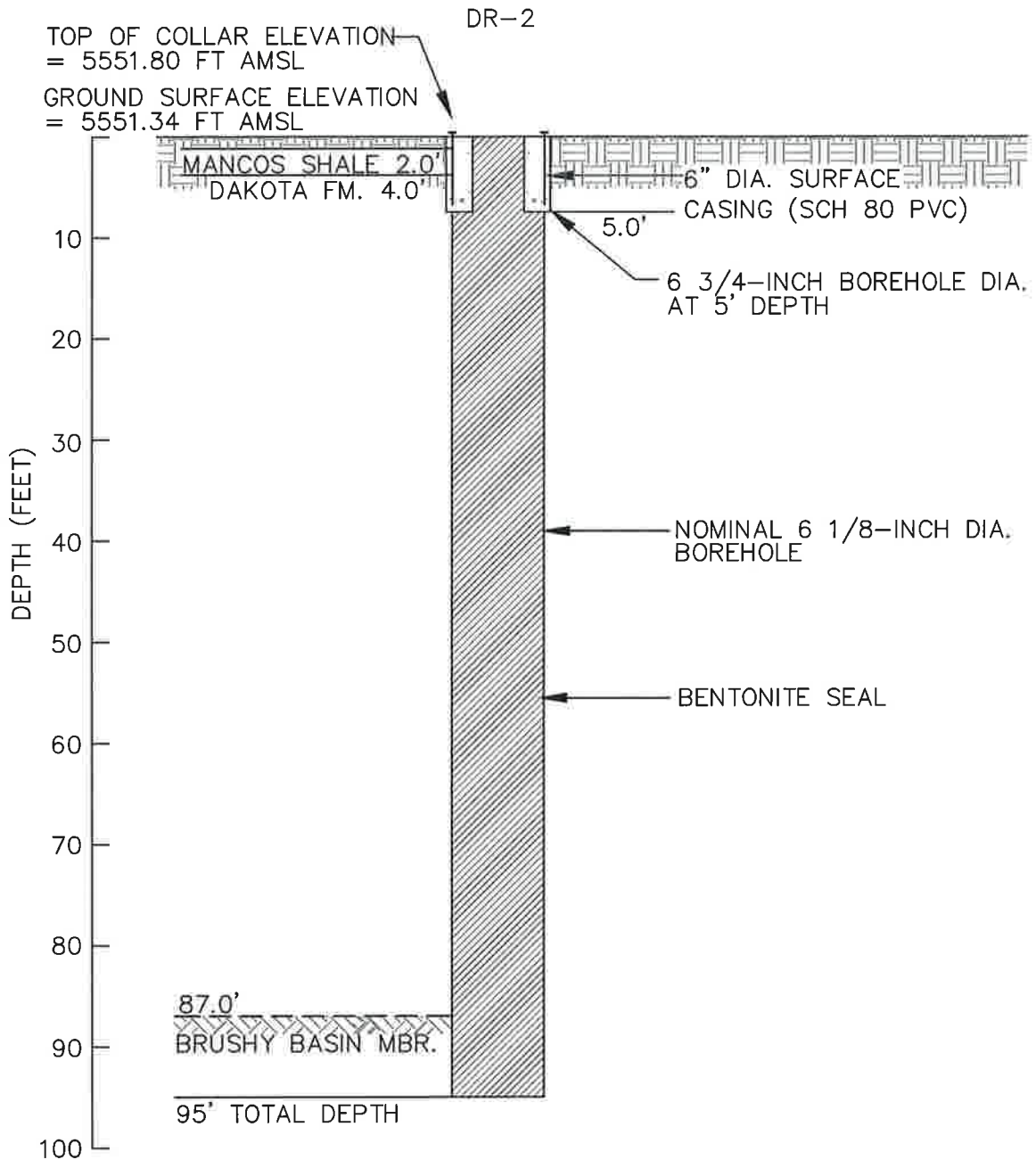


NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-2 WELL ABANDONMENT SCHEMATIC			
	Approved: SJS	Date: 1/9/12	Reference: K:\7180271A Well Construction Diagram	Figure:

Date 5 May 2011 Geologist L. Casedolt Drilling Co. Boyles Exploration Inc. Hole No. DR2

Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5576

PAGE 1 OF 1

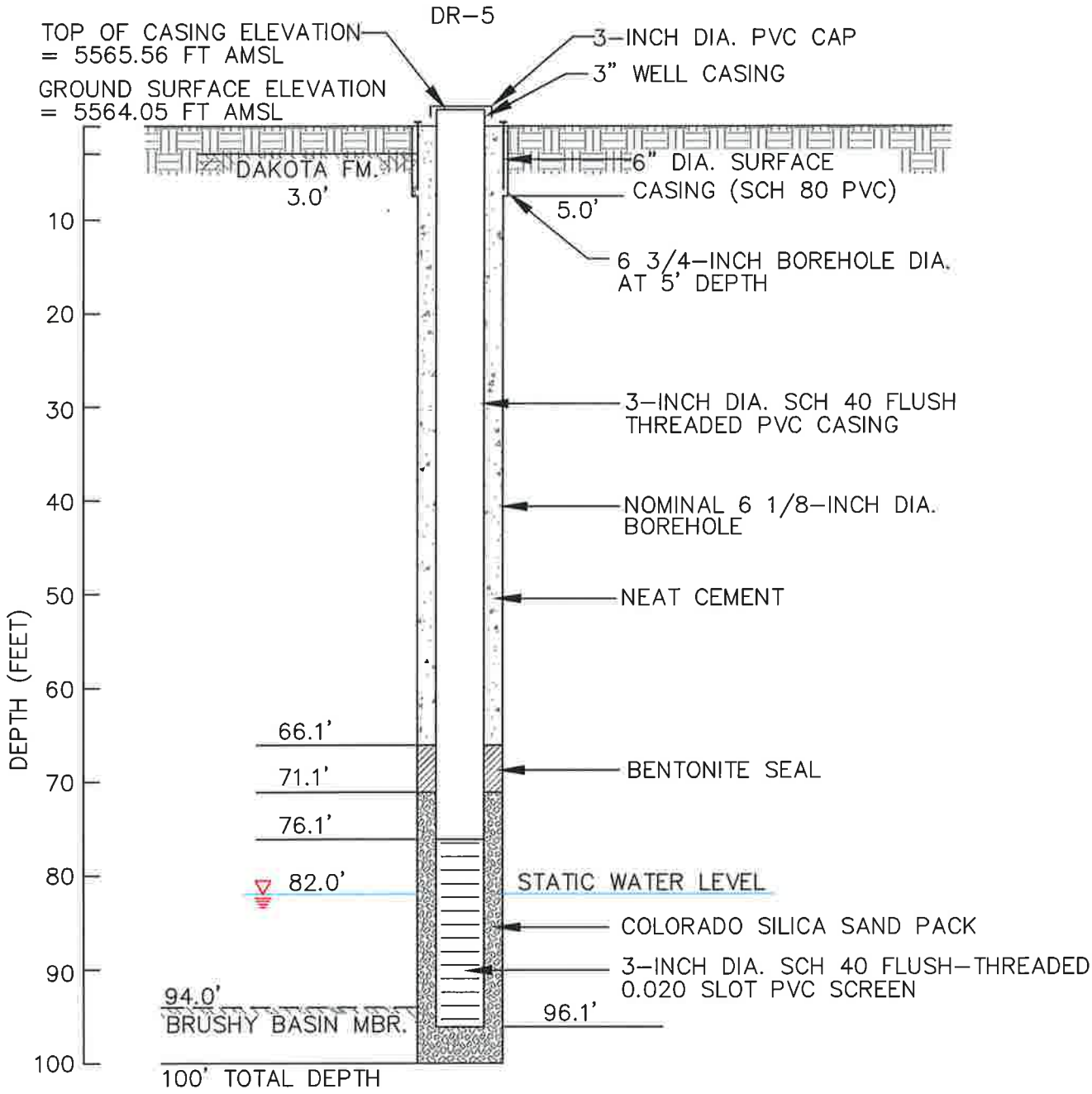
T.D. PROBE _____

T.D. DRILL 95.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						sndy mdst	rdsh-lt pksh tn	c	p	a							S				Surface soil to 2.0' Mancos Shale (unconsolidated)
2.5						sh-qtz ss	lt pksh tn	m-c	p	a							VS				Upper Burro Canyon @ 4.0' (unconsol. to 4.0')
5.0						qtz ss	lt br	m-c	p	a	H						N				wh chert grains
7.5						sh	ywgy										S				
10.0						sh-qtz ss	dk gy	m-c	f	a							M				
12.5						qtz ss	ywsh	m	w	R							N				
15.0						qtz ss	ywsh	m	w	R	L						N				sparce limonite grain coating
17.5						qtz ss	lt gysh tn	m	w	R							N				gy chert grains
20.0						[illegible]	ywsh tn	m-[illegible]	p	a							N				Moist cuttings - morning, dk chert grains - pk.
22.5						[illegible]	ywsh tn	m-[illegible]	p	a							N				lt-dk chert grains
25.0						qtz ss	lt tn	f-m	w	R							N				
27.5						sh	ywgy										N				
30.0						sh	ywgy										M				
32.5						sh	ywgy										M				
35.0						sh	ywgy										N				
37.5						qtz ss slty	lt ywsh	slt-vf	m	r							N				
40.0						qtz ss s-st	lt tn	slt-vf	m	r							N				
42.5						qtz ss s-st	lt tn	slt-vf	m	r							N				
45.0						slt st-sh	lt ywsh										N				
47.5						sh	lt-dk gn-pksh										N				
50.0						slt st-qtz ss	lt gy	slt-f	m	p	a						N				
52.5						slt st-qtz ss	lt tn	slt-vf	m	r							N				
55.0						qtz ss	lt tn	f	w	r							M				
57.5						qtz ss	lt tn	f	w	r							N				
60.0						slt st-sh	ywgy										N				
62.5						sh	lt gn-pksh										N				
65.0						qtz ss	lt-gy tn	vf-m	m	r		fr	a				N				
67.5						qtz ss	lt tn	m	w	R							N				
70.0						qtz ss	lt tn	m	w	R							N				
72.5						qtz/cher ss	ywsh	m-c	p	a							N				abund dk-lt chert grains & pebbles
75.0						qtz ss cgl	pkgy	vc-gran	p	A							N				abund multi colored chert grains
77.5						qtz ss, cgl	pkgy	vc-gran	p	A							N				Wtr flow - prelim. appx 3gpm @ 79.0'
80.0						cgl, qtz ss	wh-ltgy	m-gran	p	A	si						N				
82.5						qtz ss	wh-ltgy	m-gran	f	A	si						N				
85.0						qtz ss, sh	wh-gn	m-vc	p	a	si	L					N				Brn-Gy Resin @ 87.0' good ∅ pore oil as cement
87.5						sh	gn-pksh										N				Flow increased to 70gpm @ 87.0'
90.0						sh	gn-pksh										N				
92.5						sh	gn-pksh										N				T.D. some tall tale rd chert grains - 1-2 mm
95.0																					
97.5																					
100.0																					(intensely dk tan material (dead oil?) in
102.5																					interstices of sand grains @ 87.5')
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					Note: this well completed on 6 May 2011

PERCENTAGE COMPOSITION IMAGE



NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-5
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180250A Well Construction Diagram	

Date 5 May 2011 Geologist L. Casement Drilling Co. Bayles Exploration Inc. Hole No. DR5

Property White Mesa Mill Project cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge _____

County San Juan State Utah Location _____ Elev. ≈5560

PAGE 1 OF 1

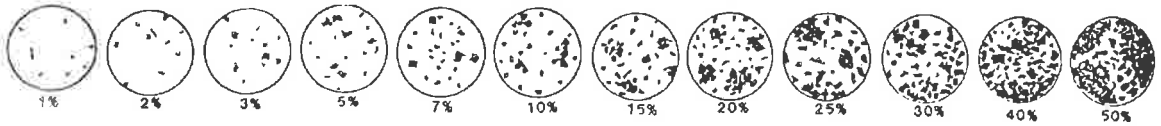
T.D. PROBE _____

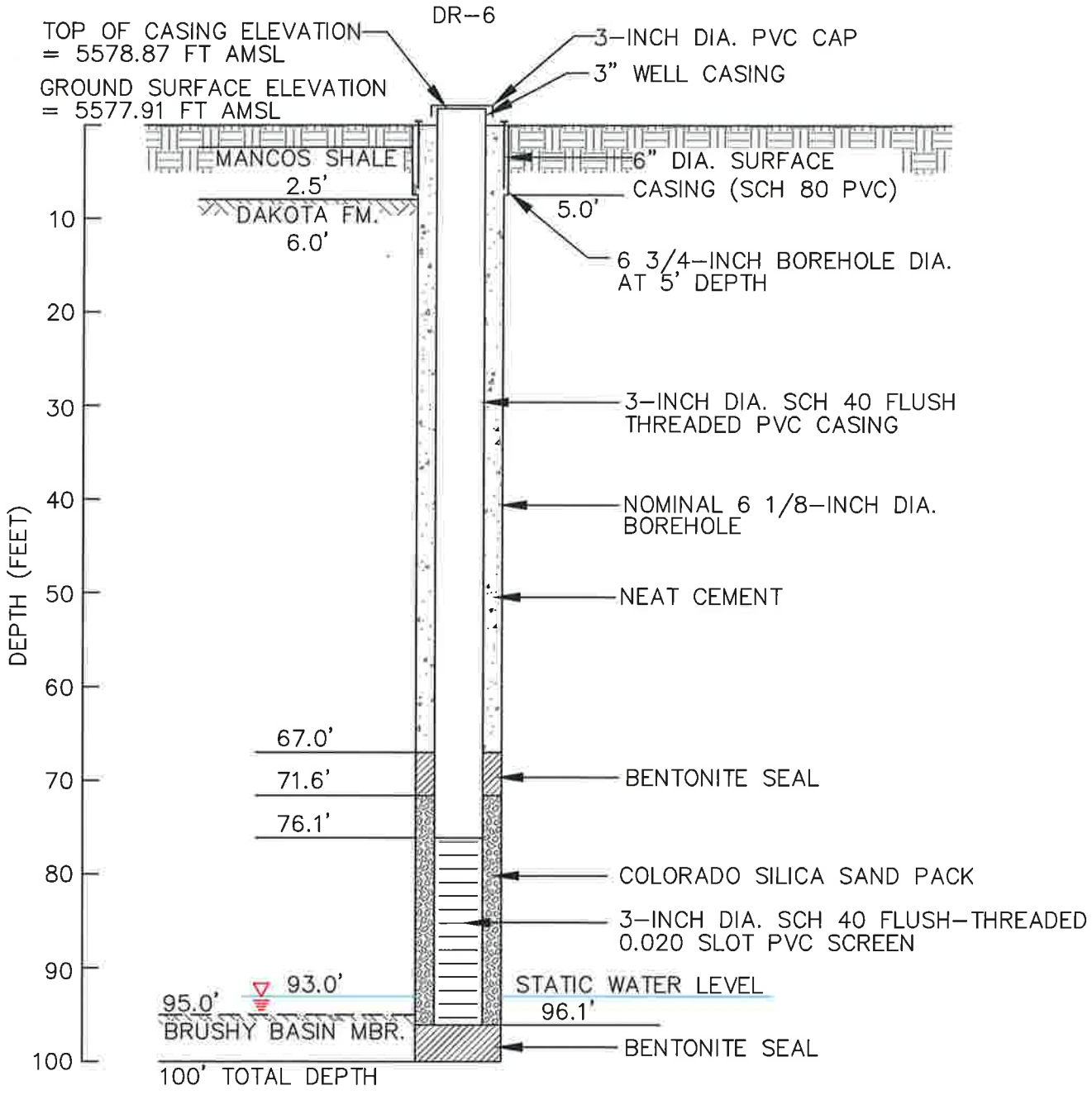
T.D. DRILL 100.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	PYRITE NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																				
2.5																S				Sandy silt, unconsolidated CL
5.0																N				Upper Dakota CL @ 30'
7.5																				
10.0																				
12.5																				
15.0																				
17.5																				
20.0																				same chert grains
22.5																				" " "
25.0																				
27.5																				
30.0																				CH
32.5																N				CH
35.0																				
37.5																				
40.0																				
42.5																				same chert & qtz sand grains
45.0																				
47.5																				
50.0																				
52.5																				
55.0																				
57.5																				
60.0																				
62.5																				moisture (condensation) chert-quartz grains
65.0																				
67.5																				abund. chert grains
70.0																				
72.5																				some chert grains + grains
75.0																				
77.5																				
80.0																				wet hard drilling
82.5																				"
85.0																				"
87.5																				"
90.0																				"
92.5																				"
95.0																				Breaks, Basin C @ 94.0' g. contact
97.5																				
100.0																				T.D. tell tale small red chert grains
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				
122.5																				
125.0																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-6 AS-BUILT WELL CONSTRUCTION SCHEMATIC			
	Approved SJS	Date 1/9/12	Reference K:\7180251A Well Construction Diagram	Figure

Date 5 May 80 Geologist L. Cosgriff Drilling Co. Bayles Exploration Inc. Hole No. DR6

Property White Mesa Mill Project coal Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5579

PAGE 1 OF 1

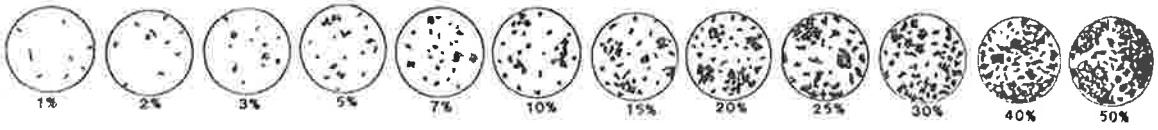
T.D. PROBE _____

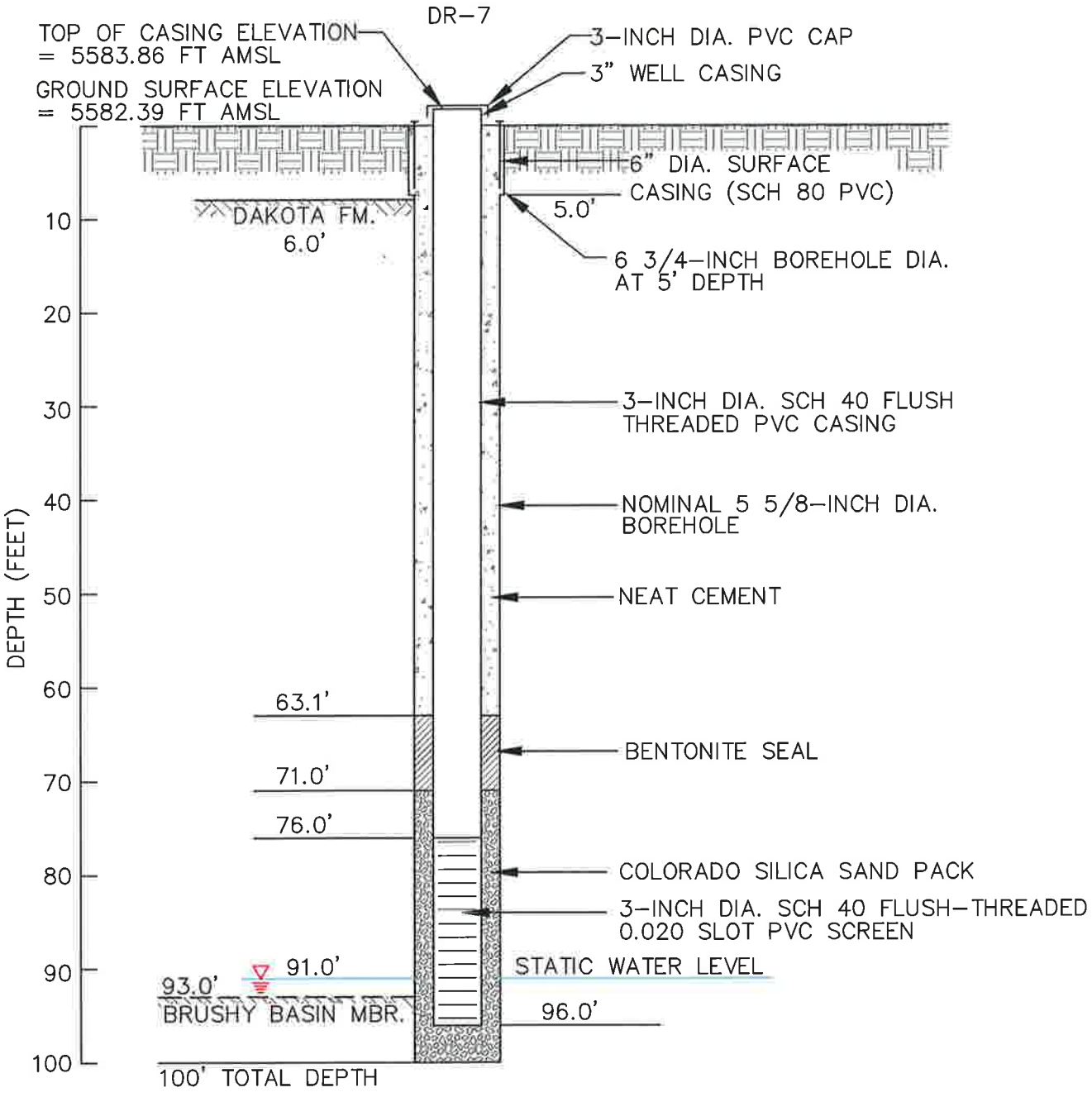
T.D. DRILL 100.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	PYRITE NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0						mdst	rdbn										W				
25						mdst, sh	rdbn ltgn										VS				Surface Sh. - waterconsolidated - C.H.
5.0						qtzss, sh	ltgn-clr	f-	m	r		L					VS				Mancos Shale " C.H.
7.5							sh		m	w	r						N				Upper Dakota Fm @ 9.0'
10.0								m-	c	m	a		L				N				
12.5									m	w	a						N				
15.0									m	w	a						N				
17.5									m	w	a						N				
20.0								m-	c	m	a		L				N				
22.5						qtzss, sh	orbn		m	w	r		L				N				
25.0									m	w	r						N				
27.5									m	w	a						N				
30.0									m	w	a						N				
32.5									m	w	R						N				
35.0									m	w	r						N				
37.5									m	w	r						N				sparse chert grains
40.0						qtzss, sh	m-vltgn	m-vc	p	a							N				
42.5						sh qtzss	ltgy-gy		m	w	r						N				CL
45.0							vltbn		m	w	r						N				
47.5							vltbn		f	w	r						N				
50.0						qtzss	vltbn	m-	c	m	r						N				
52.5						qtzss	ltbn	m-	vc	f	r		L				N				
55.0							ltbn		m	w	r						N				
57.5							ltbn	f-	c	f	r						N				
60.0						qtzss	ltgn-bn		m	w	R						N				
62.5						qtzss	vltgy	f-	m	f	r						N				
65.0						qtzss	vltgy		m	w	R						N				
67.5							vltgy		m	w	r						N				
70.0							vltgy		f	w	r						N				
72.5						qtzss	vltgy		f	w	r						N				
75.0						qtzss	vltgy		f	w	r						N				
77.5						qtzss	bn	m-	vc	m	r						N				chert frag. + grains
80.0						qtzss	ltgy-bn		m	w	R						N				
82.5						qtzss	ltgy-bn	m-	c	m	r						N				Mostly ltgy-bn below 82.0'
85.0						qtzss	ltgy-bn	m-	c	m	r						N				
87.5						qtzss	ltgy-bn	m-	pc	p	a						N				chert pebbl. + gran.
90.0						qtzss	bn	m-	pc	p	a						N				" " "
92.5						qtzss	bn	c-	pc	p	a						N				" " "
95.0						qtzss	ltgy-bn	c-	pc	p	a		tr	c			VS				
97.5						sh	ppbn-gn										N				Brushy Basin @ 95.0' gradational contact
100.0						sa	mbn-gn										N				T.D.
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-7
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180252A Well Construction Diagram	

Date 27 APR 2011 Geologist L. CASEROLT Drilling Co. BAYLES EXPLORATION CO. Hole No. DR7

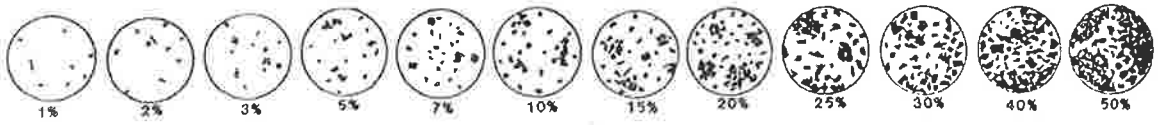
Property WHITE MESA MILL Project CELLAR Unit No. _____ Sec. _____ Twp. _____ Rge. _____

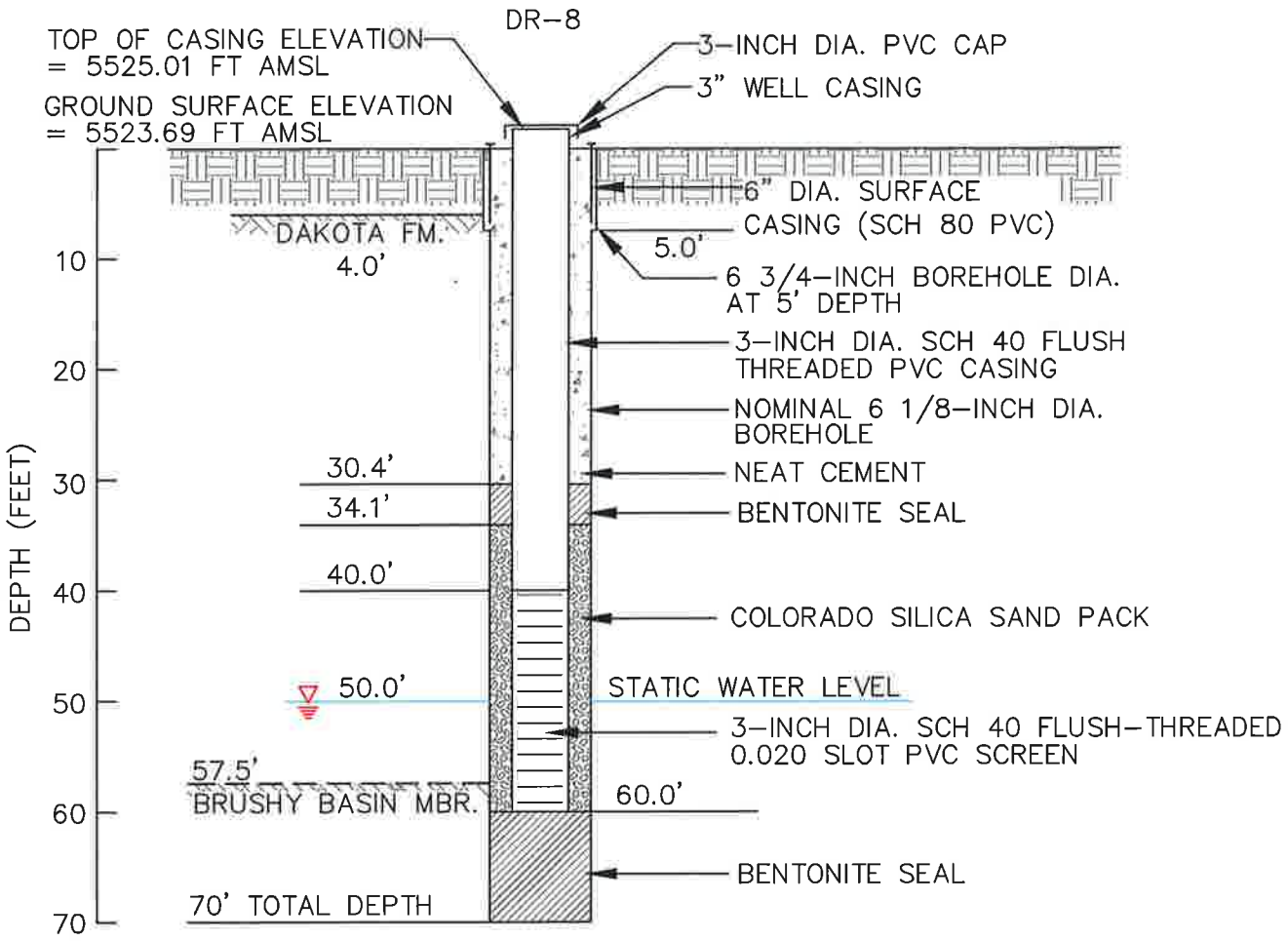
County SAN JUAN State UTAH Location _____ Elev. 5594

PAGE 1 OF 1
T.D. PROBE _____
T.D. DRILL 102.5
FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE AMOUNT	PYRITE HABIT	PYRITE ALTER	PYRITE METALLIC	PYRITE NON-METALLIC	REACT-10% HCL AMOUNT	REACT-10% HCL TYPE	CARBON	REMARKS
0																				
25						mdst	redbn									N				Surface soil - unconsolidated CH
5.0						mdst	redbn									W				Surface soil - unconsolidated CH
7.5						qtz ss	arsa	m-c	m	a	L					N				Upper Dakota @ 8.0'
10.0						qtz ss	grtn	m-c	m	A						N				
12.5						qtz ss	lt bn		m	w	a					N				
15.0						qtz ss	lt gy		m	w	a					N				
17.5						qtz ss	grtn	m-c	m	a						N				
20.0						qtz ss	tn		m	w	a					N				
22.5						qtz ss	tn		m	w	r					N				
25.0						qtz ss	lt bn	m-c	m	r						N				some chert frags.
27.5						qtz ss	tn		m	w	r					N				
30.0						qtz ss	lt gy tn	f-m	m	r						N				
32.5						qtz ss, sh	lt gy tn		m	w	r					N				
35.0						qtz ss	lt gy tn	m-c	m	r						N				
37.5						qtz ss	vl-gy tn		f	w	R					N				
40.0						qtz ss, cgl	lt gy tn	m-c	f	r						N				
42.5						sh, qtz ss	lt gy gy	vf-f	m	r	L					N				CH
45.0						qtz ss	lt tn	f-m	m	r	L					N				
47.5						qtz ss	lt gy tn	m-c	f	R						N				
50.0						qtz ss	lt gy tn	m-c	f	R						N				
52.5						qtz ss	lt pk tn	m	pk	f	a					N				some multi colored chert grains
55.0						qtz ss	vl-pk tn		m	w	R					N				
57.5						qtz ss	vl pk tn	f	m	m	r					N				
60.0						qtz ss	lt pk tn	m	pk	f	a					N				
62.5						qtz ss	lt gy tn		m	w	a					N				
65.0						qtz ss	lt gy tn	m-c	m	a						N				
67.5						qtz ss	bn	c	vc	m	a					N				abund chert frags
70.0						qtz ss	lt gy on	m-vc	m	a						N				
72.5						qtz ss, cgl	bn	c-vc	m	a						N				
75.0						qtz ss	gy tn	m-c	m	r						N				
77.5						qtz ss	lt gy tn		m	w	r					N				mainly lithic, some chert grains
80.0						qtz ss	or tn	m-c	m	r						N				
82.5						qtz ss	or pk tn		m	w	R					N				
85.0						qtz ss	tn		m	w	R					N				
87.5						qtz ss	lt tn		m	w	R					N				
90.0						qtz ss	gy tn		m	w	R					N				
92.5						qtz ss	gy tn	m-c	m	r						YW				
95.0						qtz ss, sh, cgl	wh, lt-o gn	m	pk	m	r					W				Brushy Basin fm @ 93.0' chert pebbles
97.5						sh	pprsn-gn									N				mottled frags.
100.0						sh, qtz ss	gn-vl gy	vf-c	p	r		tr	A			N				T.D.
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				
122.5																				
125.0																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-8 AS-BUILT WELL CONSTRUCTION SCHEMATIC			
	Approved SJS	Date 1/9/12	Reference K:\7180253A Well Construction Diagram	Figure

Date 5 May 20[illegible] Geologist L. Casebolt Drilling Co. Boyles Exploration Inc. Hole No. DR8

Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5557

PAGE 1 OF 1

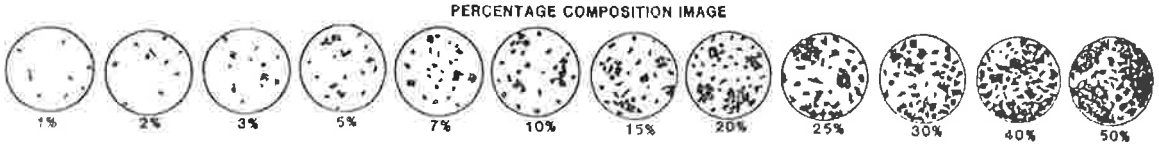
T.D. PROBE _____

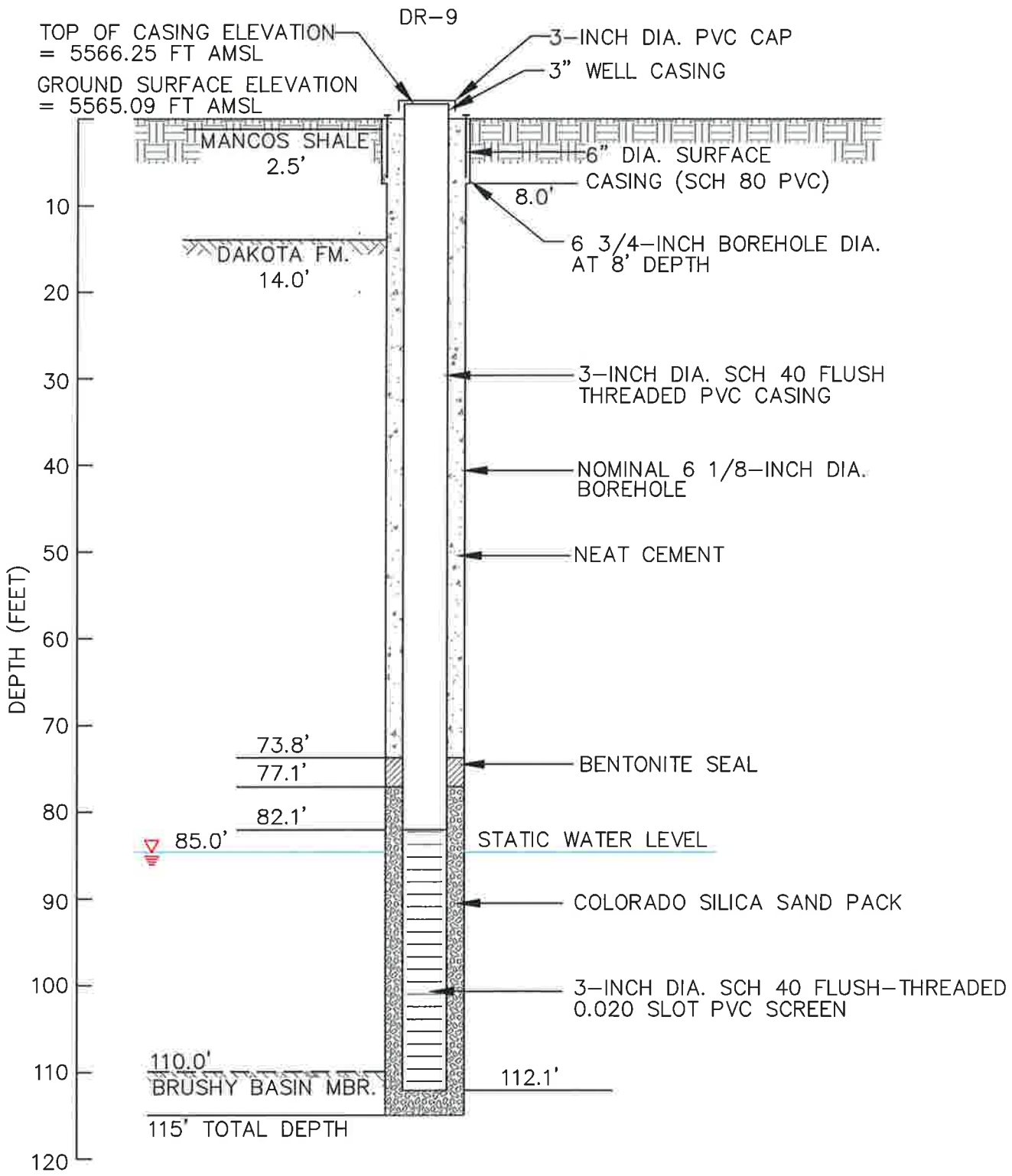
T.D. DRILL 70.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	BANNA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						Sn-qtz ss	ltgy/gy	vf	w	r							VS				Mancos Shale - Soil was removed during site prep CL
2.5						Sh-qtz ss	ltgy/gy	vf	w	r							S				upper Dakota Fm @ 4.0' ML
5.0						qtz ss	tn	f-m	m	a	L						N				
7.5						qtz ss	tn	f-m	m	a							N				
10.0						qtz ss	tn	m	w	a							N				
12.5						qtz ss	tn	m	c	m	a						N				
15.0						qtz ss	pk-tn	m-c	f	r							N				
17.5						qtz ss	tn	f-m	f	r							N				
20.0						sh, qtz ss	ltgy/gy	f-m	f	r							N				
22.5						qtz ss, sh	ltgy/gy	f-m	f	r							N				CL
25.0						qtz ss, sltst	ltgy/gy	f-m	f	r							N				ML
27.5						qtz ss, sltst	ltgy/gy	vf-m	f	r	L						N				
30.0						qtz ss, sh	ltgy/gy	vf-m	f	r	L						N				
32.5						qtz ss	brn-ltgy/gn	m	w	r							N				very hard drilling
35.0						qtz ss	ltgy/gn	m-c	m	R	L						N				some clear chert grains
37.5						qtz ss, qtzite	ltgy/gn	m-vc	f	a							N				abund " " "
40.0						qtz ss, qtzite	wh	m-vc	f	a							N				very hard drilling
42.5						qtz ss, qtzite	wh	m-vc	f	a							N				extremely hard drilling
45.0						qtz ss, qtzite	wh	m-vc	f	a							N				" " "
47.5						qtz ss, qtzite	wh	m-vc	p	a							N				" " "
50.0						qtz ss, qtzite	wh-v.ltgy	m-vc	p	a							N				" " "
52.5						qtz ss, qtzite, sh-or-argyl	wh-or-argyl	m	VP	P	A						N				" " "
55.0						sh	ltgy/blk										N				
57.5						qtz ss, qtzite	ltgy/gn	f-m	m	r							W				
60.0						sh	gy/gn-porcln										N				Porcln: Dry 1/2 hr @ 110 C - 2.8 cuttings were mottled,
62.5						sh	gn-pp gn/tn										N				take well rounded chert grains
65.0						sh	gn										N				
67.5						sh	gn					tr	A				N				
70.0						sh	gn										N				TD
72.5																					
75.0																					
77.5																					
80.0																					
82.5																					
85.0																					
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-9
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180254A Well Construction Diagram	

Date 4 May 2011 Geologist L. Casebolt Drilling Co. Rogers Exploration Inc. Hole No. DR9

Property White Mesa Mill Project Col 43 Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈ 5562

PAGE 1 OF 1

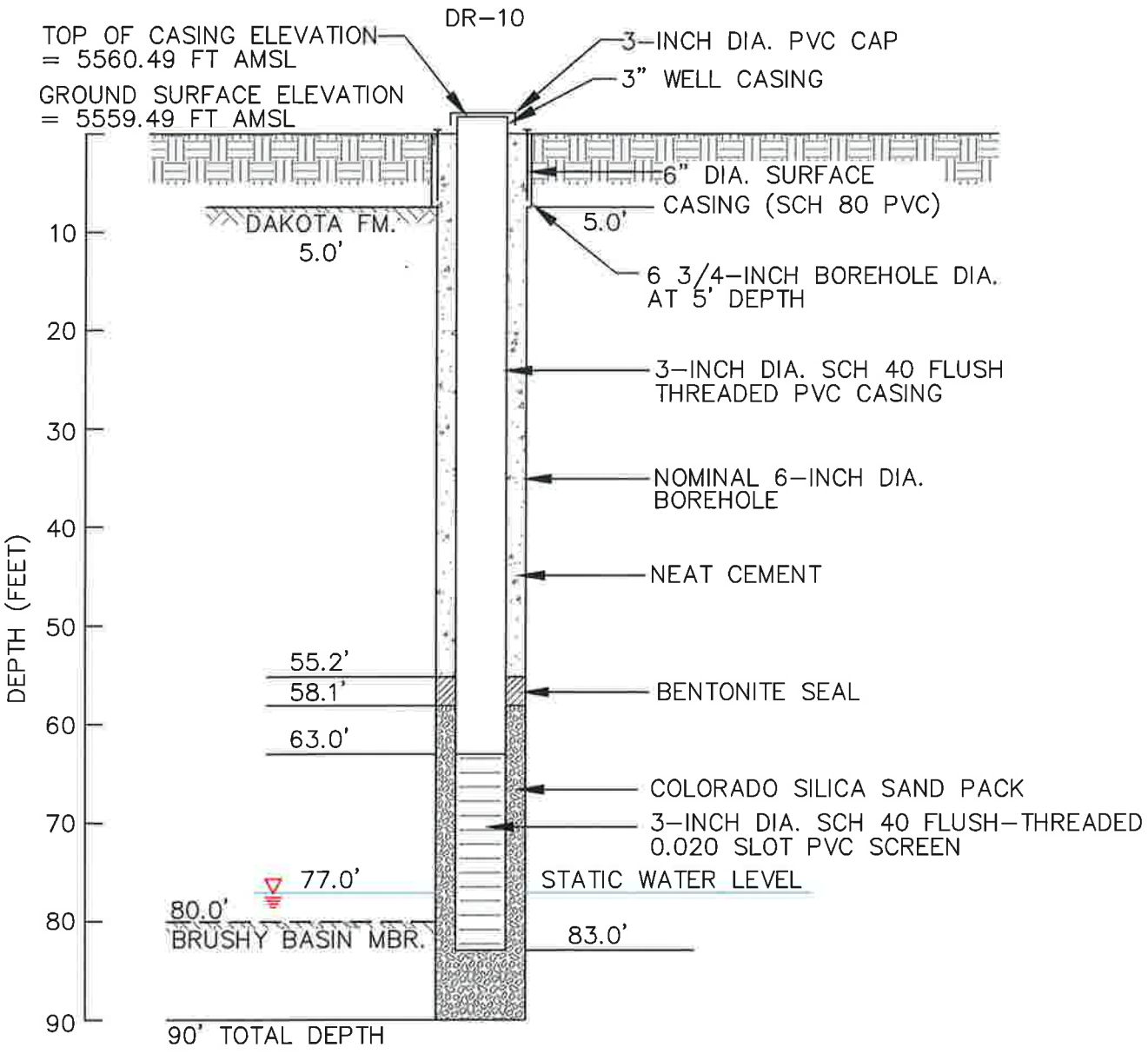
T.D. PROBE _____

T.D. DRILL 115.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT WATER	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0																					
2.5						mocs	rdbn-ltpk										W				Surface soil to 2.0', Morrison Shale to 2.5 cl
5.0						qtz ss, sh	rdbn	f-m	m	r							S				Unconsolidated mud ML
7.5						qtz ss, sh	rdbn	f	w	r							N				" ML
10.0						qtz ss, sh	rdbn	vf-f	m	r							S				
12.5						qtz ss	rdbn	m	w	r							W				
15.0						sh, qtz ss	dk gy-bn	f	m	m	a	L					N				Water Bearing Fm @ 14.0'
17.5						qtz ss	tn		m	w	a	L					N				
20.0						qtz ss	tn		m	w	a						N				
22.5						qtz ss	tn	f	m	m	a						N				
25.0						qtz ss	tn		m	w	a						N				
27.5						qtz ss	tn		f	w	r						N				
30.0						qtz ss	tn		m	w	r						N				
32.5						qtz ss	tn		m	w	a						N				
35.0						qtz ss	tn		m	w	a						N				
37.5						qtz ss	tn		m	w	a						N				
40.0						qtz ss	tn	m-c	m	a							N				
42.5						qtz ss	tn		m	w	r						N				
45.0						qtz ss	tn		f	w	r						W				
47.5						qtz ss	gray	c-vc	p	a							N				abund chert + qtz
50.0						qtz ss	gray	c-vc	p	a		L					N				" " "
52.5						qtz ss	tn	m-c	m	a							N				
55.0						qtz ss	tn	m-c	m	a							N				
57.5						sh	yw-gy										N				
60.0						qtz ss, sh	yw-gy		f	w	r						N				
62.5						qtz ss, sh	gy	f	m	m	r						N				
65.0						qtz ss, sh	gy		f	w	r						N				
67.5						qtz ss, sh	gy		f	w	r						N				
70.0						qtz ss, sh	gy	vf	f	m	r		tr	A			N				
72.5						qtz ss	gy	vf	f	m	r		tr	A			N				
75.0						qtz ss	wh	vf	f	m	r						N				
77.5						qtz ss	lt tn		m	w	r						N				
80.0						qtz ss	lt tn		m	w	a						N				
82.5						qtz ss	lt tn		m	w	a						N				
85.0						qtz ss	lt gy-tn		m	w	R						N				mottled lithology
87.5						qtz ss, sh	lt gy-tn		m	w	R						N				
90.0						qtz ss	lt tn	m-c	m	r							N				
92.5						qtz ss	lt tn		m	w	r						S				
95.0						qtz ss	lt tn		m	w	r						N				
97.5						qtz ss	lt tn		m	w	R						P				
100.0						qtz ss, sh	lt gy-wh		m	w	R						N				
102.5						qtz ss	wh		m	w	r						S				
105.0						qtz ss, sh	wh-dk gy	c-peb	p	a			1%	C			N				
107.5						qtz ss, sh	wh-dk gy	c-peb	p	a			1%	C			N				
110.0						qtz ss, sh	dk gy-gn	c-peb	p	a							N				
112.5						sh	gn										N				Bottom of Sh @ 110.0
115.0						sh	gn										N				TD
117.5																					
120.0																					

PERCENTAGE COMPOSITION IMAGE



NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-10
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7160255A Well Construction Diagram	

Date 4 May 2011 Geologist L. Casebolt Drilling Co. Bayles Exploration Inc. Hole No. DR 10

Property White Mesa Mill Project cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5559

PAGE 1 OF 1

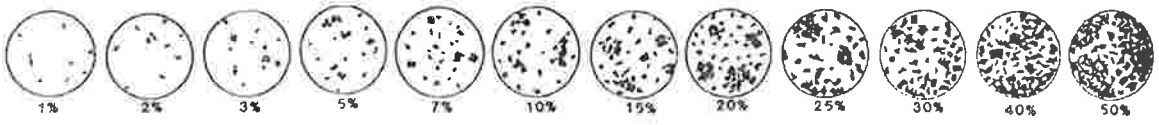
T.D. PROBE _____

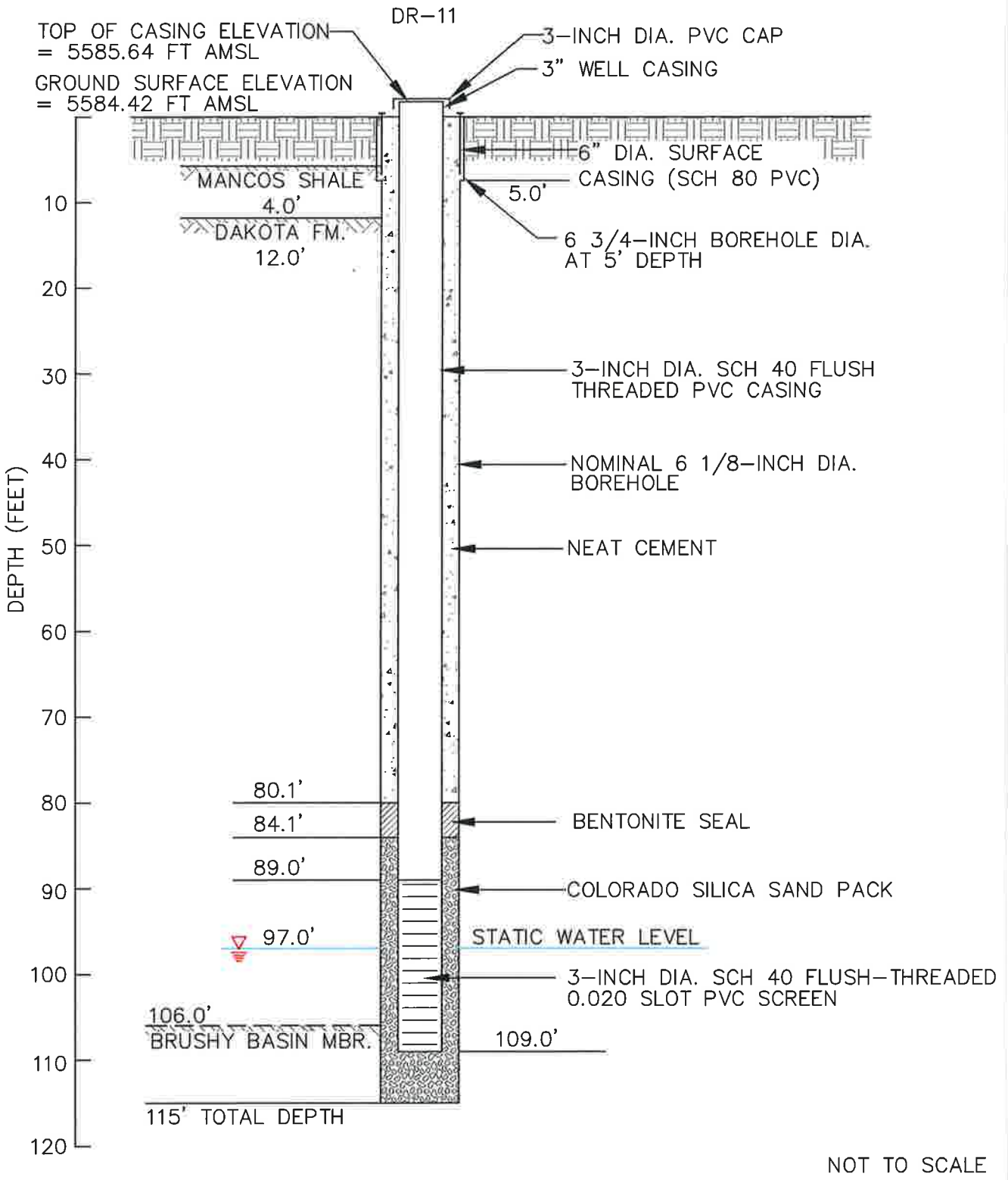
T.D. DRILL 90.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	PYRITE METALLIC	PYRITE NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																					
2.5						moist	rdsh										W				Surface soil unconsolidated CH
5.0						moist	rdsh										W				Surface soil " CH
7.5						qtz ss	tn	m	w	a	L						N				Upper Dakota Fm Cl @ 5.0'
10.0						qtz ss	tn	m	w	a	L						N				
12.5						qtz ss	tn	f	w	a							N				
15.0						qtz ss	tn	m	w	a							N				
17.5						qtz ss	tn	m-c	m	a							N				some chert frags and grains
20.0						qtz ss	tn	f-m	m	r							N				
22.5						qtz ss	tn	f-m	m	r							N				
25.0						qtz ss, sh	lt yw gy	f-m	m	r							N				sandy lean clay CL
27.5						qtz ss	lt gy	f-m	m	r	L						N				" " CL some chert pebbles
30.0						qtz ss, sh	dk yw gy	f-m	m	r							N				sandy lean clay CL " " "
32.5						qtz ss, cgl	yw gy	vf-m	m	r							N				
35.0						qtz ss, sh	yw gy	vf-c	m	r							N				Lean clay CL, some chert grains
37.5						qtz ss	yw tn	f	w	r							N				
40.0						qtz ss	yw tn	f	w	r							N				
42.5						qtz ss	pk tn	f	w	r							N				
45.0						qtz ss	yw gy-tn	f-m	m	r	L						N				
47.5						qtz ss	tn	f	w	r	L						N				
50.0						qtz ss	tn	m	w	r							N				
52.5						qtz ss	tn	M	w	r							N				
55.0						qtz ss	tn	m-M	m	r	H						N				abund chert grains
57.5						qtz ss	tn	m	w	R							N				
60.0						qtz ss	tn	m	w	R							N				
62.5						qtz ss	tn	m-c	m	a							N				
65.0						qtz ss	lt gy tn	m-c	m	a	L						N				
67.5						qtz ss	yw gy	m-c	m	r							N				very hard to cut
70.0						qtz ss, cgl	lt gy tn	m-vc	p	a							N				very abund chert frags + grains
72.5						mdst, cgl	gy tn	m-vc	p	a							N				" " "
75.0						mdst, cgl	gy tn	m-vc	p	a							N				
77.5						mdst	gy tn-wh	m-vc	p	a							N				very abund chert frags + grains
80.0						mdst	gy tn-wh	m-vc	p	a							N				
82.5						sltst, sh	gn										N				Brushy Basin Cl @ 82.0'
85.0						sltst, sh	gn										N				
87.5						sh	gn										N				
90.0						sh	gn										N				T.D.
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					

PERCENTAGE COMPOSITION IMAGE





HYDRO GEO CHEM, INC.

DR-11
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180256A Well Construction Diagram	

Date 6 May 2011 Geologist L Cascadden Drilling Co. Boyles Exploration Inc. Hole No. DR 11

Property White Mesa Mill Project cell 43 Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5582

PAGE 1 OF 1

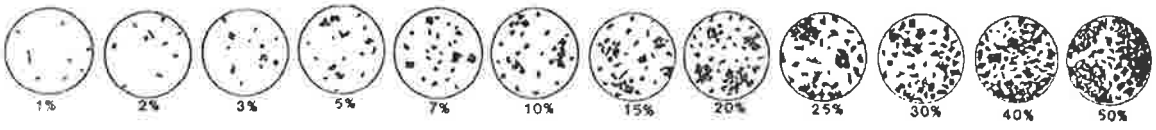
T.D. PROBE _____

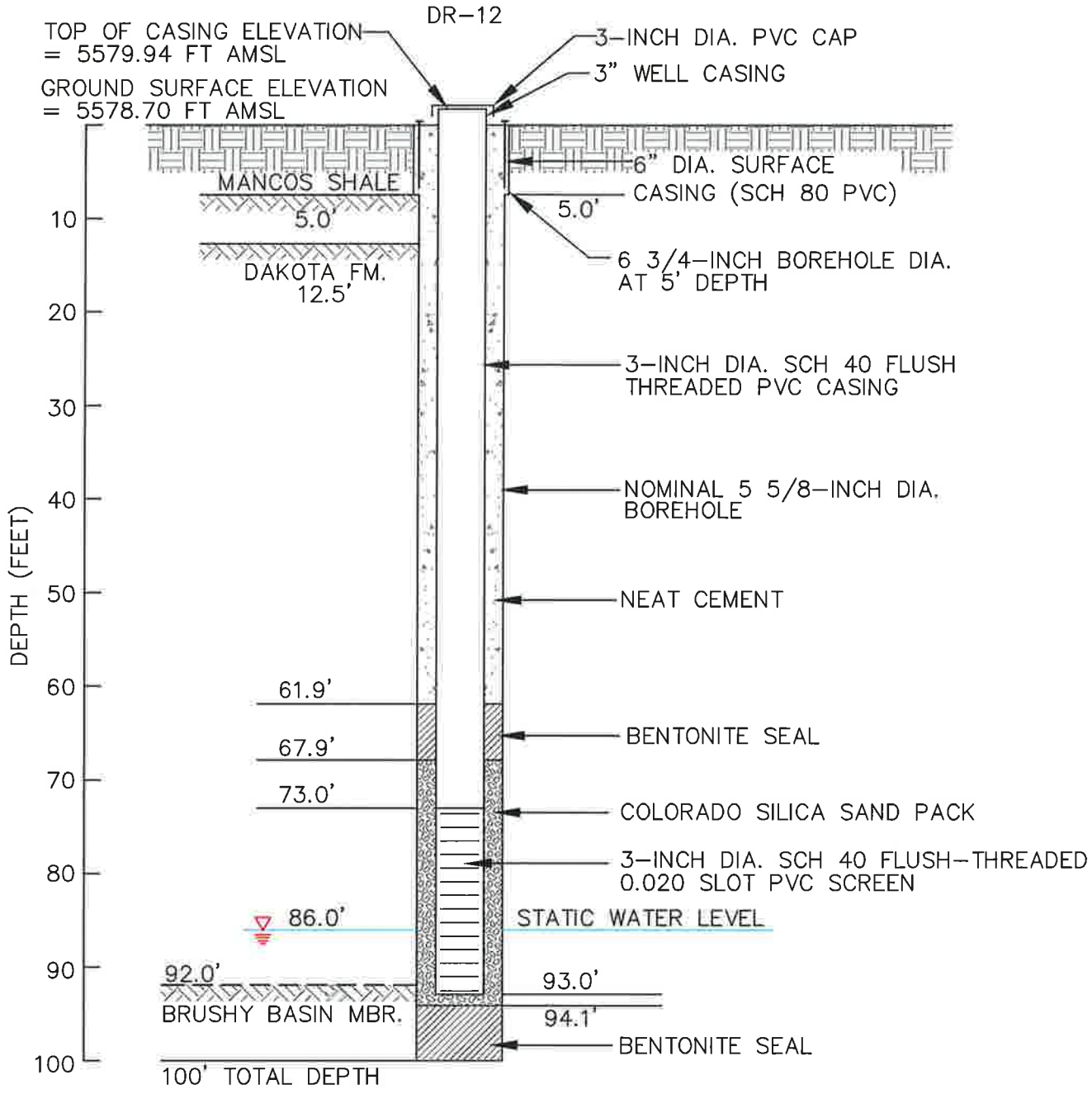
T.D. DRILL 115.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	METALLIC	NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																					
25						wash	rdbn										W				Surface Soil (unconsolidated)
5.0						wash, ss	rdbn ltpk										VS				Surface Soil (unconsolidated, Mancos shale @ 4.0'
7.5						sndy sh	rdbn	m	f	r							VS				
10.0						ss, qtz ss	rdbn - ltpk	m	m	r							VS				
12.5						sh, qtz ss	ltpk - vlt-tn	m	m	r							VS				Upper Dakota Fm @ ± 12.0'
15.0						qtz ss	ltgy tan	m-c	m	r							S				
17.5						qtz ss	ltgy	m-vc	f	a	L						N				abund. lt colored chert frags.
20.0						qtz ss	ltgy tn	m-c	f	r							N				
22.5						qtz ss	ltgy tn	m	w	r							N				
25.0						qtz ss	ltgy tn	f-m	w	r							N				
27.5						qtz ss	ltgy tn	m	w	R							N				
30.0						qtz ss	ltgy tn	c	w	r							N				
32.5						qtz ss	lt tn	f	w	r							N				
35.0						qtz ss	lt tn	f-c	p	a							N				some dk chert frags
37.5						qtz ss	gy tn	m-c	m	r							N				abund. dk chert frags
40.0						qtz ss	lt tn	m	w	R							N				
42.5						qtz ss	lt tn	m-c	m	a							N				
45.0						qtz ss	lt tn	m	w	R							N				
47.5						qtz ss	lt gy tn	c	w	R							N				
50.0						qtz ss, sh	tn - lt gn	c-peb	p	A							N				multi colored chert frags & grit
52.5						qtz ss	tn	m-vc	m	r							N				" " " " "
55.0						qtz ss	tn	m-c	m	r							N				
57.5						qtz ss, cgl	lt brn gy	m-peb	f	a							N				chert pebble frags
60.0						sltst, qtz ss	lt brn gy	f	vc	p	a						N				
62.5						sltst, qtz ss	lt brn gy	f-c	vc	p	a						N				
65.0						qtz ss, sltst	lt gn gy - lt tn	m-c	m	a							N				
67.5						qtz ss	tn	m-c	m	a							S				
70.0						qtz ss, cgl	tn brn	m-peb	p	a							M				multi colored chert frags
72.5						qtz ss, cgl	tn brn	c-peb	p	a							N				
75.0						qtz ss	ltgy tn	m-c	m	a							N				
77.5						qtz ss	ltgy tn	m-vc	f	a							N				
80.0						qtz ss	ltgy tn	f-m	w	r							N				moisture
82.5						qtz ss	ltgy tn	m-c	w	r							N				
85.0						qtz ss	ltgy tn	m	w	R							N				
87.5						qtz ss	ltgy tn	f-m	m	r							N				
90.0						qtz ss	ltgy tn	f-m	m	r							N				
92.5						qtz ss	gy tn	m-peb	f	r							N				
95.0						qtz ss	gy tn	c-peb	m	r							N				
97.5						qtz ss, cgl	gy tn	c-peb	m	r							N				
100.0						qtz ss, cgl	gy tn	m-c	m	r							N				very [illegible]
102.5						qtz ss, cgl	tn brn	m-peb	p	a							M				" " " abund dkgy chert frags
105.0						qtz ss, cgl	tn brn	m-peb	p	a		tr					M				" " " gy chert frags
107.5						qtz ss, sh	wh - gy grn	f-peb	p	a											Brushy Basin @ Ca. @ 106' - gradational chert frags
110.0						sh	gy grn					tr/vc					M				some masses of sulfide (pyrite?)
112.5						sh	gy grn										M				
115.0						sh	gy grn - ppnn										M				T.D. mottled cuttings
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-12
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180257A Well Construction Diagram	

Date 28 APR 2011 Geologist L. Casebolt Drilling Co. Bayles Exploration Co. Hole No. DR12

Property White Mesa Mill Project [illegible] Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5584

PAGE 1 OF 1

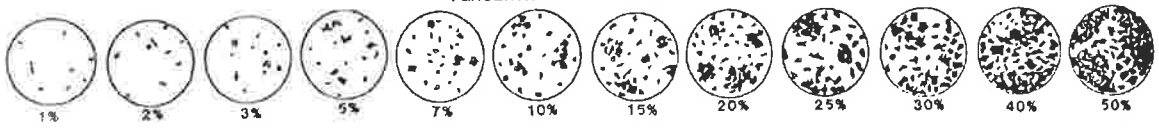
T.D. PROBE _____

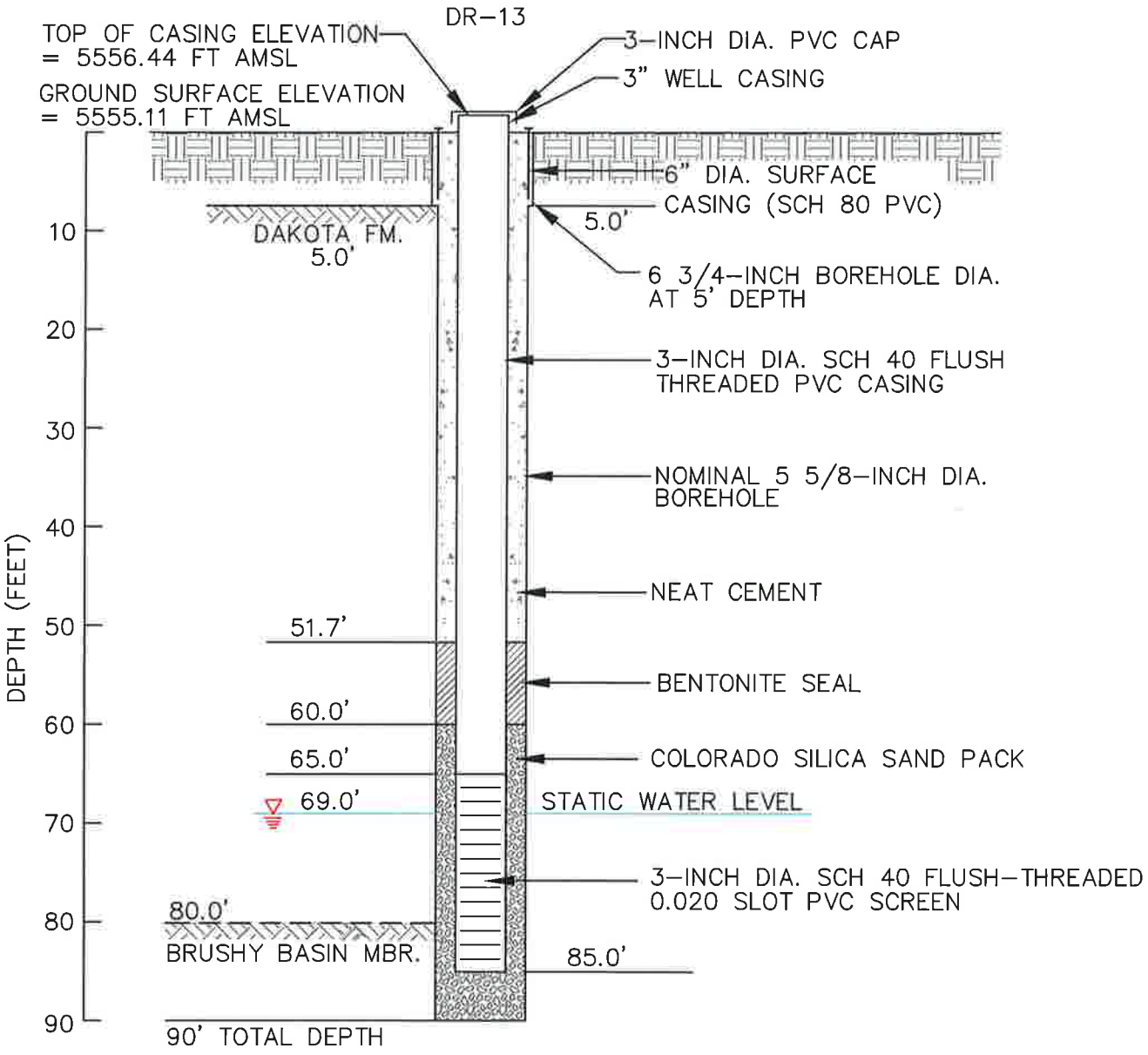
T.D. DRILL 100.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	METALLIC	NON-METALLIC	REACT. TO 10% HCL AMOUNT	REACT. TO 10% HCL TYPE	CARBON	REMARKS
0																					
25						md.-											W				Surface Soil uncons. Mod. fat clay w/sand CH
5.0						mdbr											W				Surface Soil " " " " " CH
7.5						sh											VS				Morrison Shale Fm. consolidated, less clay w/sand CL
10.0						sh											VS				" "
12.5						sh											S				" "
15.0						qtz ss, sh		m	w	r	L						N				Upper Dakota Ss @ 12.5'
17.5						qtz ss		m	w	r	L						N				
20.0						qtz ss		m	w	r	L						N				
22.5						qtz ss		m	w	a							N				
25.0						qtz ss		m	w	a							N				
27.5						qtz ss		m	w	r							N				some calc. grains
30.0						qtz ss		m-c	m	r							N				" " "
32.5						qtz ss		m-c	m	r							N				" " "
35.0						qtz ss		m-c	m	r							N				" " "
37.5						qtz ss		m	w	R	L						N				
40.0						qtz ss		m	w	R							N				
42.5						qtz ss		m-vc	f	a							N				some chert grains
45.0						qtz ss		f-m	p	a							N				" " "
47.5						qtz ss, sh, ch		f-vc	p	a							N				" " "
50.0						qtz ss, sh, ch		m-vc	p	A							N				" " "
52.5						qtz ss, sh		m-vc	p	a							N				around chert fragments grains
55.0						qtz ss		m-vc	p	a	L						N				" " " "
57.5						qtz ss		f-c	p	a	L						N				
60.0						qtz ss		f-c	p	a							N				
62.5						qtz ss			m	w	r						N				
65.0						qtz ss			m	w	r						N				
67.5						qtz ss			m	w	r						N				
70.0						qtz ss			m	w	r						N				
72.5						qtz ss			m	w	r						N				
75.0						qtz ss			m	w	a						N				
77.5						qtz ss			m	w	a						N				
80.0						qtz ss		f-	m	m	r						N				
82.5						qtz ss			m	w	a						N				
85.0						qtz ss		m-c	m	a			fr	c			N				
87.5						qtz ss, sh		f-c	m	a			fr	c			N				
90.0						qtz ss, sh		f-	m	m	r		fr	c			N				
92.5						qtz ss, sh		f-	m	m	r						N				Brushy Basin @ ± 92.5'
95.0						sh											N				
97.5						qtz ss, sh		f-	m	m	R						N				
100						sh											N				T.D. Mottled Greys
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-13
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180258A Well Construction Diagram	

Date 27 APR 2011 Geologist L. Case & JT Drilling Co. Bayles Exploration Co. Hole No. DR13

Property White Mesa Mill Project Collar Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. 5575

PAGE 1 OF 1

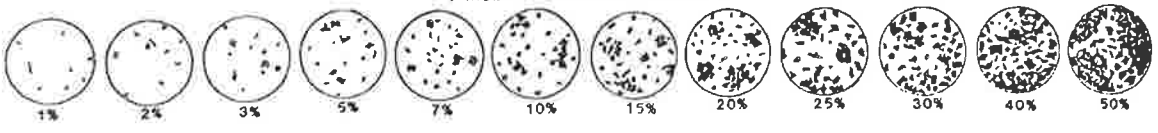
T.D. PROBE _____

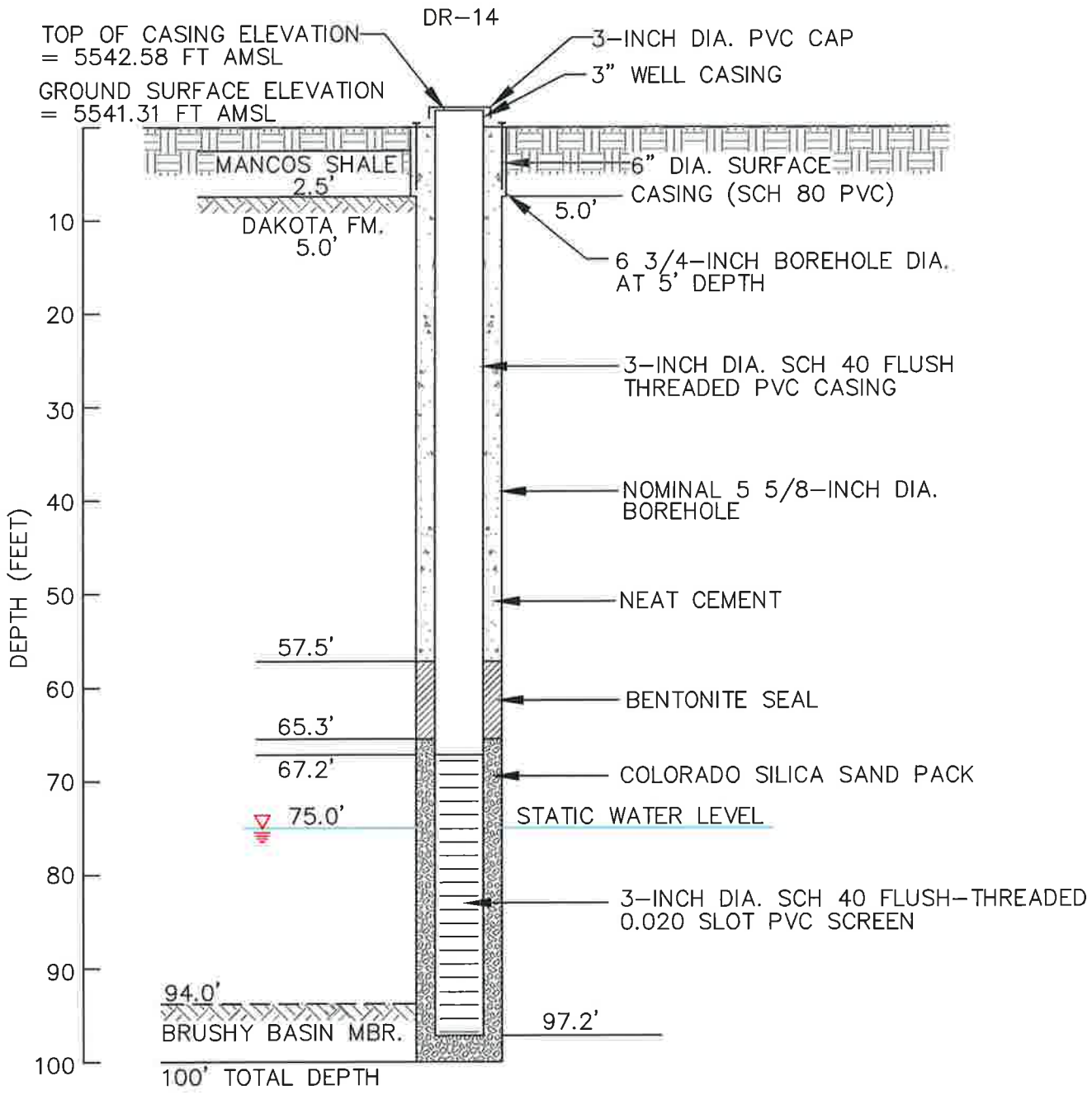
T.D. DRILL 90.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	CARBON TYPE	REMARKS
0																				
25						wdst	rdbn										W			Surface Soil - unconsolidated - tan clay w sand cc
5.0						mdst	rdbn										S			Surface Soil - unconsolidated - tan clay w sand cc
7.5						qtzss	wh-tn	vf-m	w	p	a						N			Upper Dakota @ ± 5.0' abund. chert frags pebbles,
10.0						qtzss, cgl	gy-wh	m-c	w	p	a						N			abundant chert frags pebbles
12.5						qtzss	wh-tn	m-	w	p	r	L					N			" " " "
15.0						qtz ss sh	lt gy-tn	m-	peb	p	a						N			some chert frag pebbles sandy fm clay Cl
17.5						qtz ss	lt gy-wh-tn	m-	w	p	a						N			" " " "
20.0						qtz ss cgl	lt gy-tn-rdbn	m-	w	p	a						N			" " " "
22.5						qtzss	lt tn	m-	c	m	a						N			
25.0						qtzss sh	lt tn-lt gy	m-	vc	f	a						N			
27.5						qtz ss sh	lt tn-lt gy-wh	m-	peb	p	a						N			
30.0						qtz ss	tn		m	w	r						N			
32.5						qtz ss	tn		m	w	a						N			
35.0						qtz ss	lt brn	m-	peb	p	a						N			
37.5						qtz ss cgl	dk rdbn	m-	peb	p	a						N			
40.0						qtz ss	tn		m	w	R						N			
42.5						qtzss	tn	m-	peb	p	r						N			
45.0						qtzss	tn	f-	vc	p	a						N			
47.5						qtz ss	tn		m	w	r						N			
50.0						qtz ss	tn		m	w	r						N			
52.5						qtz ss	v lt tn		m	w	r						N			
55.0						qtz ss	v lt tn		m	w	r						N			
57.5						qtz ss	lt tn		m	w	r						N			
60.0						qtz ss cgl	gy-tn	m-	peb	p	a	L					N			abund multi colored chert frags - gtz ss
62.5						qtz ss cgl	lt gy-tn	m-	peb	p	a	L					N			" " " " " "
65.0						qtz ss	lt tn		m	w	r						N			
67.5						sh qtz ss	lt blgy	m-	peb	p	a						VR			
70.0						qtz ss sh	wh-blgy	vf-	m	f	r						N			
72.5						qtz ss	wh-lt gy		f	w	r						N			
75.0						qtz ss	wh-lt gy		f	w	r						N			
77.5						qtz ss	wh-lt blgy		f	w	r						N			
80.0						qtz ss	wh-lt blgy		f	w	r						A			sparse chert pebble frags
82.5						sh	gy-rdbn										N			Brown Point Fm @ 80.0'
85.0						sh	blgy-rdbn										N			
87.5						sh	wh-gy										N			
90.0						sh	pp rdbn-gn										N			TD
92.5																				
95.0																				
97.5																				
100.0																				
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				
122.5																				
125.0																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-14
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180259A Well Construction Diagram	

Date 29 APR 2011 Geologist L. Casebolt Drilling Co. Bayles Exploration Co. Hole No. DR14

Property White Mesa Mill Project CELL 4B Unit No. ____ Sec. ____ Twp. ____ Rge. ____

County San Juan State Utah Location ____ Elev. ≈ 5506

PAGE 1 OF 1

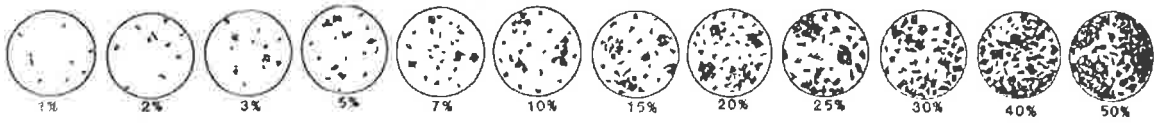
T.D. PROBE ____

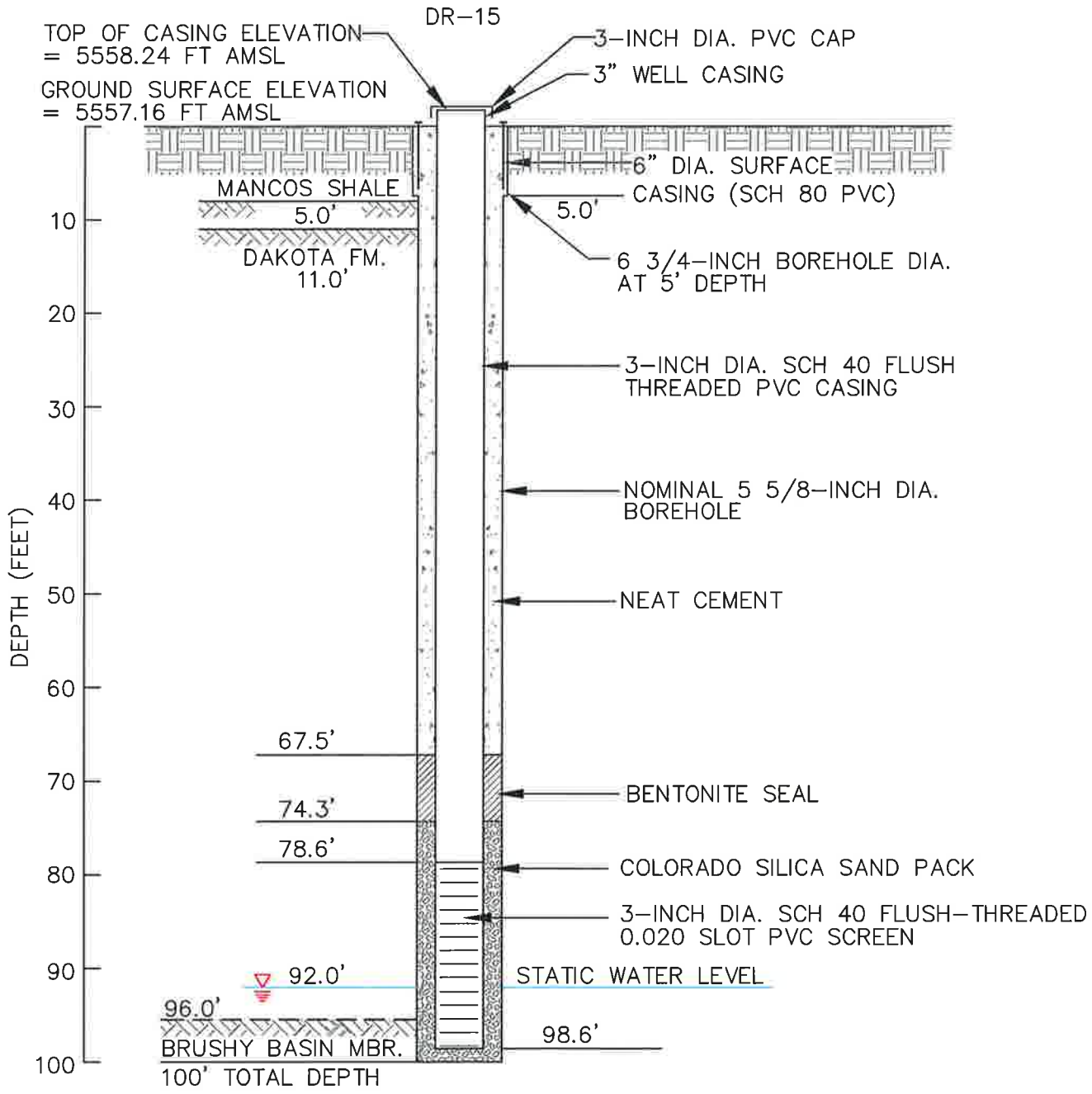
T.D. DRILL 100.0

FLUID LEVEL ____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR WET SAMPLE	GRAIN SIZE		SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0																						
2.5						sndstn	reddish											N				Surface Soil
5.0						sndstn	cobble											N				Alluvial Gravels
7.5						qtz ss	tn	m	w	a								N				Upper Dakota Fm @ 5.0'
10.0						qtz ss	tn	m	w	a								N				
12.5						qtz ss	lt tn	m	w	a								N				
15.0						qtz ss	wh-lt tn	m	w	a		L						N				
17.5						qtz ss	wh-lt tn	m-c	m	a								N				some chert grains
20.0						qtz ss	tn	f-c	f	a								N				
22.5						qtz ss, cgl sh	lt gy	m-vc	f	a								N				sound, dkgy chert frags.
25.0						qtz ss	tn		w	r								N				
27.5						qtz ss	tn	m-c	m	r								N				
30.0						qtz ss	tn	m-c	m	r								N				
32.5						qtz ss	tn		w	r								N				
35.0						qtz ss	tn	f	m	r			P					N				
37.5						qtz ss	tn		w	a								N				
40.0						qtz ss	lt gy-tn		w	r								N				
42.5						qtz ss	gy-tn	m-vc	m	r								N				
45.0						qtz ss, sh	lt gy-tn	f	m	r								N				
47.5						qtz ss	lt gy-tn	f	m	r			P	A				N				
50.0						qtz ss	lt gy-tn	f	w	r								N				
52.5						qtz ss, sltst	lt gy-tn	f	m	a								N				
55.0						qtz ss	lt gy-tn		w	r		H						N				
57.5						qtz ss	tn		w	r								N				
60.0						qtz ss	tn	m	m	r								N				
62.5						qtz ss	gy-tn	c-vc	m	a								N				
65.0						qtz ss	lt gy-tn		w	a								N				
67.5						qtz ss	lt gy-tn		w	r								N				
70.0						qtz ss	lt tn	m-c	m	r								N				
72.5						qtz ss	lt tn	m-c	m	r								N				
75.0						qtz ss	lt tn		w	r								N				
77.5						qtz ss	lt tn		w	r								N				
80.0						qtz ss	lt gy-tn	m-c	w	r								N				
82.5						qtz ss	lt gy-tn	m-c	m	r								N				
85.0						qtz ss	gy-tn	f	m	r		L						N				
87.5						qtz ss	tn	f	m	r		L						N				
90.0						qtz ss	tn	f	m	a								N				
92.5						qtz ss	tn		w	r								N				
95.0						qtz ss, sh	wh-tn, gy-o	m	w	r		L	Fr	C				N				Brushy Basin Fm @ 94.6' good ct.
97.5						sh	gy-grn											N				
100.0						sh	gy-grn-blk											N				T.D.
102.5																						
105.0																						
107.5																						
110.0																						
112.5																						
115.0																						
117.5																						
120.0																						

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-15
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180260A Well Construction Diagram	

Date 28 APR 2011 Geologist L. Cascobitt Drilling Co. Bayles Exploration a. Hole No. DR15

Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ~5571

PAGE 1 OF 1

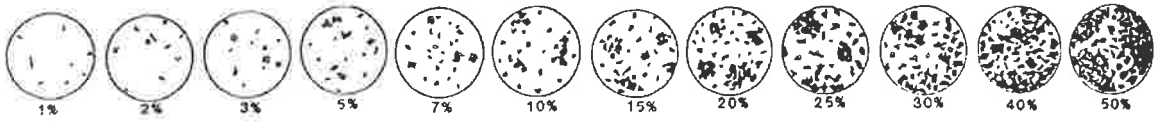
T.D. PROBE _____

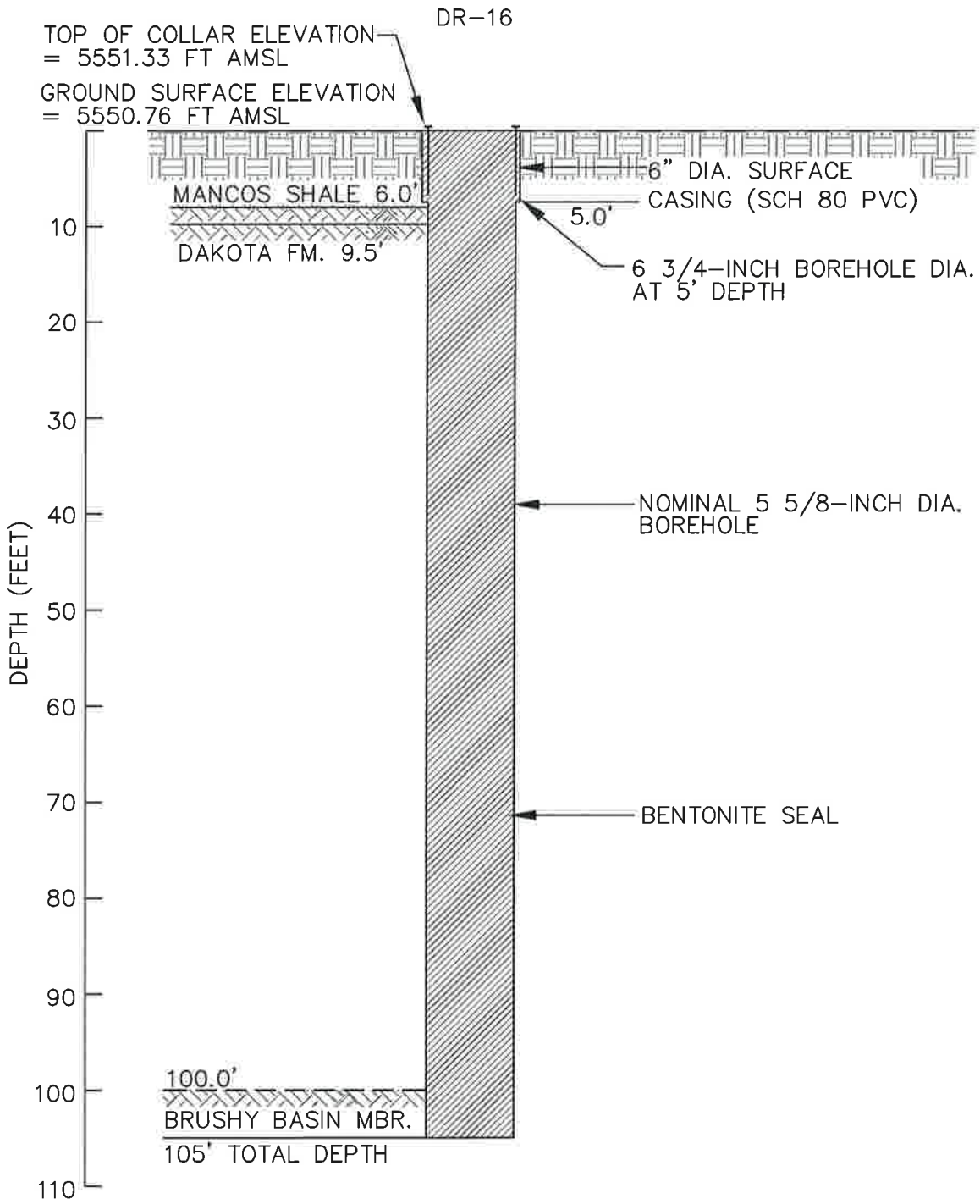
T.D. DRILL 100.0 T.D.

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	PYRITE METALLIC	NON-METALLIC REACT. 10% HCl	CARBON AMOUNT	CARBON TYPE	REMARKS
0																				
2.5						mdsr	reddish brown									S				Surface Soil - unconsolidated silty sandy lean clay CL
5.0						mdsr	reddish brown									S				Surface Soil - unconsolidated " " " CL
7.5						Sh	light gray									Y S				Mancos Sh. sandy fat clay CH
10.0						sndy ss	yellowish gray	f-	m	f	a					S				Mancos Sh
12.5						qtz ss, Sh	yellowish gray	f	w	r						N				Upper Dakota @ ± 11.5'
15.0						qtz ss	light gray	vf-f	m	r						N				
17.5						qtz ss	light gray	f	m	r		L				N				
20.0						qtz ss	gray	f	w	r						N				
22.5						qtz ss	light gray	f	w	r		L				N				
25.0						qtz ss	light gray	m	w	r						N				
27.5						qtz ss	light gray	m	w	r						N				
30.0						qtz ss	light gray	m-c	m	r						N				some chert frags and grains
32.5						qtz ss	light gray	f-	m	r		L				N				
35.0						qtz ss	light gray	f	w	r						N				
37.5						qtz ss	light gray	m	w	r						N				
40.0						qtz ss	light gray	m-c	m	a						N				
42.5						qtz ss	light gray	m-c	m	r						N				
45.0						qtz ss	light gray	m-c	m	r						N				
47.5						qtz ss	light gray	m-c	m	r						N				some chert frags and grains
50.0						qtz ss, Sh	light gray	m-c	m	r						N				Sandy gassy (gas)
52.5						Sh	yellowish gray									N				
55.0						Sh, qtz ss, cgl	light gray	m-	sc	p	a					N				abund chert frags and grains
57.5						qtz ss	light gray	m-c	c	p	a					N				" " " " "
60.0						qtz ss	light gray		m	w	r					N				
62.5						qtz ss	light gray		m	w	R		L			N				
65.0						qtz ss	light gray		m	w	R		L			N				
67.5						qtz ss	light gray	m-	vc	m	r		L			N				abund chert frags and grains
70.0						cgl	pink-gray-tan	m-	vc	f	r					N				50% quartz frags grains and pebbles
72.5						qtz ss	light gray	m-vc	f	a						N				some " " "
75.0						qtz ss	light gray		m	w	r					N				
77.5						qtz ss	light gray	m-	sc	m	a					N				10% chert frags grains
80.0						qtz ss, cgl	gray-pink-gray	m-	sc	m	a					N				50% quartz frags grains and pebbles
82.5						qtz ss	light gray		m	w	R					N				
85.0						qtz ss	light gray	m-	sc	f	a					N				some chert
87.5						qtz ss, cgl	gray	m-	sc	f	a					N				60% quartz frags grains and pebbles
90.0						qtz ss, cgl	gray	m-	sc	f	a					N				moisture noticed @ ± qtzite-hard drilling
92.5						qtz ss	light gray		m	w	r					N				qtzite - hard drilling
95.0						qtz ss	light gray-white		m	w	r					N				
97.5						qtz ss, sh, cgl	gray-white	m-	sc	p	a			V.C		N				Brushy Basin @ ± 96.0 purple shale, white.
100.0						Sh,	gray									N				T.D
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-16 WELL ABANDONMENT SCHEMATIC			
	Approved	Date	Reference	Figure
	SJS	1/9/12	K:\7180261A Well Construction Diagram	

Date 28 APR 2011 Geologist L. Caschetta Drilling Co. Bayles Exploration Co Hole No. DR16

Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈5555

PAGE 1 OF 1

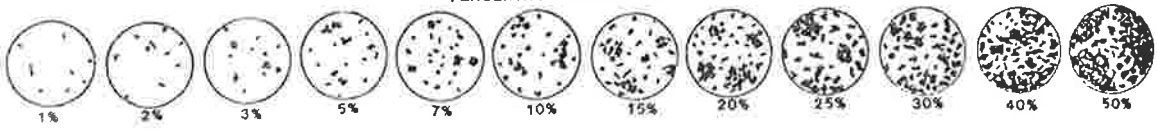
T.D. PROBE _____

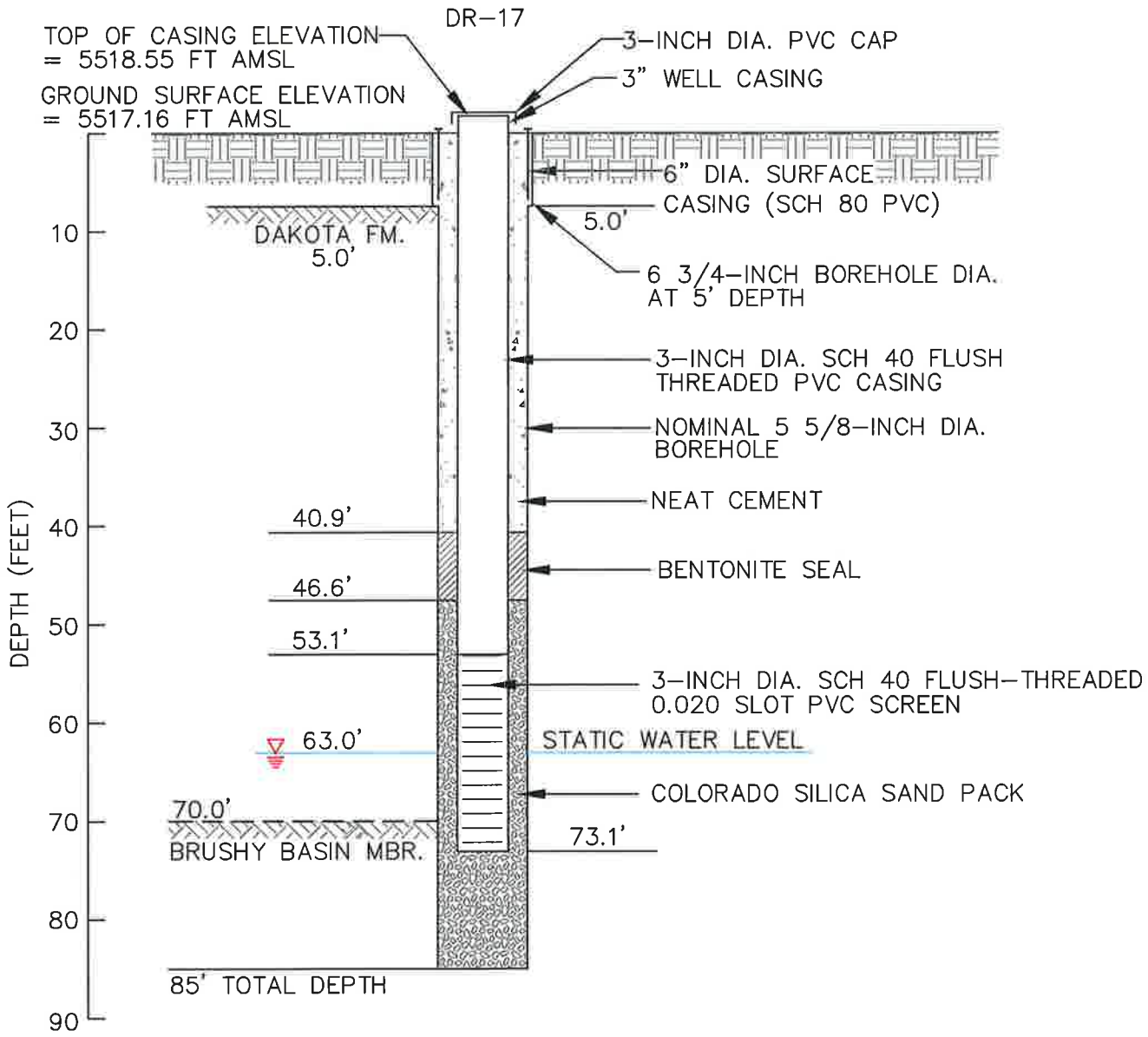
T.D. DRILL 105.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						mdst	red-brn										W				Surface Soil - waterworked - sandy lean clay CL
2.5						mdst	brown										W				Surface Soil - waterworked/dilated - Sandy lean clay CL
5.0						mdst-lmst	yel-brn-pk-tn										VS				Marker Shale @ 6.0 Ft.
7.5						lmst-qtz ss	pk-brn-wh	m	w	r							VS				Marker Shale ss is spotty
10.0						qtz ss	org-tn	m	w	r	v						S				Upper Dakota Fm @ 9.5'
12.5						qtz ss	tn	m	w	R							N				
15.0						qtz ss	tn	f-m	m	r							N				
17.5						qtz ss	tn	f-m	m	r							N				
20.0						qtz ss	tn	f	w	r							N				
22.5						qtz ss	tn	m	w	R							N				
25.0						qtz ss	tn	vf-f	m	R							N				
27.5						qtz ss	tn	m	w	R							N				
30.0						qtz ss	tn	m	w	R							N				
32.5						qtz ss	tn	vf	w	R							N				
35.0						qtz ss	ltgy-tn	m-c	m	a							N				
37.5						qtz ss	tn	m	w	a							N				
40.0						qtz ss	tn	m	w	a							N				
42.5						qtz ss	tn	m-vc	p	a							N				
45.0						sh-qtz ss	gy-org-brn	m-vc	p	a							N				
47.5						qtz ss	gy-org-tn	m-vc	p	a							N				abund. multi colored chert frags, qtz ss & pebbles
50.0						qtz ss	gy-tn	m-vc	p	a							N				
52.5						qtz ss	ltgy-tn	m-c	m	a	L						N				
55.0						qtz ss	ltgy-tn	m-c	m	a	L						N				
57.5						qtz ss	tn	m	w	r							N				
60.0						qtz ss	tn	m	w	r							N				
62.5						qtz ss, sh	ltgy-tn	m	c	m	a						N				
65.0						qtz ss	ltgy-tn	m	c	m	r						N				
67.5						qtz ss	tn	f-m	m	r							N				
70.0						qtz ss	tn	m-vc	p	a							N				chert grains
72.5						qtz ss	ltgy-tn	m-c	m	r							N				
75.0						qtz ss, sh	ltgy-tn	m-vc	p	a							N				50% chert grains + frags.
77.5						qtz ss	ltgy-tn	m-vc	p	a							N				
80.0						qtz ss	ltgy-tn	m-vc	p	a							N				
82.5						qtz ss	ltgy-tn	m-vc	p	a							N				
85.0						qtz ss, sh	gy-brn	m-vc	p	a							N				50%+ chert grains, fragments + grains
87.5						qtz ss	tn	m	w	r							N				
90.0						qtz ss, sh	gy-brn	m-vc	p	a							N				50%+ chert grains, frags + grains
92.5						qtz ss, sh	gy-brn	m-vc	p	a							N				75% chert grains, frags + grains
95.0						qtz ss	tn	m	w	r							N				
97.5						qtz ss	tn-org	m-c	m	a			tr	c			V				Basal Dakota Ss @ 100 ft, pebble assoc. w/qtz
100.0						sh	gy-brn-grn										N				
102.5						sh	gy-brn-grn										N				tentative Brushy Basin Fm @ chert grains T.D.
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-17
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180262A Well Construction Diagram	

Date 29 APR 2011 Geologist L Cook Drilling Co. Boyles Exploration Co Hole No. DR17

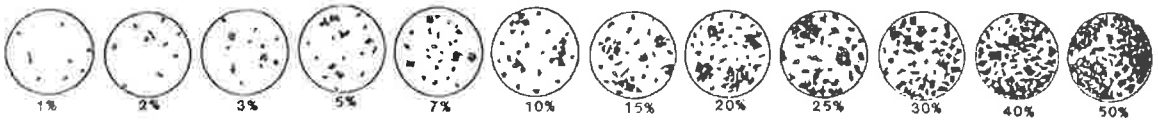
Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

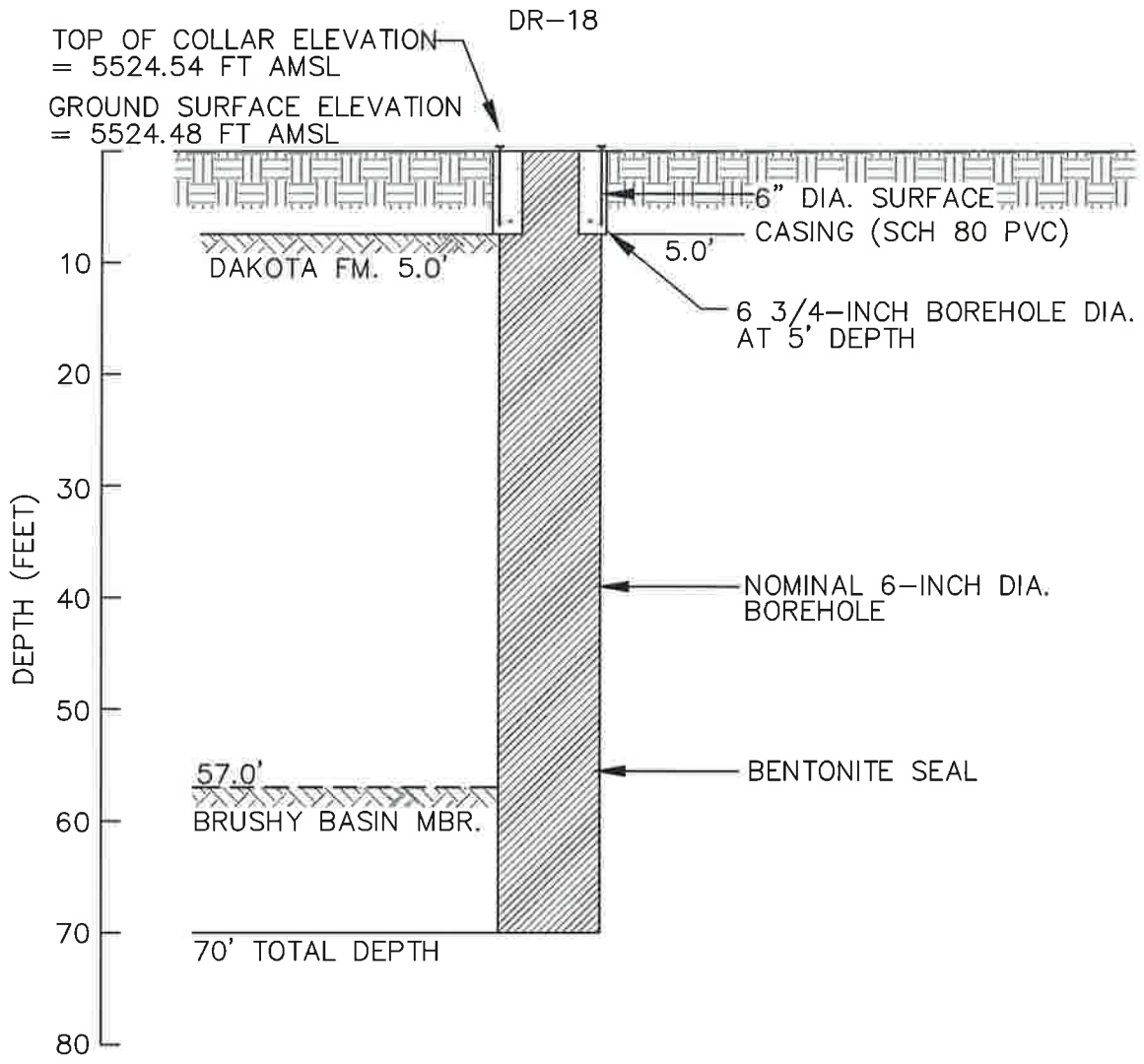
County San Juan State Utah Location _____ Elev. _____

PAGE 1 OF 1
T.D. PROBE _____
T.D. DRILL 85.0
FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	PYRITE METALLIC	NON-METALLIC REACT-10% HCL	CARBON AMOUNT	CARBON TYPE	REMARKS
0						mds-	reddish										N			Surface Soil - unconsolidated - lean sandy clay CL
2.5						mds-	reddish										N			Surface Soil - unconsolidated - lean sandy clay CL
5.0						qtz ss	orTn	m	w	r	L						N			Upper Dakota Fox Cr is 5.0'
7.5						qtz ss	tn	m-c	m	r							N			
10.0						qtz ss	tn	m	w	r							N			
12.5						qtz ss	lt gy tn	m	w	R							N			
15.0						qtz ss	lt gy tn	m-c	m	r							N			Some dk chert frags.
17.5						qtz ss	lt gy tn	f-c	f	p							N			
20.0						qtz ss	tn	m	w	a							N			
22.5						qtz ss	tn	m-c	m	a							N			
25.0						qtz ss, sh	v lt tn	f-vc	p	a							N			
27.5						cgl, qtz ss	tn - grayish	m-peb	p	a							N			dk gy chert pebbles & frags. 7%
30.0						sh, qtz ss	lt gy tn	m-vc	f	a							N			
32.5						sndy ss	lt gy tn	vf-m	f	a							N			
35.0						sndy sh	lt gy tn	vf-m	f	a							N			
37.5						sndy sh	lt gy tn	vf	f	a							N			
40.0						sndy sh, ss	lt gy - lt orTn	vf	f	a							N			
42.5						qtz ss	tn	m-c	m	r							N			
45.0						qtz ss	v lt gy	vf-f	m	r							N			
47.5						qtz ss sltst	v lt gy	vf	m	r							N			
50.0						qtz ss	tn	f-c	f	a							N			
52.5						qtz ss	tn	f-c	m	a							N			
55.0						qtz ss	lt tn	m-peb	p	a							N			some light colored chert frags. and pebbles
57.5						qtz ss, cgl	lt gy tn	m-peb	p	a							N			" " " " tell tale red chert frags
60.0						qtz ss	lt gy tn	m-vc	p	a							N			
62.5						qtz ss	lt gy tn	f-m	m	a							N			
65.0						qtz ss	tn	f-m	w	r							N			
67.5						qtz ss	tn	f-m	w	r							W			Brushy Basin Cf @ 70.0
70.0						sh, cgl	gn	peb									N			some dk chert pebbles.
72.5						sh, cgl	gn	peb									N			" " " " tell tale red chert frags
75.0						sh	gn										N			
77.5						sh	gn										N			red chert frags
80.0						sh	gn - lt gy										N			
82.5						sh	gn						tr	A			N			T.D. red chert frags, specimen submitted
85.0							d													
87.5																				
90.0																				
92.5																				
95.0																				
97.5																				
100.0																				
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				
122.5																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-18 WELL ABANDONMENT SCHEMATIC			
	Approved SJS	Date 1/9/12	Reference K:\7180263A Well Construction Diagram	Figure

Date 4 May 2011 Geologist L. Casebolt Drilling Co. Boyles Exploration Inc. Hole No. DR 18

Property White Mesa Mill Project GC-43 Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈ 5536

PAGE 1 OF 1

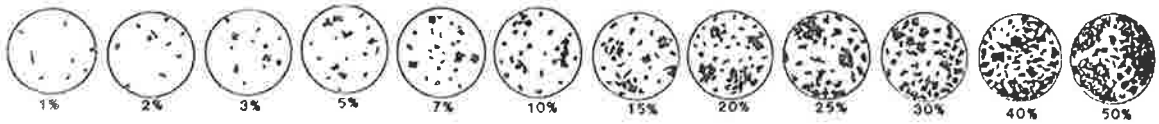
T.D. PROBE _____

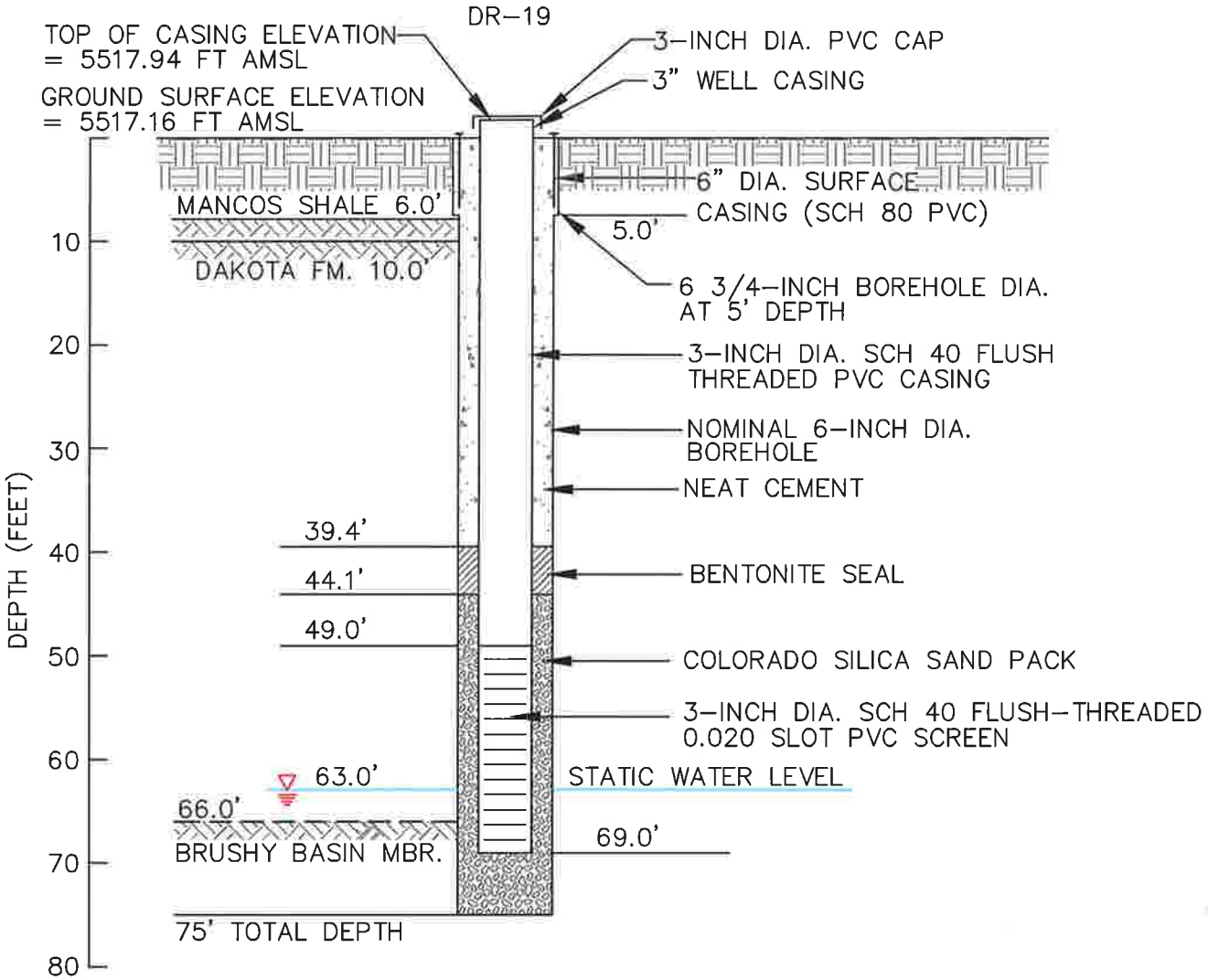
T.D. DRILL 70.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	PYRITE METALLIC	PYRITE NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						mdst	rdbn										N				
25						mdst	rdbn										N				Surface Soil: unconsolidated - sandy silt ML
5.0						mdst	rdbn										N				Surface Soil: unconsolidated - sandy silt ML
7.5						qtz ss	brn	m-vc	p	A							N				Upper Dakota Fm @ ± 5.0' wh-gy chert frags
10.0						qtz ss	wh-gybrn	m-vc	p	A							N				abund. chert frags.
12.5						cgl, qtz ss	gybrn	m-vc	p	a							N				75% multi colored chert & rock, + grains
15.0						qtz ss	lt gy	m	w	a							N				
17.5						qtz ss	tn	f	w	r							N				
20.0						qtz ss	tn	m	w	r							N				
22.5						qtz ss	tn	m-c	m	r							N				
25.0						qtz ss	tn	m-vc	f	r							N				
27.5						cgl, qtz ss	gy tn brn	m-	p	a							N				
30.0						qtz ss	tn	m	w	R							N				Mellen Sh. @ ± 30.0'
32.5						qtz ss	tn	m	w	R							N				
35.0						qtz ss	tn	m	c	m	R						N				
37.5						qtz ss	tn	m	c	m	R						N				
40.0						qtz ss	Horbn	m-vc	f	r							N				abund chert frags, + grains
42.5						qtz ss	vltn-wh	m	w	a							N				
45.0						qtz ss	vltn-wh	m-c	m	a							N				
47.5						qtz ss, qtzite	wh	m-c	m	A	L						N				very rusty stain, some small chert grains
50.0						qtz ss, qtzite	wh	m-c	m	a	L						N				" " "
52.5						qtzite	wh-vltn	m-vc	p	a							N				" " "
55.0						qtzite	wh-vltn	m-vc	p	a							N				" " "
57.5						qtzite, sh	rdbrn-brn	m-vc	p	A			tr				N				rusty Burro Ck. @ ± 57.0' chert breccia
60.0						sh	dkgy-gn				H						N				
62.5						sh	blgy				L						N				some chert grains
65.0						sh	blgy										N				tr-tgt red chert grains
67.5						sh	blgy										N				
70.0						sh	blgy										N				T.D.
72.5																					
75.0																					
77.5																					
80.0																					
82.5																					
85.0																					
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-19
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180264A Well Construction Diagram	

Date 3 May 2011 Geologist L Casebolt Drilling Co. Bayles Exploration Inc. Hole No. DR19

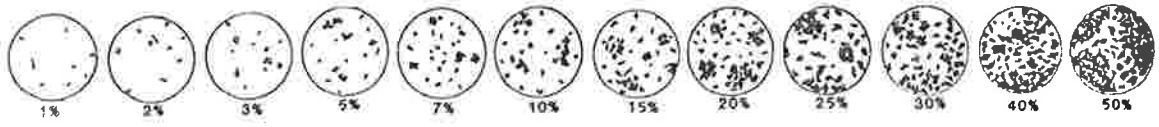
Property White Mesa Mill Project Cell 4B Unit No. ____ Sec. ____ Twp. ____ Rge. ____

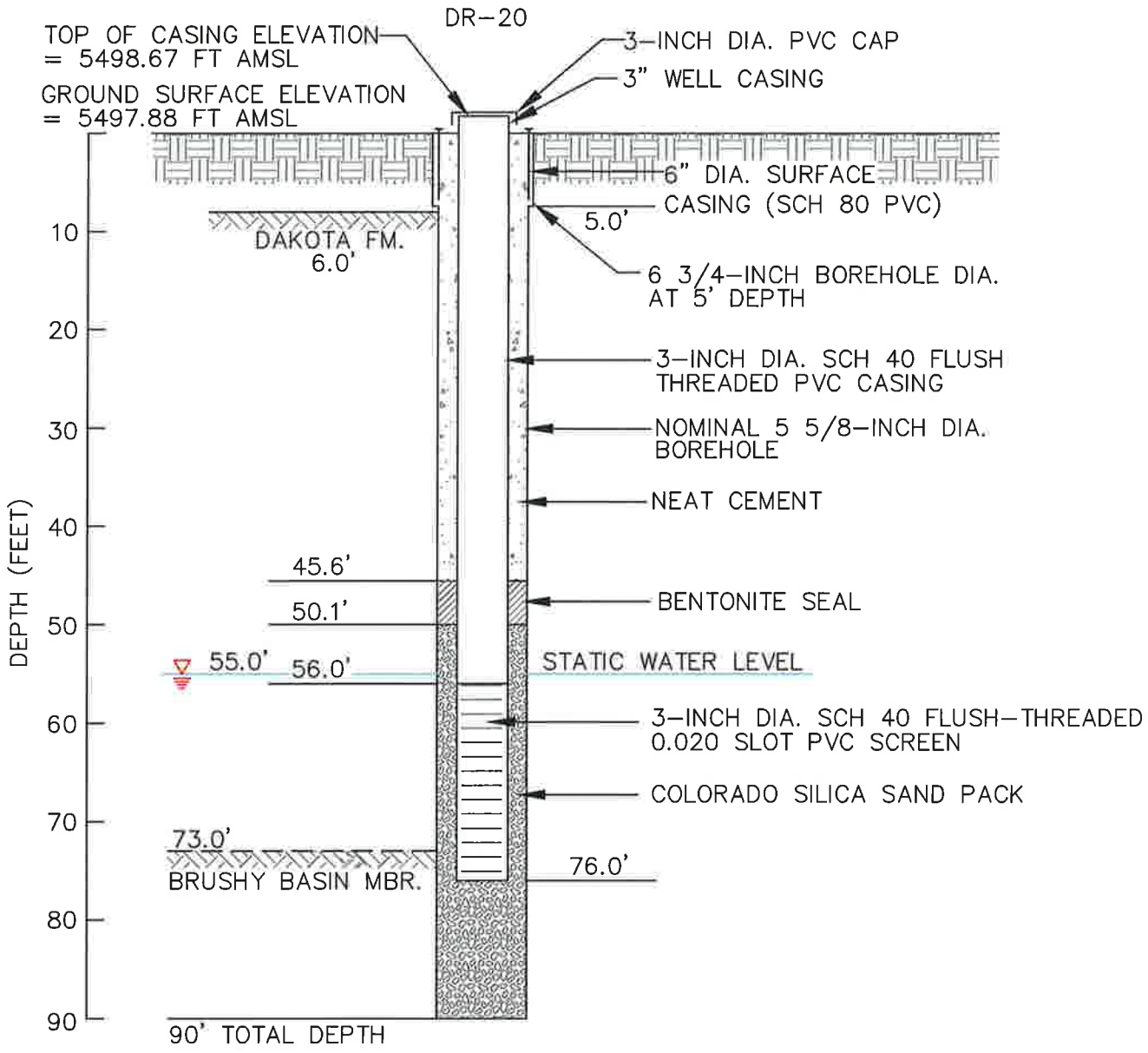
County San Juan State Utah Location ____ Elev. ≈ 5513

PAGE 1 OF 1
T.D. PROBE ____
T.D. DRILL 75.0
FLUID LEVEL ____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						mdst	rdbn										N				Surface soil - unconsolidated
2.5						mdst	rdbn										N				Surface soil - unconsolidated
5.0						sndy sltst	rd brn-pk	vf	f	m	r						VS				massive Sh @ 6.0'
7.5						sndy sltst	rd brn-pk	vf	m	f	r						VS				" "
10.0							ysh tn	f-m	m	r							N				Upper Dakota Fm Ck @ 10.0'
12.5						qtz ss	lt gr brn		m	w	a	L					N				
15.0							gytn-ltdkgy	m-c	m	a							N				
17.5						qtz ss	ltgytn		m	w	a						N				
20.0						qtz ss	tn		m	w	r	L					N				source gy chert gravels
22.5						qtz ss, cgl	gy-wh	m	peb	f	r						N				25% lt-dk gy chert pebbles & frags.
25.0						qtz ss	wh-cybn	m	peb	f	a						N				abund chert frags & pebbles
27.5						qtz ss	Haytn		m	w	r						N				
30.0						qtz ss, sh	wh-ltgytn	m-vc	peb	m	a						N				
32.5						qtz ss	ltaytn	m-vc	f	a							N				
35.0						qtz ss	ltgytn	m-c	c	m	a						N				
37.5						qtz ss	vltgytn		m	w	r						N				
40.0						qtz ss	vltgytn	f-m	m	r							N				
42.5						qtz ss	vltgytn		f	w	r						N				
45.0						qtz ss	vltgytn		m	w	r						N				
47.5						qtz ss	ltgytn	m-vc	m	r		H					N				abund chert frags.
50.0						qtz ss	ltgytn	m-c	c	f	a						N				
52.5						qtz ss	ltgytn	m-c	c	f	a						N				
55.0						qtz ss	wh-ltgytn	m-vc	c	f	a						N				
57.5						qtz ss, cgl	dkgytn	c	peb	p	a						N				50% lt & dk gy chert pebbles & frags.
60.0						qtz ss	tn-dkgy	m	peb	p	a						N				
62.5						cgl, qtz ss	pebn	c	peb	p	a						N				75% multicolored chert pebbles & frags.
65.0						sh, qtz ss	bn-gy	m-c	m	r							N				Brushy Basin Fm @ 66.0'
67.5						sh	ltgygn										N				
70.0						sndy sh	olgn										N				
72.5						sh	olgn										N				
75.0																					T.D. some red clasts noted
77.5																					
80.0																					
82.5																					
85.0																					
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-20
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180265A Well Construction Diagram	

Date 2 MAY 2011 Geologist L. Casebolt Drilling Co. Bayles Exploration Inc. Hole No. DR 20

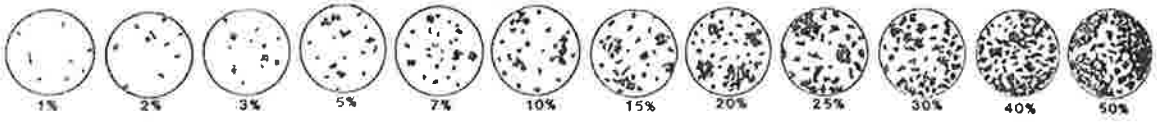
Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

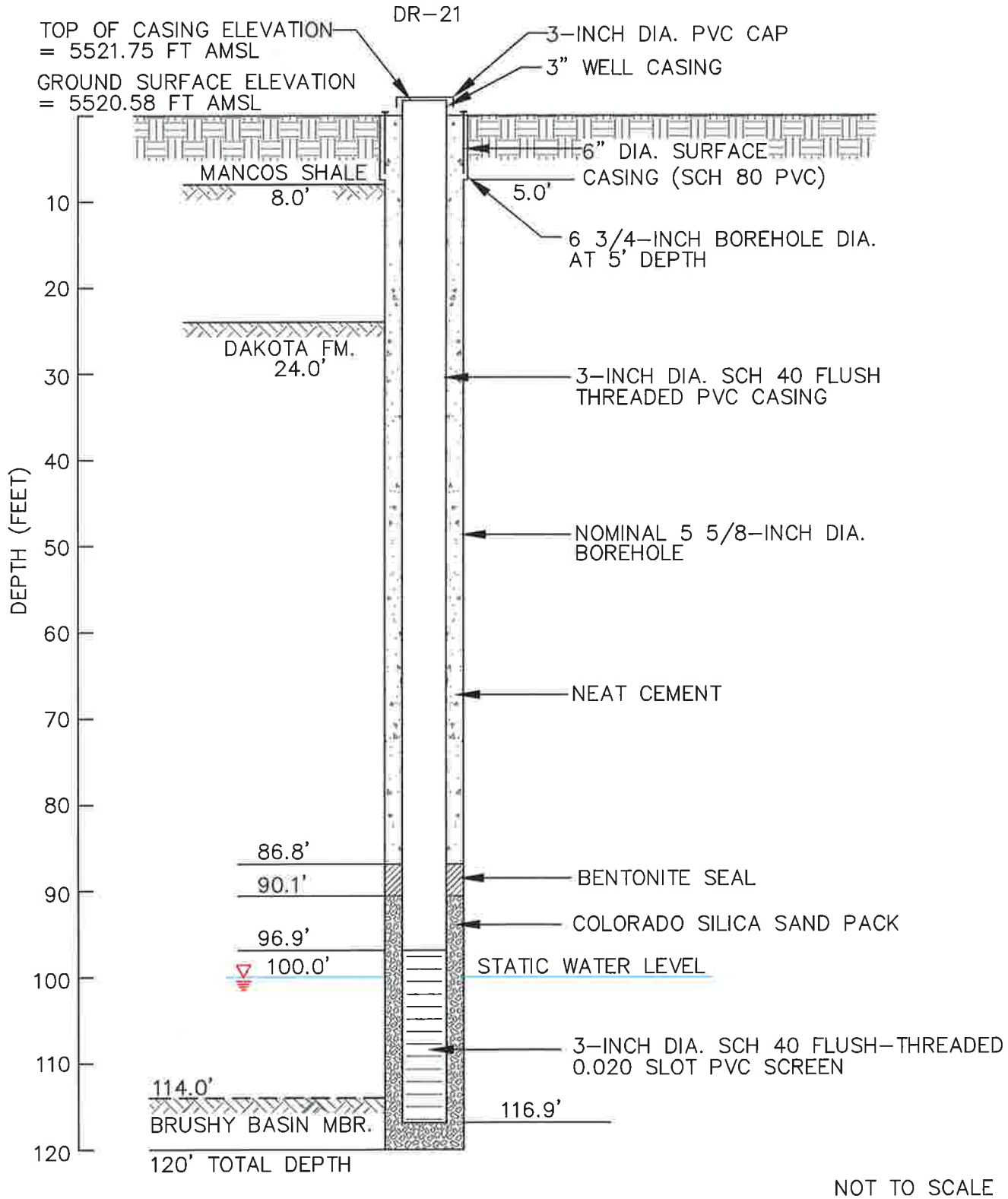
County San Juan State Utah Location _____ Elev. ≈5499

PAGE 1 OF 1
T.D. PROBE _____
T.D. DRILL _____
FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT	MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER	METALLIC	NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																						
25						mast	rd-bn											N				Surface Soil - unconsolidated sandy loam/clay co
5.0						mdst	rd-bn											N				Surface Soil - unconsolidated sandy loam/clay co
7.5						qtzss-cg	pk-tn	m-	vr			L						VS				Upper Dakota Fm Cl & Cs some chert frags.
10.0						qtzss	lt-gybn	m-	c	m	r	H						N				
12.5						qtzss	yl-rd-tn	m-	c	m	a							N				
15.0						qtzss	wh-gy		m	w	a							N				
17.5						qtzss	lt-gytn		m	w	a							N				
20.0						qtzss	tn		m	w	a							N				
22.5						qtzss	tn	m-	c	m	a							N				
25.0						qtzss	lt-tn		f	w	a							N				
27.5						qtzss	tn	m-	c	m	a							N				some chert frags
30.0						qtzss	ltgy	m-	c	m	a		H					N				" " "
32.5						qtzss	ltgytn	m-	c	m	a							N				
35.0						qtzss-sltcg	yw-pk-tn	f-	m	m	r		L					N				
37.5						sndy sh	lt brn-gy		m	w	r							N				sparse chert grains
40.0						sndy sh	lt olgy	f-	m	m	r							N				
42.5						sh	lt olgy											N				
45.0						sh	blgy-blk											N				sparse chert frags.
47.5						qtzss, sh	gy-tn	vf-	m	f	a							N				
50.0						sh, qtzss	gy-tn	vf-	m	f	a							N				
52.5						sndy sh	gy-gn	m-	pr	f	a							N				sparse chert pebble + granule
55.0						sh, qtzss	lt gray		m	w	a		L					N				
57.5						sndy sh	lt-gy-tn	f	m	m	r			tr				N				
60.0						qtzss sh	yw-gy-tn	f-	m	m	r							N				
62.5						sndy sh	lt olgy	f-	m	m	r							N				
65.0						sh	gy-gn											N				sparse red-bn chert frags.
67.5						sh	gy-gn											N				
70.0						qtzitic sh	wh-gy	f-	m	m	r							N				some red-bn chert grains + frags
72.5						qtzss, sh	wh-gy	f-	c	p	a							N				
75.0						qtzss, sh	wh-gy-gn	f	m	m	a							N				Brushy Basin Cont @ 73.9' abund. red-gy chert pebble
77.5						sh	gy-gn											N				
80.0						sh	gy-gn-pplsh											N				mottled siltst frags.
82.5						sh	gy-gn											N				
85.0						qtzss, sh	wh-gy-gn	m-	c	m	a							N				micaceous ss (muscovite)
87.5						sndy sh	gy-gy-gn	f-	m	m	r							N				
90.0						sh	dk gy							tr				N				T.D.
92.5																						
95.0																						
97.5																						
100.0																						
102.5																						
105.0																						
107.5																						
110.0																						
112.5																						
115.0																						
117.5																						
120.0																						
122.5																						

PERCENTAGE COMPOSITION IMAGE





HYDRO GEO CHEM, INC.

DR-21
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180266A Well Construction Diagram	

Date 2 May 2011 Geologist [illegible] Drilling Co. Bayles Exploration Inc Hole No. DR 21

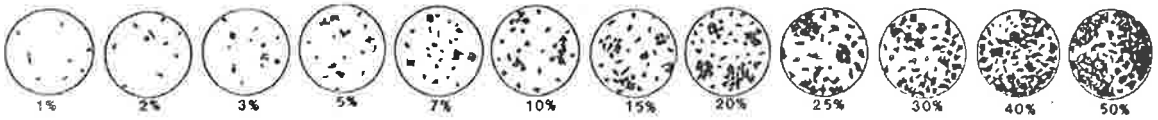
Property White Mesa Mill Project Cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

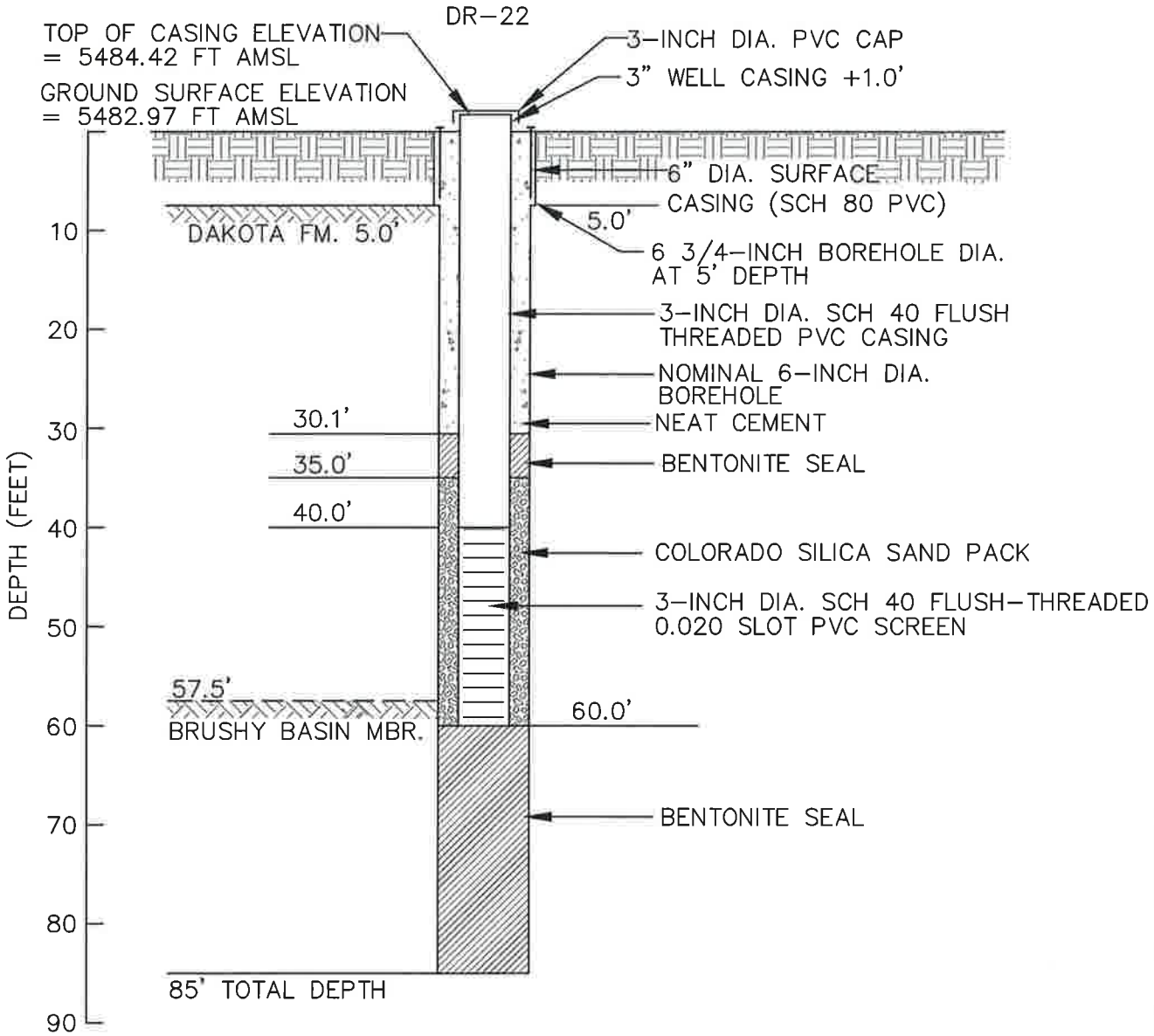
County San Juan State Utah Location _____ Elev. ≈ 5530

PAGE 1 OF 1
T.D. PROBE _____
T.D. DRILL _____
FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE		SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0																						
25						mdc-	rdbn											W				Surface soil - unconsolidated - sandy lean clay CL
5.0						sndsh	rdbn											S				Surface soil - unconsolidated - sandy lean clay CL
7.5						sndysh	rdbn-ltpk	m	w	a								VS				Moisture thin @ 7.0'
10.0						sh	pk tn											VS				
12.5						sh	yw gy											VS				
15.0						sh	yw gy											M				
17.5						sh	yw gy											M				
20.0						sndy sh	yw gy	f	w	a								M				
22.5						sndy sh	yw gy	m	w	a		L						VW				
25.0						sndy sh, ss	tn	f-m	m	a								VW				Upper Dakota Fm @ ≈ 24.0'
27.5						qtz ss	tn	m	w	a								W				
30.0						qtz ss	tn	m	w	a								N				
32.5						qtz ss	tn	m	w	a								N				
35.0						qtz ss	tn	f-m	m	a								N				
37.5						qtz ss	tn	m	w	a								N				
40.0						qtz ss	tn	f	w	a								N				
42.5						qtz ss	tn	m	w	a								N				
45.0						qtz ss, sh	dk bn	m	w	a		L						N				
47.5						qtz ss	tn	m-c	m	a								N				
50.0						qtz ss	gy tn	m-v c	p	a								N				abund multi colored chert frags.
52.5						qtz ss	tn	m-v	c	p	a								N			" " " " "
55.0						qtz ss	tn	m-	c	f	a								N			" " " " "
57.5						sh	ltgy-gy-pk											N				chert pebbles = frags
60.0						sh	ltgy											N				
62.5						sndy sh	vltgy tn	vf-	m	f	a							N				
65.0						qtz ss	tn		m	w	a							N				
67.5						qtz ss	tn	m-	c	m	a							N				
70.0						qtz ss	tn		c	w	r							N				
72.5						qtz ss, cgl	ltgy tn	m-	peb	f	r							N				
75.0						qtz ss	ltgy tn		c	w	r							N				some gy chert grains
77.5						qtz ss	tn		c	w	r							N				
80.0						qtz ss	tn	m-	c	m	a							N				
82.5						qtz ss	tn		m	w	r							N				
85.0						qtz ss	tn	f-	m	m	r							N				
87.5						qtz ss	ltpk tn		vf	w	r							N				
90.0						qtz ss	tn	f-	m	m	r							N				
92.5						qtz ss	tn		m	w	r							N				
95.0						qtz ss, cgl	tn	m	peb	f	a							N				some gy chert frags.
97.5						qtz ss	wh-vltn	m	vc	m	a							N				abund. wh-lt colored qtz & chert frags
100.0						qtz ss	wh-vltn	m-v	c	m	a							N				" " " " " "
102.5						qtz ss	wh-tn	m	peb	f	a							N				" " " " " "
105.0						qtz ss	wh-tn	m-	peb	f	a							N				hard drilling, abund rusting steel frags.
107.5						qtz ss, qtz.c	wh-tn	m-	peb	f	a							N				" " " " " "
110.0						qtz ss, qtz.c	wh-tn	m-	peb	f	a							N				50% of grains are chert
112.5						qtz ss cgl	gy tn	m-	peb	f	a							N				
115.0						qtz ss, sltst	gy tn-gy gn	m	peb	f	a		L					N				Brushy Basin Fm @ 114.0
117.5						slty ss	gn-ppbn											N				
120.0						sltysh	gn-ppbn											N				T.D.
122.5																						
125.0																						

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-22
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180267A Well Construction Diagram	

Date 3 May 291. Geologist L-Casebolt Drilling Co. Pyott Exploration Inc. Hole No. DR 22

Property White mesa mill Project cell 4B Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. 5488

PAGE 1 OF 1

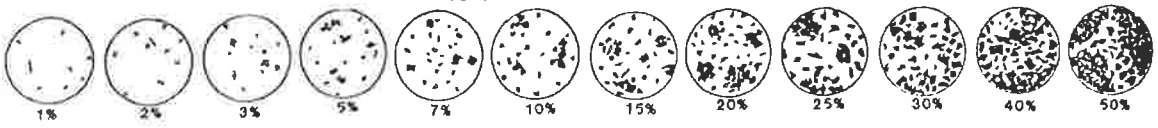
T.D. PROBE _____

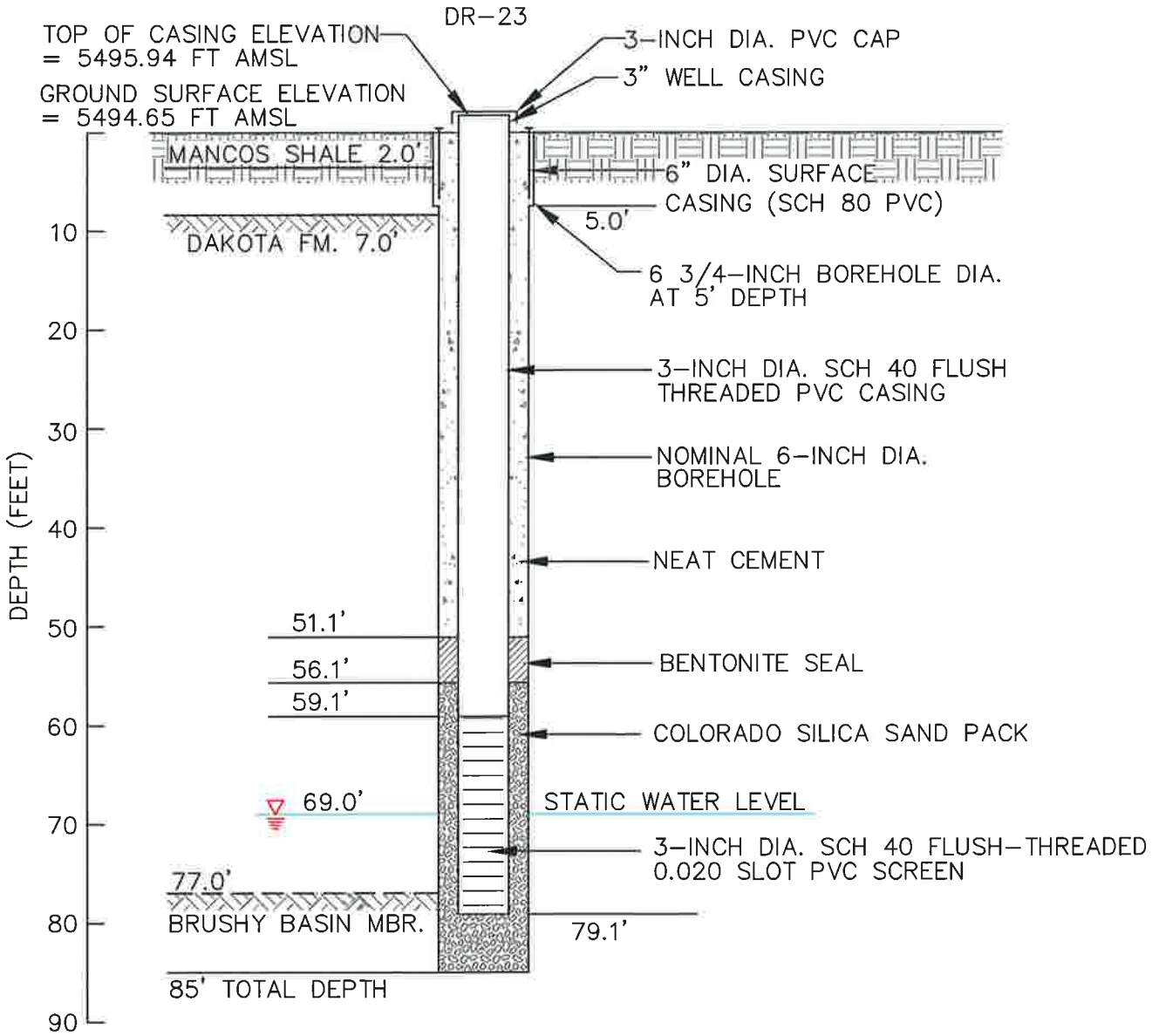
T.D. DRILL 85.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC REACT-10% HCL	CARBON AMOUNT	CARBON TYPE	REMARKS
0																				
25						mdst	rdbn										N			Surface Soil - unconsolidated - sandy lean clay cl
5.0						mdst	rdbn										N			Surface Soil - unconsolidated - sandy lean clay cl
7.5						qtz ss	ltgyish										N			Upper Dakota Ct @ 5.0'
10.0						qtz ss cgl	ltgyish	m-	peb	f	r						N			abund gray chert frags.
12.5						qtz ss,	ltgyish		m	w	r						N			
15.0						qtz ss, sh	wh-ltgyish	m-	c	m	r						N			
17.5						qtz ss	wh-ltgyish	m-	vc	m	r						N			some chert frags.
20.0						qtz ss	ltgyish	m-	c	m	r						N			
22.5						qtz ss cgl	gyish	m-	peb	f	a						N			50% chert grains & frags.
25.0						qtz ss, cgl	gyish	m-	peb	f	a						N			" " " "
27.5						qtz ss,	lt		m	w	a						N			
30.0						qtz ss cgl	gyish	m	peb	f	a						N			abund light colored chert grains
32.5						qtz ss	ltgyish	m-	c	m	R						N			
35.0						qtz ss	ltgyish		m	w	R						N			
37.5						qtz ss	ltgyish		m	w	r						N			
40.0						qtz ss	ltgyish	m-	c	m	a						N			
42.5						qtz ss	ltgyish		m	w	r						N			
45.0						qtz ss	ltgyish	m-	c	m	r						N			
47.5						qtz ss	ltgyish		m	w	r						N			
50.0						qtz ss	ltgyish	m-	c	m	r						N			
52.5						qtz ss	ltgyish	m-	c	m	a						N			
55.0						qtz ss	ltgy	m-	c	m	a						N			
57.5						qtz ss	ltgy	m-	c	m	a						M			
60.0						sh	ltgy-lt brn										N			Brassy Qtz in Ct @ 57.5' some chert frags
62.5						sh	wh-ltgyish										N			
65.0						sh	gy-pbbn										N			some red chert grains
67.5						sh	ga-pbbn										N			Extremely hard drilling (chert) from 67.5
70.0						sh, qtz	ort-gn										N			to 72.5' chert pebble & frags.
72.5						sh, qtzite	wh-ltgn	m-	peb								N			
75.0						sh	ltgy										N			red chert frags.
77.5						sh	ltgy		peb								N			" " " & pebbles
80.0						sh	ltgy										N			
82.5						sh qtz ss	ltgy	f-	m	m	a		frC				N			
85.0						qtz ss, sh	ltgy	vf-	m	f	a						N			TD
87.5																				
90.0																				
92.5																				
95.0																				
97.5																				
100.0																				
102.5																				
105.0																				
107.5																				
110.0																				
112.5																				
115.0																				
117.5																				
120.0																				

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-23
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180268A Well Construction Diagram	

Date 4 May 20[illegible] Geologist L. Casebolt Drilling Co. Boyles Exploration, Inc. Hole No. DR 23

Property White Mesa Mill Project CUD Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈ 5491

PAGE 1 OF 1

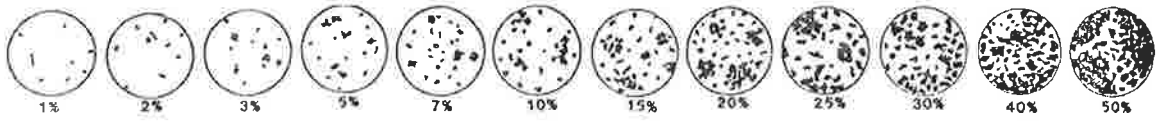
T.D. PROBE _____

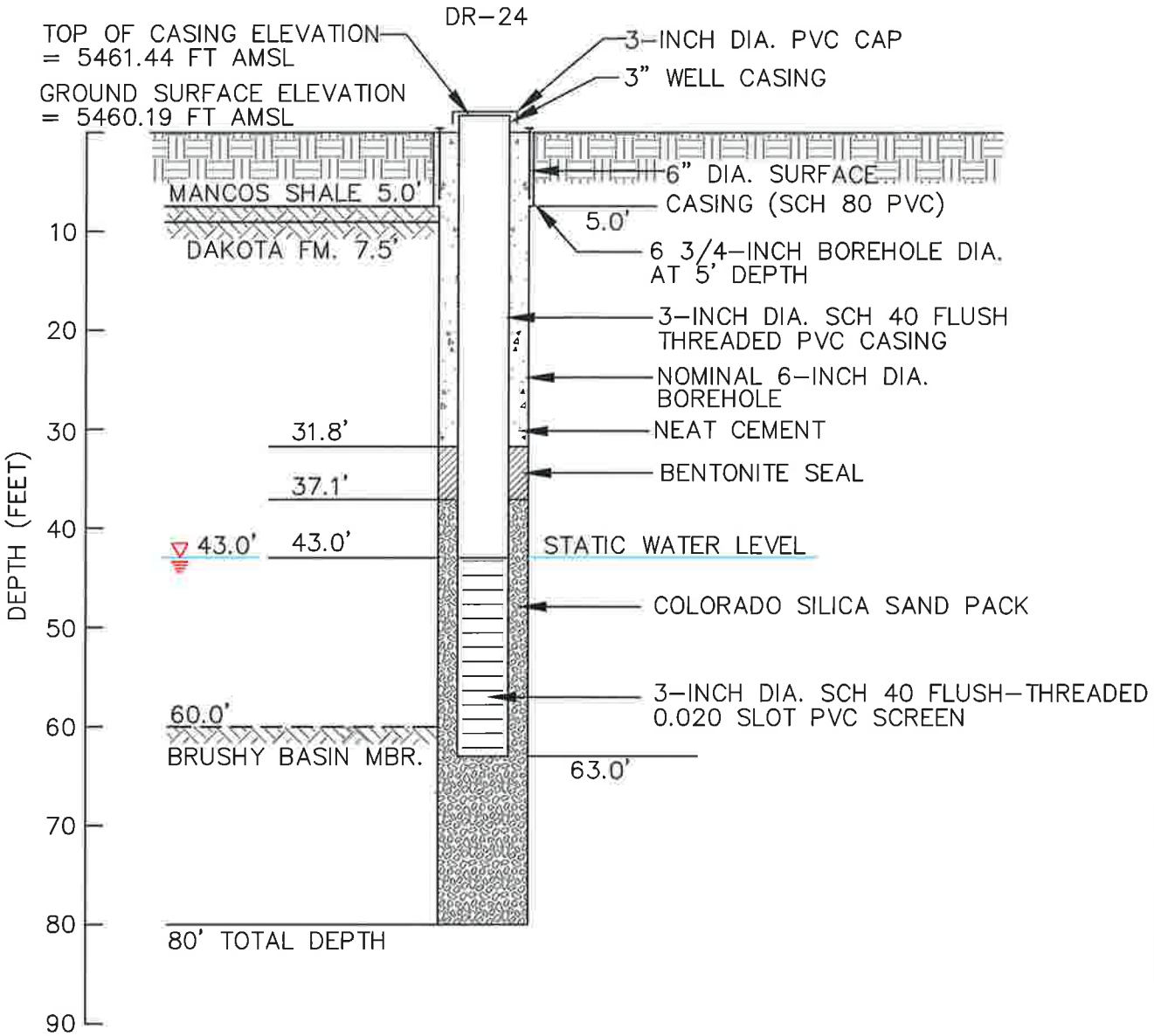
T.D. DRILL 85.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	PYRITE METALLIC	NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																					
2.5						mdst	rd-brn										S				Surface soil - Mancos Shale & 2.0' unconsolidated
5.0						sndy sh	rd-brn-ltgy-tn	vf-f	w	r							VS				Mancos Sh
7.5						sndy sh, qtzss	gy-tn-yw-brn	f	m	m	r						VS				Upper Dakota Ss @ 7.0'
10.0						qtzss	wh-gy-tn	m-c	m	r		L					N				
12.5						qtzss	tn	m-c	m	r		L					N				
15.0						qtzss	tn	m-c	m	a							N				
17.5						qtzss	tn	f-m	m	a							N				
20.0						qtzss	tn		m	w	a	L					N				
22.5						qtzss	tn		m	w	r						N				
25.0						qtzss	tn	m	c	m	a						N				
27.5						qtzss	tn	m	c	m	r						N				
30.0						qtzss	ltgy-tn		m	w	R						C				
32.5						qtzss	ltgy-tn		m	w	r						N				
35.0						qtzss	ltgy-tn		m	w	r						N				
37.5						qtzss	ltgy-tn	m-c	m	r							N				
40.0						qtzss	ltgy-tn	m-c	m	a							N				
42.5		PT				qtzss, cgl	gy-tn-dk gy	m-gr	f	a							N				30% chert pebbles & granules
45.0						qtzss	gy-tn	m-c	m	r							N				
47.5						qtzss	gy-tn	m-c	m	r							N				Some chert frags
50.0						qtzss	gy-tn	m-c	m	r							N				
52.5						qtzss	vltgy	vf-m	f	r							N				
55.0						qtzss	wh-gy-tn	f-m	m	r		L					N				
57.5						qtzss	wh		f	w	a						N				
60.0						qtzss	wh		m	w	r						N				
62.5						qtzss	vltgy		m	w	r						N				
65.0						qtzss	vltgy		m	w	r						N				
67.5						qtzss	vltgy		m	w	r						N				qtz vein @ 67.5
70.0						qtzss	vltgy		m	w	r						N				
72.5						qtzss	vltgy	m-c	m	r							N				Some gy chert grains & frags.
75.0						qtzss, sh	yw-brn-tn-brn	m-c	m	r		L					N				
77.5						qtzss, sh	wh-tn-gn	m-pb	p	a			tr	c			N				Brushy Basin @ 77.0' - gas odor
80.0						sh	gy-gn										N				some red chert grains
82.5						sh	gy-gn										N				
85.0						sh	gy-gn										N				T.D.
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.

DR-24
AS-BUILT WELL CONSTRUCTION SCHEMATIC

Approved	Date	Reference	Figure
SJS	1/9/12	K:\7180269A Well Construction Diagram	

Date 3 MAY 2011 Geologist L. Casebier Drilling Co. Bayles Exploration Inc. Hole No. DR 24

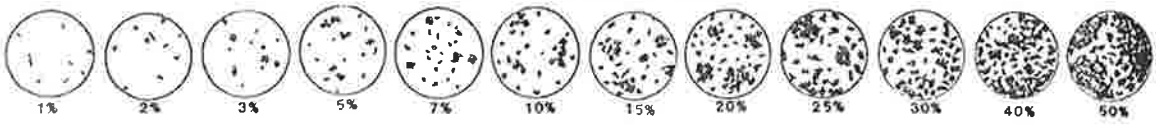
Property White Mesa Mill Project Cell 4B Unit No. ____ Sec. ____ Twp ____ Rge. ____

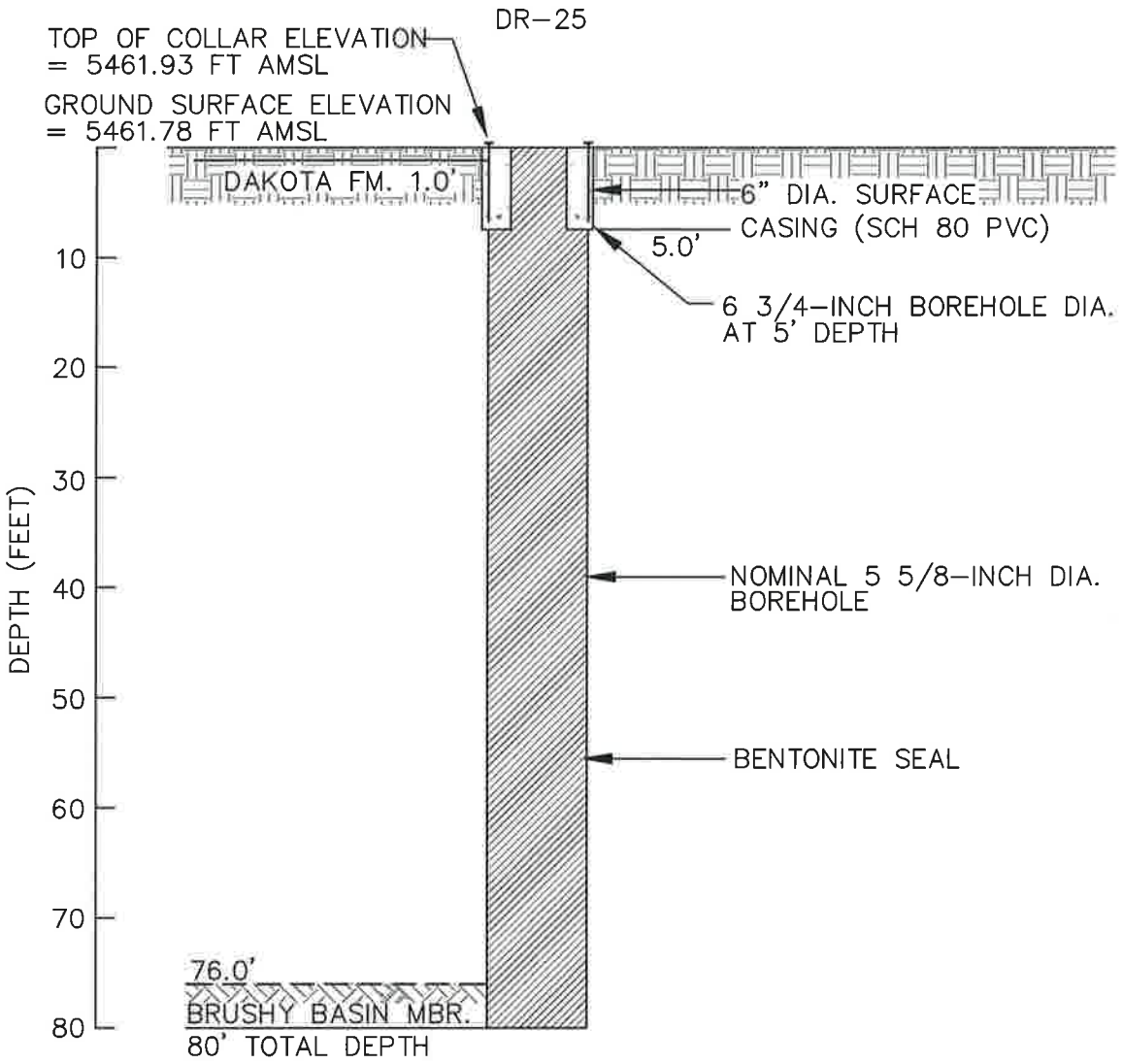
County San Juan State Utah Location ____ Elev. ≈5469

PAGE 1 OF 1
T.D. PROBE ____
T.D. DRILL 80.6'
FLUID LEVEL ____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	METALLIC	NON-METALLIC	REACT. 10% HCL AMOUNT	REACT. 10% HCL TYPE	CARBON	REMARKS
0						mdst	rd brn										N				
25.0						mdst	rd brn										N				Surface Soil - unconsolidated - sandy iron clay - CL
5.0						mdst	rd brn										N				Surface Soil - unconsolidated - sandy iron clay - CL
7.5						sltst/sh	pk tn	c-vc	p	r							VS				manner Sh
10.0						qtz ss	gy tn	m-peb	sr	r							N				Upper Dakota Fm @ ± 7.5' chert granules - grains
12.5						qtz ss	gy tn	m-vc	sr	a							N				light colored chert frags + grains
15.0						qtz ss	gy tn	m-peb	sr	a							N				" " " " "
17.5						qtz ss	lt gy tn	f-m	m	r							N				
20.0						qtz ss	lt gy tn	m-c	m	a							N				
22.5						qtz ss	lt gy tn		m	w	r						N				
25.0						qtz ss	lt gy tn		m	w	r						N				
27.5						qtz ss	gy tn	m-c	m	R							N				
30.0						qtz ss	yw gy tn	m-vc	sr	a							N				shard white chert frags.
32.5						qtz ss	lt gy tn	m-c	m	r							N				
35.0						qtz ss	lt gy tn		m	w	r						N				moisture 1st noticed 35.0'
37.5						qtz ss	lt gy tn		m	w	r						N				
40.0						qtz ss	lt gy tn		m	w	r						N				
42.4						qtz ss	lt gy tn		f	w	r						N				
45.0						qtz ss	lt gy tn	f-m	m	r							N				
47.5						qtz ss	gy tn	f-c	f	a							N				
50.0						qtz ss	lt gy tn	m-vc	sr	a		L					N				
52.5						qtz ss	yw gy tn	m-peb	sr	a		L					N				shard light colored chert pebbles + grains
55.0						qtz ss + cgl	or gy tn	m-peb	sr	a		L					N				30% " " " " "
57.4						qtz ss	yw gy tn	m-vc	sr	a							VS				
60.0						qtz ss	gy	f-c	f	a			tr				VS				
62.5						sh	gn										N				Brushy Basin @ ± 60.0' some pebb chert pebbles
65.0						sh	gn						tr				N				some pebb - red chert frags.
67.5						sh	gy gn										N				
70.0						sh	gy gn - pp tn										N				some mottled cherts
72.5						sh	gn										N				
75.0						sh	gn										N				some red chert grains
77.5						sh	gn										N				
80.0						sh	gy gn										N				T.D.
82.5																					
85.0																					
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE





NOT TO SCALE

HYDRO GEO CHEM, INC.	DR-25 WELL ABANDONMENT SCHEMATIC			
	Approved	Date	Reference	Figure
	SJS	1/9/12	K:\7180270A Well Construction Diagram	

Date 2 May 2011 Geologist L. Casebolt Drilling Co. Bayles Explorations, Inc. Hole No. DR 25

Property White Mesa Mill Project Call 43 Unit No. _____ Sec. _____ Twp. _____ Rge. _____

County San Juan State Utah Location _____ Elev. ≈ 5462

PAGE 1 OF 1

T.D. PROBE _____

T.D. DRILL 80.0

FLUID LEVEL _____

DEPTH	SAMPLE TAKEN	GRAPHIC LOG	ALTERATION	GAMMA ANOMALY	BRECCIA PIPE	LITHOLOGY	COLOR OF WET SAMPLE	GRAIN SIZE	SORTING	ANGULARITY	CEMENT MATRIX	IRON OXIDE	PYRITE AMOUNT	PYRITE HABIT	PYRITE ALTER.	METALLIC	NON-METALLIC	REACT. 10% HCl AMOUNT	REACT. 10% HCl TYPE	CARBON	REMARKS
0																					
2.5						qtz ss, mas	lt orbn	m-c	m	a	L						VN				Sandstone, to 1 foot upper Dakota Fm @ 1.0'
5.0						qtz ss	orgbn	c-vc	m	a	L						N				30% chert frags.
7.5						qtz ss	tn	m-c	m	a							N				20% " "
10.0						qtz ss	orbn	m-c	m	a							N				Morrison. First noted @ 10.0' 30% chert.
12.5						qtz ss, sltly cgl	gybn	m-peb	p	a							N				
15.0						qtz ss	tn	m-c	m	r							N				30% chert grains
17.5						qtz ss, cgl	orbn	c-peb	p	a							N				80%+ " " & pebbles
20.0						qtz ss, cgl	orbn	c-peb	p	a	L						N				90%+ " " "
22.5						qtz ss, cgl	orgybn	c-peb	p	a	L						N				90%+ " " "
25.0						qtz ss, cgl	orgybn	c-peb	p	a	L						N				90%+ " " "
27.5						qtz ss, cgl	gybn	c-peb	p	a	L						N				90%+ " " "
30.0						qtz ss, cgl	orgybn	c-peb	p	a							N				90%+ " " "
32.5						qtz ss, cgl	orbn	c-peb	p	a							N				90%+ " " "
35.0						qtz ss, cgl	gybn	c-peb	p	a							N				90%+ " " "
37.5						qtz ss	tn		m	w	R						N				
40.0						qtz ss	lt orbn	f	m	m	r	L					N				
42.5						qtz ss	tn	f	m	m	r						N				
45.0						qtz ss	tn		m	w	r						N				
47.5						qtz ss	tn	f-	m	m	r						N				Some chert frags.
50.0						qtz ss	tn		m	w	R						N				
52.5						qtz ss	tn	m-	c	f	a						VN				some gy chert frags + grains
55.0						qtz ss	lt gybn	m-	vc	f	a						N				abund. " " " "
57.5						qtz ss, cgl	lt gybn	m-peb	p	a							N				30% wh-gy chert pebble + frags.
60.0						qtz ss	lt tn	m-	peb	p	a.		tr	A			N				some " " " " "
62.5						qtz ss	lt tn		m	w	R						N				
65.0						qtz ss, cgl	orbn	m-peb	p	a							N				40% multi colored chert pebbles, frags + grains
67.5						qtz ss, cgl	gybn	m-peb	p	a							N				80% " " " " " "
70.0						qtz ss	vltgy	m-	c	f	a						N				
72.5						qtz ss	vltgy		m	w	r						N				
75.0						qtz ss	vltgy	f-	m	m	r						N				Well began producing water @ 75.5'
77.5						qtz ss cgl, sltly	gybn-wtgy	m-peb	p	a			1%	C			N				Brown clay Ch. @ 79.0' (good contact)
80.0						qtz	wtgy						tr	A			N				T.D. Some pblm chert pebbles
82.5																					
85.0																					
87.5																					
90.0																					
92.5																					
95.0																					
97.5																					
100.0																					
102.5																					
105.0																					
107.5																					
110.0																					
112.5																					
115.0																					
117.5																					
120.0																					
122.5																					
125.0																					

PERCENTAGE COMPOSITION IMAGE