

Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	330	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?		Liquid Limit			Plastic Limit	Results
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	186.3				
Washed:	wt. pan & soil	258.9	243.6	219.3	
<input type="checkbox"/>	wt. of soil	72.6	57.3	33.0	24.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	3.5	6.1%	93.9%
No. 10	3.2	5.6%	88.3%
No. 40	5.7	9.9%	78.4%
No. 200	20.0	34.9%	43.5%
Pan	0.6	43.5%	
Total	33.0	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	340	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	187.6				
Washed:	wt. pan & soil	266.5	246.9	208.6	
<input type="checkbox"/>	wt. of soil	78.9	59.3	21.0	38.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	0.7	1.2%	98.8%	
No. 10	0.9	1.5%	97.3%	
No. 40	3.7	6.2%	91.1%	
No. 200	15.6	26.3%	64.8%	
Pan	0.1	64.8%		
Total	21.0			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	360	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	188.3				
Washed:	wt. pan & soil	377.9	335.1	261.8	
<input type="checkbox"/>	wt. of soil	189.6	146.8	73.5	73.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	1.7	1.2%	98.8%
No. 10	2.1	1.4%	97.4%
No. 40	16.5	11.2%	86.2%
No. 200	52.8	36.0%	50.2%
Pan	0.4	50.2%	
Total	73.5		

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	370	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	186.4				
Washed:	wt. pan & soil	417.6	368.1	276.3	
<input type="checkbox"/>	wt. of soil	231.2	181.7	89.9	91.8

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	1.2	0.7%	99.3%
No. 10	4.9	2.7%	96.6%
No. 40	17.3	9.5%	87.1%
No. 200	66.3	36.5%	50.6%
Pan	0.2	50.6%	
Total	89.9	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	380	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	187.2				
Washed:	wt. pan & soil	520.8	450.2	315.6	
<input type="checkbox"/>	wt. of soil	333.6	263.0	128.4	134.6

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	2.9	1.1%	98.9%
No. 10	11.9	4.5%	94.4%
No. 40	23.7	9.0%	85.4%
No. 200	88.1	33.5%	51.9%
Pan	1.8	51.9%	
Total	128.4	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	390	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	188.7				
Washed:	wt. pan & soil	426.4	366.9	289.5	
<input type="checkbox"/>	wt. of soil	237.7	178.2	100.8	77.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	1.5	0.8%	99.2%	
No. 10	3.7	2.1%	97.1%	
No. 40	14.3	8.0%	89.1%	
No. 200	78.8	44.2%	44.8%	
Pan	2.5	44.8%		
Total	100.8			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	400	Sample Depth:	0

Plasticity Analysis						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	189.2				
Washed:	wt. pan & soil	395.8	354.7	324.0	
<input type="checkbox"/>	wt. of soil	206.6	165.5	134.8	30.7

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	5.4	3.3%	96.7%
No. 10	43.3	26.2%	70.6%
No. 40	63.5	38.4%	32.2%
No. 200	22.1	13.4%	18.9%
Pan	0.5	18.9%	
Total	134.8	*% retained on Pan includes Wt Washed through	

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Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	410	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	189.8				
Washed:	wt. pan & soil	294.8	275.8	236.5	
<input type="checkbox"/>	wt. of soil	105.0	86.0	46.7	39.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	5.0	5.8%	94.2%	
No. 10	7.2	8.4%	85.8%	
No. 40	6.1	7.1%	78.7%	
No. 200	28.4	33.0%	45.7%	
Pan	0.0	45.7%		
Total	46.7			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	420	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	189.4				
Washed:	wt. pan & soil	306.4	281.4	234.6	
<input type="checkbox"/>	wt. of soil	117.0	92.0	45.2	46.8

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	0.9	1.0%	99.0%	
No. 10	1.7	1.8%	97.2%	
No. 40	2.2	2.4%	94.8%	
No. 200	39.3	42.7%	52.1%	
Pan	1.1	52.1%		
Total	45.2			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	430	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	188.1				
Washed:	wt. pan & soil	299.3	276.6	236.2	
<input type="checkbox"/>	wt. of soil	111.2	88.5	48.1	40.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	6.4	7.2%	92.8%	
No. 10	4.8	5.4%	87.3%	
No. 40	6.1	6.9%	80.5%	
No. 200	30.7	34.7%	45.8%	
Pan	0.1	45.8%		
Total	48.1	*% retained on Pan includes Wt Washed through		

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	440	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	188.7				
Washed:	wt. pan & soil	325.1	298.4	255.0	
<input type="checkbox"/>	wt. of soil	136.4	109.7	66.3	43.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	3.2	2.9%	97.1%
No. 10	7.3	6.7%	90.4%
No. 40	9.5	8.7%	81.8%
No. 200	45.8	41.8%	40.0%
Pan	0.5	40.0%	
Total	66.3	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	450	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038
										35
										36
										1.042
										1.045

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	189.7				
Washed:	wt. pan & soil	264.4	252.9	232.9	
<input type="checkbox"/>	wt. of soil	74.7	63.2	43.2	20.0

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	3.6	5.7%	94.3%	
No. 10	9.2	14.6%	79.7%	
No. 40	7.4	11.7%	68.0%	
No. 200	22.8	36.1%	32.0%	
Pan	0.2	32.0%		
Total	43.2			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	460	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	185.7				
Washed:	wt. pan & soil	429.2	387.4	343.6	
<input type="checkbox"/>	wt. of soil	243.5	201.7	157.9	43.8

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	31.0	15.4%	84.6%	
No. 10	53.6	26.6%	58.1%	
No. 40	42.4	21.0%	37.0%	
No. 200	30.5	15.1%	21.9%	
Pan	0.4	21.9%		
Total	157.9			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	470	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	185.8				
Washed:	wt. pan & soil	377.4	342.8	312.4	
<input type="checkbox"/>	wt. of soil	191.6	157.0	126.6	30.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	18.6	11.8%	88.2%	
No. 10	36.7	23.4%	64.8%	
No. 40	49.6	31.6%	33.2%	
No. 200	21.7	13.8%	19.4%	
Pan	0.0	19.4%		
Total	126.6	*% retained on Pan includes Wt Washed through		

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	480	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	186.3				
Washed:	wt. pan & soil	391.4	355.8	318.2	
<input type="checkbox"/>	wt. of soil	205.1	169.5	131.9	37.6

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	16.3	9.6%	90.4%	
No. 10	50.5	29.8%	60.6%	
No. 40	38.6	22.8%	37.8%	
No. 200	26.5	15.6%	22.2%	
Pan	0.0	22.2%		
Total	131.9	*% retained on Pan includes Wt Washed through		

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	490	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	183.7				
Washed:	wt. pan & soil	362.9	320.4	286.9	
<input type="checkbox"/>	wt. of soil	179.2	136.7	103.2	33.5

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	9.0	6.6%	93.4%
No. 10	31.2	22.8%	70.6%
No. 40	22.8	16.7%	53.9%
No. 200	39.3	28.7%	25.2%
Pan	0.9	25.2%	
Total	103.2	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	500	Sample Depth:	0

Plasticity Analysis						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?		Liquid Limit			Plastic Limit	Results
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	184.3				
Washed:	wt. pan & soil	419.8	373.4	309.9	
<input type="checkbox"/>	wt. of soil	235.5	189.1	125.6	63.5
Sieve	Weight Retained (g)	Percent Retained*	Percent Passing		
No. 4	7.2	3.8%	96.2%		
No. 10	26.0	13.7%	82.4%		
No. 40	19.5	10.3%	72.1%		
No. 200	71.1	37.6%	34.5%		
Pan	1.8	34.5%			
Total	125.6	*% retained on Pan includes Wt Washed through			

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	510	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	183.3				
Washed:	wt. pan & soil	323.4	291.0	239.2	
<input type="checkbox"/>	wt. of soil	140.1	107.7	55.9	51.8

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	11.3	10.5%	89.5%
No. 10	8.4	7.8%	81.7%
No. 40	9.8	9.1%	72.6%
No. 200	26.1	24.2%	48.4%
Pan	0.3	48.4%	
Total	55.9	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	520	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	182.7				
Washed:	wt. pan & soil	340.7	308.8	263.1	
<input type="checkbox"/>	wt. of soil	158.0	126.1	80.4	45.7

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	10.8	8.6%	91.4%
No. 10	17.1	13.6%	77.9%
No. 40	16.8	13.3%	64.6%
No. 200	34.8	27.6%	37.0%
Pan	0.9	37.0%	
Total	80.4	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	530	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	181.7				
Washed:	wt. pan & soil	296.5	274.1	245.7	
<input type="checkbox"/>	wt. of soil	114.8	92.4	64.0	28.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	1.9	2.1%	97.9%	
No. 10	12.5	13.5%	84.4%	
No. 40	17.8	19.3%	65.2%	
No. 200	31.2	33.8%	31.4%	
Pan	0.6	31.4%		
Total	64.0			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	540	Sample Depth:	0

Plasticity Analysis						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?		Liquid Limit			Plastic Limit	Results
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	184.5				
Washed:	wt. pan & soil	464.9	405.8	343.3	
<input type="checkbox"/>	wt. of soil	280.4	221.3	158.8	62.5

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	9.5	4.3%	95.7%
No. 10	33.7	15.2%	80.5%
No. 40	32.5	14.7%	65.8%
No. 200	81.0	36.6%	29.2%
Pan	2.1	29.2%	
Total	158.8	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	550	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038
										35
										36
										1.042
										1.045

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	185.7				
Washed:	wt. pan & soil	404.1	364.0	307.6	
<input type="checkbox"/>	wt. of soil	218.4	178.3	121.9	56.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	9.8	5.5%	94.5%	
No. 10	23.2	13.0%	81.5%	
No. 40	20.1	11.3%	70.2%	
No. 200	67.9	38.1%	32.1%	
Pan	0.9	32.1%		
Total	121.9	*% retained on Pan includes Wt Washed through		

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	560	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:		Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)				
		Moisture Done: <input type="checkbox"/> (Check Box when Complete)				
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	188.4				
Washed:	wt. pan & soil	371.3	337.0	292.9	
<input type="checkbox"/>	wt. of soil	182.9	148.6	104.5	44.1

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	7.9	5.3%	94.7%
No. 10	31.5	21.2%	73.5%
No. 40	18.4	12.4%	61.1%
No. 200	45.6	30.7%	30.4%
Pan	1.1	30.4%	
Total	104.5	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	570	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038
										35
										36
										1.045

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	186.1				
Washed:	wt. pan & soil	376.2	339.3	297.4	
<input type="checkbox"/>	wt. of soil	190.1	153.2	111.3	41.9

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	6.3	4.1%	95.9%	
No. 10	29.8	19.5%	76.4%	
No. 40	36.3	23.7%	52.7%	
No. 200	38.9	25.4%	27.3%	
Pan	0.0	27.3%		
Total	111.3			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	580	Sample Depth:	0

<i>Plasticity Analysis</i>						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

<i>Liquid Limit Correction Factors</i>										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

<i>Sieve Analysis</i>					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	184.8				
Washed:	wt. pan & soil	355.7	316.2	277.8	
<input type="checkbox"/>	wt. of soil	170.9	131.4	93.0	38.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	4.2	3.2%	96.8%	
No. 10	32.6	24.8%	72.0%	
No. 40	27.8	21.2%	50.8%	
No. 200	28.4	21.6%	29.2%	
Pan	0.0	29.2%		
Total	93.0	*% retained on Pan includes Wt Washed through		

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	590	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	185.3				
Washed:	wt. pan & soil	494.4	433.7	383.4	
<input type="checkbox"/>	wt. of soil	309.1	248.4	198.1	50.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing
No. 4	5.8	2.3%	97.7%
No. 10	47.8	19.2%	78.4%
No. 40	88.2	35.5%	42.9%
No. 200	56.3	22.7%	20.2%
Pan	0.0	20.2%	
Total	198.1	*% retained on Pan includes Wt Washed through	

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	600	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	184.7				
Washed:	wt. pan & soil	270.5	269.8	261.5	
<input type="checkbox"/>	wt. of soil	85.8	85.1	76.8	8.3

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	2.6	3.1%	96.9%	
No. 10	34.5	40.5%	56.4%	
No. 40	29.5	34.7%	21.7%	
No. 200	10.2	12.0%	9.8%	
Pan	0.0	9.8%		
Total	76.8			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	610	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows	16	17	18	19	20	21	22	23	24	
Correction Factor	0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995	
	25	26	27	28	29	30	31	32	33	34
	1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038
										35
										36
										1.042
										1.045

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	182.1				
Washed:	wt. pan & soil	327.3	294.2	269.8	
<input type="checkbox"/>	wt. of soil	145.2	112.1	87.7	24.4

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	0.5	0.4%	99.6%	
No. 10	38.1	34.0%	65.6%	
No. 40	36.6	32.6%	32.9%	
No. 200	12.5	11.2%	21.8%	
Pan	0.0	21.8%		
Total	87.7			

*% retained on Pan includes Wt Washed through

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Soil Classification

Fine Sieve - Plasticity Index

Client:	Ensign Engineering	Sampled by:	Client
Project Name:	Checkshani well	Date Sampled:	N/A
Sample Location:	620	Sample Depth:	0

Plasticity Analysis						
Pan Name:	Saved for Moisture: <input type="checkbox"/> (Check Box if Saved)					
	Moisture Done: <input type="checkbox"/> (Check Box when Complete)					
<input type="radio"/> Non Plastic?	Liquid Limit			Plastic Limit	Results	
A - Trial number	1	2	3	1	Avg. Liquid Limit:	
B - Number of blows					Plastic Limit:	
C - Container name					Plasticity Index:	
D - Weight of container, (g)					SOIL CLASSIFICATION	
E - Weight of container & wet soil, (g)						
F - Weight of container & dry soil, (g)						
G - Moisture, (g) -- (E-F)						
H - Net weight of dry soil, (g) -- (F-D)						
I - Percent moisture -- (G/H x 100)						
J - Corrected liquid limit						

Liquid Limit Correction Factors										
No. of Blows		16	17	18	19	20	21	22	23	24
Correction Factor		0.947	0.954	0.961	0.967	0.973	0.979	0.985	0.990	0.995
25	26	27	28	29	30	31	32	33	34	35
1.000	1.005	1.009	1.014	1.018	1.022	1.026	1.030	1.034	1.038	1.042

Sieve Analysis					
Pan Name:	Pan Weight (g):	Initial Wet Wt. (g)	Initial Dry Wt. (g)	Final Dry Wt. (g):	Wt. Washed through # 200
	187.5				
Washed:	wt. pan & soil	256.6	240.7	230.6	
<input type="checkbox"/>	wt. of soil	69.1	53.2	43.1	10.1

Sieve	Weight Retained (g)	Percent Retained*	Percent Passing	
No. 4	0.2	0.4%	99.6%	
No. 10	19.5	36.7%	63.0%	
No. 40	15.1	28.4%	34.6%	
No. 200	8.3	15.6%	19.0%	
Pan	0.0	19.0%		
Total	43.1	*% retained on Pan includes Wt Washed through		

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