

District I
P.O. Box 1980, Hobbs, NM

District II
P.O. Drawer DD, Artesia, NM 88221

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Risk
Vertical
extent
7/24/99
1999
OIL CON. DIV.
DIST. 3

Operator: PNM Gas Services (Burlington) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Culpepper Martin #3A

Location: Unit D Sec 33 T 32 N R 12 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ Other

Land Type: BLM ☐ State ☐ Fee ☒ Other

Pit Location: Pit dimensions: length 15' width 15' depth 3'

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 129'

Direction from reference: 60 Degrees ☒ East North ☐
of
☐ West South ☒

Depth to Ground Water:

(Vertical distance from contaminants to
seasonal high water elevation of ground
water)

Less than 50 feet	(20 points)	
50 feet to 99 feet	(10 points)	
Greater than 100 feet	(0 points)	<u>0</u>

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than 1,000
feet from all other water sources)

Yes	(20 points)	
No	(0 points)	<u>0</u>

Distance to Surface Water:

(Horizontal distance to perennial lakes,
ponds, rivers, streams, creeks, irrigation
canals and ditches)

Less than 200 feet	(20 points)	
200 feet to 1,000 feet	(10 points)	
Greater than 1,000 feet	(0 points)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Culpepper Martin #3A

Date Remediation Started: 05/06/1999

Date Completed: 05/06/1999

Remediation Method: Excavation ☒ Approx. Cubic Yard 684

(Check all appropriate sections)

Landfarmed ☒ Amount Landfarmed (cubic yds) 600

Other 84 cu. yds. overburden.

Remediation Location: Onsite ☒ Offsite

(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 28' X 33' X 20' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

*** Vertical extent drilling conducted to 75'. Bottom hole results below OCD guidelines as indicated on attached lab analysis.

Ground Water Encountered: No ☒ Yes ☐ Depth

Final Pit Closure Sampling:

Sample Location 5 pt. composite - bottom.

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 20'

Sample date 05/06/1999

Sample time 2:20:00 PM

Sample Results

Benzene (ppm) 19 ***

Total BTEX (ppm) 247 ***

Field headspace (ppm)

TPH (ppm) 390.00 Method 8015B

Vertical Extent (ft) 75'

Risk Analysis form attached Yes ☐ No ☒

Ground Water Sample:

Yes ☐

No ☒

(If yes, see attached Groundwater Site Summary Report)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE October 28, 1999

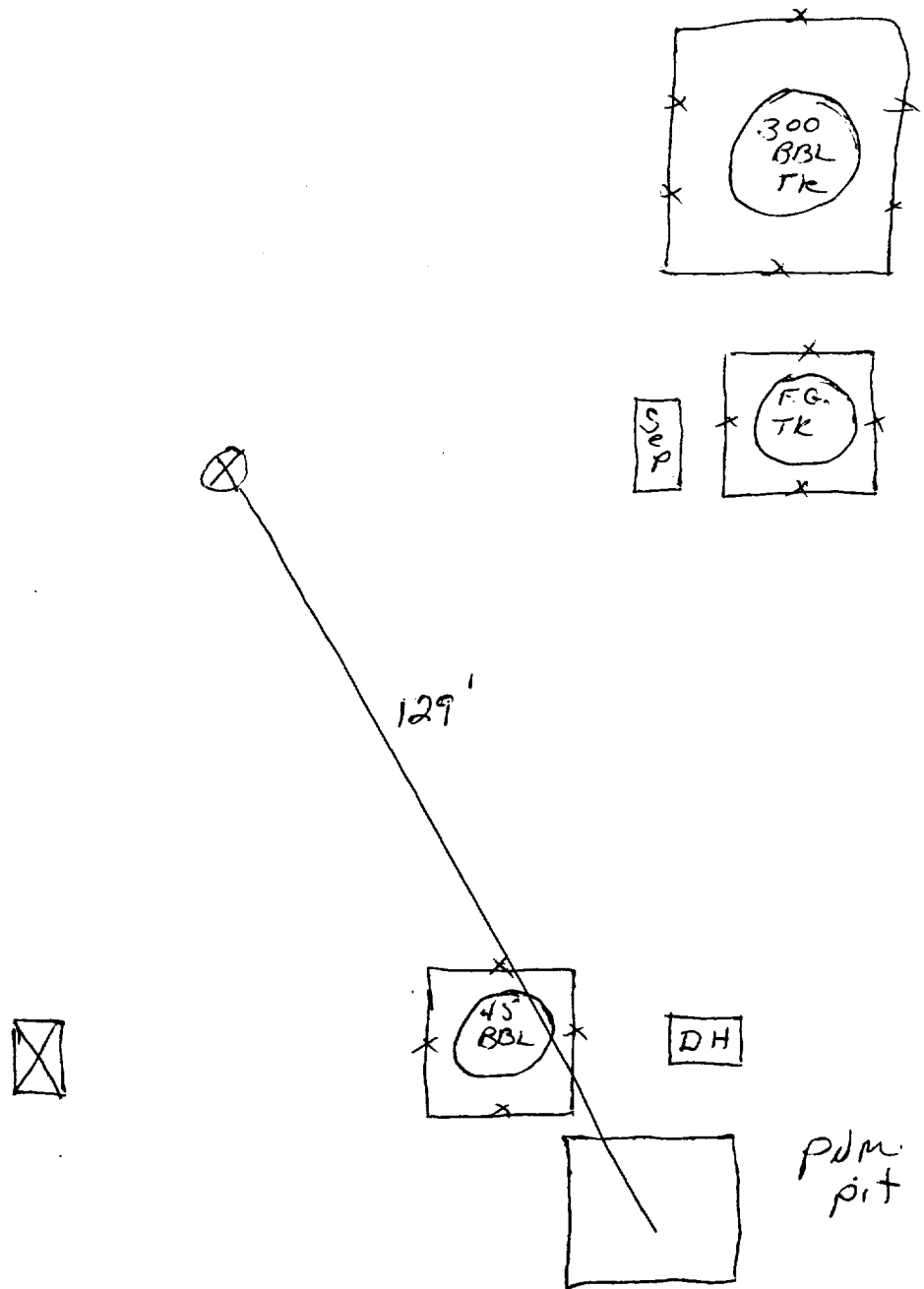
SIGNATURE

Maureen Gannon

PRINTED NAME Maureen Gannon
AND TITLE Project Manager

Culpepper Martin St
Sec. 33 T32N R12W Unit D
Burlington

Site Drawing



Calpepper Martin SH
Sec. 33 T32N R12W Unit D
Burlington

Excavation Drawing

26' x 33' x 20'

North wall sample
18' 93.3 ppm

5 pt. Composite
At 20'
936 ppm H.S.

West wall sample
18' 23.3 ppm

East wall sample
18' 0.0 ppm

South wall sample
18' 40.6 ppm

Field Headpace: 83.8 (walks)

Wall composite
83.8 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 18-May-99

CLIENT: PNM - Public Service Company of NM
Project: Culpepper Martin #11, #3A and #3
Lab Order: 9905034

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Ron

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 18-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #3A
Work Order:	9905034	Client Sample ID:	9905061420; 5pt. Bottom Comp
Lab ID:	9905034-04A	Matrix:	SOIL
Project:	Culpepper Martin #11, #3A and #3	Collection Date:	5/6/99 2:20:00 PM
		COC Record:	7478

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	390	25		mg/Kg	1	5/18/99
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	19000	2500		µg/Kg	2500	5/12/99
Toluene	120000	5000		µg/Kg	2500	5/12/99
Ethylbenzene	10000	2500		µg/Kg	2500	5/12/99
m,p-Xylene	81000	5000		µg/Kg	2500	5/12/99
o-Xylene	17000	2500		µg/Kg	2500	5/12/99

247000
247 ppm

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 18-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #3A
Work Order:	9905034	Client Sample ID:	9905061415; 4pt. Wall Comp
Lab ID:	9905034-03A	Matrix:	SOIL
Project:	Culpepper Martin #11, #3A and #3	Collection Date:	5/6/99 2:15:00 PM
		COC Record:	7478

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	5/12/99

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr - Surrogate

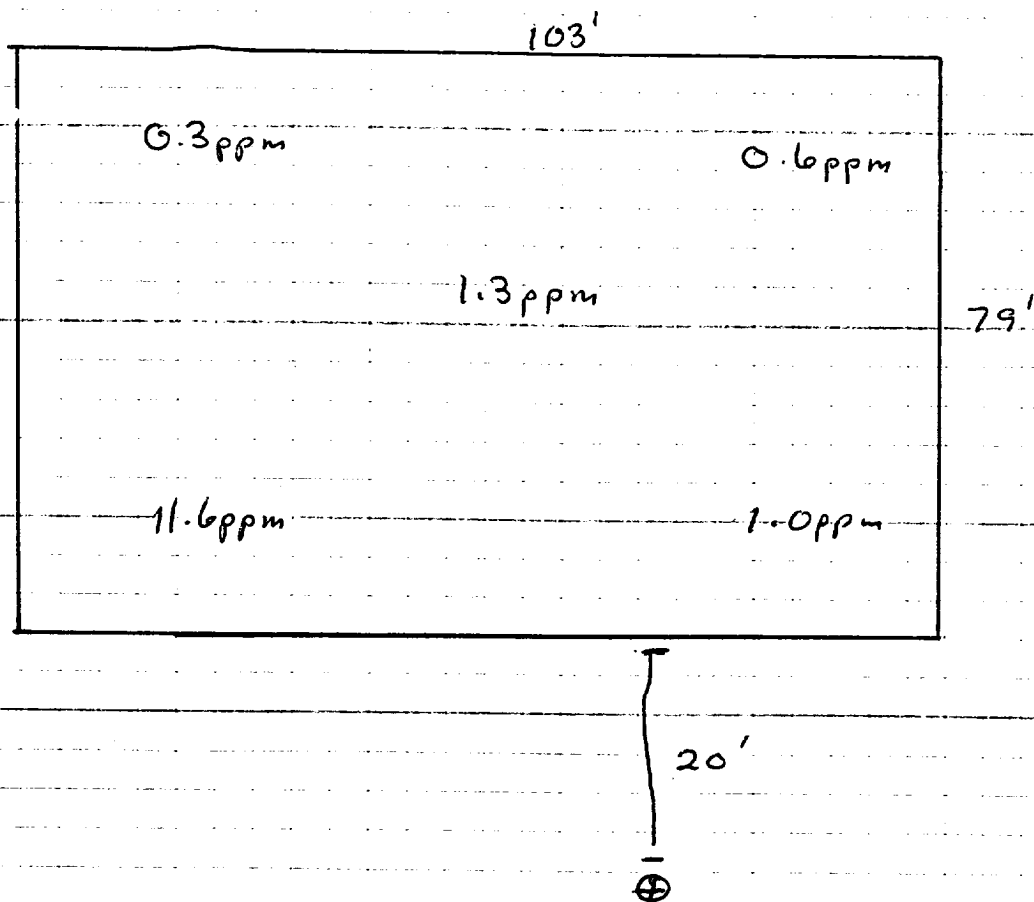
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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Culpepper Martin #3A
Sec-33 T-32N R-12W UL D
Burlington

LANDFARM DRAWING



2" to 12" Depth

Headspace Reading 13.5 ppm
Sample # 9906241130

Not to Scale

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 13-Jul-99

CLIENT: PNM - Public Service Company of NM
Project: Culpepper Martin 4, 3A, 3ARB & 3 LF
Lab Order: 9906074

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin 3A LF
Work Order:	9906074	Client Sample ID:	9906241130; 5pt Comp
Lab ID:	9906074-02A	Matrix:	SOIL
Project:	Culpepper Martin 4, 3A, 3ARB & 3 LF	Collection Date:	6/24/99 11:30:00 AM
		COC Record:	7722

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	50		mg/Kg	2	7/7/99

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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- PROVIDING QUALITY SERVICE TO THE ENVIRONMENT -

**On Site Technologies, LTD.**

Date: 01-Oct-99

CLIENT: PNM - Public Service Company of NM**Project:** Vertical Extent Drilling**Lab Order:** 9909071**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Analytical Comments for Method BTEX_S; SAMPLE 9909071-02A, Culpepper Martin #3A @ 75ft. 9909231417: The reported value for Toluene, 430 ug/Kg, is flagged as E - Value above quantitation range. The sample was re-analyzed on 9/27/99 at a two-fold (2X) dilution for confirmation within the quantitation range. Upon re-analysis it was observed that the recovery of each volatile compound was significantly less (~10X) than values observed in the original analysis on 9/24/99. The loss of volatiles is suspect to volatilization and/or degradation and therefore Toluene was reported from the original analysis and appropriately qualified.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Culpepper Martin #3A
Work Order:	9909071	Client Sample ID:	9909231417 @ 75ft.
Lab ID:	9909071-02A	Matrix:	SOIL
Project:	Vertical Extent Drilling	Collection Date:	09/23/1999 2:17:00 PM
		COC Record:	7761

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	09/28/1999
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	34	1		µg/Kg	1	09/24/1999
Toluene	430	2	E	µg/Kg	1	09/24/1999
Ethylbenzene	42	1		µg/Kg	1	09/24/1999
m,p-Xylene	380	2		µg/Kg	1	09/24/1999
o-Xylene	88	1		µg/Kg	1	09/24/1999

974
974 ppm

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

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- TRUST IN OUR BLENDING QUALITY WITH THE ENVIRONMENT -

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # 1

Well # 1

Page 1 of 2

Project Name PNM VERTICAL EXTENT

Project Number 02800044 Phase 35

Project Location Culpepper Martin #37

Well Logged By C. CULLICOTT

Personnel On-Site F. PADILLA & D. PADILLA

Contractors On-Site 0

Client Personnel On-Site GARY COOK

Elevation

Borehole Location T32N R12W S37D

GWL Depth NONE ENCOUNTERED

Logged By C. CULLICOTT

Drilled By F. PADILLA & D. PADILLA

Date/Time Started 9/23/99 11:10am

Date/Time Completed 9/23/99 3pm

Drilling Method AUGER

Air Monitoring Method PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0									
5									
10									
15									
20	① 20'-22'		① 18" RECOVERY. PERVASIVELY BLACK STAINED SILT w/ MINOR SAND. COHERENT, SLIGHT PLASTICITY, SLIGHTLY DAMP. ODOOR						① 7 BLOWS SS 295 PPM HS 290 PPM
25	② 25'-27'		② FULL RECOVERY. LOOSE, POORLY SORTED SAND, BROWN, DAMP. SOME FINES TOWARD TOP OF SS, NONE @ BOTTOM. ALSO - SOME (FEW INCHES) OF BLACK STAINED SILT @ TOP - MIGHT BE SLUFF, BUT LOOKS CONTINUOUS w/ SAND						② 7 BLOWS SS 309 PPM HS 254 PPM
30	③								③ 8 BLOWS SS 336 PPM HS 269 PPM
35									④ 26 BLOWS SS 275 PPM HS 258 PPM
40									

Comments: Overcast, cool, light BREEZE

Geologist Signature Conthy Cullcott

Culpepper 11 10.1.11 #54
Vertical Extent

③ 30-~~32~~^{31 1/2}' 12" RECOVERY
BROWN SILT, SLIGHTLY STIFF, SLIGHTLY DAMP.
ODOR, NO STAIN.

④ 35-37'
26 BLOWS
SS 275 PPM 6" RECOVERY
LOOSE BROWN POORLY SORTED SAND
WITH SMALL GRAVEL. ODOR, NO STAIN

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # 1

Well # 1

Page 2 of 2

Project Name PNM VERTICAL EXTENT

Project Number 62800044 Phase 35

Project Location CULPEPPER MARTIN #3A

Elevation 7320

Borehole Location T32N R12W S33D

GWL Depth NONE ENCOUNTERED

Logged By C. CULLICOTT

Drilled By K. PADILLA & D. PADILLA

Date/Time Started 9/23/99 11:10am

Date/Time Completed 9/23/99 3pm

Well Logged By C. CULLICOTT

Personnel On-Site K. PADILLA & D. PADILLA

Contractors On-Site 0

Client Personnel On-Site GARY COOK

Drilling Method AUGER

Air Monitoring Method PLO

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
40	5	40-42'	⑤ LOOSE BROWN SILTY FINE SAND. ODR. 6" RECOVERY						⑤ 30 BLOWS SS 284 ppm HS 246 ppm
45	6	45-47'	⑥ BROWN SANDY SILT, SLIGHTLY STIFF. ODR. 6" RECOVERY						⑥ 32 BLOWS SS 245 ppm HS 248 ppm
50	7	50-52'	⑦ 11" RECOVERY (SLURRY?) BROWN SILT, SLIGHTLY STIFF. ODR. 6" RECOVERY						⑦ 25 BLOWS SS 232 ppm HS 313 ppm
55	8	55-57'	⑧ 12" RECOVERY BROWN FINE SILTY SAND, SLIGHTLY STIFF. ODR. 6" RECOVERY						⑧ 13 BLOWS SS 233 ppm HS 208 ppm
60	9	60-61 1/2'	⑨ FULL RECOVERY DAMP BROWN SAND W/VARYING % SILTS CLAY. TOWARDS BOTTOM OF SPIT SPOON HAS HIGHER % CLAY & IS SOMEWHAT PLASTIC						⑨ 7 BLOWS SS 124 ppm HS 88 ppm
70	11	70-71 1/2'	⑩ FULL RECOVERY DARK BROWN, DAMP CLAYEY SILT TO SILTY SAND, VARYINGLY ODR.						⑩ 28 BLOWS SS 288 ppm HS 228 ppm
75	12	75-76 1/2'	TD 75' REFUSAL ON SILTSTONE						⑪ 50+ BLOWS SS 249 ppm HS 266 ppm
40									⑫ 50+ BLOWS SS 282 ppm HS 48 ppm

Comments:

HOLE BACKFILLED WITH CUTTINGS

Geologist Signature

Cathy Cullcott

Culpepper 11' birtin #3A
Vertical Extent

(11) 70-77 1/2'
HS 266 ppm

BROWN
SILTY SAND, CONSOLIDATED / STIFF
SANDSTONE, BUT CLOSE. ORANGEISH MATRIX.
ODOR, NO STAIN. PATCH OF SILTY CLAY
@ ~70 1/2' IN HALF OF SPOON (ie VERTICAL "LAYER";
SAMPLE SPLIT clay | sand | . 8" RECOVERY

(12) 75-76 1/2'
50+ BLOWS
SS 282 ppm
HS 98 ppm

BROWN SILTSTONE, MOTTLED GRAY
IN PLACES, "SHALY" PARTINGS
SPLIT SPOON REFUSAL