



## **Final Field Report**

### **Summary of Field Operations**

Advanced Resources International Inc.  
MPC 10-4 No. 1  
Tuscaloosa Shale, Lower Tuscaloosa  
Sand, Wash Fred Sands  
Kemper Power Plant  
Kemper County, Mississippi  
USA

Prepared By:

Robert Javadian

Weatherford Laboratories

HH-95968

9/7/2017

Weatherford Laboratories (WFT Labs) has determined the field activity of collecting core as one of the most important elements when fully characterizing a target reservoir. WFT Labs has developed best practices to ensure core samples are handled, stabilized and preserved correctly in order to complete uncompromised field and laboratory testing. The following report will summarize wellsite activities.

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# TABLE OF CONTENTS

## LIST OF TABLES

	Section
Coring Operation Summary	1
Core and Sample Inventories	2
Daily Field Reports	3

## LIST OF APPENDICES

Coring Vendor Core Logs	Appendix I
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<div>Weatherford LABORATORIES</div> <div>Well and Formation Summary</div>															
HH-95968															
WELL INFORMATION															
Operator Name:		Advanced Resources International Inc.		County, State:		Kemper County, Mississippi		Hole Size:		8.5"		Rig:		WT Drilling #17	
Well Name:		MPC 10-4 No. 1		Country:		USA		Hole Angle:				Elevation (Ground Level):		460'	
Field Designation:		Section 10, Township 9N, Range 15E		API #:		23-069-20015		Mud Type:		WBM		Elevation (Kelly Bushing):		475.5'	
Basin/Prospect Name:		Kemper Power Plant		Reservoir Type:		Conventional		Lithology:		Sand		AFE #:		NA	
Target Formation(s):		Tuscaloosa Shale, Lower Tuscaloosa Sand, Wash Fred Sands													
OPERATIONS SUMMARY															
Date of Departure:		08/23/17		Date of Coring Commencement:		8/23/2017		Date of Last Core:		8/29/2017		Date of Arrival in Lab:		8/31/2017	
Total Length of Job (days):		9		Total Days Coring:		7		WFT Labs' Lead Hand:		Robert Javadian		WFT Labs' Second Hand:		Kevin Milstead	
Coring Contractor:		Devilbiss Coring Services Inc.		Total Number of Cores:		6		Core Diameter:		4"		Retrieval Method:		Drill String	
Total Length Cut:		138.00		Total Length Recovered:		122.35		Percent Recovered:		89%		Coring Efficiency:		77%	
Liner Type:		Aluminum		Total Number of Desorption Samples:		0		Total Number of Whole Cores:		0		Total Number of Plugs:		0	
Tracer Chemical (Water Phase):		NA		Tracer Chemical (Oil Phase):		NA		Date Tracers Added:		NA		Total Number of Mud Samples:		0	
CORING SUMMARY															
Core Run	Core Barrel Length (Feet)	Cored Interval Top (Feet)	Cored Interval Bottom (Feet)	Core Recovered Top (Feet)	Core Recovered Bottom (Feet)	Coring Data		Recovery Percentage	Formation	Sample Information		Date & Time Start Coring		Date & Time Core at Surface	
1	30	3,170.00	3,200.00	3,170.00	3,196.70	Length Cored:	30.00	89.0%	Tuscaloosa Shale	No. of Desorption	0	Date:	08/23/17	Date:	08/23/17
						Length Recovered:	26.70			No. of W/C's	0	Time:	3:00	Time:	18:30
2	30	3,200.00	3,210.00	3,200.00	3,207.65	Length Cored:	10.00	76.5%	Lower Tuscaloosa Sand	No. of Desorption	0	Date:	08/24/17	Date:	08/24/17
						Length Recovered:	7.65			No. of W/C's	0	Time:	1:50	Time:	16:00
3	30	5,038.00	5,068.00	5,038.00	5,065.50	Length Cored:	30.00	91.7%	Wash Fred Sand	No. of Desorption	0	Date:	08/28/17	Date:	08/28/17
						Length Recovered:	27.50			No. of W/C's	0	Time:	0:13	Time:	6:00
4	30	5,068.00	5,099.00	5,068.00	5,098.45	Length Cored:	31.00	98.2%	Wash Fred Sand	No. of Desorption	0	Date:	08/28/17	Date:	08/28/17
						Length Recovered:	30.45			No. of W/C's	0	Time:	11:24	Time:	16:30
5	30	5,100.00	5,131.00	5,100.00	5,125.45	Length Cored:	31.00	82.1%	Wash Fred Sand	No. of Desorption	0	Date:	08/28/17	Date:	08/29/17
						Length Recovered:	25.45			No. of W/C's	0	Time:	21:55	Time:	4:00
6	30	5,131.00	5,137.00	5,131.00	5,135.60	Length Cored:	6.00	76.7%	Wash Fred Sand	No. of Desorption	0	Date:	08/29/17	Date:	08/29/17
						Length Recovered:	4.60			No. of W/C's	0	Time:	9:28	Time:	15:00

## Wellsite Core Inventory

**HH-95968**

**Core Number: 1**

			Date	Time (24hr)				
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/23/2017	3:00	Top Depth Cut:	3,170.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/23/2017	15:39	Bottom Depth Cut:	3,200.00	Coring Efficiency:	100.00%
County, State	Kemper County, Mississippi	Start TOH:	8/23/2017	15:45	Total Footage Cut:	30.00	Percent Recovered:	89.00%
Country:	USA	At Surface Date:	8/23/2017	18:30	Top Depth Recovered:	3,170.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/23/2017	23:00	Bottom Depth Recovered:	3,196.70	Mud Weight:	9.00
Whole Core Samples	0	Plugs:	0		Footage Recovered:	26.70	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments
1	3,170.00	3,173.00	Liner	3.00		
2	3,173.00	3,176.00	Liner	3.00		3,173.00 3/8" Chip Sample Taken from top of tube (Sand)
3	3,176.00	3,179.00	Liner	3.00		3,176.00 3/8" Chip Sample Taken from top of tube (Sand)
4	3,179.00	3,182.00	Liner	3.00		3,179.00 3/8" Chip Sample Taken from top of tube (Sand)
5	3,182.00	3,185.00	Liner	3.00		3,182.00 3/8" Chip Sample Taken from top of tube (Sand)
6	3,185.00	3,188.00	Liner	3.00		3,185.00 3/8" Chip Sample Taken from top of tube (Sand)
7	3,188.00	3,191.00	Liner	3.00		3,188.00 3/8" Chip Sample Taken from top of tube (Sand)
8	3,191.00	3,194.00	Liner	3.00		3,191.00 3/8" Chip Sample Taken from top of tube (Sand)
9	3,194.00	3,196.25	Liner	2.25		3,194.00 3/8" Chip Sample Taken from top of tube (Sand)
10	3,196.25	3,196.75	Liner	0.50		



## Wellsite Core Inventory

HH-95968

Core Number: 2

			Date	Time (24hr)				
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/24/2017	1:50	Top Depth Cut:	3,200.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/24/2017	11:15	Bottom Depth Cut:	3,210.00	Coring Efficiency:	33.33%
County, State	Kemper County, Mississippi	Start TOH:	8/24/2017	11:30	Total Footage Cut:	10.00	Percent Recovered:	76.50%
Country:	USA	At Surface Date:	8/24/2017	16:00	Top Depth Recovered:	3,200.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/24/2017	18:30	Bottom Depth Recovered:	3,207.65	Mud Weight:	9.00
Whole Core Samples	0	Plugs:	0		Footage Recovered:	7.65	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments		
1	3,200.00	3,203.00	Liner	3.00				
2	3,203.00	3,206.00	Liner	3.00		3,203.00	3/8" Chip Sample Taken from top of tube	
3	3,206.00	3,207.65	Liner	1.65		3,206.00	3/8" Chip Sample Taken from top of tube	

## Wellsite Core Inventory

**HH-95968**

**Core Number: 3**

			Date	Time (24hr)				
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/28/2017	0:13	Top Depth Cut:	5,038.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/28/2017	0:48	Bottom Depth Cut:	5,068.00	Coring Efficiency:	100.00%
County, State	Kemper County, Mississippi	Start TOH:	8/28/2017	1:00	Total Footage Cut:	30.00	Percent Recovered:	91.67%
Country:	USA	At Surface Date:	8/28/2017	6:00	Top Depth Recovered:	5,038.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/28/2017	8:15	Bottom Depth Recovered:	5,065.50	Mud Weight:	9.00
Whole Core Samples	0	Plugs:	0		Footage Recovered:	27.50	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments	
1	5,038.00	5,041.00	Liner	3.00		5,038.00	3/8" Chip Sample Taken from top of tube
2	5,041.00	5,044.00	Liner	3.00		5,041.00	3/8" Chip Sample Taken from top of tube
3	5,044.00	5,047.00	Liner	3.00		5,044.00	3/8" Chip Sample Taken from top of tube
4	5,047.00	5,050.00	Liner	3.00		5,047.00	3/8" Chip Sample Taken from top of tube
5	5,050.00	5,053.00	Liner	3.00		5,050.00	3/8" Chip Sample Taken from top of tube
6	5,053.00	5,056.00	Liner	3.00		5,053.00	3/8" Chip Sample Taken from top of tube
7	5,056.00	5,059.00	Liner	3.00		5,056.00	3/8" Chip Sample Taken from top of tube
8	5,059.00	5,062.00	Liner	3.00		5,059.00	3/8" Chip Sample Taken from top of tube
9	5,062.00	5,065.05	Liner	3.05		5,062.00	3/8" Chip Sample Taken from top of tube
10	5,065.05	5,065.50	Liner	0.45		5,065.05	3/8" Chip Sample Taken from top of tube

## Wellsite Core Inventory

**HH-95968**

**Core Number: 4**

			Date	Time (24hr)				
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/28/2017	11:24	Top Depth Cut:	5,068.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/28/2017	12:01	Bottom Depth Cut:	5,099.00	Coring Efficiency:	103.33%
County, State	Kemper County, Mississippi	Start TOH:	8/28/2017	12:25	Total Footage Cut:	31.00	Percent Recovered:	98.23%
Country:	USA	At Surface Date:	8/28/2017	16:30	Top Depth Recovered:	5,068.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/28/2017	18:15	Bottom Depth Recovered:	5,098.45	Mud Weight:	9.10
Whole Core Samples	0	Plugs:	0		Footage Recovered:	30.45	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments	
1	5,068.00	5,071.00	Liner	3.00		5,068.00	3/8" Chip Sample Taken from top of tube
2	5,071.00	5,074.00	Liner	3.00		5,071.00	3/8" Chip Sample Taken from top of tube
3	5,074.00	5,077.00	Liner	3.00		5,074.00	3/8" Chip Sample Taken from top of tube
4	5,077.00	5,080.00	Liner	3.00		5,077.00	3/8" Chip Sample Taken from top of tube
5	5,080.00	5,083.00	Liner	3.00		5,080.00	3/8" Chip Sample Taken from top of tube
6	5,083.00	5,086.00	Liner	3.00		5,083.00	3/8" Chip Sample Taken from top of tube
7	5,086.00	5,089.00	Liner	3.00		5,086.00	3/8" Chip Sample Taken from top of tube
8	5,089.00	5,092.00	Liner	3.00		5,089.00	3/8" Chip Sample Taken from top of tube
9	5,092.00	5,095.00	Liner	3.00		5,092.00	3/8" Chip Sample Taken from top of tube
10	5,095.00	5,097.80	Liner	2.80		5,095.00	3/8" Chip Sample Taken from top of tube
11	5,097.80	5,098.45	Liner	0.65		5,097.80	3/8" Chip Sample Taken from top of tube

## Wellsite Core Inventory

**HH-95968**

**Core Number: 5**

			Date	Time (24hr)	Note:	Hole Depth Adjusted to Pipe Tally		
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/28/2017	21:55	Top Depth Cut:	5,100.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/28/2017	22:26	Bottom Depth Cut:	5,131.00	Coring Efficiency:	103.33%
County, State	Kemper County, Mississippi	Start TOH:	8/28/2017	22:30	Total Footage Cut:	31.00	Percent Recovered:	82.10%
Country:	USA	At Surface Date:	8/29/2017	4:00	Top Depth Recovered:	5,100.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/29/2017	5:45	Bottom Depth Recovered:	5,125.45	Mud Weight:	9.10
Whole Core Samples	0	Plugs:	0		Footage Recovered:	25.45	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments	
1	5,100.00	5,103.00	Liner	3.00		5,100.00	3/8" Chip Sample Taken from top of tube
2	5,103.00	5,106.00	Liner	3.00		5,103.00	3/8" Chip Sample Taken from top of tube
3	5,106.00	5,109.00	Liner	3.00		5,106.00	3/8" Chip Sample Taken from top of tube
4	5,109.00	5,112.00	Liner	3.00		5,109.00	3/8" Chip Sample Taken from top of tube
5	5,112.00	5,115.00	Liner	3.00		5,112.00	3/8" Chip Sample Taken from top of tube
6	5,115.00	5,118.00	Liner	3.00		5,115.00	3/8" Chip Sample Taken from top of tube
7	5,118.00	5,121.00	Liner	3.00		5,118.00	3/8" Chip Sample Taken from top of tube
8	5,121.00	5,124.00	Liner	3.00		5,121.00	3/8" Chip Sample Taken from top of tube
9	5,124.00	5,125.05	Liner	1.05		5,124.00	3/8" Chip Sample Taken from top of tube
10	5,125.05	5,125.45	Liner	0.40		5,125.05	3/8" Chip Sample Taken from top of tube





## Wellsite Core Inventory

HH-95968

Core Number: 6

			Date	Time (24hr)				
Operator Name:	Advanced Resources International Inc.	Start Coring:	8/29/2017	9:28	Top Depth Cut:	5,131.00	Core Barrel Length:	30
Well Name:	MPC 10-4 No. 1	Stop Coring:	8/29/2017	9:32	Bottom Depth Cut:	5,137.00	Coring Efficiency:	20.00%
County, State	Kemper County, Mississippi	Start TOH:	8/29/2017	9:45	Total Footage Cut:	6.00	Percent Recovered:	76.67%
Country:	USA	At Surface Date:	8/29/2017	15:00	Top Depth Recovered:	5,131.00	Mud Type:	WBM
Desorption Samples:	0	Processing Complete Date:	8/29/2017	17:00	Bottom Depth Recovered:	5,135.60	Mud Weight:	9.10
Whole Core Samples	0	Plugs:	0		Footage Recovered:	4.60	Mud Samples:	0

Tube Number	Top Depth, Feet	Bottom Depth, Feet	Core Containment	Tube Length, Feet	Extruded Length, Feet	Comments
1	5,131.00	5,134.00	Liner	3.00		
2	5,134.00	5,134.50	Liner	0.50		
3	5,134.50	5,135.60	Box	1.10		Boxed Shoe (Rubble)



## Daily Field Report

HH-95968

**Operator Name:** Advanced Resources International Inc.

**Well Name:** MPC 10-4 No. 1

**Location:** Kemper County, Mississippi, USA

Date	Activity Log & Status Notes	Initials
8/23/2017	<p>07:45 - Spoke with Co. Man Dale. Rig had 20 out of 30' cut. Advised to mobilize ASAP.</p> <p>08:17 - Robert Javadian and Kevin Milstead departed Houston with truck, trailer and all equipment.</p> <p>19:30 - Arrived at location just as shoe was removed from bottom of inner tube. Checked in, unloaded, and set up processing equipment to start work on Core 1.</p> <p>21:30 - Started processing Core 1. Core was under gauge and received more epoxy than expected)</p> <p>23:00 - Finished processing Core 1 (26.7') and loading all samples into rock vault for climate control.</p> <p>23:30 - Checked out with co. man and went to hotel. Rig just finished cement bond log and was preparing to RIH for Core 2</p>	
8/24/2017	<p>15:00 - Bit depth 3500' - POOH with Core 2. (Cut 10')</p> <p>16:30 - Arrived on location</p> <p>18:00 - Finished processing Core 2 (7.65'). Rig was already back on bottom to drill ahead to next core point ~5100'.</p>	
8/25/2017	<p>15:30 - Spoke with Co. man Dale. Rig had to make a bit trip at 3800' after encountering a thicker than anticipated chert bed</p>	
8/26/2017	<p>06:00 - Current Depth 4200'</p> <p>16:00 - Current Depth 4500'. Rig had to make BHA trip due to hole angle deviation. Rig POOH to LD packed hole assembly and PU pendulum assembly to walk back deviated hole.</p>	
8/27/2017	<p>12:00 - Standby while finished drilling to core point.</p>	
8/28/2017	<p>00:13 - Rig reached bottom and started cutting Core 3.</p> <p>00:41 - Finished coring - Core 3 cut 1' / min. - Started out of hole with 30' cut</p> <p>04:00 - Arrived on location for Core 3.</p> <p>06:00 - Core 3 surfaced.</p> <p>08:15 - Finished processing Core 3 (27.5')</p> <p>11:30 - Rig reached bottom and started cutting Core 4.</p> <p>12:00 - Rig finished cutting Core 4 and started out of hole with 31' cut.</p> <p>16:30 - Arrived on location</p> <p>17:00 - Core 4 surfaced.</p> <p>18:15 - Finished processing Core 4 (30.45')</p> <p>21:50 - Rig Reach bottom and started cutting Core 5.</p> <p>22:27 - Rig finished cutting Core 5 and started out of hole with 31' cut.</p>	
8/29/2017	<p>03:00 - Arrived on location for Core 5.</p> <p>04:30 - Core 5 surfaced.</p> <p>05:45 - Finished processing Core 5 (25.45')</p>	
8/30/2017	<p>08:00 - Went to location to load up truck and pick up trailer.</p> <p>08:45 - Arrived at location</p> <p>10:00 - Left location with core and equipment</p> <p>20:45 - Shut down journey back to Houston in Longview, Tx</p>	
8/31/2017	<p>08:45 - Continue journey back to Houston.</p> <p>16:50 - Dropped off core in refrigerated storage at Fallbrook location.</p>	



Devilbiss Coring Service, INC  
Blanchard, Okla. • (405) 392-2515

CORING LOG

Core No. 1 Date 8-23-17  
Core Engineer V. Devilbiss Section 10-9N-15W Well Name MPC 10-4-31

WELL INFORMATION

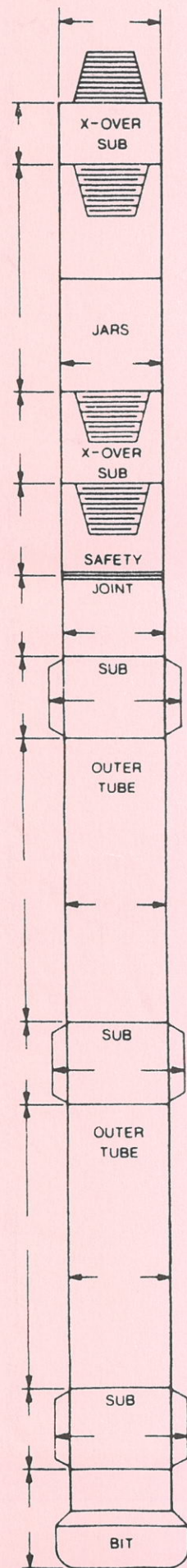
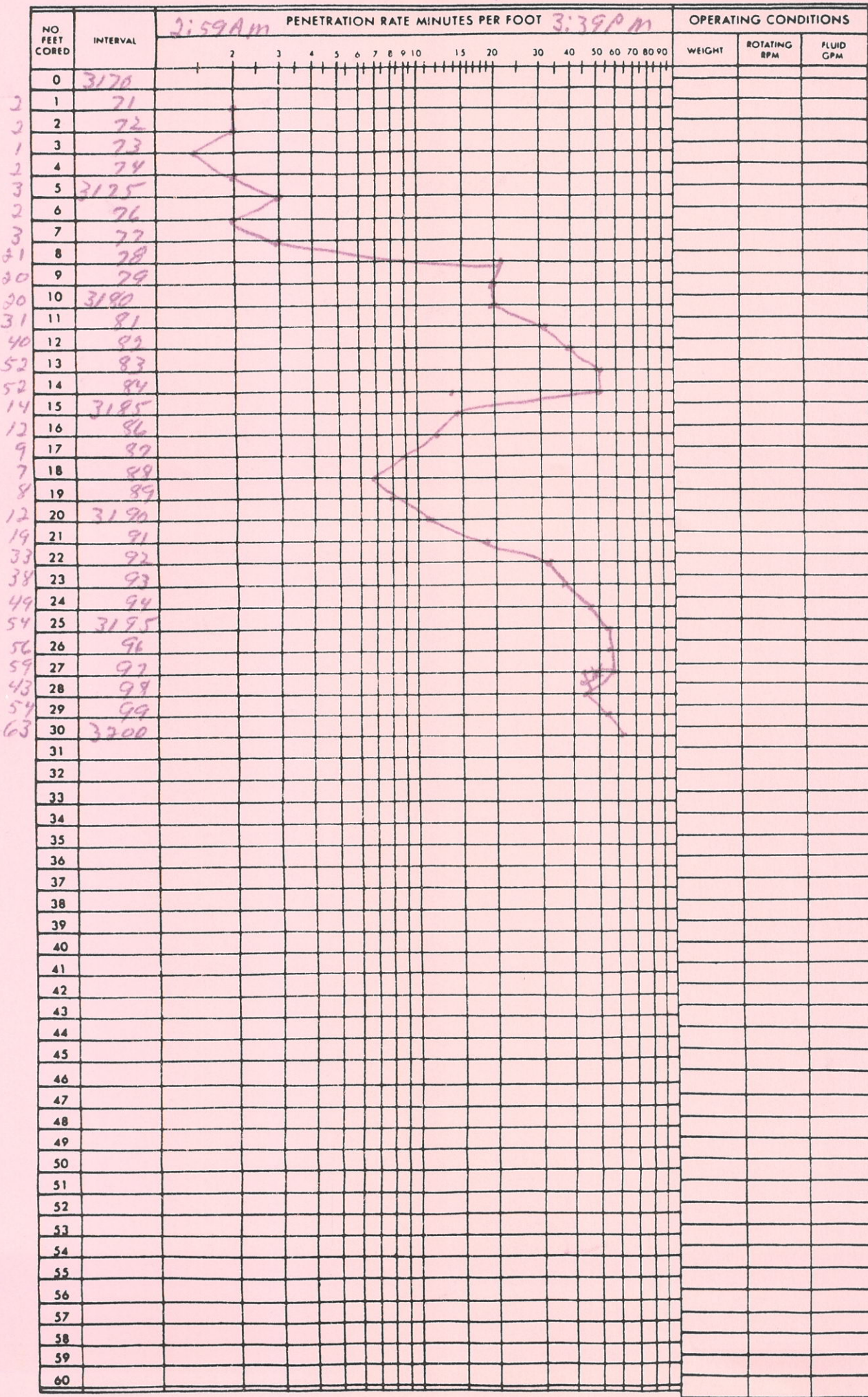
Company AKI  
Contractor WT Dole #17  
County Kemper State MS  
Formation Name \_\_\_\_\_  
Mud Wt. 9.0 Vis. 36  
Type \_\_\_\_\_ W.L. 9.4  
Pump psi On 600 Off 600  
Liner Size \_\_\_\_\_ Strokes \_\_\_\_\_

EQUIPMENT

Core Barrel No. \_\_\_\_\_  
Size 6 3/4 x 4 x 30  
FT \_\_\_\_\_ PL \_\_\_\_\_ AL x  
Core Bit No. BFL 7970278  
Size 8 3/4 x 4 Type \_\_\_\_\_  
Previous Ftg. 0  
Ftg. This Core 30  
Total Footage 30

PERFORMANCE

Conv x Other \_\_\_\_\_  
Depth of Core - Finish 3200  
Start 3170  
Core Recovered 30  
Footage Cored \_\_\_\_\_  
% Recovery \_\_\_\_\_  
Core Time 12.5 HRS  
Core Catcher Type CONV. BASKET



Total Length \_\_\_\_\_



Blanchard, Okla. • (405) 392-2515

## CORING LOG

Core Engineer V. Smith

Blanchard, Okla. • (405) 392-2515

Section 10-9N-15W

Date 8-24-17

Well Name MPC 10-4-31

## WELL INFORMATION

Company ARE / MPC

Contractor WT Dole #17

County Kanawha State WV

**Formation Name**

Mud Wt. 9.0 Vis. 40

Type water base W.L. 9.7

Pump psi On 600 Off 60

Liner Size \_\_\_\_\_ Strokes \_\_\_\_\_

## EQUIPMENT

Core Barrel No.

Size 63.4 x 30

FT \_\_\_\_\_ PL \_\_\_\_\_ AL       

Core Bit No. 8 1/2 x 4 BEL 79 70120

Size 8 1/2 x 4 Type PVC 13

Previous Ftg. 30

Ftg. This Core 10

Total Footage 40:22:38

## PERFORMANCE

Conv X Other

Depth of Core - Finish 3210

Start 3200

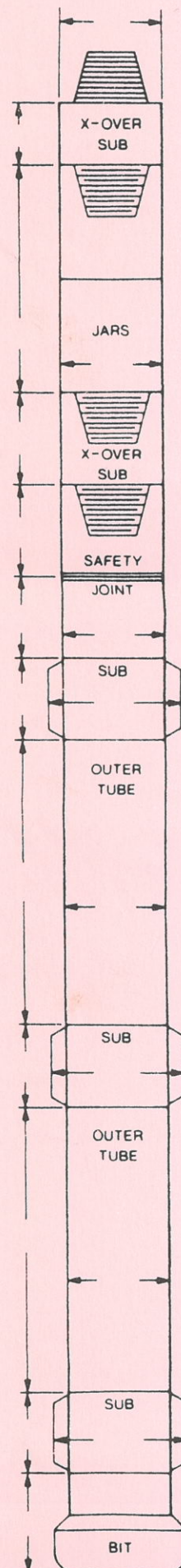
Core Recovered 7.9Footage Cored 10

% Recovery 79%

Core Time 9 HRS

Core Catcher Type Catch

NO FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT		OPERATING CONDITIONS		
		150 AM 8-34	11:15 AM	WEIGHT	ROTATING RPM	FLUID GPM
0	3200					
1	1					
2	2					
3	3					
4	4					
5	3205					
6	6					
7	7					
8	8					
9	9					
10	3210					
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Total Length \_\_\_\_\_



Devilbiss Coring Service  
Blanchard, Okla. • (405) 392-2515

CORING LOG

Core No. 3  
Core Engineer V. Devilbiss

Section \_\_\_\_\_

Date 8-28-17  
Well Name MPC 10-4-31

WELL INFORMATION

Company API / MPE  
Contractor W.T. Dyer #17  
County Harmon State MS  
Formation Name PALM 4  
Mud Wt. 9.0 Vis. 40  
Type \_\_\_\_\_ W.L. 9.2  
Pump psi On \_\_\_\_\_ Off \_\_\_\_\_  
Liner Size \_\_\_\_\_ Strokes \_\_\_\_\_

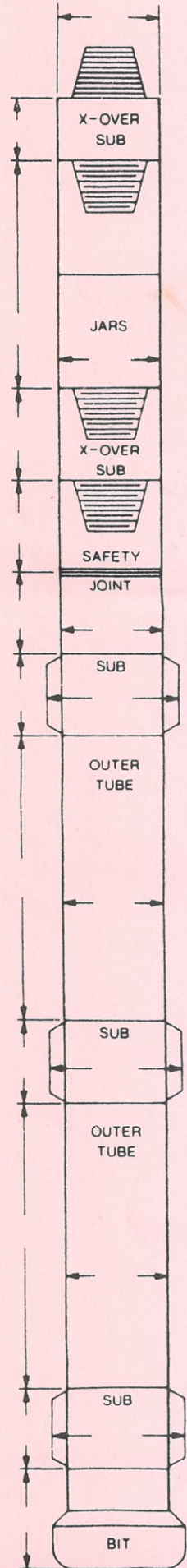
EQUIPMENT

Core Barrel No. \_\_\_\_\_  
Size 6 3/4 x 4 x 30  
FT \_\_\_\_\_ PL \_\_\_\_\_ AL X  
Core Bit No. 8 1/2 0119628  
Size 8 1/2 x 4 Type \_\_\_\_\_  
Previous Ftg. 40  
Ftg. This Core 30  
Total Footage 70

PERFORMANCE

Conv X Other \_\_\_\_\_  
Depth of Core - Finish 50.68  
Start 50.38  
Core Recovered 27.5  
Footage Cored 30  
% Recovery 91%  
Core Time 6 HR  
Core Catcher Type CONV

NO FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT																		OPERATING CONDITIONS		
		12.48																		WEIGHT	ROTATING RPM	FLUID GPM
0	50.38																					
1	34																					
2	50.40																			2-6	25-35	240
3	41																					
4	42																					
5	43																					
6	44																					
7	50.45																					
8	46																					
9	47																					
10	48																					
11	49																					
12	50.50																					
13	51																					
14	52																					
15	53																					
16	54																					
17	50.55																					
18	56																					
19	57																					
20	58																					
21	59																					
22	50.60																					
23	61																					
24	62																					
25	63																					
26	64																					
27	50.65																					
28	66																					
29	67																					
30	50.68																					
31																						
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Total Length \_\_\_\_\_



Devilbiss Coring Service  
Blanchard, Okla. • (405) 392-2515

CORING LOG

Core No. 4  
Core Engineer V. Devilbiss

Section \_\_\_\_\_

Date 8-28-17  
Well Name MPC 10-4-31

WELL INFORMATION

Company ARE / MPC  
Contractor WT D&K #17  
County Kemper State MS  
Formation Name PALEX  
Mud Wt. 9.1 Vis. 40  
Type \_\_\_\_\_ W.L. 8.2  
Pump psi On 350 Off 350  
Liner Size \_\_\_\_\_ Strokes 70

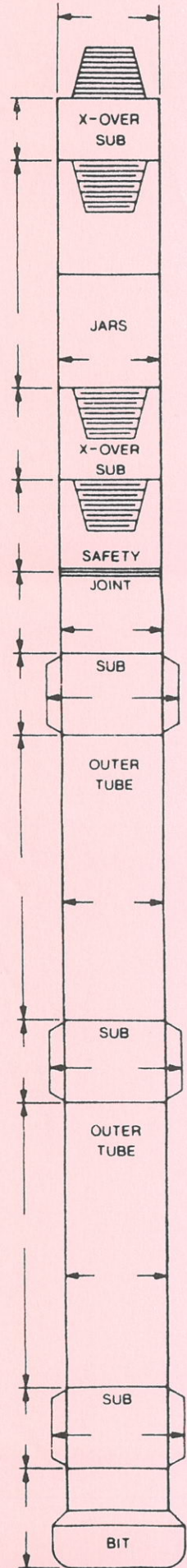
EQUIPMENT

Core Barrel No. \_\_\_\_\_  
Size 6 3/4 x 4 x 30  
FT \_\_\_\_\_ PL \_\_\_\_\_ AL X  
Core Bit No. 0119628  
Size 8 1/2 x 4 Type FD  
Previous Ftg. 70  
Ftg. This Core 31  
Total Footage 101

PERFORMANCE

Conv X Other \_\_\_\_\_  
Depth of Core - Finish 5099  
Start 5068  
Core Recovered 30.5  
Footage Cored 31  
% Recovery 98%  
Core Time 16 HR  
Core Catcher Type CANNU

NO FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT																		OPERATING CONDITIONS			
		1	2	3	4	5	6	7	8	9	10	15	20	30	40	50	60	70	80	90	WEIGHT	ROTATING RPM	FLUID GPM
0	5068																						
1	69																						
2	5070																				2-7	30-35	2 1/2
3	71																						
4	72																						
5	73																						
6	74																						
7	5075																						
8	76																						
9	77																						
10	78																						
11	79																						
12	5080																						
13	81																						
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15	83																						
16	84																						
17	5085																						
18	86																						
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22	5090																						
23	91																						
24	92																						
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27	5095																						
28	96																						
29	97																						
30	98																						
31	99																						
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Total Length \_\_\_\_\_



Devilbiss Coring Service  
Blanchard, Okla. • (405) 392-2515

CORING LOG

Core No. 5  
Core Engineer V.A. Devilbiss

Section \_\_\_\_\_

Date 8-28-17  
Well Name MPC 10-11-31

WELL INFORMATION

Company ARE/MPC  
Contractor WT Drilling  
County Kemper State MS  
Formation Name Paluxy  
Mud Wt. 9.1 Vis. 40  
Type \_\_\_\_\_ W.L. 8.2  
Pump psi On 340 Off 340  
Liner Size \_\_\_\_\_ Strokes 70

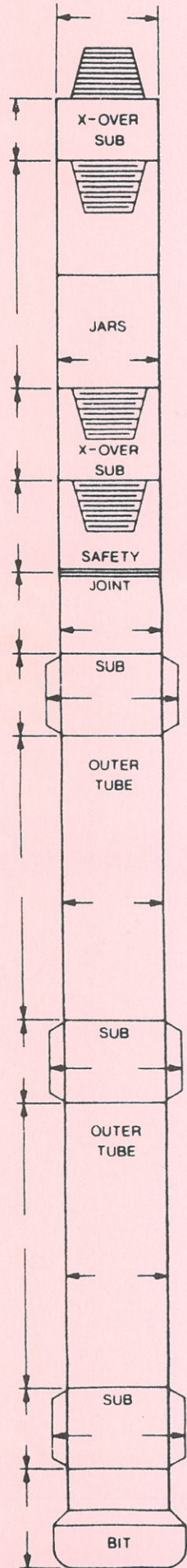
EQUIPMENT

Core Barrel No. \_\_\_\_\_  
Size 6 3/4 x 4 x 30  
FT \_\_\_\_\_ PL \_\_\_\_\_ AL X  
Core Bit No. 01196281  
Size 8 1/2 x 4 Type FD  
Previous Ftg. 101  
Ftg. This Core 31  
Total Footage 132

PERFORMANCE

Conv X Other \_\_\_\_\_  
Depth of Core - Finish 5131  
Start 5100  
Core Recovered 25.5  
Footage Cored 31  
% Recovery 82  
Core Time .5 HR  
Core Catcher Type \_\_\_\_\_

NO FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT <u>10.76</u>																		OPERATING CONDITIONS		
		2	3	4	5	6	7	8	9	10	15	20	30	40	50	60	70	80	90	WEIGHT	ROTATING RPM	FLUID GPM
0	5100																					
1	1																			2-4	35	240
2	2																					
3	3																					
4	4																					
5	5105																					
6	6																					
7	7																					
8	8																					
9	9																					
10	5110																					
11	11																					
12	12																					
13	13																					
14	14																					
15	5115																					
16	16																					
17	17																					
18	18																					
19	19																					
20	5120																					
21	21																					
22	22																					
23	23																					
24	24																					
25	5125																					
26	26																					
27	27																					
28	28																					
29	29																					
30	5130																					
31	31																					
32																						
33																						
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Total Length \_\_\_\_\_



Devilbiss Coring Service  
Blanchard, Okla. • (405) 392-2515

CORING LOG

Core No. 6  
Core Engineer H. Devilbiss

Section \_\_\_\_\_

Date 8-29-17  
Well Name MPC 10-4-31

WELL INFORMATION

Company ACE / MPC  
Contractor W.T. Dalg #17  
County Kemper State MS  
Formation Name PA/UX4  
Mud Wt. 9.1 Vis. 40  
Type \_\_\_\_\_ W.L. 8.2  
Pump psi On 400 Off 400  
Liner Size \_\_\_\_\_ Strokes \_\_\_\_\_

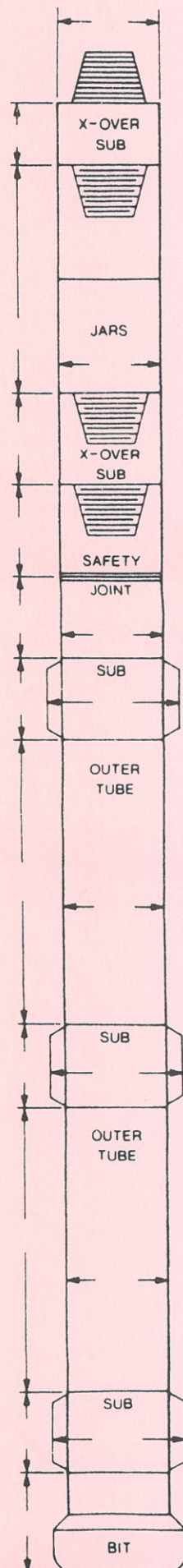
EQUIPMENT

Core Barrel No. \_\_\_\_\_  
Size 6 3/4 x 4 x 30  
FT \_\_\_\_\_ PL \_\_\_\_\_ AL X  
Core Bit No. 0119628  
Size 2 5/8 x 4 Type \_\_\_\_\_  
Previous Ftg. 132  
Ftg. This Core 6  
Total Footage 138

PERFORMANCE

Conv X Other \_\_\_\_\_  
Depth of Core - Finish 5137  
Start 5131  
Core Recovered 4.5  
Footage Cored 6  
% Recovery \_\_\_\_\_  
Core Time \_\_\_\_\_  
Core Catcher Type CONV.

NO FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT <u>9.128</u> <u>9.32</u>																		OPERATING CONDITIONS		
		2	3	4	5	6	7	8	9	10	15	20	30	40	50	60	70	80	90	WEIGHT	ROTATING RPM	FLUID GPM
0	<u>5131</u>																					
1	<u>32</u>																					
2	<u>33</u>																					
3	<u>34</u>																					
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Total Length \_\_\_\_\_