VINGINIA DIVISION OF MINERAL RESOURCES Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page / of 2

Date rec'd:

Date Processed:

PROPERTY: FRIDLEY CR-1 # 15mith

COMPANY: ARCO EXPLORATION OIL & GAS

COUNTY: CRAIG COUNTY

Well Repository No.: W- 7202

Sample Interval: from O to: 2960'

Number of samples: 272

Total Depth: 286/ (296/)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To	From-To
170-50	520.30	890 - 900	1250-90	1640-50
80-90	30-40	900-10	90-1300	50-60
90-200	40-50	10-20	1300-10	60-70
200-10	50-60	20-30	20-30	70-50
10-20	60-70	30 - 40	30-40	80-90
20-30	70-80	40 - 50	40-50	90-1700
30-40	80 - 90	50 -60	50-60	1700-10
40 - 50	90-600	60.70	60-70	10-20
50 -60	600=10	20 -80	70-80	20-30
60 = 70	10 = 20	88 -50	80-90	30-40
70 - 50	20.30	1000-10	90-1400	40 -50
80 -90	30=40	10 =20	1400-10	50-60
90 -300.	40.50	20 -30	10-20	60-20
300-10	50 760	30 -40	20-30	70-50
3/0-20	60=70	40 =50	30 - 40	80-80
20.30	70.50	50.60	40.50	90-1800
30.40	80 -90	60 .70	50 .60.	1800 -10
40-50	90 -700	70-50	60-70	10-20
30,60	700 - 10	80 -90	70-80	20-30
60-10	710-20	90 -1100	80-80	30-40:
70-80	20.30	1100-10	90-1500	40.50
90-90	30-40	10-30	1500 - 10	50-60
90-400	40-50	20-40	10 -20	60-70
400 - 10	30-60	40-50	20 .30	70-80
10 - 20	60=70	50-60	30-40	80 - 90
20.30	70.80	60.70	40,50	90-1900
30-40	80 -90	70-80	50 .60	1900-10
40.50	90.800	80-90	60.70	10 -20
50.60	20-210	90-1200	70 -50	20-30
60-70	10 = 20	1200-10	50-90	30-40
70-80	20-50	10-20	90-1600	40 -50
50-90	50-60	20-30	1600-10	50-60
90.520	60-20	30=40	10-20	60-70
500-10	70 -80	40 -50	20-30	70-80
10-20	30-90	50-60	30-40	80-90
	t)			

VIRGINIA DIVISION OF MINERAL RESOURCES Box 3667, Charlottesville, VA 22903

INTERVAL SHEET Continued

Page 2 of 2

Well Repository No.: W- 7202

From-To	From-To	From-To	From-To	From-To
1990-2000	2390 -2400	90 -2800	_	144
7000-10	2400 - 10	2800-10	_	
10 -20	10-20	10-20	_	_
20-30	20-30	20-30	_	_
30-40	30-40	30-40		_
	30-70	354	_	
40-50	40-50	40-50	-	=
50-60	50-60	50-60	_	_
60-70	60-70	60-70	_	_
70-50	70-80	70-20	-	_
82-90	80-90	80-90	_	-
90_2100	90-2500	90-2900	-	=
2100-10	7500-10	2900-10	-	_
10-20	10-20	10-20	-	-
20-30	20-30	20-30	-	·
30-40	30-40	30-40	-	-
40-50	40-SV	40_50		
50-60	50-60			_
60-70	60-70	50-60	_	=
		-	-	
70-80	70-80	_	-	_
90-90	80 - 90	Maria Maria	_	-
90-2200	90-2600	122	=	=
2200-10	2600-10	 .	-	=
10-20	10-20	-		-
20-30	20-30	_	-	-
30-40	30-40		_	-
40-50	40_57	_	_	-
30-60	50-60		=	
60-70	60-70			-
70-80	70-30	_		207 340
80-90		4,2279		
	80-90		_	-
90-2300	90-2700	-		=
2300-10	2700-10	_	-	
10-20	10 -20	_	-	-
20-30	20 -30	-	_	_
30-40	30-40			1,—1
40-50	40 -50) 	7-	-
50-60	50 -60	-	· —	-
60-70	60-70	-	=	-
70-50	70-50	·		-
80-90	80-90	-	_	

ORIGINAL INVOICE





INVOICE NO.	DATE	
365383	1778.49	大

3721K DEC85

	WELL LEASE A	91	N N	ELL LOCATION	STATE	WE	LL OWNER	
HTIMZ	HEIRS 1		CRAIG		VA	SAME		34
SE	RVICE LOCATION	CONT	TRACTOR	JOB	PURPOSE		TICK	ET DATE
ELKVIEW	WV.	DELTA DR	ILLING '85 D	PLUGA 804 ABA	NDON	*	11/	20/1985
ACCT. NO.	CUSTOMER	AGENT	VENDOR NO.	CUSTOME	R P.O. NUMBER	SHIPPI	ED VIA	
035989	S. P. SANDER	S,JR.				HALLIBUR	RTON	13068

ARCO OIL & GAS P 0 BOX 51408 LAFAYETTE, LA 70501

DIRECT CORRESPONDENCE TO: SUITE 775 PARKWAY CENTER INN PITTSBURGH, PA 15220

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117 090-910 090-928 504-043 506-105 506-121 509-408 500-207 500-306	MILEAGE MISCELLANEOUS PUMPING JOB MISCELLANEOUS PUMP JOB-ADD HRS STANDARD CEMENT POZMIX A HALLIBURTON-GEL 2% CALCIUM CHLORIDE BULK SERVICE CHARGE MILEAGE	180 2 6 163 162 5	MI HR HR SK SK SK SK SK CFT	2.10 570.00 84.00 6.04 3.03 .00 24.50 .95 .70	378.00 570.00 504.00 984.52 490.86 N/C 122.50 318.25 1,788.70
	INVOICE SUBTOTAL				5,156.83
- 8	*-VIRGINIA STATE SALE *-CRAIG COUNTY SALES				47.95 15.99
	INVOICE TOTAL - PLEASE PAY THIS	== TAUOMA 7		=======>	\$5,220.77





FORM 1906 R9 WELL NO. — FARM OR L	EASE NAME			COUNTY	SE 1 OFSTAJ	_ PAGES	CITY/OFFS	HORE LOCA	TION		DATE	
*1 5m	ths Hell	25		CRAIG		SiwiA					11-1	9.5
CHARGE TO	00				OWNER	_			VICE -	SALES	NITRO	GEN JO
DORESS	0		3260000000		CONTRACTOR	- 1		4	LOCATIO	N .	CODE]
ITY, STATE, ZIP	1. Box 5	14	08	DE0 -	De Ha	Daillin	MT CHARG	ES I	EIK	VIEW	108	25
LA	AYETE,	LA	1 7	10505°85 DEC -	HALCO			OLLECT 2				
ONLY	, ,				SAM.	4		3 REFE	RRAL LO		CODE	
CONCAN DOSE ONLY			27/15/19/2		WELL TYPE		WELL	CATEGORY	cut-	02 WELL	PERMIT NO.	
Š	J.	1,000	yes in		TYPE AND PURP	OSE OF JOB			1.		54/1220	9
date of invoice. Up	on Customer's default in p	syment	of Customer's	falliburton in accord with the rates and account by the last day of the month annum. In the event it becomes necessari	following the month	in which the in	voice is dat	ad, Customer	agrees to p	ay interest the	reon after default	at the
attorney fees in the	amount of 20% of the amo	unt of t	he unpeld soci	ount. These terms and conditions' shall be	governed by the lav	w of the state wh	ere services	are performed	or equipm	ent or material	is are furnished.	5
exclusive remedy in ment of such pro- special, incidental, in	any cause of action (whet fucts, supplies or materials direct, punitive or consequ	her in con the	contract, tort, or return to H lamages.	materials and that the same are free fro OTHERWISE WHICH EXTEND BEYO product liability, breach of warranty or alliburton or, at Halliburton's option, to	otherwise) arising of the allowance to t	ut of the sale or on the customer of the	se of any predit for th	reducts, suppli	es or mater items. In	Halliburton's l rials is expressly no event shall b	liability and custory limited to the rep Halliburton be liabi	lace- e for
PRICE REFERENCE	SECONDARY REF	L 0 C.	ACCOUNT	DESCRIPTI		UNITS		UNIT		UNIT	AMOU	9
000-117	46	Т		MILEAGE		180	mi	7		2.10	378	00
90-910				Pumping Char	9.6	2	10.	-		5200	570	00
990.928				Add towal	40.RS	6	hp.	- 5		84.00	504	00
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		LKI	MATERIA	AL DELIVERY TICKET	NO.	B-	54	7220			3704	83
AS JOB SATISFACTOR			MATERIA			B-	54	7220)	SUB TOTAL	3704 5156	8
AS JOB SATISFACTOR	ILY COMPLETED?	Y7				B	54	7220	<u> </u>	SUB TOTAL TAX TAX	3704 5156	8
AS JOB SATISFACTOR AS OPERATION OF EC	ILY COMPLETED?	Y?				B-	54	7220	j 	TAX	3704 5156	8.

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND OR WITH RESPECT TO SERVICES FURNISHED UNDER CONTRACT.

CUSTOMER

JOB SUMMARY

DIVISION THE DU

ALLIBURTON EIKVIEW

BILLED ON 305 38.

DELD PAINT BE DEFINED THICKNESS OF THE PRODE OIL DOMPLETION DATE DETECTION HOLE TEMP.	s	PATER_		то _		CASING	NEW	WEIGHT	SIZE	FROM	то	MAXIMUM P
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TTOM HOLE TEMP.	THE PERSON		SET			PERFORAT	IONS			1		
	THE WORLD	and the state of	PRESSURE	- United Street	Store Wall	PERFORAT	IONS	781				
			TOTAL	DEPTH 2	1967 '85	- Defent	ONSP	1:35				
		-	WE TO			B DATA			- 0	-		-
	TOOLS A	AND ACC	ESSORIES			CALLED OU		ON LOC		JOB STARTE	and the second	B COMPLETED
TYPE A	NO SIZE		QTY.	Bellin	MAKE	DATE !!-/	9 85	DATE /	119.85	DATE! - /	9.85 04	TE 11.19-8
LOAT COLLAR		della.	S. Ballerika	o-rec _i th	4.4	TIME 04/0	10	TIME/	30	TIME / 2/	5 7	1800
LOAT SHOE	1		Mary Control		ELL S	r .	9	PERSO	NNEL AN	D SERVICE		
UIDE SHOE			7 7 7 7	ETAPL 1	7.5		,	NAME	. 3	UNIT NO. &	TYPE	LOCATION
ENTRALIZERS	100			-min		Tin	Ac V	44	- 1	E 75%	113	KAL T
OTTOM PLUG				48	-			,	1 1	3587	7 E	KUISW
or PLUG	30.7		1. 19	Land Ha	per la Se-	K. (A51	40	17.58	IR.		
END DRIH PIN				Mallib	ration				9 8	9788		
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25		MATERIA	LS	13.0		ME	ich	15		The same	- migration over	and the same of
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ISPL. PLUID			DENSITY		The second secon	_m.	- T		1. 15	1000	0	4
Sent Company				LB.		5	Ď.		5-	jek y	1	
				LB.	60				- 1	1	4	200
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CID TYPE		GA	L							14.7		
			5012		NH-1					We do		
PREACTANT TYPE		GA	L	IN		DEPARTMEN	T /	Come	ut	B.A.	241 1-	-17 ()
E AGENT TYPE		GA	L,	IN_		DESCRIPTION	N OF JO			-		17
LUID LOSS ADD.TYPE		GAL.	-LB	IN						No.		
ELLING AGENT TYPE		GAL.	-LD	IN						1		
RIC. RED. AGENT TYP	· E	GAL.	-LB	IN								
REAKER TYPE		GAL.	·LB	IN		JOB DONE T	HRU: TI	BING 🚅	CA	SING .	ANNULUS	TBG./ANN.
LOCKING AGENT TYP				ALLB		D4:1	" Ap	e (70	2 /	V	
ERFPAC BALLS TYPE				TY		CUSTOMER REPRESENT	ATIVE	X	1.0.	Sande	is for	
THER						HALLIBURTO	. 1		1 111	11	CONTE	
THER						OPERATOR_	on w	MA DE	111/	1/1	REQUESTE	D
	T	1		1 1	CEME	NT DATA			V	11	T	_
STAGE NUMBER	TYPE	API CLASS	BRAND	BULK			ADDIT	TIVES		6	CU.FT./SK	MIXED
- Jacks	1	-		1-5	1 2 7 7						-	1
1 300	- 2			1.2	244	7 3 Co.	100				120	17.
		-										-
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	-			+							+	
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IRCULATING							LGAL	44.5				
REAKDOWN										PAC	D: BBLGAL.	
										DIS	PL: BBL -GAL	35
VERAGE		5-MIN.							76			
	HYDRAU		SEPOWER	_ 15-4114					111		-	
				USED		TOTAL VOLUME	E: BBL.	GAL	REMAI	RKS		
HUT-IN: INSTANT	AVAIL	ABLE										
	AVERAG	E RATES										
HUT-IN: INSTANT	AVERAG	E RATES	IN BPM			N						

well location bag been plugged and is on the hillside, south side of Rt. 603 which runs along Paint Bank Branch, Les to gate across entrance road can be obtained from Pano Bonk Fish Hatchery office.

- well drilled to 2700 and abandoned, reclaimed area. - plan to return - dulling mud appeared in spring \$ Stram causing fish bill at hatchery.

			300'
FENCE &	3	Lethuse 37°35 A	300
POST			
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1 3/2			5
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- -	1.	DOROTHY FRIDLEY	· į
- 1 / · · · · · · · · · · · · · · · · · ·	18.	JUNE KEFFER	\$
FENCE CORNER	E/ 8.	WILL BOOK H PG. 326	-
60.05'	NOR B.		
NO0'49'28'E	·. \ 2		1
NOO'49'28'E			
L. 1			
- N. 5.	5°W		1
NG2.32'30"	Sta 27.		
13/63 30°W	A53.		
00/10	845.04		
18 6E 8 35.30.18	. C.		8
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	570.31.19"W		~
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	AGO. ST.		1
12"POPLAR	30,55. S	/ is	
NS	07.51.N	£	1
1	Ox. 53. 10 /	F	
	Slawing	N 5.	1
*	62	39.	•
	16"	Pac Pop	
	HICKORY	1 99- 02/1	
HOWARD SMITH		NG4°5	`
D.B. 27 PG. 245		NG4 54 01 W	
l		*	
			RADIO
l			TOWER
	34 1 2		
CR-00/	recommendation of the second		

(a)	(USE OWLY:	API Well	State County Permit
		Date: _	. 19
		Operator'	•
	Big Stone Gap	F LABOR AND SION OF HIN Wood Avenu	INDUSTRY ES a 24219-1799
		WELL PLAT	12)
graph	ic Maps, scale l tude lines are re	to 24,000.	ited States Topo- Latitude and by border lines as
This	plat is new //	updated	/
of	plat is/ is a ordinate system of the well location	established oa.	for the areas
Well (perator ATLA	NTIC RIC	HFIELD CO.
	PO BOX 521, TO		OMA 74102
Tract	Acres	78.21	Lease No
Elevat	ion 275	5.29 FER VA - V	V VA
Count	CRAIG	District	NEW CASTLE
Regis	CRAIG cered Engineer	Regist	ration No
Carti	iled Land Surveyo	F VA.	Cert. No. 1177
	5-16-85	Scale	l" = 200'
	×*		
	Certificat	ion of Wel	Plat
plat !	s correct to the	best of me information virgin	tertify that this, we knowledge and ation required by law his Well Review Board.

FIGURE 2

ORIGINAL INVOICE

035989

A DIVISION OF HALLIBURTON COMPANY



HALLIBURTON

INVOICE NO.	DATE
365383	I Property

13068

3721K DEC85

S. P. SANDERS, JR.

WELL LEASE NO WELL LOCATION STATE WELL OWNER SMITH HEIRS 1 CRAIG SAME VA SERVICE LOCATION CONTRACTOR JOB PURPOSE TICKET DATE DELTA DRILLING '85 DECPLUGA 804 ABANDON ELKVIEW WV. 11/20/1985 CUSTOMER P.O. NUMBER VENDOR NO. SHIPPED VIA CUSTOMER AGENT ACCT. NO.

> ARCO OIL & GAS P 0 BOX 51408 LAFAYETTE, LA 70501

DIRECT CORRESPONDENCE TO: SUITE 775 PARKWAY CENTER INN PITTSBURGH, PA 15220

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117 090-910 090-928 504-043 506-105 506-121 509-408 500-207 500-306	MILEAGE MISCELLANEOUS PUMPING JOB MISCELLANEOUS PUMP JOB-ADD HRS STANDARD CEMENT POZMIX A HALLIBURTON-GEL 2% CALCIUM CHLORIDE BULK SERVICE CHARGE MILEAGE	180 2 6 163 162 5 335 2555.28	HR SK SK SK SK CFT	2.10 570.00 84.00 6.04 3.03 .00 24.50 .95	378.00 570.00 504.00 984.52 490.86 N/C 122.50 318.25 1,788.70
	INVOICE SUBTOTAL			*	5,156.83
	*-VIRGINIA STATE SALE *-CRAIG COUNTY SALES				47.95 15.99
				- 4	
			(*)		
	INVOICE TOTAL - PLEASE PAY THIS	== TAUOMA 7		======>	\$5,220.77



ORM 1906 R9													
VELL NO FARM OR L	the Har	• <		CRA	TE		Vacini A	CITY/OFFS	SHORE LOCA	TION		DATE	9
HARGE TO	I/IS IIGIA			LAN	1261	OWNER	LIRGINIA		TIC	KET TYPE	(CHECK ONE)	NITRO	OGEN J
AR	00	T.				SAL	ne		SEF	VICE	SALES	YES	NO
DORESS	1 P. 4 C	141	08	Marketo.		CONTRACTO	. h. 11		1	LOCATIO		CODE	
TY, STATE, ZIP	1/30 X 3/	770	00	•0	5 DEC	- SHIPPEDVI	58 FR	EIGHT CHARG	GES	LOCATIO	VIEW	CODE	25
LAF	AVETTE	LA	7	05058) ULU	HAL	6 E	PPD C	COLLECT 2				
	, , ,	-				DELIVERED			3	LOCATIO	N .	CODE	
						ORDER NO.	nk		-	ERRAL LO	CATION		
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				18 SA		WELL TYPE		WELL	CATEGORY	,	WELL	PERMIT NO.	
- 6 40			40.0	(a)		TYPE AND P	URPOSE OF JOB	1)e	ie logy	LAT-	02		-
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AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO. B - 547220 3764 83

WAS JOB SATISFACTORILY COMPLETED?

WAS OPERATION OF EQUIPMENT SATISFACTORY?

WAS PERFORMANCE OF PERSONNEL SATISFACTORY?

TAX

TAX

CUSTOMER OR HIS AGENT (PLEASE PRINT)

X 2. S 2 MOLES 1. TOTAL

CUSTOMER OR HIS AGENT (SIGNATURE)

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND OR WITH RESPECT TO SERVICES FURNISHED UNDER CONTRACT.

CUSTOMER

HALLIBURTON OPERATOR

HALLIBURTON SERVICES JOB SUMMARY WELL DATA WEIGHT FROM SIZE CASING FORMATION THICKNESS LINER 15.13 2967 OPEN HOLE PERFORATIONS PERFORATIONS BOTTOM HOLE TEMP. 35 PHONE ONS CALLED OUT TOOLS AND ACCESSORIES DATE 11.19.85 DATE 11 - 19 85 DATE 11-19 85 TYPE AND SIZE MAKE TIME / 245 FLOAT COLLAR PERSONNEL AND SERVICE UNITS FLOAT SHOE UNIT NO. & TYPE LOCATION GUIDE SHOE CENTRALIZERS TIMEVAY BOTTOM PLUG ElKUIBU TOP PLUG HEAD DE'H PIN Hallibyston 5 Douglas PACKER OTHER MATERIALS M. Fields TREAT, FLUID DESCRIPTION OF JOB FLUID LOSS ADD.TYPE Dain Ape BLOCKING AGENT TYPE CUSTOMER PERFPAC BALLS TYPE OTHER CEMENT DATA YIELD CU.FT./SK. MIXED LBS./GAL. NUMBER OF SACKS BULK ADDITIVES 1 50 1

PRESSURES IN PSI

UNMARY

VOLUMES

DISPLACEMENT

DISPLACEMENT

DISPLACEMENT

DISPLACEMENT

DISPLACEMENT

PRESSURES IN PSI

UNMARY

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PAD: BBL.-GAL.

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PREMARKS

PREMARKS

PREMARKS

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HALLIBURTON A Division of Helliburton Company

P"LK MATERIALS DELIVERY AND TICKET CONTINUATION

FOR INVOICE AND 308383

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WORK ORDER CONTRACT

INVOICE & TICKET NO. 305383

DISTRICT EIKVIEW

DATE 11-19-85

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- (b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct orgross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- (c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- (d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- (e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- (f) Halliburron makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service
- Ig) Gustomer shall at its risk and expense, attempt to rucover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered. Gustomer shall pay Halliburton its replacement cost or his south loss is due to the sole negligence of Philiburton in the loss of instruments are damaged in the well. Customer shall pay Halliburton the lesser of its replacement cost or the cost of replacement such damage is soused by the linear subject of the filter on the loss of equipment, foliate in the foregoing, be fully made and any other phase to the landing unless such that a filter of the loss of equipment to the landing, unless such that it is a cost of equipment to the landing, unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the landing unless such that is labeled to the sole of the landing unless such that is labeled to the sole of the landing unless such that is labeled to the sole of the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landing unless such that the landin
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- (j) Invoices payable NET by the 20th of the following month after date of invoice. Upon Gustomer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated. Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account. Customer agrees to pay all collection costs and attorney fees in the amount of the unpaid account.
- (k) This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.
- (i) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made, in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

DATE 1 9 CUSTOM

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

TIME____A.M. P.M.



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P.O. DRAWER 1431

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As considerate	ion, the above-named Cus on Customer's default in p	tomer aymen	t of Customer's	alliburton in accord with the rates are account by the last day of the mont annum. In the event it becomes necessart. These terms and conditions shall	ed terms stated in Halli th following the month	in which the in	price lists. I voice is date	nvolces payab id, Customer	grees to p	the 20th of the	e following month room after default	after et the
CHANTABILITY, F exclusive remedy in ment of such pro-	arrants only title to the p ITNESS FOR A PARTIC any cause of action (whet fucts, supplies or materials	ULAR her in	L, supplies and PURPOSE OF contract, tort,	materials and that the same are free OTHERWISE WHICH EXTEND BE product liability, breach of warranty alliburton or, at Halliburton's option	from defects in workma YOND THOSE STATE or otherwise) arising ou to the allowance to the	nship and mater D IN THE IMM t of the sale or t	ials. THERE	ARE NO WA	RRANTIE NTENCE.	S, EXPRESS O Halliburton's I rials is expressly	R IMPLIED. OF A lability and custor limited to the rep	IER- ner's tece-
special, incidental, in	direct, punitive or consequ	_	da mages.		. 10 100 100 100 100 10	UNITS		UNITS			T THE TAXABLE PROPERTY.	TOT
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S. S. Sandus f. CUSTOMER OR HIS AGENT (SIGNATURE)

anders Jr

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND OR WITH RESPECT TO SERVICES FURNISHED UNDER THIS CONTRACT.

WAS PERFORMANCE OF PERSONNEL SATISFACTORY?

HALLIBURTON OPERATOR



P*'LK MATERIALS DELIVERY AND TICKET CONTINUATION

FOR INVOICE AND	
FICKET NO.	

11-19-ge	CUSTOMER ORDER	NO.	ilioni;	200				HEIR	5 (NIG			STATE	
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Form 16, Appendix C

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	_	Ψ.		

File AFI Number 45 -

ARCO #1 Smith Heirs

20804

PLUGGING AFFIDAVIT

STATE OF	Louisiana		
rish OF_	Lafayette	, TO-WITE	
	Doug Chester	AND W. R. Worthington	
being first	duly sworn, depose and say	that:	
	re both experienced in the p	plugging of wells and participated in the plugging work which is the subj	ject of this
THE PLUMBIN	6 MORK WAS FOR THE PURPOSE C	CHECKED BELOW:	
X_	the Inspector or his de	ling or deepening was unsuccessful, so that the well was plugged on the v esignated representative under Code of Virginia Section 45.1-311.0.9.	
		the bottom of the hole to feet below the surface, an	id continued
	operation by the well o Partial plugging from t water well under Section	the bottom of the hole to	r development as a
	Replug		
THE MANNER (OF PLUGGING OR REPLUGGING WH	HICH WAS DOMERCED ON 10/6/87 WAS IN THE NUMBER PROVIDED BY LA	W AS CHECKED DELOW
X	45.1-343 iPlugging well 45.1-344 iPlugging well 45.1-345 iSpecial pluggi	ell that does not penetrate a coal seam) I penetrating coal seam without coal protection string provided in Section S with coal protection strings installed as provided in Section 45.1-344 Jung at the coal owner's request) Well previously plugged)	
DIANGES IN T	HE PLUGGING AS PERMITTED		
which change	s were verbally approved by	id notX make any change(s) in the plugging as specified in the the Inspector or Assistant Inspector under Regulation 4:03 of the Regulace of insuring successful completion of the plugging work.	
Note: The n	ature and purpose of each so	uch change, if any, are set out below, or on additional sheets if such w	e required.
	14.5		
		PLUGGING DETAILS	
* INTERN			
Yes scales 251	of Hole: To <u>FORMATION(8)</u> 57 below	TYPES OF MATERIALS USED FLOCATING FILLING BRIDGE SERVICE FASING SIZE Class 'A' Coment 13-3/8"	SILLO JUSE
1	ground level	MATTACH FLUSGING DETAILS IN THIS FERMAN	
ention 45.1-		all that was abandored after plugging, depoints have verified that, in : in a permanent marker of	
		First Signature Doug Chapter, EST Co	ordinator
		Excend Signature B. R. Rorphington, D	let Inte Sun
ubstribed at	in sworn to before me a onta	ry public, in and for the Lalayette Parish . I	
	St.li day of		Thursday.
		My Commission Expires and desait in	

Form 16 Appendix C, Sneet 1 (Reverse)

CHANGES IN THE PLUGGING AS PERMITTED

The well operator did __/ did not % _/ make any changes(s) in the plugging as specified in the well work permit, which changes were verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil & Gas Act, for the purpose of insuring successful completion of the plugging work.

NOTE: The nature and purpose of each such change, if any, are set out below, or on additional sheets if such are required.

OIL AND GAS WELL SUICIARY REPORT

API No. 45-045-20804		Rep. No. W-7:	202
		DMQ File No. CR-1	
Operator ARCO OIL AND GAS COMPA		,	**
Farm FRIDLEY			
Co. Well No #1 SMITH '	. X		
County CRAIG	Quad	rangle POTTS CREEK	- 7-1/2'
Location (UTI) N4,156,000; E56	8,430	UTM Zone	2 _ 17
(Lat. and Long.)			
Field		Province VALLEY	AND RIDGE
Elev. (specify) 2755.29' GR	TD 2961	Form. at TD KNC	X '
		. Age ORI	
Date compl. or abandoned NOVEN	4BER 23, 1985		
Result DRY HOLE, PLUGGED AND ABA	ÄNDONED		
Gas Shows			
Gas Pays			
Main Production			195
		. / /ge	
Treatment:			
Initial Production			
			*
Oil shows			·
Water FW YES at 0' TO 2			(8)
. SI at			
Coal			
			* * * * * * * * * * * * * * * * * * * *
Plat Plotted	. Completion	n Report X	
Drillers Log X Geologic	Log		
Samples <u>x</u> Interval Sheet	<u> </u>		
Sample Interval 0-2960			
Remarks			
Geophysical Logs S.P.	Res G	Gamma Neutro	n
Density Sonic			
*			
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Stratigraphic Data Source DIANE CATT

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* /	
FORM 16	PI WELL No. 45 - 045 - 20804
12.1	State County Permit
ARCO OIL AND FAS CO, Date: Operator	
OR-/ FRIDLEY OPERACOI	O #1 Smith Heirs
ARCO OIL AND FAS CO, Date: Operator Name ARCO POTTS CREEK 7/12 EL, 2755:29 VIRGINIA OIL AND	
21 -015 00000 12	11819202122
EL, 2753'23 VIRGINIA OIL AND	GAS INSPECTOR
ARCO#1 (#ISMITH) P. O. BO	X 1416 A 24210 PES DEC 3
ABINGDON, V. 703-628	-8115 E
763 020	728
REPORT OF COMPLETI	
	5945348
Pursuant to Regulation 4.06 of the	e Regulations under the Virginia
Oil and Gas Act, the undersigned well	
type(s) of well work specified below of	n the referenced well in
District, Craig County, Virgi	nia on 23 day, <u>November</u> month,
19_85	
WELL TYPE: Oil X / Gas X /	Enhanced recovery/ Waste
Disposal/ If "Gas	s", Production/ Underground
Storage/	
Exempt by Code Section	n 45.1-300.B.l. from general oil
WELL WORK: Drill X / Deepen	law: yes/ no/ / Redrill / Stimulate /
	n/ Perforate new formation/
Plug_X / Replug	Other physical change in well
(specify Temporari	ly Abandon
The well work was done as shown in	the Appendix(es) applicable to
The well work was done as shown in the type(s) of well work involved.	the Appendix(es) applicable to
Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Consti	
CONFIDENTIALITY STATUS UNDER CODE OF V	IRGINIA SECTION 45.1-332.
Ninety days from the filing	g of this report
X Two years from November 23	, 1985 , the date on which the
referenced well was COMPLET	TED, the well being an explora-
tory well as defined in Cod	de of Virginia Section 45.1-288.21.

APPLICANT: ARCO Oil and Gas Company

BY D. R. Vuillemont
ITS_District_Drilling Supervisor
ADDRESS_P. O. Box 51408, Lafayette, LA 70505
TELEPHONE (318) 264-4000

Form 16
Appendix A, Sheet 1 (Reverse)
Continued from Obverse side

OTHER GENERAL INFORMATION

An electric log survey was ___/ was not \underline{X} / conducted pursuant to Code of Virginia Section 45.1-333.B.2, at the coal owner's or operator's request.

An electric log survey was X / was not ___ / run for other purposes. This survey did __ / did not X / disclose the vertical location of a coal seam.

Note: If a coal seam was located, the part of the survey from the surface through the coal is attached in accordance with Code of Virginia Section 45.1-333.B.3.

Deviation surveys were ___/ were not $\frac{X}{X}$ / required under Code of Virginia Section 45.1-333.C "to the bottom of the lowest published coal seam depth."

Note: If deviation surveys were required, the survey results are attached.

A continuous survey was ___/ was not $_{\rm X}$ / required under Code of Virginia Section 45.1-333.C.

Note: If a continuous directional survey was required, the survey results are attached.

CHANGES IN THE PERMITTED WELL WORK

The well operator did___/ did not__X_/ make any change(s) in the permitted well work, verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil and Gas Act, for the purpose of insuring successful completion of the well work.

Note: The nature and purpose of each such change, if any, is set out below or on additionnal sheets if such are required.

FORM 16 APPENDIX A, SHEET 1, (OBVERSE)

API	WELL	NO.	45	- 045	- 20804	
			State	ount	y Permi	t
Date	:	12/2	/85			
Oper	ator	's W	ell			-
Name	AI	RCO #	Smith	Heirs		

REPORT OF COMPLETION OF WELL WORK IF DRILLING, REDRILLING, OR DEEPENING IS INVOLVED

ADDRESS	CONTRACTOR ARCO 0il and P. 0. Box 51408, Lafayett (318) 264-4000	Gas Com	0505	
DEPTH OF C DATE DRILL DATE DRILL	TARGET FORMATION Knows COMPLETED WELL 2961 JING COMMENCED 9/13/85 JING COMPLETED 11/18/85 RIG: ROTARY X /		TOOL/	
GEOLOGICAL	DATA Depth Top Bottom	Chickne	ess	
Fresh Wate	or 0 - 2961	2961		
Salt water	N/A		×	
Coal Seams	None	*	Name Yes	ING IN AREA No Mined Out
Oil	None		Formation	
Sas	None		Formation	
pelow:	The data on depth of X Applicant's own d Information suppl Information alrea Other (as follows	rilling ied by dy in t	g experience in the coal operat	the area or in the area e Inspector

Form 16 Appendix A, Sheet 2 (Obverse)

CASING AND TUBING PROGRAM

PRELIMINARY :	INFORMATION
---------------	-------------

Is the subject well underlaid by the red shales? Yes / No X If Yes, was a coal protection string set to the red shales? Yes

> PERFORATIONS TOP BOTTOM SIZE LENGTH FROM

CONDUCTOR:

CASING CIRCULATED AND CEMENTED IN 'TO SURFACE: 20" GL 170' GL 13-3/8" GL

1256' GL 1256'

COAL PROTECTION CASING SET UNDER SPECIAL RULE OF CODE OF VIRGINIA 45.1-334.B:

OTHER CASING AND TUBING LEFT IN WELL:

LINERS LEFT IN WELL UNDER CODE OF VIRGINIA SECTION 45.1-336 OR OTHERWISE:

PACKERS OR BRIDGE PLUGS: KIND

SIZE

SET AT

REMARKS: SHUT DOWN DEPTHS, DATES; FISHING JOB DEPTHS, DATES; CAVING; EIC.)

SAMPLES AND CUTTINGS

WILL X WILL NOT BE AVAILABLE FOR EXAMINATION BY A MEMBER OF THE VIRGINIA DIVISION OF MINERAL RESOURCES WILL WILL NOT X BE FURNISHED THE VIRGINIA DIVISION OF MINERAL RESOURCES UPON REQUEST WILL NOT X REQUIRE SACKS TO BE FURNISHED BY THE VIRGINIA DIVISION OF MINERAL RESOURCES.

FORM 16 Appendix A, Sheet 2 (Reverse)

DRILLER'S LOG

Compiled	byDiane	Catt			
Geolo- gical Age	Formation	General Lithology	Color	Depth (feet) Top Bottom	Thickness Remarks
Upper Ordovician	Trenton	limestone	Lt.gray- med.brn.	Surface-1630'	1630'
Cambo- Ordovician	Knox	dolomite	Lt./med. gray	1630' base of knox	1331'

APPENDIX TO REPORT OF COMPLETION OF WELL WORK IF THE WELL WORK INCLUDED PLUGGING OR REPLUGGING

AFFIDAVIT

STATE OF	Virginia ,
COUNTY OF	Craig , TO-WIT:
-	*
P.	S. Pierce and D. R. Vuillemont
being first	duly sworn, depose and say that:
Thou ar	e both experienced in the plugging of wells and
	in the plugging work which is the subject of this
	the referenced well.
ALLICAVIC OI	ale researched mess.
THE PLU	GGING WORK WAS FOR THE PURPOSE CHECKED BELOW;
	at the end of production or other use
X	after drilling, redrilling or deepening was unsuccess-
	ful, so that the well was plugged on the verbal per-
	mission of the Inspector or his designated representa-
	tive under Code of Virginia Section 45.1-311.C.9.
	replugging to permit the safe mining through a well
	partial plugging from the bottom of the hole to
	feet below the surface, and continued operation by
*	the well operator or
	partial plugging from the bottom of the hole to
	feet beldow the surface, for development as a water
	well under Section 45.1-350
THE MAN	NUMBER OF DESIGNATION OF DEDITION WITHOUT WAS COMMENCED ON
November 20	NER OF PLUGGING OR REPLUGGING WHICH WAS COMMENCED ON , 1985 , WAS IN THE MANNER PROVIDED BY LAW AS
CHECKED BELOW	
متونهم محتور	•
x 45.1-342	("Plugging a well that does not penetrate a coal seam")
45.1-343	("Plugging a well penetrating a coal seam without a coal
	protection string as provided in Section 45.1-334")
45.1-344	("Plugging wells with coal protection strings installed
WE 25	as provided in Section 45.1-334")
	("Special plugging at the coal owner's request") or
45.1-346	("Replugging a well previously plugged")

Form 16 Appendix C, Sneet 1 (Reverse)

CHANGES IN THE PLUGGING AS PERMITTED

The well operator did___/ did not X__/ make any changes(s) in the plugging as specified in the well work permit, which changes were verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil & Gas Act, for the purpose of insuring successful completion of the plugging work.

NOTE: The nature and purpose of each such change, if any, are set out below, or on additional sheets if such are required.

FORM 16 Appendix C, Sne 2 (Obverse)

API No. 45 - 045 - 20804

PLUGGING DETAILS (FROM BOTTOM OF HOLE)

		INTER	VAL (From G	L)	TYPES OF MA	TERIALS USI	ED	FILLED NEW	OPEN
	From	or at	OT	FORMATIONS	Plugging	Filling	BRIDGE	LINER CASIN	G HOLE
29	939'(TD)	to	1128	Knox Black River Trenton	Cement			128'	1683'
1.	128'	to	30'	Knox		Freshwater		1098	1
30)'	to	GL		Cement				30 '

Form 16 Appendix C, Sheet 2 (Reverse)

Finally, if this affidavit concerns a well that was abandoned after plugging, deponents have verified that, in accordance with Code of Virginia Section 45.1-347, a permanent marker of:

Subscribed and sworn to before me, a notary public, in and for the location day of December.

Subscribed and sworn to before me, a notary public, in and for the location day of December.

MY COMMISSION EXPIRES at death, 19

•	API	WELL	NO.	45	- 045	- 20804
		Sta	ate	County	Permi	t
Date:	12/	2/85				
Operat	or's	Well				
Name A	RCO #	l Smith	n Heir	s		

VIRGINIA OIL AND GAS INSPECTOR P. O. BOX 1416

ABINGDON, VA 24210 (E) 1985 DEC 703-628-8115
ABINGDON, VA 24210 703-628-8115 REPORT OF COMPLETION OF WELL WORK Pursuant to Regulation 4.06 of the Regulations under the Virginia
\$ 957EZ 116
Pursuant to Regulation 4.06 of the Regulations under the Virginia Oil and Gas Act, the undersigned well operator reports completion of the type(s) of well work specified below on the referenced well in District,Craig County, Virginia on _23 _day, _November month, 1985
WELL TYPE: Oil X / Gas X / Enhanced recovery / Waste Disposal / If "Gas", Production / Underground Storage/
Exempt by Code Section 45.1-300.B.l. from general oil and gas conservation law: yes/ no/ WELL WORK: Drill_X / Deepen / Redrill / Stimulate / Plug off old formation/ Perforate new formation/ Plug_X / Replug / Other physical change in well (specify Temporarily Abandon
The well work was done as shown in the Appendix(es) applicable to the type(s) of well work involved.
CONFIDENTIALITY STATUS UNDER CODE OF VIRGINIA SECTION 45.1-332.
Ninety days from the filing of this report OR
Two years from November 23, 1985, the date on which the referenced well was COMPLETED, the well being an exploratory well as defined in Code of Virginia Section 45.1-288.21.
APPLICANT: ARCO Oil and Gas Company
BY D. R. Vuillemont ITS District Drilling Supervisor
profiter printing pubervisor

ADDRESS P. O. Box 51408, Lafayette, LA 70505 TELEPHONE (318) 264-4000

Form 16
Appendix A, Sheet 1 (Reverse)
Continued from Obverse side

OTHER GENERAL INFORMATION

An electric log survey was ___/ was not X / conducted pursuant to Code of Virginia Section 45.1-333.B.2, at the coal owner's or operator's request.

An electric log survey was X / was not ___ / run for other purposes. This survey did __ / did not X / disclose the vertical location of a coal seam.

Note: If a coal seam was located, the part of the survey from the surface through the coal is attached in accordance with Code of Virginia Section 45.1-333.B.3.

Deviation surveys were ___/ were not $\frac{X}{X}$ / required under Code of Virginia Section 45.1-333.C "to the bottom of the lowest published coal seam depth."

Note: If deviation surveys were required, the survey results are attached.

A continuous survey was ____/ was not $_{\rm X}$ / required under Code of Virginia Section 45.1-333.C.

Note: If a continuous directional survey was required, the survey results are attached.

CHANGES IN THE PERMITTED WELL WORK

The well operator did / did not X / make any change(s) in the permitted well work, verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil and Gas Act, for the purpose of insuring successful completion of the well work.

Note: The nature and purpose of each such change, if any, is set out below or on additionnal sheets if such are required.

FORM 16 APPENDIX A, SHEET 1, (OBVERSE)

API	WELL	NO.	45	•	٦4	-	20804
			State		Lount	У	Permit
Date	e:	12/2/	^{'85}				
Oper	ator						
Name	AF	CO #1	Smith	He	irs		

REPORT OF COMPLETION OF WELL WORK IF DRILLING, REDRILLING, OR DEEPENING IS INVOLVED

DRILLING (CONTRACTOR ARCO Oil and Gas Co	ompany	
ADDRESS	P. O. Box 51408, Lafayette, LA	70505	
TELEPHONE_	(318) 264-4000		
DEPTH OF	TARGET FORMATION Knox COMPLETED WELL 2961 LING COMMENCED 9/13/85	FEE	T
	LING COMPLETED 11/18/85		
DRILLING H	RIG: ROTARY X / CABLE	TOOL	7
GEOLOGICAL	, DATA Depth Thickn	000	
GEOLOGICAL	Top Bottom	1622	
Fresh Wate	r · 0 - 2961 2961		
Salt water	N/A	*	
			MINING IN AREA
Coal Seams	None	Name	Yes No Mined Out
		δ.	
Oil	None	Formation	
Gas	None	Formation	
below:	The data on depth of strate	a is based on	the source(s) checked
below.	X Applicant's own drilling Information supplied by Information already in Other (as follows)	the coal op	erator in the area of the Inspector

CASING AND TUBING PROGRAM

PRELIMINARY	INFORMATION
-------------	-------------

Is the subject well underlaid by the red shales? Yes__/ No_X / If Yes, was a coal protection string set to the red shales? Yes__/ No__/

SIZE TOP BOTTOM LENGTH FROM TO

CONDUCTOR:

CASING CIRCULATED AND CEMENTED IN '10 SURFACE:

20" GL 170' GL 170' 13-3/8" GL 1256' GL 1256'

COAL PROTECTION CASING SET UNDER SPECIAL RULE OF CODE OF VIRGINIA 45.1-334.B:

OTHER CASING AND TUBING LEFT IN WELL;

LINERS LEFT IN WELL UNDER CODE OF VIRGINIA SECTION 45.1-336 OR OTHERWISE:

PACKERS OR BRIDGE PLUGS: KIND SIZE SET AT

REMARKS: SHUT DOWN DEPTHS, DATES; FISHING JOB DEPTHS, DATES; CAVING; EIC.)

SAMPLES AND CUTTINGS

WILL X WILL NOT BE AVAILABLE FOR EXAMINATION BY A MEMBER OF THE VIRGINIA DIVISION OF MINERAL RESOURCES
WILL WILL NOT X BE FURNISHED THE VIRGINIA DIVISION OF MINERAL RESOURCES UPON REQUEST
WILL WILL NOT X REQUIRE SACKS TO BE FURNISHED BY THE VIRGINIA DIVISION OF MINERAL RESOURCES.

FORM 16 Appendix A, Sheet 2 (Reverse)

DRILLER'S LOG

Compiled by Diane Catt

Geolo- gical Age	Formation	General Lithology	Color	Depth (feet) Top Bottom	Thickness Remarks
Upper Ordovician	Trenton	limestone	Lt.gray- med.brn.	Surface-1630'	1630'
Cambo- Ordovician	Knox	dolomite	Lt./med. gray	1630' base of knox not reached	1331'

APPENDIX TO REPORT OF COMPLETION OF WELL WORK IF THE WELL WORK INCLUDED PLUGGING OR REPLUGGING

AFFIDAVIT

STATE OF	Virginia , TO (TT)
COUNTY OF	Craig , TO-WIT:
	S. Pierce and D. R. Vuillemont
being first	duly sworn, depose and say that:
participated	re both experienced in the plugging of wells and in the plugging work which is the subject of this the referenced well.
THE PLU	IGGING WORK WAS FOR THE PURPOSE CHECKED BELOW;
	at the end of production or other use
·X	after drilling, redrilling or deepening was unsuccessful, so that the well was plugged on the verbal permission of the Inspector or his designated representative under Code of Virginia Section 45.1-311.C.9.
	replugging to permit the safe mining through a well
	partial plugging from the bottom of the hole to feet below the surface, and continued operation by the well operator or
	partial plugging from the bottom of the hole to feet beldow the surface, for development as a water well under Section 45.1-350
THE MANN November 20	NER OF PLUGGING OR REPLUGGING WHICH WAS COMMENCED ON 1985, WAS IN THE MANNER PROVIDED BY LAW AS
THECKED BELOW	V:
	("Plugging a well that does not penetrate a coal seam")
45.1-343	("Plugging a well penetrating a coal seam without a coal protection string as provided in Section 45.1-334")
45.1-344	("Plugging wells with coal protection strings installed as provided in Section 45.1-334")
45.1-345	("Special plugging at the coal owner's request") or
	("Replugging a well previously plugged")

Form 16
Appendix C, Sneet 1 (Reverse)

CHANGES IN THE PLUGGING AS PERMITTED

The well operator did___/ did not_X / make any changes(s) in the plugging as specified in the well work permit, which changes were verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil & Gas Act, for the purpose of insuring successful completion of the plugging work.

NOTE: The nature and purpose of each such change, if any, are set out below, or on additional sheets if such are required.

FORM 16
Appendix C, Snee_ 2 (Obverse)

API No. 45 - 045 - 20804

PLUGGING DETAILS (FROM BOTTOM OF HOLE)

	INTERVAL (From GL)			TYPES OF MATERIALS USED			FILLED NEW OPEN		
	From	or at	To	FORMATIONS	Plugging	Filling	BRIDGE	LINER CASIN	HOLE
2939	'(TD)	to	1128'	Knox Black River Trenton	Cement			128'	1683'
1128	1.	to	30'	Knox		Freshwater		1098'	
30'		to	GL		Cement				30'

Form 16 Appendix C, Sheet 2 (Reverse)

Finally, if this affidavit concerns a well that was abandoned after plugging, deponents have verified that, in accordance with Code of Virginia Section 45.1-347, a permanent marker of:

concrete iron & concrete
DA Villamont
Subscribed and sworn to before me, a notary public, in and for theafayetecounty,nuisian a
MY COMMISSION EXPIRES at death, 19

OIL AND GAS WELL SUMMARY REPORT

API No. 45-045-20804	VDMR Well Rep. No.
	Dig File No. CR-/
Operator Acco (il and Gas (mpany-
Co. Well 110. # 1 Smith	
County Chaig	Quadrangle Potte Creek - 751
Location (UTI-1) N4,156,000 ; 85	568,430 UTM Zone /7
(Lat. and Long.)	
Field	Province Valley and Rice
Elev. (specify) 2755,29/6k TD 25	Age O'Ampian .
Date compl. or abandoned Movember	
Result Dig Hole, physica and abando	ned'
Gas Shows	
Gas Pays	
Main Production	Prod. Form.
	/dc
Treatment:	
	·
Initial Production	
Oil shows	*
Water FW Ufel at 0' to 2861' at	at
SW at at	
Coal	N .
Plat Plotted Comple	tion Report
Drillers Log Geologic Log	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
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Stratigraphic	Data Source	o De	ane Call		
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Form	ation.	Тор.	(Subsea)	Thickness	1
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UTN measurements in moters, all others in feet)