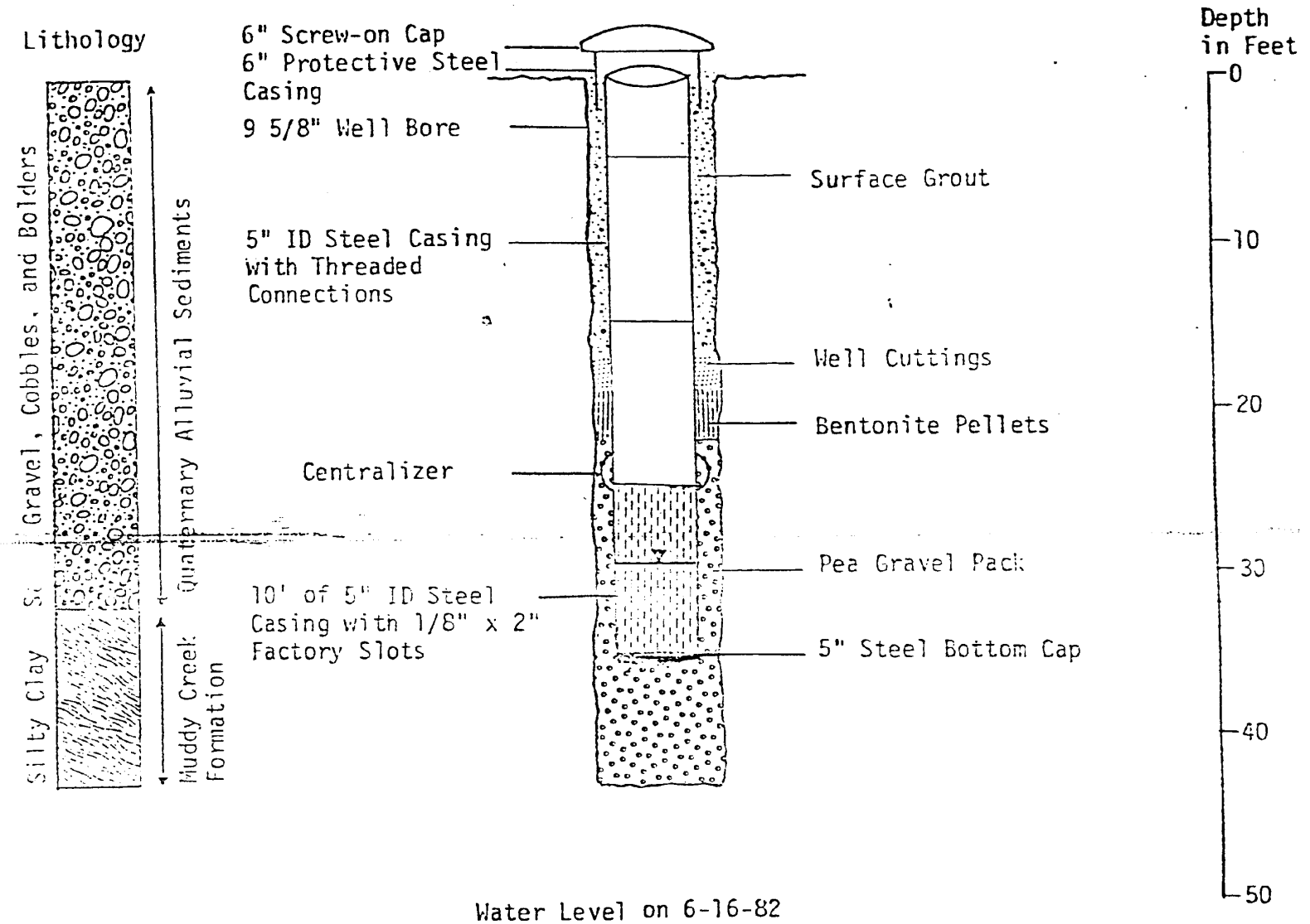
K-M Chemical Corporation
Henderson, Nevada Facility
Well No. M-6



Water Level on 6-16-82

31' 4"

Measured from Top of Protective Casing

KERR-McGEE CHEMICAL CORPORATION

Henderson Facility

RCRA Monitor Well No. M-6
Well Construction and Completion Table

Date Started	June 2, 1982
Date Completed	June 3, 1982 (except for surface grout)
Location	NW corner of landfill
Elevation from Top of Well Cover	1729.17'
Drilling Method	Rotary rig
Drilling Fluid	Revert
Depth to Muddy Creek	32'
Total Depth of Well	43'
Borehole Diameter	9 5/8"
Well Casing Diameter/Type	5" ID/threaded steel pipe
Well Casing Interval	34' to surface
Perforated Interval	35' - 25'
Perforation Type/ Size /Open Area	Factory slot/ 1/8" x 2" / 4 in^2 per 10'
Casing Above Ground (Well Cover)	Approx. 15"
Gravel Pack Interval	43' -22'
Type of Gravel	1/8" - 3/8" pea gravel
Surface Seal Interval	15' to surface
Completion:	0 -15.0' grout 15.0'-18.0' well cuttings 18.0'-22.0' bentonite pellets 22.0'-43.0' gravel pack
Comments: Open hole with gravel from 43.0' to 35.0'. Steel well cover with cap cemented in place on 6-16-82.	

Lithology Log
for Henderson
Well No. M-6

Depth in Feet	Lithology Description
0-29.0	Silty gravel and sand; slightly cemented from 12' - 13'
29.0-32.0	Silty sand and gravel with gypsum
32.0-32.5	Brown silty clay
32.5-34.0	Silty sand and gravel
34.0-38.0	Brown silty clay
38.0-43.0	Brown clay with sand and gravel

Top of Muddy Creek at 32 feet

Log of Boring No. BW-3A

BMI Landfill CAMU Investigation

Henderson, Nevada

Drilling Method: Rotary Sonic
Drilling Equipment: GEFCO
Drilling Contractor: Water Development Corporation
Driller: Mike Wilkerson

Sample Type: 2" Split Spoon
Sample Interval Continuous

Logged By: A. Norris
Date Started: 03/28/05
Date Completed: 03/28/05

Northing: 26720593.456
Easting: 825973.664
TOC Elevation (ft. msl): 1739.478
Borehole Total Depth: 60 ft bgs
Borehole Diameter: 7 5/8" O.D. Casing / 7 7/8" O.D. Bit
Well ID: GW-AA-BW-03A
Depth to Water (ft. bgs): 49' bgs ⧖

Basic Remediation COMPANY

Monitoring Well Construction

Type of Surface Seal:	Bentonite-Grout	**Screen Slot Size:**	0.010"
Blank Casing Type/Size:	4" Sch 80 PVC	**Top of Screen (ft. bgs):**	33 ft bgs
Screen Type/Size:	4" Sch 80 PVC	**Bottom of Screen (ft. bgs):**	53 ft bgs
Transition Sand Type:	N/A	**Type of Sand Pack:**	#2/12

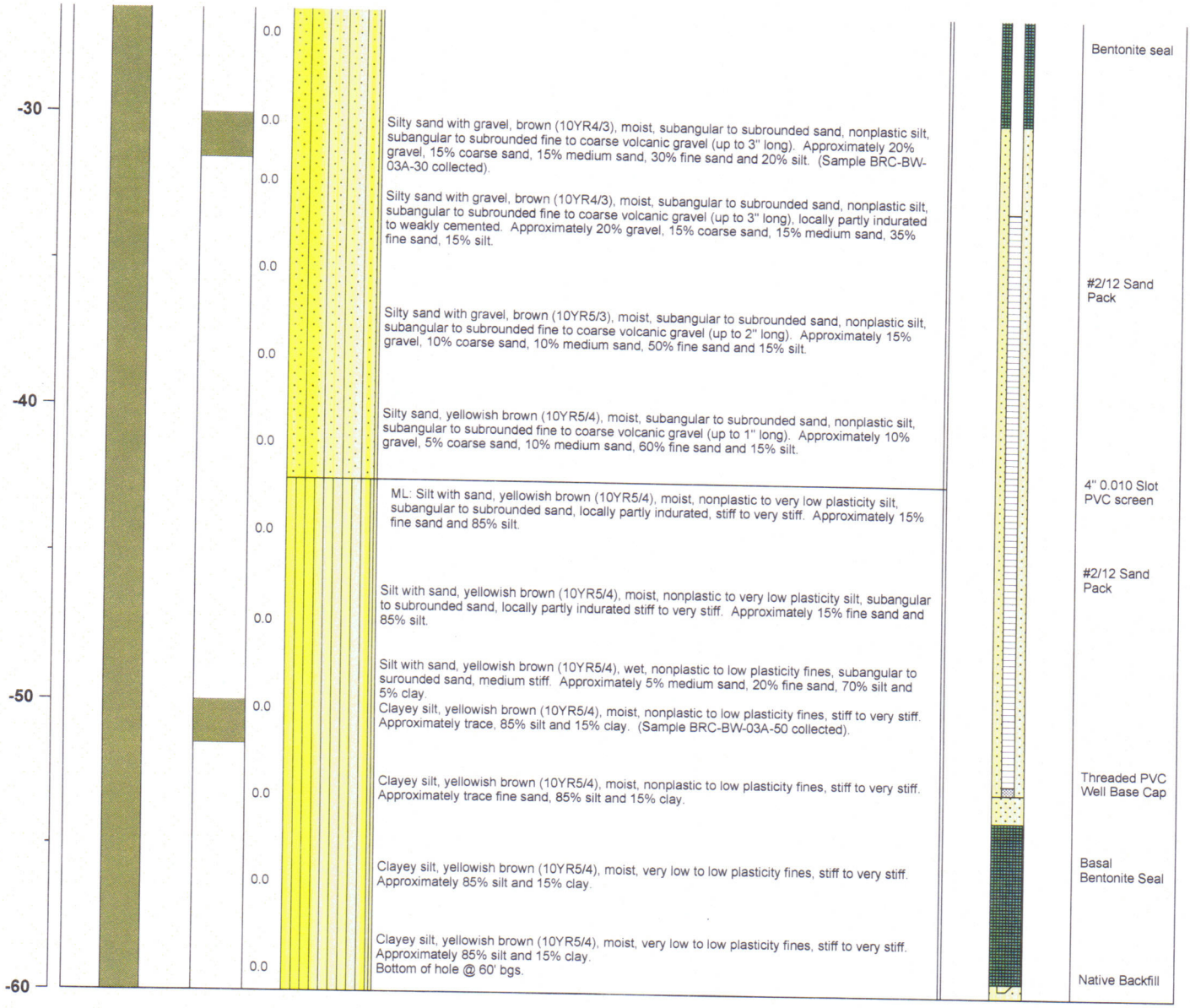
Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
0					0.0		SM: Silty sand with gravel, yellowish brown (10YR5/4), dry to moist, subangular to subrounded san, nonplastic to very low plasticity silt, subangular to subrounded fine to coarse volcanic gravel (up to 1" long). Approximately 15% gravel, 10% coarse sand, 15% medium sand, 40% fine sand and 20% silt. (Sample BRC-BW-03A-0 collected).	Locking monument well box with concrete apron and ballards
					0.0		ML: Sandy silt, brown (7.5YR5/4), with very local dark gray (7.5YR3/2) mottling, moist, nonplastic to low plasticity fines, subangular to subrounded sand, stiff to very stiff, partly indurated. Approximately trace gravel, trace coarse sand, 5% medium sand, 25% fine sand, 70% silt and trace clay.	
					0.0		SM: Silty sand, yellowish brown (10YR5/4), moist, subangular to subrounded sand, nonplastic to very low plasticity silt. Approximately trace coarse sand, 5% medium sand, 60% fine sand and 35% silt.	Cement Bentonite Grout
-10					0.0		Silty sand with gravel, yellowish brown (10YR5/4), dry to moist, subangular to subrounded sand, nonplastic silt, locally indurated to weakly cemented, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long). Approximately 15% gravel, 10% coarse sand, 15% medium sand, 40% sint sand and 20% silt.	4" Blank PVC Riser Pipe
					0.0		Silty sand, yellowish brown (10YR5/4), dry to moist, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 10% coarse sand, 10% medium sand, 45% fine sand and 20% silt.	
					0.0		Silty sand with gravel, light yellowish brown (10YR6/4), dry subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2.5" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 10% coarse sand, 10% medium sand, 45% fine sand and 20% silt.	
					0.0		(Sample BRC-BW-03A-18 collected).	
-20					0.0		Silty sand with gravel, pale brown (10YR6/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long). Approximately 15% gravel, 10% coarse sand, 10% medium sand, 45% fine sand and 20% silt.	
					0.0		Silty sand with gravel, pale brown (10YR6/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long). Approximately 15% gravel, 10% coarse sand, 10% medium sand, 45% fine sand and 20% silt. Silty sand with gravel, pale brown (10YR6/3), dry subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up tp 3" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand and 20% silt.	

BMI Landfill CAMU Investigation

Henderson, Nevada

Basic Remediation COMPANY

Log of Boring No. BW-3A



Project No. 1881263.020101

MWH

Log of Boring: BW-3A

Log of Boring No. BW-2A

BMI Landfill CAMU Investigation

Henderson, Nevada

Drilling Method: Rotary Sonic
Drilling Equipment: GEFCO
Drilling Contractor: Water Development Corporation
Driller: Mike Wilkerson

Sample Type: 2.5" Split Spoon
Sample Interval Continuous

Logged By: A. Norris
Date Started: 03/3/05
Date Completed: 03/3/05

Northing: 26720214.671
Easting: 826041.398
TOC Elevation (ft. msl): 1746.777
Borehole Total Depth: 60 ft bgs
Borehole Diameter: 7 5/8" O.D. Casing / 7 7/8" O.D. Bit
Well ID: GW-AA-BW-02A
Depth to Water (ft. bgs): 50' bgs ▽

Basic Remediation COMPANY

Monitoring Well Construction

Type of Surface Seal:	Bentonite-Grout	**Screen Slot Size:**	0.010 in
Blank Casing Type/Size:	4" Sch 80 PVC	**Top of Screen (ft. bgs):**	33 ft bgs
Screen Type/Size:	4" Sch 80 PVC	**Bottom of Screen (ft. bgs):**	53 ft bgs
Transition Sand Type:	N/A	**Type of Sand Pack:**	#2/12

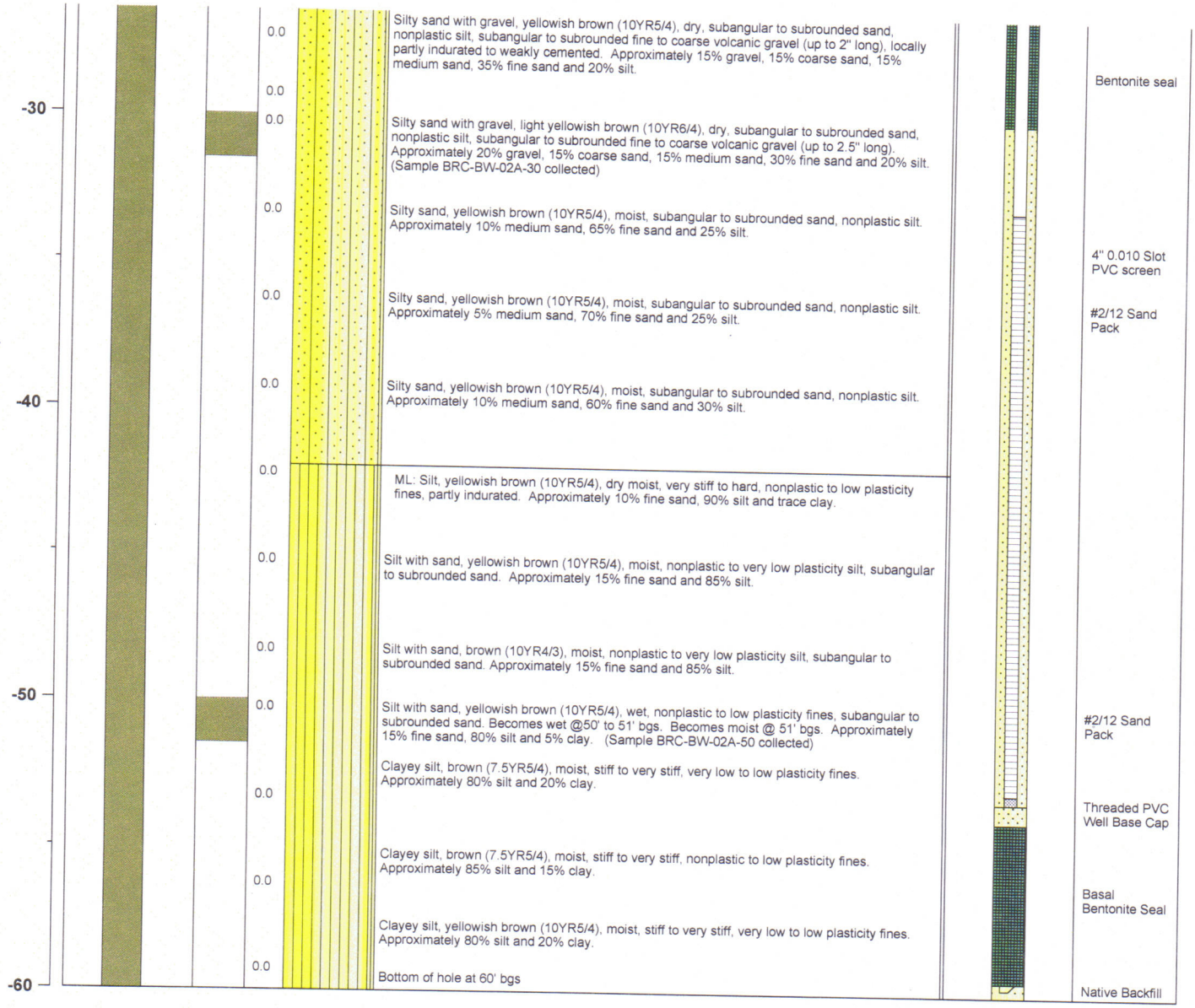
Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
0					0.0		SM: Silty sand with gravel, brown (10YR5/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long). Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand and 20% silt. (Sample BRC-BW-02A-0 collected)	Locking monument well box with concrete apron and ballards
					0.0		Silty sand with gravel, brown (10YR5/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long). Approximately 20% gravel, 15% coarse sand, 15% mediun sand, 30% fine sand and 20% silt.	Cement Bentonite Grout
					0.0		Silty sand with gravel, yellowish brown (10YR5/4), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 3" long). Approximately 20% gravel, 15% coarse sand, 15% mediun sand, 30% fine sand and 20% silt.	
-10					0.0		Silty sand with gravel, light brown (7.5YR6/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long), locally partially indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand and 20% silt.	4" Blank PVC Riser Pipe
					0.0		Silty sand with gravel, light brown (7.5YR6/4), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded, fine to coarse volcanic gravel (up to 2" long). Approximately 20% gravel, 15% coarse sand, 10% medium sand, 35% medium sand and 20% silt.	
-20					0.0		Silty sand with gravel, brown (7.5YR5/4), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 15% coarse sand, 10% medium sand, 40% fine sand and 20% silt. (Sample BRC-BW-02A-18 collected)	
					0.0		Silty sand with gravel, yellowish brown (10YR5/4), dry, subangular to subrounded sand, nonplastic silt, subanglar to subrounded fine to coarse volcanic gravel (up to 1" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand 15% medium sand, 30% fine sand and 20% silt.	Bentonite seal

BMI Landfill CAMU Investigation

Henderson, Nevada

Basic Remediation COMPANY

Log of Boring No. BW-2A



Project No. 1881263.020101

MWH

Log of Boring: BW-2A

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept - S&EA Division	KM SUBSIDIARY KMCLLC	LOCATION HENDERSON	BORING NUMBER TR-2

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
	TOTAL DEPTH 180' SEE LOG FROM INFILL TR-1 (12' EAST OF TR-2) FOR LITHOLOGY									

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED	9/8/99
PAGE	1 of 1
DRILLING METHOD	ARCH
DRILLED BY	BEYLIK
LOGGED BY	T. REED
EXISTING GRADE ELEVATION (FT. AMSL)	
LOCATION ON GRID COORDINATES	

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division	KM SUBSIDIARY: KMCC	LOCATION: Henderson	BORING NUMBER: TR-1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
0	0-37' GRAVELLY SAND, sdy GRAVEL and SAND, interbedded. mod. brown (5YR 4/4). Poorly sorted (well graded) Gravel up to 2" diam Sand vc-vf.... predom m-f, A-SR. Minor silt 10-20%, no clay mod CaCO3 rinds on gravel grains		SW							
5			SP							
10			GP							
15	8-12' inc. gravel size									
	16-20' m-vf sand w/ minor pea gravel		SW							
20			GP							
25	25-29' m-vf sand w/ minor pea gravel little silt - 10-20%		SP							
30	31-33' Gravelly		GP							
	36-37' damp		SP							
35										QAL
37	37-104' sdy SILT (20-30% vfg A-SA grains),		ML							mc fg

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED: 9-1-99

PAGE: 1 of 8

DRILLING METHOD: ARCH

DRILLED BY: Beylik

LOGGED BY: EJ KRISH

EXISTING GRADE ELEVATION (FT AMSL):

LOCATION OR GRID COORDINATES:

SOIL BORING LOG KM-565S-B

KERR-McGEE CORPORATION Hydrology Dept - S&EA Division	KM SUBSIDIARY KMCC	LOCATION Henderson, NV	BORING NUMBER TR1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
	and SILT, INTERBEDDED, mod yell brn (10YR5/2 to 10YR 5/4)		ML							
45	mod strong pesticide odor 37'-128'									
	disseminated f-vcg nodular, soft caliche moderately common throughout									
50										
55	scattered thin (1-2') beds of caliche (nodular + relatively soft) throughout									
60										
65	moist throughout									
	v. thin laminar bedding throughout (varves?)									
70										
75	caliche layers bearing more common below 75'									

EXPLANATION

- ▼ Water Table (24 Hour)
- ▽ Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC. Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND
- ____
- ____

DATE DRILLED 9-2-99

PAGE 2 of 8

DRILLING METHOD ARCH

DRILLED BY BEYLIK

LOGGED BY E. KRISH

EXISTING GRADE ELEVATION (FT. AMSL)

LOCATION OR GRID COORDINATES

SOIL BORING LOG KM-SESS-8

KERR-McGEE CORPORATION
Hydrology Dept - S&EA Division

KM SUBSIDIARY: KMCC

LOCATION: Henderson NV

BORING NUMBER: TR-1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
80	82-86' nodular caliche layer (50% of smpl)		ML							
	@86' color change to gry orange (10YR 7/4)									
90										
95	@98' thin nodular caliche layer									
100										
104	104'-106' silty CLAY gry orange		CL							
106	106'-114' sdy SILT & SILT, interbedded, as above		ML							
110										
114	114'-118' cly SILT gry orange (10YR 7/4)		ML							
118	118-122 SILT gry tan		ML							

EXPLANATION

- ▼ Water Table (24 Hour)
- ▽ Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND
- ____
- ____

DATE DRILLED: 9-2-99

PAGE: 3 of 8

DRILLING METHOD: ARCH

DRILLED BY: BEYLIK

LOGGED BY: E. KRISH

EXISTING GRADE ELEVATION (FT AMSL):

LOCATION OR GRID COORDINATES:

SOIL BORING LOG KM-S655-B

KERR-McGEE CORPORATION
Hydrology Dept. - S&EA Division

KM SUBSIDIARY: KMCC

LOCATION: Henderson, NV

BORING NUMBER: TR-1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
122			ML							
	122'- 128' silty CLAY grg orange (10YR 7/4) w/ mod small caliche nodules (white N9)		CL							
125										
128										
130	128'-151' SILT w/ minor interbedded cly & sdy zones Gry orange (10YR 7/4)		ML							
135	10-20% clay in cly silt 20-25% vfg sd in sdy silt									
140	minor disseminated small caliche nodules throughout. Scattered thin (1-2') layers of nodular caliche present									
145	135-150' yell gry (5Y8/1) interbeds									
151										
155	151'-160' VOLC. ASH, of mod grn gry (5G 5/1), hnbd- and biotite rich xtal ash.		ML							

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID — Photoionization Detection (ppm)
- NO. — Identifies Sample by Number
- TYPE — Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH — Depth Top and Bottom of Sample
- REC — Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND
- SILT & ASH

DATE DRILLED: 9-2-99

PAGE: 4 of 8

DRILLING METHOD: ARCH

DRILLED BY: BEYLIK

LOGGED BY: E. KRISH

EXISTING GRADE ELEVATION IFT AMSLI

LOCATION OR GRID COORDINATES

C

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION Hydrology Dept. - S&EA Division	KM SUBSIDIARY KMCC	LOCATION Henderson, NV	BORING NUMBER TR-1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
165	160-178' sdy SILT, gry orange (10YR 7/4), w/ 20-30% vfg. A-SA sd.		ML							
	165-175' increase in nodular caliche	CA								
170		CA								WTR sample @ 170' (fracture controlled?) beneath volc ash
175		CA								
178		CA								
180	178'-221' SILT (mod yell brn 10YR 5/4) w/ minor clayey (5-10% clay) and sandy (20-30% sand) interbeds		ML							
185	Mod amounts of thin nodular caliche layers. Minor hard massive caliche scattered throughout	CA								
192	182-184' nod. caliche bed	CA								
195	192-198' nod. caliche zone	CA								

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID — Photoionization Detection (ppm)
- NO. — Identifies Sample by Number
- TYPE — Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH — Depth Top and Bottom of Sample
- REC — Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED	PAGE
9-2-99	5 of 8
DRILLING METHOD: ARCH	
DRILLED BY: BEYLIK	
LOGGED BY: E. KRISH	
EXISTING GRADE ELEVATION (FT AMSL):	
LOCATION OR GRID COORDINATES:	

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION
Hydrology Dept. - S&EA Division

KM SUBSIDIARY

LOCATION

BORING NUMBER TR-1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
205	200'-210' - hard, nodular caliche zone WTR below caliche	CA	ML							
210										WTR sample @ 210' from beneath caliche
215										
221	221-234' silty SAND, vfg w/20% silt, gry orange, com calcareous cement locally w/ minor small caliche nodules		SM							
225										
230										
234	234-259' SILT and sdy SILT, interbedded, mod brn (5YR 4/6), sdy layer have 20-30% vfg sd, small caliche		ML							

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC. Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND
- _____
- _____

DATE DRILLED

PAGE 6 of 8

DRILLING METHOD

DRILLED BY

LOGGED BY

EXISTING GRADE ELEVATION (FT AMSL)

LOCATION OR GRID COORDINATES

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION
Hydrology Dept. - S&EA Division

KM SUBSIDIARY

LOCATION

BORING NUMBER

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
245	nodules mod-com. Locally slightly clayey		ML							
250	249-250' thin semi-medium caliche layer WTR below caliche									WTR sample @ 250'
255										
259	259'-280' sl. slty SANDSTONE, Mod brn (5YR 4/6), Var. calcareous cement but usually hard. vf-mg w/ minor c+vc and occ granule of qtz and volcanics. A-SA, poorly sorted (well graded) w/ sp-mod silt in matrix (10-30%.)		SP							hard
265										
270										
275										

EXPLANATION

- ▼ Water Table (24 Hour)
- ▽ Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT BARREL
- AUGER
- ROCK CORE
- THIN WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC. Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED

PAGE 7 of 8

DRILLING METHOD

DRILLED BY

LOGGED BY

EXISTING GRADE ELEVATION (FT. AMSL)

LOCATION OR GRID COORDINATES

SOIL BORING LOG KM-5655-B

KERR-McGEE CORPORATION
Hydrology Dept. - S&EA Division

KM SUBSIDIARY: KMCC

LOCATION: HENDERSON, NV

BORING NUMBER: TR 1

DEPTH IN FEET	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	UNIFIED SOIL FIELD CLASS.	BLOWS PER 6"	PID (ppm)	SOIL SAMPLE NO.	SOIL SAMPLE TYPE	SOIL SAMPLE DEPTH	SOIL SAMPLE REC.	REMARKS OR FIELD OBSERVATIONS
285	280-298' Gravelly Ss, mod brn (5YR 3/6). Com calcareous cement. hard vf-vc w/ con sm-granules to 1/8-1/4" of qtz and volcanics (basalt, dacite, andesite)		GW/GP							HARD & fractured
290										
295										
298	298'-305' sl. silty Ss, mod brn (5YR 4/6). Var calc. cement ... softer than above. 20-25% silt, vfg sd.		SM							
305	305-312' Gravelly Ss. mod brn (5YR 3/6 to 5YR 4/6) hard, calcareous cement vf-vc w/ con volc & qtz granules		GW/GP							hard & fractured WTR sample @ 312'
310										
312	TD 312'									

EXPLANATION

- Water Table (24 Hour)
- Water Table (Time of Boring)
- PID Photoionization Detection (ppm)
- NO. Identifies Sample by Number
- TYPE Sample Collection Method
- SPLIT-BARREL
- AUGER
- ROCK CORE
- THIN-WALLED TUBE
- CONTINUOUS SAMPLER
- NO RECOVERY
- DEPTH Depth Top and Bottom of Sample
- REC Actual Length of Recovered Sample in Feet

GRAPHIC LOG LEGEND

- CLAY
- SILT
- SAND
- GRAVEL
- SILTY CLAY
- CLAYEY SILT
- DEBRIS FILL
- HIGHLY ORGANIC (PEAT)
- SANDY CLAY
- CLAYEY SAND

DATE DRILLED: 9-2-99

PAGE: 8 of 8

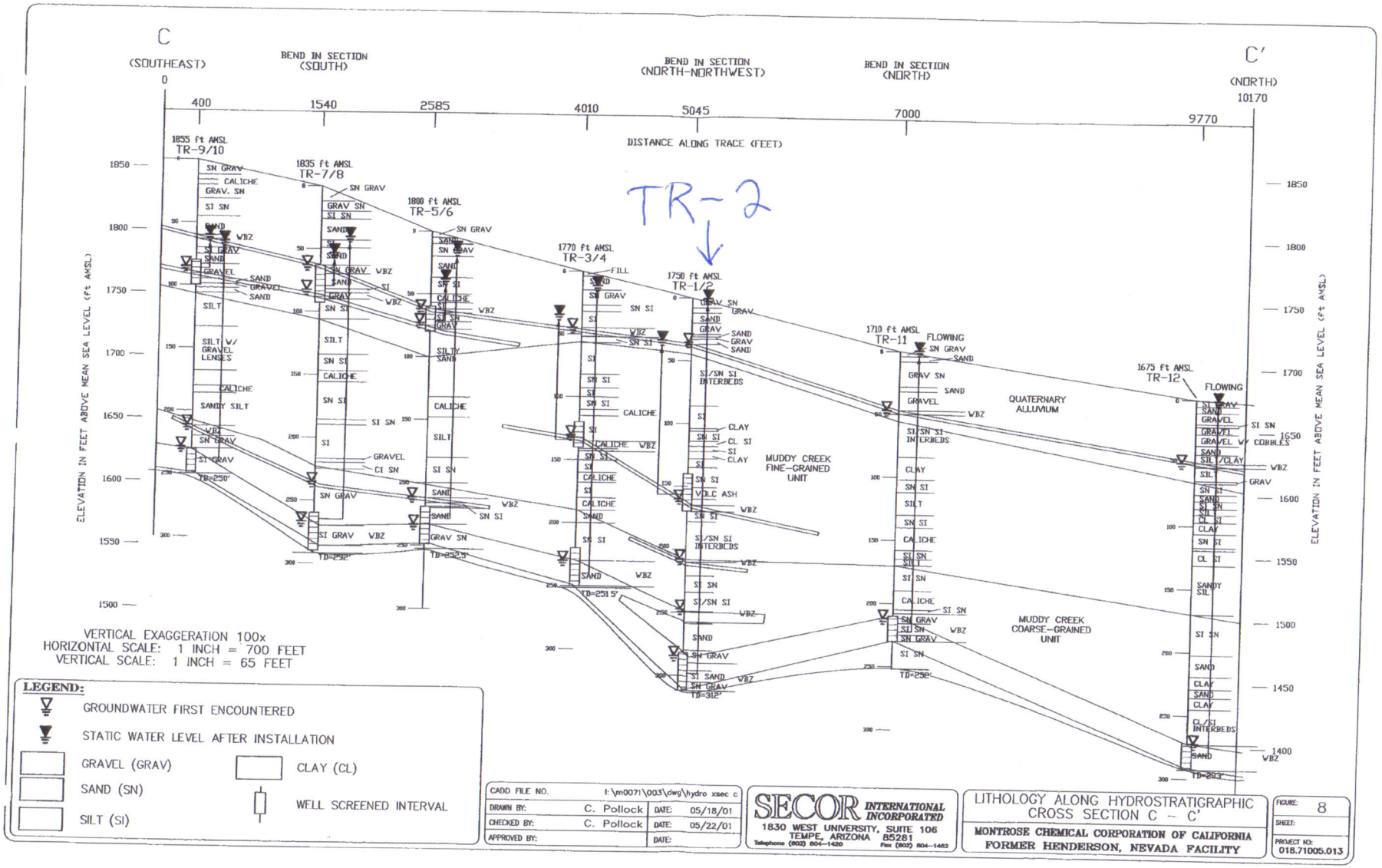
DRILLING METHOD: AIRCH

DRILLED BY: BEYLIK

LOGGED BY: E. KRISH

EXISTING GRADE ELEVATION (FT AMSL):

LOCATION OR GRID COORDINATES:



CADD FILE NO.	F:\m0071\003\dwg\hydro xsec c		
DRAWN BY:	C. Pollock	DATE:	05/18/01
CHECKED BY:	C. Pollock	DATE:	05/22/01
APPROVED BY:		DATE:	

SECOR INTERNATIONAL INCORPORATED
1830 WEST UNIVERSITY, SUITE 106
TEMPE, ARIZONA 85281
Telephone (602) 804-1420 Fax (602) 804-1462

LITHOLOGY ALONG HYDROSTRATIGRAPHIC CROSS SECTION C – C'

MONTROSE CHEMICAL CORPORATION OF CALIFORNIA
FORMER HENDERSON, NEVADA FACILITY

FIGURE: 8
SHEET:
PROJECT NO: 018.71005.013

Log of Boring No. BW-1A

BMI Landfill CAMU Investigation

Henderson, Nevada

Drilling Method: Rotary Sonic
Drilling Equipment: GEFCO
Drilling Contractor: Water Development Corporation
Driller: Mike Wilkerson

Sample Type: 2" Split Spoon
Sample Interval Continuous

Logged By: A. Norris
Date Started: 03/8/05
Date Completed: 03/9/05

Northing: 26719802.786
Easting: 826112.390
TOC Elevation (ft. msl): 1752.838
Borehole Total Depth: 60 ft bgs
Borehole Diameter: 7 5/8" O.D. Casing / 7 7/8" O.D. Bit
Well ID: GW-AA-BW-01A
Depth to Water (ft. bgs): 50' bgs ▽

Basic Remediation COMPANY

Monitoring Well Construction

Type of Surface Seal:	Bentonite-Grout	**Screen Slot Size:**	0.010 in
Blank Casing Type/Size:	4" Sch 80 PVC	**Top of Screen (ft. bgs):**	33 ft bgs
Screen Type/Size:	4" Sch 80 PVC	**Bottom of Screen (ft. bgs):**	53 ft bgs
Transition Sand Type:	N/A	**Type of Sand Pack:**	#2/12

Depth Elevation (MSLD)	Sample Type	Sample Interval	Sample Recovery (feet)	Sample Retained for Analysis	PID	Lithology	Soil Description	Well Construction
0					0.0		SM: Silty sand with gravel, brwon (7.5YR5/3), dry to moist, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 3" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand and 20% silt. (Sample BRC-BW-01A-0 collected)	Locking monument well box with concrete apron and ballards
					0.0		Silty sand with gravel, brown (7.5YR5/3), dry to moist, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand, 20% silt.	
					0.0			Cement Bentonite Grout
					0.0		Silty sand with gravel, pale brown (10YR6/3), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long), locally partly indurated to weakly cemented. Approximatly 20% gravel, 10% coarse sand, 10% medium sand, 35% fine sand and 25% silt.	
-10					0.0		Silty sand with gravel, brown (7.5YR5/4), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 10% coarse sand 15% medium sand, 40% fine sand and 20% silt.	4" Blank PVC Riser Pipe
					0.0		Silty sand with gravel, dark yellowish brown (10YR4/4), moist, subangular to subrounded sand, nonplastic to very low plasticity silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 10% coarse sand, 15% medium sand, 40% fine sand and 20% silt.	
					0.0		Silty sand with gravel, dark yellowish brown (10YR4/4), dry to moist, subangular to subrounded sand, nonplastic to very low plasticity silt, subangular to subrounded fine to coarse volcanic gravel (up to 1" long), locally partly indurated to weakly cemented. Approximately 15% gravel, 10% coarse sand, 10% medium sand, 45% fien sand and 20% silt. (Sample BRC-BW-01A-18 collected)	
-20					0.0		Silty sand with gravel, yellowish brwon (10YR5/4), dry, angular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 3" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand, 15% medium sand, 30% fine sand and 20% silt.	
					0.0		Silty sand with gravel, yellowish brown (10YR5/4), dry, angular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 1.5" long), locally partly indurated to weakly cemented. Approximately 20% gravel, 15% coarse sand 15% medium sand, 30% fine sand and 20% silt.	
							Silty sand with gravel, yellowish brown (10YR6/4), dry, subangular to subrounded sand, nonplastic silt, subangular to subrounded fine to coarse volcanic gravel (up to 2" long), locally	Bentonite seal

BMI Landfill CAMU Investigation

Henderson, Nevada

Basic Remediation COMPANY

Log of Boring No. BW-1A