-vcrs	m	sb rnd
OTHER	>gravel	8	vfp-mp	1	rnd
	sand	67	vfs-vcrs	m	sb rnd
SILT AND CLAY		9			

REMARKS

color Brownish Tan
HCL -

Slightly Micaceous

Frosted Quartz

Sample interval 290'-295'
missing

Immature

DEPTH
(FT.)

305

TO

330

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

DEPTH
(FT.)

330

TO

335

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-mp	l	w rnd
	sand	11	vfs-vcrs	m	sb rnd
OTHER	>gravel	20	vfp-mp	m	w rnd
	sand	38	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

335

TO

345

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	40	vfp-mp	l	w rnd
	sand	10	vfs-vcrs	l	sb rnd
OTHER	>gravel	20	vfp-mp	m	w rnd
	sand	20	vfs-vcrs	m	rnd
SILT AND CLAY		10			

REMARKS

color Blackish Grey
HCL +

Abundant Caliche (30%, fragments) Lithified (?)

Immature

DEPTH
(FT.)

345

TO

350

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	3	vfp-mp	1	rnd
	sand	8	vfs-crs	1	sb rnd
OTHER	>gravel	0			
	sand	68	vfs-crs	m	rnd
SILT AND CLAY		21			

REMARKS

color Greyish Tan
HCL +

Caliche (pebbles & sand present)

Immature

DEPTH
(FT.)

350

TO

360

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	4	-vfp-	1	sb ang
	sand	29	vfs-vcrs	1	sb rnd
OTHER	>gravel	0			
	sand	53	vfs-vcrs	m	rnd
SILT AND CLAY		14			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous

Immature

WELL NUMBER

699-19-88

DEPTH
(FT.)

360

TO

365

ROCK CLASSIFICATION

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
OTHER >gravel	_____	_____	_____	_____
sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

365

TO

385

ROCK CLASSIFICATION

slightly silty gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	21	vfp-mp	1	ang
sand	39	vfs-vcrs	m	sb rnd
OTHER >gravel	1	-fp-	1	w rnd
sand	27	vfs-vcrs	m	rnd
SILT AND CLAY	12			

REMARKS

color
HCL

Greyish Brown

Slightly Micaceous

Frosted Quartz

Immature

WELL NUMBER

699-19-88

DEPTH
(FT.)

385

TO

388

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
OTHER	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
SILT AND CLAY		_____			

REMARKS

color
HCL

Sample missing

Total Drilled Depth reported as 388'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
OTHER	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
SILT AND CLAY		_____			

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 020304

E 012017

Altitude 435

Other Data used in
Interpretation

Well 699 - 20 - E12

DEPTH
(FT.)

0

TO

75

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	70	vfp-smcb	1	rnd
	sand	19	vfs-vcrs	1	rnd
OTHER	>gravel	5	vfp-vcrp	1	w rnd
	sand	3	vfs-vcrs	1	w rnd
SILT AND CLAY		3			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

75

TO

85

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	60	vfp-smcb	1	rnd
	sand	4	vfs-vcrs	1	sb rnd
OTHER	>gravel	20	vfp-vcrp	1	w rnd
	sand	13	vfs-vcrs	1	rnd
SILT AND CLAY		3			

REMARKS

color Golden Buff
HCL -

Caliche (present in fragments) Slightly Micaceous Frosted Quartz

Lithified by silt, clay & CaCO₃

Immature

WELL NUMBER

699-20-E12

DEPTH
(FT.)

85

TO

90

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	20	vfp-mp	m	rnd
sand	6	vfs-vcrs	l	sb rnd
OTHER >gravel	15	vfp-mp	l	w rnd
sand	47	vfs-vcrs	m	rnd
SILT AND CLAY	12			

REMARKS

color
HCL

Light Brown

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

90

TO

95

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

95

TO

110

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	52	vfp-crp	1	rnd
	18	vfs-vcrs	1	sb rnd
OTHER > gravel sand	23	vfp-mp	m	w rnd
	6	vfs-vcrs	1	rnd
SILT AND CLAY	1			

REMARKS

color Blackish Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Sample interval 100'-105' missing

Immature

DEPTH
(FT.)

110

TO

115

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	18	vfp-mp	1	rnd
	10	vfs-vcrs	1	sb rnd
OTHER > gravel sand	18	vfp-mp	1	rnd
	32	vfs-vcrs	m	rnd
SILT AND CLAY	22			

REMARKS

color Greyish White
HCL -

Immature

DEPTH
(FT.)

115

TO

120

ROCK CLASSIFICATION

sandy Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	10	vfs-crs	1	rnd
OTHER > gravel	0			
sand	40	vfs-crs	1	rnd
SILT AND CLAY	50			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

120

TO

135

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	22	vfp-crp	1	rnd
sand	14	vfs-vcrs	1	sb rnd
OTHER > gravel	18	vfp-crp	1	rnd
sand	36	vfs-vcrs	m	rnd
SILT AND CLAY	10			

REMARKS

color Light Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

135

TO

145

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	18	vfp-crp	m	sb rnd
	sand	18	ms-vcrs	1	sb ang
OTHER	>gravel	30	vfp-crp	1	w rnd
	sand	34	ms-vcrs	1	sb rnd
SILT AND CLAY		0			

REMARKS

color
HCL

Greyish Buff

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

145

TO

155

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	13	vfp-mp	m	sb rnd
	sand	16	vfs-vcrs	1	sb rnd
OTHER	>gravel	13	vfp-mp	m	sb rnd
	sand	48	vfs-vcrs	h	rnd
SILT AND CLAY		10			

REMARKS

color
HCL

Greyish White

-

Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

155

TO

165

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	27	vfp-crp	1	rnd
	sand	14	vfs-vcrs	1	sb rnd
OTHER	> gravel	21	vfp-crp	1	w rnd
	sand	36	vfs-vcrs	m	rnd
SILT AND CLAY		2			

REMARKS

color Greyish BuffHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

165

TO

175

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-crp	1	rnd
	sand	14	vfs-vcrs	1	rnd
OTHER	> gravel	15	vfp-crp	1	w rnd
	sand	46	vfs-vcrs	1	rnd
SILT AND CLAY		5			

REMARKS

color Greyish TanHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

175

TO

180

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	40	vfp-crp	1	rnd
sand	12	vfs-vcrs	1	rnd
OTHER > gravel	30	vfp-crp	1	w rnd
sand	15	vfs-vcrs	1	rnd
SILT AND CLAY	3			

REMARKS

color Greyish Buff
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

180

TO

200

ROCK CLASSIFICATION

gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	8	vfp-mp	1	rnd
sand	8	vfs-crs	1	sb rnd
OTHER > gravel	8	vfp-mp	1	rnd
sand	74	vfs-crs	1	rnd
SILT AND CLAY	2			

REMARKS

color Buff White
HCL -

Slightly Diatomaceous Frosted Quartz

Immature

WELL NUMBER

699-20-E12

DEPTH
(FT.)

200

TO

205

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	8	vfs-ms	m	rnd
OTHER > gravel	0			
sand	89	vfs-ms	m	rnd
SILT AND CLAY	3			

REMARKS

color Buff
HCL -

Slightly Diatomaceous Frosted Quartz

Mature

DEPTH
(FT.)

205

TO

210

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	8	vfs-ms	m	rnd
OTHER > gravel	0			
sand	85	vfs-ms	m	rnd
SILT AND CLAY	7			

REMARKS

color Whitish Buff
HCL -

Diatomaceous Frosted Quartz

Mature

DEPTH (FT.) 210 TO 215 ROCK CLASSIFICATION slightly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	15	vfs-vcrs	m	rnd
OTHER > gravel	0			
sand	75	vfs-vcrs	m	rnd
SILT AND CLAY	10			

REMARKS

color Greyish White
HCL -

Diatomaceous

Immature

DEPTH (FT.) 215 TO 240 ROCK CLASSIFICATION sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	43	vfp-crp	l	w rnd
sand	8	vfs-vcrs	l	sb rnd
OTHER > gravel	30	vfp-crp	l	w rnd
sand	18	vfs-vcrs	m	rnd
SILT AND CLAY	1			

REMARKS

color Buff Grey
HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

240

TO

255

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	30	vfp-mp	1	sb rnd
	sand	12	vfs-vcrs	1	rnd
OTHER	> gravel	30	vfp-mp	1	sb rnd
	sand	26	vfs-vcrs	1	rnd
SILT AND CLAY		2			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

255

TO

265

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	15	vfp-mp	1	sb ang
	sand	11	vfs-vcrs	1	sb rnd
OTHER	> gravel	15	vfp-mp	1	sb ang
	sand	52	vfs-vcrs	1	rnd
SILT AND CLAY		7			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

265

TO

270

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>15</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb ang</u>
	sand	<u>10</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
OTHER	> gravel	<u>15</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb ang</u>
	sand	<u>46</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>14</u>			

REMARKS

color Greyish WhiteHCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

270

TO

280

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>20</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>4</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>40</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>36</u>			

REMARKS

color Reddish BrownHCL -

Micaceous

Immature

DEPTH
(FT.)

280

TO

285

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	vfp-mp	m	rnd
	sand	7	vfs-vcrs	l	rnd
OTHER	>gravel	0			
	sand	65	vfs-vcrs	m	sb rnd
SILT AND CLAY		20			

REMARKS

color Light Brown
HCL -

Slightly Micaceous Slightly Gypsiferous Frosted Quartz
Immature

DEPTH
(FT.)

285

TO

290

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	3	vfs-vcrs	m	rnd
OTHER	>gravel	0			
	sand	17	vfs-vcrs	m	rnd
SILT AND CLAY		80			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous Slightly Gypsiferous
Immature

DEPTH
(FT.)

290

TO

295

ROCK CLASSIFICATION

silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	4	vfp-mp	m	rnd
sand	0			
OTHER > gravel	0			
sand	58	vfs-ms	l	rnd
SILT AND CLAY	38			

REMARKS

color Light Brown

HCL -

Slightly Micaceous Gypsiferous

Immature

DEPTH
(FT.)

295

TO

300

ROCK CLASSIFICATION

sandy Silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	1	vfs-ms	h	rnd
OTHER > gravel	0			
sand	30	vfs-ms	h	rnd
SILT AND CLAY	69			

REMARKS

color Grey

HCL -

Slightly Gypsiferous

Immature

DEPTH
(FT.)

300

TO

315

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	17	vfp-mp	l	sb rnd
	sand	29	vfs-vcrs	m	rnd
OTHER	>gravel	0			
	sand	53	vfs-vcrs	m	rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff
HCL -

Frosted Quartz

Immature

DEPTH
(FT.)

315

TO

320

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	-vfp-	l	sb rnd
	sand	29	fs-vcrs	l	sb rnd
OTHER	>gravel	0			
	sand	66	fs-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Greyish Buff
HCL -

Slightly Gypsiferous

Frosted Quartz

Mature

WELL NUMBER

699-20-E12

DEPTH
(FT.)

320

TO

325

ROCK CLASSIFICATION

BASALT >gravel
sand%SIZE RANGESPHERICITYROUNDNESSOTHER >gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

325

TO

330

ROCK CLASSIFICATION

gravelly Sand

BASALT >gravel
sand%SIZE RANGESPHERICITYROUNDNESS

17

vfp-mp

1

sb ang

64

fs-vcrs

1

sb rnd

OTHER >gravel
sand

3

vfp-mp

m

w rnd

16

fs-vcrs

1

rnd

SILT AND CLAY

0

REMARKS

color
HCL

Black

-

Caliche (pebbles present)

Frosted Quartz

Immature

WELL NUMBER

699-20-E12

DEPTH
(FT.)

330

TO

340

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
OTHER	>gravel	_____	_____	_____	_____
	sand	_____	_____	_____	_____
SILT AND CLAY		_____			

REMARKS

color

HCL

Sample missing

DEPTH
(FT.)

340

TO

345

ROCK CLASSIFICATION

Basalt ?

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	2	-fp-	l	sb rnd
	sand	93	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	5	vfs-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color

HCL

Greyish Black

-

Frosted Quartz

WELL NUMBER

699-20-E12

DEPTH
(FT.)

345

TO

357

ROCK CLASSIFICATION

Basalt ?

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	6	vfp-mp	1	v ang
sand	85	fs-vcrs	m	sb ang
OTHER > gravel	0			
sand	8	fs-vcrs	1	rnd
SILT AND CLAY	1			

REMARKS

color Black

HCL -

Frosted Quartz Sample interval 350'-357' missing

Total Drilled Depth reported as 357'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color

HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 020008

E 004755

Altitude 465

Other Data used in
Interpretation

Driller's Log

Well 699 - 20 - E5P

greyish black

greyish black

greyish black

grey

brownish tan

blackish brown

grey

greyish tan

brownish black

brownish black

brownish black

brownish black

brownish grey

brownish grey

brownish black

WELL NUMBER

699-20-E5P

DEPTH
(FT.)

0

TO

15

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	60	vfp-crp	1	w rnd
	sand	15	ms-vcrs	1	rnd
OTHER	> gravel	23	vfp-crp	1	w rnd
	sand	2	ms-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Greyish Black
HCL -

Immature

DEPTH
(FT.)

15

TO

90

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	12	vfp-crp	1	rnd
	sand	68	ms-vcrs	1	rnd
OTHER	> gravel	8	vfp-crp	1	rnd
	sand	12	ms-vcrs	1	rnd
SILT AND CLAY		0			

REMARKS

color Greyish Black ("salt & pepper")
HCL -

Immature

DEPTH (FT.)	<u>90</u>	TO	<u>100</u>	ROCK CLASSIFICATION
				<u>sandy Gravel</u>

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u>30</u>	<u>vfp-crp</u>	<u>1</u>	<u>w rnd</u>
	<u>sand</u>	<u>40</u>	<u>ms-vcrs</u>	<u>1</u>	<u>rnd</u>
OTHER	<u>> gravel</u>	<u>20</u>	<u>vfp-crp</u>	<u>1</u>	<u>w rnd</u>
	<u>sand</u>	<u>10</u>	<u>ms-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>0</u>			

REMARKS

color Greyish Black ("salt & pepper")
HCL -

Immature Unfrosted Quartz

DEPTH (FT.)	<u>100</u>	TO	<u>130</u>	ROCK CLASSIFICATION
				<u>Gravel</u>

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u>43</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	<u>sand</u>	<u>5</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	<u>> gravel</u>	<u>43</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	<u>sand</u>	<u>8</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY		<u>1</u>			

REMARKS

color Grey
HCL -

Immature Frosted Quartz

WELL NUMBER

699-20-E5P

DEPTH
(FT.)

130

TO

145

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>11</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>24</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>rnd</u>
OTHER	> gravel	<u>11</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>27</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>27</u>			

REMARKS

color Brownish TanHCL -

Immature

DEPTH
(FT.)

145

TO

155

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>33</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>17</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>sb rnd</u>
OTHER	> gravel	<u>33</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>14</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>rnd</u>
SILT AND CLAY		<u>3</u>			

REMARKS

color Blackish BrownHCL -

Immature

DEPTH
(FT.)

155

TO

175

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	50	vfp-crp	1	sb rnd
	sand	7	vfs-vcrs	1	sb rnd
OTHER	>gravel	35	vfp-crp	m	rnd
	sand	8	vfs-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Grey
HCL -

Immature

DEPTH
(FT.)

175

TO

180

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	45	vfp-crp	1	sb rnd
	sand	8	vfs-vcrs	1	sb rnd
OTHER	>gravel	35	vfp-crp	m	rnd
	sand	10	vfs-vcrs	m	sb rnd
SILT AND CLAY		2			

REMARKS

color Greyish Tan
HCL -

Immature

DEPTH
(FT.)

180

TO

280

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	44	vfp-crp	1	sb rnd
	sand	14	vfs-vcrs	1	sb rnd
OTHER	> gravel	30	vfp-crp	m	rnd
	sand	11	vfs-vcrs	m	rnd
SILT AND CLAY		1			

REMARKS

color Brownish Black
HCL -

Immature

DEPTH
(FT.)

280

TO

300

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	45	vfp-crp	1	sb rnd
	sand	10	crs-vcrs	1	sb rnd
OTHER	> gravel	35	vfp-crp	m	rnd
	sand	10	crs-vcrs	1	sb rnd
SILT AND CLAY		0			

REMARKS

color Brownish Black
HCL -

Slightly Gypsiferous

Immature

WELL NUMBER

699-20-E5P

DEPTH
(FT.)

300

TO

320

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	1	rnd
	sand	16	vfs-vcrs	1	sb rnd
OTHER	>gravel	35	vfp-crp	m	w rnd
	sand	13	vfs-vcrs	1	rnd
SILT AND CLAY		1			

REMARKS

color Brownish Black
HCL -

Immature

DEPTH
(FT.)

320

TO

325

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	40	vfp-crp	1	sb rnd
	sand	10	crs-vcrs	1	sb rnd
OTHER	>gravel	40	vfp-crp	m	rnd
	sand	10	crs-vcrs	1	rnd
SILT AND CLAY		0			

REMARKS

color Brownish Black
HCL -

Immature

WELL NUMBER

699-20-E5P

DEPTH
(FT.)

325

TO

355

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	40	vfp-crp	m	sb rnd
sand	11	crs-vcrs	l	sb rnd
OTHER > gravel	40	vfp-crp	m	sb rnd
sand	9	crs-vcrs	l	rnd
SILT AND CLAY	0			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous Sample interval 343'-345' missing

Immature

DEPTH
(FT.)

355

TO

450

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	35	vfp-crp	l	rnd
sand	19	vfs-vcrs	l	sb rnd
OTHER > gravel	27	vfp-crp	m	w rnd
sand	15	vfs-vcrs	l	rnd
SILT AND CLAY	4			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous Sample interval 420'-425' missing

Immature

WELL NUMBER

699-20-E5P

DEPTH
(FT.)

450

TO

455

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	60	vfp-mp	l	rnd
	sand	15	crs-vcrs	m	rnd
OTHER	> gravel	15	vfp-mp	m	rnd
	sand	10	crs-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Brownish Black
HCL -

Immature

DEPTH
(FT.)

455

TO

466

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

Total Drilled Depth reported as 466'

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 020389

W 020390

Altitude 504

Other Data used in
Interpretation

(1) Driller's Log

(2) Descriptive Log
from Newcomb, et al,
1972, p. 68

Well 699 - 20 - 20

brownish grey- greyish brown

greyish tan

tanned buff
greyish buff; ASH FRAGMENTS
tanned grey

DEPTH (FT.) 0 TO 85 ROCK CLASSIFICATION gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>11</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>30</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>7</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>45</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>7</u>			

REMARKS

color Brownish Grey-Greyish Brown
HCL - (0'-65'), + (65'-80'), - (80'-85')

Slightly Micaceous Frosted Quartz Sample interval 45'-50' missing
Immature

DEPTH (FT.) 85 TO 125 ROCK CLASSIFICATION sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>33</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>8</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER	> gravel	<u>35</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>21</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>3</u>			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Frosted Quartz
Immature

DEPTH
(FT.)

125

TO

135

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	10	vfp-crp	1	sb rnd
	sand	10	vfs-vcrs	m	sb rnd
OTHER	>gravel	10	vfp-crp	1	w rnd
	sand	64	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color Tanned Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

135

TO

140

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-vfp-	1	sb rnd
	sand	12	vfs-vcrs	m	sb rnd
OTHER	>gravel	1	-vfp-	1	sb rnd
	sand	83	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Ash (fragments present) Frosted Quartz

Mature

WELL NUMBER

699-20-20

DEPTH
(FT.)

140

TO

158

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	33	vfp-crp	l	rnd
	sand	6	vfs-vcrs	m	sb rnd
OTHER	> gravel	33	vfp-crp	m	w rnd
	sand	27	vfs-vcrs	m	sb ang
SILT AND CLAY		1			

REMARKS

color Tanned Grey
HCL -

Slightly Micaceous Unfrosted Quartz Sample interval 155'-158' missing
Immature

Total Drilled Depth reported as 158'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

Well 699 - 24 - 33

N 023809

W 033315

Altitude 522

Other Data used in Interpretation

- (1) Driller's Log
- (2) E-Log
- (3) Sieve analyses in
McHenry, 1957, p.36

buff

buff grey

greyish buff-greyish tan

greyish tan

buff grey

buff grey

greyish buff

DEPTH
(FT.)

0

TO

5

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	15	vfs-crs	1	sb rnd
OTHER	>gravel	0			
	sand	85	vfs-crs	m	sb ang
SILT AND CLAY		0			

REMARKS

color
HCL

Buff

-

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

5

TO

80

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	2	vfp-crp	1	rnd
	sand	21	vfs-vcrs	m	sb rnd
OTHER	>gravel	2	vfp-crp	1	rnd
	sand	67	vfs-vcrs	m	sb rnd
SILT AND CLAY		8			

REMARKS

color
HCL

Buff Grey

+ (5'-10'), - (10'-40'), + (40'-80')

Slightly Micaceous Frosted Quartz
 Sample intervals 10'-15', 20'-25', 45'-50', 60'-65' & 75'-80' missing
 Immature

DEPTH
(FT.)

80

TO

120

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>36</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>16</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER	>gravel	<u>15</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>30</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>3</u>			

REMARKS

color Greyish Buff-Greyish Tan
HCL + (80'-90'), - (90'-120')

Slightly Micaceous

Frosted Quartz

Sample intervals 90'-95',
100'-105' missing

Immature

DEPTH
(FT.)

120

TO

140

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>2</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>38</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>2</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>48</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>10</u>			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous

Sample interval 125'-130' missing

Immature

DEPTH
(FT.)

140

TO

150

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	2	vfp-fp	m	sb rnd
sand	24	vfs-vcrs	m	sb ang
OTHER > gravel	2	vfp-fp	m	sb rnd
sand	71	vfs-vcrs	m	sb ang
SILT AND CLAY	1			

REMARKS

color Buff Grey

HCL -

Slightly Micaceous Unfrosted Quartz

Submature

DEPTH
(FT.)

150

TO

155

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	20	vfp-crp	l	w rnd
sand	21	vfs-vcrs	m	sb rnd
OTHER > gravel	25	vfp-crp	m	w rnd
sand	33	vfs-vcrs	m	sb rnd
SILT AND CLAY	1			

REMARKS

color Buff Grey

HCL -

Slightly Micaceous Frosted Quartz

Immature

699-24-33

DEPTH (FT.)		TO	ROCK CLASSIFICATION		
155		165	Sand		
		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	> gravel	1	vfp-mp	m	rnd
	sand	12	vfs-vcrs	l	sb ang
OTHER	> gravel	1	vfp-mp	m	rnd
	sand	86	vfs-vcrs	m	ang
SILT AND CLAY		0			
REMARKS					
color		Greyish Buff			
HCL		-			
Slightly Micaceous		Unfrosted Quartz		Sample interval 155'-160' missing	
Submature					
Total Drilled Depth reported as 165'					

DEPTH (FT.)		TO	ROCK CLASSIFICATION	
	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT ≥ gravel sand	_____	_____	_____	_____
	_____	_____	_____	_____
OTHER ≥ gravel sand	_____	_____	_____	_____
	_____	_____	_____	_____
SILT AND CLAY	_____			
REMARKS				
color	_____			
HCL	_____			

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 025258

W 070080

Altitude 628

Other Data used in Interpretation

(1) Descriptive Log from Newcomb, et al, 1972, p.678

(2) Driller's Log

(3) Sieve analyses in McHenry, 1957, p.38

WELL NUMBER

699-25-70

DEPTH
(FT.)

0

TO

125

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	vfp-fp	1	rnd
	sand	12	vfs-crs	1	sb rnd
OTHER	>gravel	0			
	sand	60	vfs-crs	m	sb rnd
SILT AND CLAY		27			

REMARKS

color Brownish Buff
HCL +

Micaceous Unfrosted Quartz Compacted (?)

Immature

DEPTH
(FT.)

125

TO

145

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-vfp-	1	rnd
	sand	10	vfs-ms	1	sb rnd
OTHER	>gravel	0			
	sand	20	vfs-ms	1	sb ang
SILT AND CLAY		69			

REMARKS

color Brownish Tan
HCL +

Micaceous Compacted

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

145

TO

160

ROCK CLASSIFICATION

silty Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u>31</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	<u>sand</u>	<u>3</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	<u>> gravel</u>	<u>3</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	<u>sand</u>	<u>10</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>53</u>			

REMARKS

color Brownish Tan
HCL +

Micaceous Compacted

Immature

DEPTH
(FT.)

160

TO

165

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>sand</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER	<u>> gravel</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>sand</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY		<u> </u>			

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-25-70

DEPTH (FT.)	<div style="border: 1px solid black; padding: 2px;">165</div>	TO	<div style="border: 1px solid black; padding: 2px;">185</div>	ROCK CLASSIFICATION <div style="border: 1px solid black; padding: 2px;">sandy Silt</div>
----------------	---	----	---	---

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>0</u>			
	sand	<u>5</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>25</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>70</u>			

REMARKS

color	<u>Brownish Tan</u>
HCL	<u>+</u>

Micaceous

Immature

DEPTH (FT.)	<div style="border: 1px solid black; padding: 2px;">185</div>	TO	<div style="border: 1px solid black; padding: 2px;">225</div>	ROCK CLASSIFICATION <div style="border: 1px solid black; padding: 2px;">silty sandy Gravel</div>
----------------	---	----	---	---

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>56</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>7</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	<u>17</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>16</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color	<u>Greyish Buff</u>
HCL	<u>+</u>

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-25-70

DEPTH (FT.) 225 TO 230 ROCK CLASSIFICATION Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
	sand	<u>15</u>	<u>fs-ms</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
	sand	<u>80</u>	<u>fs-ms</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY		<u>5</u>			

REMARKS

color Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH (FT.) 230 TO 245 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>20</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>24</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	<u>20</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>27</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>9</u>			

REMARKS

color Greyish Buff
HCL +

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

245

TO

255

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	65	vfp-crp	1	rnd
sand	4	vfs-vcrs	1	sb rnd
OTHER > gravel	15	vfp-crp	1	rnd
sand	13	vfs-vcrs	1	rnd
SILT AND CLAY	3			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

255

TO

270

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	25	vfp-crp	1	rnd
sand	10	vfs-vcrs	1	sb ang
OTHER > gravel	13	vfp-crp	m	rnd
sand	43	vfs-vcrs	1	sb rnd
SILT AND CLAY	9			

REMARKS

color Yellowish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

270

TO

315

ROCK CLASSIFICATION

gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>10</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>22</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER > gravel	<u>4</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
sand	<u>56</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
SILT AND CLAY	<u>8</u>			

REMARKS

color Yellowish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

315

TO

320

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY	<u> </u>			

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-25-70

DEPTH
(FT.)

320

TO

330

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>60</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>11</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>5</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>19</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>5</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

330

TO

335

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>12</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>30</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER	>gravel	<u>2</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>39</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY		<u>17</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

335

TO

340

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	74	vfp-mp	m	sb rnd
	sand	2	vfs-vcrs	l	sb ang
OTHER	> gravel	20	vfp-mp	m	rnd
	sand	3	vfs-vcrs	l	rnd
SILT AND CLAY		1			

REMARKS

color Buff Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Submature

DEPTH
(FT.)

340

TO

390

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	53	vfp-mp	m	sb rnd
	sand	13	vfs-vcrs	l	sb ang
OTHER	> gravel	10	vfp-mp	m	rnd
	sand	17	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH (FT.) 390 TO 395 ROCK CLASSIFICATION Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>2</u>	<u>-vfp-</u>	<u>1</u>	<u>rnd</u>
	sand	<u>34</u>	<u>fs-crs</u>	<u>1</u>	<u>sb ang</u>
OTHER	> gravel	<u>2</u>	<u>-vfp-</u>	<u>1</u>	<u>rnd</u>
	sand	<u>57</u>	<u>fs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>5</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH (FT.) 395 TO 415 ROCK CLASSIFICATION silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>50</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>10</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER	> gravel	<u>10</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>26</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

415

TO

420

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	vfp-fp	m	sb rnd
	sand	18	vfs-vcrs	l	sb ang
OTHER	> gravel	5	vfp-fp	m	sb rnd
	sand	63	vfs-vcrs	l	sb rnd
SILT AND CLAY		9			

REMARKS

color Greyish Buff
HCL -

Micaceous

Immature

DEPTH
(FT.)

420

TO

440

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	45	vfp-mp	m	sb rnd
	sand	15	vfs-vcrs	l	sb ang
OTHER	> gravel	10	vfp-mp	m	rnd
	sand	23	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-25-70

DEPTH
(FT.)

440

TO

460

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	17	vfp-fp	m	sb rnd
	sand	23	vfs-vcrs	l	sb ang
OTHER	> gravel	17	vfp-fp	m	sb rnd
	sand	36	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous

Immature

Total Drilled Depth reported as 460'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 025080

W 079512

Altitude 614

Other Data used in
Interpretation

(1) Descriptive Log from
Newcomb, et al,
1972, p.65
(2) Driller's Log

Well 699 - 25 - 80

DEPTH
(FT.)

0

TO

30

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	2	vfp-mp	l	rnd
	sand	5	vfs-vcrs	m	rnd
OTHER	>gravel	1	vfp-mp	m	rnd
	sand	78	vfs-vcrs	m	sb ang
SILT AND CLAY		14			

REMARKS

color Brownish Buff
HCL +

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

30

TO

50

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	17	vfp-crp	l	rnd
	sand	15	vfs-vcrs	l	sb rnd
OTHER	>gravel	9	vfp-mp	l	w rnd
	sand	52	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Buff Brown
HCL +

Caliche (pebbles present between 30' & 40', sand) Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

50

TO

60

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>11</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>16</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	<u>11</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>58</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color Buff Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

60

TO

105

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	<u>> gravel</u>	34	vfp-crp	1	w rnd
	<u>sand</u>	8	vfs-vcrs	m	rnd
OTHER	<u>> gravel</u>	26	vfp-crp	m	w rnd
	<u>sand</u>	26	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color Greyish Brown Buff
HCL - (60'-85'), + (85'-95'), -(95'-105')

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-25-80

DEPTH
(FT.)

105

TO

110

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	55	vfp-crp	l	sb rnd
	sand	19	vfs-vcrs	m	sb rnd
OTHER	>gravel	10	vfp-fp	m	w rnd
	sand	14	vfs-vcrs	m	sb ang
SILT AND CLAY		2			

REMARKS

color Light Grey

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

110

TO

190

ROCK CLASSIFICATION

slightly silty Sand
& Basalt Flow

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	63	vfp-vcrp	l	ang
	sand	29	vfs-vcrs	l	sb rnd
OTHER	>gravel	1	vfp-fp	m	w rnd
	sand	3	vfs-vcrs	m	w rnd
SILT AND CLAY		4			

REMARKS

color Black

HCL -

Ash (fragments present between 150' & 155')

Immature

WELL NUMBER

699-25-80

DEPTH
(FT.)

190

TO

205

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	22	vfp-mp	1	sb rnd
	sand	62	vfs-vcrs	1	rnd
OTHER	>gravel	0			
	sand	4	vfs-vcrs	m	w rnd
SILT AND CLAY		12			

REMARKS

color Brownish Black
HCL -

Immature

DEPTH
(FT.)

205

TO

210

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	65	vfp-mp	m	sb rnd
	sand	28	vfs-vcrs	m	sb ang
OTHER	>gravel	0			
	sand	3	vfs-vcrs	m	w rnd
SILT AND CLAY		4			

REMARKS

color Greyish Black
HCL -

Immature

WELL NUMBER

699-25-80

DEPTH
(FT.)

210

TO

225

ROCK CLASSIFICATION

silty Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	25	vfp-mp	l	sb rnd
	sand	6	vfs-vcrs	m	sb ang
OTHER	> gravel	12			
	sand	16	vfs-vcrs	m	rnd
SILT AND CLAY		41			

REMARKS

color Greyish Tan
HCL +

Abundant Caliche (pebbles, sand & fragments present) Slightly Micaceous

Frosted Quartz Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

225

TO

230

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-25-80

DEPTH (FT.) 230 TO 250 ROCK CLASSIFICATION sandy Silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	<u>2</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>5</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>0</u>			
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>w rnd</u>
SILT AND CLAY	<u>73</u>			

REMARKS

color Whitish Grey
HCL -

Slightly Micaceous Frosted Quartz Lithified by silt & clay
Immature

DEPTH (FT.) 250 TO 290 ROCK CLASSIFICATION slightly gravelly silty Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	<u>6</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>5</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER > gravel	<u>0</u>			
sand	<u>66</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>23</u>			

REMARKS

color Greyish Tan
HCL -

Slightly Diatomaceous (pebbles present between 275' & 290')

Slightly Micaceous Frosted Quartz Compacted (?)

Immature

DEPTH
(FT.)

290

TO

295

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	40	vfp-mp	m	sb rnd
	sand	21	vfs-vcrs	m	sb rnd
OTHER	> gravel	0			
	sand	27	vfs-vcrs	m	sb rnd
SILT AND CLAY		12			

REMARKS

color Tan Grey
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

295

TO

320

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	8	vfp-mp	l	sb ang
	sand	73	vfs-vcrs	l	sb ang
OTHER	> gravel	1	vfp-mp	m	sb rnd
	sand	14	vfs-vcrs	m	sb ang
SILT AND CLAY		4			

REMARKS

color Tan Grey
HCL -

Slightly Diatomaceous (pebbles present between 315' & 320', sand)

Slightly Micaceous Rhyolite (? fragments present) Unfrosted Quartz

Immature

WELL NUMBER

699-25-80

DEPTH
(FT.)

320

TO

325

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	8	-mp-	l	ang
sand	14	vfs-vcrs	m	sb rnd
OTHER > gravel	0			
sand	64	vfs-vcrs	m	rnd
SILT AND CLAY	14			

REMARKS

color Greyish Tan
HCL -

Frosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

325

TO

330

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	90	vfs-vcrs	m	sb rnd
OTHER > gravel	0			
sand	10	vfs-vcrs	h	rnd
SILT AND CLAY	0			

REMARKS

color Black
HCL -

Frosted Quartz

Mature

WELL NUMBER

699-25-80

DEPTH
(FT.)

330

TO

336

ROCK CLASSIFICATION

Sand & Basalt Flow

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	25	vfp-mp	l	v ang
sand	66	vfs-vcrs	m	sb rnd-ang
OTHER > gravel	0			
sand	8	vfs-vcrs	h	sb ang
SILT AND CLAY	1			

REMARKS

color Greyish Black
HCL -

Slightly Diatomaceous (fragments present)

Unfrosted Quartz

Immature

Total Drilled Depth reported as 336'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 025665

W 014554

Altitude 441

Other Data used in
Interpretation

(1) Driller's Log

(2) E-Logs

Well 699 - 26 - 15

buff
tan

tan

tan

brownish buff

buff

buff

greenish grey

buff

greenish grey

greyish buff

brownish buff

brownish buff

brownish buff

brownish buff

greyish tan

greyish tan

light grey

DEPTH
(FT.)

0

TO

5

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	8	vfs-ms	m	rnd
OTHER	>gravel	0			
	sand	80	vfs-ms	m	sb rnd
SILT AND CLAY		12			

REMARKS

color
HCL

Buff

+

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

5

TO

10

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	65	vfp-crp	m	rnd
	sand	4	vfs-vcrs	m	rnd
OTHER	>gravel	25	vfp-crp	m	rnd
	sand	5	vfs-vcrs	m	rnd
SILT AND CLAY		1			

REMARKS

color
HCL

Tan

+

Slightly Micaceous

Immature

WELL NUMBER

699-26-15

DEPTH
(FT.)

10

TO

45

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	41	vfp-crp	m	rnd
sand	17	vfs-vcrs	m	rnd
OTHER > gravel	9	vfp-crp	m	rnd
sand	25	vfs-vcrs	m	rnd
SILT AND CLAY	8			

REMARKS

color Tan
HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

45

TO

100

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

100

TO

120

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	28	vfp-crp	m	rnd
	sand	7	vfs-vcrs	m	sb rnd
OTHER	> gravel	4	vfp-crp	m	rnd
	sand	44	vfs-vcrs	m	rnd
SILT AND CLAY		17			

REMARKS

color
HCL

Tan

+

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

120

TO

135

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	1	vfp-fp	l	sb rnd
	sand	2	vfs-ms	m	rnd
OTHER	> gravel	0			
	sand	87	vfs-ms	m	sb rnd
SILT AND CLAY		10			

REMARKS

color
HCL

Brownish Buff

+

Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

135

TO

145

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>2</u>	<u>vfs-crs</u>	<u>m</u>	<u>rnd</u>
OTHER > gravel	<u>0</u>			
sand	<u>92</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>5</u>			

REMARKS

color
HCLBuff+

Micaceous

Frosted Quartz

Mature

DEPTH
(FT.)

145

TO

155

ROCK CLASSIFICATION

slightly gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>4</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>9</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER > gravel	<u>4</u>	<u>vfp-mp</u>	<u>1</u>	<u>rnd</u>
sand	<u>78</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>5</u>			

REMARKS

color
HCLBuff+

Slightly Micaceous

Frosted Quartz

Immature

WELL NUMBER

699-26-15

DEPTH
(FT.)

155

TO

165

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	l	rnd
	sand	8	vfs-vcrs	m	rnd
OTHER	> gravel	15	vfp-crp	m	rnd
	sand	25	vfs-vcrs	m	rnd
SILT AND CLAY		17			

REMARKS

color Greenish Grey
HCL +

Abundant Caliche (pebbles & sand)

Slightly Micaceous

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

165

TO

170

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	vfp-fp	l	sb rnd
	sand	2	vfs-crs	m	rnd
OTHER	>gravel	0			
	sand	92	vfs-crs	m	rnd
SILT AND CLAY		5			

REMARKS

color Buff
HCL +

Caliche (sand present)

Slightly Micaceous

Frosted Quartz

Mature

DEPTH
(FT.)

170

TO

180

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	35	vfp-crp	l	rnd
	sand	2	vfs-crs	m	rnd
OTHER	> gravel	15	vfp-crp	m	rnd
	sand	28	vfs-crs	m	rnd
SILT AND CLAY		20			

REMARKS

color Greenish Grey
HCL +

Abundant Caliche (pebbles & sand)

Slightly Micaceous

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

180

TO

195

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	6	vfp-fp	m	sb rnd
	sand	14	vfs-vcrs	l	sb rnd
OTHER	> gravel	6	vfp-fp	m	sb rnd
	sand	70	vfs-vcrs	m	sb rnd
SILT AND CLAY		4			

REMARKS

color Greyish Buff
HCL +

Frosted Quartz

Immature

WELL NUMBER

699-26-15

DEPTH
(FT.)

195

TO

205

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	32	vfp-crp	l	rnd
	sand	10	vfs-vcrs	m	sb ang
OTHER	>gravel	20	vfp-crp	m	w rnd
	sand	34	vfs-vcrs	m	rnd
SILT AND CLAY		4			

REMARKS

color Brownish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

205

TO

215

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-mp	l	sb rnd
	sand	5	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	70	vfs-vcrs	m	rnd
SILT AND CLAY		5			

REMARKS

color Brownish Buff
HCL +

Micaceous Frosted Quartz

Immature

WELL NUMBER

699-26-15

DEPTH
(FT.)

215

TO

225

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	33	vfp-mp	l	sb rnd
	sand	8	vfs-vcrs	m	rnd
OTHER	> gravel	12	vfp-crp	l	sb rnd
	sand	41	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color
HCL

Brownish Buff

+

Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

225

TO

235

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-fp	l	sb rnd
	sand	22	vfs-vcrs	m	sb rnd
OTHER	> gravel	5	vfp-fp	l	sb rnd
	sand	47	vfs-vcrs	m	rnd
SILT AND CLAY		6			

REMARKS

color
HCL

Brownish Buff

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

235

TO

255

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>20</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>11</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	> gravel	<u>5</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>56</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>8</u>			

REMARKS

color Greyish Tan
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

255

TO

345

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>13</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>13</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>65</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>9</u>			

REMARKS

color Greyish Tan
HCL +

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-26-15

DEPTH
(FT.)

345

TO

350

ROCK CLASSIFICATION

slightly silty gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	30	vfp-crp	m	rnd
sand	11	vfs-vcrs	m	rnd
OTHER > gravel	0			
sand	52	vfs-vcrs	m	rnd
SILT AND CLAY	7			

REMARKS

color Light Grey
HCL -

Slightly Micaceous Frosted Quartz

Immature

Total Drilled Depth reported as 350'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color _____
HCL _____

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 027027

W 008281

Altitude 463

Other Data used in
Interpretation

(1) Driller's Log

(2) E-Logs

Well 699 - 27 - 8

W. K. Summers & Associates

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

Well 699 - 27 - 8 cont

blackish brown
blackish brown
blackish brown
blackish brown
greyish brown-brown
greyish brown

Altitude _____

Other Data used in
Interpretation

WELL NUMBER

699-27-8

DEPTH
(FT.)

0

TO

35

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	25	vfp-crp	m	sb rnd
	sand	41	vfs-vcrs	m	sb ang
OTHER	> gravel	7	vfp-mp	m	rnd
	sand	17	vfs-vcrs	m	sb rnd
SILT AND CLAY		10			

REMARKS

color Brownish Black
HCL +

Sample interval 25'-30' missing

Immature

DEPTH
(FT.)

35

TO

45

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-crp	m	sb rnd
	sand	42	vfs-vcrs	m	sb rnd
OTHER	> gravel	5	vfp-mp	l	sb rnd
	sand	34	vfs-vcrs	m	sb rnd
SILT AND CLAY		9			

REMARKS

color Greyish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

45

TO

55

ROCK CLASSIFICATION

slightly silty gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>10</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>26</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>5</u>	<u>vfp-mp</u>	<u>l</u>	<u>sb rnd</u>
sand	<u>50</u>	<u>vfs-crs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY	<u>9</u>			

REMARKS

color Brownish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

55

TO

65

ROCK CLASSIFICATION

slightly silty gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>20</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>23</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>5</u>	<u>vfp-crp</u>	<u>l</u>	<u>sb rnd</u>
sand	<u>44</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY	<u>8</u>			

REMARKS

color Greyish Buff
HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

65

TO

85

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand		30	vfp-crp	l	rnd
		22	vfs-vcrs	m	sb rnd
OTHER > gravel sand		15	vfp-crp	l	rnd
		22	vfs-vcrs	h	sb ang
SILT AND CLAY		11			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

85

TO

90

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT ≥ gravel sand		55	vfp-vcrp	m	rnd
		4	vfs-vcrs	h	sb rnd
OTHER ≥ gravel sand		25	vfp-vcrp	m	rnd
		14	vfs-vcrs	h	sb ang
SILT AND CLAY		2			

REMARKS

color Greyish Buff
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

90

TO

100

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-mp	m	rnd
	sand	11	vfs-vcrs	h	sb rnd
OTHER	>gravel	4	vfp-vcrp	m	rnd
	sand	57	vfs-vcrs	h	sb ang
SILT AND CLAY		8			

REMARKS

color Greyish Buff

HCL +

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

100

TO

115

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	60	vfp-crpf	m	rnd
	sand	3	vfs-vcrs	m	sb rnd
OTHER	>gravel	30	vfp-crpf	m	rnd
	sand	5	vfs-vcrs	m	sb ang
SILT AND CLAY		2			

REMARKS

color Brownish Grey

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

115

TO

155

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	-vfp-	m	rnd
	sand	3	vfs-vcrs	h	sb rnd
OTHER	> gravel	0			
	sand	87	vfs-vcrs	h	ang
SILT AND CLAY		5			

REMARKS

color
HCL

Buff

-

Micaceous

Unfrosted Quartz

Sample interval 120'-125' missing

Immature

DEPTH
(FT.)

155

TO

185

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	4	-vfp-	m	rnd
	sand	2	vfs-crs	h	sb rnd
OTHER	> gravel	0			
	sand	80	vfs-crs	h	ang
SILT AND CLAY		14			

REMARKS

color
HCL

Brownish Buff

+

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

185

TO

220

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-mp	m	rnd
	sand	41	vfs-vcrs	m	sb rnd
OTHER	> gravel	0			
	sand	43	vfs-vcrs	h	ang
SILT AND CLAY		6			

REMARKS

color Greyish Brown

HCL +

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

220

TO

250

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	vfp-crp	m	sb rnd
	sand	38	vfs-vcrs	m	sb rnd
OTHER	> gravel	1	vfp-mp	m	sb rnd
	sand	47	vfs-vcrs	m	sb ang
SILT AND CLAY		9			

REMARKS

color Greyish Brown

HCL -

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

250

TO

265

ROCK CLASSIFICATION

silty sandy Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	25	vfp-mp	m	sb rnd
sand	20	vfs-vcrs	m	rnd
OTHER >gravel	10	vfp-mp	m	rnd
sand	20	vfs-vcrs	m	sb rnd
SILT AND CLAY	25			

REMARKS

color Brown

HCL +

Caliche Present Lithified by silt & clay

Immature

DEPTH
(FT.)

265

TO

275

ROCK CLASSIFICATION

gravelly Silt

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	15	vfp-crp	m	sb rnd
sand	8	vfs-vcrs	m	sb rnd
OTHER >gravel	0			
sand	7	vfs-vcrs	m	sb rnd
SILT AND CLAY	70			

REMARKS

color Tan

HCL +

Lithified by silt & clay

Immature

DEPTH (FT.) 275 TO 290 ROCK CLASSIFICATION gravelly Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>15</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>10</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
	sand	<u>5</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb ang</u>
SILT AND CLAY		<u>70</u>			

REMARKS

color Brown
HCL +

Slightly Micaceous Lithified by silt & clay

Immature

DEPTH (FT.) 290 TO 320 ROCK CLASSIFICATION silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>1</u>	<u>-vfp-</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>19</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
	sand	<u>55</u>	<u>vfs-crs</u>	<u>h</u>	<u>sb ang</u>
SILT AND CLAY		<u>25</u>			

REMARKS

color Brown
HCL +

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

320

TO

355

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	vfp-mp	m	sb rnd
	sand	10	vfs-crs	m	sb rnd
OTHER	>gravel	0			
	sand	57	vfs-crs	h	sb ang
SILT AND CLAY		25			

REMARKS

color Greyish Brown

HCL +

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

355

TO

365

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	25	-vfp-	m	sb ang
	sand	15	vfs-vcrs	l	sb ang
OTHER	>gravel	0			
	sand	25	vfs-vcrs	m	sb rnd
SILT AND CLAY		35			

REMARKS

color Greenish Gray

HCL +

Caliche (present between 360' & 365')

Lithified by silt & clay

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

365

TO

380

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	6	vfp-mp	m	sb rnd
	sand	15	vfs-vcrs	h	sb rnd
OTHER	>gravel	0			
	sand	49	vfs-vcrs	h	sb rnd
SILT AND CLAY		30			

REMARKS

color Greyish Brown

HCL +

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

380

TO

385

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-mp	m	sb rnd
	sand	10	vfs-vcrs	m	sb rnd
OTHER	> gravel	0			
	sand	40	vfs-vcrs	m	sb rnd
SILT AND CLAY		40			

REMARKS

color Yellowish Tan

HCL +

Slightly Micaceous Lithified by silt & clay

Immature

WELL NUMBER

699-27-8

DEPTH
(FT.)

385

TO

390

ROCK CLASSIFICATION

slightly gravelly Sand

		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	>gravel	10	vfp-mp	m	sb rnd
	sand	10	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	75	vfs-vcrs	h	sb rnd
SILT AND CLAY		5			

REMARKS

color Greyish Brown
HCL +

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

390

TO

410

ROCK CLASSIFICATION

silty Sand

		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	>gravel	3	-vfp-	m	sb rnd
	sand	5	vfs-crs	h	sb rnd
OTHER	>gravel	0			
	sand	50	vfs-crs	h	sb rnd
SILT AND CLAY		42			

REMARKS

color Yellowish Tan
HCL +

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

410

TO

440

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-crp	m	sb ang
	sand	5	vfs-vcrs	h	sb rnd
OTHER	> gravel	0			
	sand	65	vfs-vcrs	h	sb rnd
SILT AND CLAY		20			

REMARKS

color Greyish Brown

HCL +

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

440

TO

455

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	9	<u>vfp-crp</u>	<u>m</u>	<u>sb ang</u>
	sand	<u>6</u>	<u>vfs-crs</u>	<u>h</u>	<u>sb rnd</u>
OTHER	> gravel	0			
	sand	<u>65</u>	<u>vfs-crs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		20			

REMARKS

color Yellowish Tan

HCL +

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

455

TO

460

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	0			
	sand	10	vfs-ms	h	sb rnd
OTHER	> gravel	0			
	sand	75	vfs-ms	h	sb rnd
SILT AND CLAY		15			

REMARKS

color Greyish Brown
HCL +

Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

460

TO

470

ROCK CLASSIFICATION

gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-mp	m	rnd
	sand	5	vfs-ms	h	sb rnd
OTHER	> gravel	0			
	sand	15	vfs-ms	h	sb rnd
SILT AND CLAY		60			

REMARKS

color Blackish Brown
HCL +

Slightly Micaceous Lithified by silt & clay

Immature

DEPTH
(FT.)

470

TO

490

ROCK CLASSIFICATION

slightly gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-mp	m	rnd
	sand	5	vfs-vcrs	h	sb ang
OTHER	> gravel	0			
	sand	25	vfs-vcrs	m	sb rnd
SILT AND CLAY		60			

REMARKS

color Blackish Brown
HCL +

Slightly Micaceous Unfrosted Quartz

Lithified by silt & clay

Immature

DEPTH
(FT.)

490

TO

500

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	0			
	sand	2	vfs-fs	h	sb ang
OTHER	> gravel	0			
	sand	25	vfs-fs	h	sb rnd
SILT AND CLAY		73			

REMARKS

color Blackish Brown
HCL +

Micaceous Lithified by silt & clay

Immature

DEPTH
(FT.)

500

TO

510

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>0</u>			
	sand	<u>4</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>			
	sand	<u>26</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		<u>70</u>			

REMARKS

color Blackish Brown
HCL +

Slightly Micaceous Lithified by silt & clay

Immature

DEPTH
(FT.)

510

TO

525

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>0</u>			
	sand	<u>5</u>	<u>vfs-ms</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>			
	sand	<u>35</u>	<u>vfs-ms</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		<u>60</u>			

REMARKS

color Blackish Brown
HCL +

Micaceous Frosted Quartz Lithified by silt & clay

Immature

DEPTH
(FT.)

525

TO

530

ROCK CLASSIFICATION

slightly gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	5	-vfp-	m	rnd
	sand	5	vfs-vcrs	m	sb rnd
OTHER	> gravel	5	-vfp-	m	rnd
	sand	15	vfs-vcrs	m	sb rnd
SILT AND CLAY		70			

REMARKS

color Blackish Brown
HCL +

Abundant Caliche (60%, silt & clay)

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

530

TO

550

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	1	-vfp-	m	sb rnd
	sand	14	vfs-vcrs	m	sb rnd
OTHER	> gravel	0			
	sand	55	vfs-vcrs	h	sb rnd
SILT AND CLAY		30			

REMARKS

color Blackish Brown
HCL +

Abundant Caliche (between 535' & 540')

Micaceous

Frosted Quartz

Lithified (?)

Immature

WELL NUMBER

699-27-8

DEPTH
(FT.)

550

TO

565

ROCK CLASSIFICATION

Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	0			
OTHER	>gravel	0			
	sand	10	vfs-crs	m	rnd
SILT AND CLAY		90			

REMARKS

color Greyish Brown-Brown
HCL +

Abundant Caliche (between 555' & 565')

Slightly Micaceous

Immature

DEPTH
(FT.)

565

TO

570

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

WELL NUMBER

699-27-8

DEPTH
(FT.)

570

TO

575

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	5	vfs-ms	m	sb rnd
OTHER	>gravel	0			
	sand	75	vfs-ms	m	sb ang
SILT AND CLAY		20			

REMARKS

color Greyish Brown
HCL -

Micaceous Unfrosted Quartz

Immature

Total Drilled Depth reported as 577'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 028400

W 051525

Altitude 683

Other Data used in
Interpretation

Driller's Log

Well 699 - 28 - 52

W. K. Summers & Associates

Well 699 - 28 - 52 cont

Other Data used in Interpretation

brownish grey

grey
grey

brownish grey

brownish grey

brownish grey

greyish brown

brownish buff

buff
grey

greyish black; TRACE DIATOMITE

DEPTH
(FT.)

0

TO

125

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>1</u>	<u>-vfp-</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>20</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>1</u>	<u>-vfp-</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>68</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY		<u>10</u>			

REMARKS

color Greyish Tan
HCL + (0'-5'), - (5'-125')

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

125

TO

145

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>2</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>29</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>2</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>62</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY		<u>5</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Submature

DEPTH
(FT.)

145

TO

150

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	0			
sand	18	vfs-vcrs	m	rnd
OTHER >gravel	0			
sand	75	vfs-vcrs	m	sb ang
SILT AND CLAY	7			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Frosted Quartz

Submature

DEPTH
(FT.)

150

TO

170

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	1	vfp-mp	1	sb rnd
sand	19	vfs-vcrs	m	sb rnd
OTHER >gravel	1	vfp-mp	1	sb rnd
sand	76	vfs-vcrs	m	sb rnd
SILT AND CLAY	3			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Submature

DEPTH
(FT.)

170

TO

185

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>85</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY	<u>3</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Submature

DEPTH
(FT.)

185

TO

240

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>15</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER > gravel	<u>1</u>	<u>vfp-mp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>80</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY	<u>3</u>			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Submature

WELL NUMBER

699-28-52

DEPTH
(FT.)

240

TO

255

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-mp	1	rnd
	sand	13	vfs-vcrs	m	sb rnd
OTHER	>gravel	5	vfp-mp	1	rnd
	sand	76	vfs-vcrs	m	sb ang
SILT AND CLAY		1			

REMARKS

color Greyish Buff
HCL -

Unfrosted Quartz Slightly Micaceous

Immature

DEPTH
(FT.)

255

TO

264

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	21	vfp-crp	1	w rnd
	sand	11	vfs-vcrs	1	sb ang
OTHER	>gravel	25	vfp-crp	1	w rnd
	sand	42	vfs-vcrs	m	sb ang
SILT AND CLAY		1			

REMARKS

color Buff Grey
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-28-52

DEPTH
(FT.)

264

TO

295

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>30</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>11</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
OTHER	>gravel	<u>32</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
	sand	<u>23</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color Greyish TanHCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

295

TO

300

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>8</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>34</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>8</u>	<u>vfp-mp</u>	<u>l</u>	<u>rnd</u>
	sand	<u>48</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>2</u>			

REMARKS

color GreyHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

300

TO

305

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	33	vfp-crp	l	w rnd
	sand	6	vfs-vcrs	m	rnd
OTHER	>gravel	33	vfp-crp	l	w rnd
	sand	26	vfs-vcrs	m	sb ang
SILT AND CLAY		2			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

305

TO

320

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	24	vfp-crp	l	rnd
	sand	5	vfs-vcrs	m	rnd
OTHER	>gravel	28	vfp-crp	l	w rnd
	sand	42	vfs-vcrs	m	sb ang
SILT AND CLAY		1			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

320

TO

330

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	8	vfs-vcrs	m	rnd
OTHER	>gravel	0			
	sand	82	vfs-vcrs	m	sb rnd
SILT AND CLAY		10			

REMARKS

color
HCL

Greyish Tan

- (320'-325'), + (325'-330')

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

330

TO

340

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	22	vfp-crp	m	w rnd
	sand	8	vfs-vcrs	m	rnd
OTHER	>gravel	22	vfp-crp	m	w rnd
	sand	40	vfs-vcrs	m	rnd
SILT AND CLAY		8			

REMARKS

color
HCL

Greyish Tan

+ (330'-335'), - (335'-340')

Slightly Micaceous

Immature

DEPTH
(FT.)

340

TO

345

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	2	vfp-mp	1	rnd
sand	23	vfs-vcrs	m	sb rnd
OTHER >gravel	2	vfp-mp	1	rnd
sand	72	vfs-vcrs	m	sb rnd
SILT AND CLAY	1			

REMARKS

color Greyish Tan

HCL -

Unfrosted Quartz Unfrosted Quartz

Submature

DEPTH
(FT.)

345

TO

350

ROCK CLASSIFICATION

gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	5	-vcrp-	1	w rnd
sand	22	vfs-vcrs	m	rnd
OTHER >gravel	20	-vcrp-	1	w rnd
sand	53	vfs-vcrs	m	sb ang
SILT AND CLAY	0			

REMARKS

color Greyish Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

350

TO

355

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-crp	l	w rnd
	sand	6	vfs-vcrs	m	sb rnd
OTHER	> gravel	20	vfp-crp	l	w rnd
	sand	51	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

355

TO

375

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	3	vfp-crp	m	w rnd
	sand	9	vfs-vcrs	m	sb rnd
OTHER	> gravel	3	vfp-crp	m	w rnd
	sand	71	vfs-vcrs	m	sb rnd
SILT AND CLAY		14			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Frosted Quartz Sample interval 360'-365' missing

Immature

DEPTH
(FT.)

375

TO

390

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	7	vfp-mp	l	rnd
	sand	11	vfs-vcrs	m	rnd
OTHER	>gravel	7	vfp-mp	l	rnd
	sand	65	vfs-vcrs	m	rnd
SILT AND CLAY		10			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

390

TO

400

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	l	sb rnd
	sand	8	vfs-vcrs	m	rnd
OTHER	>gravel	35	vfp-crp	l	rnd
	sand	19	vfs-vcrs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

400

TO

405

ROCK CLASSIFICATION

Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>2</u>	<u>-vfp-</u>	<u>1</u>	<u>sb ang</u>
sand	<u>7</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER <u>> gravel</u>	<u>2</u>	<u>-vfp-</u>	<u>1</u>	<u>sb ang</u>
sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY	<u>77</u>			

REMARKS

color
HCL

Tan

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

405

TO

410

ROCK CLASSIFICATION

gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT <u>> gravel</u>	<u>10</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>12</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER <u>> gravel</u>	<u>10</u>	<u>vfp-fp</u>	<u>1</u>	<u>sb rnd</u>
sand	<u>52</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY	<u>16</u>			

REMARKS

color
HCL

Greyish Tan

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

410

TO

415

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-fp	l	sb rnd
	sand	9	vfs-vcrs	m	sb rnd
OTHER	> gravel	20	vfp-fp	l	sb rnd
	sand	44	vfs-vcrs	m	sb rnd
SILT AND CLAY		7			

REMARKS

color Greyish TanHCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

415

TO

420

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color HCL

Sample missing

WELL NUMBER

699-28-52

DEPTH
(FT.)

420

TO

450

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	17	vfp-crp	1	rnd
	sand	13	vfs-vcrs	m	sb rnd
OTHER	>gravel	17	vfp-crp	1	rnd
	sand	45	vfs-vcrs	m	rnd
SILT AND CLAY		8			

REMARKS

color Greyish TanHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

450

TO

455

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color HCL

Sample missing

WELL NUMBER

699-28-52

DEPTH
(FT.)

455

TO

460

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>1</u>	<u>-vfp-</u>	<u>1</u>	<u>sb rnd</u>
	sand	<u>15</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	> gravel	<u>0</u>			
	sand	<u>70</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
SILT AND CLAY		<u>14</u>			

REMARKS

color Greyish TanHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

460

TO

470

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER	> gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY		<u> </u>			

REMARKS

color HCL

Sample missing

WELL NUMBER

699-28-52

DEPTH
(FT.)

470

TO

495

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>1</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>8</u>	<u>vfs-crs</u>	<u>m</u>	<u>sb rnd</u>
OTHER	>gravel	<u>1</u>	<u>vfp-crp</u>	<u>1</u>	<u>rnd</u>
	sand	<u>12</u>	<u>vfs-crs</u>	<u>h</u>	<u>rnd</u>
SILT AND CLAY		<u>78</u>			

REMARKS

color Yellowish Tan
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

495

TO

500

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>0</u>			
	sand	<u>5</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	>gravel	<u>0</u>			
	sand	<u>70</u>	<u>vfs-vcrs</u>	<u>h</u>	<u>sb rnd</u>
SILT AND CLAY		<u>25</u>			

REMARKS

color Grey
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-28-52

DEPTH
(FT.)

500

TO

520

ROCK CLASSIFICATION

BASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Sample missing

%SIZE RANGESPHERICITYROUNDNESSDEPTH
(FT.)

520

TO

585

ROCK CLASSIFICATION

slightly silty Sand

BASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Brownish Grey

-

Slightly Micaceous

Frosted Quartz

Immature

%SIZE RANGESPHERICITYROUNDNESS2
17vfp-mpvfs-vcrs11w rndsb rnd2
67vfp-mpvfs-vcrs1hw rndsb ang12

WELL NUMBER

699-28-52

DEPTH
(FT.)

585

TO

595

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	14	vfp-crp	l	rnd
	sand	22	vfs-vcrs	m	rnd
OTHER	>gravel	13	vfp-crp	l	rnd
	sand	46	vfs-vcrs	h	rnd
SILT AND CLAY		5			

REMARKS

color Grey
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

595

TO

600

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-vfp-	l	sb rnd
	sand	25	vfs-vcrs	m	rnd
OTHER	>gravel	1	-vfp-	l	sb rnd
	sand	73	vfs-vcrs	m	sb rnd
SILT AND CLAY		0			

REMARKS

color Grey
HCL -

Slightly Micaceous

Submature

DEPTH
(FT.)

600

TO

635

ROCK CLASSIFICATION

slightly gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	4	vfp-crp	l	rnd
sand	19	vfs-vcrs	m	rnd
OTHER > gravel	4	vfp-crp	l	rnd
sand	64	vfs-vcrs	h	sb rnd
SILT AND CLAY	9			

REMARKS

color
HCL

Brownish Grey

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

635

TO

655

ROCK CLASSIFICATION

gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	13	vfp-mp	l	sb rnd
sand	26	vfs-vcrs	m	sb rnd
OTHER > gravel	13	vfp-mp	l	sb rnd
sand	41	vfs-vcrs	m	sb rnd
SILT AND CLAY	7			

REMARKS

color
HCL

Brownish Grey

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

655

TO

660

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-crp	m	w rnd
	sand	13	vfs-crs	m	sb rnd
OTHER	>gravel	5	vfp-crp	m	w rnd
	sand	75	vfs-crs	m	rnd
SILT AND CLAY		2			

REMARKS

color
HCL

Brownish Grey

-

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

660

TO

675

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-vfp-	1	sb rnd
	sand	8	vfs-vcrs	m	sb rnd
OTHER	>gravel	1	-vfp-	1	sb rnd
	sand	65	vfs-vcrs	1	sb ang
SILT AND CLAY		25			

REMARKS

color
HCL

Greyish Brown

-

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH (FT.)		TO	ROCK CLASSIFICATION		
675		685	Sand		
		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	> gravel	2	vfp-mp	1	w rnd
	sand	5	vfs-crs	1	sb rnd
OTHER	> gravel	2	vfp-mp	1	w rnd
	sand	88	vfs-crs	m	sb rnd
SILT AND CLAY		3			
REMARKS					
color		Brownish Buff			
HCL		-			
Slightly Micaceous		Unfrosted Quartz			
Immature					

DEPTH (FT.)		TO	ROCK CLASSIFICATION		
685		690	sandy Gravel		
		%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT	> gravel	28	vfp-crp	1	w rnd
	sand	9	fs-vcrs	m	sb rnd
OTHER	> gravel	28	vfp-crp	1	w rnd
	sand	35	fs-vcrs	m	sb ang
SILT AND CLAY		0			
REMARKS					
color		Buff			
HCL		-			
Slightly Micaceous		Unfrosted Quartz			
Immature					

WELL NUMBER

699-28-52

DEPTH
(FT.)

700

TO

715

ROCK CLASSIFICATION

slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	vfp-mp	1	sb rnd
	sand	73	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	16	vfs-vcrs	m	sb ang
SILT AND CLAY		3			

REMARKS

color Greyish Black ("salt & pepper")
HCL -

Slightly Diatomaceous (? pebbles & sand)

Slightly Micaceous

Unfrosted Quartz Immature

Total Drilled Depth reported as 715'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 029000

W 078000

Altitude 645

Other Data used in
Interpretation

Drillers Log

Well 699 - 29 - 78

grey

greyish tan

greyish tan

brownish tan

greyish brown

brownish grey

brownish grey

buff grey

buff

greyish buff

brownish grey

greyish buff

greyish buff

greyish buff

buff

greyish buff

tan

buff

brownish tan

brownish tan

tan

buff

buff grey

greyish tan

light brown

whitish brown

greyish tan

whitish tan

W. K. Summers & Associates

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

Well 699 - 29 - 76 cont

buff

greyish buff

yellowish buff

greyish buff

brownish grey

Altitude _____

Other Data used in Interpretation

DEPTH
(FT.)

0

TO

25

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-fp-	l	sb rnd
	sand	30	vfs-crs	m	sb rnd
OTHER	>gravel	0			
	sand	68	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color
HCL

Grey

+

Slightly Micaceous

Unfrosted Quartz

Mature

DEPTH
(FT.)

25

TO

40

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	40	vfp-mp	l	sb rnd
	sand	14	vfs-vcrs	m	rnd
OTHER	>gravel	3	vfp-fp	m	sb rnd
	sand	26	vfs-vcrs	m	rnd
SILT AND CLAY		17			

REMARKS

color
HCL

Greyish Tan

+

Slightly Micaceous

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

40

TO

50

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	-vfp-	m	sb rnd
	sand	25	vfs-vcrs	m	rnd
OTHER	>gravel	8	-vfp-	m	sb rnd
	sand	42	vfs-vcrs	m	w rnd
SILT AND CLAY		17			

REMARKS

color Greyish Tan
HCL +

Micaceous

Immature

DEPTH
(FT.)

50

TO

125

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	1	-vfp-	m	sb rnd
	sand	10	vfs-crs	m	rnd
OTHER	>gravel	0			
	sand	30	vfs-crs	m	rnd
SILT AND CLAY		59			

REMARKS

color Brownish Tan
HCL +

Micaceous

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

125

TO

135

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>40</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>37</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	>gravel	<u>3</u>	<u>vfp-fp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>11</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>9</u>			

REMARKS

color Greyish Brown
HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

135

TO

165

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	<u>52</u>	<u>vfp-mp</u>	<u>m</u>	<u>sb rnd</u>
	sand	<u>32</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER	>gravel	<u>8</u>	<u>vfp-crp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>4</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>4</u>			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

165

TO

185

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	33	vfp-mp	l	sb rnd
	sand	21	vfs-vcrs	m	rnd
OTHER	>gravel	7	vfp-mp	m	sb rnd
	sand	36	vfs-vcrs	m	rnd
SILT AND CLAY		3			

REMARKS

color
HCL

Brownish Grey

-

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

185

TO

210

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	47	vfp-crp	l	rnd
	sand	12	vfs-vcrs	m	rnd
OTHER	>gravel	21	vfp-crp	m	rnd
	sand	18	vfs-vcrs	m	rnd
SILT AND CLAY		2			

REMARKS

color
HCL

Buff Grey

- (185'-200'), + (200'-205'), - (205'-210')

Slightly Micaceous

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

210

TO

220

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	39	vfp-mp	1	sb rnd
	sand	1	vfs-vcrs	1	sb ang
OTHER	>gravel	35	vfp-mp	m	rnd
	sand	24	vfs-vcrs	m	sb ang
SILT AND CLAY		1			

REMARKS

color Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

220

TO

245

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	42	vfp-crp	1	rnd
	sand	3	vfs-vcrs	1	rnd
OTHER	>gravel	32	vfp-crp	m	rnd
	sand	22	vfs-vcrs	1	sb rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-29-78

DEPTH (FT.) 245 TO 255 ROCK CLASSIFICATION Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	75	vfp-crp	l	sb rnd
	sand	5	vfs-vcrs	m	sb rnd
OTHER	>gravel	15	vfp-crp	m	w rnd
	sand	4	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color Brownish Grey
HCL -

Frosted Quartz Lithified by sand & silt

Immature

DEPTH (FT.) 255 TO 290 ROCK CLASSIFICATION sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	53	vfp-crp	l	sb rnd
	sand	9	vfs-vcrs	m	sb rnd
OTHER	>gravel	22	vfp-crp	m	w rnd
	sand	15	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

290

TO

295

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-mp	l	sb rnd
	sand	10	vfs-vcrs	m	sb ang
OTHER	>gravel	15	vfp-fp	m	sb rnd
	sand	38	vfs-vcrs	m	sb rnd
SILT AND CLAY		2			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

295

TO

305

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-mp	m	sb rnd
	sand	19	vfs-vcrs	l	sb ang
OTHER	>gravel	12	vfp-mp	m	rnd
	sand	43	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

305

TO

310

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel sand	30	vfp-mp	m	rnd
		10	ms-vcrs	m	sb rnd
OTHER	>gravel sand	20	vfp-mp	m	rnd
		40	ms-vcrs	m	sb rnd
SILT AND CLAY		0			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

310

TO

320

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel sand	1	-mp-	m	sb rnd
		5	ms-vcrs	m	sb ang
OTHER	>gravel sand	0			
		94	ms-vcrs	m	sb ang
SILT AND CLAY		0			

REMARKS

color Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

WELL NUMBER

699-29-78

DEPTH
(FT.)

320

TO

340

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	38	vfp-mp	l	rnd
	sand	8	vfs-vcrs	m	sb rnd
OTHER	> gravel	22	vfp-mp	l	rnd
	sand	30	vfs-vcrs	m	rnd
SILT AND CLAY		2			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

340

TO

345

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

DEPTH
(FT.)

345

TO

350

ROCK CLASSIFICATION

gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	20	vfp-mp	1	sb rnd
	sand	<u>4</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER	> gravel	5	vfp-fp	m	rnd
	sand	<u>26</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		45			

REMARKS

color
HCLTan
+

Slightly Micaceous

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

350

TO

360

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-mp	1	rnd
	sand	5	vfs-vcrs	m	rnd
OTHER	>gravel	20	vfp-mp	1	rnd
	sand	54	vfs-vcrs	m	sb rnd
SILT AND CLAY		1			

REMARKS

color
HCLBuff
-

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

360

TO

370

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	10	vfp-mp	1	rnd
	sand	4	vfs-vcrs	1	sb rnd
OTHER	> gravel	10	vfp-mp	1	rnd
	sand	56	vfs-vcrs	m	rnd
SILT AND CLAY		20			

REMARKS

color Brownish Tan
HCL +

Slightly Micaceous

Immature

DEPTH
(FT.)

370

TO

380

ROCK CLASSIFICATION

gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	≥ gravel	10	vfp-mp	m	w rnd
	sand	4	vfs-ms	l	sb rnd
OTHER	≥ gravel	5	vfp-mp	m	w rnd
	sand	38	vfs-ms	h	sb rnd
SILT AND CLAY		43			

REMARKS

color Brownish Tan
HCL -

Micaceous Lithified by silt & clay

DEPTH
(FT.)

380

TO

410

ROCK CLASSIFICATION

sandy Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>-mp-</u>	<u>1</u>	<u>w rnd</u>
sand	<u>5</u>	<u>vfs-ms</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>1</u>	<u>-mp-</u>	<u>1</u>	<u>w rnd</u>
sand	<u>30</u>	<u>vfs-ms</u>	<u>1</u>	<u>rnd</u>
SILT AND CLAY	<u>63</u>			

REMARKS

color
HCL

Tan

+

Slightly Micaceous Lithified by silt, clay & CaCO₃

Sample interval 390'-395' missing

Immature

DEPTH
(FT.)

410

TO

415

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>-mp-</u>	<u>1</u>	<u>w rnd</u>
sand	<u>5</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb ang</u>
OTHER > gravel	<u>1</u>	<u>-mp-</u>	<u>1</u>	<u>w rnd</u>
sand	<u>83</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb ang</u>
SILT AND CLAY	<u>10</u>			

REMARKS

color
HCL

Buff

-

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

415

TO

435

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	37	vfp-mp	l	w rnd
sand	5	vfs-vcrs	m	sb ang
OTHER > gravel	22	vfp-mp	l	w rnd
sand	35	vfs-vcrs	m	sb rnd
SILT AND CLAY	1			

REMARKS

color
HCL

Buff Grey

-

Slightly Micaceous

Unfrosted Quartz

DEPTH
(FT.)

435

TO

440

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-29-78

DEPTH
(FT.)

440

TO

445

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-fp	l	rnd
	sand	6	vfs-vcrs	m	sb rnd
OTHER	>gravel	5	vfp-fp	m	sb rnd
	sand	35	vfs-vcrs	m	sb ang
SILT AND CLAY		29			

REMARKS

color
HCL

Greyish Tan

-

Micaceous

Immature

DEPTH
(FT.)

445

TO

450

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-29-78

DEPTH
(FT.)

450

TO

455

ROCK CLASSIFICATION

gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	18	vfp-fp	1	rnd
	sand	2	vfs-vcrs	1	sb ang
OTHER	> gravel	0			
	sand	27	vfs-vcrs	m	sb rnd
SILT AND CLAY		53			

REMARKS

color
HCL

Light Brown

-

Micaceous

Lithified by silt & clay

Immature

DEPTH
(FT.)

455

TO

460

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel				
	sand				
OTHER	> gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

460

TO

470

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-fp	1	sb rnd
	sand	5	vfs-vcrs	1	sb ang
OTHER	>gravel	0			
	sand	76	vfs-vcrs	h	rnd
SILT AND CLAY		14			

REMARKS

color Whitish Brown
HCL +

Abundant Caliche (sand) Slightly Micaceous

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

470

TO

485

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	6	vfp-mp	m	sb rnd
	sand	9	vfs-vcrs	m	rnd
OTHER	>gravel	6	vfp-mp	m	sb rnd
	sand	53	vfs-vcrs	m	sb rnd
SILT AND CLAY		26			

REMARKS

color Greyish Tan
HCL +

Caliche (sand present) Micaceous Lithified by silt, clay & CaCO₃

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

485

TO

495

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	_____	_____	_____	_____
OTHER > gravel sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

495

TO

500

ROCK CLASSIFICATION

silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	0 5	vfs-crs	m	rnd
OTHER > gravel sand	0 65	vfs-crs	h	sb rnd
SILT AND CLAY	30			

REMARKS

color Whitish Tan
HCL +

Abundant Caliche Slightly Micaceous

Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

500

TO

510

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	0			
	sand	5	ms-crs	m	sb rnd
OTHER	> gravel	0			
	sand	94	ms-crs	m	rnd
SILT AND CLAY		1			

REMARKS

color
HCL

Buff

-

Slightly Micaceous

Frosted Quartz

Mature

DEPTH
(FT.)

510

TO

525

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	29	vfp-mp	l	rnd
	sand	3	vfs-crs	m	rnd
OTHER	> gravel	7	vfp-fp	l	w rnd
	sand	58	vfs-crs	m	sb rnd
SILT AND CLAY		3			

REMARKS

color
HCL

Greyish Buff

+

Slightly Micaceous

Unfrosted Quartz

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

525

TO

550

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	1	vfp-fp	1	rnd
sand	3	vfs-crs	m	rnd
OTHER > gravel	1	vfp-fp	1	rnd
sand	90	vfs-crs	m	rnd
SILT AND CLAY	5			

REMARKS

color Yellowish Buff
HCL -

Slightly Micaceous Unfrosted Quartz

Mature

DEPTH
(FT.)

550

TO

555

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-29-78

DEPTH
(FT.)

555

TO

560

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>5</u>	<u>vfs-crs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>1</u>	<u>vfp-fp</u>	<u>1</u>	<u>rnd</u>
sand	<u>78</u>	<u>vfs-crs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY	<u>15</u>			

REMARKS

color Greyish Buff
HCL +

Micaceous

Immature

DEPTH
(FT.)

560

TO

565

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER > gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY	<u> </u>			

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-29-78

DEPTH
(FT.)

565

TO

570

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-fp	m	rnd
	sand	3	vfs-vcrs	l	sb rnd
OTHER	>gravel	12	vfp-mp	l	rnd
	sand	45	vfs-vcrs	m	sb rnd
SILT AND CLAY		20			

REMARKS

color Brownish Grey
HCL +

Abundant Caliche (pebbles & sand) Slightly Micaceous

Unfrosted Quartz Lithified by silt, clay & CaCO₃

Immature

DEPTH
(FT.)

570

TO

585

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color _____
HCL _____

Sample missing

WELL NUMBER

699-29-78

DEPTH
(FT.)

585

TO

590

ROCK CLASSIFICATION

Sand & Basalt Flow

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	82	vfp-mp	m	sb rnd-v ang
	sand	8	vfs-vcrs	m	sb rnd
OTHER	>gravel	8	vfp-mp	m	w rnd
	sand	1	vfs-vcrs	m	rnd
SILT AND CLAY		1			

REMARKS

color Black
HCL +

Abundant Caliche (pebbles & sand)

Frosted Quartz

Immature

DEPTH
(FT.)

590

TO

595

ROCK CLASSIFICATION

Sand & Basalt Flow

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	80	vfp-fp	m	sb rnd-v ang
	sand	17	vfs-vcrs	m	sb rnd
OTHER	>gravel	0			
	sand	3	vfs-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Black
HCL -

Immature

WELL NUMBER

699-29-78

DEPTH
(FT.)

595

TO

660

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	_____	_____	_____	_____
OTHER > gravel sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

Total Drilled Depth reported as 660'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel sand	_____	_____	_____	_____
OTHER > gravel sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

N 030507

W 030678

Altitude 527

Other Data used in
Interpretation

(1) Driller's Log

(2) E-Log

(3) Sieve analyses in
McHenry, 1957, p.39-40

Well 699 - 31 - 31

greyish buff
brownish grey
black
black
greyish buff
greyish black
dark grey
greyish brown
greyish tan
reddish tan
brownish tan
buff grey
greyish buff
tan
tan
tan white
tan
brownish tan
greyish brown
light brown
light brown
brown
greyish brown
brown
light grey
greyish buff
brownish buff
greyish buff
buff
reddish tan
greyish tan
greenish tan; TRACE DIATOMITE
tan
tan; TRACE DIATOMITE
reddish tan
brownish tan
tan
light grey

Depth
(ft.)

Graphic Log

Sample Description

Plant Coordinates

Well 699 - 31 - 31 cont

DEPTH
(FT.)

0

TO

10

ROCK CLASSIFICATION

Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	0			
sand	20	vfs-crs	1	sb rnd
OTHER > gravel	0			
sand	78	vfs-crs	m	rnd
SILT AND CLAY	2			

REMARKS

color Greyish Buff
HCL - (0'-5'), + (5'-10')

Slightly Micaceous Frosted Quartz

Mature

DEPTH
(FT.)

10

TO

30

ROCK CLASSIFICATION

gravelly Sand

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT > gravel	22	vfp-crp	m	w rnd
sand	51	vfs-vcrs	1	sb rnd
OTHER > gravel	5	vfp-crp	1	w rnd
sand	18	vfs-vcrs	m	rnd
SILT AND CLAY	4			

REMARKS

color Brownish Grey
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

30

TO

35

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel sand	_____	_____	_____	_____
OTHER >gravel sand	_____	_____	_____	_____
SILT AND CLAY	_____			

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

35

TO

40

ROCK CLASSIFICATION

gravelly Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel sand	18 68	vfp-crp ms-vcrs	1 m	w rnd sb rnd
OTHER >gravel sand	2 12	vfp-mp ms-vcrs	1 m	w rnd rnd
SILT AND CLAY	0			

REMARKS

color
HCL

Black ("salt & pepper")

-

Unfrosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

40

TO

50

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	0			
sand	80	vfs-crs	l	rnd
OTHER >gravel	0			
sand	20	vfs-crs	m	rnd
SILT AND CLAY	0			

REMARKS

color Black ("salt & pepper")
HCL -

Slightly Micaceous Frosted Quartz

Mature

DEPTH
(FT.)

50

TO

60

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-31-31

DEPTH
(FT.)

60

TO

70

ROCK CLASSIFICATION

Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	1	w rnd
	sand	1	ms-vcrs	1	rnd
OTHER	>gravel	63	vfp-crp	1	w rnd
	sand	1	ms-vcrs	m	rnd
SILT AND CLAY		0			

REMARKS

color Greyish Buff ("salt & pepper")
HCL -

Mature

DEPTH
(FT.)

70

TO

80

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	30	vfp-crp	m	sb rnd
	sand	12	fs-vcrs	m	sb rnd
OTHER	>gravel	50	vfp-crp	m	w rnd
	sand	8	fs-vcrs	1	sb rnd
SILT AND CLAY		0			

REMARKS

color Greyish Black ("salt & pepper")
HCL -

Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

80

TO

95

ROCK CLASSIFICATION

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

95

TO

105

ROCK CLASSIFICATION

Gravel

	%	SIZE RANGE	SPHERICITY	ROUNDNESS
BASALT >gravel	40	vfp-crp	1	rnd
sand	3	ms-vcrs	1	rnd
OTHER >gravel	50	vfp-crp	1	w rnd
sand	7	ms-vcrs	1	rnd
SILT AND CLAY	0			

REMARKS

color Dark Grey ("salt & pepper")
HCL -

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

105

TO

125

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	1	rnd
	sand	14	vfs-vcrs	1	sb rnd
OTHER	>gravel	42	vfp-smcb	1	w rnd
	sand	7	vfs-vcrs	1	rnd
SILT AND CLAY		2			

REMARKS

color Greyish Brown
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

125

TO

145

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	40	vfs-vcrs	1	sb rnd
OTHER	>gravel	0			
	sand	45	vfs-vcrs	m	rnd
SILT AND CLAY		15			

REMARKS

color Greyish Tan
HCL -

Sieved(?)

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

145

TO

170

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>20</u>	<u>vfs-vcrs</u>	<u>1</u>	<u>sb rnd</u>
OTHER > gravel	<u>0</u>	<u></u>	<u></u>	<u></u>
sand	<u>72</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY	<u>8</u>			

REMARKS

color Reddish TanHCL -

Micaceous Sieved (?) Sample interval 155'-160' missing

Mature

DEPTH
(FT.)

170

TO

175

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	<u></u>	<u></u>	<u></u>	<u></u>
sand	<u></u>	<u></u>	<u></u>	<u></u>
OTHER > gravel	<u></u>	<u></u>	<u></u>	<u></u>
sand	<u></u>	<u></u>	<u></u>	<u></u>
SILT AND CLAY	<u></u>			

REMARKS

color HCL

Sample missing

WELL NUMBER

699-31-31

DEPTH
(FT.)

175

TO

185

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	15	vfs-vcrs	1	sb rnd
OTHER > gravel	0			
sand	83	vfs-vcrs	1	rnd
SILT AND CLAY	2			

REMARKS

color
HCL

Brownish Tan

-

Micaceous

Frosted Quartz

Sieved (?)

Mature

DEPTH
(FT.)

185

TO

195

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	15	ms-vcrs	1	sb ang
OTHER > gravel	0			
sand	85	ms-vcrs	m	sb rnd
SILT AND CLAY	0			

REMARKS

color
HCL

Buff Grey

-

Micaceous

Unfrosted Quartz

Sieved (?)

Very Mature

WELL NUMBER

699-31-31

DEPTH
(FT.)

195

TO

205

ROCK CLASSIFICATION

%SIZE RANGESPHERICITYROUNDNESSBASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

205

TO

210

ROCK CLASSIFICATION

Sand

%SIZE RANGESPHERICITYROUNDNESSBASALT > gravel
sandOTHER > gravel
sand

SILT AND CLAY

REMARKS

color
HCL

Greyish Buff

Slightly Micaceous

Frosted Quartz

Sieved (?)

Mature

WELL NUMBER

699-31-31

DEPTH
(FT.)

210

TO

230

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	0			
sand	15	vfs-vcrs	l	sb rnd
OTHER >gravel	0			
sand	70	vfs-vcrs	m	rnd
SILT AND CLAY	15			

REMARKS

color
HCL

Tan

-

Slightly Micaceous

Sieved (?)

Sample interval 215'-225' missing

Immature

DEPTH
(FT.)

230

TO

245

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-31-31

DEPTH
(FT.)

245

TO

255

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	12	vfs-ms	1	sb ang
OTHER	>gravel	0			
	sand	80	vfs-ms	1	sb rnd
SILT AND CLAY		8			

REMARKS

color
HCL

Tan

+

Caliche (sand present)

Slightly Micaceous

Frosted Quartz

Sieved (?)

Mature

DEPTH
(FT.)

255

TO

260

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	4	vfs-ms	m	sb rnd
OTHER	>gravel	0			
	sand	70	vfs-ms	1	rnd
SILT AND CLAY		26			

REMARKS

color
HCL

Tan-White

+

Abundant Caliche

Slightly Micaceous

Sieved (?)

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

260

TO

275

ROCK CLASSIFICATION

slightly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	6	vfs-vcrs	l	sb rnd
OTHER > gravel	0			
sand	80	vfs-vcrs	h	rnd
SILT AND CLAY	14			

REMARKS

color
HCLTan
+

Caliche (sand present)

Micaceous

Frosted Quartz

Sieved (?)

Immature

DEPTH
(FT.)

275

TO

285

ROCK CLASSIFICATION

silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	35	vfs-vcrs	l	sb rnd
OTHER > gravel	0			
sand	45	vfs-vcrs	m	sb rnd
SILT AND CLAY	20			

REMARKS

color
HCLBrownish Tan
-

Slightly Micaceous

Immature

DEPTH
(FT.)

285

TO

305

ROCK CLASSIFICATION

slightly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	38	vfs-vcrs	l	sb rnd
OTHER	>gravel	0			
	sand	50	vfs-vcrs	m	sb rnd
SILT AND CLAY		12			

REMARKS

color Greyish Brown
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

305

TO

320

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	30	vfp-mp	l	rnd
	sand	30	vfs-vcrs	l	sb ang
OTHER	>gravel	4	vfp-mp	m	rnd
	sand	23	vfs-vcrs	m	rnd
SILT AND CLAY		13			

REMARKS

color Light Brown
HCL -

Slightly Micaceous Sample interval 310'-315' sieved (?)

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

320

TO

340

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	45	vfp-crp	1	rnd
	sand	10	vfs-vcrs	1	sb rnd
OTHER	>gravel	15	vfp-crp	m	rnd
	sand	20	vfs-vcrs	m	rnd
SILT AND CLAY		10			

REMARKS

color
HCL

Light Brown

-

Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

340

TO

345

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

345

TO

355

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	20	vfp-mp	1	rnd
	sand	10	vfs-vcrs	1	sb rnd
OTHER	>gravel	10	vfp-mp	m	w rnd
	sand	42	vfs-vcrs	m	rnd
SILT AND CLAY		18			

REMARKS

color
HCL

Brown

-

Slightly Micaceous

Unfrosted Quartz

Immature

DEPTH
(FT.)

355

TO

360

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	60	vfp-smcb	1	rnd
	sand	5	vfs-vcrs	1	sb rnd
OTHER	>gravel	20	vfp-crp	m	w rnd
	sand	14	vfs-vcrs	m	rnd
SILT AND CLAY		1			

REMARKS

color
HCL

Greyish Brown

-

Slightly Micaceous

Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

360

TO

365

ROCK CLASSIFICATION

slightly silty gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u>7</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>17</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>sb rnd</u>
OTHER	> gravel	<u>8</u>	<u>vfp-mp</u>	<u>m</u>	<u>rnd</u>
	sand	<u>59</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
SILT AND CLAY		<u>9</u>			

REMARKS

color BrownHCL -

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

365

TO

370

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	> gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER	> gravel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	sand	<u> </u>	<u> </u>	<u> </u>	<u> </u>
SILT AND CLAY		<u> </u>			

REMARKS

color HCL

Sample missing

WELL NUMBER

699-31-31

DEPTH
(FT.)

370

TO

375

ROCK CLASSIFICATION

sandy Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	10	vfs-ms	m	rnd
OTHER > gravel	0			
sand	25	vfs-ms	m	rnd
SILT AND CLAY	65			

REMARKS

color Light Grey
HCL -

Slightly Micaceous Sieved (?)

Immature

DEPTH
(FT.)

375

TO

385

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

WELL NUMBER

699-31-31

DEPTH
(FT.)

385

TO

390

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	8	vfs-ms	1	rnd
OTHER	>gravel	0			
	sand	72	vfs-ms	m	sb rnd
SILT AND CLAY		20			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz Sieved (?)

Immature

DEPTH
(FT.)

390

TO

395

ROCK CLASSIFICATION

gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	6	vfp-mp	1	rnd
	sand	4	vfs-ms	1	rnd
OTHER	>gravel	6	vfp-mp	1	rnd
	sand	82	vfs-ms	1	sb rnd
SILT AND CLAY		2			

REMARKS

color Brownish Buff
HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

395

TO

405

ROCK CLASSIFICATION

sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	50	vfp-crp	1	rnd
	sand	5	vfs-vcrs	1	sb rnd
OTHER	>gravel	30	vfp-crp	1	w rnd
	sand	14	vfs-vcrs	1	sb rnd
SILT AND CLAY		1			

REMARKS

color Greyish Buff

HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

405

TO

425

ROCK CLASSIFICATION

Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	3	vfp-fp	1	rnd
	sand	10	vfs-crs	1	sb ang
OTHER	>gravel	2	vfp-fp	m	rnd
	sand	80	vfs-crs	1	sb rnd
SILT AND CLAY		5			

REMARKS

color Buff

HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

425

TO

430

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	4	vfp-fp	l	rnd
	sand	18	vfs-ms	l	sb rnd
OTHER	>gravel	4	vfp-fp	m	rnd
	sand	56	vfs-ms	m	rnd
SILT AND CLAY		18			

REMARKS

color Reddish Tan
HCL -

Slightly Micaceous

Immature

DEPTH
(FT.)

430

TO

435

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

435

TO

440

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-mp	m	sb rnd
	sand	11	vfs-vcrs	l	sb rnd
OTHER	>gravel	20	vfp-mp	m	w rnd
	sand	22	vfs-vcrs	l	sb rnd
SILT AND CLAY		22			

REMARKS

color Greyish Tan

HCL -

Slightly Micaceous Slightly Gypsiferous

Lithified by gypsum (?), silt & clay

Immature

DEPTH
(FT.)

440

TO

450

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	3	vfp-fp	l	rnd
	sand	8	vfs-crs	l	rnd
OTHER	>gravel	3	vfp-fp	m	rnd
	sand	75	vfs-crs	l	sb rnd
SILT AND CLAY		11			

REMARKS

color Greyish Tan

HCL -

Unfrosted Quartz

Immature

DEPTH
(FT.)

450

TO

455

ROCK CLASSIFICATION

slightly gravelly sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-mp	l	w rnd
	sand	5	vfs-vcrs	m	sb rnd
OTHER	>gravel	10	vfp-mp	l	w rnd
	sand	36	vfs-vcrs	m	sb rnd
SILT AND CLAY		49			

REMARKS

color Greenish Tan
HCL -

Slightly Diatomaceous (pebbles) Unfrosted Quartz

Immature

DEPTH
(FT.)

455

TO

460

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0	.		
	sand	5	vfs-ms	l	rnd
OTHER	>gravel	0			
	sand	70	vfs-ms	m	sb rnd
SILT AND CLAY		25			

REMARKS

color Tan
HCL -

Slightly Micaceous Frosted Quartz Sieved (?)

Immature

DEPTH
(FT.)

460

TO

465

ROCK CLASSIFICATION

slightly gravelly silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	5	vfp-fp	l	rnd
sand	4	vfs-vcrs	m	sb rnd
OTHER > gravel	5	vfp-fp	m	rnd
sand	54	vfs-vcrs	m	sb rnd
SILT AND CLAY	32			

REMARKS

color
HCL

Tan

-

Slightly Diatomaceous (pebbles)

Slightly Micaceous

Frosted Quartz

Immature

DEPTH
(FT.)

465

TO

470

ROCK CLASSIFICATION

slightly gravelly Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	4	vfp-mp	l	rnd
sand	3	ms-vcrs	m	sb rnd
OTHER > gravel	4	vfp-mp	l	rnd
sand	15	ms-vcrs	m	sb rnd
SILT AND CLAY	74			

REMARKS

color
HCL

Reddish Tan

-

Lithified by silt & clay

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

470

TO

480

ROCK CLASSIFICATION

Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	2	vfs-crs	l	rnd
OTHER > gravel	0			
sand	18	vfs-crs	m	sb rnd
SILT AND CLAY	80			

REMARKS

color
HCL

Brownish Tan

-

Slightly Micaceous Frosted Quartz

Immature

DEPTH
(FT.)

480

TO

495

ROCK CLASSIFICATION

Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	2	vfs-crs	m	sb rnd
OTHER > gravel	0			
sand	10	vfs-crs	m	sb rnd
SILT AND CLAY	88			

REMARKS

color
HCL

Tan

-

Slightly Micaceous Sample interval 480'-485' sieved (?)

Immature

DEPTH
(FT.)

495

TO

505

ROCK CLASSIFICATION

sandy silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	2	vfs-ms	l	sb rnd
OTHER	>gravel	0			
	sand	28	vfs-ms	h	sb rnd
SILT AND CLAY		70			

REMARKS

color Light Grey
HCL -

Slightly Micaceous Frosted Quartz

Sample interval 500'-505' sieved (?)

Immature

DEPTH
(FT.)

505

TO

515

ROCK CLASSIFICATION

Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	1	vfs-ms	l	rnd
OTHER	>gravel	0			
	sand	9	vfs-ms	m	sb rnd
SILT AND CLAY		90			

REMARKS

color Greyish Tan
HCL -

Caliche (pebbles & sand present between 505' & 510') Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

515

TO

520

ROCK CLASSIFICATION

sandy Silt

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	1	vfs-ms	m	rnd
OTHER > gravel	0			
sand	39	vfs-ms	h	sb rnd
SILT AND CLAY	60			

REMARKS

color Reddish Tan
HCL -

Sieved (?)

Immature

DEPTH
(FT.)

520

TO

530

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel				
sand				
OTHER > gravel				
sand				
SILT AND CLAY				

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

530

TO

540

ROCK CLASSIFICATION

Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	1	vfs-ms	m	rnd
OTHER	>gravel	0			
	sand	9	vfs-ms	h	rnd
SILT AND CLAY		90			

REMARKS

color Reddish Tan
HCL -

Caliche (pebbles present)

Immature

DEPTH
(FT.)

540

TO

550

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	3	vfs-crs	l	rnd
OTHER	>gravel	0			
	sand	70	vfs-crs	h	rnd
SILT AND CLAY		27			

REMARKS

color Reddish Brown
HCL -

Caliche (pebbles & sand present) Frosted Quartz

Sample interval 545'-550' sieved (?)

Immature

DEPTH
(FT.)

550

TO

560

ROCK CLASSIFICATION

slightly gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	5	vfp-mp	1	sb rnd
	sand	1	vfs-crs	1	rnd
OTHER	>gravel	5	vfp-mp	1	sb rnd
	sand	45	vfs-crs	m	sb rnd
SILT AND CLAY		44			

REMARKS

color Reddish Brown
HCL -

Abundant Caliche (10%, pebbles) Frosted Quartz

Immature

DEPTH
(FT.)

560

TO

565

ROCK CLASSIFICATION

silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	0			
	sand	5	vfs-ms	1	rnd
OTHER	>gravel	0			
	sand	50	vfs-ms	1	sb rnd
SILT AND CLAY		45			

REMARKS

color Reddish Tan
HCL +

Unfrosted Quartz Sieved (?)

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

565

TO

570

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	<u>20</u>	<u>vfp-crp</u>	<u>m</u>	<u>sb rnd</u>
sand	<u>8</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>rnd</u>
OTHER >gravel	<u>47</u>	<u>vfp-crp</u>	<u>l</u>	<u>w rnd</u>
sand	<u>23</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>sb rnd</u>
SILT AND CLAY	<u>2</u>			

REMARKS

color Light GreyHCL -

Micaceous Unfrosted Quartz

Immature

DEPTH
(FT.)

570

TO

585

ROCK CLASSIFICATION

sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	<u>26</u>	<u>vfp-vcrp</u>	<u>l</u>	<u>rnd</u>
sand	<u>10</u>	<u>vfs-vcrs</u>	<u>m</u>	<u>sb rnd</u>
OTHER >gravel	<u>44</u>	<u>vfp-smcb</u>	<u>l</u>	<u>w rnd</u>
sand	<u>18</u>	<u>vfs-vcrs</u>	<u>l</u>	<u>sb rnd</u>
SILT AND CLAY	<u>2</u>			

REMARKS

color Greyish BuffHCL -

Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

585

TO

590

ROCK CLASSIFICATION

Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	0			
sand	38	vfs-vcrs	m	sb rnd
OTHER > gravel	0			
sand	60	vfs-vcrs	m	sb rnd
SILT AND CLAY	2			

REMARKS

color Greyish Buff
HCL -

Slightly Micaceous Frosted Quartz Sieved (?)

Mature

DEPTH
(FT.)

590

TO

595

ROCK CLASSIFICATION

silty sandy Gravel

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT > gravel	10	vfp-mp	l	w rnd
sand	6	vfs-vcrs	m	sb rnd
OTHER > gravel	70	vfp-smcb	l	w rnd
sand	11	vfs-vcrs	m	sb rnd
SILT AND CLAY	3			

REMARKS

color Dark Grey
HCL -

Slightly Micaceous Frosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

595

TO

600

ROCK CLASSIFICATION

gravelly silty Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	10	vfp-mp	1	rnd
	sand	16	vfs-vcrs	m	rnd
OTHER	>gravel	10	vfp-mp	1	rnd
	sand	44	vfs-vcrs	1	sb rnd
SILT AND CLAY		20			

REMARKS

color Brownish Grey
HCL -

Lithified by silt & clay

Immature

DEPTH
(FT.)

600

TO

610

ROCK CLASSIFICATION

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel				
	sand				
OTHER	>gravel				
	sand				
SILT AND CLAY					

REMARKS

color
HCL

Sample missing

DEPTH
(FT.)

610

TO

625

ROCK CLASSIFICATION

sandy Silt

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	2	-fp-	l	rnd
	sand	1	vfs-ms	h	rnd
OTHER	>gravel	0			
	sand	47	vfs-ms	h	sb rnd
SILT AND CLAY		50			

REMARKS

color
HCL

Brownish Tan

+ (610'-620'), - (620'-625')

Micaceous

Immature

DEPTH
(FT.)

625

TO

630

ROCK CLASSIFICATION

silty Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	25	vfp-crp	l	rnd
	sand	1	vfs-ms	l	rnd
OTHER	>gravel	15	vfp-mp	l	w rnd
	sand	24	vfs-ms	h	sb rnd
SILT AND CLAY		35			

REMARKS

color
HCL

Brownish Tan

-

Micaceous

Immature

DEPTH
(FT.)

630

TO

635

ROCK CLASSIFICATION

slightly silty
slightly gravelly Sand

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	8	vfp-mp	1	sb rnd
	sand	18	vfs-crs	1	rnd
OTHER	>gravel	0			
	sand	56	vfs-crs	m	sb rnd
SILT AND CLAY		18			

REMARKS

color Brownish Tan
HCL -

Immature

DEPTH
(FT.)

635

TO

638

ROCK CLASSIFICATION

silty sandy Gravel

		<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT	>gravel	35	vfp-crp	1	w rnd
	sand	6	vfs-vcrs	1	rnd
OTHER	>gravel	40	vfp-crp	m	w rnd
	sand	15	vfs-vcrs	m	sb rnd
SILT AND CLAY		4			

REMARKS

color Greyish Tan
HCL -

Slightly Micaceous Unfrosted Quartz

Immature

WELL NUMBER

699-31-31

DEPTH
(FT.)

638

TO

640

ROCK CLASSIFICATION

silty Sand

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel	0			
sand	20	vfs-vcrs	l	rnd
OTHER >gravel	0			
sand	60	vfs-vcrs	m	sb rnd
SILT AND CLAY	20			

REMARKS

color Greyish Tan

HCL -

Micaceous Unfrosted Quartz

Immature

Total Drilled Depth reported as 640'

DEPTH
(FT.)

TO

ROCK CLASSIFICATION

	<u>%</u>	<u>SIZE RANGE</u>	<u>SPHERICITY</u>	<u>ROUNDNESS</u>
BASALT >gravel				
sand				
OTHER >gravel				
sand				
SILT AND CLAY				

REMARKS

color

HCL