

ATTACHMENT 5-1 I
FIELD INVESTIGATION ACTIVITIES 2006

TABLE 5-1 I
BORING/MONITOR WELL INVENTORY
CJI 2006 Investigations
Waste Control Specialists LLC

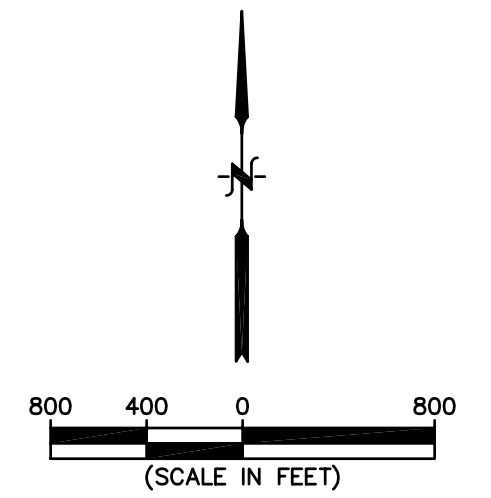
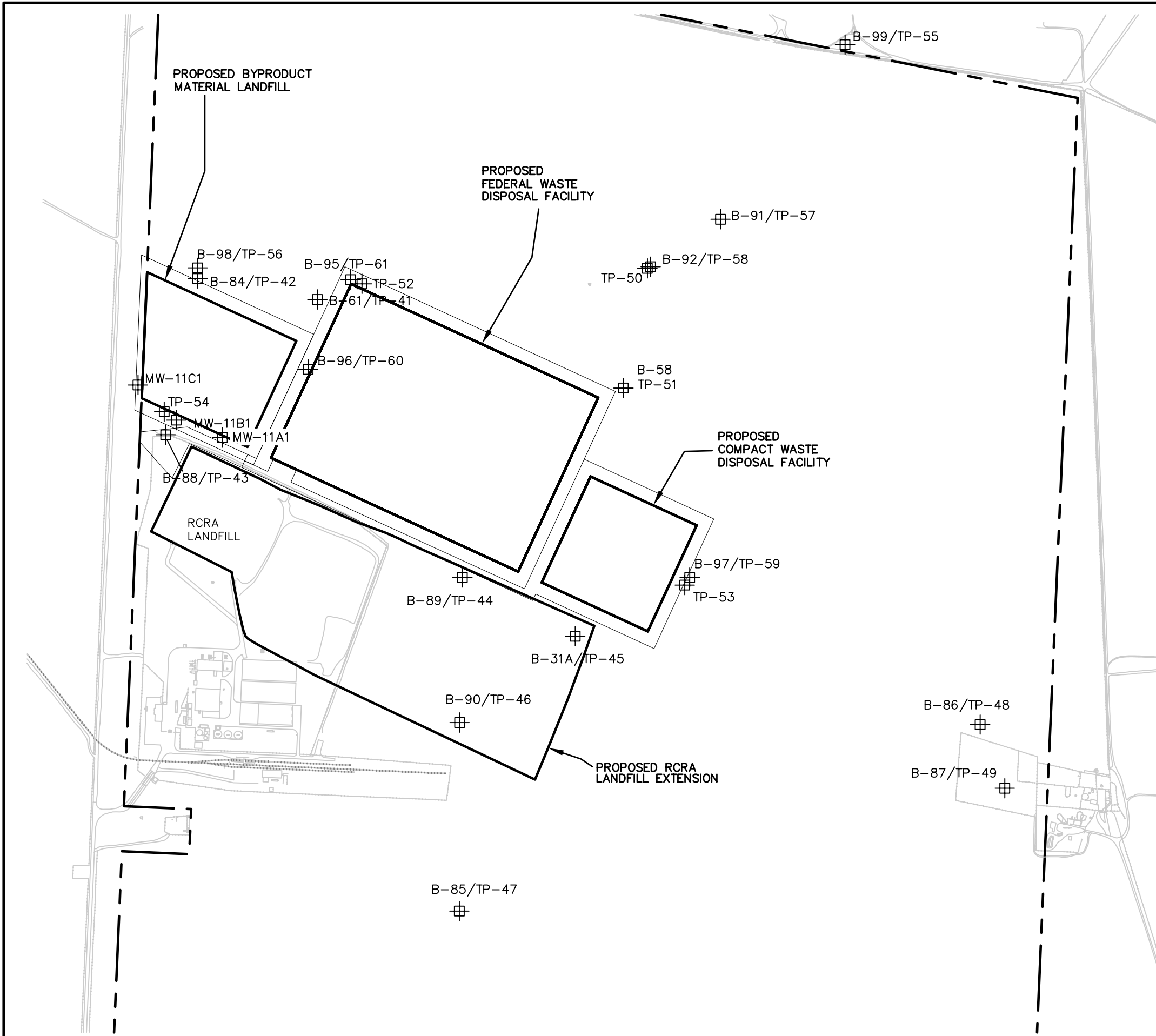
Boring Name	Associated Monitor Wells	Total Boring Depth (ft bgs)	Screened Interval Top (ft bgs)	Screened Interval Bottom (ft bgs)	Adjusted Top of Casing (ft amsl)	Adjusted Ground Elevation (ft amsl)	Adjusted Northing (TX State Plane, Zone 4202, ft, NAD83)	Adjusted Easting (TX State Plane, Zone 4202, ft, NAD83)
B-19A	MW-11B1/TP-54	264	NA	NA	NA	3470.79	6874642.9299	561220.7265
B-11A	MW-11A1	275	NA	NA	NA	3471.62	6874665.5490	561587.3693
B-11C	MW-11C1	283	NA	NA	NA	3471.14	6875026.8230	560996.1198
B-31A	TP-45	167	NA	NA	NA	3453.58	6873096.3115	564368.6481
B-58	TP-51	208	NA	NA	NA	3485.01	6875046.3175	564658.1128
B-61	TP-41	205	NA	NA	NA	3482.92	6875749.3941	562413.4253
B-84	TP-42	39	NA	NA	NA	3478.70	6875850.3766	561457.3686
B-85	TP-47	66	NA	NA	NA	3433.32	6870974.2359	563474.0964
B-86	TP-48	49	NA	NA	NA	3474.78	6872411.8124	567489.0349
B-87	TP-49	45	NA	NA	NA	3474.25	6871921.0354	567678.9741
B-88	TP-43	24	NA	NA	NA	3471.30	6874646.2440	561210.6455
B-89	TP-44	12	NA	NA	NA	3455.57	6873546.6476	563497.5524
B-90	TP-46	32	NA	NA	NA	3437.31	6872427.4861	563476.1809
B-91	TP-57	223	NA	NA	NA	3476.59	6876280.9300	565418.4400
B-92	TP-50/58	227	NA	NA	NA	3484.78	6875928.9500	564923.7700
B-93	NA	209	NA	NA	NA	NS	NS	NS
B-94	NA	210	NA	NA	NA	NS	NS	NS
B-95	TP-52/61	216	NA	NA	NA	3486.04	6876003.9300	562597.0500
B-96	TP-60	203	NA	NA	NA	3478.62	6875293.9800	562196.9000
B-97	TP-53/59	198	NA	NA	NA	3471.05	6873542.3900	565259.3200
B-98	TP-56	213	NA	NA	NA	3478.41	6875845.4500	561466.7400
B-99	TP-55	258	NA	NA	NA	3489.48	6877644.6000	566480.1000

NA: Not Applicable

NS: Not Surveyed, Not Logged



TABLE 5-1 I
BORING/MONITOR WELL INVENTORY
CJI 2006 Investigations
Waste Control Specialists LLC

Monitor Well	Reference Boring	Total Well Depth (ft bgs)	Screened Interval Top (ft bgs)	Screened Interval Bottom (ft bgs)	Adjusted Top of Casing (ft amsl)	Adjusted Ground Elevation (ft amsl)	Adjusted Northing (TX State Plane, Zone 4202, ft, NAD83)	Adjusted Easting (TX State Plane, Zone 4202, ft, NAD83)
TP-41	B-61	41.5	31.5	41.5	3485.54	3482.46	6875682.5760	562371.0063
TP-42	B-84	38.0	28.0	38.0	3481.66	3478.70	6875850.3766	561457.3686
TP-43	B-88	24.0	14.0	24.0	3474.28	3471.30	6874646.2440	561210.6455
TP-44	B-89	12.0	7.0	12.0	3458.14	3455.57	6873546.6476	563497.5524
TP-45	B-31A	17.0	7.0	17.0	3456.35	3453.35	6873096.2449	564321.5367
TP-46	B-90	31.0	21.0	31.0	3440.50	3437.31	6872427.4861	563476.1809
TP-47	B-85	65.0	55.0	65.0	3436.41	3433.32	6870974.2359	563474.0964
TP-48	B-86	47.0	37.0	47.0	3477.70	3474.78	6872411.8124	567489.0349
TP-49	B-87	45.0	35.0	45.0	3477.41	3474.25	6871921.0354	567678.9741
TP-50	B-92	171.5	161.5	171.5	3487.94	3484.78	6875928.9500	564923.7700
TP-51	B-58	157.5	147.5	157.5	3488.60	3485.46	6875063.5600	564638.1700
TP-52	B-95	143.0	133.0	143.0	3489.09	3486.04	6876003.9300	562597.0500
TP-53	B-97	127.0	117.0	127.0	3474.17	3471.05	6873542.3900	565259.3200
TP-54	B-19A	129.0	114.0	129.0	3474.00	3471.20	6874782.5700	561202.5300
TP-55	B-99	210.5	200.5	210.5	3492.72	3489.48	6877644.6000	566480.1000
TP-56	B-98	183.5	173.5	183.5	3481.30	3478.41	6875845.4500	561466.7400
TP-57	B-91	218.0	208.0	218.0	3479.74	3476.59	6876280.9300	565418.4400
TP-58	B-92	224.0	214.0	224.0	3487.79	3484.66	6875941.2500	564948.6700
TP-59	B-97	192.0	182.0	192.0	3474.43	3471.29	6873568.3000	565274.7200
TP-60	B-96	200.0	185.0	200.0	3481.89	3478.62	6875293.9800	562196.9000
TP-61	B-95	212.0	202.0	212.0	3489.05	3486.02	6876001.5400	562605.5700
MW-11A1	B-11A	170.0	155.0	170.0	3474.53	3471.63	6874647.0600	561590.7500
MW-11B1	B-19A	160.0	150.0	160.0	3473.65	3470.73	6874782.4100	561215.1400
MW-11C1	B-11C	175.0	155.0	175.0	3473.97	3471.43	6875031.0200	560978.6900



LEGEND

- - - - -	WCS FACILITIES AREA BOUNDARY
⊕	INVESTIGATION BORINGS/PIEZOMETERS

1	3/07	UPDATED FACILITY BOUNDARIES, ADDED ADDITIONAL BORING/PIEZOMETERS, CHANGED FIGURE NUMBER	RB	GEG
REV.	DATE	DESCRIPTION	DR BY	APP BY
 INTERA INCORPORATED 9111A Research Blvd. Austin, TX 78758				
 COOK-JOYCE INC. ENGINEERING AND CONSULTING 812 WEST ELEVENTH 512-474-9097 AUSTIN, TEXAS 78701				
PROJECT:				
WASTE CONTROL SPECIALISTS LLC ANDREWS COUNTY, TEXAS				
SHEET TITLE:				
2006 INVESTIGATIONS				
DES BY	DHG	DHG	SCALE: SEE BAR SCALE	
DR BY	SDB	SDB	PROJECT NO. 03047.05	
CHK BY	EEH	EEH	CJI NO. 03047306R12a	
APP BY	DHG	DHG	SHEET 1 OF 1 SHEETS	
DATE ISSUED: 04-13-2006			FIGURE NO.	
FILE: WCS_Fig5-11.dwg			5-11	

PROJECT: Waste Control Specialists LLC

WELL / BORING NO. TP-41/B-61

LOCATION: Andrews County, TX

DATE: 9/9/2005

NORTHING: 6875749.3941

DRILLING COMPANY: Groundwater Monitoring, Inc

EASTING: 562413.4253

DRILLING EQUIPMENT: CME 75

ELEVATION: 3482.9'

DRILLING METHOD: HSA and Mud Core

TOTAL DEPTH: 205.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, soft, dry, brown.					3480	<p>Concrete</p> <p>Bentonite Chips</p> <p>2-inch Diameter PVC</p> <p>Sand</p> <p>Slotted PVC</p>
10		GW	CALICHE, hard, dry, white/gray/tan. Silty Gravel, chert, soft, subangular, dry, reddish tan					3475	
15								3470	
20								3465	
25			CALICHE, hard, dry, white/tan					3460	
30			Similar to above (STA), not as hard.					3455	
35		GW	Sandy GRAVEL, orange sand matrix, various colored chert gravel <1" diameter, dry.	Hand				3450	
40			CLAY, stiff, dry, gray. STA, maroon at 41'					3445	
45								3440	
50								3435	
55								3430	
60								3425	
65			CLAYSTONE, hard, maroon					3420	
70								3415	
75								3410	
80		CL						3405	
85				Hand				3400	
90								3395	
95								3390	
100								3385	
105								3380	
110			STA with gray and orange mottling.					3375	
115								3370	
120			SILTSTONE, hard, dry, gray		95			3365	
125								3360	
130					32			3355	
135								3350	
140			CLAYSTONE, hard, dry, maroon with gray mottling		100			3345	
145		CL						3340	
150					100			3335	
155								3330	
160			SILTSTONE, hard, dry, gray. CLAYSTONE, hard, dry, maroon with gray mottling		100			3325	
165								3320	
170					100			3315	
175		CL						3310	
180					100			3305	
185								3300	
190			SILTSTONE, hard, dry, gray.		50			3295	
195								3290	
200					100			3285	
205		CL	CLAYSTONE, hard, dry, maroon, with gray mottling. TD = 205'					3280	
210								3275	
								3270	

C:J BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ C:J LOG WITH WELL.GDT 1/11/07

CJ COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
 AUSTIN, TEXAS 78701-2000
 (512) 474-9057 FAX (512) 474-8463

This boring log should not be used separately from the original report.

PROJECT NO. 03047.03

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-42/B-84

LOCATION: Andrews County, TX

DATE: 2/21/2006

NORTHING: 6875850 3766

DRILLING COMPANY: Talon LPE

EASTING: 561457 3686

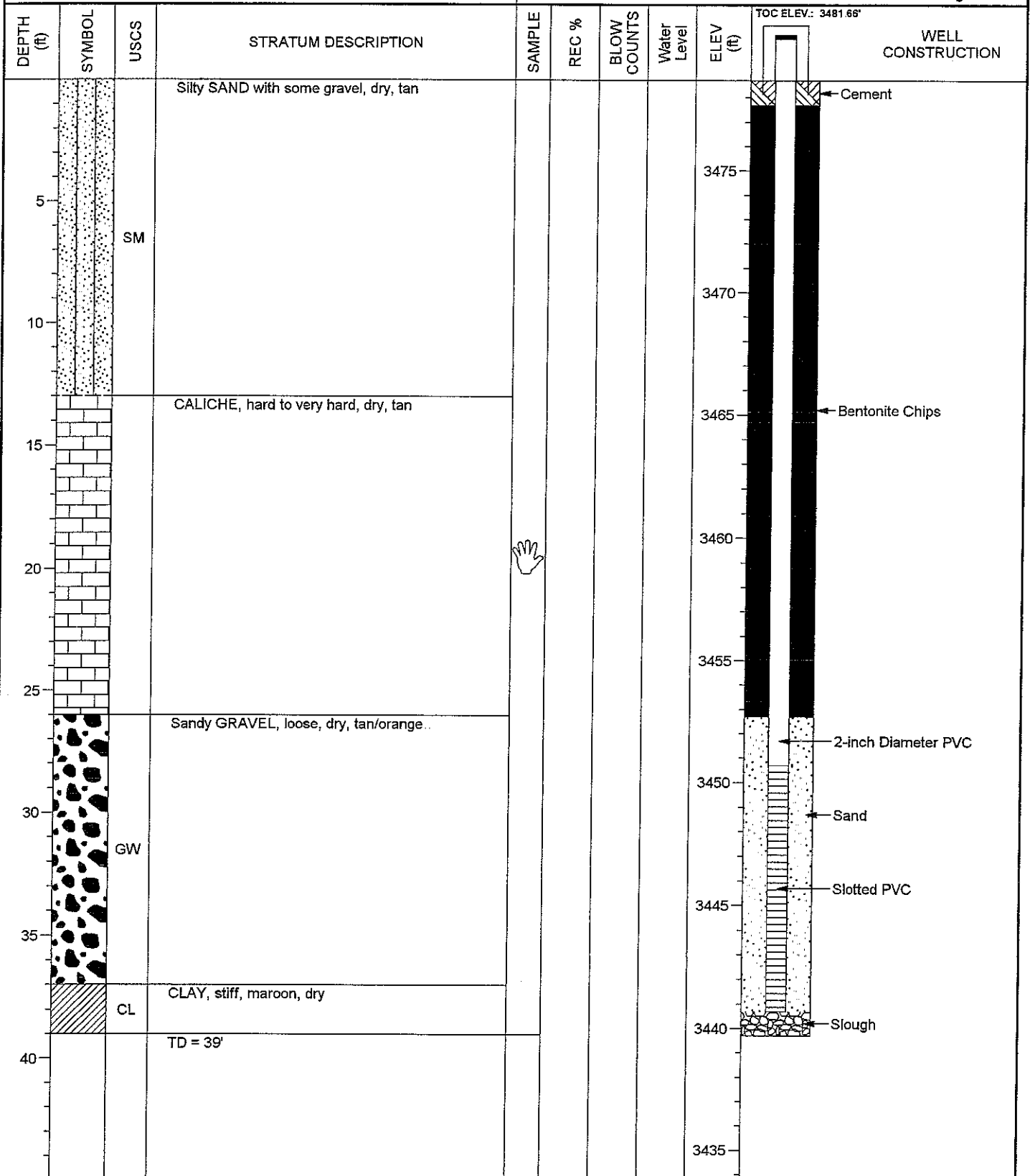
DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3478.7'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 39.0'

LOGGED BY: Ed Hughes



CJL BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ CJL LOG WITH WELL.GDT 1/3/07

PROJECT: waste Control Specialists LLC

WELL / BORING NO:

TP-43/B-88

LOCATION: Andrews County, TX

DATE: 2/21/2006

NORTHING: 6874646.244

DRILLING COMPANY: Talon LPE

EASTING: 561210.6455

DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3471.3'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 24.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
0 - 1.5	[Dotted Pattern]	SW	Gravelly SAND, loose, dry, white.					3470	Cement
1.5 - 14.5	[Brick Pattern]		CALICHE, hard, dry, calcareous cementation, white and gray.					3465	Bentonite Chips
14.5 - 21.5	[Dotted Pattern]	SW	Gravelly SAND, dry, loosely cemented.					3460	2-inch Diameter PVC
21.5 - 24.0	[Diagonal Lines]	CH	Silty CLAY, firm, dry, maroon/purple					3455	Sand
24.0			TD = 24'					3450	Slotted PVC

CJ1 BORING LOG WITH WELL_WCS 03047.03 2006 OAG.GPJ LOG A EWRIND4.GDT 3/27/06

CJ **COOK-JOYCE INC.**
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PROJECT NO. 03047.03

PROJECT: Waste Control Specialists LLC

WELL / BORING NO.:

TP-44/B-89

LOCATION: Andrews County, TX

DATE: 2/21/2006

NORTHING: 6873546.6476

DRILLING COMPANY: Talon LPE

EASTING: 563497.5524

DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3455.6'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 12.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
0 - 2.5	[Symbol: Dotted pattern]	ML	Sandy SILT, dry, white					3455	Cement
2.5 - 9.5	[Symbol: Brick pattern]		CALICHE, hard, dry, well cemented, calcareous sand matrix, white to pink.						Bentonite Chips
9.5 - 10.5	[Symbol: Dotted pattern]	SW	Gravelly SAND, loose, dry, tan/orange.					3450	2-inch Diameter PVC
10.5 - 12.0	[Symbol: Diagonal lines]	CH	Silty CLAY, firm, dry, maroon with gray and orange mottling					3445	Slotted PVC
			TD = 12'						

C:\J BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ LOG A EWIN04.GDT 3/27/06

PROJECT: Waste Control Specialists LLC

LOCATION: Andrews County, TX

WELL / BORING NO:

TP-45/B-31A

DATE: 8/25/2005

DRILLING COMPANY: Groundwater Monitoring, Inc.

DRILLING EQUIPMENT: CME 75

DRILLING METHOD: HSA and Mud Core

NORTHING: 6873096 3115

EASTING: 564368.6481

ELEVATION: 3453.6'

TOTAL DEPTH: 167.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
0-5	SW		SAND, topsoil, brown. CALICHE, hard, dry, white/tan.					3450	
5-10	GW		Sandy GRAVEL, chert gravel, dry					3445	
10-15			CLAY, firm, dry, maroon					3440	
15-80		CH						3435	
80-85			Similar to above (STA) with orange staining and gray veining with slickensides.		100			3430	
85-95			SILTSTONE, hard, dry, gray with maroon and orange staining. Dark black oxidation staining present with cross-bedding and lensical features		100			3425	
95-100					100			3420	
100-125		CL	CLAYSTONE, hard, dry, maroon with gray mottling		55			3415	
125-126			STA with gray interbedding from 125'-126' and 127'-129'					3410	
126-127								3405	
127-129								3400	
129-150			Gravelly SILTSTONE, hard, dry, gray/blue, gravel is generally less than 1/4" diameter.		92			3395	
150-165					0			3390	
165-166	CL		CLAYSTONE, hard, dry, maroon. TD = 167'					3385	
166-170								3380	

CJL BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ CJL LOG WITH WELL.GDT 1/11/07



PROJECT NO. 03047.03

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PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-46/B-90

LOCATION: Andrews County, TX

DATE: 2/21/2005

NORTHING: 6872427.4861

DRILLING COMPANY: Talon LPE

EASTING: 563476.1809

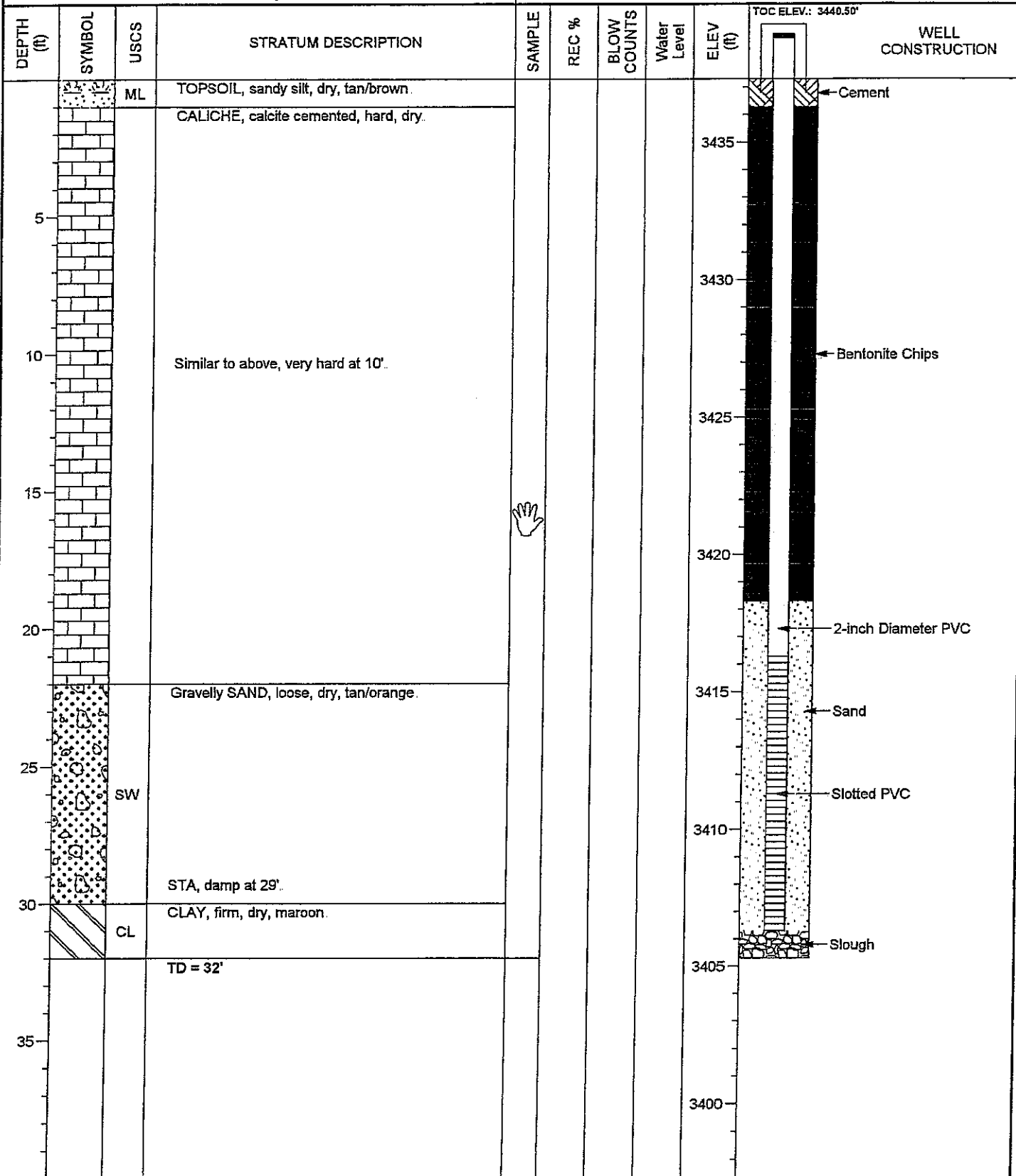
DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3437.3'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 32.0'

LOGGED BY: Ed Hughes



CJL BORING LOG WITH WELL WCS 03047.03 2005 DAG.GPJ LOG A EWMN04.GDT 3/27/06

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-47/B-85

LOCATION: Andrews County, TX

DATE: 2/21/2006

NORTHING: 6870974.2359

DRILLING COMPANY: Talon LPE

EASTING: 563474.0964

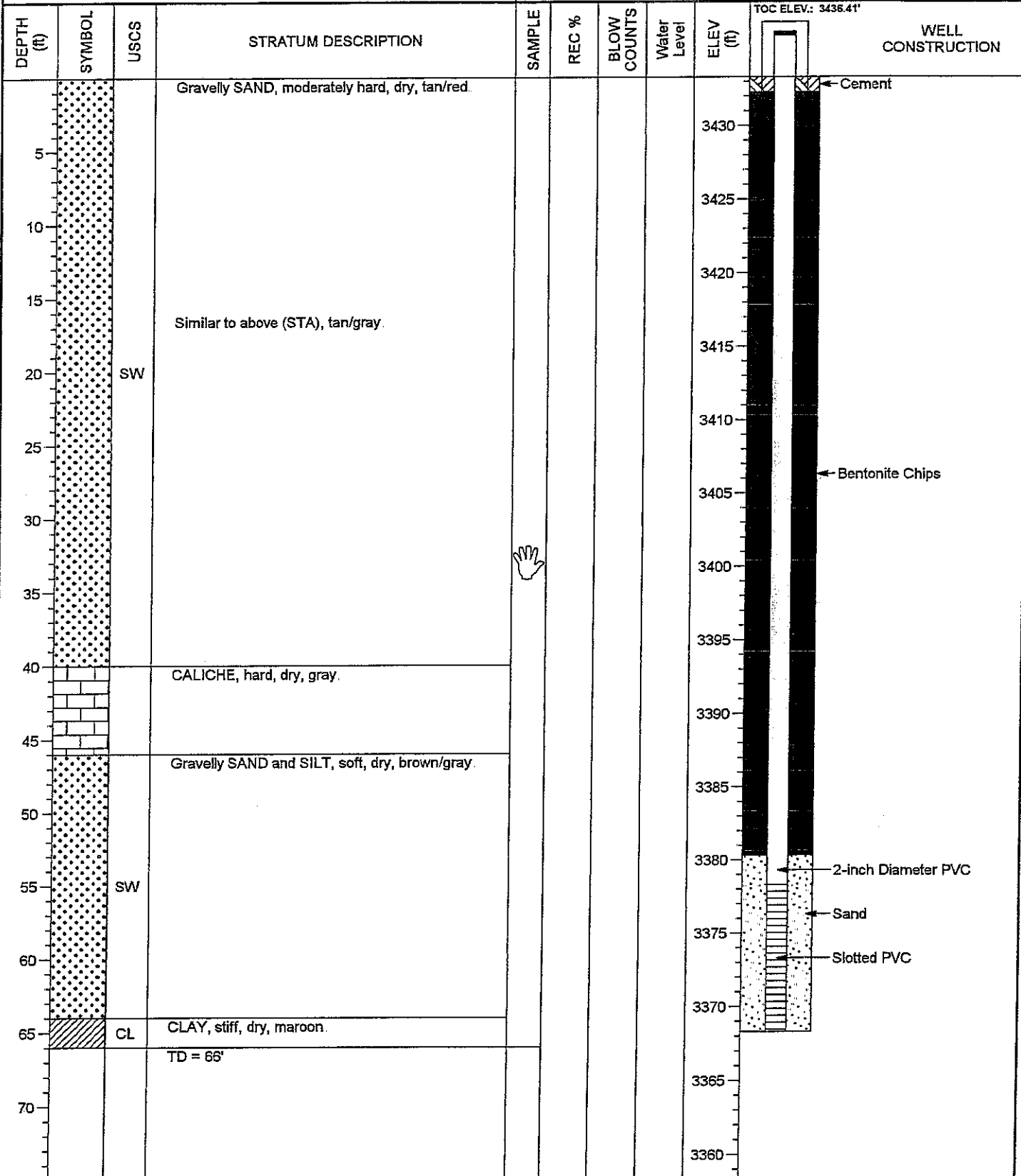
DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3433.3'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 66.0'

LOGGED BY: Ed Hughes



CJL BORING LOG WITH WELL. WCS 03047.03 2006 OAG.GPJ LOG A EWNND4.GDT 3/27/06

COOK-JOYCE INC.
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PROJECT NO. 03047.03

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-48/B-86

LOCATION: Andrews County, TX

DATE: 2/22/2006

NORTHING: 6872411.8124

DRILLING COMPANY: Talon LPE

EASTING: 667489.0349

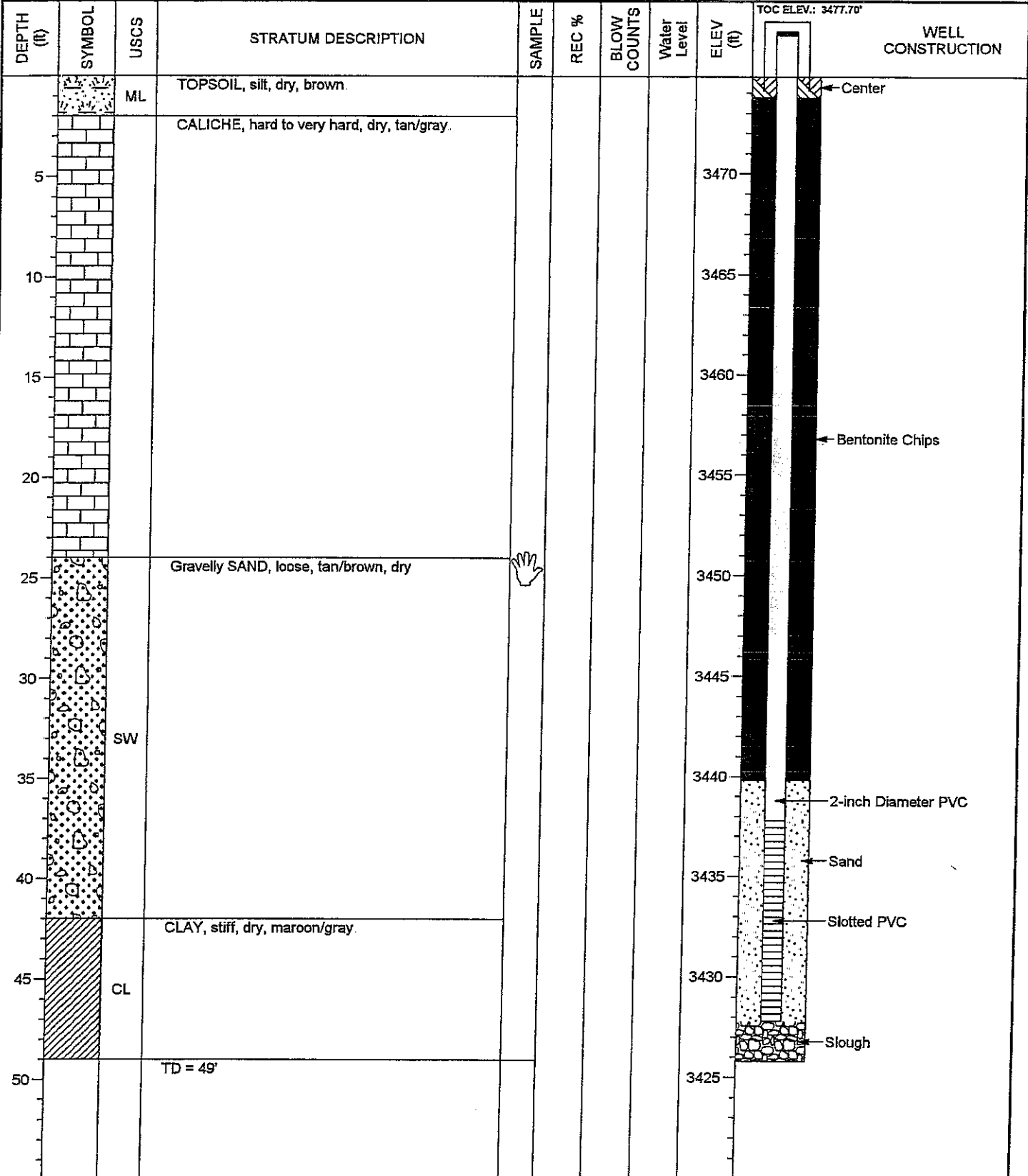
DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3474.8'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 49.0'

LOGGED BY: Ed Hughes



C:\J BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ LOG A EMINN04.GDT 3/27/06

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-49/B-87

LOCATION: Andrews County, TX

DATE: 2/22/2006

NORTHING: 6871921.0354

DRILLING COMPANY: Talon LPE

EASTING: 567678.9741

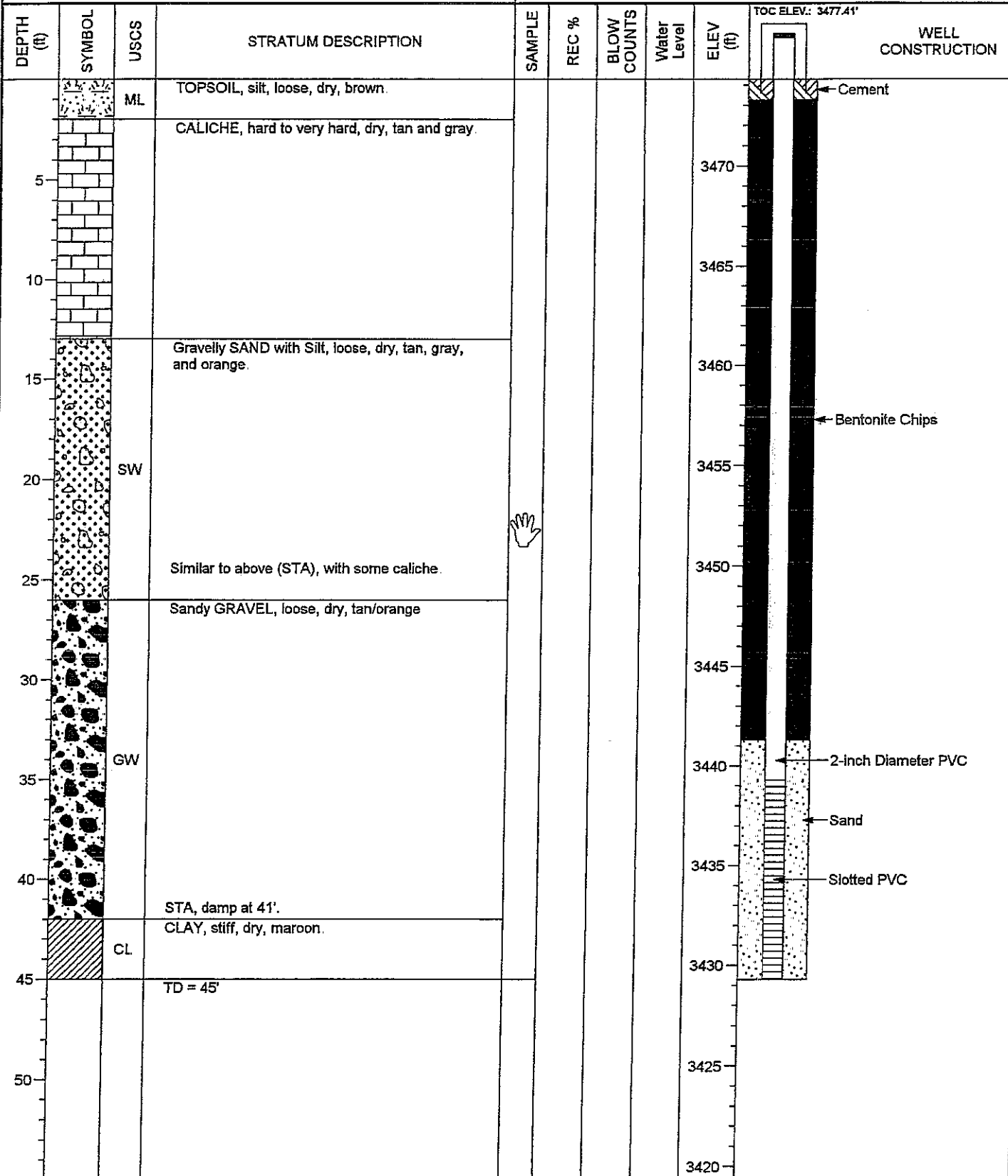
DRILLING EQUIPMENT: Reich Drill T-650 W II

ELEVATION: 3474.3'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 45.0'

LOGGED BY: Ed Hughes



CJL BORING LOG WITH WELL WCS 03047.03 2006 OAG.GPJ LOG A EWMIND4.GDT 3/27/06

CJ **COOK-JOYCE INC.**
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PROJECT NO. 03047.03

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-50/B-92

LOCATION: Andrews County, TX

DATE: 10/4/2006

NORTHING: 6875928.95

DRILLING COMPANY: Talon LPE

EASTING: 564923.77

DRILLING EQUIPMENT: Reich Drill T-650-WII

ELEVATION: 3484.8'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 227.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, soft, dry, brown.					3480	Concrete
10		SW	CALICHE, hard, dry, white.					3475	Cement/Bentonite Slurry
15			Gravelly SAND, moderately hard, dry, orange sand matrix, various colored chert gravel.					3470	
20			CALICHE, very hard, dry, white/gray.					3465	
25								3460	
30								3455	
35								3450	
40								3445	
45		SW	Gravelly SAND, loose, dry, orange sand with various colored chert <1" diameter. Damp at 46'.					3440	
50								3435	
55								3430	
60			CLAYSTONE, dry, maroon.					3425	
65								3420	
70								3415	
75								3410	
80								3405	
85								3400	Bentonite Chips
90								3395	
95		CL						3390	
100								3385	
105			Siltstone lens from 101' to 102'.					3380	
110								3375	
115								3370	
120								3365	
125								3360	
130			Interbedded Siltstone and Claystone, moderately hard, dry, maroon/gray					3355	
135								3350	
140		CL	CLAYSTONE, dry, maroon.					3345	
145								3340	
150								3335	
155								3330	2-inch Diameter PVC
160			SILTSTONE, hard, dry, gray.					3325	
165								3320	Slotted PVC
170								3315	Sand
175			CLAYSTONE, dry, maroon.					3310	Bentonite Chips
180								3305	
185								3300	
190		CL						3295	
195								3290	
200								3285	
205			SILTSTONE, very hard, dry, gray.					3280	
210								3275	
215			SAND, loose, moist, dark brown.					3270	
220			Saturated at 216'					3265	
225		CL	CLAYSTONE, dry, maroon.					3260	
230			TD = 227'					3255	

CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
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 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

PROJECT NO. 03047.05

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-51/B-58

LOCATION: Andrews County, TX

DATE: 9/22/2005

NORTHING: 6875063.56

DRILLING COMPANY: Groundwater Monitoring Inc.

EASTING: 564638.17

DRILLING EQUIPMENT: CME 75

ELEVATION: 3485.5'

DRILLING METHOD: Air Rotary and Mud Core

TOTAL DEPTH: 208.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	Sandy SILT, topsoil, soft, dry, brown.					3480	Concrete
10			CALICHE, hard, dry, white/gray.					3475	Cement/Bentonite Slurry
15		SW	Gravelly SAND, very fine grained, sand is orange, gravel is various colored chert, loose from 8' to 18.5', dry					3470	
20			Similar to above (STA), moderately hard at 18.5'					3465	
25			CALICHE, very hard, dry, white/gray.					3460	
30								3455	
35								3450	
40								3445	
45		SW	Gravelly SAND, orange sand, chert gravel various colors, <1" diameter, hard, dry.					3440	
50								3435	TP-51 installed by Talon LPE on 10-8-06.
55								3430	
60			CLAY, stiff, dry, maroon and gray.					3425	
65					3			3420	
70					0			3415	
75			STA, with orange staining and slickensides at 72'.		100			3410	Bentonite Chips
80								3405	
85					100			3400	
90								3395	
95		CL			100			3390	
100								3385	
105					100			3380	
110								3375	
115					100			3370	
120								3365	
125					100			3360	
130								3355	
135					100			3350	
140			SILTSTONE, hard, dry, gray, some cross bedding.		100			3345	2-inch Diameter PVC
145								3340	
150								3335	Slotted PVC
155					100			3330	
160								3325	Sand
165			CLAYSTONE, stiff, dry, maroon with gray mottling, slickensides present.		100			3320	
170			STA, with siltstone interbedded from 167' to 168.5'.					3315	
175		CL			60			3310	
180			CLAYSTONE, hard, dry, maroon with gray mottling at 180'.					3305	
185					91			3300	
190								3295	
195					100			3290	
200			SILTSTONE, hard, dry, gray					3285	
205		CL	CLAYSTONE, stiff, dry, maroon with gray mottling.		73			3280	
210			TD = 208'					3275	

CJI BORING LOG WITH WELL WCS 03047.05.GPJ CJI LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

This boring log should not be used separately from the original report.

PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-52/B-95

LOCATION: Andrews County, TX

DATE: 10/7/2006

NORTHING: 6876003.93

DRILLING COMPANY: Talon LPE

EASTING: 562597.05

DRILLING EQUIPMENT: Reich Drill T-650-WII

ELEVATION: 3486.0'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 216.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, soft, dry, brown.					3480	Concrete
10		SW	Silty SAND with Gravel, dry, chert gravel					3475	Cement/Bentonite Slurry
15								3470	
20			CALICHE, very hard, dry, tan/white					3465	
25								3460	
30								3455	
35								3450	
40		SW	Gravelly SAND, loose, dry, orange sand with various colored chert					3445	
45								3440	
50			CLAYSTONE, dry, maroon					3435	
55								3430	
60								3425	
65								3420	Bentonite Chips
70								3415	
75								3410	
80								3405	
85		CL	Interbedded Siltstone and Claystone from 85'-89'					3400	
90								3395	
95								3390	
100								3385	
105								3380	
110								3375	
115								3370	
120								3365	
125			SILTSTONE, hard, dry, gray					3360	2-inch Diameter PVC
130								3355	
135								3350	Slotted PVC
140								3345	Sand
145			CLAYSTONE, dry, maroon					3340	
150								3335	
155								3330	
160								3325	
165								3320	
170		CL						3315	
175								3310	
180								3305	
185								3300	
190								3295	
195								3290	
200			Interbedded Siltstone and Claystone from 197' to 202'					3285	
205			SILTSTONE, hard, gray					3280	
210			Moist at 210'					3275	
215		CL	CLAYSTONE, gray clay from 212'-213', then maroon.					3270	
220			TD = 216'					3265	

CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/1/007



This boring log should not be used separately from the original report

PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC

LOCATION: Andrews County, TX

WELL / BORING NO:

TP-53/B-97

DATE: 10/5/2006

DRILLING COMPANY: Talon LPE

NORTHING: 6873542.39

EASTING: 565259.32

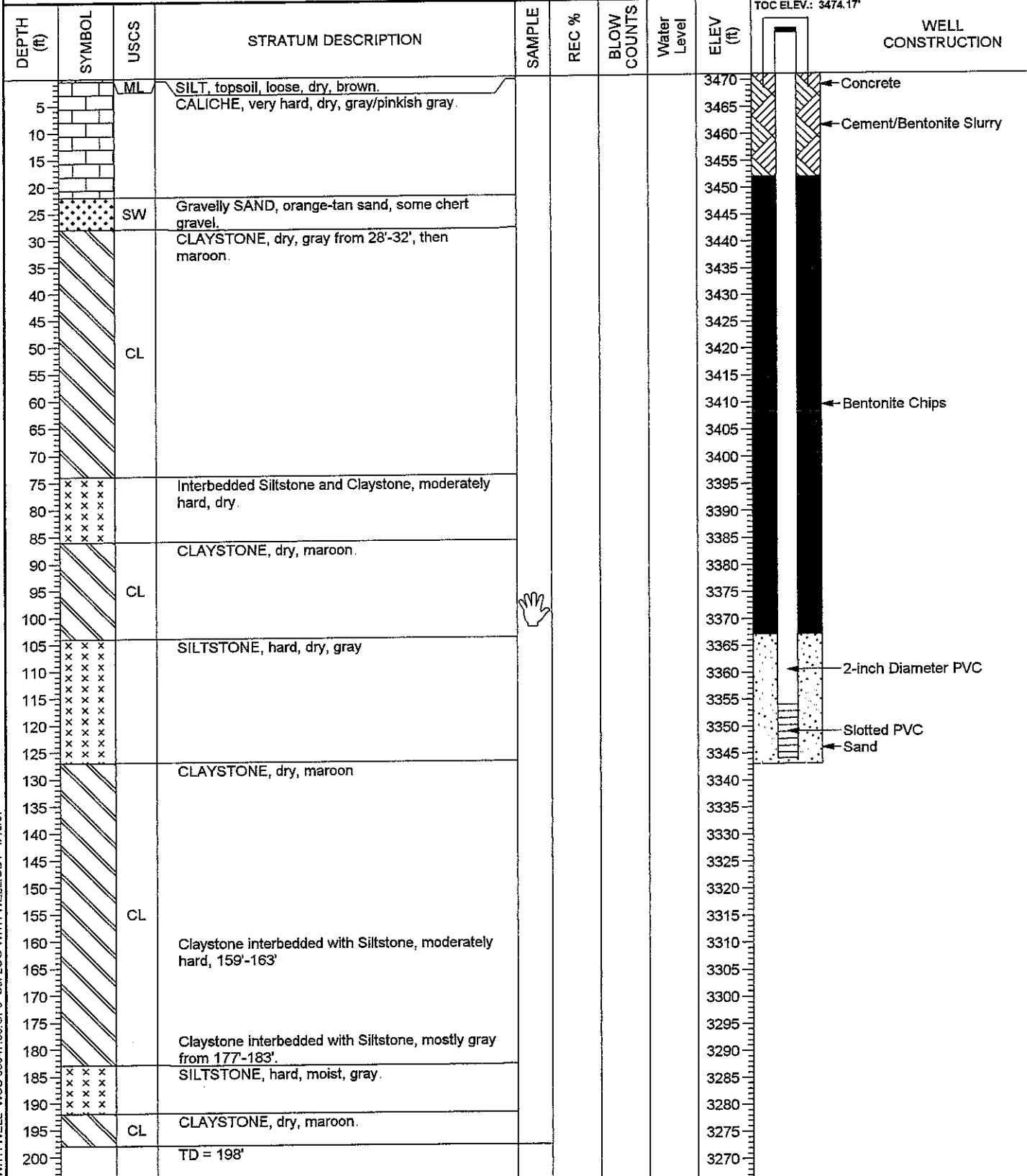
DRILLING EQUIPMENT: Reich Drill T-650-WII

ELEVATION: 3471.1'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 198.0'

LOGGED BY: Ed Hughes



CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

This boring log should not be used separately from the original report

PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC

LOCATION: Andrews County, TX

WELL / BORING NO:

TP-54/B-19A

DATE: 12/22/2003

DRILLING COMPANY: Total Support Services

DRILLING EQUIPMENT: Mobile B-51

DRILLING METHOD: Mud core

NORTHING: 6874782.57

EASTING: 561202.53

ELEVATION: 3471.2'

TOTAL DEPTH: 264.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		SW	Gravelly SAND, loose, dry, white. CALICHE, hard, dry, calcareous cementation, white and gray					3470	Concrete
10			Similar to above with more quartz					3465	Cement/Bentonite Slurry
15		SW	Gravelly SANDSTONE, dry, loosely cemented					3460	
20			Silty CLAYSTONE, hard, dry, maroon/purple.					3455	
25		CH			0			3450	
30			SANDSTONE, hard, well cemented, dry, tan with black and gray stains.		65			3445	
35			Similar to above with less cementation.		100			3440	
40			No recovery from 40' to 50', sandstone/claystone contact unknown.					3435	
45					0			3430	
50		CH	Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling		90			3425	
55			SILTSTONE, hard, dry, light gray and maroon.					3420	TP-54 installed by Talon LPE on 9-26-06.
60			Silty CLAYSTONE, hard, dry, maroon/purple with gray and yellow mottling.		100			3415	Bentonite Chips
65					100			3410	
70		CH			100			3405	
75					100			3400	
80					100			3395	
85					100			3390	
90					100			3385	
95		CL	Sandy CLAYSTONE, hard, dry, maroon with gray mottling.		100			3380	
100		CL	SANDSTONE, hard, dry, well cemented, gray with yellow and black grains.		100			3375	
105			Sandy Silty CLAYSTONE, hard, dry, gray.		100			3370	
110		CH	SANDSTONE, hard, dry, light gray. Sandy Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling.		70			3365	2-inch Diameter PVC
115								3360	
120			SANDSTONE, hard, dry, light gray with black crystals.		0			3355	Slotted PVC
125			No Recovery from 120' to 130', sandstone/claystone contact unknown.					3350	
130		CH	Silty CLAYSTONE, hard, dry, maroon with gray mottling.		100			3345	Sand
								3340	

CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07



PROJECT NO. 03047.05

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-54/B-19A

LOCATION: Andrews County, TX

DATE: 12/22/2003

NORTHING: 6874782.57

DRILLING COMPANY: Total Support Services

EASTING: 561202 53

DRILLING EQUIPMENT: Mobile B-51

ELEVATION: 3471.2'

DRILLING METHOD: Mud core

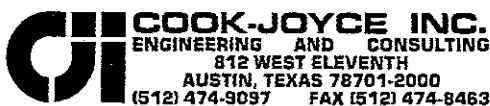
TOTAL DEPTH: 264.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION	
140	[Diagonal Hatching]	CH	Silty CLAYSTONE, hard, dry, maroon with gray mottling. (continued)	[Vertical Line]	100			3335		
145					88			3330		
150	[Cross-hatching]		SILTSTONE interbedded with Silty CLAYSTONE, hard, dry, light gray siltstone and maroon/purple claystone.	[Vertical Line]	100			3325		
155					100			3320		
160	[Diagonal Hatching]	CH	Silty CLAYSTONE, firm, dry, maroon/purple with gray mottling.	[Vertical Line]	38			3315		
165					100			3310		
170					100			3305		
175					100			3300		
180					100			3295		
185					100			3290		
190					100			3285		
195					100			3280		
200					100			3275		
205					92			3270		
210	[Diagonal Hatching]	CH	Similar to above with green mottling	[Vertical Line]				3265		
215								100		3260
220								100		3255
225								100		3250
230	[Cross-hatching]	CH	SILTSTONE with some clay, hard, dry, light gray and maroon.	[Vertical Line]				3245		
235	[Cross-hatching]	CH	Silty CLAYSTONE interbedded with SILTSTONE, hard, moist, maroon and gray. SILTSTONE, hard, moist, light gray.					100		3240
240	[Cross-hatching]	CH	Silty CLAYSTONE, hard, dry, maroon with gray mottling.	[Vertical Line]				3235		
245	[Cross-hatching]	CH	SILTSTONE, hard, dry, light gray.					73		3230
250	[Vertical Lines]	ML	Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling. Sandy SILT, loose, damp, light gray to tan.	[Vertical Line]				3225		
255	[Vertical Lines]	ML						3220		
260	[Diagonal Hatching]	CH	CLAYSTONE, hard, dry, maroon with gray mottling	[Vertical Line]				3215		
265			TD = 264'					3210		
								3205		

TOC ELEV.: 3474.00'

C:\JL BORING LOG WITH WELL - WCS 03047.05.GPJ C:\JL LOG WITH WELL.GDT 1/10/07



PROJECT NO. 03047.05

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

WELL / BORING NO:

TP-55/B-99

LOCATION: Andrews County, TX

DATE: 10/10/2006

NORTHING: 6877644.6

DRILLING COMPANY: Talon LPE

EASTING: 566480.1

DRILLING EQUIPMENT: Reich Drill T-650-WII

ELEVATION: 3489.5'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 258.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, loose, dry, brown.					3485	Concrete
10			CALICHE, moderately hard, dry, white/gray with some sand matrix.					3480	Cement/Bentonite Slurry
15			Similar to above (STA), softer with pink sand matrix at 5'					3475	
20			STA, moderately hard, dry, white/gray at 20'					3470	
25								3465	
30								3460	
35								3455	
40			CALICHE, very hard, dry, white/gray.					3450	
45								3445	
50			Sandy GRAVEL, very fine grained light pink sand, various colored chert.					3440	
55	GW							3435	
60								3430	
65			CLAY, stiff, dry, maroon					3425	
70	CL							3420	
75			Interbedded Siltstone and Claystone, moderately hard, dry.					3415	
80								3410	
85								3405	
90			CLAYSTONE, dry, maroon					3400	
95								3395	
100	CL							3390	
105			SILTSTONE, hard, gray.					3385	
110			STA, interbedded with claystone from 105'-110'.					3380	Bentonite Chips
115			CLAYSTONE, dry, maroon					3375	
120								3370	
125	CL							3365	
130			Interbedded Siltstone and Claystone from 130'-138'.					3360	
135			SILTSTONE, hard, dry, gray.					3355	
140								3350	
145								3345	
150								3340	
155			STA, not as hard from 156'-167'					3335	
160								3330	
165								3325	
170			CLAYSTONE, dry, maroon					3320	
175								3315	
180								3310	
185								3305	
190	CL							3300	
195								3295	
200								3290	2-inch Diameter PVC
205			SILTSTONE, hard, gray.					3285	Slotted PVC
210			Interbedded with claystone.					3280	
215	CL		CLAYSTONE, dry, maroon					3275	Sand

CJL BORING LOG WITH WELL WCS 03047.05.GPJ C:J LOG WITH WELL.GDT 1/19/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

PROJECT NO. 03047.05

This boring log should not be used separately from the original report

PROJECT: Waste Control Specialists LLC

LOCATION: Andrews County, TX

WELL / BORING NO:

TP-55/B-99

DATE: 10/10/2006

DRILLING COMPANY: Talon LPE

DRILLING EQUIPMENT: Reich Drill T-650-WII

DRILLING METHOD: Air Rotary

NORTHING: 6877644.6

EASTING: 566480.1

ELEVATION: 3489.5'

TOTAL DEPTH: 258.0'

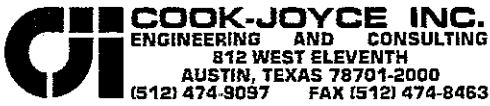
LOGGED BY: Ed Hughes

TOC ELEV.: 3492.72'

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
225	[Diagonal hatching symbol]	CL	CLAYSTONE, dry, maroon. (continued)	[Hand icon]				3265	
230								3260	
235	[Cross-hatching symbol]		SILTSTONE, hard, dry, gray.					3255	
240			3250						
245			3245						
250			3240						
255			3235						
260			3230						
265			3225						
270			3220						
275			3215						
280			3210						
285	3205								
290	3200								
295	3195								
300	3190								
305	3185								
310	3180								
315	3175								
320	3170								
325	3165								
330	3160								
335	3155								
340	3150								
345	3145								
350	3140								
355	3135								
360	3130								
365	3125								
370	3120								
375	3115								
380	3110								
385	3105								
390	3100								
395	3095								
400	3090								
405	3085								
410	3080								
415	3075								
420	3070								
425	3065								
430	3060								
435	3055								

TD = 258'

CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07



PROJECT NO. 03047.05

This boring log should not be used separately from the original report.

PROJECT: Waste Control Specialists LLC

LOCATION: Andrews County, TX

WELL / BORING NO:

TP-56/B-98

DATE: 10/8/2006

NORTHING: 6875845.45

DRILLING COMPANY: Talon LPE

EASTING: 561466.74

DRILLING EQUIPMENT: Reich Drill T-650-WII

ELEVATION: 3478.4'

DRILLING METHOD: Air Rotary

TOTAL DEPTH: 213.0'

LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		SM	Silty SAND with some gravel, dry, tan					3475	Cement/Bentonite Slurry
10							3470		
15			CALICHE, hard to very hard, dry, tan.					3465	
20								3460	
25								3455	
30		GW	Sandy GRAVEL, loose, dry, tan/orange					3450	
35								3445	
40			CLAYSTONE, dry, maroon.					3440	
45								3435	
50								3430	
55								3425	
60								3420	
65								3415	
70								3410	
75								3405	
80								3400	
85								3395	
90								3390	
95								3385	Bentonite Chips
100								3380	
105		CL						3375	
110								3370	
115								3365	
120								3360	
125								3355	
130								3350	
135								3345	
140								3340	
145								3335	
150								3330	
155								3325	
160								3320	
165								3315	
170								3310	
175			Interbedded Siltstone and Claystone, moderately hard, gray and maroon.					3305	2-inch Diameter PVC
180								3300	Slotted PVC
185			CLAYSTONE, dry, maroon					3295	Sand
190								3290	
195								3285	
200		CL						3280	Bentonite Chips
205								3275	
210								3270	
215			TD = 213'					3265	
								3260	

CJL BORING LOG WITH WELL WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07



PROJECT NO. 03047.05

This boring log should not be used separately from the original report

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/3/2006
 DRILLING COMPANY: Talon LPE
 DRILLING EQUIPMENT: Reich Drill T-650-WII
 DRILLING METHOD: Air Rotary

WELL / BORING NO: TP-57/B-91
 NORTHING: 6876280.93
 EASTING: 565418.44
 ELEVATION: 3476.6'
 TOTAL DEPTH: 223.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5	[Dotted pattern]	SP	SAND, loose, dry, tan to gray.					3475	Concrete
10								3470	Cement/Bentonite Slurry
15	[Horizontal lines]		CALICHE, hard, dry, pink sand matrix, calcareous cementation, gray/white to pink.					3465	
20								3460	
25	[Dotted pattern]	SP	SAND, loose, dry, tan to gray					3455	
30								3450	
35	[Dotted pattern]	SW	Gravelly SAND, light calcareous cementation, dry, tan sand, various colored gravel					3445	
40				Maroon clay lense from 42'-43'				3440	
45				Gravelly SAND, loose, saturated, multi-colored gravel less than 1" in diameter.				3435	
50				CLAYSTONE, hard, dry, maroon with gray mottling.				3430	
55	[Diagonal lines]	CL						3425	
60								3420	
65								3415	
70								3410	
75								3405	
80								3400	
85								3395	
90								3390	
95								3385	
100								3380	
105	[Horizontal lines]		SILTSTONE, hard, moist, gray.					3375	
110				CLAYSTONE, dry, maroon.				3370	
115	[Diagonal lines]	CL						3365	Bentonite Chips
120								3360	
125								3355	
130								3350	
135								3345	
140								3340	
145								3335	
150								3330	
155								3325	
160								3320	
165	[Diagonal lines]	CL	Interbedded Siltstone and Claystone 162.5'-163'					3315	
170								3310	
175								3305	
180								3300	
185	[Diagonal lines]	CL	Interbedded Siltstone and Claystone 200'-203'					3295	
190								3290	
195								3285	
200								3280	
205	[Cross-hatch pattern]		SILTSTONE, hard, saturated, gray.					3275	
210								3270	2-inch Diameter PVC
215	[Cross-hatch pattern]							3265	Slotted PVC
220								3260	Sand
225		CL	CLAYSTONE, maroon, dry					3255	
			TD = 223'					3250	

C:J: BORING LOG WITH WELL WCS 03047.05.GPJ C:J: LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
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 (512) 474-8097 FAX (512) 474-8463

This boring log should not be used separately from the original report.

PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC LOCATION: Andrews County, TX	WELL / BORING NO: TP-58/B-92
DATE: 10/4/2006 DRILLING COMPANY: Talon LPE DRILLING EQUIPMENT: Reich Drill T-650-WII DRILLING METHOD: Air Rotary	NORTHING: 6875941.25 EASTING: 564948.67 ELEVATION: 3484.7' TOTAL DEPTH: 227.0'
LOGGED BY: Ed Hughes	

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, soft, dry, brown.					3480	Concrete
10		SW	CALICHE, hard, dry, white.					3475	Cement/Bentonite Slurry
15			Gravelly SAND, moderately hard, dry, orange sand matrix, various colored chert gravel					3470	
20			CALICHE, very hard, dry, white/gray.					3465	
25								3460	
30								3455	
35								3450	
40								3445	
45		SW	Gravelly SAND, loose, dry, orange sand with various colored chert <1" diameter. Damp at 46.					3440	
50								3435	
55								3430	
60			CLAYSTONE, dry, maroon					3425	
65								3420	
70								3415	
75								3410	
80								3405	
85								3400	
90		CL						3395	
95								3390	
100			Siltstone lens from 101'-102'					3385	
105								3380	
110								3375	
115								3370	Bentonite Chips
120								3365	
125								3360	
130			Interbedded Siltstone and Claystone, moderately hard, dry, maroon/gray.					3355	
135								3350	
140			CLAYSTONE, dry, maroon.					3345	
145								3340	
150		CL						3335	
155								3330	
160			SILTSTONE, hard, dry, gray.					3325	
165								3320	
170								3315	
175			CLAYSTONE, dry, maroon.					3310	
180								3305	
185		CL						3300	
190								3295	
195								3290	
200								3285	
205			SILTSTONE, very hard, dry, gray.					3280	
210								3275	2-inch Diameter PVC
215			SAND, loose, moist, dark brown.					3270	Sand Slotted PVC
220			Saturated at 216'					3265	
225		CL	CLAYSTONE, dry, maroon.					3260	
230			TD = 227'					3255	

CJI BORING LOG WITH WELL WCS 03047.05.GPJ CJI LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
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 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

PROJECT NO. 03047.05
 This boring log should not be used separately from the original report.
 PAGE 1 OF 1

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/5/2006
 DRILLING COMPANY: Talon LPE
 DRILLING EQUIPMENT: Reich Drill T-650-WII
 DRILLING METHOD: Air Rotary

WELL / BORING NO: **TP-59/B-97**
 NORTHING: 6873568.3
 EASTING: 565274.72
 ELEVATION: 3471.3'
 TOTAL DEPTH: 198.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, loose, dry, brown.					3470	Concrete
10			CALICHE, very hard, dry, gray/pinkish gray					3465	Cement/Bentonite Slurry
15								3460	
20								3455	
25		SW	Gravelly SAND, orange-tan sand, some chert gravel.					3450	
30			CLAYSTONE, dry, gray from 28'-32', then maroon					3445	
35								3440	
40								3435	
45								3430	
50		CL						3425	
55								3420	
60								3415	
65								3410	
70								3405	
75			Interbedded Siltstone and Claystone, moderately hard, dry					3400	
80								3395	
85								3390	
90			CLAYSTONE, dry, maroon					3385	
95		CL						3380	
100								3375	Bentonite Chips
105			SILTSTONE, hard, dry, gray					3370	
110								3365	
115								3360	
120								3355	
125								3350	
130			CLAYSTONE, dry, maroon.					3345	
135								3340	
140								3335	
145								3330	
150								3325	
155		CL						3320	
160			Claystone interbedded with Siltstone, moderately hard, 159'-163'					3315	
165								3310	
170								3305	
175								3300	
180			Claystone interbedded with Siltstone, mostly gray from 177'-183'					3295	
185			SILTSTONE, hard, moist, gray.					3290	2-inch Diameter PVC
190								3285	Slotted PVC
195		CL	CLAYSTONE, dry, maroon.					3280	
200			TD = 198'					3275	Sand
								3270	

C:J BORING LOG WITH WELL WCS 03047.05.GPJ C:J LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
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 AUSTIN, TEXAS 78701-2000
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PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/6/2006
 DRILLING COMPANY: Talon LPE
 DRILLING EQUIPMENT: Reich Drill T-650-WII
 DRILLING METHOD: Air Rotary

WELL / BORING NO: **TP-60/B-96**
 NORTHING: 6875293.98
 EASTING: 562196.9
 ELEVATION: 3478.6'
 TOTAL DEPTH: 203.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5	[Symbol]	ML	SILT, topsoil, soft, dry, brown.					3475	Concrete
10	[Symbol]	SM	Silty SAND, dry, brown.					3470	Cement/Bentonite Slurry
15	[Symbol]		Sandy CALICHE, moderately soft to moderately hard.					3465	
20	[Symbol]		CALICHE, very hard, dry, tan/white from 17'-25'					3460	
25	[Symbol]		Gravelly SAND, loose, damp					3455	
30	[Symbol]	SW						3450	
35	[Symbol]		CLAYSTONE, firm, dry, gray from 35'-36', then maroon					3445	
40	[Symbol]							3440	
45	[Symbol]							3435	
50	[Symbol]							3430	
55	[Symbol]	CL						3425	
60	[Symbol]							3420	
65	[Symbol]							3415	
70	[Symbol]							3410	
75	[Symbol]							3405	
80	[Symbol]		SILTSTONE, moderately hard, dry, gray.					3400	
85	[Symbol]							3395	
90	[Symbol]		CLAYSTONE, firm, dry, maroon					3390	
95	[Symbol]							3385	
100	[Symbol]	CL						3380	Bentonite Chips
105	[Symbol]							3375	
110	[Symbol]							3370	
115	[Symbol]		SILTSTONE, hard, dry, gray					3365	
120	[Symbol]							3360	
125	[Symbol]							3355	
130	[Symbol]							3350	
135	[Symbol]							3345	
140	[Symbol]		CLAYSTONE, dry, maroon.					3340	
145	[Symbol]							3335	
150	[Symbol]	CL						3330	
155	[Symbol]							3325	
160	[Symbol]		SILTSTONE, hard, gray. CLAYSTONE, dry, maroon.					3320	
165	[Symbol]							3315	
170	[Symbol]	CL						3310	
175	[Symbol]							3305	
180	[Symbol]							3300	
185	[Symbol]		Interbedded Siltstone and Claystone, mostly siltstone. Hard at 186'					3295	2-inch Diameter PVC
190	[Symbol]							3290	Slotted PVC
195	[Symbol]							3285	Sand
200	[Symbol]	CL	CLAYSTONE, dry, maroon.					3280	
205	[Symbol]		TD = 203'					3275	

C-JI BORING LOG WITH WELL WCS 03047.05.GPJ C-JI LOG WITH WELL_GDT 1/10/07

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/7/2006
 DRILLING COMPANY: Taton LPE
 DRILLING EQUIPMENT: Reich Drill T-650-WII
 DRILLING METHOD: Air Rotary

WELL / BORING NO: TP-61/B-95
 NORTHING: 6876001.54
 EASTING: 562605.57
 ELEVATION: 3486.0'
 TOTAL DEPTH: 216.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		ML	SILT, topsoil, soft, dry, brown.					3480	Concrete
10		SW	Silty SAND with Gravel, dry, chert gravel.					3475	Cement/Bentonite Slurry
15								3470	
20			CALICHE, very hard, dry, tan/white.					3465	
25								3460	
30								3455	
35								3450	
40		SW	Gravelly SAND, loose, dry, orange sand with various colored chert					3445	
45								3440	
50			CLAYSTONE, dry, maroon					3435	
55								3430	
60								3425	
65								3420	
70								3415	
75								3410	
80								3405	
85		CL	Interbedded Siltstone and Claystone from 85'-89'					3400	
90								3395	
95								3390	
100								3385	
105								3380	Bentonite Chips
110								3375	
115								3370	
120								3365	
125			SILTSTONE, hard, dry, gray					3360	
130								3355	
135								3350	
140								3345	
145			CLAYSTONE, dry, maroon.					3340	
150								3335	
155								3330	
160								3325	
165								3320	
170		CL						3315	
175								3310	
180								3305	
185								3300	
190								3295	
195								3290	
200			Interbedded Siltstone and Claystone from 197'-202'					3285	2-inch Diameter PVC
205			SILTSTONE, hard, gray.					3280	Slotted PVC
210			Moist at 210'.					3275	Sand
215		CL	CLAYSTONE, gray clay from 212'-213', then maroon.					3270	
220			TD = 216'					3265	

CJL BORING LOG WITH WELL, WCS 03047.05.GPJ, CJL LOG WITH WELL, GDT, 1/10/07

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/23/2004
 DRILLING COMPANY: Total Support Services
 DRILLING EQUIPMENT: Mobile B-51
 DRILLING METHOD: Mud core

WELL / BORING NO: **MW-11A1/B-11A**
 NORTHING: 6874647.06
 EASTING: 561590.75
 ELEVATION: 3471.6'
 TOTAL DEPTH: 275.0' LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	TOC ELEV.: 3474.53'	WELL CONSTRUCTION
5			Surface soil.					3470		
10			CALICHE, gravel in pink to white calcitic matrix, moderately hard to hard, lightly cemented		25			3465		← Concrete
15								3460		← Cement/Bentonite Slurry
20			Gravelly SAND, tan, dry, various colored gravel, light cementation. (SW).					3455		
25			CLAY, stiff, maroon, dry, (CH/CL)					3450		
30								3445		
35					20			3440		
40								3435		
45			SANDSTONE, lightly cemented, tan, gray, orange, black nodules present		94			3430		
50								3425		
55					63			3420		← MW-11A1 installed by Talon LPE on 9-22-06
60			SANDSTONE/CLAY contact between 57' and 60' where there was no recovery.					3415		
65			CLAY, maroon, dry, firm. (CL/CH).		100			3410		
70	x x x		SILTSTONE, hard, gray, dry.					3405		
75			CLAY, maroon with gray and orange mottling, firm, dry, (CH/CL)		100			3400		
80								3395		
85					90			3390		← Bentonite Chips
90								3385		
95					57			3380		
100								3375		
105					100			3370		
110	x x x x x		Sandy SILTSTONE, hard, maroon with some gray mottling, dry					3365		
115	x x x x x				100			3360		
120	x x x x x							3355		
125	x x x x x				78			3350		
130			CLAYSTONE, maroon with some gray mottling, hard, dry, black nodules present, (CH/CL).					3345		
135					100			3340		
140								3335		
145					97			3330		
150								3325		
155					67			3320		← 2-inch Diameter PVC
160	x x x x x		SILTSTONE, hard, gray and maroon, dry					3315		
165	x x x x x		SILTSTONE/CLAYSTONE contact between 160' and 180' where there was no recovery.		0			3310		← Slotted PVC
170	x x x x x							3305		
175	x x x x x				0			3300		← Sand
180			CLAYSTONE, hard, dry, maroon with gray mottling, (CH/CL)		100			3295		
185								3290		
190								3285		
195					91			3280		
200								3275		
205					100			3270		
210								3265		
215					100			3260		
220								3255		
225					93			3250		
230			CLAYSTONE, hard, dry, maroon, (CH/CL).					3245		
235					100			3240		
240								3235		
245	x x x x x		SILTSTONE, hard, gray with some maroon banding, moist		92			3230		
250	x x x x x							3225		
255	x x x x x				17			3220		
260	x x x x x							3215		
265	x x x x x				0			3210		
270	x x x x x							3205		
275			CLAY, hard, maroon with some gray mottling, (CH/CL).		80			3200		
280			TD = 275'					3195		
								3190		

CJ BORING LOG WITH WELL. WCS 03047.05.GPJ CJ LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
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PROJECT NO. 03047.05
 This boring log should not be used separately from the original report.
 PAGE 1 OF 1

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 12/22/2003
 DRILLING COMPANY: Total Support Services
 DRILLING EQUIPMENT: Mobile B-51
 DRILLING METHOD: Mud core

WELL / BORING NO: MW-11B1/B-19A
 NORTHING: 6874782 41
 EASTING: 561215.14
 ELEVATION: 3470.7'
 TOTAL DEPTH: 264.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5		SW	Gravelly SAND, loose, dry, white.					3465	Concrete
10			CALICHE, hard, dry, calcareous cementation, white and gray.					3460	Cement/Bentonite Slurry
15		SW	Gravelly SANDSTONE, dry, loosely cemented.					3455	
20		CH	Silty CLAYSTONE, hard, dry, maroon/purple.					3450	
25					0			3445	
30					65			3440	
35			SANDSTONE, hard, well cemented, dry, tan with black and gray stains		100			3435	
40			Similar to above with less cementation.					3430	
45			No recovery from 40' to 50', sandstone/claystone contact unknown		0			3425	
50		CH	Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling.		90			3420	MW-11B1 installed by Talon LPE on 9-22-06
55								3415	
60			SILTSTONE, hard, dry, light gray and maroon.					3410	
65			Silty CLAYSTONE, hard, dry, maroon/purple with gray and yellow mottling		100			3405	
70					100			3400	
75		CH			100			3395	
80					100			3390	Bentonite Chips
85					100			3385	
90								3380	
95		CL	Sandy CLAYSTONE, hard, dry, maroon with gray mottling.		100			3375	
100		CL	SANDSTONE, hard, dry, well cemented, gray with yellow and black grains.		100			3370	
105			Sandy Silty CLAYSTONE, hard, dry, gray.		100			3365	
110		CH	SANDSTONE, hard, dry, light gray.					3360	
115			Sandy Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling.		70			3355	
120			SANDSTONE, hard, dry, light gray with black crystals.					3350	
125			No Recovery from 120' to 130', sandstone/claystone contact unknown.		0			3345	
130								3340	
135			Silty CLAYSTONE, hard, dry, maroon with gray mottling.		100			3335	
140		CH			100			3330	
145					88			3325	2-inch Diameter PVC
150								3320	Slotted PVC
155			SILTSTONE interbedded with Silty CLAYSTONE, hard, dry, light gray siltstone and maroon/purple claystone.		100			3315	
160		CH	Silty CLAYSTONE, firm, dry, maroon/purple with gray mottling.		38			3310	Sand

CJL BORING LOG WITH WELL, WCS 03047.05.GPJ CJL LOG WITH WELL.GDT 1/10/07



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PROJECT NO. 03047.05

PROJECT: Waste Control Specialists LLC LOCATION: Andrews County, TX DATE: 12/22/2003 DRILLING COMPANY: Total Support Services DRILLING EQUIPMENT: Mobile B-51 DRILLING METHOD: Mud core	WELL / BORING NO: MW-11B1/B-19A NORTHING: 6874782.41 EASTING: 561215.14 ELEVATION: 3470.7' TOTAL DEPTH: 264.0' LOGGED BY: Ed Hughes
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DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION	
170		CH	Silty CLAYSTONE, firm, dry, maroon/purple with gray mottling. (continued)		100			3300		
175							100			3295
180										3290
185							100			3285
190										3280
195					Similar to above with green mottling		100			3275
200										3270
205							92			3265
210										3260
215					Similar to above but harder		100			3255
220							3250			
225					100		3245			
230		CH	SILTSTONE with some clay, hard, dry, light gray and maroon.					3240		
235			Silty CLAYSTONE interbedded with SILTSTONE, hard, moist, maroon and gray.		100			3235		
240		CH	SILTSTONE, hard, moist, light gray.					3230		
245			Silty CLAYSTONE, hard, dry, maroon with gray mottling.		73			3225		
250		ML	SILTSTONE, hard, dry, light gray.					3220		
255			Silty CLAYSTONE, hard, dry, maroon/purple with gray mottling.					3215		
260		CH	Sandy SILT, loose, damp, light gray to tan.					3210		
265			CLAYSTONE, hard, dry, maroon with gray mottling.					3205		
270								3200		
275								3195		
280								3190		
285								3185		
290								3180		
295								3175		
300								3170		
305								3165		
310								3160		
315								3155		
320								3150		
325								3145		

CJI BORING LOG WITH WELL WCS 03047.05.GPJ CJI LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

PROJECT: Waste Control Specialists LLC
 LOCATION: Andrews County, TX
 DATE: 10/26/2004
 DRILLING COMPANY: Total Support Services
 DRILLING EQUIPMENT: Mobile B-51
 DRILLING METHOD: Mud core

WELL / BORING NO: MW-11C1/B-11C
 NORTHING: 6875031.02
 EASTING: 560978.69
 ELEVATION: 3471.4'
 TOTAL DEPTH: 283.0'
 LOGGED BY: Ed Hughes

DEPTH (ft)	SYMBOL	USCS	STRATUM DESCRIPTION	SAMPLE	REC %	BLOW COUNTS	Water Level	ELEV (ft)	WELL CONSTRUCTION
5			Surface Soil, Sandy SILT, tan/brown, dry.		73			3465	Concrete
10			CALICHE, moderately hard to hard, gravel up to 2" diameter; cementation is various from well-cemented to lightly-cemented, white to pink, dry.		100			3460	Cement/Bentonite Slurry
15					33			3455	
20			Gravelly SAND, gravel up to about 2" diameter, poorly sorted, lightly cemented, gravel is various in color, white-pink matrix, dry, (SW).		0			3450	
25								3445	
30					79			3440	
35			Silty CLAY, maroon, dry, (CH/CL).					3435	
40								3430	
45			Silty SANDSTONE, fine grained, gray, tan and black grains, lightly cemented from 39.5' to 42', better cementation from 42' to 50', lightly cemented to unconsolidated from 50' to 52.75'.		96			3425	
50					95			3420	MW-11C1 installed by Talon LPE on 9-26-06
55			CLAY, maroon with yellow and gray mottling, firm, dry, (CH/CL).		100			3415	
60								3410	
65			Similar to above but very little yellow and gray mottling, (CH/CL).		99			3405	
70								3400	
75			CLAY, maroon, firm, dry, (CH/CL)		88			3395	
80								3390	Bentonite Chips
85					98			3385	
90								3380	
95					90			3375	
100								3370	
105					90			3365	
110			Similar to above, some claystone from 110'-115' but then firm clay from 115'-120'		100			3360	
115								3355	
120			CLAY, maroon, firm to hard, dry, (CH/CL)		97			3350	
125								3345	
130					100			3340	
135								3335	
140			Similar to above, with increased silt content (lenses less than 2" thick)		96			3330	
145								3325	
150					33			3320	2-inch Diameter PVC
155								3315	
160					100			3310	Slotted PVC
165								3305	
170			CLAY, with some silt lenses, maroon with gray splotching, firm to hard, dry, (CH/CL).		62			3300	Sand
175								3295	
180					97			3290	
185								3285	
190					92			3280	
195								3275	
200					100			3270	
205			CLAY, maroon with gray splotching, firm to hard, dry, (CH/CL).		100			3265	
210								3260	
215					100			3255	
220								3250	
225					88			3245	
230								3240	
235					100			3235	
240			SILTSTONE, hard, gray with some maroon banding, moist		96			3230	
245								3225	
250					100			3220	
255								3215	
260					100			3210	
265								3205	
270					70			3200	
275			CLAY, maroon, firm, (CH/CL)					3195	
280					100			3190	
285			TD = 283'					3185	

C:\J\BORING LOG WITH WELL - WCS 03047.05.GPJ C:\J\LOG WITH WELL.GDT 1/10/07

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
 812 WEST ELEVENTH
 AUSTIN, TEXAS 78701-2000
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This boring log should not be used separately from the original report.

PROJECT NO. 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: 1P-41
Boring No.: B-61

Survey Coordinates: 6875682.576 N
562371.0063 E

Elevation Ground Level: 3482.5'
Top of Casing: 3485.54'
Screened Interval: 3451' - 3441'

DRILLING SUMMARY

Total Depth: 42'
Borehole Diameter: 5 5/8"

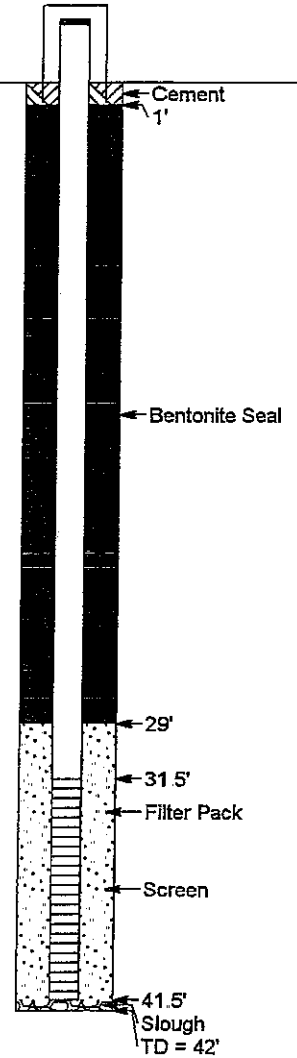
Casing Stick-up Height: 3.08'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	8:47	2-21-06	9:15
Geophys Log: Casing:	2-21-06	9:20	2-21-06	9:23
Filter Placement: Cementing: Bentonite Seal:	2-21-06	9:28	2-21-06	9:30
	2-21-06	9:31	2-21-06	9:33

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 31.5'	C1	3482.5' - 3451'
31.5' - 41.5'	S1	3451' - 3441'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb. bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 5-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-42
Boring No.: B-84

Survey Coordinates: 6875850.3766 N
561457.3686 E

Elevation Ground Level: 3478.7'
Top of Casing: 3481.66'
Screened Interval: 3451' - 3441'

DRILLING SUMMARY

Total Depth: 39'
Borehole Diameter: 5 5/8"

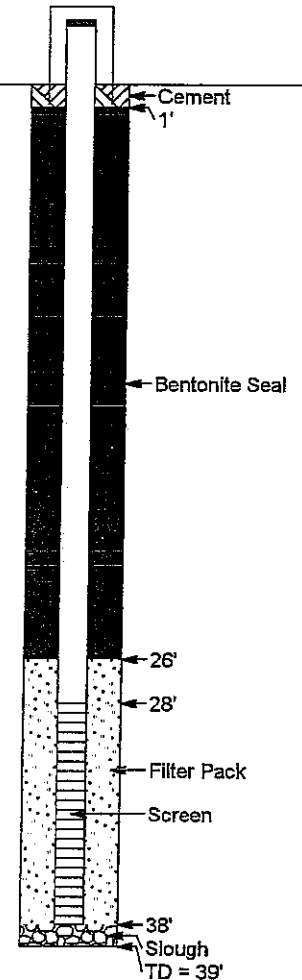
Casing Stick-up Height: 2.96'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	10:03	2-21-06	10:54
Geophys Log: Casing:	2-21-06	10:57	2-21-06	10:58
Filter Placement: Cementing: Bentonite Seal:	2-21-06	10:59	2-21-06	11:02
	2-21-06	11:02	2-21-06	11:02

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 28'	C1	3479' - 3451'
28' - 38'	S1	3451' - 3441'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb bags of Obiebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0 01" Slot

Bentonite Seal: 6-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-43
Boring No.: B-88

Survey Coordinates: 6874646.244 N
561210.6455 E

Elevation Ground Level: 3471.3'
Top of Casing: 3474.28'
Screened Interval: 3457' - 3447'

DRILLING SUMMARY

Total Depth: 24'
Borehole Diameter: 5 5/8"

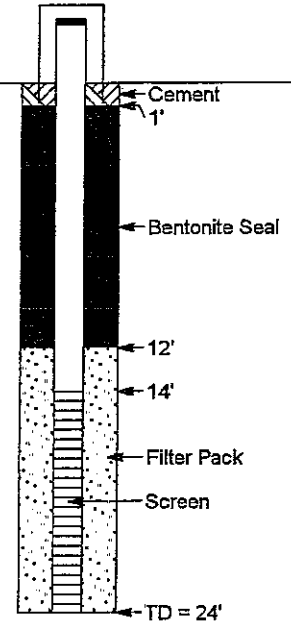
Casing Stick-up Height: 2.98'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	11:20	2-21-06	11:20
Geophys Log: Casing:	2-21-06	11:37	2-21-06	11:38
Filter Placement: Cementing: Bentonite Seal:	2-21-06	11:39	2-21-06	11:41
	2-21-06	11:42	2-21-06	11:42

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 14'	C1	3471' - 3457'
14' - 24'	S1	3457' - 3447'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb. bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 3-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: IP-44
Boring No.: B-89

Survey Coordinates: 6873546.6476 N
563497.5524 E

Elevation Ground Level: 3455.6'
Top of Casing: 3458.14'
Screened Interval: 3448.5' - 3443.5'

DRILLING SUMMARY

Total Depth: 12'
Borehole Diameter: 5 5/8"

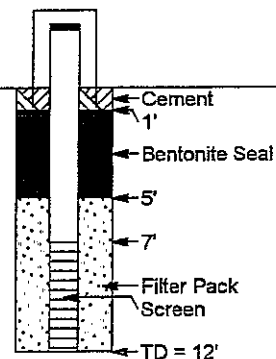
Casing Stick-up Height: 2.57'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	13:16	2-21-06	13:21
Geophys Log: Casing:	2-21-06	13:38	2-21-06	13:38
Filter Placement: Cementing: Bentonite Seal:	2-21-06	13:39	2-21-06	13:40
	2-21-06	13:40	2-21-06	13:41

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 7'	C1	3455.5' - 3448.5'
7' - 12'	S1	3448.5' - 3443.5'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 3-50 lb bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 3-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

CLIENT: Waste Control Specialists LLC

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: **TP-45**
 Boring No.: **B-31A**

Survey Coordinates: 6873096.2449 N
 564321.5367 E

Elevation Ground Level: 3453.4'
 Top of Casing: 3456.35'
 Screened Interval: 3446' - 3436'

DRILLING SUMMARY

Total Depth: 17'
 Borehole Diameter: 5 5/8"

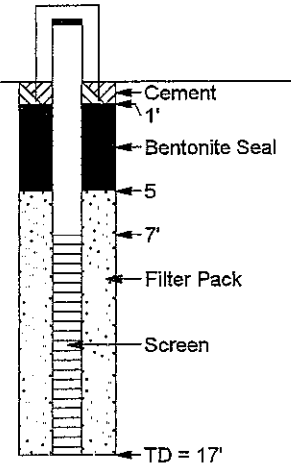
Casing Stick-up Height: 3
 Driller: Talon LPE

Rig: Reich Drill T-650-W II
 Bit(s): Mill Claw
 Drilling Fluid: Air
 Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	13:53	2-21-06	13:57
Geophys Log: Casing:	2-21-06	14:03	2-21-06	14:03
Filter Placement: Cementing:	2-21-06	14:04	2-21-06	14:06
Bentonite Seal:	2-21-06	14:07	2-21-06	14:08

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 7'	C1	3453' - 3446'
7' - 17'	S1	3446' - 3436'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 2-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

COOK-JOYCE INC.
 ENGINEERING AND CONSULTING
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 AUSTIN, TEXAS 78701-2000
 (512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-46
Boring No.: B-90

Survey Coordinates: 6872427.4861 N
563476.1809 E

Elevation Ground Level: 3437.3'
Top of Casing: 3440.50'
Screened Interval: 3416' - 3406'

DRILLING SUMMARY

Total Depth: 32'
Borehole Diameter: 5 5/8"

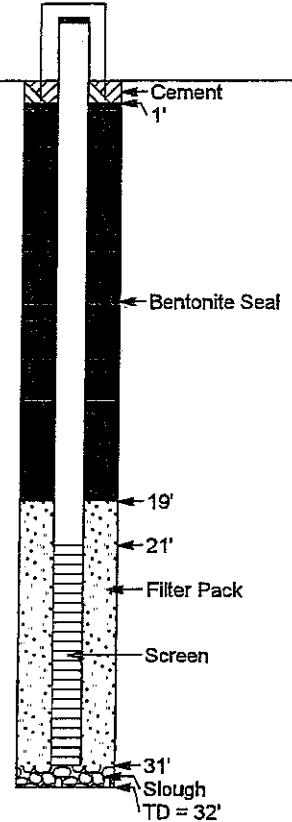
Casing Stick-up Height: 3 19'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	14:47	2-21-06	14:55
Geophys Log: Casing:	2-21-06	15:00	2-21-06	15:01
Filter Placement: Cementing:	2-21-06	15:02	2-21-06	15:04
Bentonite Seal:	2-21-06	15:05	2-21-06	15:05

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 21'	C1	3437' - 3416'
21' - 31'	S1	3416' - 3406'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb. bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 6-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-47
Boring No.: B-85

Survey Coordinates: 6870974.2359 N
563474.0964 E

Elevation Ground Level: 3433.3'
Top of Casing: 3436.41'
Screened Interval: 3378' - 3368'

DRILLING SUMMARY

Total Depth: 66'
Borehole Diameter: 5 5/8"

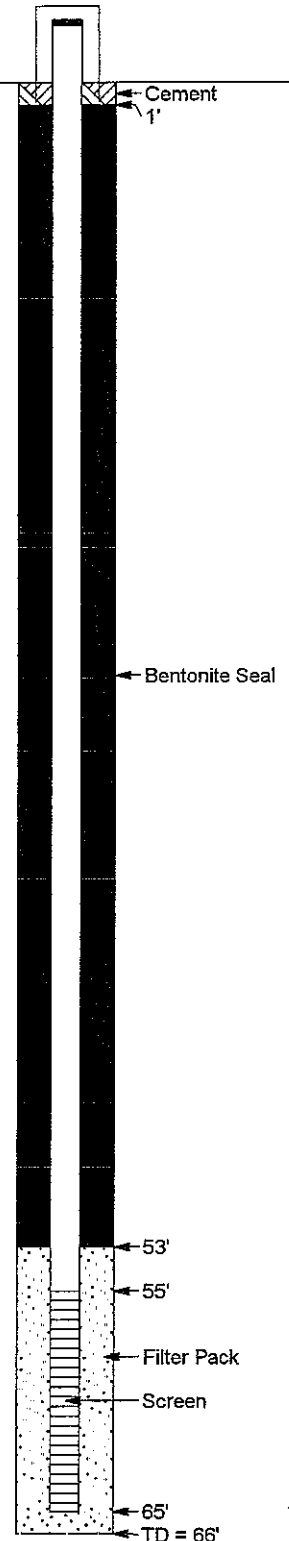
Casing Stick-up Height: 3.09'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-21-06	16:08	2-21-06	16:24
Geophys Log: Casing:	2-21-06	16:33	2-21-06	16:37
Filter Placement: Cementing:	2-21-06	16:38	2-21-06	16:41
Bentonite Seal:	2-21-06	16:41	2-21-06	16:45

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 55'	C1	3433 - 3378'
55' - 65'	S1	3378' - 3368'

Casing (C1): 2 Schedule 40 PVC

Filter Pack: 4-50 lb. bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 12-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-48
Boring No.: B-86

Survey Coordinates: 6872411.8124 N
567489 0349 E

Elevation Ground Level: 3474.8'
Top of Casing: 3477.70'
Screened Interval: 3438' - 3428'

DRILLING SUMMARY

Total Depth: 49'
Borehole Diameter: 5 5/8"

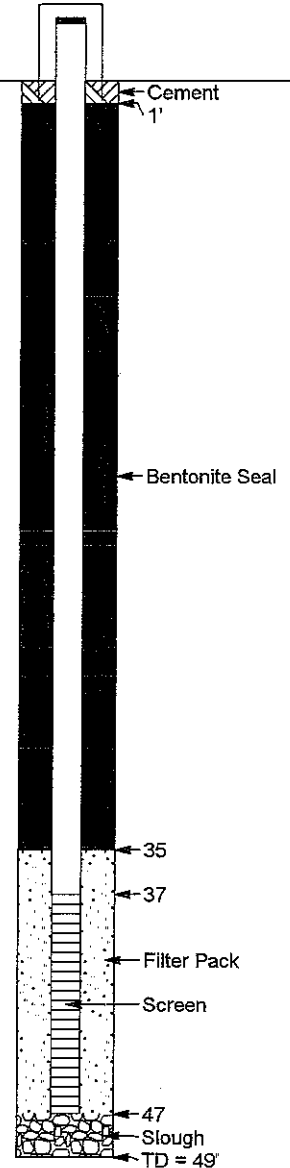
Casing Stick-up Height: 2.92'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-22-06	10:17	2-22-06	10:38
Geophys Log: Casing:	2-22-06	11:06	2-22-06	11:07
Filter Placement: Cementing:	2-22-06	11:08	2-22-06	11:10
Bentonite Seal:	2-22-06	11:11	2-22-06	11:13

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 37'	C1	3475' - 3438'
37' - 47'	S1	3438' - 3428'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 5-50 lb bags of Oblebay Norton silica sand

Screen (S1): 2' Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 8-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
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812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-49
Boring No.: B-87

Survey Coordinates: 6871921.0354 N
567678.9741 E

Elevation Ground Level: 3474.3'
Top of Casing: 3477.41'
Screened Interval: 3439' - 3429'

DRILLING SUMMARY

Total Depth: 45'
Borehole Diameter: 5 5/8"

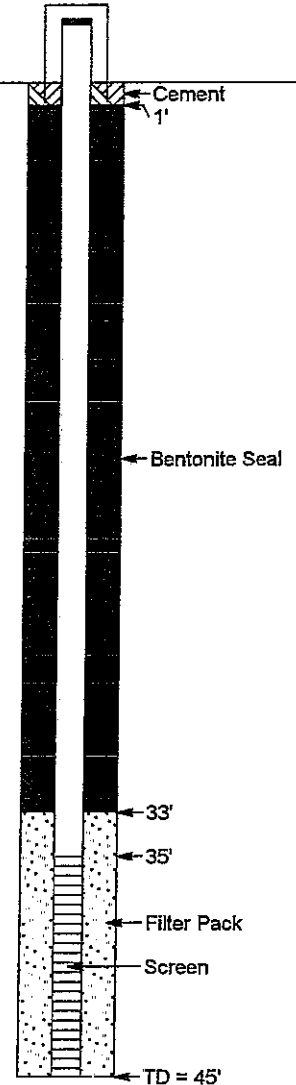
Casing Stick-up Height: 3.15'
Driller: Talon LPE

Rig: Reich Drill T-650-W II
Bit(s): Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/ 4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	2-22-06	9:24	2-22-06	9:38
Geophys Log: Casing:	2-22-06	9:50	2-22-06	9:51
Filter Placement: Cementing:	2-22-06	9:52	2-22-06	9:53
Bentonite Seal:	2-22-06	9:54	2-22-06	9:57

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 35'	C1	3474' - 3439'
35' - 45'	S1	3439' - 3429'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 4-50 lb. bags of Oblebay Norton silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 8-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: NA

COMMENTS:

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: February 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.03

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-50
Boring No.: B-92

Survey Coordinates: 6875928.95 N
564923 77 E

Elevation Ground Level: 3484.8'
Top of Casing: 3487.94'
Screened Interval: 3323.3' - 3313.3'

DRILLING SUMMARY

Total Depth: 180'
Borehole Diameter: 6"

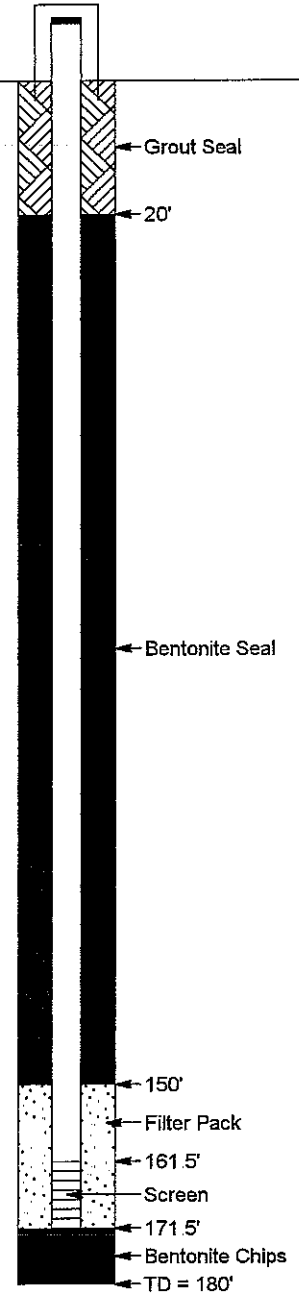
Casing Stick-up Height: 3.14'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-20-06	10:22	9-20-06	11:00
	10-8-06	15:35	10-8-06	16:15
Geophys Log: Casing:	10-8-06	17:00	10-8-06	17:10
Filter Placement: Cementing:	10-8-06	17:14	10-8-06	17:17
Bentonite Seal:	10-8-06	17:17	10-8-06	17:30

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 161.5'	C1	3484.8' - 3323.3'
161.5' - 171.5'	S1	3323.3' - 3313.3'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 8-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 43-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 40', 90', and 140' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-51
Boring No.: B-58

Survey Coordinates: 6875063.56 N
564638.17 E

Elevation Ground Level: 3485.5'
Top of Casing: 3488.60'
Screened Interval: 3338.0' - 3328.0'

DRILLING SUMMARY

Total Depth: 160'
Borehole Diameter: 6"

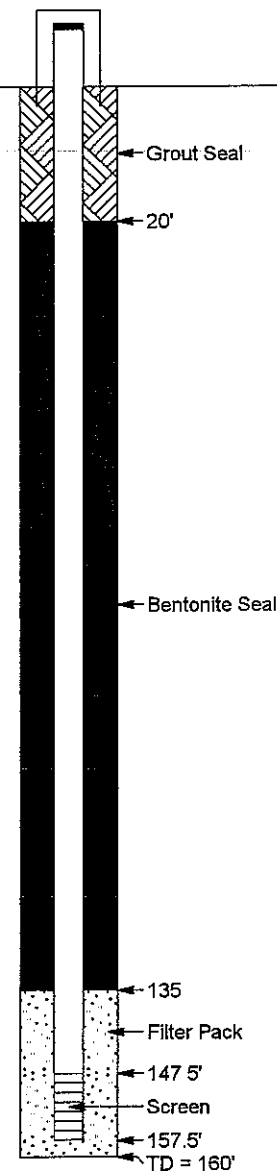
Casing Stick-up Height: 3.1'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	10-8-06	14:15	10-8-06	14:50
Geophys Log: Casing:	10-8-06	14:55	10-8-06	15:05
Filter Placement:	10-8-06	15:07	10-8-06	15:09
Cementing: Bentonite Seal:	10-8-06	15:10	10-8-06	15:15

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 147.5'	C1	3485.5' - 3338.0'
147.5' - 157.5'	S1	3338.0' - 3328.0'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 8-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 6-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 30', 80', and 130' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
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812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

WELL CONSTRUCTION SUMMARY 03047.05 WELL CONSTRUCTION SUMMARIES.GPJ CUI LOG WITH WELL.GDT 1/10/07

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-52
Boring No.: B-95

Survey Coordinates: 6876003.93 N
562597.05 E

Elevation Ground Level: 3486.0'
Top of Casing: 3489.09'
Screened Interval: 3353.0' - 3343.0'

DRILLING SUMMARY

Total Depth: 143'
Borehole Diameter: 6"

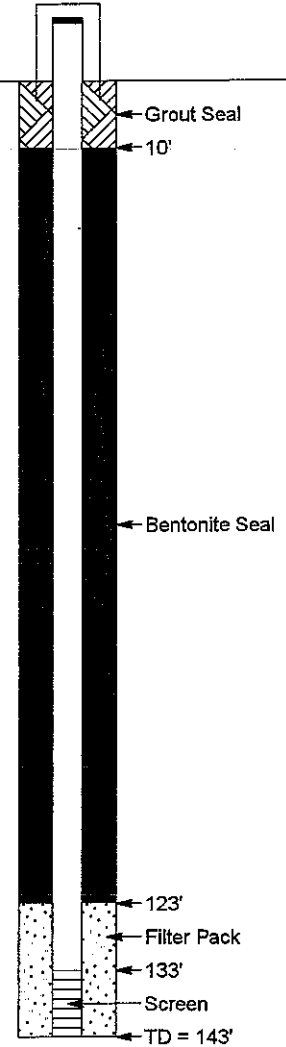
Casing Stick-up Height: 3.09'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	10-8-06	12:00	10-8-06	12:45
Geophys Log: Casing:	10-8-06	13:15	10-8-06	13:25
Filter Placement:	10-8-06	13:34	10-8-06	13:38
Cementing: Bentonite Seal:	10-8-06	13:40	10-8-06	13:55

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 133'	C1	3486.0' - 3353.0'
133' - 143'	S1	3353.0' - 3343.0'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 8-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 27-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 10', 60', and 110' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-53
Boring No.: B-97

Survey Coordinates: 6873542.39 N
565259.32 E

Elevation Ground Level: 3471.1'
Top of Casing: 3474.17'
Screened Interval: 3354.1' - 3344.1'

DRILLING SUMMARY

Total Depth: 128'
Borehole Diameter: 6"

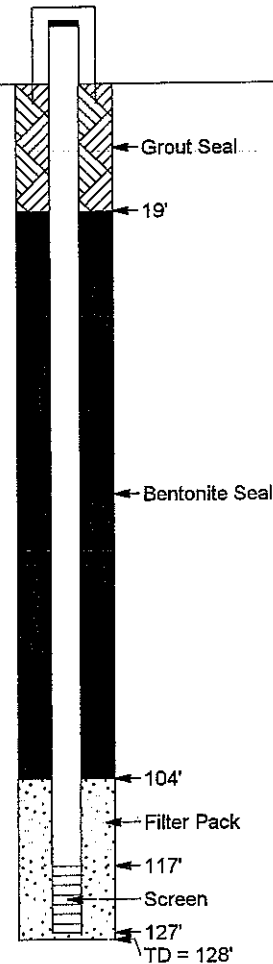
Casing Stick-up Height: 3.07'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-19-06	13:45	9-19-06	15:00
	10-5-06	8:10	10-5-06	12:00
Geophys Log: Casing:	10-5-06	14:00	10-5-06	14:10
Filter Placement: Cementing:	10-5-06	14:12	10-5-06	14:15
Bentonite Seal:	10-5-06	14:20	10-5-06	14:40

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 117'	C1	3471.1' - 3354.1'
117' - 127'	S1	3354.1' - 3344.1'

Casing (C1): 2' Schedule 40 PVC

Filter Pack: 12-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 22-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 10', 50', and 100' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-54
Boring No.: B-19A

Survey Coordinates: 6874782.57 N
561202.53 E

Elevation Ground Level: 3471.2'
Top of Casing: 3474.00'
Screened Interval: 3357.2' - 3342.2'

DRILLING SUMMARY

Total Depth: 130'
Borehole Diameter: 6"

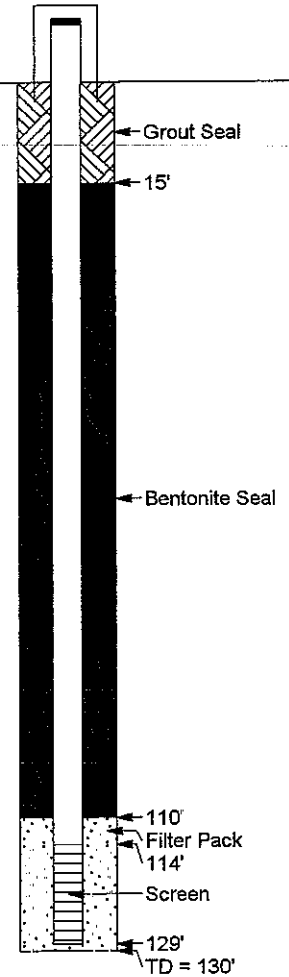
Casing Stick-up Height: 2.8'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-26-06	8:40	9-26-06	11:05
Geophys Log: Casing:	9-26-06	11:15	9-26-06	11:20
Filter Placement: Cementing:	9-26-06	11:27	9-26-06	11:30
Bentonite Seal:	9-26-06	11:32	9-26-06	11:45

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 114'	C1	3471.2' - 3357.2'
114' - 129'	S1	3357.2' - 3342.2'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 9-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01 Slot

Bentonite Seal: 23-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 10', 50', and 100' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-8097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-55
Boring No.: B-99

Survey Coordinates: 6877644.6 N
566480.1 E

Elevation Ground Level: 3489.5'
Top of Casing: 3492.72'
Screened Interval: 3289.0' - 3279.0'

DRILLING SUMMARY

Total Depth: 213'
Borehole Diameter: 6"

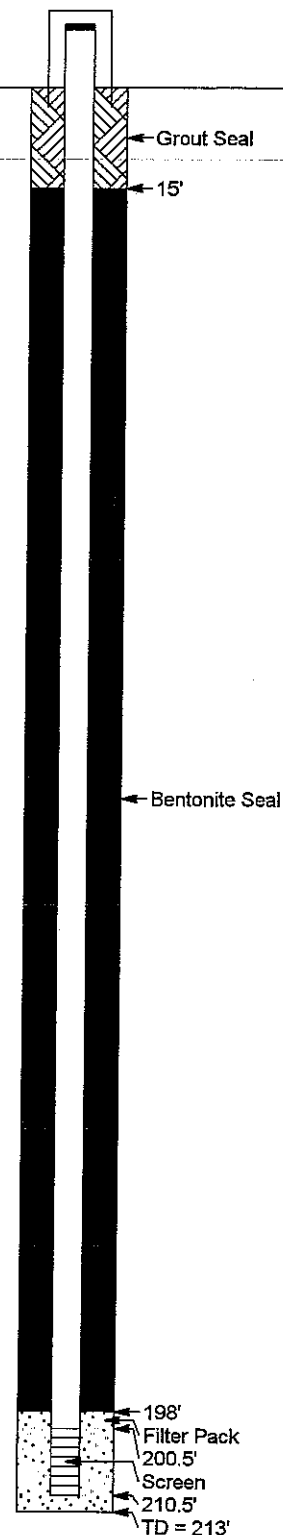
Casing Stick-up Height: 3 22'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	10-9-06	13:00	10-9-06	20:15
	10-10-06	8:00	10-10-06	12:10
Geophys Log: Casing:	10-10-06	12:30	10-10-06	12:35
Filter Placement: Cementing: Bentonite Seal:	10-10-06	12:47	10-10-06	12:53
	10-10-06	12:55	10-10-06	13:10

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 200.5'	C1	3489.5' - 3289.0'
200.5' - 210.5'	S1	3289.0' - 3279.0'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 6-50 lb. bags of 12/20 silica sand

Screen (S1): 2' Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 20-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 30', 80', 130', and 180' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-56
Boring No.: B-98

Survey Coordinates: 6875845.45 N
561466 74 E

Elevation Ground Level: 3478.4'
Top of Casing: 3481.30'
Screened Interval: 3304.9' - 3294.9'

DRILLING SUMMARY

Total Depth: 213'
Borehole Diameter: 6"

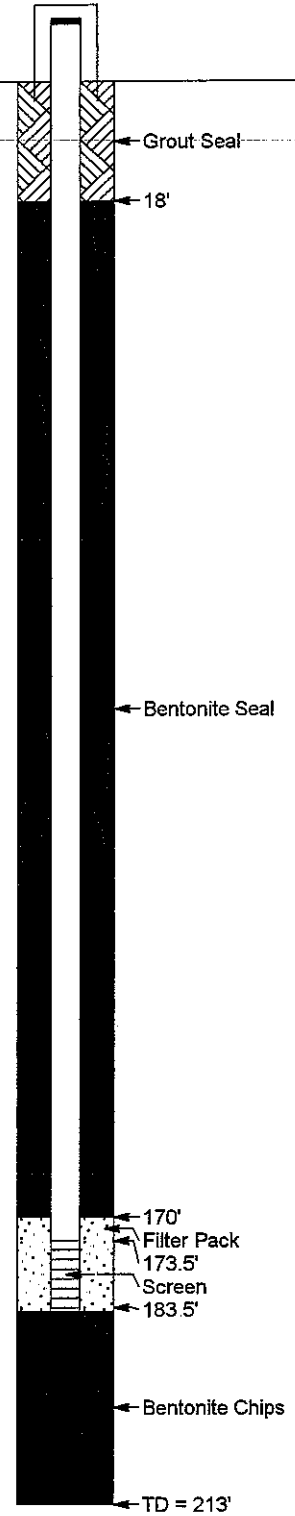
Casing Stick-up Height: 2.9'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	10-7-06	12:00	10-7-06	18:00
	10-8-06	8:10	10-8-06	10:35
Geophys Log: Casing:	10-8-06	10:50	10-8-06	10:57
Filter Placement: Cementing:	10-8-06	11:11	10-8-06	11:13
Bentonite Seal:	10-8-06	11:15	10-8-06	11:40

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 173.5'	C1	3478.4' - 3304.9'
173.5' - 183.5'	S1	3304.9' - 3294.9'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 5-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 35-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 50', 100', and 150' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-57
Boring No.: B-91

Survey Coordinates: 6876280.93 N
565418 44 E

Elevation Ground Level: 3476.6'
Top of Casing: 3479.74'
Screened Interval: 3268.6' - 3258.6'

DRILLING SUMMARY

Total Depth: 223'
Borehole Diameter: 6"

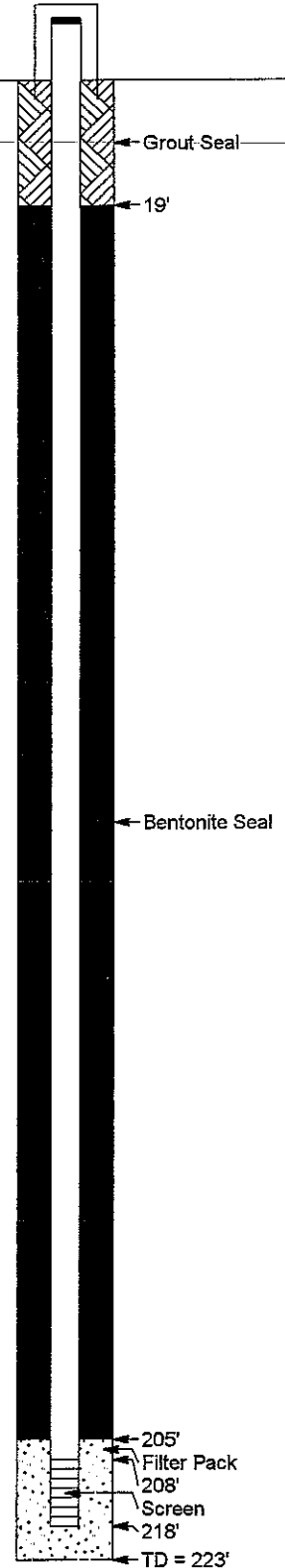
Casing Stick-up Height: 3.14'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-20-06	8:30	9-20-06	10:00
	10-3-06	14:00	10-3-06	15:55
Geophys Log: Casing:	10-3-06	16:00	10-3-06	16:10
Filter Placement: Cementing:	10-3-06	16:22	10-3-06	16:25
Bentonite Seal:	10-3-06	16:30	10-3-06	16:40

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 208'	C1	3476.6' - 3268.6'
208' - 218'	S1	3268.6' - 3258.6'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 5-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 23-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 30', 80', 130', and 180' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

WELL CONSTRUCTION SUMMARY 03047.05 WELL CONSTRUCTION SUMMARIES.GPJ C:\LOG WITH WELL.GDT 1/10/07

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-58
Boring No.: B-92

Survey Coordinates: 6875941.25 N
564948.67 E

Elevation Ground Level: 3484.7'
Top of Casing: 3487.79'
Screened Interval: 3270.7' - 3260.7'

DRILLING SUMMARY

Total Depth: 227
Borehole Diameter: 6"

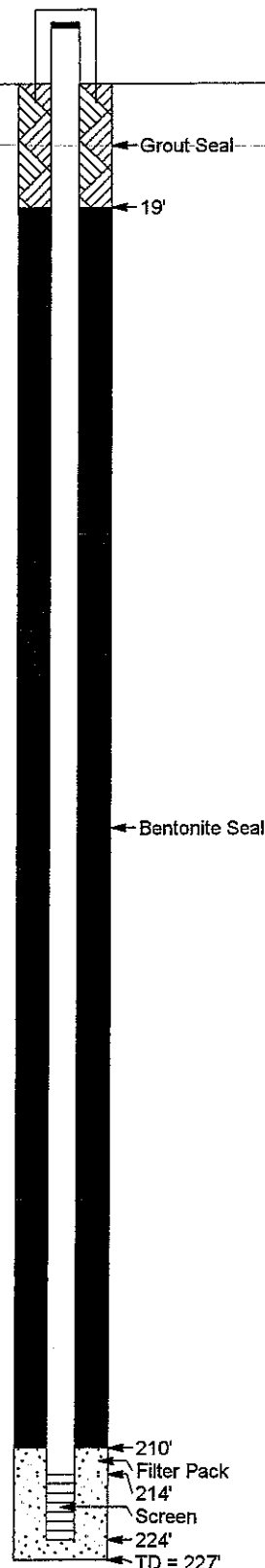
Casing Stick-up Height: 3.09'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-20-06	10:22	9-20-06	13:45
	10-4-06	8:10	10-4-06	14:45
Geophys Log: Casing:	10-4-06	14:55	10-4-06	15:00
Filter Placement: Cementing: Bentonite Seal:	10-4-06	15:05	10-4-06	15:10
	10-4-06	15:12	10-4-06	15:35

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 214'	C1	3484.7' - 3270.7'
214' - 224'	S1	3270.7' - 3260.7'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 10-50 lb. bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 30-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 50', 100', 150', and 200' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
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(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-59
Boring No.: B-97

Survey Coordinates: 6873568.3 N
565274.72 E

Elevation Ground Level: 3471.3'
Top of Casing: 3474.43'
Screened Interval: 3289.3' - 3279.3'

DRILLING SUMMARY

Total Depth: 198'
Borehole Diameter: 6"

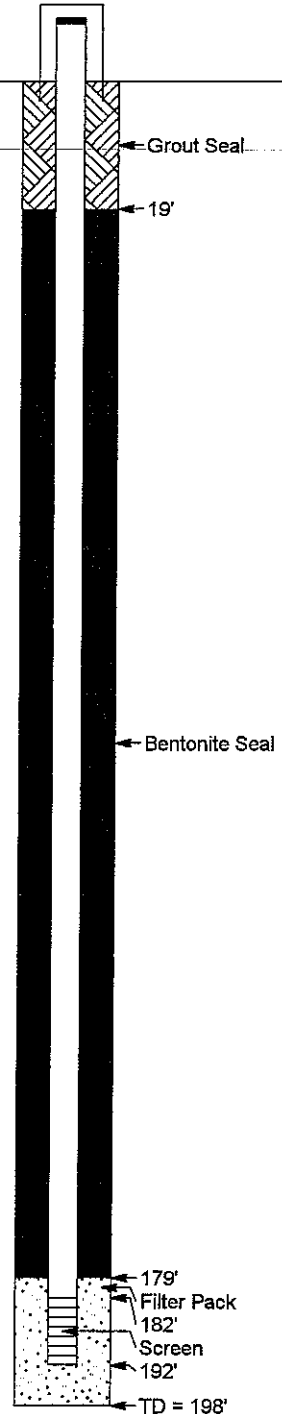
Casing Stick-up Height: 3.13'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-19-06	13:45	9-19-06	15:00
	10-5-06	8:10	10-5-06	10:30
Geophys Log: Casing:	10-5-06	10:35	10-5-06	10:40
	10-5-06	10:49	10-5-06	10:53
Filter Placement: Cementing: Bentonite Seal:	10-5-06	10:55	10-5-06	11:05

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 182'	C1	3471.3' - 3289.3'
182' - 192'	S1	3289.3' - 3279.3'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 18-50 lb. bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 43-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 10', 60', 110', and 160' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

WELL CONSTRUCTION SUMMARY 03047.05 WELL CONSTRUCTION SUMMARIES.GPJ C:\LOG WITH WELL.GDT 1/10/07

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-60
Boring No.: B-96

Survey Coordinates: 6875293.98 N
562196.9 E

Elevation Ground Level: 3478.6'
Top of Casing: 3481.89'
Screened Interval: 3293.6' - 3278.6'

DRILLING SUMMARY

Total Depth: 203'
Borehole Diameter: 6"

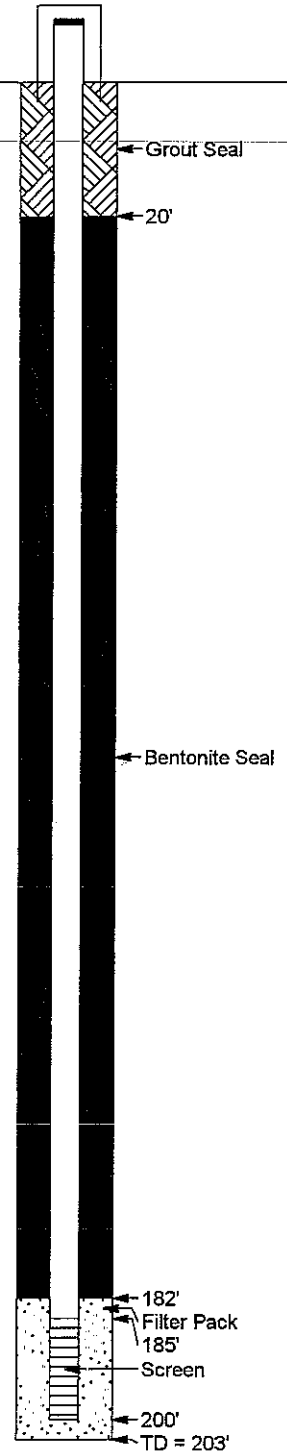
Casing Stick-up Height: 3.29'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-26-06	16:20	9-26-06	17:00
	10-6-06	8:00	10-6-06	11:00
Geophys Log: Casing:	10-6-06	11:35	10-6-06	11:40
Filter Placement: Cementing: Bentonite Seal:	10-6-06	11:49	10-6-06	11:57
	10-6-06	12:00	10-6-06	12:15

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 185'	C1	3478.6' - 3293.6'
185' - 200'	S1	3293.6' - 3278.6'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 10-50 lb. bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 39-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 20', 70', 120', and 170' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

WELL CONSTRUCTION SUMMARY 03047.05 WELL CONSTRUCTION SUMMARIES.GPJ C:\J LOG WITH WELL.GDT 1/10/07

CJ **COOK-JOYCE INC.**
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CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: TP-61
Boring No.: B-95

Survey Coordinates: 6876001.54 N
562605.57 E

Elevation Ground Level: 3486.0'
Top of Casing: 3489.05'
Screened Interval: 3284.0' - 3274.0'

DRILLING SUMMARY

Total Depth: 216'
Borehole Diameter: 6"

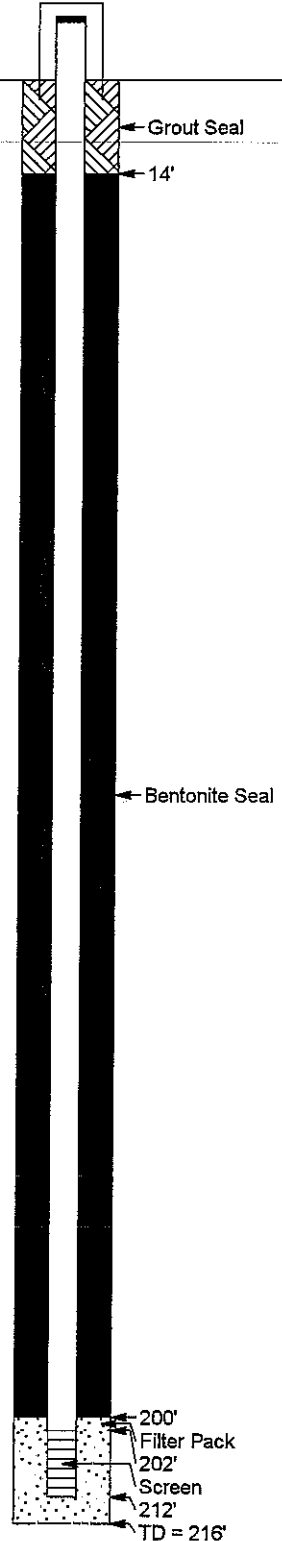
Casing Stick-up Height: 3.05'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	10-6-06	13:00	10-6-06	17:00
	10-7-06	7:30	10-7-06	10:45
Geophys Log: Casing:	10-7-06	10:55	10-7-06	11:00
Filter Placement: Cementing:	10-7-06	11:07	10-7-06	11:10
Bentonite Seal:	10-7-06	11:12	10-7-06	11:25

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 202'	C1	3486.0' - 3284.0'
202' - 212'	S1	3284.0' - 3274.0'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 8-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 40-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 35', 85', 135', and 185' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
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(512) 474-9097 FAX (512) 474-8463

CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

WELL CONSTRUCTION SUMMARY 03047.05 WELL CONSTRUCTION SUMMARIES.GPJ - C/J LOG WITH WELL.GDT 1/10/07

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: MW-11A1
Boring No.: B-11A

Survey Coordinates: 6874647.06 N
561590.75 E

Elevation Ground Level: 3471.6'
Top of Casing: 3474.53'
Screened Interval: 3316.6' - 3301.6'

DRILLING SUMMARY

Total Depth: 180'
Borehole Diameter: 6"

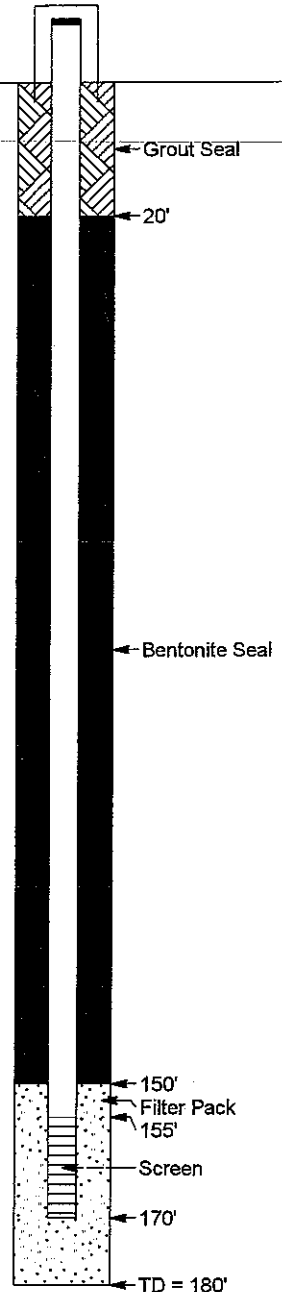
Casing Stick-up Height: 2.93'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-22-06	9:15	9-22-06	10:00
Geophys Log: Casing:	9-22-06	10:25	9-22-06	10:30
Filter Placement: Cementing:	9-22-06	10:35	9-22-06	10:45
Bentonite Seal:	9-22-06	10:50	9-22-06	11:10

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 155'	C1	3471.6' - 3316.6'
155' - 170'	S1	3316.6' - 3301.6'

Casing (C1): 2" Schedule 40 PVC

Filter Pack: 14-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 30-50 lb bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 30', 80', and 130' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas



CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: MW-11B1
Boring No.: B-19A

Survey Coordinates: 6874782.41 N
561215.14 E

Elevation Ground Level: 3470.7'
Top of Casing: 3473.65'
Screened Interval: 3320.7' - 3310.7'

DRILLING SUMMARY

Total Depth: 162'
Borehole Diameter: 6"

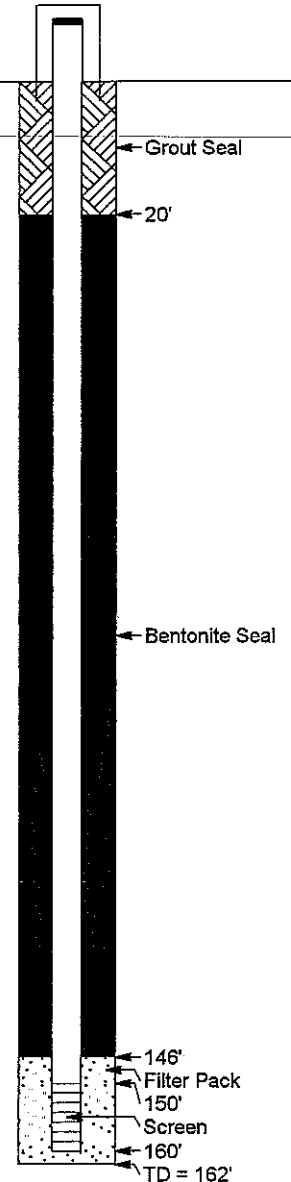
Casing Stick-up Height: 2.95'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc. pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-22-06	11:25	9-22-06	12:14
Geophys Log: Casing:	9-22-06	12:24	9-22-06	12:30
Filter Placement: Cementing:	9-22-06	12:32	9-22-06	12:37
Bentonite Seal:	9-22-06	12:38	9-22-06	12:50

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 150'	C1	3470.7' - 3320.7'
150' - 160'	S1	3320.7' - 3310.7'

Casing (C1): 2 Schedule 40 PVC

Filter Pack: 8-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 25-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 20', 70', and 120' BGS.

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

CJ **COOK-JOYCE INC.**
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812 WEST ELEVENTH
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CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05

MONITOR WELL CONSTRUCTION SUMMARY

Well No.: MW-11C1
Boring No.: B-11C

Survey Coordinates: 6875031.02 N
560978.69 E

Elevation Ground Level: 3471.4'
Top of Casing: 3473.97'
Screened Interval: 3316.4' - 3296.4'

DRILLING SUMMARY

Total Depth: 180'
Borehole Diameter: 6"

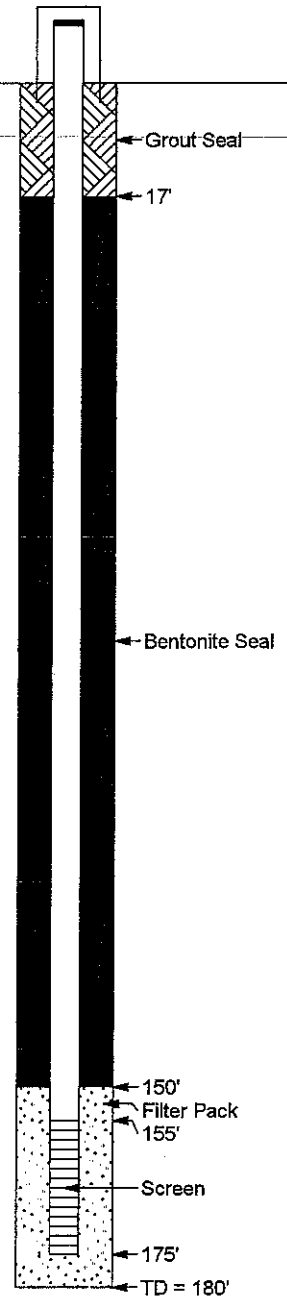
Casing Stick-up Height: 2.57'
Driller: Talon LPE

Rig: Reich Drill T-650-WII
Bit(s): 6" Mill Claw
Drilling Fluid: Air
Protective Cover: Steel Upright w/4'X4' conc pad

CONSTRUCTION TIME LOG

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: Air Rotary	9-26-06	13:30	9-26-06	15:00
Geophys Log: Casing:	9-26-06	15:15	9-26-06	15:20
Filter Placement: Cementing:	9-26-06	15:27	9-26-06	15:29
Bentonite Seal:	9-26-06	15:30	9-26-06	15:40

DIAGRAM



WELL DESIGN AND SPECIFICATIONS

Basis: Geologic Log

Casing String(s): C = Casing S = Screen

Depth	String(s)	Elevation
0' - 155'	C1	3471.4' - 3316.4'
155' - 175'	S1	3316.4' - 3296.4'

Casing (C1): 2' Schedule 40 PVC

Filter Pack: 13-50 lb bags of 12/20 silica sand

Screen (S1): 2" Schedule 40 PVC, 0.01" Slot

Bentonite Seal: 32-50 lb. bags of 3/8 inch bentonite holeplug

Grout Seal: 5% Bentonite/95% cement mix

COMMENTS:

Centralizers located at 35', 85', and 135' BGS

SUPERVISOR: Ed Hughes

SITE NAME: Waste Control Specialists

DATE: September-October 2006

LOCATION: Andrews County, Texas

COOK-JOYCE INC.
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CLIENT: Waste Control Specialists LLC

PROJECT NO.: 03047.05