

CONTACT INFORMATION  
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The following file is part of the A. F. Budge Mining Ltd. Mining Collection

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**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

Carole A. O'Brien  
DMEA  
4203 N. Brown Ave-Suite F  
Scottsdale AZ 85251

29 January 1985

RECEIVED FEB 4 1985

Dear Carole:

Please find the enclosed Vulture Mine invoices, originally included with the mailed reports, and the related receipts. I trust you will find everything O.K. Please call me should there be any questions

kindest Regards,

Jim Prudden



**DMEA LTD. / BEN DICKERSON**  
 NAME (PRINT OR TYPE)  
**4203 N. BROWN AVENUE, SUITE F**  
 DIVISION OR WORKS **VULTURE MINE RACERS**  
 OFFICE ADDRESS STR. & NO. **SCOTTSDALE** CITY **ARIZONA** STATE **8551** ZIP

**MONTHLY EXPENSE STATEMENT**  
 PERIOD **JAN 1st** TO **JAN 28** 19 **85**  
 CLOSE AND PRESENT EXPENSE STATEMENT ON SCHEDULED DATE AND DECEMBER 31ST. ADDITIONAL INSTRUCTIONS ON REVERSE SIDE.

DATE	FROM	TO	TRAVEL EXPENSE						WAGES	CONTRACT FEES	OTHER EXPENSE (A)	BUSINESS PURPOSE OF TRAVEL AND DETAIL ON LAST TWO ITEMS (A)	
			MILEAGE EMPLOYE AUTO	TRANS-PORTATION	HOTEL	MEALS	LOCAL TRANSP.	TEL. AND TEL.					PARKING-TOLLS-TIPS-ETC.
7								6 33					
8								5 97					
9													
10													
11			20								6 32 - film developing		
14			20								5 13 photostating		
15								3 13			28 98 - photographs (18.63 + 10.35)		
17													
18								9 63					
21			20										
22													
23			35					7 53					
24													
25								8 63					
28			62										
<b>TOTAL</b>			<b>MILEAGE</b>	<b>EXPENSE</b>	<b>157</b>	<b>31 40</b>		<b>41 22</b>	<b>17 50 -</b>	<b>74 22</b>	<b>25 00</b>	<b>33 45</b>	<b>45 00 overhead.</b>

LEASSED CAR GASOLINE AND OTHER EXPENSE IS ALSO DETAILED HEREIN.  
 NOTE - ALL PARKING & TOLLS WILL BE CONSIDERED AND ENTERED AS TRAVEL EXPENSE  
 TRAVEL EXPENSES TOTALED BELOW FROM ABOVE DETAIL SHOULD NOT INCLUDE LEASSED CAR EXPENSE EXCEPT FOR PARKING AND TOLLS.  
 ABOVE EXPENSE SHOULD BE DISTRIBUTED BELOW BY TYPE

LEASED CAR NO.	ENTER TOTAL OF EACH TYPE OF EXPENSE		EXPENSE CODE		TOTAL NET EXPENSE	
	TYPE OF EXPENSE	TOTAL AMOUNT	G.O.	WC/E	DATE	AMOUNT
MAKE MODEL MODEL YEAR ODOMETER READINGS AND MILEAGE DATA END CURRENT PERIOD END PREVIOUS PERIOD TOTAL MILES DRIVEN BUSINESS MILES PERSONAL MILES	TRAVEL EXPENSE		07.01			
	LEASED CAR GASOLINE		07.03	corner fuel.	1/42	32
	OTHER EXPENSE		07.07			
	ENTERTAINMENT		07.10			
	CLUB DUES		07.30			
	ASSOCIATION DUES		24.00			
	OTHER EXPENSE		21.90			
	<b>TOTAL GROSS EXPENSES</b>				<b>1/42</b>	<b>32</b>
	DEDUCT - PERSONAL USE		07.05		<b>1898</b>	<b>40</b>
	<b>TOTAL NET EXPENSES</b>					

I HEREBY CERTIFY THE EXPENSES AS ABOVE WERE INCURRED IN CONNECTION WITH BUSINESS

SIGNED *J. W. Rudden*

APPROVED FOR *Two thousand four hundred 72/100* DOLLARS  
 (EXACT AMOUNT TO BE WRITTEN BY EMPLOYEE INCURRING EXPENSE)

APPROVED BY: \_\_\_\_\_

NEGOTIATED BY: \_\_\_\_\_

DATE NEGOTIATED: \_\_\_\_\_

*film developing*

01/02/85 RA TF

2X 2.99 =

T 5.98 2

34 TX

632 SA TR

#1895

Jim M. Prudden

1-25-85

10779

Vulture Mine Report

Typing

\$74.22

BRENDA PHILLIPS  
3690 WEDGEWOOD ROAD  
S.L.C., UT 84106

If you are not satisfied with my service please let me know. If you are satisfied, please recommend me to your friends

...Thank you!

**THANK YOU FOR  
YOUR BUSINESS!**

# SUN PHOTO SERVICE, INC.

P.O. BOX 30040 • TELEPHONE (801) 355-5363

SALT LAKE CITY, UTAH 84130

DATE 1/8/85

No. 40611

STORE NO. \_\_\_\_\_ ACCOUNT NO. 9000

NAME Prudden

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

## PLEASE CHECK WORK TYPE →

ITEM	ENVELOPE NUMBER	NAME	RECD	KODA-COLOR	EXTRA PROC.	REPRINTS	SLIDES TO PRINTS	BLACK & WHITE	KODA-CHROME	OTHER
1	601300	24.84								
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Less 25.90

\$18.63

pd  
en

# FEDERAL EXPRESS

AIRBILL NUMBER

**105239956**

 PLEASE COMPLETE ALL INFORMATION IN THE 5 BLOCKS OUTLINED IN ORANGE  
 SEE BACK OF FORM SET FOR COMPLETE PREPARATION INSTRUCTIONS.


YOUR FEDERAL EXPRESS ACCOUNT NUMBER

291-1056

DATE

1/29/75

FROM (Your Name)

J.M. Madden

TO (Recipient's Name)

L.A. &amp; Pickersin

 If Hold For Pick-Up or Saturday Delivery,  
 Recipient's Phone Number

COMPANY

4909 North 1st Road

DEPARTMENT/FLOOR NO

COMPANY

LIMEA LTD

DEPARTMENT/FLOOR NO

STREET ADDRESS

STREET ADDRESS (P.O. BOX NUMBERS ARE NOT DELIVERABLE)

4203 NORTH BROWNE AVENUE

CITY

GAITHERSBURG MD

STATE

MD

CITY

PHOENIX AZ

STATE

AZ

AIRBILL NO.

**105239956**

 ZIP ACCURATE ZIP CODE REQUIRED  
 FOR CORRECT INVOICING

211124

 IN TENDERING THIS SHIPMENT, SHIPPER AGREES THAT  
 F.E.C. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL  
 OR CONSEQUENTIAL DAMAGES ARISING FROM

 ZIP ACCURATE ZIP CODE REQUIRED  
 FOR OVERNIGHT DELIVERY

0124511

YOUR NOTES/REFERENCE NUMBERS (FIRST 12 CHARACTERS WILL ALSO APPEAR ON INVOICE)

 CARRIAGE HEREOF, F.E.C. DIS-  
 CLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WITH  
 RESPECT TO THIS SHIPMENT. THIS IS A NON-NEGOTIABLE  
 AIRBILL SUBJECT TO CONDITIONS OF CONTRACT SET FORTH  
 ON REVERSE OF SHIPPER'S COPY, UNLESS YOU DECLARE A  
 HIGHER VALUE. THE LIABILITY OF FEDERAL EXPRESS COR-  
 PORATION IS LIMITED TO \$100.00. FEDERAL EXPRESS DOES  
 NOT CARRY CARGO LIABILITY INSURANCE.

FEDERAL EXPRESS USE

FREIGHT CHARGES

28.00

DECLARED VALUE CHARGE

 PAYMENT  Bill Shipper

 Bill Recipient's F.E.C. Acct.

 Bill 3rd Party F.E.C. Acct.

 Bill Credit Card

 Cash in Advance

Account Number/Credit Card Number

SERVICES

CHECK ONLY ONE BOX

DELIVERY AND SPECIAL HANDLING

CHECK SERVICES REQUIRED

PACKAGES

WEIGHT

 DECLARED  
 VALUE

O/S

PRIORITY 1

OVERNIGHT LETTER

 (OVERNIGHT PACKAGES) 6  (Up to 2 Oz.)

 COURIER PAK 7 
 OVERNIGHT ENVELOPE 8 
 OVERNIGHT BOX 9 
 OVERNIGHT TUBE

 (Up to 5 LBS.)

STANDARD AIR

 DELIVERY 2ND BUSINESS  
 DAY FOLLOWING PICK UP  
 (Up to 70 LBS.)

 HOLD FOR PICK UP AT FOLLOWING  
 FEDERAL EXPRESS LOCATION SHOWN  
 IN SERVICE GUIDE. RECIPIENT'S  
 PHONE NUMBER REQUIRED.

 DELIVER

 SATURDAY SERVICE REQUIRED  
 See Reverse (Extra charge applies for delivery.)

 RESTRICTED ARTICLES SERVICE (P-1 and  
 Standard Air Packages only, extra charge)

 SSS (Signature Security Service  
 required, extra charge applies)

 DRY ICE \_\_\_\_\_ LBS.

 OTHER SPECIAL SERVICE \_\_\_\_\_



RECEIVED AT

 SHIPPER'S DOOR

 REGULAR STOP

 ON-CALL STOP

 F.E.C. LOC.

Federal Express Corporation Employee No.

DATE/TIME For Federal Express Use

1/29 1:30

AGT/PRO

ADVANCE ORIGIN

AGT/PRO

ADVANCE DESTINATION

OTHER

TOTAL CHARGES

25.00



SHIPPER'S COPY

 PART# 2041730750  
 FEC-S-0750 D/Q/W  
 REVISION DATE  
 2/83 GBF  
 PRINTED USA

 "OVERNIGHT" IS NEXT BUSINESS DAY  
 (MONDAY THROUGH FRIDAY). TWO DAYS  
 FROM ALASKA/HAWAII. SATURDAY DELIV-  
 ERY AVAILABLE IN CONTINENTAL U.S.  
 SEE "SPECIAL HANDLING."





**DNBA LTD / BEN DICKERSON**

NAME (PRINT OR TYPE)  
**4203 N. BROWN AVENUE, SUITE F**

DIVISION OR WORKS  
**VULTURE MINE PLACERS**

RESP. NO.  
 DEPT.

**MONTHLY EXPENSE STATEMENT**

PERIOD December 1 TO December 22 19 84  
 CLOSE AND PRESENT EXPENSE STATEMENT ON SCHEDULED DATE AND DECEMBER 31ST. ADDITIONAL INSTRUCTIONS ON REVERSE SIDE.

OFFICE ADDRESS STR. & NO. SCOTTSDALE CITY ARIZONA STATE \_\_\_\_\_ ZIP 85251

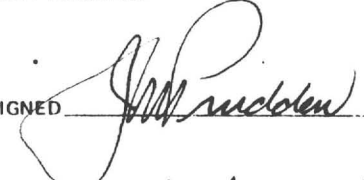
DATE	FROM	TO	TRAVEL EXPENSE					WAGES	CONTRACT FEES	OTHER EXPENSE (A)	BUSINESS PURPOSE OF TRAVEL AND DETAIL ON LAST TWO ITEMS (A)
			MILEAGE EMPLOYE AUTO	TRANS-PORTATION	HOTEL	MEALS	LOCAL TRANSP.				
1	S.L.C.	L.V. NV.	432	25 -	19 26	12 96	45 35	188 -			
2	L.V. NV.	Wickenburg	250	25		14 35	36 41	188 -			
3	VULTURE MINE PROJECT		29	25				375 -	35 -		
4			42	25		15 95		375 -	35 -		
5			39	25		14 64		375 -	35 -		
6			36	25		16 56		375 -	35 -		
7	Wickenburg-Scottsdale-Wickenburg		149	25	278 92	4 34	44 45	188 -	35 -	11 09	
8	VULTURE MINE PROJECT		40	25		24 09		375 -	35 -	32 10	
9			38	25				188 -	35 -	2 31	
10			42	25		7 10		375 -	35 -	11 66	
11			47	25	348 77	11 98		375 -	35 -	0 22	
12			37	25		8 62		375 -	35 -	11 82	
13			77	25		14 24		375 -	35 -	4 08	
14			48	25		7 68		375 -	35 -	17 53	
15			52	25		19 28	48 42	375 -	35 -	24 59	
16			55	25				375 -	35 -	35 23	
17			42	25		7 26		375 -	35 -	46 -	
18			67	25		24 78		375 -	35 -	45 26	
19			46	25	367 67	3 81		375 -	35 -	5 45	
20			61	25		4 34		375 -			
21	Wickenburg	S.L.C.	694	25	96 75	18 30	43 66	188 -			

TOTAL	MILEAGE	2323									
	EXPENSE	464 60	525 -	1111	37	230	28	218	29	25 80	6940 -
											595 -
											247 34

LEASED CAR GASOLINE AND OTHER EXPENSE IS ALSO DETAILED HEREIN.  
 NOTE: ALL PARKING & TOLLS WILL BE CONSIDERED AND ENTERED AS TRAVEL EXPENSE

LEASED CAR NO.	ENTER TOTAL OF EACH TYPE OF EXPENSE		EXPENSE CODE		TOTAL NET EXPENSE	
	TYPE OF EXPENSE	TOTAL AMOUNT	G.O.	WC/E	DATE	AMOUNT
MAKE	TRAVEL EXPENSE		07.01			
MODEL	LEASED CAR		07.03			1000 -
MODEL YEAR	GASOLINE		07.07			500 -
ODOMETER READINGS AND MILEAGE DATA	OTHER EXPENSE		07.10			2500 -
END CURRENT PERIOD	ENTERTAINMENT		07.30			6500 -
END PREVIOUS PERIOD	CLUB DUES		24.00			
TOTAL MILES DRIVEN BUSINESS MILES	ASSOCIATION DUES		21.90			
PERSONAL MILES	OTHER EXPENSE					
	TOTAL GROSS EXPENSES					10,500 -
	DEDUCT - PERSONAL USE		07.05			
	TOTAL NET EXPENSES					142 32

I HEREBY CERTIFY THE EXPENSES AS ABOVE WERE INCURRED IN CONNECTION WITH BUSINESS

SIGNED: 

APPROVED FOR: ten thousand three hundred forty two and 32/100 DOLLARS 68/100  
 (EXACT AMOUNT TO BE WRITTEN BY EMPLOYEE INCURRING EXPENSE)

APPROVED BY: \_\_\_\_\_

NEGOTIATED BY: \_\_\_\_\_

DATE NEGOTIATED: \_\_\_\_\_

ENTER THIS AMOUNT HERE

4763 0001 9908 1182

10/85\*VISA

J H PRUDDEN P GEOSCIENCE

RANCHO GRANDE

HTL/50683081

2302104951

7020591376

AZ

12 12 84

5749492

DATE 12/19/84	CLERK/WTR. [Signature]
AUTHORIZATION NO. 10013433	
DESCRIPTION Motel	

SALE	
TAX	
TIPS	
TOTAL	36767

SALES SLIP

The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

SIGN HERE X [Signature]

TRAVEL & ENTERTAINMENT SALES SLIP  
CUSTOMER COPY

CUSTOMER: RETAIN THIS COPY FOR YOUR RECORDS



OR





1	
2	
3	12-18" 84 19:44
4	0137PB+ 327.77
5	12-19" 84 12:09 BAL NC 327.77
6	0137PB+ 327.77
7	* ROOM 32.00
8	TAX 1.95
9	BAL NC 367.67
10	
11	
12	
13	
14	12-19" 84 18:53
15	0137PB+ 367.67
16	MC/VI 367.67
17	CHANG 0.00
18	
19	
20	

BEST WESTERN

*Rancho Grande*P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

Great Western Hosts



NAME

Cont from #65954

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN  
PTY

MAKE OF CAR

LICENSE NO.

STATE REGISTERED IN

RATE

LENGTH OF STAY

DATE ARRIVED

38

ROOM NO. NAME  
137 PRUDEN

65954  
NUMBER

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20



12-18<sup>th</sup> 84 11:21 0137PB+ 278.14  
 \* ROOM 39.00  
 TAX 1.90  
 BALANCE 318.04  
 12-18<sup>th</sup> 84 19:43 0137PB+ 318.04

BEST WESTERN *Rancho Grande* 327.77

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
 (602) 684-5445

Operated By



**Great Western Hosts**



NAME CONT. FROM #65910

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING \_\_\_\_\_

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE <u>38</u>	LENGTH OF STAY	DATE ARRIVED
-------------------	----------------	--------------

ROOM NO NAME  
137 Prudden

65910  
NUMBER

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

12-17"84 18:49  
 0137PB+ 228.82  
 BALANCE 228.82

12-17"84 11:05  
 0137PB+ 228.82  
 LD PH 2.63  
 BALANCE 231.45

12-17"84 12:27  
 0137PB+ 231.45

\* ROOM 38.00  
 TAX 1.90  
 BALANCE 271.35

12-18"84 06:23  
 0137PB+ 271.35  
 BALANCE 278.14

BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

 Great Western Hosts



NAME *Cont from 65899*

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING \_\_\_\_\_

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE <i>38</i>	LENGTH OF STAY	DATE ARRIVED
-------------------	----------------	--------------

137 | Prudden

65899  
NUMBER

1			
2			
3	12-16"84	21:53	
4			@137PB+ 191.59
5	GOLD N	17.18	
6			BALNC 288.77
7			
8			
9	12-17"84	09:53	
10			@137PB+ 288.77
11	LD PH	12.40	
12			BALNC 291.17
13			
14	12-17"84	09:13	
15			@137PB+ 221.17
16	LD PH	4.85	
17			BALNC 226.02
18	12-17"84	10:49	
19			@137PB+ 226.02
20	LD PH	2.80	
			BALNC 228.82



BEST WESTERN

*Rancho Grande*P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



Great Western Hosts



NAME

Cont from #65831

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

REPRESENTING \_\_\_\_\_

NO. IN MAKE OF CAR  
PTY

LICENSE NO.

STATE REGISTERED IN

RATE

LENGTH OF STAY

DATE ARRIVED

38

137 PRUDDEN

65831  
NUMBER

1	
2	
3	12-15"84 07:12
4	GOLD N 6.96
5	BALNC 99.36
6	12-15"84 11:43
7	BALNC 106.32
8	* ROOM 38.00
9	TAX 1.90
10	BALNC 146.22
11	12-16"84 07:44
12	BALNC 146.22
13	GOLD N 5.47
14	12-16"84 12:12
15	BALNC 151.69
16	* ROOM 38.00
17	TAX 1.90
18	BALNC 191.59
19	
20	



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



Great Western Hosts



NAME COURT FROM #65737

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE 38	LENGTH OF STAY	DATE ARRIVED
------------	----------------	--------------

137 NAME

Prudden

65737 NUMBER

1	
2	
3	12-13"84 08:47
4	0137PB+ 0.00
5	LD PH 10.18
6	* ROOM 38.00
7	TAX 1.90
8	12-13"84 09:52 BALNC 50.08
9	0137PB+ 50.08
10	LD PH 5.86
11	BALNC 55.94
12	
13	
14	12-13"84 15:05
15	0137PB+ 35.94
16	LD PH 3.52
17	BALNC 59.46
18	12-14"84 12:37
19	0137PB+ 59.46
20	* ROOM 38.00
	TAX 1.90
	BALNC 99.36



BEST WESTERN

Rancho Grande

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358 (602) 684-5445

Operated By



Great Western Hosts



NAME

Con't from 65729

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE 38.00	LENGTH OF STAY	DATE ARRIVED
---------------	----------------	--------------

4763 0001 9908 1182

10/85\*VISA  
 J M PRUDDEN P GEOSCIENCE

RANCHO GRANDE

HTL 50683081

2302104951

7020591376 AZ

12 19 84

DATE	CLERK/WTR.
AUTHORIZATION NO.	
DESCRIPTION	

5749866

The Issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

SIGN HERE X

*J M Prudden*

SALES  
SLIP

SALE		
TAX		
TIPS		
TOTAL	96	75

CUSTOMER: RETAIN THIS COPY FOR YOUR RECORDS



OR



TRAVEL & ENTERTAINMENT SALES SLIP  
 CUSTOMER COPY



ROOM NO. NAME  
137 Rudden

66056  
NUMBER

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

12-20"84 20:25



96.75  
96.75

12-21"84 08:17



96.75  
96.75

CHANG 0.00

BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



**Greet Western Hosts**



NAME

*Cont from 66004*

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN PTY	MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN
---------------	-------------	-------------	---------------------

RATE

LENGTH OF STAY

DATE ARRIVED

*38-*



ROOM NO. NAME  
137 Krudden

66004  
NUMBER

1			
2			
3			
4	12-20 <sup>th</sup> 84	11:34	
5			0137PB+ 0.00
6			3.80
7			5.84
8			.95
9			.00
10			1.90
11			BALNC 63.49
12	12-20 <sup>th</sup> 84	20:21	
13			0137PB+ 63.49
14			LD PH 5.86
15	12-20 <sup>th</sup> 84	21:24	BALNC 69.35
16			0137PB+ 69.35
17			LD PH 12.56
18			GOLD N 14.84
19			BALNC 96.75
20			



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

*Great Western Hosts*



NAME *Cont from 65980*

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING \_\_\_\_\_

NO. IN PTY	MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN

RATE <i>38</i>	LENGTH OF STAY	DATE ARRIVED

HOME OFFICE: 5195 Las Vegas Boulevard South  
Las Vegas, Nevada 89119



*"the best bad  
guy in the west"*

STATION STAMP:

137

DEC. 21 1984

DATE \_\_\_\_\_, 19\_\_\_\_

M

*Chap*

Account No.

Make of Car

Model

License No.

*33<sup>4</sup>*

Gals. Gasoline

Qts. Oil

*43.66*

*LC*



281 South Main

Cedar City, Utah

SERVER

TABLE NO.

PERSONS

CHECK NO.

106441

Date

12-21-84

Meals

6.02

TK

GUEST RECEIPT

DATE

SERVER

AMOUNT

12/21/84

08144

25.67

THIS SECTION MAY BE USED AS A RECEIPT FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

SF740 **REDIFORM**®

Thank You

# GUEST RECEIPT

DATE	SERVER		AMOUNT
12/20		77507	4.34

THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

# GUEST RECEIPT

DATE	SERVER		AMOUNT
12-17-84		75678	3.81

THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

# GUEST RECEIPT

*J Peterson* *Horseshoe Cafe*

DATE	SERVER		AMOUNT
12-13-84		75503	4.35

THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

4763 0001 9908 1182

5409994

10/85 VISA  
J H PRUDDEN P GEOSCIENCE

COCK • BULL REST  
421 N TEGNER  
WICKENBURG AZ 50641738

DATE	AUTHORIZATION NO.	IDENTIFICATION	CLERK	REG./DEPT.	TAKE <input type="checkbox"/>	SEND <input type="checkbox"/>
12/13/84			S			
QUAN.	DESCRIPTION		UNIT COST	AMOUNT		
	dinner			8.89		
AUTO. LICENSE NO.			STATE	SUB-TOTAL		
The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.				TIPS		1.00
PURCHASER-SIGN HERE				TAX		
X <i>J H Prudden</i>				TOTAL		9.89

SALES SLIP



IMPORTANT: RETAIN THIS COPY FOR YOUR RECORDS

BANKCARD SALES SLIP  
CARDHOLDER COPY

YOUR RECEIPT  
THANK YOU

12-13-84

7	\$4.60	
7	\$2.90	
7	\$4.43	
7	\$3.16	
1 Tx	\$4.00	
	\$19.09	St
	\$0.24	Tx

\$19.33 Ca

886.3-0.1 No A

YOUR RECEIPT  
THANK YOU

12-13-84

1 Tx	\$15.00	
	\$15.00	St
	\$0.90	Tx
	\$15.90	Ca

886.4-0.1 No A

# DOUBLE B PHOTO

BOX BB - PHONE 684-5583

WICKENBURG, ARIZONA 85358



5924

DATE 12-13-84 1984

NAME Pruden

ADD. Ranch Grande

SOLD BY		CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	
QUAN.	DESCRIPTION					PRICE	AMOUNT	
1	Jacks Assay							
2	Tucson AZ							
3								
700	4	40					4.60	
3000	5	20	Zone				2.90	
700	6	38	photography				4.43	
700	7	23	2				3.16	
	8							
	9	Handling					4.00	
	10							24
	11							
	12							\$ 19.33
CUSTOMER'S ORDER NO.					REC'D BY	J. J. J. 15.00		
KEEP THIS SLIP FOR REFERENCE								
						Tax -	.90	
							35.23	



**United Parcel Service**  
PICKUP RECORD (One Time)

RECEIVED FROM

NAME

Rancho Grande Motel.

STREET

main st. in Wickenburg

CITY

Wickenburg

STATE

AZ

ZIP

85358.

CALLER

Dames Prudolen

TELEPHONE NO.

684-5445.

CLOSING TIME

PICKUP LOCATION

DATE

12 '13 '84

TELEPHONE CENTER NO.

OPERATING CENTER NO.

871404

PLACE UPS SHIPPER NUMBER ABOVE

401703

*P. Vargas*

ENTER EACH PACKAGE ON SEPARATE LINE  
INCREASE FRACTION OF POUND TO NEXT FULL POUND.

ENTER DETAIL BELOW  
BY TYPE SERVICE

DECLARED  
VALUE IF IN  
EXCESS OF  
\$100.00

C.O.D.  
AMOUNT  
OR  
A.O.D.

PACKAGE  
CHARGE

GROUND AIR

ZONE

LBS.

ZONE

LBS.

CALL OR O.S.

4

45

5,500.00

8 09

SALES MEMO	NAME	STREET NUMBER	STREET NAME	CITY	STATE	ZIP CODE
	JACOBS ASSAY	LASORATORY 1435	S. 10th Ave	TULSON	AZ	85713
	45	11x8x9	Mineral Samples	5,500	(9)	

UNLESS A GREATER VALUE IS DECLARED IN WRITING ON THIS RECEIPT, THE SHIPPER HEREBY DECLARES AND AGREES THAT THE RELEASED VALUE OF EACH PACKAGE OR ARTICLE NOT ENCLOSED IN A PACKAGE COVERED BY THIS RECEIPT IS \$100, WHICH IS A REASONABLE VALUE UNDER THE CIRCUMSTANCES SURROUNDING THE TRANSPORTATION. THE ENTRY OF A C.O.D. AMOUNT IS NOT A DECLARATION OF VALUE. IN ADDITION, THE MAXIMUM VALUE FOR AN AIR SERVICE PACKAGE IS \$25,000 AND THE MAXIMUM CARRIER LIABILITY IS \$25,000. CLAIMS NOT MADE TO CARRIER WITHIN 9 MONTHS OF SHIPMENT DATE ARE WAIVED. CUSTOMER'S CHECK ACCEPTED AT SHIPPER'S RISK UNLESS OTHERWISE NOTED ON C.O.D. TAG.

C.O.D. CHARGES	
A.O.D. CHARGES	
EXCESS VALUATION	13.50
SERVICE CHARGE	3.20
<b>TOTAL CHARGES</b>	<b>7.459</b>

RECEIVED BY	PICKUP TIME	NO. PKGS.	NO. CALLS
<i>V. Malagueo</i>	12:20	1	<i>e</i>



# ARDWARE **Coast to Coast**

STORE AT

DATE

12/14/84

SOLD TO

Cash

SOLD BY

1	4" Pulley	3	65
1	1/4 Key		20
		3	85
			23
		4	08

*PK*

31449-43

ALL RETURNS OR CLAIMS MUST BE ACCOMPANIED BY THIS RECEIPT.

COASTERS  
HARDWARE

12-14-84

1 TX \*0.20  
1 TX \*3.65  
\*3.85 ST  
\*0.23 TX

\*4.08 TL  
\*10.00 CA TD  
\*5.92 CA CG

10-35A  
000-3450

**GUEST RECEIPT**

DATE <i>12-14-84</i>	SERVER <i>84</i>	AMOUNT <i>75585</i>	<i>434</i>
-------------------------	---------------------	------------------------	------------

THIS SECTION MAY BE USED AS A RECEIPT FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

**GUEST RECEIPT**

0317485

*Done*

Date *12-12* Amount *8.02*

BOB MELL & CO. 1-800 262-6365, IL. 1-312 470-0520 Style No. 620

Please pay total shown at top

- A 17.53 T 001
- TX 00.35 001
- TX 00.17 001
- GR • 01.09 001
- GR • 01.89 001
- PR • 03.95 001
- LIFI 07.00 001
- GR • 01.19 001
- GR • 01.89 001

*lunch material + field supp.*

MCNEEVEN'S FINE FOODS

12-14-84  
20000.02

RD 11.9  
LBS 0.08 @  
\*2.59  
NF \* 0.21 TM  
\*0.21 ST  
\*0.21 ST  
\*0.01 TX  
\*0.22 TL  
\*1.00 CA TL  
\*0.78 CG  
A 29.65

MCNEEVEN'S FINE FOODS

*field supplies*

12-12-84  
20000.02

NF \* 1.69 TM  
NF \* 1.69 TM  
NF \* 1.69 TM  
GR \* 3.04 TM  
GR \* 3.04 TM  
\*11.15 ST  
\*11.15 ST  
\*0.67 TX  
\*11.82 TL  
\*12.00 CA TL  
\*0.18 CG  
A 25.49

4763 0001 9908 1182

10/85 VISA

J H PRUDDEN P GEOSCIENCE

RANCHO GRANDE  
HTL/50683081  
2302104951  
7020591376

AZ

12 - 7 84

DATE 12/21/84	CLERK/WTR. CW
AUTHORIZATION NO. HT 15656	
DESCRIPTION HOTEL	

5749436

SALE		
TAX		
TIPS		
TOTAL	348.77	

The Issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

SIGN  
HERE X

*J. Prudden*

SALES  
SLIP

CUSTOMER: RETAIN THIS COPY FOR YOUR RECORDS



OR



TRAVEL & ENTERTAINMENT SALES SLIP  
CUSTOMER COPY

ROOM NO. NAME  
137 Prudden

65729  
NUMBER

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

12-12"84 17:06

0137PB+ 348.77  
BALMO 348.77



12-12"84 19:45

0137PB+ 348.77  
MS/VI 348.77

CHANG

BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



NAME Cont gum 65727

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE 38	LENGTH OF STAY	DATE ARRIVED
------------	----------------	--------------

137 Prudden.

65727

NUMBER

1	
2	
3	
4	12-12" 84 16:10
5	BALMO 0137PB+ 312.02
6	LD PH 2.74
7	LD PH 7.96
8	BALMO 322.74
9	
10	
11	BALMO 339.77
12	12-12" 84 16:35
13	BALMO 0137PB+ 322.74
14	LD PH 2.25
15	LD PH 3.71
16	LD PH 7.07
17	BALMO 339.77
18	12-12" 84 17:05
19	BALMO 0137PB+ 339.77
20	LD PH 2.63
	LD PH 6.37

BEST WESTERN

*Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358

(602) 684-5445

Operated By

Great Western Hosts



NAME

*Cont from 65664*

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN  
PTY

MAKE OF CAR

LICENSE NO.

STATE REGISTERED IN

RATE

LENGTH OF STAY

DATE ARRIVED

*3800*

ROOM NO. NAME  
 137 Prudden

65664  
 NUMBER

1	
2	
3	
4	12-11"84 12:03
5	0137PB+ 237.90
6	BALNC 237.90
7	
8	12-11"84 18:03
9	0137PB+ 237.90
10	LD PH 3.07
11	LD PH 12.84
12	12-11"84 20:53B
13	0137PB+ 258.19
14	LD PH 7.40
15	12-12"84 07:22
16	BALNC 265.59
17	0137PB+ 265.59
18	GOLD N 6.53
19	* ROOM 38.00
20	TAX 1.90
	BALNC 312.02



BEST WESTERN

*Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
 (602) 684-5445

Operated By

Great Western Hosts



NAME

*Cont from 65621*

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN PTY	MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN
DATE	LENGTH OF STAY	DATE ARRIVED	
<i>38 00</i>			



ROOM NO. NAME

137 Prudden

65621  
NUMBER

1	
2	
3	12-10"84 11:31
4	0137PB+ 183.16
5	BALNC 183.16
6	
7	12-10"84 21:05
8	0137PB+ 183.16
9	GOLD N. 14.84
10	BALNC 198.00
11	
12	
13	
14	
15	
16	12-11"84 11:30
17	0137PB+ 198.00
18	* ROOM 38.00
19	TAX 1.90
20	BALNC 237.90



BEST WESTERN

Rancho Grande

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

Great Western Hosts



NAME

Corit from 65591

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN  
PTY

MAKE OF CAR

LICENSE NO.

STATE REGISTERED IN

RATE

LENGTH OF STAY

DATE ARRIVED

38.00



ROOM NO. NAME  
137 Prudden.

65591  
NUMBER

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

12-09" 84 13:16

0137PB+ 128.81  
BALNC 128.81

12-09" 84 21:40

0137PB+ 128.81  
LD PH 10.50  
BALNC 139.31

12-10" 84 07:29

0137PB+ 139.31

GN  
3.95 -

12-10" 84 11:3795

BALNCE+ 143.26

\* ROOM 38.00

TAX 1.90

BALNC 183.16

BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

 Great Western Hosts



NAME

Don't from # 65577

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN MAKE OF CAR PTY	LICENSE NO.	STATE REGISTERED IN
---------------------------	-------------	---------------------

RATE

LENGTH OF STAY

DATE ARRIVED

38.00

ROOMING NAME  
#38 Prudden.

65577  
NUMBER

137

2			
3	12-09"84	09:30	
4		0138PB+	77.70
5		BALNC	77.70
6			
7	12-09"84	12:09	
8		0138PB+	77.70
9	ADJ CR	77.70	
10		BALNC	0.00
11			
12	12-09"84	12:10	
13		0137PB+	77.70
14	* ROOM	30.00	
15	TAX	1.90	
16	12-09"84	13:16	BALNC 117.60
17		0137PB+	117.60
18	GOLD N	11.21	
19		BALNC	128.81
20			

changed room



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



Great Western Hosts



NAME *Con't from # 65515*

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

REPRESENTING \_\_\_\_\_

NO. IN PTY	MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN

DATE *3/9/00*

LENGTH OF STAY \_\_\_\_\_

DATE ARRIVED \_\_\_\_\_

ROOM NO NAME

138 Prudden

65515  
NUMBER

1	
2	
3	12-07"84 19:14
4	0138PB+ 0.00
5	* ROOM 37.00
6	TAX 1.85
7	BALNC 38.85
8	12-08"84 11:40
9	0138PB+ 38.85
10	* ROOM 37.00
11	TAX 1.85
12	BALNC 77.70
13	12-09"84 09:26
14	0138PB+ 77.70
15	GOLD N 2.09
16	12-09"84 09:29 BALNC 79.79
17	0138PB+ 79.79
18	GOLD N 02.09
19	BALNC 77.70
20	

voided  
07



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By



Great Western Hosts



NAME J. Prudden

ADDRESS 4809 Quail Pt Rd

CITY Salt Lake STATE UT ZIP \_\_\_\_\_

REPRESENTING

NO. IN PARTY	MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN
1	Dodge	NS0411	UT

RATE	LENGTH OF STAY	DATE ARRIVED
37.00	10	7 10 DEC 7

## CUSTOMERS EXPENDITURE RECORD

FOR: \_\_\_\_\_

DATE	GUESTS	AMOUNT	GUEST RECEIPT
12/11/84	1	2.28	

GUEST RECEIPT

DATE	SERVER	AMOUNT
12-11-84	76594	2.82


THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 **REDIFORM***Thank You*

Guest Receipt

WE ARE PROUD TO BE A PART OF

*The* **GOLD  
NUGGET**  
*Restaurant*

  
**Great Western Hosts**

Rancho Grande  
Wickenburg, Ariz.

FULLY LICENSED 602-684-2430  
WICKENBURG, ARIZONA

**GUESTS ENTERTAINED**

---

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---

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---

# GUEST CHECK

TABLE NO.	NO. PERSONS	CHECK NO.	SERVER NO.
		950638	

CHEZ RENE'S  
SWISS CHALET 12-11-84  
169 E. CENTER  
WICKENBURG, AZ 85358

684-5775

Dinner

\$ 11.98

Thank you!

N. Luggenbayer

TAX

# GUEST RECEIPT

DATE	SERVER		AMOUNT
12-5		76621	4.34

THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

# GUEST RECEIPT

CHECK NO.	DATE	TOTAL
83603	12-7	6.97

THE TURKEY COMETH...

SMITHS FOOD KING  
3953 WASATCH BLVD  
SALT LAKE CITY UTAH  
STORE #14 11/21/84

NONFDS 1.22A  
CM BAR 1.99A  
TAXCOL .18H

TOTAL 3.39

CASH 10.00

CHANGE 6.61

5 12.56PM

WILDERS  
BEN FRANKLIN

*Film*

12-09-84

1 TX 2.53  
2.53 ST  
0.13 TX  
0.03 TX  
2.69 TL  
5.00 CA  
2.31 CD

1001 0073

11-53

# DOUBLE B PHOTO

BOX BB - PHONE 684-5583

WICKENBURG, ARIZONA 85358

4983



DATE 12-17 198X

NAME \_\_\_\_\_

ADD. \_\_\_\_\_

SOLD BY		CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	
QUAN.		DESCRIPTION				PRICE	AMOUNT	
1	1	KR-135 36					6	49
	2							39
	3						6	88
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
CUSTOMER'S ORDER NO.					REC'D BY			
KEEP THIS SLIP FOR REFERENCE								



2 Wash 2 <sup>00</sup>  
—

Soap .70

Dry .75

Labour 2 <sup>00</sup>  
—

---

5 <sup>45</sup>  
—

# DOUBLE B PHOTO

BOX BB - PHONE 684-5583

WICKENBURG, ARIZONA 85358



5058

DATE 12-17 1984

NAME J. PRUDDEN

ADD. 60 LAKEWOOD BLVD

WICKENBURG

SOLD BY		CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT	
QUAN.	DESCRIPTION					PRICE	AMOUNT	
1	JACOBS ASSAULTS							
2	TUESDAY AZ							
1	3	15000000			25		3	58
1	4	40000000			18		2	73
1	5	10000000			35		4	18
	6	Photography					28	50
	7	HAND.					3	75
	8	TAX					2	52
	9						<del>3</del>	
	10						4	526
	11							
	12							

CUSTOMER'S ORDER NO.

REC'D BY

KEEP THIS SLIP FOR REFERENCE

# GUEST CHECK

TABLE NO.	NO. PERSONS	CHECK NO.	SERVER NO.
		857107	

B Veg 1.75

Co 50

2.25

Therms 1.00

3.25

3.75

3.75

12-17-84

TAX

# Thank You!

## Frontier Inn

DATE	WAITER NO.	AMOUNT	GUEST CHECK NO.
12-18-84	4	14.28	74661

CUSTOMER'S RECEIPT— Keep above record for income tax or expense account, if needed - detach below this line.

12-17-84

2000.01

2.0

\*1.69

NE NE NE X *tapl* \*2.38 TM

NE NE NE X *s.bags* \*5.99 TM

NE NE NE X *pick* \*1.00 TM

4.0

\*1.76

GR \* \*7.04 TE

\*36.20 ST

\*36.20 ST

\*2.22 T

\*32.12 TL

\*100.00 CS TND

\*60.58 CG

96.58 2

4763 0001 9908 1182

5229410

10/85 • VISA

J H PRUDDEN P GEOSCIENCE

WICKI BLVD AZ

20704140

DATE	AUTHORIZATION NO.	IDENTIFICATION	CLERK	REG./DEPT.	TAKE <input type="checkbox"/>
12/15/84		20	3		SEND <input type="checkbox"/>
QUAN.	DESCRIPTION		UNIT COST	AMOUNT	
	1 meal				
AUTO LICENSE NO.			STATE	SUB-TOTAL	16 30
The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.				TIPS	2 00
PURCHASER SIGN HERE				TAX	98
X <i>J H Prudden</i>				TOTAL	19 28

SALES SLIP

BANKCARD SALES SLIP  
CARDHOLDER COPY

IMPORTANT: RETAIN THIS COPY FOR YOUR RECORDS



04842

Chevron U.S.A. Inc.



Thanks for buying CHEVRON

Customer's Copy

DATE

121524 7216602

PRODUCTS & SERVICES

PRODUCTS & SERVICES				Quantity	Price	Amount
SUPREME	REGULAR	UNLEADED	DIESEL	421	114.9	4842
CUSTOM	SPECIAL	DELO		Qts.		
						/
					Sales Tax	
				<i>AM</i>	<b>Total</b>	<b>4842</b>

Customer agrees to pay a late charge on past due balances of 1 1/4% per month or the maximum rate allowed in customer's state of residence, whichever is less.

*JM Mudden*  
Customer's Signature

FTC Notice (16 CFR 433.2) is incorporated herein

NS0411

UTAH

Authorization No.

License Number

State

Price includes motor vehicle fuel tax (if applicable).

These Amounts Must Agree

S-28 (4-84)

5170794

4763 0001 9908 1182

10/85\*VISA  
 J. H. PRUDDEN P GEOSCIENCE

DOUBLE B PHOTO  
 27 NO TEGNER BOX BB  
 WICKENBURG 50006072

DATE	AUTHORIZATION NO.	IDENTIFICATION	CLERK	REG./DEPT.	TAKE <input type="checkbox"/>	SEND <input type="checkbox"/>
QUAN.	DESCRIPTION		UNIT COST	AMOUNT		
	Film				11	00
	12 13 84					
AUTO LICENSE NO.			STATE	SUB-TOTAL		
<small>The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.</small>				TIPS		
PURCHASER-SIGN HERE				TAX		66
X <i>J. H. Prudden</i>				TOTAL		11 66

**SALES SLIP**

BANKCARD SALES SLIP  
 CARDHOLDER COPY

**IMPORTANT: RETAIN THIS COPY FOR YOUR RECORDS**



# GUEST CHECK

TABLE NO.	NO. PERSONS	CHECK NO.	SERVER NO.
		857880	

1/2 Chick.

2.25

C. veg.

roll

40

67

50

3.34

TAX



WICKENBURG  
LUMBER AND HARDWARE  
Wickenburg, Arizona

A	34	4/	2.56	MD
A	34	4/	2.76	MD
A	34		2.38	MD
A	34	3/	2.97	MD
A			.21-	DS
			.63	TX
001	7747E	11/09/84	11.09	TL

11.09CATD

.00CACG

001 7747 E

11/09/84



# GUEST RECEIPT

DATE	SERVER		AMOUNT
12/19		75887	381

THIS SECTION MAY BE USED AS A RECEIPT  
FOR INCOME TAX OR EXPENSE ACCOUNT RECORD.

5F740 REDIFORM

*Thank You*

# *Thank You!*

*Frontier Inn*

DATE	WAITER NO.	AMOUNT	GUEST CHECK NO.
12-8-84	5	17.12	74159

**CUSTOMER'S RECEIPT**— Keep above record for income  
tax or expense account, if needed - detach below this line.

## GUEST RECEIPT

0317714

Date \_\_\_\_\_ Amount 5.25

BOB MELL & CO. 1-800 262-6355, Ill. 1-312 470-0520 Style No. 620

# Field supplies

12-08-34

2000.01

	GR	X	*	1.35	T/M	
	GR	X	*	1.35	T/M	
	GR	X	*	1.55	T/M	
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LBS		3.27	@	1.5		
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J H PRUDDEN P GEOSCIENCERANCHO GRANDE  
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DATE	CLERK/WTR.
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DESCRIPTION	

SALE		
TAX		
SALES SLIP	TIPS	
	TOTAL	27892

The Issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

SIGN  
HERE X*J H Prudden*

CUSTOMER: RETAIN THIS COPY FOR YOUR RECORDS



OR

TRAVEL & ENTERTAINMENT SALES SLIP  
CUSTOMER COPY

ROOM NO | NAME

136 | PRUDDEN

05488  
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Best  
Western

BEST WESTERN

*Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358

(602) 684-5445

Operated By



Great Western Hosts



NAME

CONT. FROM #15397

ADDRESS

CITY

STATE

ZIP

REPRESENTING

NO. IN  
PTY

MAKE OF CAR

LICENSE NO.

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LENGTH OF STAY

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30

ROOM NO NAME  
 136 Prudden

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 NUMBER

1	
2	
3	12-04"84 18:46
4	0136PB+ 171.59
5	BALNC 171.59
6	12-05"84 07:10
7	0136PB+ 171.59
8	* ROOM 38.00
9	GOLD N 7.87
10	TAX 1.90
11	BALNC 219.36
12	12-06"84 11:58
13	0136PB+ 219.36
14	* ROOM 38.00
15	TAX 1.90
16	BALNC 259.26
17	12-06"84 22:09
18	0136PB+ 259.26
19	LD PH 9.47
20	BALNC 268.73
	12-07"84 06:51



BEST WESTERN *Rancho Grande* 0136PB+ 268.73

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
 (602) 684-5445 BALNC 273.63

Operated By  Great Western Hosts



NAME *Cont from #65360*

ADDRESS \_\_\_\_\_

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ROOM NO. NAME  
136 Prudden

65360  
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3	12-04"84 07:22
4	0136PB+ 119.46
5	BAL NC 119.46
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8	12-04"84 07:49
9	0136PB+ 119.46
10	GOLD N 6.05
11	BAL NC 125.51
12	
13	12-04"84 12:01
14	* ROOM 38.00
15	TAX 1.90
16	BAL NC 165.41
17	
18	12-04"84 18:29
19	0136PB+ 165.41
20	LD PH 6.18
	BAL NC 171.59



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By

 Great Western Hosts



NAME

*Cont from # 65314*

ADDRESS

CITY

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PTY

LICENSE NO.

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136 | *Preudden*

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*Chngd Rooms*

ADJ DB 59.25

12-03'84 11:24

\* ROOM 38.00

TAX 1.90

12-03'84 21:36

GOLD N 15.49

12-04'84 07:22

LD PH 4.82

0136PB+ 0.00

BALNC 59.25

0136PB+ 59.25

BALNC 99.15

0136PB+ 99.15

BALNC 114.64

0136PB+ 114.64

BALNC 119.46



BEST WESTERN *Rancho Grande*

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
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NAME *Cont from # 65281*

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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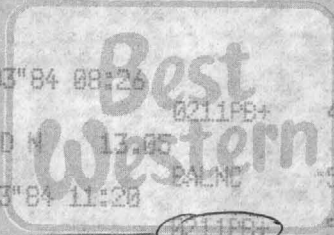
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* ROOM	44.00		
TAX	2.20		
		BALNC	46.20
12-03"84	08:26	0211PB+	46.20
GOLD N	13.05		
		BALNC	-59.25
12-03"84	11:20	0211PB+	59.25
ADJ CR	-59.25		
		BALNC	0.00



chngd  
rooms

# BEST WESTERN Rancho Grande

P.O. BOX 1328 - 293 E. CENTER, WICKENBURG, AZ 85358  
(602) 684-5445

Operated By  Great Western Hosts



NAME J. PRUDDEN

ADDRESS 4509 Quail Pt Rd

CITY Salt Lake STATE UT ZIP 84124

### REPRESENTING

NO IN MAKE OF CAR	LICENSE NO.	STATE REGISTERED IN
1 Dod.	NS 0411	UT

RATE	LENGTH OF STAY	DATE ARRIVED
44-38-1	- ?	2 WKS

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FAD #6003  
3979 S. WASATCH  
278-0463

**GUEST RECEIPT**

CHECK NO. <b>84349</b>	DATE <b>12/2/84</b>	TOTAL <b>11.35</b>
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*breakfast & lunch 3.00*

A	5.99	GRO
A	4.44	GRO
A	11.66	GRO
A	14.17	GRO
A	28.05	GRO
	3.70	TAX
3211	68.01	TOTL
3211	68.01	CHK
	.00	CHNG
36003A36	11/21/84	

**Thank You!**  
*Monterey Inn*

DATE	WAITER NO.	AMOUNT	GUEST CHECK NO.
<b>12/4/84</b>	<b>5</b>	<b>12.67</b>	<b>74513</b>

**CUSTOMER'S RECEIPT** - Keep above record for income tax or expense account, if needed - detach below this line.

**GUEST RECEIPT**

*Love*      Date **12-5-84**      Amount **9.75**      **0317167**

BOB MELL & CO. 1-800 262-6355, IL. 1-312 470-0520 Style No. 620

**Thank You!**  
*Monterey Inn*

DATE	WAITER NO.	AMOUNT	GUEST CHECK NO.
<b>12/4/84</b>	<b>5</b>	<b>15.95</b>	<b>72148</b>

**CUSTOMER'S RECEIPT** - Keep above record for income tax or expense account, if needed - detach below this line.

**GUEST RECEIPT**

**MINT** *Del Webb's* **Quarterdeck** **06387**  
Casino/Hotel Las Vegas      Seafood Restaurant and Lounge

DATE **12-01-84**      AMOUNT **10.96**

12-05-84  
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421 @ 1.5  
\*0.89  
\*3.75 TIM  
\*1.09 TIM RSM  
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\*4.84 ST  
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\*4.89 TL  
\*5.00 CA  
\*0.11 CG  
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13898

STOP N GO MARKETS  
GASOLINE RECEIPT

DATE \_\_\_\_\_

DEC 2 1984

SOLD TO \_\_\_\_\_

	QUANTITY	PRICE	AMOUNT
<input type="checkbox"/> PREMIUM <input type="checkbox"/> UNLEADED <input checked="" type="checkbox"/> REGULAR	34.710	1.079	36.41
		SALES TAX	—
		TOTAL	36.41

1201

4763 0001 9908 1182

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10/85\*VISA

J H PRUDDEN P GEOSCIENCE

MOTEL REGENCY

47248703

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NV

DATE	AUTH. NO.	IDENTIFICATION	CLERK	REG/DEPT	<input type="checkbox"/> TAKE <input type="checkbox"/> SEND
QTY.	CLASS	DESCRIPTION	PRICE	AMOUNT	
		Rent One Day			
		# 116			

THIS FORM TO BE USED WITH



OR



The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the Agreement governing the use of such card.

PURCHASER-SIGN HERE X

SALES SLIP

SUB  
TOTAL

18.00

TAX

1.28

TOTAL

19.28

SALES SLIP  
CARDHOLDER COPY

IMPORTANT: RETAIN THIS COPY FOR YOUR RECORDS

PRUDDEN

12/2

NO

**NOTICE** - This contract limits our liability - **PLEASE READ.**  
We are **NOT** responsible for accidents or injury, nor for loss of any money, jewelry or valuables of any kind suffered by our guests from whatever cause. **We reserve the right to refuse service to anyone.**

No. 6907	The Undersigned Agrees to Terms and Conditions on Reverse Side
----------	---

NAME J. Prudden

ADDRESS 4809 Quail Hill

CITY & STATE SLC UT

REPRESENTING			
Make of Car	License No.	Year	State Registered
	NS0411		

THE GUEST WILL PAY      Cash       Credit Card       Other

ROOM 116    CLERK HU    ROOM CHARGE \$ 18.00

ARRIVAL DATE 12-1      TAX \$ 1.26

NUMBER OF GUESTS 1      MISC. CHARGES \$ \_\_\_\_\_

RATE \$ 18.00      TELEPHONE \$ \_\_\_\_\_

NUMBER OF DAYS CHARGED 1      TOTAL AMOUNT \$ 19.26

VISA

The best rest in the west **MOTEL REGENCY**  
700 N. Main  
Las Vegas, Nevada 89101

Best Western

*Rancho Grande*



**Great Western Hosts**

P.O. Box 1328 • 293 East Center Street  
Wickenburg, Arizona 85358



**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

February 20, 1985

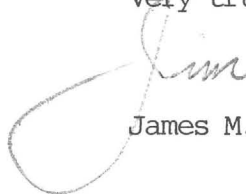
RECEIVED FEB 25 1985

Mr. Ben F. Dickerson, III  
DMEA  
7340 E. Shoeman Lane  
Suite 111 b(E)  
Scottsdale, Arizona 85251

Dear Ben:

Please find the enclosed computerized placer bibliography for your information. I will enclose this reference, plus complimentary lists covering placer mining and processing as additions to a case history syllabus which I present at in-house seminars to interested corporate management. Obviously, I am always seeking such consulting situations and would welcome the opportunity to work with you in presenting this material. Any suggestions you might have on this proposal would be most welcome.

Very truly yours,



James M. Prudden

JMPrudden:bsp

Enclosure

PRUDDEN GEOSCIENCE SERVICES

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# VULCHER MINE PLACER SAMPLES DRILL CUTTINGS

COLUMN WRITE

HOLE NO	INTERVAL / LOCATION	CONC.		1	2	3	4
		PROC.	SHIPPED				
1 H 19	0-5	✓	12/13 ✓				NO Au
2	5-10	✓	12/13 ✓				" "
3	10-15	✓	12/13 ✓				" "
4	15-20	✓	12/13 ✓				one Au grain
5 H 34	<del>0-5</del>		12/17				
6	<del>5-10</del>						
7	10-15	✓					
8	15-20	✓	12/13 ✓				2 Au grains
9 H 31	10-15	✓	12/13 ✓				no Au
10	15-20	✓	12/13 ✓				Au
11 H 21	0-5	✓	12/17 ✓				
12	5-10	✓	1				
13 H 31	5-10	✓					
14 H 31	0-5						
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MEMO FROM

James M. Prudden

Ben

Recent correspondence re  
sample processing and shipping.  
Am anxious to read your  
talk from Tucson.

Regards

Jim

RECEIVED DEC 15 1984

JAMES M. PRUDDEN  
CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

1/2

12<sup>th</sup> Dec 1984

Mr. Mike <sup>Jacobs/</sup> Jacobs Assay Lab.  
1435 South 10<sup>th</sup> Ave  
Tucson, Ariz. 85713

Dear Mike:

Subsequent to our discussions today regarding DMEA's placer project in the Wickenburg area, the following details the sample processing procedures for the three (3) different sample types

1) Black Sand Concentrates - These samples weigh from about two (2) to eight (8) pounds and are numbered as follows: 1/1/0-6 or 4/1/2. Depth measurements will also be on the outer bag, but need not appear on your sample sheets. The following requirements are included in your \$55/sample cost estimate

- a) Dry sample and record weight in grams. I will specify which samples contain +1.5mm gold grains which should be recorded individually and then returned to the original sample.
- b) Entire sample ball mill ground for four (4) hours in nitric acid medium to remove Fe, Ca and native Hg-amalgam. Some samples will have significant CaCO<sub>3</sub> necessitating pH control.
- c) Ground sample from (b) above bottle rolled - below critical speed (30RPM?) - for eight (8) hours with mercury (60g for 300g sample?) in a caustic medium. Residue from this phase must be checked for complete gold removal.
- d) Mercury removed from amalgam using nitric acid and total mg. of gold determined by fire assay.

(cont.)

**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

2/2

- 2) Black Sand Concentrates - These small samples, designated as, say, H34 0-5, will be fire assayed in total and total gold and silver reported in mg's.
- 3) Tailings - labeled as per (1) above, will be fire assayed using 2 A.T. charge and gold-silver values reported as ounces/ton.

I am looking forward to working with you on this project and welcome any questions or suggestions you might have to expedite the sample returns.

Copies of your Assay Sheets mailed to:

- Ben Dickerson  
DMEA Ltd.  
4203 N. Brown Ave "F"  
Scottsdale, Az. 85251
- Milton Hood  
P.O. Box 20865  
Wickenburg, Az 85358
- James Prudden  
4809 Quail Point Rd.  
Salt Lake City, UT 84124

Sincerely Yours,

Jim Prudden



**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

To: Jacobs Assay Lab.

12 Dec 1984

Sample Submittal Sheet

the following Black Sand Concentrates are enclosed  
for amalgamation assay as per instructions:

1/1/0-6  
1/1/6-10  
1/2/1 (4-8)  
3/1/1  
3/1/2  
4/1/1  
4/1/2  
5/1/1  
5/1/2  
5/1/3  
6/1/1

TOTAL 11 Samples

*JM Prudden*

**JAMES M. PRUDDEN**

MINING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84117  
801-272-4720

TO: JACOBS ASSAY LAB  
Sample Transmittal Sheet

13/12/84

Four (4) boxes of samples were shipped from Wickenburg via U.P.S. on the above date, consisting of

- 1) Four placer concentrates for amalgam processing  
samp. Nos: 1/1/10-14.5; 1/2/2; 2/1/1; 2/1/2
- 2) seven placer concentrates requiring total fine assay  
samp Nos: H19 0-5, 5-10, 10-15, 15-20; H34 15-20; H31 10-15, 15-20
- 3) Fifteen Tails samples requiring 2 A.T. fine assay

J.M. Prudden

# VULCHER MINE PLACER SAMPLES DRILL CUTTINGS

COLUMN WRITE

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HOLE NO	INTERVAL / LOCATION	CONC.				
		PROC.	SHIPPED			
H 19	0-5	✓	12/13 ✓			NO Au
	5-10	✓	12/13 ✓			" "
	10-15	✓	12/13 ✓			" "
	15-20	✓	12/13 ✓			one Au grain
H 34	0-5					
	5-10					
	10-15					
	15-20	✓	12/13 ✓			2 Au grains
H 31	10-15	✓	12/13 ✓			no Au
	15-20	✓	12/13 ✓			Au

# VULCHER MINE PLACER SAMPLES

## TRENCH CHANNELS

COLUMN WRITE

samp No	LOCATION	1		2		3		WT.	
		Conc	Tails	Conc	Tails	Vol.	Samp.		
1 (1/1/06)	Trench 1 / channel 1 / 0-6'	x	x	✓ 12/12	12/13 ✓	12 ft <sup>3</sup>	904	sample 2.5' from top	
2 (1/1/6-10)	" " 6-10'	x	x	✓ 12/12	✓	8 ft <sup>3</sup>	730		
3	" " 10'-14.5'	x	✓	✓ 12/13	✓	9 ft <sup>3</sup>	1431		
4 (1/2/1)	Trench 1 / channel 2 / 4-8'	x	x	✓ 12/12	✓	8 ft <sup>3</sup>	805		
5 (1/2/2)	" " 0-4.5'	✓	✓	✓ 12/13	✓	6.75 ft <sup>3</sup>	973	top 1.5' below surface	
6 2/1/1	4.5-10.0'	✓	✓	✓ 12/13	✓				
7 (2/1/2)	Trench 2 / chan. 1 / 4.5-10.5'	✓	✓	✓ 12/13	✓	9 ft <sup>3</sup>	1887		
8 3/1/1	Trench 3 / chan 1 / samp 1	✓	✓	✓ 12/12	✓	8.75 ft <sup>3</sup>	1072		
9 3/1/2	" " 2 (5.83-10.2')	✓	✓	✓ 12/12	✓	6.5 ft <sup>3</sup>	1069		
10 4/1/1	Trench 4 / chan 1 / samp 1 (0-5.2')	✓	✓	✓ 12/12	✓	7.8 ft <sup>3</sup>	753		
11 4/1/2	(5.2-9'4")	✓	✓	✓ 12/12	✓	6.25 ft <sup>3</sup>			
12 5/1/1	(0-3')	✓	✓	✓ 12/12	✓	4.5 ft <sup>3</sup>			
13 5/1/2	(3-10')	✓	✓	✓ 12/12	✓	10.5 ft <sup>3</sup>			
14 5/1/3	(10-16')	✓	✓	✓ 12/12	✓	9 ft <sup>3</sup>			
15 6/1/1	(0-6')	✓	✓	✓ 12/12	✓	9.0 ft <sup>3</sup>			
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**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

January 28, 1985

RECEIVED JAN 29 1985

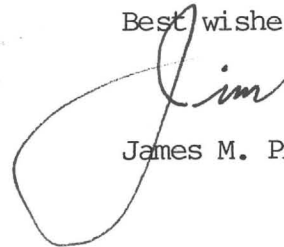
Mr. Ben F. Dickerson, III  
DMEA LIMITED  
4203 North Brown Avenue  
Suite F  
Scottsdale, Arizona 85251

Dear Ben:

Please find enclosed two copies of my evaluation report on the Vulture Mine placers. I feel the placers immediately adjacent to the mine offer areas of good grade potential with modest volume. The total economic situation for the property will probably dictate your continued presence to develop the inferred placers and whether to proceed with broader exploration efforts should a placer operation be commissioned. I would be pleased to furnish you continued consulting services should DMEA advance with this project or alternatively commence other exploration -- development ventures.

I would again like to thank you for the opportunity to work for you and Carol and wish DMEA the best of success in establishing a mine.

Best wishes,



James M. Prudden

JMPrudden:bsp



VULTURE MINE PLACER SAMPLE DATA TABLE I

Sample No.	Depth Below Surface	Sample Wt. (lb.)	Sample Vol. (ft <sup>3</sup> )	Con. Wt. (g)	T. F. lb/cu.ft	Gold Nugget	Particle #1	Size Distribution #2	Distribution #3	Fines	Amalgamation Au mg.	Tails OPT	Plant Tails +10# Au	Plant Tails -10# Au	Placer Grade mg/cu.yd
1-1-1	1.5'-7.5'	909	12.00	927	75.75	-----	-----	-----	-----	-----	6.734	.005	.009	.001	15.15
1-1-2	7.5'-11.5'	730	8.00	673	91.25	-----	-----	-----	1	9	2.780	.007	.002	.002	9.38
1-1-3	11.5'-16.0'	1431	9.00	4635	159.00	-----	-----	-----	-----	14	13.145	.002	.001	.001	39.44
1-2-1	3.0'-7.5'	805	9.00	503	89.44	-----	-----	-----	-----	6	0.835	.010	.003	.002	2.51
1-2-2	7.5'-12.0'	718	8.00	399	89.75	-----	-----	-----	-----	11	3.210	.014	.002	.001	10.83
2-1-1	2.0'-6.5'	973	6.75	722	89.75	-----	-----	-----	-----	3	0.765	.002	.003	.002	3.06
2-1-2	6.5'-12.5'	1887	9.00	1126	144.15	-----	-----	2	-----	12	9.220	.004	.001	.002	27.66
3-1-1	6.0'-11.5'	1082	8.75	1643	123.66	-----	-----	-----	-----	3	1.990	.013	Tr	Tr	6.14
3-1-2	11.5'-16.5'	1069	6.50	553	164.46	2	1	15	-----	13	451.100	.023	.002	.002	1874.22
3-2-1	11.3'-16.5'	955	7.75	612	123.23	1	3	-----	2	23	107.310	.033	.005	.001	373.85
4-1-1	2.0'-7.2'	753	7.75	424	97.16	-----	-----	-----	-----	16	3.410	.045	Tr	Tr	11.88
4-1-2	7.2'-11.3'	747	6.25	413	119.52	-----	1	16	10	20	20.180	.013	.002	.001	87.18
4-2-1	7.3'-11.3'	757	6.00	468	126.17	-----	-----	5	7	51	11.950	.050	Tr	.002R	53.78
5-1-1	1.0'-4.0'	367	4.50	271	81.56	-----	-----	-----	-----	-----	0.040	.010	Tr	.001	0.24
5-1-2	4.0'-11.0'	1417	10.50	780	134.95	-----	-----	-----	-----	7	0.153	.007	Tr	Tr	0.65
5-1-3	11.0'-17.0'	1268	9.00	931	140.89	-----	-----	-----	-----	-----	0.062	.003	.001	Tr	0.19
6-1-1	0-6.0'	840	9.00	1337	93.33	-----	-----	-----	1	6	0.140	.010	.001	.001	0.42
6-1-2	6.0'-11.0'	871	7.50	637	116.13	-----	-----	-----	-----	4	0.580	.011	Tr	Tr	2.09
7-1-1	1.0'-6.0'	283	3.75	70	75.47	-----	-----	-----	-----	-----	0.030	.528/.583R	.002	Tr	0.22
7-1-2	6.0'-10.25'	273	3.19	86	85.58	-----	-----	-----	-----	2	0.063	.096/.091R	.005	.002	0.53
7-1-3	10.25'-15.0'	848	7.00	949	121.14	-----	-----	2	-----	9	0.022	.005	.002	.002	0.08
8-1-1	0-4.0'	667	4.00	349	166.75	-----	-----	-----	-----	2	0.026	.006	.002	.002	0.10
8-1-2	4.0'-8.0'	777	4.00	755	194.25	-----	-----	-----	-----	9	0.468	.006	.003	.002	3.16
8-1-3	8.0'-13.0'	701	4.83	461	145.13	-----	-----	-----	1	19	14.530	.020	.001	.004	81.22
9-1-1	0-4.5'	771	6.50	1124	118.62	-----	1	1	-----	4	18.020	.031	.001	.001	74.85
10-1-1	0-4.33'	971	6.50	824	141.08	-----	-----	-----	1	18	11.054	.014	.002	.008R	45.92
11-1-1	3.0'-6.7'	413	4.13	199	100.00	-----	-----	-----	-----	1	0.413	.008	.001	.002	2.70
11-1-2	6.7'-12.0'	973	8.00	784	121.63	-----	-----	-----	-----	6	3.180	.009	.002	.001	10.73
11-1-3	12.0'-16.3'	874	6.50	867	134.46	-----	-----	1	1	12	0.835	.002	Tr	.001	3.47
11-1-4	16.3'-20.3'	756	6.00	385	126.00	-----	-----	1	3	8	5.553	.014	.001	.004	24.99
12-1-1	4.0'-8.0'	796	6.00	587	132.67	-----	-----	-----	1	3	0.434	.006	Tr	Tr	1.95
12-1-2	8.0'-12.0'	828	6.00	569	138.00	-----	-----	-----	-----	10	1.430	.002	.001	.002	6.44
12-1-3	12.0'-15.5'	799	5.25	591	152.19	-----	-----	-----	2	8	0.838	.004	.001	.001	4.31
13-1-1	0-4.9'	568	4.79	289	118.58	1	2	4	10	59	66.650	.663/.467R	.002	.003	375.69
14-1-1	9.0'-15.0'	1026	9.00	1195	114.00	-----	-----	-----	-----	16	2.455	.003	.004	.001	7.37
15-1-1	8.0'-11.7'	620	5.50	2480	112.73	-----	-----	-----	-----	-----	0.179	.005	.001	Tr	0.88
15-1-2	11.7'-16.0'	990	6.50	1350	152.31	-----	-----	-----	-----	8	14.300	.002	Tr	.001	59.40
16-1-1	7.0'-11.0'	623	6.00	247	103.83	-----	-----	-----	1	24	1.800	.014	.001	.001	8.10
16-1-2	11.0'-17.0'	1029	9.00	204	114.33	-----	2	1	20	133	74.160	1.028/1.133R	.002	Tr	222.48

**JAMES M. PRUDDEN**

CONSULTING GEOLOGIST

4809 Quail Point Road  
Salt Lake City, Utah 84124  
801-272-4720

RECEIVED DEC 21 1984

20 Dec 84

To: Jacobs Assay Lab

Sample Transmittal Sheet

The remaining samples for the Wickenburg placer project will be transported to your Lab in person by Milt Hood

Samples included in this shipment include

1) fifteen (15) placer concentrates numbered as follows: 11/1/1, 11/1/2, 11/1/3, 11/1/4, 12/1/1, 12/1/2, 12/1/3, 13/1/1, 14/1/1, 15/1/1, 15/1/2, 16/1/1, 16/1/2, 3/2/1 & 4/2/1

2) fifteen (15) TAILS samples numbered as per (1) above

In addition one rock sample 16/1/1 is to be crushed panned and the concentrates amalgamated using our standard procedure.

*J. M. Prudden*

But keep in  
hand

## NORTH WESTERN CALIFORNIA PLACER

### SUMMARY

This small but attractive grade unconsolidated placer deposit is divided into two pay zones or channels each forming the margins of a north flowing V-shaped stream confluence. A total of 12 drill holes have sampled this approximately 14-acre perched river terrace. Geological ore reserves for both channels as, defined by drilling, aggregate 110,200 cubic yards averaging 0.072 ounces of gold per cubic yard. A further 100,000 cubic yards exists below mined and within sparsely sampled mapped channel trends correlating with stratigraphically lower ore grade horizons in adjacent minable channel. Additional untested potential placer reserves exist along strike from both channels.

Mining can be conveniently unitized to maximize efficiency and avoid the heavy winter rainfall season. The 1984 operational schedule is divided into four categories commencing with development drilling and overlapping with engineering studies, permitting, and final production stages. It is anticipated that this six (6) month period will provide the investors with approximate investment capital pay-back, including capitalization of processing plant, pre-production costs and property payments. The 1985 production period will mine the bulk of the above reserves and produce an anticipated net profit exceeding twice the capital investment for this property. A third production in 1986 is very possible pending 1984 drilling returns and subsequent bulk sampling results.

Additional and separate lower grade placer deposits, that have been drilled, exist within a reasonable geographic radius and could provide long-term production continuity for these limited, but good grade reserves.

### PRODUCTION

Present owners excavated approximately 3,000 cubic yards in 1980 and recovered 44 ounces of coarse gold and some "black sands" using a very crude and inefficient sluice recovery system. Their average recovered value for this operation was \$10.80/cubic yard.

### CLAIM STATUS

A total of sixteen (16) 40 acre placer claims are located along section line meridians. BLM records indicate that the required assessment work has been duly completed and recorded. Considerable title search has been conducted by a California attorney who would be available for consultation and property opinion.

### DEVELOPMENT

A Canadian development company conducted a reconnaissance drilling program totaling twelve (12) 6" core holes aggregating 362 feet at approximate 150-foot intervals. This core was processed at 2.5 foot intervals with the individual samples emulsified and amalgamated with the concentrates fire assayed. Assay results indicated two very good grade holes (e.g. S1.5/E1.5 and NO.0/W2.9) with marginal adjacent holes indicating possible low grade extensions.

*Vibra Jais.*



## RESERVES

The two drill holes (S1.5/1.5E and NO.0/2.9W) have resulted in outlining two ore lenses or channels adjacent to the flowing streams forming the "bar" at the confluence of these fluvial systems. It must be understood that each "ore" zone is defined by one drill hole each augmented by shallow back hoe sampling. These areas are:

	<u>HOLE</u>	<u>DEPTH</u>	<u>VOLUME</u>	<u>GRADE</u>	<u>CONTAINED OZ.</u>
West Area	NO.0/W2.9	0-15'	18,500	0.085 opy	1,573
East Area	S1.5/E1.5	0-25'	91,700 110,200	0.069 opy 0.072 opy	6,327 7,900

NOTE: West Area reserves to 15-foot depth were calculated to contain approximately 95% of the gold values. Values to bedrock (15' to 44') in this area indicated highly anomalous but sub-economic values as bedrock concentrations which typically contains "pay" gold concentrations in placer deposits.

Considerable untested stream and bench gravel remains to be drilled to compliment the above reserve estimates.

## PROPERTY PAYMENTS

Three stage cost estimates are presented below in an attempt to approximate total cost to potential investors.

- A. <sup>200,000±</sup> \$300,000 buy-out for property ownership at \$100,000 six monthly increments following six monthly \$2,500 advance payment allocations. This includes \$150,000 drilling payback costs to the Canadian development company. *cor. U.S. # ?*
- B. \$25,000 finder's fee *to whom ?*

## ROYALTIES

- A. At present <sup>5</sup> % gross recovered values. Current negotiations suggests that this could be rescheduled.
- B. Property payments paid from 50% net profits until the total ~~\$300,000~~ <sup>200,000±</sup> paid.
- C. United Minerals Services to receive ~~five-year~~ management / *operating* contract at a rate of 5% net profits plus \$3,000/month operating fee. *definition ?*

## 1984 OPERATING SCHEDULE

### STAGE I

This 90-day period is devoted to development drilling within two previously drilled defined ore grade placer channels. Developing proven reserves for these channels is considered essential to provide cost effective professional level mining for this deposit. The following steps are considered essential to bring this placer to "bankable" status.

1. Confirm earlier drill results
2. Block reserves on 50-foot centers
3. Provide mining engineering data and beneficiation-metallurgical process estimates to reduce design and start-up time commitments.

It is important to note that over 95% of the presently known reserves in the West Ore Block lie within 15 feet of the surface (drill hole NO.0/W2.9) which are within the limits of practical dry placer mining methods. Shallow production within the northern extension of this same zone accounted for 44 ounces of gold, plus discarded "black sand" concentrates from approximately 3,000 cubic yards. The above drill hole discloses zones of sub-economic but geochemically important placer enrichment at 26-29.5 and 40-44 foot intervals from incomplete drill records. Drilling in the East Ore Block discloses two pay zones, one of which is near bedrock. Consequently, drilling to bedrock in the West Ore Body is designed to sample the entire placer profile and determine the likelihood of a second and deeper ore horizon. The potential for this zone is estimated to approximately 100,000 cubic yards.

The following drilling program is designed to test the two horizontal units in the West Ore Block and the complete reserve area in the East Ore Block on 50-foot drill spacings.

West Ore Block	28 holes x 47 feet	1,081 feet
East Ore Block	62 holes x 26 feet	1,612 feet
	90 holes	<u>2,928 feet</u>

Assume: \$30/ft.; 35 ft./day; 6 day week

### COST ESTIMATES

Drilling Costs - direct	\$87,840	
indirect	2,500	
Sample testing equipment rental	5,000	
Assaying	10,000	
Wages - professional 2x3 month ?	42,000	
technician	7,500	
Vehicles	3,000	
Travel Expenses	2,000	
Camp expenses (25/day/man)	9,100	
Misc. supplies	1,500	
	<u>\$ 170,440</u>	S. Total

During this period one professional (mining engineer) will be responsible for pre-production engineering, bulk sampling, plant design, permitting, environmental impact analysis and mitigation.

Wages	\$ 10,500	
Travel expenses	3,000	
Vehicle	1,000	
Heavy equipment rental	5,000	
Legal and permitting	<u>10,000</u>	
	\$ 29,500	S. Total
	<u>\$199,940</u>	Total

## STAGE II

### ENGINEERING AND CONSTRUCTION

Engineering will include organizing environmental data, legal requirements and drilling results to develop a mine plan process flow sheet, waste disposal system and reclamation plan utilizing total drill data. The background information and plans will not only guide the operation but will also serve as information for the operating permits. The engineering can be separated into four main elements.

- Mine Planning
- Process Design
- Permitting
- Waste Disposal

Mine planning will utilize the developmental drilling data to define economic reserves. Deposit characteristics such as, deposit geometry, water table, volume and grade will be coupled with equipment limitations and economic necessities (e.g. quick recapture of invested funds) to formulate a mine plan on a weekly schedule basis. The mining sequence will support a precise operating budget and facilitate permitting by anticipating environmental issues.

Characterization of gold grains from drilling and bulk sampling will be a distinct guide to designing a recovery process during plant construction. Two weeks are anticipated for this data collection and assimilation into a flow sheet. An additional four weeks are anticipated for equipment purchase, transport to the property and assemble the plant. It is anticipated that this phase would consume ten weeks.

Permitting will entail initially identifying the governmental agencies regulating the operations which will at least be:

- California Water Board (waste discharge)
- California Mine Reclamation Group
- U.S. Forest Service
- County Officials

Other organizations will most probably have some say in the operation and must be addressed at an early date to promote time effective permitting.

The specific concerns will be addressed and solved to form a clear and concise guide to mine planning and operation. It is anticipated that a maximum of 12 weeks of intermittent contact with these various governmental agencies should provide the necessary contact for this process. It must be remembered that an existing U.S. Forest Service permit and bond exists for this property, which should greatly aid in reducing this estimated time allocation.

The problem of waste disposal has been addressed in a Dames & Moore consulting report dated October 26, 1983. This report details the problems of confining silt discharge from a plant employing exclusively gravity separation processes. Obviously detailed follow-up is required to convince the agencies and general public that negligible solids discharge is practical from a well-designed placer plant. A copy of this report has been filed with the U.S. Forest Service.

### STAGE III

#### START-UP

Unforeseen equipment problems always arise during this period and consequently three to four weeks have been allocated to this phase of the program. It will be noted that the extensive precautions taken during the development stage should prove immensely valuable in minimizing the probable problems that need to be addressed during this period.

### STAGE IV

#### PRODUCTION/OPERATION

Equipment utilized in the actual mining this unconsolidated placer will probably consist of a Front End Loader (FEL) to excavate and haul the gravel to the processing plant. The processing plant will screen the large barren gravel sizes and jigs, sluices and possibly other equipment will recover the gold. A rubber tire dozer will rip the gravel and create large stock-piles for the FEL. The dozer will also backfill mined areas with the plant discards. The FEL and dozer will advance the plant as mining progresses. The rate of advance is based on a processing rate of 500 cubic yards for a ten-hour work day or a nominal rate of 13,000 cubic yards per month. Achieving the scheduled rate requires a peak capacity of 890 cubic yards per day or 23,140 cubic yards per month. This peak productivity differential accounts for the many productivity losses usually experienced while operating a mine.

Existing information on the property and the probable mine operating conditions described in this text were used to develop the following criterion.

- 60 hour work week schedule
- Labor paid \$14.50/hour including payroll and fringe benefit costs
- Equipment operating supplies, rental and repair costs
- Pumping costs and rental

The following break-down of major cost categories illustrates the distribution of funds in calculating per cubic yard operating expenditures.

Equipment operating	\$2.89 cu yd	51.9%
Labor	1.39 cu yd	24.9%
Supplies	<u>1.29 cu yd</u>	23.2%
	<u>\$5.57 cu yd</u>	

The construction phase will entail sizing of the processing facilities with planned daily production rates. Contracting sediment pond construction is a possibility. Vegetation removal will entail contract logging and then probably stock piling soil for future reclamation. It must be emphasized that most of the Western Ore Body is already cleared of vegetation.

APRIL  
 MAY  
 JUNE  
 JULY  
 AUGUST  
 SEPT  
 OCTOBER  
 NOVEMBER  
 DECEMBER

STAGE I

STAGE II

STAGE III

STAGE IV

1984 SCHEDULE

START-UP

PRODUCTION

1985 SCHEDULE

ESTIMATED PROJECT BUDGET

1984 Approximate Budget

STAGE I	Development, drilling, engineering, permitting, design, etc. (90 days)	\$ 199,440
STAGE II	Construction, procurement and detail design (60 days)	\$ 200,000
STAGE III	Start-up (30 days)	\$ 50,000
STAGE IV	Production - West Ore Body (0-15 depth) 18,500 cubic yards for 1,561 ounces	<u>\$ 103,045</u>
		\$ 552,485 S.T.
	Six (6) month advance property payment	15,000
? →	First of three (3) property payments Management	100,000
		35,000
	TOTAL	<u>\$ 702,485</u>
	Less Gross Production	<u>626,000</u>
	Net Loss for 1984	(\$ 76,485)

1985 Operating Estimate

Gross Production	91,700 cubic yards for 6,327 oz	\$2,530,800
<u>Less;</u>	Estimated production costs at \$5.57/cu yd	\$ 510,770
	Property payments (\$200,000-\$15,000)	185,000
	Royalties on 1984 & 1985 Production	
	5 @ 9% gross	284,000
	Management	<u>70,000</u>
	<sup>pretax</sup> NET PROFIT 1984-1985	<u>\$1,480,920</u>



# **JAMES M. PRUDDEN**

*CONSULTING GEOLOGIST*

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Salt Lake City, Utah 84124  
801-272-4720

## PERSONAL PROFILE

### SUMMARY:

Mr. Prudden has approximately 20 years experience in a wide variety of geographical and professional postings in the mining industry. Senior managerial positions held have been responsible for exploration geology, mine development, bulk sampling, operations, metallurgical evaluation and production engineering situations in U.S.A., Canada, Alaska, Australia, South Pacific and Africa. The seven managerial and staff responsibilities required large staffs, in-house laboratories, and heavy equipment in developing and expediting self-generated exploration and development programs. Specific areas of expertise would include ore deposit sedimentology, placer exploration and development and small precious metal mine operations. Budgeting, property negotiations and government regulation compliance consumed considerable efforts in these various positions.

### BIOGRAPHICAL DATA:

Date of Birth: October 23, 1939  
Marital Status: Married  
Family: 2 sons, ages 11 and 14

### EDUCATION:

C.C.S.F.: A.A . Engineering  
Mackay School of Mines, UNR: BSC Geology  
University of Adelaide, Australia: MSC Studies in Geochemistry

### PUBLICATIONS AND HONORS

Turquoise Deposits of Nevada 1968, N.B.M. Report 17.  
Presented several lectures and seminars on placer geology  
Co-chairman SME Lead-Zinc Symposium 1979  
Sedimentology as Applied to the Exploration of Fossil Placer  
Deposits; Mackay School of Mines Bul. 36, 1981  
Selected as People-to-People Delegate to the Peoples Republic of China  
Geochemical Evaluation of Placer Gold Deposits; A.I.P.G. Conference,  
1984  
Speaker: Placer Exploration and Mining Short Course, Mackay School  
of Mines, 1984.  
Consultant for United Nations

WORK EXPERIENCE:December 1978 to PresentConsulting Mining Geologist

Project management, mine evaluation, economic mine modeling, feasibility studies, geological mapping and expert witness status for a wide variety of clients on base and precious metal properties. Placer evaluation a specific specialty.

January to September 1982

NORANDA MINING INC., Salt Lake City, Utah

Position: Chief Geologist

Coordinating geological activities at developing and operating properties, reviewing ore reserves, representing Geology Department in feasibility studies, reviewing and advising on property submittals and commodity reports, member of International Placer Task Force coordinating placer development and operations.

May 1979 to September 1980

FALCON EXPLORATIONS, Tonopah, Nevada

Position: General Manager

Coordinated and planned corporate objectives and goals, found and developed 2.0 M.T. silver-gold ore body at Tonopah Divide, constructed heap leach plant including agglomeration tests; retimbering three shafts and related underground development; staff averaged 50; constructed and operated successful commercial assay laboratory and drilling operation.

November 1976 to December 1978

U.S. STEEL, Salt Lake City, Utah

Position: Geologist

Assumed control of Mid-Continent and Eastern U.S. exploration orientated towards Mississippi Valley lead-zinc and pre-Cambrian uranium and base metal deposits. Located areas of significant carbonate hosted lead-zinc and pre-Cambrian lead-zinc-tin mineralization using sedimentology, advanced geochemistry and petrology followed by diamond drilling.

September 1973 to November 1976

AUSTRALIAN ANGLO AMERICAN, Melbourne, Australia

Position: Senior Geologist - Department Head, Gold division

Designed regional sedimentary gold geochemical program for Queensland followed by 18 month secondment to South Africa evaluating new reef potential in several mines, subsequently extended mine life by ten years. Managed integrated successful exploration department N.E. Australia

WORK EXPERIENCE:  
(Continued)

including base-precious metals and placer deposits; staff averaged 40. Discovered potentially economic massive sulfide and fossil placer deposits.

August 1967 to September 1973

INTERNATIONAL NICKEL AUSTRALIA LTD., Sydney, Australia  
Position: Senior Geologist - Department Head

Variety of management postings within Australia and South Pacific as Department Head of large integrated regional offices, including supervision of Atomic Absorption Laboratories; principally oriented towards nickel laterite and sulfide exploration. Operations Manager for two major bulk sampling and beneficiation projects in the Solomon Islands and Queensland, Australia. Department Head in Kalgoorlie, Western Australia involved evaluation of large property holdings including developing underground mine. Quaternary calcrete hosted uranium deposit was located using hydro-geochemical and geophysical methods. Postings in South Australia and Northern Territories were oriented towards evaluation of regional basemental and uranium potential of these large areas.

June 1967 to August 1967

COMINCO AMERICAN, Spokane, Washington  
Position: Project Geologist

Involved geological mapping and diamond drilling a Mississippi Valley lead-zinc and copper Skarn-type deposit in Northern Washington. Integrated use of low-level air photographs, geochemistry, and geophysics were the principle tools required for the successful selection of specific drill targets.

August 1965 to December 1966

INTERNATIONAL NICKEL COMPANY OF CANADA, Thompson, Manitoba  
Position: Geologist

Underground stope and development mapping at the Thompson Nickel Mine, Manitoba involved routine geological evaluation of the ore bodies, development planning, grade control and frequent coordination with production engineers on mining problems. Summer surface exploration in the Arctic included, field checking airborne EM-magnetic anomalies and regional mapping. Discovered significant molybdenum deposit during this reconnaissance period.

June to September 1965

NEVADA BUREAU OF MINES, Reno, Nevada  
Position: Junior Geologist

Commissioned by the Director of the N.B.M. to investigate all

WORK EXPERIENCE:  
(Continued)

Nevada turquoise deposits subsequently published as N.B.M. Report 17. This was an ideal opportunity to visit most of the porphyry copper and precious metal districts in Nevada.

June 1963 to January 1964

GETCHELL GOLD MINE, Golconda, Nevada  
Position: Junior Engineer

Stadia and triangulation surveying open cut mine benches and grade control supervision using production samples and geological sampling.

Summer 1962

CONTINENTAL URANIUM, Grooks Gap, Wyoming  
Position: Assistant Surveyor and Sampler

Channel sampling two underground mines provided a detailed perusal of this classical Colorado Plateau-type uranium deposit. Underground surveying consisted of compass and theodolite triangulation for drift and raise connections and also responsible for weekly production volume measurements.

Summer 1961 and 1960

NEVADA BUREAU OF MINES, Reno, Nevada  
Position: Field Assistant

Employment covered a great variety of projects and situations assisting State Geologists and University Staff.

JAMES M. PRUDDEN

CONSULTING GEOLOGIST

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RECEIVED DEC 19 1984

To: Jacobs Assay Lab

Sample Transmittal Sheet

17 Dec. 84

Three (3) boxes of samples were shipped from  
Wickenburg via U.P.S. on the above date,  
consisting of:

- 1) nine (9) placer concentrates for amalgam  
processing; sample Nos: 7/1/1, 7/1/2, 7/1/3, 8/1/1,  
8/1/2, 8/1/3, 9/1/1, 10/1/1, & 6/1/2
- 2) nine (9) TAILS samples for the same samples  
as per (1) above
- 3) four (4) placer concentrates for total fine  
assay

J. M. Prudden

## PERSONAL CLIENTS/SPONSORS

Morrison-Knudson  
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Modern Exploration  
Sunbeam Mining Co.  
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Dawson Metallurgical Labs.  
Cordex Exploration

Noranda Mining  
Amselco  
Shell Oil Co.  
RoMax Gold, Ltd.  
Coppermine River Ltd.  
Kerr McGee Corp.  
Anaconda  
Falcon Explorations  
Thyssen Mining Const., Inc.  
Union Mines  
Olympus MTM  
Haywire Mining Co.  
R & F Coal Co.  
Quadel Energy

ALL INQUIRIES WILL BE HANDLED DIRECTLY BY CORPORATE OFFICERS

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President  
Geologist

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**Frank Ramos**  
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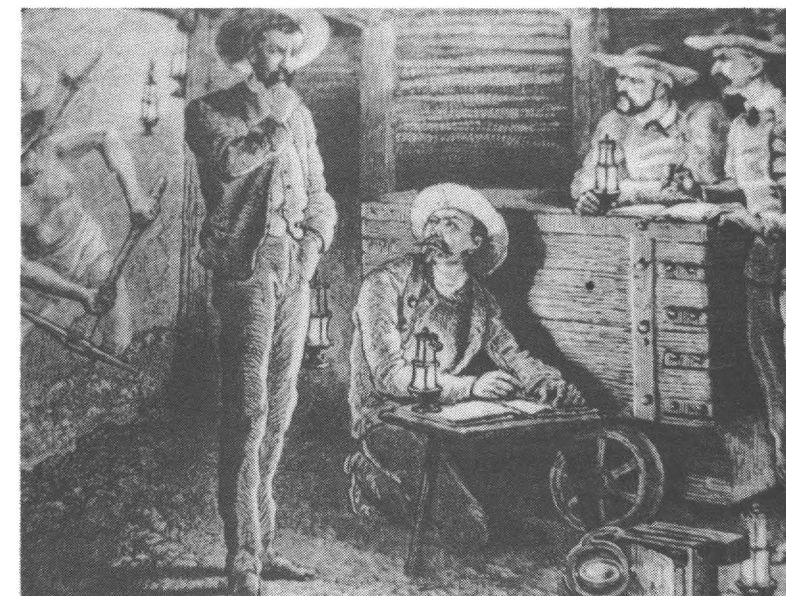


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# UNITED MINERAL SERVICES, INC.



**MINING CONSULTANTS**



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J. Prudden

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James M. Prudden, President



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- **CERTIFIED GEOLOGICAL REPORTS**
- **REGISTERED ENGINEERING REPORTS**
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- **MINE PLANNING & FEASIBILITY STUDIES**
- **EXPERT WITNESS**

## SERVICES

### EXPLORATION

A complete line of capabilities are provided, including geological mapping, geochemistry, data processing, project development and underground mapping and sampling. Claim staking, assessment work and surveying are important additions. Placer evaluation is a particular specialty.

### DEVELOPMENT

Pre-production services include ore reserves, underground rehabilitation, mine engineering and plant design, feasibility studies and cost estimating. Team orientated geological and engineering staff will reduce this anxious phase to minimal time allocation. Heap leach pad design and testing, insures maximum recovery.

### PRODUCTION

Precious metal heap leach and placer plant operation are specific specialties. Only bonded employees are assigned to production facilities.

## FEES

Competitive rates are offered to all clients. Specific fees vary according to length and type of service provided with hourly, daily or contract schedules applied where required.

## TECHNICAL EXPERIENCE

U.M.S. takes pride in offering a diverse mining team with over 75 years accumulated experience in all phases of the mining industry.

JAMES M. PRUDDEN combines many domestic and overseas exploration management positions, mining geology and operations experience with formal education in geology, geochemistry and engineering.

KRAIG W. GRUBAUGH, Registered Professional Engineer, has an extensive mining engineering background in underground and surface mining, production, engineering construction and management. He has also built and operated several beneficiation facilities.

FRANK RAMOS balances his project geology background with heap leach design and operation. Formal geology training is augmented by pharmacy/chemist registration.

# SEDIMENTOLOGY AS APPLIED TO THE EXPLORATION OF FOSSIL PLACER DEPOSITS

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## ABSTRACT

The Witwatersrand Basin in South Africa is the most famous sequence of fossil placer deposits, having produced 55% of all mined gold. This geological model possesses the required sedimentological signatures fundamentally necessary to evaluate economic ore deposits in other Precambrian and younger geological settings. Provenance area, basin structure, external and internal geometry of the host sediments and sedimentary history of the enclosing basin are the major components of the formation of Precambrian fossil placer deposits. Younger fossil placer ore deposits must also contain the above ingredients to form the necessary concentration of detrital minerals. The proposed Precambrian climatic change from a reducing to an oxidizing atmosphere had a dramatic effect on the genesis of sedimentary uranium deposits. However, the nature of detrital gold deposits remains primarily unchanged throughout geological time. Consequently, the Witwatersrand is considered the geological model by which contemporary and younger detrital gold deposits may be evaluated.

Sedimentology must play an integral role in the evaluation of any placer deposit. The sampling problems associated with particulate gold are only too well known and cause—at times—insurmountable evaluation problems. Consequently, properly directed and executed sedimentological evaluation of carefully selected clastic sediments is a reliable method for the exploration and development of potential auriferous horizons.

Geological exploration for any ore type is best oriented by using a well-defined geological model. It is my proposal that the Witwatersrand Basin in South Africa be such a model. This series of clastic horizons have produced 2.8 billion tons of ore averaging 10 grams/ton or an estimated 55 per cent of ALL mined gold (Papenfus, J.A. 1968). Contemporary and younger clastic horizons generally conform to the Witwatersrand sedimentation pattern.

The schematic diagram in Figure 1 represents the geological model for this famous deposit picturing a portion of the closed yoked basin, consisting of an active fault bounded margin(s) and a geochemically favorable provenance or source area being actively eroded by braided streams during a long, humid climatic cycle. These streams formed active coalescing alluvial fans vigorously reworked in a progressively shrinking basin. Offshore winnowing by lacustrine currents, as illustrated by the skewed shape of the alluvial fan base, constitutes a subordinate, but important variation to this fluvial environment. The degree of sediment reworking and consequent heavy mineral concentration would be

dependent on the interaction of local geologic and geomorphologic factors. The duration of these events would partially govern the payability of these fluvial clastic sediments as formed and reworked in this braided-stream system.

This model would be very similar to the East Rand gold field where the mid-fan dimensions would be 40 kilometers, fan base 90 kilometers and the longitudinal or down-fan axis would be 40 kilometers. The East Rand has produced almost one billion tons of ore averaging 8.5 grams per ton gold from 27 major mines over a period of 75 years (Whiteside, H.C.M. 1968).

There are several other well-known Proterozoic clastic sequences which have payable detrital gold and/or uranium mineralization deposited in similar braided-stream environments. The variabilities within and between each deposit are more dependent on local source area configurations, geological structures and geomorphological environment than their gross dissimilarities with the Witwatersrand model. To take this important observation one step further, current sedimentation features are widely used in the evaluation of these ancient gravels, implying that the study and usage of clastic sedimentation transects geological time (Sestini G. 1973; Goss, W.H. 1968; and Bateman, J. D. 1958).

There are four basic parameters involved in effective basin analysis fully utilizing the effectiveness of our geological model. The first category is provenance area which would be the prime prerequisite for the formation of an auriferous placer deposit. Greenstone belts commonly portray the highest geochemical levels of gold and commonly host narrow hydrothermal quartz veins frequently mined for gold. The type area would be the Archean Swazi System (Barberton Mountain area) in South Africa (Viljoen, R. P. et.al. 1969). However, other metamorphic terrains are also sources for auriferous sediments. Examples would include the gneissic terrain in the Jacobina area of Brazil (Bateman, J. D. 1958), the quartz-veined Paleozoic schists at Manhattan, Nevada (Ferguson, H. G. 1917) and also the California Mother Lode (Clark, W. B. 1970 and Moore, L. 1968). Granitic and granite gneiss terrains with pegmatite swarms would be the logical source for particulate uranium minerals in the case of Lower Proterozoic uraniumiferous placer deposits.

Gross basin structure and sedimentation characteristics are interrelated. Our model is typically a large basin with tectonically active margins supplying detritus in concentrated troughs known as yoked basins. In this model, terrestrial sedimentation in a humid climate supplies vast quantities of sediment from the elevated source bordering the basin to be concentrated within a braided-stream environment



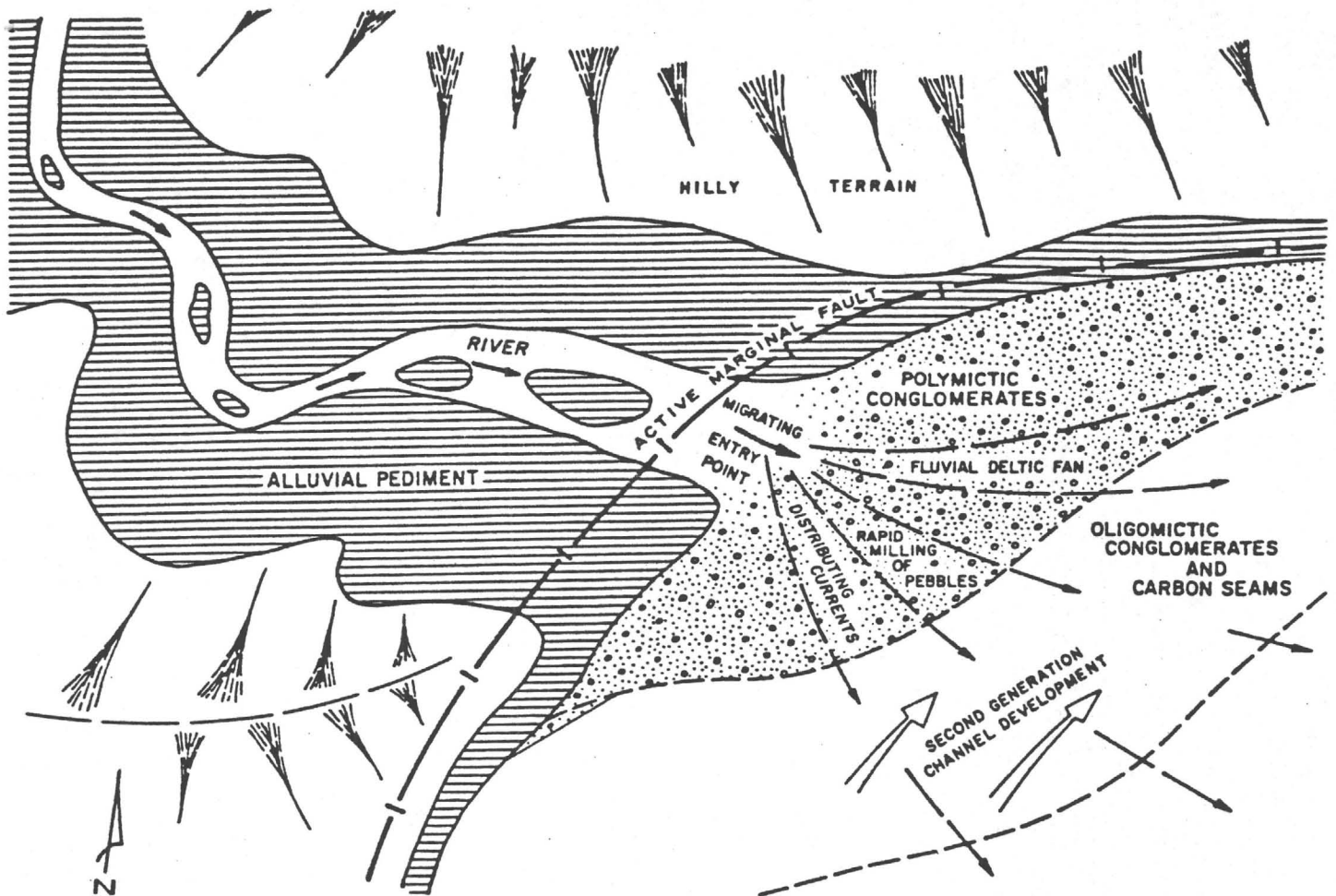


FIGURE 1. Schematic diagram illustrating braided stream sedimentation patterns.

in the form of coalescing fluvial fans. A further example would be the Basin and Range fluvialite sedimentation formed during the Pleistocene in the western United States.

A regressive sedimentation pattern, resulting from rejuvenated basin margin tectonics, provides the energy necessary to prolong the source erosion and also the reworking of earlier sediments. It has been estimated that a conglomerate grading 0.12 parts per million averaging 290 meters thick and outcropping for 1700 meters at a  $10^\circ$  dip *downstream* will liberate 810 kilograms of gold per one meter of vertical erosion (Papenfus, J. A., 1968). Hence, continual basin margin uplift of an auriferous provenance area in alternating transgressive-regressive cycles during a humid climate will eventually produce economic concentrations of heavy minerals. Offshore reworking of the alluvial fan base by offshore lacustrine-marine currents provides an important heavy mineral concentration phase to this ore deposit model.

After the explorationist has confirmed a favorable provenance and lengthy fluvialite sedimentary history necessary to concentrate economic heavy minerals, the external geometry of the sediments must then be evaluated. Essentially, this involves the classification of the basin sedimentation history into various cycles to ascertain the most favorable

zone(s) for detailed examination. The most useful parameters are:

1. Percentage conglomerate within defined stratigraphic zones
2. Delineation of braided-stream channels and associated fluvial fans
3. Transgressive—regressive cycles in the stratigraphic column
4. Gross paleocurrent trends.

Some idea can thus be gleaned as to the tectonic activity of the basin margin during sedimentation and the size and gross economic potential of the clastic sedimentation sequence.

The next phase in the geological evaluation of a potential economic clastic sequence is selecting which specific horizon(s) have the most potential for developing viable fossil placer deposits. Each clastic sedimentary unit must be evaluated by combining numerous internal geometry aspects. The more useful of these detailed measurements are:

1. Thickness of the individual sedimentary cycle
2. Conglomerate thickness, which can also be presented as a percentage of the total sedimentary cycle presented as isopach maps

- 3: Systematic pebble counts, obtained from residual weathering products, outcrops, underground exposures and drill core. These critical factors will measure roundness, pebble lithology, sorting and packing. This raw data can then be plotted to produce percentage of clast lithology, mean pebble size, standard deviation, distinguish variances in provenance areas, predict paleo channel confluences and in general delineate paleoslope gradients within the braided-stream system
4. Paleocurrent measurements as cross-bedding and pebble imbrication provide the necessary directional vectors to classify and evaluate the broader sedimentological projections mentioned above.

Processing these measurable parameters will determine the relative tonnage potential of each horizon and can be used as an empirical technique to establish exploration priorities within the various clastic units.

The above systematic approach to the evaluation of conglomerate horizons might appear long winded and academic. However, a concerted continent-wide gold exploration program requires a specific geological model and the methodology in selecting and evaluating exploration targets. Sampling for particulate gold, with the best of intentions, can be so subjective that a placer exploration program could be doomed to failure before it commences. However,

the selection of exploration targets on well-formulated geological parameters assures a cost-and time-effective exploration project enjoying the highest success potential.

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## GEOCHEMICAL EVALUATION OF PLACER GOLD DEPOSITS

*Physical and chemical characteristics of placer gold deposits must be related to a geologic model to facilitate practical cost-effective evaluation of these very difficult ore deposit types. Economic geologists must combine total heavy mineral suite distribution, concentration, particle size, shape and chemical composition with transport distance and provenance area to comply with a geologic model based on sedimentary history, external and internal geometry of the sediments and form of the enclosing sedimentary basin. This increased general acceptance of the combined geochemical and geological appraisal of sediments has evolved from the practical use of clastic sedimentology in evaluating placer deposits spanning geologic time. The use of these measurable geological and mineralogic parameters is considered essential in locating, defining and mining placer deposits. Deviations from these predictable parameters can be attributed to local influxes of new gold and local sediment into the seemingly simple fluviate system. Orientation studies, relying on the above parameters, will determine sample density, spacings and size to produce a cost-effective evaluation program. These exploration-phase deposit characteristics will be of great assistance in determining mining and beneficiation parameters at an early stage for timely production decisions.*





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# SEDIMENTOLOGY AS APPLIED TO THE EXPLORATION OF FOSSIL PLACER DEPOSITS

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## ABSTRACT

The Witwatersrand Basin in South Africa is the most famous sequence of fossil placer deposits, having produced 55% of all mined gold. This geological model possesses the required sedimentological signatures fundamentally necessary to evaluate economic ore deposits in other Precambrian and younger geological settings. Provenance area, basin structure, external and internal geometry of the host sediments and sedimentary history of the enclosing basin are the major components of the formation of Precambrian fossil placer deposits. Younger fossil placer ore deposits must also contain the above ingredients to form the necessary concentration of detrital minerals. The proposed Precambrian climatic change from a reducing to an oxidizing atmosphere had a dramatic effect on the genesis of sedimentary uranium deposits. However, the nature of detrital gold deposits remains primarily unchanged throughout geological time. Consequently, the Witwatersrand is considered the geological model by which contemporary and younger detrital gold deposits may be evaluated.

Sedimentology must play an integral role in the evaluation of any placer deposit. The sampling problems associated with particulate gold are only too well known and cause—at times—insurmountable evaluation problems. Consequently, properly directed and executed sedimentological evaluation of carefully selected clastic sediments is a reliable method for the exploration and development of potential auriferous horizons.

Geological exploration for any ore type is best oriented by using a well-defined geological model. It is my proposal that the Witwatersrand Basin in South Africa be such a model. This series of clastic horizons have produced 2.8 billion tons of ore averaging 10 grams/ton or an estimated 55 per cent of ALL mined gold (Papenfus, J.A. 1968). Contemporary and younger clastic horizons generally conform to the Witwatersrand sedimentation pattern.

The schematic diagram in Figure 1 represents the geological model for this famous deposit picturing a portion of the closed yoked basin, consisting of an active fault bounded margin(s) and a geochemically favorable provenance or source area being actively eroded by braided streams during a long, humid climatic cycle. These streams formed active coalescing alluvial fans vigorously reworked in a progressively shrinking basin. Offshore winnowing by lacustrine currents, as illustrated by the skewed shape of the alluvial fan base, constitutes a subordinate, but important variation to this fluvial environment. The degree of sediment reworking and consequent heavy mineral concentration would be

dependent on the interaction of local geologic and geomorphologic factors. The duration of these events would partially govern the payability of these fluvial clastic sediments as formed and reworked in this braided-stream system.

This model would be very similar to the East Rand gold field where the mid-fan dimensions would be 40 kilometers, fan base 90 kilometers and the longitudinal or down-fan axis would be 40 kilometers. The East Rand has produced almost one billion tons of ore averaging 8.5 grams per ton gold from 27 major mines over a period of 75 years (Whiteside, H.C.M. 1968).

There are several other well-known Proterozoic clastic sequences which have payable detrital gold and/or uranium mineralization deposited in similar braided-stream environments. The variabilities within and between each deposit are more dependent on local source area configurations, geological structures and geomorphological environment than their gross dissimilarities with the Witwatersrand model. To take this important observation one step further, current sedimentation features are widely used in the evaluation of these ancient gravels, implying that the study and usage of clastic sedimentation transects geological time (Sestini G. 1973; Goss, W.H. 1968; and Bateman, J. D. 1958).

There are four basic parameters involved in effective basin analysis fully utilizing the effectiveness of our geological model. The first category is provenance area which would be the prime prerequisite for the formation of an auriferous placer deposit. Greenstone belts commonly portray the highest geochemical levels of gold and commonly host narrow hydrothermal quartz veins frequently mined for gold. The type area would be the Archean Swazi System (Barberton Mountain area) in South Africa (Viljoen, R. P. et.al. 1969). However, other metamorphic terrains are also sources for auriferous sediments. Examples would include the gneissic terrain in the Jacobina area of Brazil (Bateman, J. D. 1958), the quartz-veined Paleozoic schists at Manhattan, Nevada (Ferguson, H. G. 1917) and also the California Mother Lode (Clark, W. B. 1970 and Moore, L. 1968). Granitic and granite gneiss terrains with pegmatite swarms would be the logical source for particulate uranium minerals in the case of Lower Proterozoic uranium placer deposits.

Gross basin structure and sedimentation characteristics are interrelated. Our model is typically a large basin with tectonically active margins supplying detritus in concentrated troughs known as yoked basins. In this model, terrestrial sedimentation in a humid climate supplies vast quantities of sediment from the elevated source bordering the basin to be concentrated within a braided-stream environment



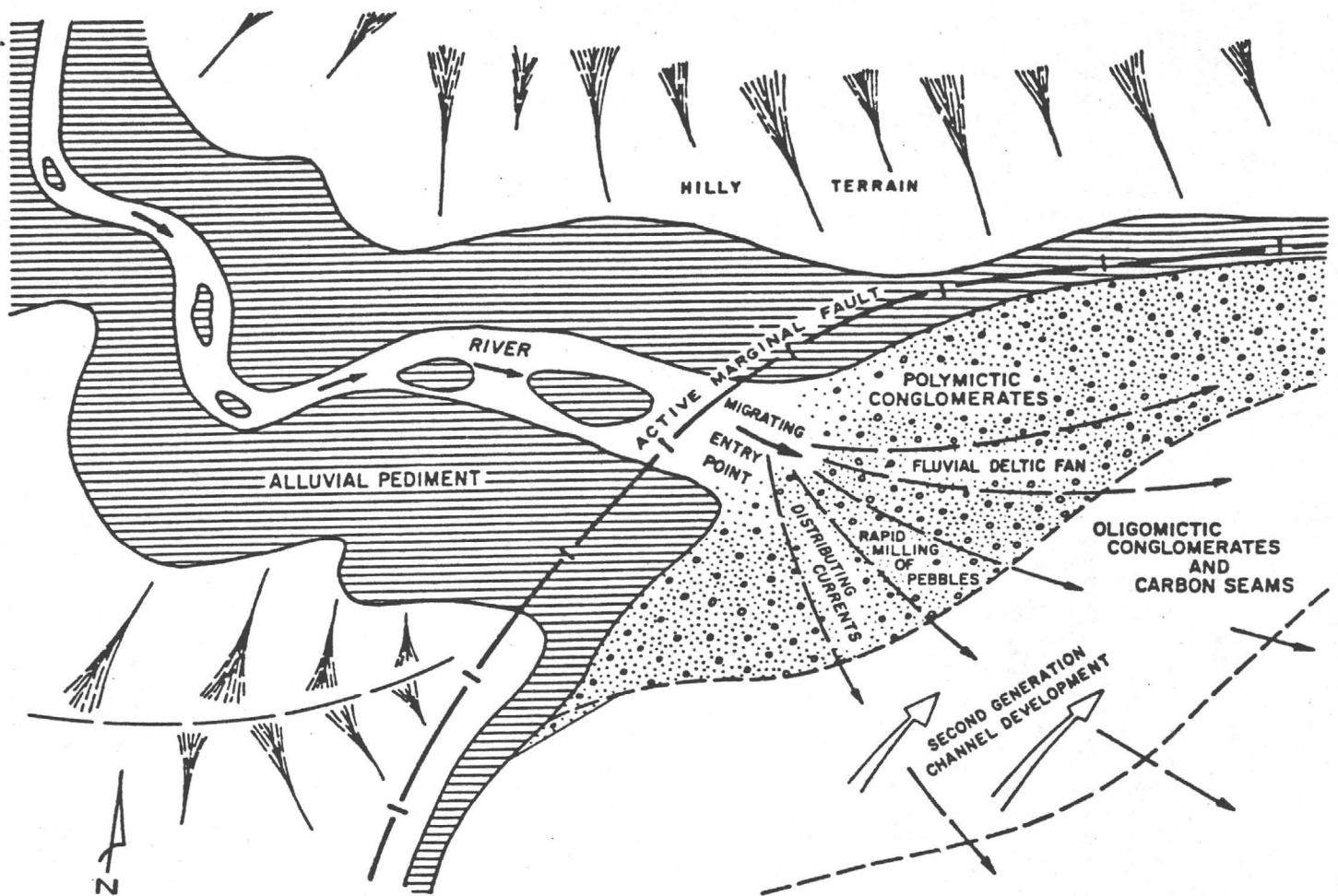


FIGURE 1. Schematic diagram illustrating braided stream sedimentation patterns.

in the form of coalescing fluvial fans. A further example would be the Basin and Range fluvialite sedimentation formed during the Pleistocene in the western United States.

A regressive sedimentation pattern, resulting from rejuvenated basin margin tectonics, provides the energy necessary to prolong the source erosion and also the reworking of earlier sediments. It has been estimated that a conglomerate grading 0.12 parts per million averaging 290 meters thick and outcropping for 1700 meters at a  $10^\circ$  dip *downstream* will liberate 810 kilograms of gold per one meter of vertical erosion (Papenfus, J. A., 1968). Hence, continual basin margin uplift of an auriferous provenance area in alternating transgressive-regressive cycles during a humid climate will eventually produce economic concentrations of heavy minerals. Offshore reworking of the alluvial fan base by offshore lacustrine-marine currents provides an important heavy mineral concentration phase to this ore deposit model.

After the explorationist has confirmed a favorable provenance and lengthy fluvialite sedimentary history necessary to concentrate economic heavy minerals, the external geometry of the sediments must then be evaluated. Essentially, this involves the classification of the basin sedimentation history into various cycles to ascertain the most favorable

zone(s) for detailed examination. The most useful parameters are:

1. Percentage conglomerate within defined stratigraphic zones
2. Delineation of braided-stream channels and associated fluvial fans
3. Transgressive—regressive cycles in the stratigraphic column
4. Gross paleocurrent trends.

Some idea can thus be gleaned as to the tectonic activity of the basin margin during sedimentation and the size and gross economic potential of the clastic sedimentation sequence.

The next phase in the geological evaluation of a potential economic clastic sequence is selecting which specific horizon(s) have the most potential for developing viable fossil placer deposits. Each clastic sedimentary unit must be evaluated by combining numerous internal geometry aspects. The more useful of these detailed measurements are:

1. Thickness of the individual sedimentary cycle
2. Conglomerate thickness, which can also be presented as a percentage of the total sedimentary cycle presented as isopach maps

3. Systematic pebble counts, obtained from residual weathering products, outcrops, underground exposures and drill core. These critical factors will measure roundness, pebble lithology, sorting and packing. This raw data can then be plotted to produce percentage of clast lithology, mean pebble size, standard deviation, distinguish variances in provenance areas, predict paleo channel confluences and in general delineate paleoslope gradients within the braided-stream system
4. Paleocurrent measurements as cross-bedding and pebble imbrication provide the necessary directional vectors to classify and evaluate the broader sedimentological projections mentioned above.

Processing these measurable parameters will determine the relative tonnage potential of each horizon and can be used as an empirical technique to establish exploration priorities within the various clastic units.

The above systematic approach to the evaluation of conglomerate horizons might appear long winded and academic. However, a concerted continent-wide gold exploration program requires a specific geological model and the methodology in selecting and evaluating exploration targets. Sampling for particulate gold, with the best of intentions, can be so subjective that a placer exploration program could be doomed to failure before it commences. However,

the selection of exploration targets on well-formulated geological parameters assures a cost-and time-effective exploration project enjoying the highest success potential.

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## NORTH WESTERN CALIFORNIA PLACER

### SUMMARY

This small but attractive grade unconsolidated placer deposit is divided into two pay zones or channels each forming the margins of a north flowing V-shaped stream confluence. A total of 12 drill holes have sampled this approximately 14-acre perched river terrace. Geological ore reserves for both channels as, defined by drilling, aggregate 110,200 cubic yards averaging 0.072 ounces of gold per cubic yard. A further 100,000 cubic yards exists below mined and within sparsely sampled mapped channel trends correlating with stratigraphically lower ore grade horizons in adjacent minable channel. Additional untested potential placer reserves exist along strike from both channels.

Mining can be conveniently unitized to maximize efficiency and avoid the heavy winter rainfall season. The 1984 operational schedule is divided into four categories commencing with development drilling and overlapping with engineering studies, permitting, and final production stages. It is anticipated that this six (6) month period will provide the investors with approximate investment capital pay-back, including capitalization of processing plant, pre-production costs and property payments. The 1985 production period will mine the bulk of the above reserves and produce an anticipated net profit exceeding twice the capital investment for this property. A third production in 1986 is very possible pending 1984 drilling returns and subsequent bulk sampling results.

Additional and separate lower grade placer deposits, that have been drilled, exist within a reasonable geographic radius and could provide long-term production continuity for these limited, but good grade reserves.

### PRODUCTION

Present owners excavated approximately 3,000 cubic yards in 1980 and recovered 44 ounces of coarse gold and some "black sands" using a very crude and inefficient sluice recovery system. Their average recovered value for this operation was \$10.80/cubic yard.

### CLAIM STATUS

A total of sixteen (16) 40 acre placer claims are located along section line meridians. BLM records indicate that the required assessment work has been duly completed and recorded. Considerable title search has been conducted by a California attorney who would be available for consultation and property opinion.

### DEVELOPMENT

A Canadian development company conducted a reconnaissance drilling program totaling twelve (12) 6" core holes aggregating 362 feet at approximate 150-foot intervals. This core was processed at 2.5 foot intervals with the individual samples emulsified and amalgamated with the concentrates fire assayed. Assay results indicated two very good grade holes (e.g. S1.5/E1.5 and NO.0/W2.9) with marginal adjacent holes indicating possible low grade extensions.



## RESERVES

The two drill holes (S1.5/1.5E and NO.0/2.9W) have resulted in outlining two ore lenses or channels adjacent to the flowing streams forming the "bar" at the confluence of these fluvial systems. It must be understood that each "ore" zone is defined by one drill hole each augmented by shallow back hoe sampling. These areas are:

	<u>HOLE</u>	<u>DEPTH</u>	<u>VOLUME</u>	<u>GRADE</u>	<u>CONTAINED OZ.</u>
West Area	NO.0/W2.9	0-15'	18,500	0.085 opy	1,573
East Area	S1.5/E1.5	0-25'	91,700 <u>110,200</u>	0.069 opy <u>0.072 opy</u>	6,327 <u>7,900</u>

NOTE: West Area reserves to 15-foot depth were calculated to contain approximately 95% of the gold values. Values to bedrock (15' to 44') in this area indicated highly anomalous but sub-economic values as bedrock concentrations which typically contains "pay" gold concentrations in placer deposits.

Considerable untested stream and bench gravel remains to be drilled to compliment the above reserve estimates.

## PROPERTY PAYMENTS

Three stage cost estimates are presented below in an attempt to approximate total cost to potential investors.

- A. <sup>200,000±</sup> \$300,000 buy-out for property ownership at \$100,000 six monthly increments following six monthly \$2,500 advance payment allocations. This includes \$150,000 drilling payback costs to the Canadian development company.
- B. \$25,000 finder's fee

## ROYALTIES

- A. At present <sup>5</sup>/<sub>8</sub>% gross recovered values. Current negotiations suggests that this could be rescheduled.
- B. Property payments paid from 50% net profits until the total ~~\$300,000~~ <sup>200,000</sup> paid.
- C. United Minerals Services to receive ~~five-year~~ management <sup>operating</sup> contract at a rate of 5% net profits plus \$3,000/month operating fee.

## 1984 OPERATING SCHEDULE

### STAGE I

This 90-day period is devoted to development drilling within two previously drilled defined ore grade placer channels. Developing proven reserves for these channels is considered essential to provide cost effective professional level mining for this deposit. The following steps are considered essential to bring this placer to "bankable" status.

1. Confirm earlier drill results
2. Block reserves on 50-foot centers
3. Provide mining engineering data and beneficiation-metallurgical process estimates to reduce design and start-up time commitments.

It is important to note that over 95% of the presently known reserves in the West Ore Block lie within 15 feet of the surface (drill hole NO.0/W2.9) which are within the limits of practical dry placer mining methods. Shallow production within the northern extension of this same zone accounted for 44 ounces of gold, plus discarded "black sand" concentrates from approximately 3,000 cubic yards. The above drill hole discloses zones of sub-economic but geochemically important placer enrichment at 26-29.5 and 40-44 foot intervals from incomplete drill records. Drilling in the East Ore Block discloses two pay zones, one of which is near bedrock. Consequently, drilling to bedrock in the West Ore Body is designed to sample the entire placer profile and determine the likelihood of a second and deeper ore horizon. The potential for this zone is estimated to approximately 100,000 cubic yards.

The following drilling program is designed to test the two horizontal units in the West Ore Block and the complete reserve area in the East Ore Block on 50-foot drill spacings.

West Ore Block	28 holes x 47 feet	1,081 feet
East Ore Block	62 holes x 26 feet	1,612 feet
	<u>90 holes</u>	<u>2,928 feet</u>

Assume: \$30/ft.; 35 ft./day; 6 day week

### COST ESTIMATES

Drilling Costs - direct	\$87,840	
indirect	2,500	
Sample testing equipment rental	5,000	
Assaying	10,000	
Wages - professional 2x3 month	42,000	
technician	7,500	
Vehicles	3,000	
Travel Expenses	2,000	
Camp expenses (25/day/man)	9,100	
Misc. supplies	1,500	
	<u>\$ 170,440</u>	S. Total

During this period one professional (mining engineer) will be responsible for pre-production engineering, bulk sampling, plant design, permitting, environmental impact analysis and mitigation.

Wages	\$ 10,500	
Travel expenses	3,000	
Vehicle	1,000	
Heavy equipment rental	5,000	
Legal and permitting	<u>10,000</u>	
	\$ 29,500	S. Total
	<u>\$199,940</u>	Total

## STAGE II

### ENGINEERING AND CONSTRUCTION

Engineering will include organizing environmental data, legal requirements and drilling results to develop a mine plan process flow sheet, waste disposal system and reclamation plan utilizing total drill data. The background information and plans will not only guide the operation but will also serve as information for the operating permits. The engineering can be separated into four main elements.

- Mine Planning
- Process Design
- Permitting
- Waste Disposal

Mine planning will utilize the developmental drilling data to define economic reserves. Deposit characteristics such as, deposit geometry, water table, volume and grade will be coupled with equipment limitations and economic necessities (e.g. quick recapture of invested funds) to formulate a mine plan on a weekly schedule basis. The mining sequence will support a precise operating budget and facilitate permitting by anticipating environmental issues.

Characterization of gold grains from drilling and bulk sampling will be a distinct guide to designing a recovery process during plant construction. Two weeks are anticipated for this data collection and assimilation into a flow sheet. An additional four weeks are anticipated for equipment purchase, transport to the property and assemble the plant. It is anticipated that this phase would consume ten weeks.

Permitting will entail initially identifying the governmental agencies regulating the operations which will at least be:

- California Water Board (waste discharge)
- California Mine Reclamation Group
- U.S. Forest Service
- County Officials

Other organizations will most probably have some say in the operation and must be addressed at an early date to promote time effective permitting.

The specific concerns will be addressed and solved to form a clear and concise guide to mine planning and operation. It is anticipated that a maximum of 12 weeks of intermittent contact with these various governmental agencies should provide the necessary contact for this process. It must be remembered that an existing U.S. Forest Service permit and bond exists for this property, which should greatly aid in reducing this estimated time allocation.

The problem of waste disposal has been addressed in a Dames & Moore consulting report dated October 26, 1983. This report details the problems of confining silt discharge from a plant employing exclusively gravity separation processes. Obviously detailed follow-up is required to convince the agencies and general public that negligible solids discharge is practical from a well-designed placer plant. A copy of this report has been filed with the U.S. Forest Service.



### STAGE III

#### START-UP

Unforeseen equipment problems always arise during this period and consequently three to four weeks have been allocated to this phase of the program. It will be noted that the extensive precautions taken during the development stage should prove immensely valuable in minimizing the probable problems that need to be addressed during this period.

### STAGE IV

#### PRODUCTION/OPERATION

Equipment utilized in the actual mining this unconsolidated placer will probably consist of a Front End Loader (FEL) to excavate and haul the gravel to the processing plant. The processing plant will screen the large barren gravel sizes and jigs, sluices and possibly other equipment will recover the gold. A rubber tire dozer will rip the gravel and create large stock-piles for the FEL. The dozer will also backfill mined areas with the plant discards. The FEL and dozer will advance the plant as mining progresses. The rate of advance is based on a processing rate of 500 cubic yards for a ten-hour work day or a nominal rate of 13,000 cubic yards per month. Achieving the scheduled rate requires a peak capacity of 890 cubic yards per day or 23,140 cubic yards per month. This peak productivity differential accounts for the many productivity losses usually experienced while operating a mine.

Existing information on the property and the probable mine operating conditions described in this text were used to develop the following criterion.

- 60 hour work week schedule
- Labor paid \$14.50/hour including payroll and fringe benefit costs
- Equipment operating supplies, rental and repair costs
- Pumping costs and rental

The following break-down of major cost categories illustrates the distribution of funds in calculating per cubic yard operating expenditures.

Equipment operating	\$2.89 cu yd	51.9%
Labor	1.39 cu yd	24.9%
Supplies	<u>1.29 cu yd</u>	23.2%
	<u>\$5.57 cu yd</u>	

The construction phase will entail sizing of the processing facilities with planned daily production rates. Contracting sediment pond construction is a possibility. Vegetation removal will entail contract logging and then probably stock piling soil for future reclamation. It must be emphasized that most of the Western Ore Body is already cleared of vegetation.

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SHEET NO. .... OF .....

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JOB NO. ....

.....  
SUBJECT .....

.....

BY ..... DATE .....

CHKD. BY ..... DATE .....

April

May

June

July

August

Sept

October

November

December

STAGE I

STAGE II

STAGE III

STAGE IV

### 1984 SCHEDULE

START-UP

PRODUCTION

### 1985 SCHEDULE

ESTIMATED PROJECT BUDGET

1984 Approximate Budget

STAGE I	Development, drilling, engineering, permitting, design, etc. (90 days)	\$ 199,440
STAGE II	Construction, procurement and detail design (60 days)	\$ 200,000
STAGE III	Start-up (30 days)	\$ 50,000
STAGE IV	Production - West Ore Body (0-15 depth) 18,500 cubic yards for 1,561 ounces	\$ <u>103,045</u>
		\$ 552,485 S.T.
	Six (6) month advance property payment	15,000
	First of three (3) property payments	100,000
	Management	<u>35,000</u>
	TOTAL	\$ <u>702,485</u>
	Less Gross Production	<u>626,000</u>
	Net Loss for 1984	(\$ 76,485)

1985 Operating Estimate

Gross Production	91,700 cubic yards for 6,327 oz	\$2,530,800
<u>Less;</u> Estimated production costs at \$5.57/cu yd		\$ 510,770
Property payments (\$200,000-\$15,000)		185,000
Royalties on 1984 & 1985 Production @ 9% gross		284,000
Management		<u>70,000</u>
	NET PROFIT 1984-1985	<u>\$1,480,920</u>