1R-426-84

REPORTS

DATE: 12/11/2001

12926-84

RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

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				BOX LOC					
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	and the second s	DIMENSIONS	
BD	ARCO "F" DE	F	19	21S	37E	LEA	Length 10	Width 8	Depth 5
LAND TYPE: E	SLM S	TATE	XFEE L/	ANDOWNER	4		OTHE	R	
Depth to Grour	ndwater	217	feet	NMOCE	SITE ASS	ESSMENT	RANKING	SCORE:	0
Date Started	01/25/2	001	Date Co	mpleted	01/29/2001	OCD	Witness	N	0
Soil Excavated	60	cubic ya	rds Ex	cavation Le	ngth 12	Width	10	Depth	fe
Soil Disposed	42	cubic ya	rds O	ffsite Facility	SUND	ANCE	Locatio	n <u>EUN</u>	ICE, NM
INAL ANALY	TICAL RE	SULTS	S: Samp	le Date	01/29/2	001	_Sample [Depth	12'
Ρ	rocure 5-point BTEX and Cl		oratory tes		pleted by us	ing an appr			
Sample	Benzene	Tol	uene E	thyl Benzene	Total Xylen	es G	RO	DRO	Chlorides
Location	mg/kg		g/kg	mg/kg	mg/kg		g/kg	mg/kg	mg/kg
SIDEWALLS BOTTOM	0.004		.007	0.007	0.026		50 50		178 1212
eneral Description	n of Remedial	Action:	Delineated v	vertical and late	ral extent to be	low	CHLC	ORIDE FIELD	TESTS
MOCD guidelines. H	······································					r		DEDT	
idelines. Installed co	· · · · · · · · · · · · · · · · · · ·			erucal transmiss	sivity.	the second second	OCATION		
water tight junction b	ox was installed a	and DackTilk	ed.	<u></u>			BOTTOM	<u> </u>	<u> </u>
					<u></u>		BOTTOM	12	000
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		····	,, <u>, , , , ,</u>			I	<u> </u>	<u> </u>	<u>l</u>
					E IS TRUE				

KNOWLEDGE AND BELIEF.

DATE	12/1/12001	PRINTED NAME	D. E. Anderson
SIGNATURE	De Underson		Project Leader - Environmental

5053932476



PHONE (915) 673-7001 . 2111 BEECHWOOD . ABILENE, TX 78603

PHONE (505) 393-2326 - 101 E. MARLAND - HOBBS, NM 88240

ANALYTICAL RESULTS FOR RICE OPERATING CO. ATTN: JAMES STURGILL 122 W. TAYLOR HOBBS, NM 88240 FAX TO:

Receiving Date: 01/29/01 Reporting Date: 01/30/01 Project Number: ARCO "F" DE Project Name: ARCO "F" SIDES AND BOTTOM Project Location: UF SECTION 19 T21 R36 Sampling Date: 01/29/01 Sample Type: SOIL Sample Condition; COOL & INTACT Sample Received By: AH Analyzed By: BC/AH

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LAB NUMB	ER SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/K 0)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl⁺ (mg/Kg)
ANALYSIS	DATE	01/29/01	01/29/01	01/30/01
H5561-1	ARCO "F" DE SIDES	<50	770	178
H5561-2	ARCO "F" DE BOTTOM	<50	188	1212
Quality Con	trol	760	761	1051
True Value	QC	800	800	1000
% Recovery		95.0	95.1	105
Relative Pe	rcent Difference	3.3	0.2	3.9

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB *Analyses performed on 1:4 w:v aqueous extracts.

PLEASENCE Anothing and Damages. Cardinal's liability and client's exclusive remarky for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be flable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim to based upon any of the above-stated reasons or otherwise.



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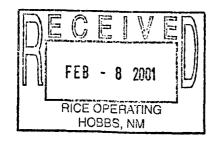
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: JAMES STURGILL 122 W. TAYLOR HOBBS, NM 88240 FAX TO:

Receiving Date: 01/29/01 Reporting Date: 02/01/01 Project Number: ARCO "F" DE Project Name: ARCO "F" SIDES AND BOTTOM Project Location: UF SECTION 19 T21 R36 Sampling Date: 01/29/01 Sample Type: SOIL Sample Condition: COOL, INTACT Sample Received By: AH Analyzed By: JA

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DAT	E	02/01/01	02/01/01	02/01/01	02/01/01
H5561-1	ARCO "F" DE SIDES	0.004	0.007	0.007	0.026
H5561-2	ARCO "F" DE BOTTOM	<0.002	<0.002	0.007	0.009
Quality Control		0.097	0.106	0.095	0.290
True Value QC		0.100	0.100	0.100	0.300
% Accuracy		97	106	95	97
Relative Percent	t Difference	3.1	0.7	3.0	2.4
		3.1			

METHOD: EPA SW 846-8020, 5030, Gas Chromatography



2-1-0

Chemist

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST	CARDINAL LABORAI OKIES, INC. 2111 Beechwood, Abilene, TX 79603 101 East Mariand, Hobbs, NM 88240 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476	Rive Darant Find	21M Stur + 11 P.O.#	K	State: NM Zip: 88240	3924174ax#	Project Owner:	ARED 7° Sidestand Dottom	on: UF Section 19721 236 Phone #		ATRIX	сомр. 1990 1997 1997 1997 1997 1997 1997 1997	300F BYZE: K : 3E	оола Сои	ARED FDE Sides GI V	AREO F. JE BOHW			ar labby and distric actuates remark for any datan affing whether based in contrast or fort, and by its actuals and any other cause whethoover shall be doomed walved unless made in writing and received by Card	is for indextand or consequentsi demages, including manades to serve use, or use, or use a promo inclured by demage manades of the state of the state and resonance of affilies including in gradiess of whether such chain is based upon any of the states resonance of affiliess of the states are of the states are of the states and other and the states are other and	1 Pate: 25-01 Received By:	TUUL IN 1992; DO Received By: 11 ah Stath	I MUL STIME	By: (Circle One) Sample Condition CHECKED BY: Cool Intact (Initials) S. Bus - Other:
Jan Barris	2111 Beecl (915) 67	Company Name:	Project Manager:	Address: / Z	×	50.5 #0	ALOY	.em	Ï	Sampler Name:	FOR LAB USE ONLY	-	Lab I.D.		H 9/10-1 AR	N T			LEASE NOTE: Unbilly and Damagos. Card naiyees. At claims including those for motion	eervice. In no event shell Cardinal be lable for it affiliates or successors arising out of or related.	Sampler Relinquished://	Conce Ma	· to much hundre	Delivered Bv: (Circle One) Samplerj - UPS - Bus - Other:

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LEASE OPERATOR/SHIP			
	PER/COMPANY:	· AFE	692
LEASE NAME AR CC	S DEC MA	3 20 12	
TRANSPORTER COMPAN	W: Contraction	TIME:	AM/PN
DATE: 1 - 2 9 - 21	VEHICLE NO.: 72	DRIVER NO.:	
CHARGE TO:	A second second		
	TYPE OF MATER	IAL	
[] Production Water [] Tank Bottoms [] Other Material: Description:	[] Drilling Fluids [] Contaminated soil [] BS&W Content:	[] Completion Flui [] C-117 No.:	ids
JOB TICKET, OPERATOR/SHIPPI HEREWITH IS MATERIAL EXEM AMENDED FROM TIME TO TIM AND REGULATIONS RELATED PRODUCED WATERS, AND OTH PRODUCTION OF CRUDE OIL O ALSO AS A CONDITION TO SU THIS JOB TICKET, TRANSPORTH	NCE SERVICES, INC.'S ACCEPTANCE ER REPRESENTS AND WARRANTS T IPT FROM THE RESOURCE, CONSER E, 40 U.S.C. § 6901, et seq., THE NM THERETO, BY VIRTUE OF THE EXEN IER WASTE ASSOCIATED WITH THE PR NATURAL GAS OR GEOTHERMAL UNDANCE SERVICES, INC.'S ACCEPT ER REPRESENTS AND WARRANTS TH PORTER IS NOW DELIVERED BY TR	HAT THE WASTE MATERIAL S VATION AND RECOVERY ACT HEALTH AND SAF. CODE § 36 MPTION AFFORDED DRILLING EXPLORATION, DEVELOPME ENERGY. FANCE OF THE MATERIALS SI HAT ONLY THE MATERIAL DI	SHIPPED T OF 1976, AS 61.001, et seq., 3 FLUIDS, INT OR HIPPED WITH ELIVERED BY
THIS WILL CERTIFY that a Statement at the above descri	the above Transporter loaded the ibed location, and that it was tend materials were added to this loa	dered by the above describe	ed shipper. This
DRIVER:			

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	Sundance Services P.O. Box 1737 * Eunice, NM (505) 394-2511	•	eliter and
LEASE OPERATOR/SH	IPPER/COMPANY:		
LEASE NAME:	and the second	in the second second	
TRANSPORTER COMP	ANY:	ТІМЕ	
DATE:	VEHICLE NO.:	DRIVER NO	D.:
CHARGE TO:			
	TYPE OF MATERI	AL	
[] Production Water [] Tank Bottoms [] Other Material:	[] Drilling Fluids [] Contaminated soil [] BS&W Content:	[] Comple [] C-117 N	etion Fluids No.:
Description:			
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AS A CONDITION TO SUND. JOB TICKET, OPERATOR/SHIF HEREWITH IS MATERIAL EXE AMENDED FROM TIME TO TH AND REGULATIONS RELATEN PRODUCED WATERS, AND OT PRODUCTION OF CRUDE OIL ALSO AS A CONDITION TO THIS JOB TICKET, TRANSPOR OPERATOR/SHIPPER TO TRAN FACILITY FOR DISPOSAL. THIS WILL CERTIFY tha Statement at the above desce	- [] BBLS: [] ANCE SERVICES, INC.'S ACCEPTANCE PPER REPRESENTS AND WARRANTS TH EMPT FROM THE RESOURCE, CONSERV IME, 40 U.S.C. § 6901, et seq., THE NM H D THERETO, BY VIRTUE OF THE EXEM THER WASTE ASSOCIATED WITH THE H OR NATURAL GAS OR GEOTHERMAL I SUNDANCE SERVICES, INC.'S ACCEPTA TER REPRESENTS AND WARRANTS TH	OF THE MATERIALS IAT THE WASTE MA /ATION AND RECOV HEALTH AND SAF. C IPTION AFFORDED I EXPLORATION, DEV ENERGY. ANCE OF THE MATE ANSPORTER TO SUN material represente ered by the above	S SHIPPED WIT: TERIAL SHIPPE VERY ACT OF 1 CODE § 361.001, DRILLING FLUI VELOPMENT OR ERIALS SHIPPEJ ERIAL DELIVEJ DANCE SERVIC CA by this Tran described ship
AS A CONDITION TO SUND. JOB TICKET, OPERATOR/SHIF HEREWITH IS MATERIAL EXE AMENDED FROM TIME TO TH AND REGULATIONS RELATED PRODUCED WATERS, AND O' PRODUCTION OF CRUDE OIL ALSO AS A CONDITION TO THIS JOB TICKET, TRANSPOR OPERATOR/SHIPPER TO TRAN FACILITY FOR DISPOSAL. THIS WILL CERTIFY tha Statement at the above desc will certify that no addition	- [] BBLS: [] ANCE SERVICES, INC.'S ACCEPTANCE PPER REPRESENTS AND WARRANTS TH EMPT FROM THE RESOURCE, CONSERV IME, 40 U.S.C. § 6901, et seq., THE NM H D THERETO, BY VIRTUE OF THE EXEM THER WASTE ASSOCIATED WITH THE H OR NATURAL GAS OR GEOTHERMAL I SUNDANCE SERVICES, INC.'S ACCEPTA TER REPRESENTS AND WARRANTS TH NSPORTER IS NOW DELIVERED BY TRA the above Transporter loaded the r cribed location, and that it was tended	OF THE MATERIALS IAT THE WASTE MA /ATION AND RECOV HEALTH AND SAF. C IPTION AFFORDED I EXPLORATION, DEV ENERGY. ANCE OF THE MATE ANSPORTER TO SUN material represente ered by the above	S SHIPPED WIT: TERIAL SHIPPE VERY ACT OF 1 CODE § 361.001, DRILLING FLUI VELOPMENT OR ERIALS SHIPPEJ ERIAL DELIVEJ DANCE SERVIC CA by this Tran described ship

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`S	Sundance Services, P.O. Box 1737 ★ Eunice, NM 8 (505) 394-2511		87095
LEASE OPERATOR/SHIPPER			
LEASE NAME:	<u> </u>	2	me
TRANSPORTER COMPANY:	1211 to 1000 to 1000 to 20	TIME:	AM/PM
DATE: VEI	HICLE NO.:	DRIVER NO.:	
CHARGE TO:			
	TYPE OF MATERIA	L	
[] Production Water [] Tank Bottoms [] Other Material: Description:	[] Drilling Fluids [*:] Contaminated soil [.] BS&W Content:	[] Completion Flui [] C-117 No.:	
VOLUME OF MATERIAL [] E AS A CONDITION TO SUNDANCE S JOB TICKET, OPERATOR/SHIPPER RI HEREWITH IS MATERIAL EXEMPT F	SERVICES, INC.'S ACCEPTANCE O EPRESENTS AND WARRANTS THA	F THE MATERIALS SHIPPEL T THE WASTE MATERIAL S	SHIPPED
AMENDED FROM TIME TO TIME, 40 AND REGULATIONS RELATED THER PRODUCED WATERS, AND OTHER W PRODUCTION OF CRUDE OIL OR NA	U.S.C. § 6901, et seq., THE NM HE ETO, BY VIRTUE OF THE EXEMP (ASTE ASSOCIATED WITH THE EX	EALTH AND SAF. CODE § 36 TION AFFORDED DRILLING KPLORATION, DEVELOPMEN	51.001, et seq., FLUIDS,
ALSO AS A CONDITION TO SUNDA THIS JOB TICKET, TRANSPORTER RE OPERATOR/SHIPPER TO TRANSPORT FACILITY FOR DISPOSAL.	PRESENTS AND WARRANTS THA	T ONLY THE MATERIAL DE	ELIVERED BY
THIS WILL CERTIFY that the a Statement at the above described will certify that no additional mate without incident.	location, and that it was tender	red by the above described	d shipper. This
DRIVER:			
FACILITY REPRESENTATIVE:	NATURE)	· · · · · · · · · · · · · · · · · · ·	
White-Sundance Canary-Sundance Acct#I Pin Revised 12/27/95	k-Sundance Acct#2 Gold-Transporter		

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	Sundance Services P.O. Box 1737 * Eunice, NM (505) 394-2511		38761
LEASE OPERATOR/SHIP	PPER/COMPANY:	and the second sec	
		-ARLO F	
TRANSPORTER COMPA	NY:	TIME:	AM/PM
DATE:	VEHICLE NO.:	DRIVER NO.:	
CHARGE TO:			
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Statement at the above descr will certify that no additiona without incident.	the above Transporter loaded the m ibed location, and that it was tende l materials were added to this load,	ered by the above described	l shipper. This
DRIVER:	(SIGNATURE)		
White-Sundance Canary-Sundance Accta Revised 12/27/95	#1 Pink-Sundance Acct#2 Gold-Transporter	a subsection of the second	

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